

DATE 01/23/2008

Columbia County Building Permit

This Permit Must Be Prominently Posted on Premises During Construction

PERMIT

000026658

APPLICANT JOSEPH BENNETT,SR. PHONE 954.290.5382
ADDRESS 2699 SW SPRUCE ROAD LAKE CITY FL 32024
OWNER JOSEPH BENNETT PHONE 954.290.5382
ADDRESS 2699 SW SPRUCE ROAD LAKE CITY FL 32024
CONTRACTOR JOSEPH BENNETT,SR. PHONE 954.290.5382
LOCATION OF PROPERTY 47-S TO C-240,W, ICHE,TURN S, TO CURTAIN,TURN W TO
DEAD END @ SPRUCE,GO N TO PASTURE -PRIVATE LAND-GATE ON R.
TYPE DEVELOPMENT SFD/UTILITY ESTIMATED COST OF CONSTRUCTION 110000.00
HEATED FLOOR AREA 2200.00 TOTAL AREA 4540.00 HEIGHT 19.00 STORIES 1
FOUNDATION CONC WALLS FRAMED ROOF PITCH 5'12 FLOOR CONC
LAND USE & ZONING A-3 MAX. HEIGHT 35
Minimum Set Back Requirments: STREET-FRONT 30.00 REAR 25.00 SIDE 25.00
NO. EX.D.U. 0 FLOOD ZONE X DEVELOPMENT PERMIT NO. _____

PARCEL ID 25-5S-15-00479-314 SUBDIVISION SOUTHERN EXP. UNREC.
LOT 14 BLOCK _____ PHASE _____ UNIT _____ TOTAL ACRES 9.80

Culvert Permit No. _____ Culvert Waiver _____ Contractor's License Number _____
PRIVATE EASEMEN 07-0959 BLK Applicant/Owner/Contractor JTH Y
Driveway Connection _____ Septic Tank Number _____ LU & Zoning checked by _____ Approved for Issuance _____ New Resident _____

COMMENTS: FLOOR ONE FOOT ABOVE PRIVATE EASEMENT.

Check # or Cash 2537

FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

Temporary Power _____ Foundation _____ Monolithic _____
date/app. by _____ date/app. by _____ date/app. by _____
Under slab rough-in plumbing _____ Slab _____ Sheathing/Nailing _____
date/app. by _____ date/app. by _____ date/app. by _____
Framing _____ Rough-in plumbing above slab and below wood floor _____
date/app. by _____ date/app. by _____
Electrical rough-in _____ Heat & Air Duct _____ Peri. beam (Lintel) _____
date/app. by _____ date/app. by _____ date/app. by _____
Permanent power _____ C.O. Final _____ Culvert _____
date/app. by _____ date/app. by _____ date/app. by _____
M/H tie downs, blocking, electricity and plumbing _____ Pool _____
date/app. by _____ date/app. by _____
Reconnection _____ Pump pole _____ Utility Pole _____
date/app. by _____ date/app. by _____ date/app. by _____
M/H Pole _____ Travel Trailer _____ Re-roof _____
date/app. by _____ date/app. by _____ date/app. by _____

BUILDING PERMIT FEE \$ 550.00 CERTIFICATION FEE \$ 22.70 SURCHARGE FEE \$ 22.70
MISC. FEES \$ 0.00 ZONING CERT. FEE \$ 50.00 FIRE FEE \$ 0.00 WASTE FEE \$ _____
FLOOD DEVELOPMENT FEE \$ _____ FLOOD ZONE FEE \$ 25.00 CULVERT FEE \$ _____ TOTAL FEE 670.40
INSPECTORS OFFICE _____ CLERKS OFFICE _____

NOTICE: IN ADDITION TO THE REQUIREMENTS OF THIS PERMIT, THERE MAY BE ADDITIONAL RESTRICTIONS APPLICABLE TO THIS PROPERTY THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY. AND THERE MAY BE ADDITIONAL PERMITS REQUIRED FROM OTHER GOVERNMENTAL ENTITIES SUCH AS WATER MANAGEMENT DISTRICTS, STATE AGENCIES, OR FEDERAL AGENCIES.

"WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT."

EVERY PERMIT ISSUED SHALL BECOME INVALID UNLESS THE WORK AUTHORIZED BY SUCH PERMIT IS COMMENCED WITHIN 180 DAYS AFTER ITS ISSUANCE, OR IF THE WORK AUTHORIZED BY SUCH PERMIT IS SUSPENDED OR ABANDONED FOR A PERIOD OF 180 DAYS AFTER THE TIME THE WORK IS COMMENCED. A VALID PERMIT RECIEVES AN APPROVED INSPECTION EVERY 180 DAYS. WORK SHALL BE CONSIDERED TO BE IN ACTIVE PROGRESS WHEN THE PERMIT HAS RECIEVED AN APPROVED INSPECTION WITHIN 180 DAYS.

The Issuance of this Permit Does Not Waive Compliance by Permittee with Deed Restrictions.

This Instrument Prepared by & return to:

Name: **KIM WATSON, an employee of
TITLE OFFICES, LLC**
Address: **1089 SW MAIN BLVD.
LAKE CITY, FLORIDA 32025
File No. 05Y-09082KW**

Inst:2005024773 Date:10/05/2005 Time:14:50
Doc Stamp-Deed : 658.00

YMK DC, P. Dewitt Cason, Columbia County B:1060 P:2463

Parcel I.D. #: **00479-315**

SPACE ABOVE THIS LINE FOR PROCESSING DATA

SPACE ABOVE THIS LINE FOR RECORDING DATA

THIS WARRANTY DEED Made the 30th day of September, A.D. 2005, by **ROBERT E. WEIR, JR. and**

MARINA WEIR, HIS WIFE, hereinafter called the grantors, to **JOSEPH EARL BENNETT, SR.,**

SINGLE and **BONNIE ANN ROMER, SINGLE,**

AS JOINT TENANTS WITH FULL RIGHTS OF SURVIVORSHIP,

whose post office address is **4495 NW 17 TERRACE, OAKLAND PARK, FL. 33334**, hereinafter called the grantees:

(Wherever used herein the terms "grantors" and "grantees" include all the parties to this instrument, singular and plural, the heirs, legal representatives and assigns of individuals, and the successors and assigns of corporations, wherever the context so admits or requires.)

Witnesseth: That the grantors, for and in consideration of the sum of \$10.00 and other valuable consideration, receipt whereof is hereby acknowledged, do hereby grant, bargain, sell, alien, remise, release, convey and confirm unto the grantees all that certain land situate in **Columbia County, State of FLORIDA**, viz:

LOT 14: COMMENCE AT THE NW CORNER OF THE S½ OF SECTION 25, TOWNSHIP 5 SOUTH, RANGE 15 EAST, COLUMBIA COUNTY, FLORIDA; THENCE N 88°33'56" E, ALONG THE NORTH LINE OF SAID S½ OF SECTION 25, A DISTANCE OF 1968.15 FEET; THENCE S 00°35'31" E, A DISTANCE OF 430.69 FEET TO THE RADIUS POINT OF A CUL-DE-SAC HAVING A RADIUS OF 50 FEET AND BEING PART OF A 60 FOOT ROAD EASEMENT AND THE POINT OF BEGINNING OF THE HEREIN DESCRIBED LANDS; THENCE N 88°33'18" E, A DISTANCE OF 989.62 FEET TO A POINT ON THE EAST LINE OF LANDS DESCRIBED IN O.R. BOOK 943, PAGE 1192 OF THE OFFICIAL RECORDS OF COLUMBIA COUNTY, FLORIDA; THENCE S 05°32'32" W, ALONG SAID EAST LINE A DISTANCE OF 455.38 FEET; THENCE S 88°33'18" W, A DISTANCE OF 940.96 FEET TO A POINT ON THE CENTERLINE OF THE AFOREMENTIONED 60 FOOT WIDE ROAD EASEMENT; THENCE N 00°35'31" W, ALONG SAID CENTERLINE A DISTANCE OF 452.05 FEET TO THE POINT OF BEGINNING.

SUBJECT TO AND TOGETHER WITH AN EASEMENT FOR INGRESS AND EGRESS AND PUBLIC UTILITIES DESCRIBED AS "ROAD EASEMENT" AND SHOWN HEREON.

TOGETHER WITH:
"ROAD EASEMENT"

COMMENCE AT THE NW CORNER OF THE SOUTH ½ OF SECTION 25, TOWNSHIP 5 SOUTH, RANGE 15 EAST, COLUMBIA COUNTY, FLORIDA; THENCE S 00°35'31" E, ALONG THE WEST LINE OF SAID SECTION 25 A DISTANCE OF 1107.80 FEET TO A POINT ON THE WESTERLY EXTENSION OF THE CENTERLINE OF A 60 FOOT WIDE ROAD EASEMENT; THENCE N 88°33'18" E, ALONG SAID EXTENSION A DISTANCE OF 19.96 FEET TO THE POINT OF BEGINNING OF THE HEREIN DESCRIBED ROAD EASEMENT; THENCE N 00°57'09" W, ALONG THE EAST RIGHT-OF-WAY LINE OF COUNTY MAINTAINED PUBLIC ROAD A DISTANCE OF 60.26 FEET TO THE POINT OF CURVATURE OF A CURVE TO THE LEFT HAVING A RADIUS OF 30.00 FEET, A CENTRAL ANGLE OF 90°29'33", A CHORD BEARING OF S 46°11'56" E AND A CHORD LENGTH OF 42.61 FEET; THENCE ALONG THE ARC OF SAID CURVE, AN ARC LENGTH OF 47.38 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE N 88°33'18" E, A DISTANCE OF 1858.56 FEET TO THE POINT OF CURVATURE OF A CURVE TO THE LEFT, HAVING A RADIUS OF 30.00 FEET A CENTRAL ANGLE OF 89°08'49", A CHORD BEARING OF N 43°58'54" E AND A CHORD LENGTH OF 42.11 FEET; THENCE ALONG THE ARC OF SAID CURVE, AN ARC LENGTH OF 46.68 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE N 00°35'31" W, A DISTANCE OF 564.72 FEET TO THE POINT OF CURVATURE OF A CURVE TO THE LEFT, HAVING A RADIUS OF 30.00 FEET, A CENTRAL ANGLE OF 41°24'35", A CHORD BEARING OF N 21°17'48" W AND CHORD LENGTH OF 21.21 FEET; THENCE ALONG THE ARC OF SAID CURVE, AN ARC LENGTH OF 21.68 FEET TO THE POINT OF COMPOUND CURVATURE OF A CURVE TO THE LEFT, HAVING A RADIUS OF 50.00 FEET, A CENTRAL ANGLE OF 262°49'09", A CHORD BEARING OF N 89°24'29" E AND A CHORD LENGTH OF 75.00 FEET; THENCE ALONG THE ARC OF SAID CURVE AN ARC LENGTH OF 229.35 FEET TO THE POINT OF COMPOUND CURVATURE OF A CURVE TO THE LEFT, HAVING A RADIUS OF 30.00 FEET, A CENTRAL ANGLE OF 41°24'35", A CHORD BEARING OF S 20°06'46" W AND CHORD LENGTH OF 21.21 FEET; THENCE ALONG THE ARC OF SAID CURVE, AN ARC LENGTH OF 21.68 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE S 00°35'31" E, A DISTANCE OF 1561.82 FEET TO THE POINT OF CURVATURE OF A CURVE TO THE RIGHT, HAVING A RADIUS OF 330.00 FEET, A CENTRAL ANGLE OF 17°20'29", A CHORD BEARING OF S 08°04'44" W AND A CHORD LENGTH OF 99.50 FEET; THENCE ALONG THE ARC OF SAID CURVE, AN ARC LENGTH OF 99.88 FEET TO THE POINT

OF REVERSE CURVATURE OF A CURVE TO THE LEFT, HAVING A RADIUS OF 330.00 FEET, A CENTRAL ANGLE OF 34°25'28", A CHORD BEARING OF S 00°27'46" E AND A CHORD LENGTH OF 195.30 FEET; THENCE ALONG THE ARC OF SAID CURVE, AN ARC LENGTH OF 198.27 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE TO THE RIGHT, HAVING A RADIUS OF 360.00 FEET, A CENTRAL ANGLE OF 16°23'15", A CHORD BEARING OF S 09°28'52" E AND A CHORD LENGTH OF 102.61 FEET; THENCE ALONG THE ARC OF SAID CURVE, AN ARC LENGTH OF 102.97 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE S 01°17'15" E, A DISTANCE OF 245.85 FEET TO A POINT ON THE SOUTH LINE OF SAID SECTION 25; THENCE S 01°17'15" E, A DISTANCE OF 257.55 FEET TO A POINT ON THE NORTH LINE OF "FERNWOOD ESTATES" A SUBDIVISION AS PER PLAT THEREOF RECORDED IN PLAT BOOK 4 PAGES 104-104A OF THE PUBLIC RECORDS OF COLUMBIA COUNTY, FLORIDA; THENCE N 77°07'10" W, ALONG SAID NORTH LINE A DISTANCE OF 61.88 FEET; THENCE N 01°17'15" W, A DISTANCE OF 241.76 FEET TO A POINT ON THE AFOREMENTIONED SOUTH LINE OF SECTION 25; THENCE N 01°17'15" W, A DISTANCE OF 246.49 FEET TO THE POINT OF CURVATURE OF A CURVE TO THE LEFT, HAVING A RADIUS OF 300.00 FEET, A CENTRAL ANGLE OF 16°23'15", A CHORD BEARING OF N 09°28'52" W AND CHORD LENGTH OF 85.51 FEET; THENCE ALONG THE ARC OF SAID CURVE, AN ARC LENGTH OF 85.80 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE TO THE RIGHT, HAVING A RADIUS OF 390.00 FEET, A CENTRAL ANGLE OF 34°25'28", A CHORD BEARING OF N 00°27'46" W AND A CHORD LENGTH OF 230.81 FEET; THENCE ALONG THE ARC OF SAID CURVE, AN ARC LENGTH OF 234.32 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE TO THE LEFT, HAVING A RADIUS OF 270.00 FEET, A CENTRAL ANGLE OF 17°20'29", A CHORD BEARING OF N 08°04'44" E AND A CHORD LENGTH OF 81.41 FEET; THENCE ALONG THE ARC OF SAID CURVE, AN ARC LENGTH OF 81.72 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE N 00°35'31" W, A DISTANCE OF 877.08 FEET TO THE POINT OF CURVATURE OF A CURVE TO THE LEFT, HAVING A RADIUS OF 30.00 FEET, A CENTRAL ANGLE OF 90°51'11", A CHORD BEARING OF N 46°01'07" W AND A CHORD LENGTH OF 42.74 FEET; THENCE ALONG THE ARC OF SAID CURVE, AN ARC LENGTH OF 47.57 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE S 88°33'18" W, A DISTANCE OF 1857.80 FEET TO THE POINT OF CURVATURE OF A CURVE OF THE LEFT, HAVING A RADIUS OF 30.00 FEET, A CENTRAL ANGLE OF 89°30'27", A CHORD BEARING OF S 43°48'04" W AND A CHORD LENGTH OF 42.24 FEET; THENCE ALONG THE ARC OF SAID CURVE, AN ARC LENGTH OF 46.87 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE N 00°57'09" W, ALONG THE AFOREMENTIONED WEST RIGHT-OF-WAY LINE OF THE COUNTY MAINTAINED PUBLIC ROAD A DISTANCE OF 59.74 FEET TO THE POINT OF BEGINNING.

THE ABOVE DESCRIBED LANDS ARE PART OF THE SOUTH ½ OF SECTION 25, TOWNSHIP 5 SOUTH, RANGE 15 EAST AND SECTION 36, TOWNSHIP 5 SOUTH, RANGE 15 EAST, COLUMBIA COUNTY, FLORIDA.

Inst:2005024773 Date:10/05/2005 Time:14:50

Doc Stamp-Deed : 658.00

DC, P. DeWitt Cason, Columbia County B:1060 P:2464

Together with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

To Have and to Hold the same in fee simple forever.

And the grantors hereby covenant with said grantees that they are lawfully seized of said land in fee simple; that they have good right and lawful authority to sell and convey said land, and hereby fully warrant the title to said land and will defend the same against the lawful claims of all persons whomsoever, and that said land is free of all encumbrances, except taxes accruing subsequent to December 31, 2004.

In Witness Whereof, the said grantors have signed and sealed these presents, the day and year first above written.

Signed, sealed and delivered in the presence of:



Witness Signature

SUSAN SLOAN

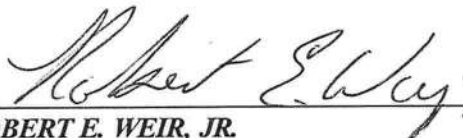
Printed Name



Witness Signature

BONITA HADWIN

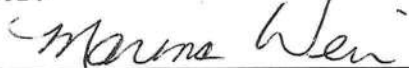
Printed Name

 L.S.

ROBERT E. WEIR, JR.

Address:

2573 SW SPRUCE RD, LAKE CITY, FLORIDA
32024

 L.S.

MARINA WEIR

Address:

2573 SW SPRUCE RD, LAKE CITY, FLORIDA
32024

Inst:2005024773 Date:10/05/2005 Time:14:50
Doc Stamp-Deed : 658.00
DC, P. DeWitt Cason, Columbia County B:1060 P:2465

STATE OF FLORIDA
COUNTY OF COLUMBIA

The foregoing instrument was acknowledged before me this 30th day of September, 2005, by ROBERT E. WEIR, JR. and MARINA WEIR, who are known to me or who have produced [Signature] as identification.

[Signature]
Notary Public
My commission expires _____



Bonita Hadwin
MY COMMISSION # DD230004 EXPIRES
August 10, 2007
BONDED THRU TROY FAIN INSURANCE, INC.

Columbia County Building Permit Application

For Office Use Only		Application # <u>0712-84</u>	Date Received <u>12/17</u>	By <u>JW</u>	Permit # <u>26658</u>
Zoning Official <u>BLK</u>	Date <u>08.01.08</u>	Flood Zone <u>X</u>	FEMA Map # <u>N/A</u>	Zoning <u>A-3</u>	
Land Use <u>A-3</u>	Elevation <u>N/A</u>	MFE <u>above eastward</u>	River <u>N/A</u>	Plans Examiner <u>OK JTH</u>	Date <u>1-22-08</u>
Comments _____					
☒ NOC ☒ EH ☐ Deed or PA ☐ Site Plan ☐ State Road Info ☐ Parent Parcel # _____					
☐ Dev Permit # _____ ☐ In Floodway ☐ Letter of Authorization from Contractor					
☐ Unincorporated area ☐ Incorporated area ☐ Town of Fort White ☐ Town of Fort White Compliance letter					

Septic Permit No. 637666 Fax _____

Name Authorized Person Signing Permit JOSEPH EARL BENNETT SR Phone 386 754 5455

Address 2699 S.W. SPRUCE RD LAKE CITY 32024

Owners Name Joseph E. Bennett, Sr. Phone 954-290-5382(c)

911 Address 2699 SW SPRUCE Rd. LAKE City, FL 32024

Contractors Name SAME AS ABOVE - OWENNEK BUILDER Phone _____

Address SAME

Fee Simple Owner Name & Address N/A

Bonding Co. Name & Address N/A

Architect/Engineer Name & Address MUHAMMAD ALMAHAYNI, PE 7101 W. 12 ST Suite 301D
LITTLE ROCK, AR 72204

Mortgage Lenders Name & Address CASH

Circle the correct power company - FL Power & Light - Clay Elec. - Suwannee Valley Elec. - Progress Energy

Property ID Number 25-55-15-00479-314 Estimated Cost of Construction 125,000

Subdivision Name Southern Exposure, UNR Lot 14 Block N/A Unit — Phase —

Driving Directions 441 TO 47 SOUTH TO CR 240 WEST TO ICHECUCKNEE AVE

SOUTH TO CURTAIN RD - RIGHT ON CURTAIN TO SPRUCE RD - RIGHT ON SPRUCE RD
CROSS THRU PICTURE - CONTINUE N TO 2699 SW SPRUCE RD GATE ON RIGHT Number of Existing Dwellings on Property 1 *Garage according to plan*

Construction of SINGLE FAMILY RESIDENCE Total Acreage 9.8 ACRES Lot Size 455 X 946

Do you need a - Culvert Permit or Culvert Waiver or Have an Existing Drive Total Building Height 19'

Actual Distance of Structure from Property Lines - Front 318' Side 190' Side 183' Rear 568'

Number of Stories 1 Heated Floor Area 2200 *SOFT HOUSE* Total Floor Area 4540 Roof Pitch 5-12

2340 PORCH *PER PLANS 57' X 80' = 4560*

Application is hereby made to obtain a permit to do work and installations as indicated. I certify that no work or installation has commenced prior to the issuance of a permit and that all work be performed to meet the standards of all laws regulating construction in this jurisdiction.

The Left Mess 1.22.08

Columbia County Building Permit Application

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOU PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

FLORIDA'S CONSTRUCTION LIEN LAW: Protect Yourself and Your Investment

According to Florida Law, those who work on your property or provide materials, and are not paid-in-full, have a right to enforce their claim for payment against your property. This claim is known as a construction lien. If your contractor fails to pay subcontractors or material suppliers or neglects to make other legally required payments, the people who are owed money may look to your property for payment, even if you have paid your contractor in full. This means if a lien is filed against your property, it could be sold against your will to pay for labor, materials or other services which your contractor may have failed to pay.

NOTICE OF RESPONSIBILITY TO BUILDING PERMITEE:

YOU ARE HEREBY NOTIFIED as the recipient of a building permit from Columbia County, Florida, you will be held responsible to the County for any damage to sidewalks and/or road curbs and gutters, concrete features and structures, together with damage to drainage facilities, removal of sod, major changes to lot grades that result in ponding of water, or other damage to roadway and other public infrastructure facilities caused by you or your contractor, subcontractors, agents or representatives in the construction and/or improvement of the building and lot for which this permit is issued. No certificate of occupancy will be issued until all corrective work to these public infrastructures and facilities has been corrected.

OWNERS CERTIFICATION: I hereby certify that all the foregoing information is accurate and all work will be done in compliance with all applicable laws and regulating construction and zoning. I further understand the above written responsibilities in Columbia County for obtaining this Building Permit.


Owners Signature

CONTRACTORS AFFIDAVIT: By my signature I understand and agree that I have informed and provided this written statement to the owner of all the above written responsibilities in Columbia County for obtaining this Building Permit.

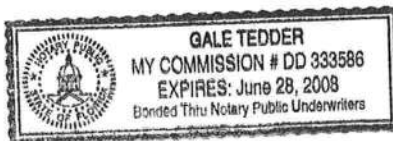
Contractor's Signature (Permitee)

Contractor's License Number _____
Columbia County
Competency Card Number _____

Affirmed under penalty of perjury to by the Contractor and subscribed before me this 27th day of December 2007
Personally known _____ or Produced Identification DL


State of Florida Notary Signature (For the Contractor)

SEAL:



26658

NOTICE OF COMMENCEMENT

County Clerk's Office Stamp or Seal

Tax Parcel Identification Number 25-58-15-00479-314

THE UNDERSIGNED hereby gives notice that improvements will be made to certain real property, and in accordance with Section 713.13 of the Florida Statutes, the following information is provided in this NOTICE OF COMMENCEMENT.

1. Description of property (legal description): Lot 14, NW corner of S 1/2 of Section 25, Township 5 South, Southern Exposure, UNR
 a) Street (job) Address: 2699 SW Spruce Rd.
2. General description of improvements: new construction for house
3. Owner Information
 a) Name and address: Joseph E. Bennett, Sr.
 b) Name and address of fee simple titleholder (if other than owner): 1495 NW 17 Terr. OAKLAND PARK, FL 3330
 c) Interest in property: owner
4. Contractor Information
 a) Name and address: owner
 b) Telephone No.: _____ Fax No. (Opt.) _____
5. Surety Information none
 a) Name and address: _____ Inst: 200812001497 Date: 1/24/2008 Time: 1:55 PM
 b) Amount of Bond: _____ DC, P. DeWitt Cason, Columbia County Page 1 of 1
 c) Telephone No.: _____ Fax No. (Opt.) _____
6. Lender
 a) Name and address: N/A
 b) Phone No.: _____
7. Identity of person within the State of Florida designated by owner upon whom notices or other documents may be served:
 a) Name and address: _____
 b) Telephone No.: _____ Fax No. (Opt.) _____
8. In addition to himself, owner designates the following person to receive a copy of the Lienor's Notice as provided in Section 713.13(l)(b), Florida Statutes:
 a) Name and address: Bonnie Romer
 b) Telephone No.: 954-492-5382 954-673-3584 Fax No. (Opt.) 954-492-5382
 (cell)
9. Expiration date of Notice of Commencement (the expiration date is one year from the date of recording unless a different date is specified): _____

WARNING TO OWNER: ANY PAYMENTS MADE BY THE OWNER AFTER THE EXPIRATION OF THE NOTICE OF COMMENCEMENT ARE CONSIDERED IMPROPER PAYMENTS UNDER CHAPTER 713, PART I, SECTION 713.13, FLORIDA STATUTES, AND CAN RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY; A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT YOUR LENDER OR AN ATTORNEY BEFORE COMMENCING WORK OR RECORDING YOUR NOTICE OF COMMENCEMENT.

STATE OF FLORIDA
 COUNTY OF COLUMBIA

10. Joseph E. Bennett, Sr.
 Signature of Owner or Owner's Authorized Office/Director/Partner/Manager
Joseph E. Bennett, Sr.
 Print Name

The foregoing instrument was acknowledged before me, a Florida Notary, this 24 day of January, 2008, by:
Joseph Bennett as _____ (type of authority, e.g. officer, trustee, attorney
 fact) for Joseph Bennett (name of party on behalf of whom instrument was executed).

Personally Known _____ OR Produced Identification X Type DL B530 485-49-4640

Notary Signature Lisa Huchingson Notary Stamp or Seal:



11. Verification pursuant to Section 92.525, Florida Statutes. Under penalties of perjury, I declare that I have read the foregoing and that the facts stated in it are true to the best of my knowledge and belief.

Joseph E. Bennett, Sr.
 Signature of Natural Person Signing (in line #10 above.)

@ CAM112M01	S	CamaUSA Appraisal System		Columbia County
1/23/2008 16:30		Legal Description Maintenance	75150	Land 001
Year T Property		Sel		AG 000
2008 R 25-5S-15-00479-314		...		Bldg 000
2699 SPRUCE RD SW LAKE CITY				Xfea 000
BENNETT JOSEPH EARL SR &			75150	TOTAL B*

1	LOT 14 SOUTHERN EXPOSURES UNR.	COMM AT NW COR OF S1/2 OF SEC	2
3	RUN E 1968.15 FT, S 430.69 FT	TO RADIUS PT OF CUL-DE-SAC &	4
5	TO POB, RUN E 989.62 FT, SOUTH	455.38 FT, W 940.96 FT. TO C/L	6
7	OF EASEMENT, N ALONG C/L	452.05 FT TO POB.	8
9	WD 1018-2957 & WD 1060-2463		10
11			12
13			14
15			16
17			18
19			20
21			22
23			24
25			26
27			28

Mnt 11/03/2005 THRESA

F1=Task F3=Exit F4=Prompt F10=GoTo PgUp/PgDn F24=More

NOTORIZED DISCLOSURE STATEMENT

FOR OWNER/BUILDER WHEN ACTING AS THEIR OWN CONTRACTOR AND CLAIMING EXEMPTION OF CONTRACTOR LICENSING REQUIREMENTS IN ACCORDANCE WITH FLORIDA STATUTES, ss. 489.103(7).

State law requires construction to be done by licensed contractors. You have applied for a permit under an exemption to that law. The exemption allows you, as the owner of your property, to act as your own contractor with certain restrictions even though you do not have a license. You must provide direct, onsite supervision of the construction yourself. You may build or improve a one-family or two-family residence or a farm outbuilding. You may also build or improve a commercial building, provided your costs do not exceed \$75,000. The building or residence must be for your own use or occupancy. It may not be built or substantially improved for sale or lease. If you sell or lease a building you have built or substantially improved yourself within 1 year after the construction is complete, the law will presume that you built or substantially improved it for sale or lease, which is a violation of this exemption. You may not hire an unlicensed person to act as your contractor or to supervise people working on your building. It is your responsibility to make sure that people employed by you have licenses required by state law and by county or municipal licensing ordinances. You may not delegate the responsibility for supervising work to a licensed contractor who is not licensed to perform the work being done. Any person working on your building who is not licensed must work under your direct supervision and must be employed by you, which means that you must deduct F.I.C.A. and withholding tax and provide workers' compensation for that employee, all as prescribed by law. Your construction must comply with all applicable laws, ordinances, building codes, and zoning regulations.

☒ Single Family Dwelling
☐ Farm Outbuilding

TYPE OF CONSTRUCTION

☐ Two-Family Residence
☐ Other _____

☒ New Construction

NEW CONSTRUCTION OR IMPROVEMENT

☐ Addition, Alteration, Modification or other Improvement

I JOSEPH EARL BENNETT SR, have been advised of the above disclosure statement for exemption from contractor licensing as an owner/builder. I agree to comply with all requirements provided for in Florida Statutes ss.489.103(7) allowing this exception for the construction permitted by Columbia County Building Permit Number _____

Joseph Earl Bennett Sr
Owner Builder Signature _____ Date _____



The above signer is personally known to me or produced identification DL

Notary Signature Gale Tedder Date 12/27/07

(Stamp / Seal)

FOR BUILDING USE ONLY

I hereby certify that the above listed owner/builder has been notified of the disclosure statement in Florida Statutes ss 489.103(7).

Date 12.27.2007 Building Official/Representative [Signature]

Joe HALEWANGER 758-1163

0712-84

0712-84

FORM 600C-01

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Small Additions, Renovations & Building Systems

Residential Limited Applications Prescriptive Method C

NORTH 1 2 3

Compliance with Method C of Chapter 6 of the Florida Energy Efficiency Code may be demonstrated by the use of Form 600C-01 for additions of 600 square feet or less, site-installed components of manufactured homes, and renovations to single and multifamily residences. Alternative methods are provided for additions by use of Form 600B-01 or 600A-01.

PROJECT NAME: AND ADDRESS:	EARL BENNET SPRUCE ST. Fort White 32038	BUILDER: PERMITTING OFFICE:	EARL BENNET	CLIMATE ZONE:	1 ☐ 2 ☐ 3 ☒
OWNER:	EARL Bennet	PERMIT NO.:	0712-84	JURISDICTION NO.:	221000

SMALL ADDITIONS TO EXISTING RESIDENCES (600 Square feet or less of conditioned area). Prescriptive requirements in Tables 6C-1, 6C-2 and 6C-3 apply only to the components of the addition, not to the existing building. Space heating, cooling, and water heating equipment efficiency levels must be met only when equipment is installed specifically to serve the addition or is being installed in conjunction with the addition construction. Components separating unconditioned spaces from conditioned spaces must meet the prescribed minimum insulation levels. RENOVATIONS (Residential buildings undergoing renovations costing more than 30% of the assessed value of the building). Prescriptive requirements in Tables 6C-1 and 6C-2 apply only to the components and equipment being renovated or replaced. MANUFACTURED HOMES AND BUILDINGS. Only site-installed components and features are covered by this form. BUILDING SYSTEMS Comply when complete new system is installed.

Please Print

CK

1. Renovation, Addition, New System or Manufactured Home
2. Single family detached or Multifamily attached
3. If Multifamily—No. of units covered by this submission
4. Conditioned floor area (sq. ft.)
5. Predominant eave overhang (ft.)
6. Glass area and type:
 - a. Clear glass
 - b. Tint, film or solar screen
7. Percentage of glass to floor area
8. Floor type and insulation:
 - a. Slab-on-grade (R-value)
 - b. Wood, raised (R-value)
 - c. Wood, common (R-value)
 - d. Concrete, raised (R-value)
 - e. Concrete, common (R-value)
9. Wall type and insulation:
 - a. Exterior:
 1. Masonry (Insulation R-value)
 2. ~~Wood~~ frame (Insulation R-value)
 - b. Adjacent:
 1. Masonry (Insulation R-value)
 2. Wood frame (Insulation R-value)
 - c. Marriage Walls of Multiple Units* (Yes/No)
10. Ceiling type and insulation:
 - a. Under attic (Insulation R-value)
 - b. Single assembly (Insulation R-value)
11. Cooling system*
(Types: central, room unit, package terminal A.C., gas, existing, none)
12. Heating system*: (Types: heat pump, elec. strip, natural gas, L.P. gas, gas h.p., room or PTAC, existing, none)
13. Air Distribution System*:
 - a. Backflow damper or single package systems* (Yes/No)
 - b. Ducts on marriage walls adequately sealed* (Yes/No)
14. Hot water system:
(Types: elec., natural gas, other, existing, none)

* Pertains to manufactured homes with site installed components.

1.	NEW SYSTEM	
2.	SINGLE	
3.		
4.	2110 sq. Ft.	
5.	10 Ft.	
	Single Pane	Double Pane
6a.	_____ sq. ft.	344 sq. ft.
6b.	_____ sq. ft.	_____ sq. ft.
7.	_____ %	
8a.	R= 7	_____ lin. ft.
8b.	R= _____	_____ sq. ft.
8c.	R= _____	_____ sq. ft.
8d.	R= _____	_____ sq. ft.
8e.	R= _____	_____ sq. ft.
9a-1	R= _____	_____ sq. ft.
9a-2	R= 19	2110 sq. ft.
9b-1	R= _____	_____ sq. ft.
9b-2	R= _____	_____ sq. ft.
9c	NO	
10a.	R= 44	_____ sq. ft.
10b.	R= _____	_____ sq. ft.
11.	Type: CENTRAL	
	SEER/EER: 14.2	
12.	Type: HEAT Pump	
	HSPF/COP/AFUE: 8.4	
13a.	YES	
13b.		
14.	Type: ELECT.	
	EF: .88	

I hereby certify that the plans and specifications covered by the calculation are in compliance with the Florida Energy Code.

PREPARED BY: Tom Buccchi
I hereby certify that this building is in compliance with the Florida Energy Code.

OWNER AGENT: Tom Buccchi

DATE: 1-21-07

DATE: 1-22-07

Review of plans and specifications covered by this calculation indicates compliance with the Florida Energy Code. Before construction is completed, this building will be inspected for compliance in accordance with Section 553.908, F.S.

BUILDING OFFICIAL:

DATE:

JOE

FAX # 758-2160

TABLE 6C-1: PRESCRIPTIVE REQUIREMENTS FOR SMALL ADDITIONS (800 Sq. Ft. and Less), RENOVATIONS TO EXISTING BUILDINGS AND SITE-INSTALLED COMPONENTS OF MANUFACTURED HOMES.

COMPONENT		MINIMUM INSULATION	INSULATION INSTALLED	EQUIPMENT		MINIMUM EFFICIENCY	INSTALLED EFFICIENCY
WALLS	Concrete Block	R-7		COOLING	Central A/C - Split	SEER = 10.0	SEER = 14
	Frame, 2' x 4'	R-11			-Single Pkg.	SEER = 9.7	SEER =
	Frame, 2' x 8'	R-19	X YES		Room unit or PTAC	EER = 8.5*	EER =
	Common, Frame	R-11		SPACE HEATING	Electric Resistance	ANY	
	Common, Masonry	R-3			Heat pump - Split	HSPF = 6.8	HSPF = 8.4
CEILING	Under Attic	R-30 44	YES		-Single Pkg.	HSPF = 8.6	HSPF =
	Single Assembly; Enclosed	R-19			Room unit or PTHP	COP = 2.7*	HSPF/ COP =
	Frame	R-13			Gas, natural or propane	AFUE = .78	AFUE =
	Metal Pans	R-10			Fuel Oil	AFUE = .78	AFUE =
	Single Assembly; Open	R-11		HOT WATER	Electric Resistance	EF = .88	EF = .68
FLOORS	Slab-on-grade	No Minimum			Gas; Natural or L.P.	EF = .54	EF =
	Raised Wood	R-19			Fuel Oil	EF = .54	EF =
	Raised Concrete	R-7	YES				
DUCT	Common, Frame	R-11					
	In unconditioned space	R-6	YES				
	In conditioned space	No minimum					

TABLE 6C-2: PRESCRIPTIVE REQUIREMENTS FOR GLASS AREAS IN ADDITIONS ONLY

Maximum percentage glass to floor area allowed is selected by type, overhang length, and solar heat gain coefficient. Maximum% = Installed % =							
GLASS TYPE, OVERHANG, AND SOLAR HEAT GAIN COEFFICIENT REQUIRED FOR GLASS PERCENTAGE ALLOWED							
UP TO 20%		UP TO 30%		UP TO 40%		UP TO 50%	
Single	Double	Single	Double	Single	Double	Single	Double
OH - SHGC	OH - SHGC	OH - SHGC	OH - SHGC	OH - SHGC	OH - SHGC	OH - SHGC	OH - SHGC
1' - .87	0' - .78	2' - .87	1' - .78	NOT ALLOWED	2' - .78	NOT ALLOWED	3' - .78
0' - .75		1' - .75	0' - .61		1' - .61		2' - .61
		0' - .57			0' - .44		1' - .44
							0' - .35
Get certified SHGC from the manufacturer or use defaults: Single clear SHGC = .87, double clear SHGC = .78, and single tint SHGC = .75							

COMPONENTS	SECTION	REQUIREMENTS	CHECK
Exterior Joints & Cracks	606.1	To be caulked, gasketed, weather-stripped or otherwise sealed.	✓
Exterior Windows & Doors	606.1	Max. 0.3 cfm/sq.ft. window area; .5 cfm/sq.ft. door area.	✓
Sole & Top Plates	606.1	Sole plates and penetrations through top plates of exterior walls must be sealed.	✓
Recessed Lighting	606.1	Type IC rated with no penetrations (two alternatives allowed).	
Multi-story Houses	606.1	Air barrier on perimeter of floor cavity between floors.	
Exhaust Fans	606.1	Exhaust fans vented to unconditioned space shall have dampers, except for combustion devices with integral exhaust ductwork.	✓
Combustion Heating	606.1	Combustion space and water heating systems must be provided with outside combustion air, except for direct vent appliances.	✓
Water Heaters	612.1	Comply with efficiency requirements in Table 6-12. Switch or clearly marked circuit breaker (electric) or cutoff (gas) must be provided. External or built-in heat trap required for vertical pipe risers.	✓
Swimming Pools & Spas	612.1	Spas & heated pools must have covers (except solar heated). Non-commercial pools must have a pump timer. Gas spa & pool heaters must have minimum thermal efficiency of 78%.	
Hot Water Pipes	612.1	Insulation is required for hot water circulating systems (including heat recovery units).	
Shower Heads	612.1	Water flow must be restricted to no more than 2.5 gallons per minute at 80 PSIG.	✓
HVAC Duct Construction, Insulation & Installation	610.1	All ducts, fittings, mechanical equipment and plenum chambers shall be mechanically attached, sealed, insulated and installed in accordance with the criteria of Section 610.1. Ducts in attics must be insulated to a minimum of R-6.	✓
HVAC Controls	607.1	Separate readily accessible manual or automatic thermostat for each system.	✓

GENERAL DIRECTIONS:

- On Table 6C-1 indicate the R-value of the insulation being added to each component and the efficiency levels of the equipment being installed. All R-values and efficiencies installed must meet or exceed the minimum values listed. Components and equipment neither being added nor renovated may be left blank.
- ADDITIONS ONLY. Determine the percentage of new glass to conditioned floor area in the addition as follows. Total the areas of all glass windows, sliding glass doors and glass door panels. Double the area of all non-vertical roof glass and add it to the previous total. When glass in existing exterior walls is being removed or enclosed by the addition, an amount equal to the total area of this glass may be subtracted from the total glass area. Divide the adjusted glass area total by the conditioned floor area of the addition. Multiply by 100 to get the percent. Find the largest glass percentage under which your calculated percentage falls on Table 6C-2. Prescriptions are given by the type of glass (Single or Double pane) and the overhang (OH) paired with a solar heat gain coefficient (SHGC). For a given glass type and overhang, the minimum solar heat gain coefficient allowed is specified. Actual glass windows and doors previously in the exterior walls of the house and being reinstalled in the addition do not have to comply with the overhang and solar heat gain coefficient requirements on Table 6C-2. All new glass in the addition must meet the requirement for one of the options in the glass percentage category you indicated. The overhang (OH) distance is measured perpendicularly from the face of the glass to a point directly under the outermost edge of the overhang.
- RENOVATIONS ONLY. Replacement glass needs to meet the following requirements. Any glass type and solar heat gain coefficient may be used for glass areas which are under at least a two foot overhang and whose lowest edge does not extend further than 8 feet from the overhang. Glass areas being renovated that do not meet this criteria must be either single-pane tinted, double-pane clear or double-pane tinted.
- BUILDING SYSTEMS. Comply when new system is installed for system installed.
- Complete the information requested on the top half of page 1.
- Read "Minimum Requirements for Small Additions and Renovations", Table 6C-3, and check all applicable items.
- Read, sign and date the "Owner/Agent" certification statement on page 1

ACE Heat & Air INC 497-2216

See Memo 758-1163

E-212-84

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION
Residential Limited Applications Prescriptive Method C

Form 600C-01
 Small Additions, Remodels & Building Systems

Compliance with Florida Code Chapter 6 of the Florida Energy Efficiency Code may be demonstrated by the use of Form 600C-01 for additions of built-up area less than 10,000 sq. ft., non-attached components of manufactured homes, and alterations to single and multifamily residences. Alternative methods are provided for additions by use of Form 600C-01 or 600A-01.

PROJECT NAME: **KATH BENNET**
 AND ADDRESS: **SPRACE ST.**
 CARRIER: **EARL BENNET**

BUILDER: **EARL BENNET**
 PERMITTING OFFICE: **SPRACE ST.**
 PERMIT NO.: **0712-84**

CLIMATE ZONE: **1**
 JURISDICTION NO.: **1**

SMALL ADDITIONS TO EXISTING RESIDENCES (600 Square feet or less of conditioned area). Prescriptive requirements in Tables 6C-1, 6C-2 and 6C-3 apply only to the components of the addition, not to the existing building. Heating, cooling, and water heating equipment efficiency levels must be met only when equipment is installed specifically to serve the addition or is being installed in conjunction with the addition construction. Components separating unconditioned spaces from conditioned spaces must meet the prescriptive minimum efficiency levels. REMODELS (Residential buildings undergoing renovation costing more than 20% of the assessed value of the building. Prescriptive components in Tables 6C-1 and 6C-2 apply only to the components and equipment being renovated or replaced. MANUFACTURED HOMES AND BUILDINGS. Only site-installed components and features are covered by the form. BUILDING SYSTEMS. Compliance when complete new system is installed.

1. Permitted Addition, New System or Manufactured Home
 2. Single family detached or continuously attached
 3. If Unusually - Not - or unless covered by this submission
 4. Conditioned floor area (sq. ft.)
 5. Total conditioned area (sq. ft.)
 6. Glazed area and type:
 - a. Clear glass
 - b. tint, blue or solar screen
 7. Percentage of glass to floor area
 8. Floor type and construction:
 - a. Slab on grade (R-value)
 - b. Wood, raised (R-value)
 - c. Wood, common (R-value)
 - d. Concrete, raised (R-value)
 - e. Concrete, common (R-value)
 9. Wall type and construction:
 - a. Masonry
 1. Masonry (Insulation R-value)
 2. Wood frame (Insulation R-value)
 - b. Adjacent:
 1. Masonry (Insulation R-value)
 2. Wood frame (Insulation R-value)
 - c. Meeting walls of Multiple Units* (Yes/No)
 10. Ceiling type and construction:
 - a. Under attic (Insulation R-value)
 - b. Single assembly (Insulation R-value)
 11. Ceiling system*
 (Types: ceiling, drop ceiling, package terminal A.C., gas, existing, none)
 12. Heat pump system*: (Types: heat pump, electric, strip, natural gas, L.P. gas, heat pump, room or P.T.A.C., existing, none)
 13. Air distribution system*:
 - a. Backflow damper or single package system* (Yes/No)
 - b. Ducts or meeting walls adequately sealed* (Yes/No)
 14. Hot water system:
 (Types: electric, natural gas, oil, existing, none)
- * Pertains to manufactured homes with site installed components.

Provide Data

1. **NEW SYSTEM**
2. **SINGLE**
- 3.
4. **2110 Sq. Ft.**
5. **10 Ft.**
- 6a. Single Panel **Double Panel**
- 6b. sq. ft. **344** sq. ft.
- 6c. sq. ft. sq. ft.
7. %
- 8a. R-7
- 8b. R-7
- 8c. R-7
- 8d. R-7
- 8e. R-7
- 9a-1 R-19
- 9a-2 R-19
- 9b-1 R-19
- 9b-2 R-19
- 9c. NC
- 10a. R-44
- 10b. R-44
11. Type: **CENTRAL**
12. Type: **HEAT PUMP**
- 13a. YES
- 13b. YES
14. Type: **ELECT.**
15. R-88

I hereby certify that the plans and specifications covered by the calculation are in compliance with the Florida Energy Code.

Signature: **Sara Bucchi** DATE: **1-21-07**

Signature: **Sara Bucchi** DATE: **1-22-07**

I hereby certify that the plans and specifications covered by the calculation comply with the Florida Energy Code. Before construction is completed, this building will be inspected for compliance in accordance with Section 553.906, F.S.

BUILDING OFFICIAL: _____

DATE: _____

~~See~~

FAX # 758-2160

Climatic Zones 1 2 3

TABLE 1: THE SCOPE OF INVESTIGATION FOR SMALL ADDITIONS (ADD Sq. Ft. and Less), IMPROVEMENTS TO EXISTING BUILDINGS AND PRE-INSTALLED COMPONENTS OF MANUFACTURED HOMES

COMMENTS		COVERED INSULATION	INSULATION INSTALLED	EQUIPMENT	MINIMUM EFFICIENCY	INSTALLED EFFICIENCY
WALLS	Concrete Block	R-7		Control A/C - Split	SEER = 10.0	SEER = 17
	Frame, 2" x 4"	R-11		Single Pkg.	SEER = 9.7	SEER =
	Frame, 2" x 6"	R-13	X YES	Floor unit or PTAC	EER = 8.5	EER =
	Common, Frame	R-11				
CEILING	Common, Masonry	R-5				
	Under Sill	R-30 44	YES	Electric Resistance	ANY	
	Single Assembly, Insulated			Heat pump - Split	HSPF = 6.8	HSPF = 8.4
	Frame	R-10		Single Pkg.	HSPF = 6.6	HSPF =
FLOOR	Metal Frame	R-10		Floor unit or FTHP	GOP = 2.7	GOP =
	Single Assembly, Upset	R-10				
	Common, Frame	R-13		Gas, natural or propane	AFUE = 76	AFUE =
	34-in.-out grade	No insulation		Fuel Oil	AFUE = 70	AFUE =
DOOR	Insulated Wood	R-10		Electric Resistance	EF = 86	EF = 88
	Insulated Concrete	R-9	YES	Gas, Natural or L.P.	EF = 84	EF =
	Common, Frame	R-11		Fuel Oil	EF = 84	EF =
	In unconditioned space	R-6	YES			
STAIRS	In conditioned space	No insulation				

FOR ALL INFORMATION REQUESTED FOR CLARIFICATION IN ADDITIONS ONLY

of bottom temperature data in Lake Erie allowed it to be selected by type, overhang length, and solar heat gain coefficient. *Keywords:* ...

GLASS TYPE, COEFFICIENT, AND SOLAR HEAT GAIN COEFFICIENT REQUIRED FOR GLASS PERCENTAGE ALLOWED							
UP TO 10%		UP TO 20%		UP TO 30%		UP TO 40%	
Single	Double	Single	Double	Single	Double	Single	Double
0.1 - 0.20	0.1 - 0.20	0.1 - 0.20	0.1 - 0.20	0.1 - 0.20	0.1 - 0.20	0.1 - 0.20	0.1 - 0.20
1.57	0.76	2.87	1.76	NOT	2.76	NOT	2.76
9.75		1.75	0.76	ALLOWED	1.61	ALLOWED	1.61
		0.57			0.36		0.36

(b) $\frac{1}{2}$ inch $\times$ 36 inch from the member after it was deflected. Single clear SLHC = 87, double clear SLHC = 74, and double clear SLHC = 74.

FREE 90 DAY TRIAL PERIOD! NO OBLIGATION! NO CREDIT CARD REQUIRED!
 ORDER TODAY! **FREE SHIPPING AND HANDLING FOR ALL PACKAGES!**

MECHANICAL SYSTEM	SECTION	REQUIREMENTS	REMARKS
Exterior Windows & Doors	606.1	100% air-tight, insulated, weather-stripped or otherwise sealed.	✓
Exterior Windows & Doors	606.2	Shall, 0.3 cfm/sq. ft. window area; .5 cfm/sq. ft. door area.	✓
Solar & Cap. Phases	606.3	Cold phases and penetrations through top plates of exterior walls must be sealed.	✓
Insulated Lighting	606.4	Type IC rated with no penetrations (see alternatives allowed).	✓
Roof & Ceiling Details	606.5	Air barrier on perimeter of floor cavity between floors.	✓
Roofing Details	606.6	Exhaust fans vented to unconditioned space shall have dampers, except for combination devices with integral exhaust ductwork.	✓
Combustion Details	606.7	Combustion space and water heating systems must be provided with outside combustion air, except for direct vent equipment.	✓
Water Heating	610.1	Comply with efficiency requirements in Table 6-12. Switch or clearly marked circuit breaker (locked) or cutoff must be provided. External or built-in heat loss required for vented chimneys.	✓
Swimming Pools & Spas	610.2	Spas & heated pools must have covers (except solar heated). Non-commercial pools must have a pump filter, flow spa & pool heaters must have minimum flow rate efficiency of 75%.	✓
Hot Water Circulation	610.3	Insulation is required for hot water circulating systems (including heat recovery units).	✓
Water Flow	610.4	Water flow must be restricted to no more than 2.5 gallons per minute at 60 PSIG.	✓
Water Heating	610.5	All ducts, flues, mechanical equipment and plenum chambers shall be mechanically insulated, sealed, insulated and installed in accordance with the code of Section 610.1. Ducts & flues must be insulated to a minimum of R-6.	✓
Water Heating	610.6	Separate readily accessible manual or automatic thermostat for each system.	✓

For Value 1, the base value of the material being added to each component and the additional costs of the component being installed. PEI pricing includes work included with base cost of the material being installed. Components and equipment including base and additional material are listed below.

AREA WAS CANCELLED. The entire square value of one given to conditions of the area in the addition as follows. Total the areas of all given elements, adding minus signs and minus signs (and) the area of all elements and the area of the given total. The area of the given total is being removed or excluded by the addition, an amount equal to the total area of the given elements is subtracted from the total area of the given elements. The area of the given elements is the area of the given elements.

[illegible]

When a child is wearing a harness, the harness should be properly adjusted. Any child who is not wearing a harness correctly may be used for play only, which includes a child who is wearing a harness that is not properly adjusted. A child who is wearing a harness that is not properly adjusted may be used for play only, which includes a child who is wearing a harness that is not properly adjusted. A child who is wearing a harness that is not properly adjusted may be used for play only, which includes a child who is wearing a harness that is not properly adjusted.

For full details of the conditions of sale, please refer to the full terms and conditions on the back of the book.

1. *Chlorophyll a* and *Chlorophyll b* contents were determined using a spectrophotometer (Shimadzu UV-1601) at 663 nm and 646 nm, respectively. The total chlorophyll content was calculated using the following formula: $\text{Total Chlorophyll} = \frac{1}{22.2} \times \text{Chlorophyll a} + \frac{1}{22.9} \times \text{Chlorophyll b}$.

1977

2/28 09:46 PM AOE Hunt & Air Inc 1087-2346

12.5. 1222 + 1122 + 112 487-2216 Page 2

Back to Quote

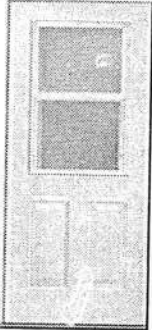
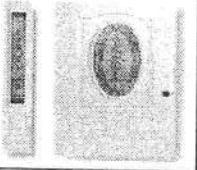
Date: 12/24/2007

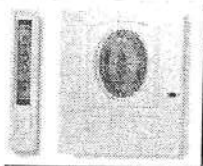
LOWE'S HOME CENTERS, INC.
#179
3463 NW BASCOM NORRIS DRIVE
LAKE CITY, FL 32055
USA
(386) 719-6622



Project #: 225513264
Customer Name: JOSEPH BENNETT
Customer Phone: (386) 754-5455
Customer Address: 2699 SW SPRUCE RD.
LAKE CITY, FL 32024
USA

Description: doors and windows

Line Item	Product Code	Unit Price	Quantity	Total Price
Frame Size	Description			
0003	Manufacturer: Masonite Reliabt			
RO Size = 38 1/4" W x 82 1/8" H	Division: Millwork			
	Product: Doors			
	Type: Entry/Exterior			
	Manufacturer: Masonite Reliabt			
	Configuration: Single Unit			
	Finish: Steel			
	Material: Steel			
	Door Style: Ventlite			
	Product Style: Clear			
	Handing: Left Inswing			
	Sill Style: Mill Finish			
	Slab Width: 36"			
	Slab Height: 79"			
	Rough Opening Width: 38 1/4"			
	Rough Opening Height: 82 1/8"			
	Glass Style: Clear Insulated			
	Jamb Width: 6 9/16"			
	Jamb Type: Primed			
	Brickmould: Yes			
	Bore: Double			
	Lead Time: 10 Days			
	*** UNIT WILL BE DELIVERED PREFINISHED WHITE.***			
	Thank you for Ordering a Masonite Reliabt Product			
	Unit is built to specifications given in the configurator. Pictures might not be an exact representation of the door that has been ordered.			
		\$281.00	1	\$281.00
0004	Manufacturer: Masonite Reliabt			
RO Size = 51 3/4" W x 82 1/8" H	Division: Millwork			
	Product: Doors			
	Type: Entry/Exterior			
	Manufacturer: Masonite Reliabt			
	Configuration: Single Unit w Hinge Side Sidelite			
	Finish: Steel			
	Material: Steel			
		\$638.00	1	\$638.00

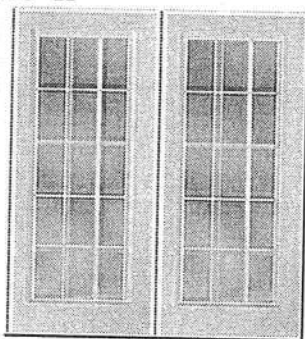


Door Style: 3/4 Oval
 Product Style: Hampton
 Sidelight Style: 3/4 Lite
 Caming Style: Platinum
 Handing: Left Inswing
 Sill Style: Mill Finish
 Slab Width: 36"
 Slab Height: 79"
 Sidelight Width: 12"
 Rough Opening Width: 51 3/4"
 Rough Opening Height: 82 1/8"
 Glass Style: Decorative
 Jamb Width: 6 9/16"
 Jamb Type: Primed
 Brickmould: Yes
 Bore: Double
 Lead Time: 10 Days

*** UNIT WILL BE DELIVERED
 PREFINISHED WHITE. ***

Thank you for Ordering a Masonite Reliabilt
 Product
 Unit is built to specifications given in the
 configurator. Pictures might not be an exact
 representation of the door that has been ordered.

0007
 RO Size = 74 3/4" W x 81
 1/8" H



Manufacturer: Masonite Reliabilt
 Division: Millwork
 Product: Doors
 Type: Entry/Exterior
 Manufacturer: Masonite Reliabilt
 Configuration: Double Unit
 Finish: Steel
 Material: Steel
 Door Style: 15 Lite
 Product Style: Clear with Grille
 Handing: Right Outswing
 Sill Style: Mill Finish
 Slab Width: 36"
 Slab Height: 79"
 Rough Opening Width: 74 3/4"
 Rough Opening Height: 81 1/8"
 Glass Style: Clear Insulated
 Jamb Width: 6 9/16"
 Jamb Type: Primed
 Brickmould: Yes
 T-Astragal: Yes
 Bore: Double
 Lead Time: 10 Days

*** UNIT WILL BE DELIVERED
 PREFINISHED WHITE. ***

Thank you for Ordering a Masonite Reliabilt
 Product
 Unit is built to specifications given in the
 configurator. Pictures might not be an exact
 representation of the door that has been ordered.

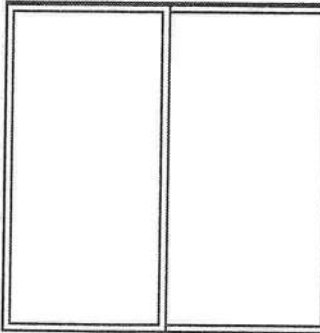
\$571.00

1

\$571.00

0001

RO Size = 48" W x 48" H
 Frame Size = 47 1/2" W x
 47 1/2" H



Manufacturer: ThermaStar by Pella (R)

47 1/2" x 47 1/2"

Product: Windows

Type: Sliding

Manufacturer: ThermaStar by Pella (R)

Room Location: KITCHEN

Material: Vinyl

Frame Type (Overall Width): Nail Fin w/

J-Channel (2 11/16" OAW - 1 5/8" WD)

Series: 10 Series

Configuration: XO

Frame Size Width: 47 1/2"

Frame Size Height: 47 1/2"

Vent Size: 1/2 Vent

Exterior Finish: White

Interior Finish: White

Glazing: Low-E (Recommended)

Argon Gas Filled IG: No

Tempered Glass: No

Grilles Between Glass Type: None

Hardware: 1 Cam/Keeper Lock Set

Hardware Color: White

Screen: Half Unit Fiberglass Screen

Lead Time: 14 Days

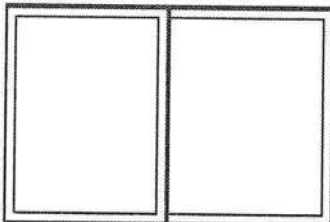
\$170.83

2

\$341.66

0002

RO Size = 36" W x 24" H
 Frame Size = 35 1/2" W x
 23 1/2" H



Manufacturer: ThermaStar by Pella (R)

35 1/2" x 23 1/2"

Product: Windows

Type: Sliding

Manufacturer: ThermaStar by Pella (R)

Room Location: MASTER BATH

Material: Vinyl

Frame Type (Overall Width): Nail Fin w/

J-Channel (2 11/16" OAW - 1 5/8" WD)

Series: 10 Series

Configuration: XO

Frame Size Width: 35 1/2"

Frame Size Height: 23 1/2"

Vent Size: 1/2 Vent

Exterior Finish: White

Interior Finish: White

Glazing: Low-E (Recommended)

Argon Gas Filled IG: No

Tempered Glass: No

Grilles Between Glass Type: None

Hardware: 1 Cam/Keeper Lock Set

Hardware Color: White

Screen: Half Unit Fiberglass Screen

Lead Time: 14 Days

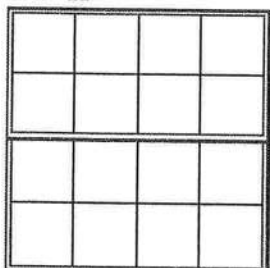
\$104.83

2

\$209.66

0005

RO Size = 48" W x 60" H
 Frame Size = 47 1/2" W x
 59 1/2" H



Manufacturer: ThermaStar by Pella (R)

47 1/2" x 59 1/2"

Product: Windows

Type: Single Hungs

Manufacturer: ThermaStar by Pella (R)

Room Location: FAMILY ROOM

Material: Vinyl

Frame Type (Overall Width): Nail Fin w/

J-Channel (2 11/16" OAW - 1 5/8" WD)

Series: 10 Series

Configuration: One Wide

Frame Size Width: 47 1/2"

\$267.47

7

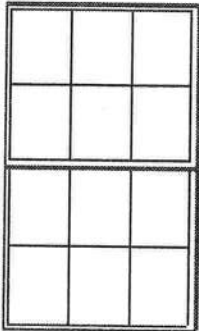
\$1,872.29



Frame Size Height: 59 1/2"
Vent Size: 1/2 Vent
Drywall Pass-Thru: No
Exterior Finish: White
Interior Finish: White
Glazing: Low-E (Recommended)
Argon Gas Filled IG: No
Tempered Glass: No
Grilles Between Glass Type: 3/4" Contour
Grille Pattern: Standard Colonial
Top Sash Lite Pattern: 4W2H
Bottom Sash Lite Pattern: 4W2H
Hardware: 2 Cam/Keeper Lock Sets
Hardware Color: White
Screen: Half Unit Fiberglass Screen
Design Performance: Standard
Lead Time: 14 Days

0006

RO Size = 36" W x 60" H
Frame Size = 35 1/2" W x
59 1/2" H



Manufacturer: ThermaStar by Pella (R)
35 1/2" x 59 1/2"
Product: Windows
Type: Single Hungs
Manufacturer: ThermaStar by Pella (R)
Room Location: FAMILY ROOM
Material: Vinyl
Frame Type (Overall Width): Nail Fin w/
J-Channel (2 11/16" OAW - 1 5/8" WD)
Series: 10 Series
Configuration: One Wide
Frame Size Width: 35 1/2"
Frame Size Height: 59 1/2"
Vent Size: 1/2 Vent
Drywall Pass-Thru: No
Exterior Finish: White
Interior Finish: White
Glazing: Low-E (Recommended)
Argon Gas Filled IG: No
Tempered Glass: No
Grilles Between Glass Type: 3/4" Contour
Grille Pattern: Standard Colonial
Top Sash Lite Pattern: 3W2H
Bottom Sash Lite Pattern: 3W2H
Hardware: 2 Cam/Keeper Lock Sets
Hardware Color: White
Screen: Half Unit Fiberglass Screen
Design Performance: Standard
Lead Time: 14 Days

\$211.95 7 \$1,483.65

Salesperson: LAWRENCE TIERNEY (S0179LT1)

Project Total: \$5,397.26

Accepted by: _____

Date: 12/24/2007

Print this Page

This Millwork Quote is valid until 12/30/2007. This is an estimate only. This estimate does not include tax or delivery charges. Delivery of all materials contained in this estimate are subject to availability from the manufacturer or supplier. All the above quantities, dimensions, specifications and accessories have been verified and accepted.

Right-J Worksheet
Entire House
A.C.E. HEAT AND AIR, INC

Job: BENNETT
 Date: Dec 11, 2007
 By: SARA

1 2 3 4 5	Room name Exposed wall Ceiling height Room dimensions Room area				Entire House 192.0 ft 10.0 ft 2204.0 ft ²				MB 35.0 ft 10.0 ft 18.0 x 17.0 ft 306.0 ft ²				heat/cool	
	Ty	Construction number	U-value (Btuh/ft ² ·°F)	Or	HTM (Btuh/ft ²)		Area (ft ²) or perimeter (ft)		Load (Btuh)		Area (ft ²) or perimeter (ft)		Load (Btuh)	
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool
6	W	12E-2bm	0.091	n	3.37	1.21	380	356	1199	429	0	0	0	0
	G	1D-c2ob	0.650	n	24.05	24.99	24	0	577	600	0	0	0	0
	W	12E-2bm	0.091	e	3.37	1.21	580	511	1721	616	180	168	566	203
	G	1D-c2ob	0.650	e	24.05	75.35	48	0	1154	3617	12	0	289	904
11	D	11D0	0.390	e	14.43	11.37	21	21	303	239	0	0	0	0
	W	12E-2bm	0.091	s	3.37	1.21	380	314	1057	379	170	116	391	140
	G	1D-c2ob	0.650	s	24.05	29.42	24	0	577	706	12	0	289	353
	D	11D0	0.390	s	14.43	11.37	42	42	606	477	42	42	606	477
	W	12E-2bm	0.091	w	3.37	1.21	580	502	1690	605	0	0	0	0
	G	1D-c2ob	0.650	w	24.05	75.35	36	0	866	2713	0	0	0	0
	D	11D0	0.390	w	14.43	11.37	42	42	606	477	0	0	0	0
	C	16A-44md	0.022	-	0.81	1.60	2204	2204	1794	3523	306	306	249	489
	F	22A-tpb	1.358	-	50.25	0.00	2204	192	9647	0	306	35	1759	0
6	c) AED excursion									0				-236
	Envelope loss/gain								21798	14381			4147	2330
12	a) Infiltration								4758	1093			867	199
	b) Room ventilation								6092	2799			0	0
13	Internal gains:				Occupants @	230	4			920	2			460
					Appliances @	1200	3			3600	0			0
	Subtotal (lines 6 to 13)								32648	22793			5015	2989
	Less external load								0	0			0	0
	Less transfer								0	0			0	0
	Redistribution								0	0			0	0
14	Subtotal								32648	22793			5015	2989
15	Duct loads						32%	56%	10409	12786	32%	56%	1599	1677
	Total room load								43057	35579			6613	4666
	Air required (cfm)								1733	1733			266	227

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Right-J Worksheet

Entire House

A.C.E. HEAT AND AIR, INC

Job: BENNETT
Date: Dec 11, 2007
By: SARA

1	Room name					M.BATH				CLOSET					
2	Exposed wall					11.0 ft				23.0 ft					
3	Ceiling height					10.0 ft				10.0 ft					
4	Room dimensions					18.0 x 11.0 ft				13.0 x 10.0 ft					
5	Room area					198.0 ft²				130.0 ft²					
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)		
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool	
6	W	12E-2bm	0.091	n	3.37	1.21	0	0	0	0	0	0	0	0	
	G	1D-c2ob	0.650	n	24.05	24.99	0	0	0	0	0	0	0	0	
	W	12E-2bm	0.091	e	3.37	1.21	0	0	0	0	0	0	0	0	
	G	1D-c2ob	0.650	e	24.05	75.35	0	0	0	0	0	0	0	0	
11	D	11D0	0.390	e	14.43	11.37	0	0	0	0	0	0	0	0	
	W	12E-2bm	0.091	s	3.37	1.21	110	98	330	118	100	100	337	121	
	G	1D-c2ob	0.650	s	24.05	29.42	12	0	289	353	0	0	0	0	
	D	11D0	0.390	s	14.43	11.37	0	0	0	0	0	0	0	0	
	W	12E-2bm	0.091	w	3.37	1.21	0	0	0	0	130	130	438	157	
	G	1D-c2ob	0.650	w	24.05	75.35	0	0	0	0	0	0	0	0	
	D	11D0	0.390	w	14.43	11.37	0	0	0	0	0	0	0	0	
	C	16A-44md	0.022	-	0.81	1.60	198	198	161	316	130	130	106	208	
	F	22A-tpb	1.358	-	50.25	0.00	198	11	553	0	130	23	1156	0	
6	c) AED excursion									-97				-45	
	Envelope loss/gain								1332	691			2036	440	
12	a) Infiltration								273	63			570	131	
	b) Room ventilation								3036	1395			0	0	
13	Internal gains:														
	Occupants @ 230							0		0	0			0	
	Appliances @ 1200							0		0	0			0	
	Subtotal (lines 6 to 13)									4641	2148			2606	571
	Less external load									0	0			0	0
	Less transfer									0	0			0	0
	Redistribution									0	0			0	0
14	Subtotal									4641	2148			2606	571
15	Duct loads							32%	56%	1480	1205	32%	56%	831	320
	Total room load									6121	3353			3437	891
	Air required (cfm)									246	163			138	43

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1	Room name					UTILITY 9.0 ft 10.0 ft 9.0 x 14.0 ft heat/cool 126.0 ft²					BED 12.0 ft 10.0 ft 12.0 x 14.0 ft heat/cool 168.0 ft²					
2	Ty	Construction number	U-value (Btuh/ft²-°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)			
3					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool		
4	6 . . . 11	W	12E-2bm	0.091	n	3.37	1.21	0	0	0	0	0	0	0	0	
5			G	1D-c2ob	0.650	n	24.05	24.99	0	0	0	0	0	0	0	0
		W	12E-2bm	0.091	e	3.37	1.21	90	69	232	83	120	108	364	130	
		G	1D-c2ob	0.650	e	24.05	75.35	0	0	0	0	12	0	289	904	
		D	11D0	0.390	e	14.43	11.37	21	21	303	239	0	0	0	0	
		W	12E-2bm	0.091	s	3.37	1.21	0	0	0	0	0	0	0	0	
		G	1D-c2ob	0.650	s	24.05	29.42	0	0	0	0	0	0	0	0	
		D	11D0	0.390	s	14.43	11.37	0	0	0	0	0	0	0	0	
		W	12E-2bm	0.091	w	3.37	1.21	0	0	0	0	0	0	0	0	
		G	1D-c2ob	0.650	w	24.05	75.35	0	0	0	0	0	0	0	0	
	D	11D0	0.390	w	14.43	11.37	0	0	0	0	0	0	0	0		
	C	16A-44md	0.022	-	0.81	1.60	126	126	103	201	168	168	137	269		
	F	22A-tpb	1.358	-	50.25	0.00	126	9	452	0	168	12	603	0		
6	c) AED excursion									-42				16		
	Envelope loss/gain								1090	481			1392	1319		
12	a) Infiltration								223	51			297	68		
	b) Room ventilation								0	0			0	0		
13	Internal gains:			Occupants @	230	0				0	1			230		
				Appliances @	1200	0				0	0			0		
	Subtotal (lines 6 to 13)								1313	532			1689	1617		
	Less external load								0	0			0	0		
	Less transfer								0	0			0	0		
	Redistribution								0	0			0	0		
14	Subtotal								1313	532			1689	1617		
15	Duct loads						32%	56%	419	299	32%	56%	539	907		
	Total room load									1732	831			2228	2524	
	Air required (cfm)									70	40			90	123	

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Right-J Worksheet
Entire House
A.C.E. HEAT AND AIR, INC

Job: BENNETT
 Date: Dec 11, 2007
 By: SARA

1	Room name				OFFICE						LIV/FAM			
	Exposed wall				12.0 ft						57.0 ft			
	Ceiling height				10.0 ft						10.0 ft			
	Room dimensions				12.0 x 12.0 ft						1.0 x 866.0 ft			
	Room area				144.0 ft²						866.0 ft²			
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)	
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool
6	W	12E-2bm	0.091	n	3.37	1.21	120	108	364	130	120	108	364	130
	G	1D-c2ob	0.650	n	24.05	24.99	12	0	289	300	12	0	289	300
	W	12E-2bm	0.091	e	3.37	1.21	0	0	0	0	0	0	0	0
	G	1D-c2ob	0.650	e	24.05	75.35	0	0	0	0	0	0	0	0
11	D	11D0	0.390	e	14.43	11.37	0	0	0	0	0	0	0	0
	W	12E-2bm	0.091	s	3.37	1.21	0	0	0	0	0	0	0	0
	G	1D-c2ob	0.650	s	24.05	29.42	0	0	0	0	0	0	0	0
	D	11D0	0.390	s	14.43	11.37	0	0	0	0	0	0	0	0
	W	12E-2bm	0.091	w	3.37	1.21	0	0	0	0	450	372	1253	449
	G	1D-c2ob	0.650	w	24.05	75.35	0	0	0	0	36	0	866	2713
	D	11D0	0.390	w	14.43	11.37	0	0	0	0	42	42	606	477
	C	16A-44md	0.022	-	0.81	1.60	144	144	117	230	866	866	705	1384
	F	22A-1ph	1.358	-	50.25	0.00	144	12	603	0	866	57	2864	0
6	c) AED excursion									-53				515
	Envelope loss/gain								1372	607			6946	5968
12	a) Infiltration								297	68			1413	325
	b) Room ventilation								0	0			20	9
13	Internal gains:				Occupants @	230	0		0	0	0			0
					Appliances @	1200	0		0	0	3			3600
	Subtotal (lines 6 to 13)								1670	675			8378	9902
	Less external load								0	0			0	0
	Less transfer								0	0			0	0
	Redistribution								1482	853			0	0
14	Subtotal								3152	1528			8378	9902
15	Duct loads						32%	56%	1005	857	32%	56%	2671	5554
	Total room load								4157	2385			11050	15456
	Air required (cfm)								167	116			445	753

Printout certified by ACCA to meet all requirements of Manual J 8th Ed.

Right-J Worksheet
Entire House
A.C.E. HEAT AND AIR, INC

Job: BENNETT
 Date: Dec 11, 2007
 By: SARA

1	Room name					BATH				BED 2					
2	Exposed wall					7.0 ft				26.0 ft					
3	Ceiling height					10.0 ft				10.0 ft					
4	Room dimensions					7.0 x 14.0 ft				12.0 x 14.0 ft					
5	Room area					98.0 ft²				168.0 ft²					
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)		
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool	
6	W	12E-2bm	0.091	n	3.37	1.21	0	0	0	0	140	140	471	169	
	G	1D-c2ob	0.650	n	24.05	24.99	0	0	0	0	0	0	0	0	
	W	12E-2bm	0.091	e	3.37	1.21	70	58	195	70	120	108	364	130	
	G	1D-c2ob	0.650	e	24.05	75.35	12	0	289	904	12	0	289	904	
11	D	11D0	0.390	e	14.43	11.37	0	0	0	0	0	0	0	0	
	W	12E-2bm	0.091	s	3.37	1.21	0	0	0	0	0	0	0	0	
	G	1D-c2ob	0.650	s	24.05	29.42	0	0	0	0	0	0	0	0	
	D	11D0	0.390	s	14.43	11.37	0	0	0	0	0	0	0	0	
	W	12E-2bm	0.091	w	3.37	1.21	0	0	0	0	0	0	0	0	
	G	1D-c2ob	0.650	w	24.05	75.35	0	0	0	0	0	0	0	0	
	D	11D0	0.390	w	14.43	11.37	0	0	0	0	0	0	0	0	
	C	16A-44md	0.022	-	0.81	1.60	98	98	80	157	168	168	137	269	
	F	22A-tpb	1.358	-	50.25	0.00	98	7	352	0	168	26	1306	0	
6	c) AED excursion									-55				-2	
	Envelope loss/gain								915	1076			2567	1469	
12	a) Infiltration								173	40			644	148	
	b) Room ventilation								3036	1395			0	0	
13	Internal gains:		Occupants @	230			0			0	1			230	
			Appliances @	1200			0			0	0			0	
	Subtotal (lines 6 to 13)								4125	2511			3211	1847	
	Less external load								0	0			0	0	
	Less transfer								0	0			0	0	
	Redistribution								1729	995			-3211	-1847	
14	Subtotal								5854	3505			0	0	
15	Duct loads							32%	56%	1866	1966	32%	56%	0	0
	Total room load								7720	5472			0	0	
	Air required (cfm)								311	267			0	0	

Printout certified by ACCA to meet all requirements of Manual J 8th Ed.



CAL-TECH TESTING, INC.

ENGINEERING & TESTING LABORATORY

P.O. Box 1625, Lake City, FL 32056-1625
4784 Rosselle St. • Jacksonville, FL 32254
2230 Greensboro Hwy., Quincy, FL 32351

Lake City • (386) 755-3633

Fax • (386) 752-5456

Jacksonville • (904) 381-8901

Fax • (904) 381-8902

Quincy • (850) 442-3495

Fax • (850) 442-4008

JOB NO.:
DATE TESTED: 03-25-08

26658

REPORT OF IN-PLACE DENSITY TEST

ASTM METHOD: ✓ (D-2922) Nuclear (D-2937) Drive Cylinder Other

PROJECT: BENNET RESIDENCE

CLIENT: MOWREY CONCRETE FINISHING

GENERAL CONTRACTOR: SAC EARTHWORK CONTRACTOR: SAC

SOIL USE (SEE NOTE): SPECIFICATION REQUIREMENTS: 95%

TECHNICIAN: S. OSTEEN

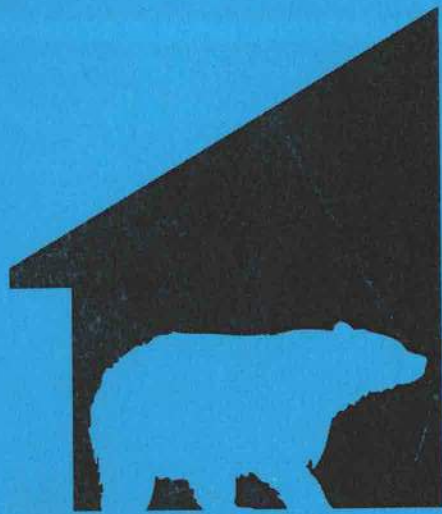
MODIFIED (ASTM D-1557): ✓ STANDARD (ASTM D-698):

TEST NO.	TEST LOCATION	TEST:	PROCTOR NO.	WET DENS. LBS./CU.FT.	DRY DENS. LBS./CU.FT.	MOIST PERCENT	% MAX. DENS.
		✓ DEPTH ELEV. LIFT					
1	8' FROM NW CORNER	12"		109.4	103.9	5.3	97.7
2	8' FROM NE CORNER	12"		107.5	102.5	4.9	95.8
3	8' FROM SE CORNER	12"		106.0	102.1	3.8	95.5
4	8' FROM SW CORNER	12"		108.8	102.0	6.7	95.3

REMARKS:

PROCTOR NO.	SOIL DESCRIPTION	PROCTOR VALUE	OPT. MOIST.
		107.0	

NOTE: 1. Building Fill 2. Trench Backfill 3. Base Course 4. Subbase/Stabilized Subgrade 5. Embankment 6. Subgrade/Natural Soil 7. Other
The test results presented in this report are specific only to the samples tested at the time of testing. The tests were performed in accordance with generally accepted methods and standards. Since material conditions can vary between test location and change with time, sound judgement should be exercised with regard to the use and interpretation of the data.



**KODIAK
STEEL
HOMES**

**7200 Industry Drive
North Little Rock, AR 72117**

**AUGUSTA 14
CALCULATIONS**

FBC 2004/ 20140

EXP. B SEISMIC 2

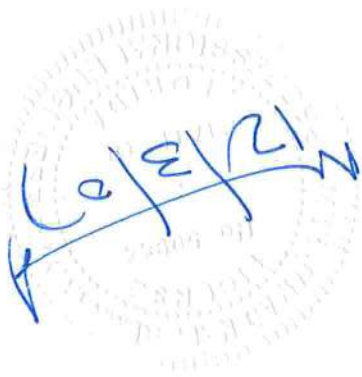
(EAE)
Joseph E. Bennett, Sr.
2699 SW Spruce Rd
Lake City, FL 32024

KODIAK Steel Homes
7301 INDUSTRY DR
North Little Rock, Arkansas, 72117

Project Name:
AUGUSTA 1 DESIGN

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KODIAK STEEL HOMES
7301 INDUSTRY DR.
N. LITTLE ROCK, AR 72117

STRUCTURAL DESIGN CALCULATIONS
FOR

Augusta 1

BUILDING DATA
Width (ft) = 37.0
Length (ft) = 60.0
Eave Height (ft) = 11.8/ 11.8
Roof Slope (rise/12) = 5.00/ 5.00
Dead Load (psf) = 3.0
Live Load (psf) = 20.0
Collat. Load (psf) = 7.0
Snow Load (psf) = 20.0
Wind Speed(mph) = 140.0
Wind Code = FBC 04
Closed/Open = C
Exposure = B
Importance - Wind = 1.00
Importance - Seismic = 1.00
Seismic Design Category= D
Seismic Coeff (Fa*Sa) = 1.00
Designer =

10/28/07

Surf	Rafter_Wind_1	Rafter_Wind_2	Bracing_Wind	Long	Surface	Friction
Id	Left	Right	Left	Right	Wind	
1	0.00	0.00	0.56	-0.75	0.00	0.00
2	-0.89	-0.53	-0.81	-0.95	0.00	0.00
3	-0.81	-0.45	-0.89	-0.95	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00

COLUMN & BRACING DESIGN LOADS:

No. Id	Dead	Coll	LIVE	Snow	Left	Right	Brace_Wind	Long	Column_Wind	Press	Suct	Seis	Id	Coef	Aux_Load
12	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	1.13	1.13	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	1.13	1.13	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.73	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.73	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

RAFTER DESIGN LOADS:

No. Id	Dead	Coll	LIVE	Snow	Left	Right	Rafter_Wind_1	Rafter_Wind_2	Long	Wind	Right	Left	Seis	Id	Coef	Aux_Load
13	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

AUXILIARY LOADS:

No. Aux	Aux Id	Name	No. Load	Add_Load	Coef
6	1	E1UNB_SL 1	2	1.00	0.00
2	2	E1UNB_SL 2	2	1.50	1.50
3	3	E1PAT_TL 3	3	1.00	1.00
4	4	E1PAT_TL 4	3	1.00	1.00
5	5	E1PAT_TL 5	2	1.00	1.00
6	6	E1PAT_TL 6	2	1.00	1.00

ADDITIONAL LOADS:

No. Add	Add Id	Surf	Basic Load	Type	W1	Fy	Mom	X	Y	.. Conc	.. Dist
14	1		-----	D	-0.13	-0.13	0.42	0.00	20.04		
2	2		-----	D	-0.13	-0.13	0.42	0.00	20.04		
3	3		-----	D	-0.13	-0.13	0.42	0.00	20.04		
4	4		-----	D	-0.13	-0.13	0.42	0.00	20.04		

[illegible]

AUXILIARY LOADS:					
No.	Aux	Name	No.	Add_Load	Coeff
6	Aux Id	E2UNB_SL 1	2	1	0.00
					1.50
2		E2UNB_SL 2	2	1	1.50
					0.00
3		E2PAT_TL 3	3	3	1.00
					1.00
					1.00
4		E2PAT_TL 4	3	4	1.00
					1.00
					1.00
5		E2PAT_TL 5	2	3	1.00
					1.00
					1.00
6		E2PAT_TL 6	2	4	1.00
					1.00

ADDITIONAL LOADS:													
No.	Add	Surf	Basic	Load	Load	Type	Fx	Fy	Mom	X	Y	.. Conc	.. Dist
10	Add	Id	Id	Id	Id	D	-0.13	-0.13	0.42	0.00	20.04	Dx2	
2	3	----	D	-0.13	-0.13	D	-0.13	-0.13	-0.42	0.00	20.04		
3	2	----	D	-0.13	-0.13	D	-0.13	-0.13	-0.42	0.00	20.04		
4	2	----	D	-0.13	-0.13	D	-0.13	-0.13	0.42	0.00	13.54		
5	3	----	D	-0.13	-0.13	D	-0.13	-0.13	-0.42	0.00	20.04		
6	3	----	D	-0.13	-0.13	D	-0.13	-0.13	-0.42	6.50	20.04		
7	2	WINDL1	D	-0.01	-0.01	D	-0.01	-0.01	0.00	18.50	20.04		
8	2	WINDL2	D	-0.02	-0.02	D	-0.02	-0.02	0.00	18.50	20.04		
9	3	WINDR1	D	-0.02	-0.02	D	-0.02	-0.02	0.00	0.00	1.54		
10	3	WINDR2	D	-0.01	-0.01	D	-0.01	-0.01	0.00	0.00	1.54		

BASIC LOADS:		Dead Collat	7.0	20.0	3.0
		Live Load	20.0	20.0	
		Snow Load	20.0	29.9	
		Wind Deflect	1.00	1.00	
		Wind_Load_Ratio	1.00	1.00	
		Surface Friction	0.00	1.000	
		Seis Factor	0.00	0.00	

BASIC LOADS:		Dead Collat	7.0	20.0	3.0
		Live Load	20.0	20.0	
		Snow Load	20.0	29.9	
		Wind Deflect	1.00	1.00	
		Wind_Load_Ratio	1.00	1.00	
		Surface Friction	0.00	1.000	
		Seis Factor	0.00	0.00	

WIND PRESSURE/SUCTION:

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14.3	-29.3	.. Purlins
0.0	-65.7	.. Gable Extensions
20.3	-32.2	.. Panels
11.9	-8.7	.. Long Bracing, Building
18.2	-12.8	.. Long Bracing, Wall Edge Zone
53.7	-32.8	.. Long Bracing, Facia/Parapet
	-20.6	
	23.9	

EDGE & CORNER ZONE WIND:

Surface	Id	Loc	Width	Length	Purlin Panel
2	L		3.70		
---	---	---	---	---	---
Left_End	---	---	---	---	---
Center	---	---	---	---	---
Right_End	---	---	---	---	---
2	L		3.70		
---	---	---	---	---	---
Left_End	---	---	---	---	---
Center	---	---	---	---	---
Right_End	---	---	---	---	---
2	L		3.70		
---	---	---	---	---	---
Left_End	---	---	---	---	---
Center	---	---	---	---	---
Right_End	---	---	---	---	---

Load	Fy	Dx	Type
.. Conc	W1	Dx1	.. Dist
.. Dist	W2	Dx2	.. Dist

BASIC LOADS:

Dead	3.0	20.0	20.0	20.0	7.0	29.9	1.00
Live							
Snow							
Collateral							
Basic							
Defl							
Ratio							

-Setsmc--	Weak_Axis_L	Wind	Seis	0.00	0.00	0.00	0.00
-Setsmc--	Weak_Axis_R	Wind	Seis	0.00	0.00	0.00	0.00
--Torsion--	Wind	Seis	0.00	0.00	0.00	0.00	0.00
--Torsion--	Wind	Seis	0.00	0.00	0.00	0.00	0.00
-EW_Brace--	Wind	Seis	0.00	0.00	0.00	0.00	0.00

Id	Left	Right	Left	Right	Left	Right	Long_Wind	Surface Friction
1	0.36	-0.60	0.72	-0.24	-0.63	-0.63	2	0.00
2	-0.65	-0.65	-0.29	-0.29	-0.87	-0.55	1	0.00
3	-0.65	-0.65	-0.29	-0.29	-0.87	-0.55	2	0.00
4	-0.60	0.36	-0.24	0.72	-0.63	-0.63	1	0.00

	No. Id	Dead COLL	Ltve	Snow	-Wind_1--	-Wind_2--	Long_Wind	-Seismic--	Aux_Load
Load	24	1	1.00	1.00	0.00	0.00	0.00	0.00	0.00
					Rt	Rt	Rt	Tran	Id
					Lt	Lt	Lt	Coef	

[illegible]

AUXILIARY LOADS:


```
Code      =FBC 04
Length    = 60.00
Width     = 37.00
Left Eave Height = 11.75
Right Eave Height = 11.75
```

$$\text{Base Shear, } V = 0.667 * I_e * F_a * S_s * W/R$$

Note: Applied load is seismic force multiplied by load combination

$$= 1.000$$
$$= 1.$$
$$= 2-20 / (R_{\text{Max}} * \text{SQRT}(W * L))$$

Snow Factor = 0.000

$$\begin{aligned} &= 10.00 \\ &= 2.00 \end{aligned}$$

= 12.00

$$= 2.00$$

```
Weight= 26.64 (k)
Weight= 0.58 (k)
```

```

* ( 4) DESIGN CODE:
*
* ---Steel_Code---
* Design      Cold      Hot
* Code      'AISI89', 'AISC89',
*
* ---Build---
* Seismic     Code      Year      FBC      '04'
* Zone

```

* (7) DEFLECTION LIMITS:			
* --Vertical--	----	Total	0.0
* Live	----	Sels	0.0
* Total	----	Crane	60.0
* Axis	----		60.0
* Weak	----		

(*) (8) REPORTS :

* Input Design	End Base	Revise Action	Sec Flange	Segment	Unbrc Floor	Cable
* Echo Summary	Plate Plate	Input Stress	Prop Brace	Displ.	Len React	React
'Y'	'Y'	'Y'	'N'	'N'	'N'	'N'
'Y'	'Y'	'Y'	'N'	'N'	'N'	'N'

* (9) BUILDING SHAPE:			
* No.	X_Coord	Y_Coord	Offset
*	Surf	(ft)	(in)
	4	0.0000	0.000
		11.7500	0.000
		18.5000	6.250
		19.4583	6.250
		11.7500	6.250
		0.0000	0.000

* (10) MEMBER DEPTHS:			
*Surt	Depth (in)	No.	Interior_Depths
* Id	Start	End	Loc (ft) Depth (in)
1	7.130	7.130	0
2	11.460	11.460	0
3	11.460	11.460	0
4	7.130	7.130	0

* (22) BASIC LOADS:

* (23) BASIC LOADS AT EAVE:

LOADS: (25) LONGITUDINAL BRACING LOADS:

(26) DESIGN LOADS: strength

(26) DESIGN LOADS: strength

(27) DESIGN LOADS: Deflection

(36) SPECIAL FAB DATA

* No. Piece Piece

* Piece Id Key

0

(37) ENDWALL COLUMNS:

* Wall	Expand_EW	No.	Column	Column	Offset
* Id	Use	Offset	Column	Locate	Offset
1	'N'	0.000	0		
3	'N'	0.000	0		

(38) JACK BEAMS:

* No.	Beam	Beam	Beam	Height	Length	Part
* Beam	Id	Offset	Offset			
0						

* Code file used was RF_FBC.04 Version 1.0

* DS_RFDEP.Siz

* Surface	Span	--Required--	Type	Span	Type	Span	#Depth	#Splice
* Id	Id	Id	Id	Id	Id	Id	Id	Id
1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4

STRUCTURAL CODE:

Design Basis : WS
Hot Rolled Steel : AISI89
Cold Formed Steel : AISI89

BUILDING CODE:

Wind Code : FBC
Year : 04
Seismic Zone : D

MODULUS OF ELASTICITY

Hot Rolled Steel : 29000 (ksi)
Cold Formed Steel : 29000 (ksi)

Augustal Rigid Frame Design Code 10/28/07 6:27pm

BUILDING CODE:

Design Basis : WS
Hot Rolled Steel : AISI89
Cold Formed Steel : AISI89

Wind Code : FBC
Year : 04
Seismic Zone : D

MODULUS OF ELASTICITY

Hot Rolled Steel : 29000 (ksi)
Cold Formed Steel : 29000 (ksi)

Augustal Base Plate and Anchor Bolt Design 10/28/07 6:27pm

BASE PLATE & BOLT SIZE:

--Column_Base--	Loc. Typ Depth	--Plate_Size(in)--	--Bolts(A307)--
Left P	8.0	8.0	2 0.750
Right P	8.0	8.0	2 0.750
Left P	8.0	8.0	2 0.750
Right P	8.0	8.0	2 0.750

BASE REACTIONS:

Column	--Max_Comp--	--Max_Tens--	--Max_Shear	--Weak_Axis--
Loc.	Ld Fy(k)	Ld Fy(k)	Ld Fx(k)	Tens Moment

Stiffener	Location	Load	Calc	Allow	UC	Max
Left Col	7	19.6	66.0	25.7	132.0	0.30
Right Col	8	19.6	66.0	25.7	132.0	0.30

WELDS:

Stiffener	Location	Size	Typ	Calc	Allow	Shear(k/in)	Stiff-To-Web
Left Col	0.188	F1	2.45	0.188	F1	1.80	2.78
Right Col	0.188	F1	2.45	0.188	F1	1.80	2.78

Augustal Flange Brace Report

10/28/07 6:27pm

Flange Brace Yield= 50.0 ksi
Girt/Purlin Yield= 57.0 ksi
Flange Brace Bolt = 0.500 (A307) (0 Washer)

Surf	Id	No	Brace	Loc	Side	Part	Web	Depth	Brace	Dist	Force	Calc	--Brace_UC--	Conn
1	2	3	0	1	1	L2X2X14G	11.46	28.00	0.14	0.05	0.01	0.07	0.01	0.07
	3	5	1	1	L2X2X14G	11.46	28.00	0.09	0.02	0.01	0.03	0.01	0.01	0.05
	3	1	3	1	L2X2X14G	11.46	28.00	0.02	0.01	0.00	0.00	0.01	0.01	0.05
	4	0	5	1	L2X2X14G	11.46	28.00	0.09	0.02	0.01	0.03	0.01	0.01	0.05

Augustal Special Segment Report

10/28/07 6:27pm

FLANGE PLATE: (a)

Location	Width	Thick	Initial	Required
Lt Col	8.0	0.435	8.0	0.500
Rt Col	8.0	0.435	8.0	0.500

WEB PLATE: (b)

Location	Id	(k)	(F-k)	Axial Moment	Thick	Initial	Required
Lt Col	1	5.3	30.0	0.285	0.285	0.285	0.285
Rt Col	1	5.3	30.0	0.285	0.285	0.285	0.285

DEFLECTIONS : (In)

24	2.38	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	2.36	5.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	1.22	8.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	1.08	0.20	4.77	0.00	0.00	0.00	0.00	0.00	0.00
20	2.05	5.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.39	4.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.79	6.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.65	-1.23	4.54	0.00	0.00	0.00	0.00	0.00	0.00
16	1.58	3.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	2.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	-0.32	-0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	-0.32	-6.31	3.48	0.00	0.00	0.00	0.00	0.00	0.00
12	0.56	-1.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.56	-6.63	3.48	0.00	0.00	0.00	0.00	0.00	0.00
10	1.18	-3.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	-2.86	-4.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	1.21	-5.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	-2.83	-7.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	3.04	5.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.01	4.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	3.06	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.03	2.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.44	1.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.44	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	2.36	5.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	1.22	8.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	1.08	0.20	4.77	0.00	0.00	0.00	0.00	0.00	0.00
20	2.05	5.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.39	4.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.79	6.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.65	-1.23	4.54	0.00	0.00	0.00	0.00	0.00	0.00
16	1.58	3.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	2.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	-0.32	-0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	-0.32	-6.31	3.48	0.00	0.00	0.00	0.00	0.00	0.00
12	0.56	-1.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.56	-6.63	3.48	0.00	0.00	0.00	0.00	0.00	0.00
10	1.18	-3.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	-2.86	-4.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	1.21	-5.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	-2.83	-7.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	3.04	5.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.01	4.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	3.06	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.03	2.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.44	1.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

DEFLECTIONS RATIO:

Load	Id	Lateral Defl @ Top Of Col	Left	Right	Vert Defl @ Midspar
1	1	-0.31	0.31	-0.77	-0.77
2	2	-0.05	0.05	-0.12	-0.12
3	3	0.28	0.62	-0.41	-0.41
4	4	-0.62	-0.28	-0.41	-0.41
5	5	0.25	0.66	-0.51	-0.51
6	6	-0.66	-0.25	-0.51	-0.51
7	7	0.70	0.51	0.25	0.25
8	8	-0.51	-0.70	0.25	0.25
9	9	0.65	0.56	0.12	0.12
10	10	-0.56	-0.65	0.12	0.12
11	11	-0.22	-0.37	0.20	0.20
12	12	-0.22	-0.37	0.20	0.20
13	13	0.37	0.22	0.20	0.20
14	14	0.37	0.22	0.20	0.20
15	15	0.31	0.49	-0.22	-0.22
16	16	-0.49	-0.31	-0.22	-0.22
17	17	-0.07	0.07	-0.18	-0.18
18	18	-0.09	0.09	-0.22	-0.22
19	19	0.28	0.55	-0.34	-0.34
20	20	-0.55	-0.28	-0.34	-0.34
21	21	-0.12	0.12	-0.30	-0.30
22	22	-0.14	0.14	-0.34	-0.34
23	23	-0.46	0.07	-0.65	-0.65
24	24	-0.07	0.46	-0.65	-0.65
1	1	428	428	578	578
2	2	2714	2714	3661	3661

*(1)JOBID: AUGUST11

*(2)PROGRAM OPTIONS:
* Frame Frame Stress
* Id Type Space Frame No. End_Conn Splice
1 BC 5.00 12.00 7 P P 0.00
* Option Option
* (3)ANALYSIS OPTIONS:
* Plate Depth Frame Column_Dep_Opt(in) Rafter_Dep_Opt(in) Web_Stiffener P_Delta
* Opt Opt Opt Sym Type Min Max Use Ratio Side
'N' 'N' 'N' 'R' 10.00 18.00 'R' 10.00 58.00 'N' 0.00 'Y' 'N'

*(4)DESIGN CODE:
* Design ---Steel_Code---
* Code Cold Hot
'WS' 'AISC89' 'AISC89'
* Country Code Year Zone
---Build--- Seismic

*(5)DESIGN CONSTANTS:
* ---Strength_Factor---
* ---Stress_Ratio---
* Frame Col EP BP Wind Frame SpcEP
1.03 1.03 1.03 1.0000 1.0000 1.0000

*(6)STEEL YIELDS:
* Web Flg C_Sec W_Sec R_Sec P_Sec T_Sec U_Sec EP BP
46.0 55.0 57.0 55.0 50.0 50.0 46.0 50.0 55.0 55.0
*(7)DEFLECTION LIMITS:
* ---Vertical--- ---Horizontal--- Weak
* Live Total Total Seis Crane Axis
180.0 0.0 60.0 0.0 60.00

*(8)REPORTS:
* Input Design End Base Revise Action Sec Flange Segment Unbrc Floor Cable
* Echo Summary Plate Input Stress Prop Brace Displ. Len React React
'Y' 'Y' 'Y' 'Y' 'Y' 'N' 'N' 'N' 'N' 'N' 'N' 'N' 'N'

*(9)SURFACE SHAPE:
* No. X_Coord Y_Coord
* Surf (ft) (ft) Offset
3 0.0000 9.5833 0.000
10.0000 11.2500 6.250
10.0000 0.0000
*(10)MEMBER DEPTHS:
* Surf Depth(in) No. Interior_Depths
* Id Start End Dep Loc.(ft) Depth(in)
1 11.460 11.460 0
2 11.460 11.460 0

*(11)MEMBER SPLICES:
* Surf No. Splice Loc(ft) Type
* Id Splice
1 0
2 0.0000 'VFF' 10.1379 '-FF'

*(12)SEGMENT PLATES:
* No. Surf Mem Seg
* Seg Id Id Id Len(ft) Part Member Flange Width(in) Web OS_Flg IS_Flg
Plate_Thickness(in)

2	1	1	1	0.0000	'W6X9	'	3.9700	0.2000	0.2250	0.2250
	2	2	2	0.0000	'W6X9	'	3.9700	0.2000	0.2250	0.2250

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* (13) INTERIOR COLUMNS:

* No.	Col	Col	Col	Col	Connection	Rafter	Unbrace_Length	Col	Col
* Col	Id	Type	Rot	Loc	Bot	Top	Opt	Major	Minor
0									

* (14) TAPERED INTERIOR COLUMNS:

* Col	Col	---Depth---	No.	Start	---Web_Depth---	Web	Flg	OS_Flg	IS_Flg
* Id	Shape	Min	Max	Mem	Locate	Start	End	Thick	Width

* (15) BASE ELEVATION/WALL OPTIONS:

* Base	Base	Frame	Open
* Id	Elev	Space	Height
1	0.00	12.00	0.0000

.. Left Column

* (16) BASE DISPLACEMENT:

* Base	Displace	Spring
* Id	Opt	Dir
0	'-'	'-'

(in) (k/in)

* (17) WALL GIRTS:

* Surf	Girt	Girt	Girt	Girt	Girt	Bay No.
* Id	Type	Size	Depth	Project	Lap	Id Girt
1	'ZF'	'W4X13	'	8.00	0.00	0.000 5 0

Location(ft)

* (18) ROOF PURLINS:

* Surf	Purl	Purl	Purl	Purl	Purl	No.	Peak	Set_Of	-Set_Space-
* Id	Type	Size	Depth	Project	Lap	Purlin	Space	Space	Space
2	'ZB'	'6X25Z16	'	6.00	0.00	1.000	4	0.550	1

No. 3.000 4

* (19) FLANGE BRACES:

* Surf	No.	Flange_Brace_At
* Id	Brace	Girt/Purlin_Number
1	0	
2	4	1 2 3 4

* (20) SIDEWALL EXTENSIONS:

* Surf	No.	Ext	-----Attach_Beam-----	---Facia/Parapet---	Load
* Id	Ext	Id	Type	Elev	Width
1	1	1	'EE'	9.583	1.500
3	0				

Slope 2.00 Elev 0.000 Height 0.000 Slope 0.00 Width 12.000

* (21) EXTENSION LOADS:

* Ext	Dead	Collat	Live	Snow	Wind1_Coeff	Wind2_Coeff	Long_Wind1	Fac/Par_Wind	Se
* Id	psf	psf	psf	psf	Left	Right	Left	Right	ps
1	3.00	7.00	20.00	20.00	-2.20	-2.20	-2.20	-2.20	0.00
3	0								

* (22) BASIC LOADS:

* Dead	Live	Snow	Collat	Basic	---Deflection---
* psf	psf	psf	psf	Wind	Load_Ratio
3.00	20.00	20.00	7.00	29.85	1.00

Snow 1.00 Wind 1.00 Seis 1.00 Temperature Change 0.0

* (23) BASIC LOADS AT EAVE:

* --Seismic--	Weak_Axis_L	Weak_Axis_R	--Torsion--	-EW_Brace--
* Load	SpcEP	Wind	Seis	Wind
k	k	k	k	k
0.15	0.46	0.00	0.00	0.00

Seis 0.00 Wind 0.00 Seis 0.00 Wind 0.00

* (24) WIND COEFFICIENTS:

3	471	215	1083
4	215	471	1083
5	543	202	875
6	202	543	875
7	190	264	1792
8	264	190	1792
9	205	240	3750
10	240	205	3750
11	611	357	2201
12	611	357	2216
13	357	611	2201
14	357	611	2216
15	434	275	2034
16	275	434	2034
17	1835	1835	2475
18	1508	1507	2018
19	478	241	1314
20	241	478	1314
21	1101	1101	1485
22	974	974	1307
23	291	1889	681
24	1889	291	681

MAX DEFLECTION:

Type	Deflect	Span/Deflect	Limit
Live Vertical	-0.47	948.	180.
Horizontal Drift	-0.70	191.	60.

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Augustal	Rigid Frame Clearances	10/28/07 6:27pm
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VERTICAL CLEARANCE:

Location	Span	X_Coord	Y_Coord
Left_Col	10'04-02"	7-13"	10'04-02"
Right_Col	10'04-02"	36'04-03"	10'04-02"
Midspan	17'09-06"	18'06-00"	17'09-06"

HORIZONTAL CLEARANCE:

Location	Span	X_Coord1	X_Coord2
Left_Col - Right_Col	35'08-00"	8-00"	36'04-00"

=====

Augustal	Rigid Frame Design Warnings	10/28/07 6:27pm
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(a)DS_BUILD(frame37)=1 .. see help.
 (b)DS_BUILD(frame36)=1 .. see help.

Augustal

Design Summary Report

10/28/07 6:27pm

FRAME:

Id = 1
 Type = RF
 Line Id= 2 3 4 5

MEMBERS:

Mem	Seg	Flange	Web_Depth	Plate_Thickness	Max_UCV	Max_UCO	Max_UCI										
Id	Id	Len	Wid	Strt	End	Web	O-flg	I-flg	Id	Ld	Ucv	Id	Ld	Uco	Id	Ld	Uci
1	1	11.2	8.0	7.1	7.1	0.285	0.435	0.435	1	4	0.08	4	6	0.35	4	1	0.45
2	2	19.8	4.0	11.5	11.5	0.260	0.425	0.425	5	24	0.10	5	1	0.40	5	1	0.50
3	3	19.8	4.0	11.5	11.5	0.260	0.425	0.425	14	23	0.10	14	1	0.40	14	1	0.50
4	4	11.2	8.0	7.1	7.1	0.285	0.435	0.435	18	3	0.08	15	5	0.35	15	1	0.45

HOT ROLLED MEMBERS:

Surf	Member	Member
Id	Id	Part
1	1	W8X31
2	2	W12X22
3	3	W12X22
4	4	W8X31

LOAD COMBINATIONS:

1 - DL+CL+LL
 3 - DL+CL+0.75LL+0.75WL1
 4 - DL+CL+0.75LL+0.75WR1
 5 - DL+CL+0.75LL+0.75WL2
 6 - DL+CL+0.75LL+0.75WR2
 23 - DL+CL+AUX1
 24 - DL+CL+AUX2

WEIGHTS:

Member	1	2	3	4
Weight (lb)	333	425	425	333

Total Weight (lb)
 Frame Members = 1516
 Interior Col. = 0
 Conn. Plates = 110
 Base Plates = 19
 Trans Stiff = 0

 1646

REACTIONS: (Sidewall Columns)

Load	-----Left_Column-----				-----Right_Column-----			
Id	Fx(k)	Fy(k)	Fz(k)	M(f-k)	Fx(k)	Fy(k)	Fz(k)	M(f-k)
1	2.77	10.23	0.00	0.00	-2.77	10.23	0.00	0.00

Left	1	10.2	7	-7.0	21	4.9	0.0	0.0
Right	1	10.2	8	-7.0	21	5.1	0.0	0.0

WELDS:

Base Id	Outside_Flange_To_Base Shear(k/in)				Inside_Flange_To_Base Shear(k/in)				-----Web_To_Base----- Shear(k/in)			
	Size	Typ	Calc	Allow	Size	Typ	Calc	Allow	Size	Typ	Calc	Allow
Left	0.188	F1	0.44	2.78	0.188	F1	0.44	2.78	0.188	F1	0.69	2.78
Right	0.188	F1	0.44	2.78	0.188	F1	0.44	2.78	0.188	F1	0.71	2.78

Augustal Bolted-End-Plate Design 10/28/07 6:27pm

Splice Id	Member Type	Web Loc.	-Splice(in)- Depth Width Thick	Ten Loc	---Load(k ,f-k)--- Id Ax1 Shr Mom	----Bolts(A325)---- Row Diam Space Gage
1	VSS	1- 2	11.46 8.0 0.500	Top 26	2 6 37	2 0.750 4.00 3.50
				Bot 7	-2 -4 23	2 0.750 4.00 3.50
2	-SS	2- 3	12.41 6.5 0.375	Top 8	-4 1 1	2 0.750 4.00 3.50
				Bot 1	3 0 16	2 0.750 4.00 3.50
3	VSS	3- 4	11.46 8.0 0.500	Top 25	2 -6 37	2 0.750 4.00 3.50
				Bot 8	-2 4 23	2 0.750 4.00 3.50

WELDS:

Splice Id	Side	Outside_Flange_To_Bep Shear(k/in)				Inside_Flange_To_Bep Shear(k/in)				-----Web_To_Bep----- Shear(k/in)			
		Size	Typ	Calc	Allow	Size	Typ	Calc	Allow	Size	Typ	Calc	Allow
1	L	0.188	F2	2.16	2.78	0.188	F2	2.31	2.78	0.188	F1	0.49	2.78
1	R	0.313	F2	3.73	4.64	0.188	F2	2.37	2.78	0.188	F1	0.49	2.78
2	L	0.188	F2	0.14	2.78	0.188	F2	1.48	2.78	0.188	F1	0.06	2.78
2	R	0.188	F2	0.14	2.78	0.188	F2	1.48	2.78	0.188	F1	0.06	2.78
3	L	0.313	F2	3.73	4.64	0.188	F2	2.37	2.78	0.188	F1	0.49	2.78
3	R	0.188	F2	2.16	2.78	0.188	F2	2.31	2.78	0.188	F1	0.49	2.78

Augustal Stiffener Report 10/28/07 6:27pm

Stiffener Yield = 55.0 (ksi)

STIFFENER SIZE:

----Stiffener----		--Web(in)--		-Stiffener_Size(in)-		
Location	No.	Depth	Thick	Width	Thick	Length
Left Col	1	7.13	0.285	4.00	0.250	7.13
Right Col	1	7.13	0.285	4.00	0.250	7.13

STIFFENER DESIGN:

*No Id Dead Coll Live Snow Lt Rt Lt Rt 1 2 Long Tran Id Coeff
0

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*(28)DESIGN LOADS:Special

*-----Load_Coefficients-----
*Load -Wind_1- -Wind_2- Long_Wind -Seismic-- Aux_Load
*No Id Dead Coll Live Snow Lt Rt Lt Rt 1 2 Long Tran Id Coeff
2 25 1.33 1.33 0.00 0.20 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1.00 0 0.00
26 1.33 1.33 0.00 0.20 0.00 0.00 0.00 0.00 0.00 0.00 -1.00 0 0.00

*(29)AUXILARY LOADS:

*No. Aux Aux No._Add Add_Comb
*Aux Id Name Loads Id Coeff
2 1 'F1UNB_SL 1' 2 5 0.00
6 1.50
2 'F1UNB_SL 2' 2 5 1.50
6 0.00

*(30)ADDITIONAL LOADS:

*No. Add Surf Basic Load Fx Fy Mom Dx Dy .. Conc
*Add Id Id Type Type W1 W2 Co D11 D12 .. Dist
6 1 2 'WINDL1' 'D ' 0.000 0.000 0.00 18.500 20.042
2 2 'WINDL2' 'D ' 0.000 0.000 0.00 18.500 20.042
3 3 'WINDR1' 'D ' 0.000 0.000 0.00 0.000 1.542
4 3 'WINDR2' 'D ' 0.000 0.000 0.00 0.000 1.542
5 2 '-----' 'D ' -0.204 -0.204 0.42 0.000 20.042
6 3 '-----' 'D ' -0.204 -0.204 -0.42 0.000 20.042

*(31)FLOOR BEAMS:

* Bay No. Beam Beam Con_Type Con_Loc Beam Properties
* Id Beam Id Ht Lt Rt Lt Rt Area Ixx
1 0

*(32)CABLES:

* Bay No. Cable Cable Cable Cable
* Id Cable Id Level Type Area
1 0

*(33)CRANE BRACKET:

*Crane BayId Crane Crane ----Beam---- ----Offset---- -----Bracket----- Col_Sup Loa
d
*No Id Lt Rt Type Height Depth Width Left Right Type Opt Select Lt Rt (k
)
0

*(34)FRAME LINES:

* No
*Line Frame_Line_Id
4 2 3 4 5

*(35)DESIGN PLATES:

*No. ---Plate-- --Plate_Size- Bolt Bolt ---Top---- -Bottom--
*Plt Type Id Width Thick Dia Gage Row Space Row Space
0

*No.	Surf	Mem	Seg	Seg	Member	Flange	Plate_Thickness(in)		
*Seg	Id	Id	Id	Len(ft)	Part	Widin	Web	OS_Flg	IS_Flg
4	1	1	1	0.0000	'W8X31	' 7.99	0.2850	0.4350	0.4350
	2	2	2	0.0000	'W12X22	' 4.03	0.2600	0.4250	0.4250
	3	3	3	0.0000	'W12X22	' 4.03	0.2600	0.4250	0.4250
	4	4	4	0.0000	'W8X31	' 7.99	0.2850	0.4350	0.4350

[illegible]

*Col	Col	---	Depth---	No.	Start	--Web_Depth---	Web	Flg	OS_Flg	IS_Flg	
* Id	Shape	Min	Max	Mem	Locate	Start	End	Thick	Width	Thick	Thick

*Base	Base	Frame	Open		
* Id	Elev	Space	Height		
1	0.00	12.00	0.0000	Left	Column
2	0.00	12.00	0.0000	Right	Column

*Base			Displace	Spring
* Id	Opt	Dir	(in)	(k/in)
0	'_'	'_'	0.000	0.000

*Surf	Girt	Girt	Girt	Girt	Girt	Bay	No.	
* Id	Type	Size	Depth	Proj	Lap	Id	Girt	Location(ft)
1	'ZF'	'W4X13	8.00	0.00	0.000	5	0	
4	'ZF'	'W4X13	8.00	0.00	0.000	2	0	

*Surf	Purl	Purl	Purl	No.	Peak	Set_Of	-Set_Space
* Id	Type	Size	Depth	Proj	Lap	Purl	Space
2	'ZB'	'6X25Z16 '	6.00	0.00	1.000	5	0.750
3	'ZB'	'6X25Z16 '	6.00	0.00	1.000	5	0.750

* *	Surf Id	No. Brace	Flange_Brace_At Girt/Purlin Number			
	1	0				
	2	5	1	2	3	4
	3	5	1	2	3	4
	4	0				

*Surf No			-----Extension_Size-----				----Facia_Size----			Load
* Id	Ext	Id	Type	Elev	Width	Slope	Elev	Height	Slope	Width
1	1	1	'LT'	11.750	14.500	2.0	0.000	0.000	0.00	12.00
4	1	1	'LT'	11.750	14.500	2.0	0.000	0.000	0.00	12.00

*Ext	Dead	Collat	Live	Snow	Wind1_Coeff	Wind2_Coeff	Long_Wind1	Fac/Par_Wind	Se		
*Id	psf	psf	psf	psf	Left	Right	Left	Right	Left	Right	ps

F_SW	Dead	=	2.00 (psf)	,	Weight=	0.70 (k)
R_EW	Dead	=	2.00 (psf)	,	Weight=	0.58 (k)
B_SW	Dead	=	2.00 (psf)	,	Weight=	0.70 (k)

Total =					29.20 (k)	

Seismic Forces

Roof Bracing

R	=	5.00, Rho=	1.15, RMax=	0.50, Omega=	2.00
W	=	27.79 (k)			
Force, V	=	3.71 (k)			
Force, E	=	8.54 (k)			

Sidewall Bracing

Front	R	=	5.00, Rho=	1.15, RMax=	0.50, Omega=	2.00
	W	=	15.41 (k)			
	Force, V	=	2.06 (k)			
	Force, E	=	4.73 (k)			
Back	R	=	5.00, Rho=	1.15, RMax=	0.50, Omega=	2.00
	W	=	14.79 (k)			
	Force, V	=	1.97 (k)			
	Force, E	=	4.54 (k)			

Endwall Bracing

Left	R	=	5.00, Rho=	1.00, RMax=	0.10, Omega=	2.00
	W	=	4.20 (k)			
	Force, V	=	0.56 (k)			
	Force, E	=	1.12 (k)			
Right	R	=	5.00, Rho=	1.00, RMax=	0.10, Omega=	2.00
	W	=	4.20 (k)			
	Force, V	=	0.56 (k)			
	Force, E	=	1.12 (k)			

Rigid Frames

	R	=	3.50, Rho=	1.00, RMax=	0.20, Omega=	1.00
Frame 1	W	=	5.67 (k)			
	Force, V	=	1.08 (k)			
	Force, E	=	1.08 (k)			

End Plates

Frame	R	=	3.50, Omega=	3.00
-------	---	---	--------------	------

2 F1UNB_SL 2 2

6 1.50
5 1.50
6 0.00

ADDITIONAL LOADS:

No.	Add	Surf	Basic	Load	Fx	Fy	Mom	Dx	Dy	.. Conc
Add	Id	Id	Type	Type	W1	W2	Co	D11	D12	.. Dist
6	1	2	WINDL1	D	0.00	0.00	0.000	18.50	20.04	
	2	2	WINDL2	D	0.00	0.00	0.000	18.50	20.04	
	3	3	WINDR1	D	0.00	0.00	0.000	0.00	1.54	
	4	3	WINDR2	D	0.00	0.00	0.000	0.00	1.54	
	5	2	-----	D	-0.20	-0.20	0.420	0.00	20.04	
	6	3	-----	D	-0.20	-0.20	-0.420	0.00	20.04	

	C	12.64	3.70	1.41	1.73	12.64	1.00	1.00	12.64	3.70	1.41	1.73
	R	3.70	3.70	2.22	2.57	3.70	1.41	1.73	3.70	3.70	2.22	2.57
3	L	3.70	3.70	2.22	2.57	3.70	1.41	1.73	3.70	3.70	2.22	2.57
	C	12.64	3.70	1.41	1.73	12.64	1.00	1.00	12.64	3.70	1.41	1.73
	R	3.70	3.70	2.22	2.57	3.70	1.41	1.73	3.70	3.70	2.22	2.57

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PURLIN DESIGN LOADS:

KLEIN DESIGN LOADS.										
Surf	No.	Load					Wind	Wind	Aux_Load	
Id	Loads	Id	Dead	Collat	Live	Snow	Press	Suct	Id	Coef
2	13	1	1.00	1.00	0.00	1.50	0.00	0.00	0	0.00
		2	1.00	1.00	0.00	0.00	1.00	0.00	0	0.00
		3	1.00	1.00	0.00	0.75	0.00	0.75	0	0.00
		4	1.00	1.00	0.00	0.00	0.75	0.75	0	0.00
		5	0.60	0.00	0.00	0.00	0.00	0.00	0	0.00
		6	1.00	1.00	0.00	0.00	0.00	0.00	1	2.00
		7	1.00	1.00	0.00	0.00	0.00	0.00	2	2.00
		8	1.00	1.00	0.00	0.00	0.00	0.00	3	2.00
		9	1.00	1.00	0.00	0.00	0.00	0.00	4	2.00
		10	1.00	1.00	0.00	0.00	0.00	0.00	5	2.00
		11	1.00	1.00	0.00	0.00	0.00	0.00	6	2.00
		12	1.00	1.00	0.00	0.00	0.00	0.00	7	2.00
		13	1.00	1.00	0.00	0.00	0.00	0.00	8	2.00
3	13	1	1.00	1.00	0.00	1.50	0.00	0.00	0	0.00
		2	1.00	1.00	0.00	0.00	1.00	0.00	0	0.00
		3	1.00	1.00	0.00	0.75	0.00	0.75	0	0.00
		4	1.00	1.00	0.00	0.00	0.75	0.75	0	0.00
		5	0.60	0.00	0.00	0.00	0.00	0.00	0	0.00
		6	1.00	1.00	0.00	0.00	0.00	0.00	1	2.00
		7	1.00	1.00	0.00	0.00	0.00	0.00	2	2.00
		8	1.00	1.00	0.00	0.00	0.00	0.00	3	2.00
		9	1.00	1.00	0.00	0.00	0.00	0.00	4	2.00
		10	1.00	1.00	0.00	0.00	0.00	0.00	5	2.00
		11	1.00	1.00	0.00	0.00	0.00	0.00	6	2.00
		12	1.00	1.00	0.00	0.00	0.00	0.00	7	2.00
		13	1.00	1.00	0.00	0.00	0.00	0.00	8	2.00

BRACING DESIGN LOADS:

DESIGN LOADS:						Wind	Wind	Seis	Aux_Load	
No.	Load					Press	Suct	Load	Id	Coef
Loads	Id	Dead	Collat	Live	Snow					
4	1	1.00	1.00	0.00	0.75	0.75	0.75	0.00	0	0.00
	2	1.13	1.13	0.00	0.00	0.00	0.00	0.70	0	0.00
	3	0.60	0.00	0.00	0.00	1.00	1.00	0.00	0	0.00
	4	0.73	0.00	0.00	0.00	0.00	0.00	0.70	0	0.00

AUXILIARY LOADS:

No.	Aux	Aux	No.	Add_Load	
Aux	Id	Name	Load	Id	Coef
8	1	-----	2	1	0.50
				2	0.50
	2	-----	2	2	0.50
				3	0.50
	3	-----	2	3	0.50
				4	0.50
	4	-----	2	4	0.50
				5	0.50
	5	-----	2	5	0.50
				6	0.50
	6	-----	2	6	0.50
				7	0.50
	7	-----	4	1	0.50
				3	0.50
				5	0.50
	8	-----	3	7	0.50
2				0.50	
4				0.50	

5	3	-----	D	-0.13	-0.13	-0.42	0.00	6.50
6	3	-----	D	-0.13	-0.13	-0.42	6.50	20.04
7	1	LIVE	C	0.00	-5.00	0.00	0.00	11.00
8	1	LIVE	I	0.00	-5.00	0.00	0.00	11.00
9	2	LIVE	I	0.00	-5.00	0.00	0.00	11.00
10	4	LIVE	C	0.00	-5.00	0.00	0.00	-1.00
11	2	WINDL1	D	-0.01	-0.01	0.00	18.50	20.04
12	2	WINDL2	D	-0.02	-0.02	0.00	18.50	20.04
13	3	WINDR1	D	-0.02	-0.02	0.00	0.00	1.54
14	3	WINDR2	D	-0.01	-0.01	0.00	0.00	1.54

RIGHT ENDWALL:

BASIC LOADS:

Dead Load	Collat Load	Live Load	Snow Load	Basic Wind	Wind_Load_Ratio		-----Edge_Strip_Ratio-----			Col/Jamb
					Deflect	Factor	Zone Width	Girt	Panel	
3.0	7.0	20.0	20.0	29.9	1.00	1.00	3.70	1.00	1.00	1.00

BASIC LOADS AT EAVE:

Seis Load	---Torsion---	Wind	Seismic
0.56	0.00	0.00	0.00

WIND PRESSURE/SUCTION:

Wind Press	Wind Suct	
28.4	-31.0	.. Column
28.4	-31.0	.. Girt/Header
28.4	-31.0	.. Jamb
35.2	-47.2	.. Panel
53.7	-32.8	.. Parapet

WIND COEFFICIENTS:

Surf Id	Rafter_Wind_1		Rafter_Wind_2		Bracing_Wind		Long Wind	Surface Friction
	Left	Right	Left	Right	Left	Right		
1	0.00	0.00	0.00	0.00	0.56	-0.75	0.00	0.00
2	-0.89	-0.81	-0.53	-0.45	-0.89	-0.81	-0.95	0.00
3	-0.81	-0.89	-0.45	-0.53	-0.81	-0.89	-0.95	0.00
4	0.00	0.00	0.00	0.00	-0.75	0.56	0.00	0.00

COLUMN & BRACING DESIGN LOADS:

COLUMN & BRACING DESIGN LOADS:															
Load						Rafter_Wind		Brace_Wind		Long	Column_Wind			Aux_Load	
No.	Id	Dead	Coll	Live	Snow	Left	Right	Left	Right	Wind	Press	Suct	Seis	Id	Coef
12	1	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	2	1.00	1.00	0.75	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.75	0.00	0	0.00
	3	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.75	0.00	0	0.00
	4	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0	0.00
	5	0.60	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0	0.00
	6	0.60	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0	0.00
	7	1.13	1.13	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	0	0.00
	8	1.13	1.13	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.05	0	0.00
	9	0.73	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0	0.00
10	0.73	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	0	0.00	
11	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1	1.00	
12	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2	1.00	

RAFTER DESIGN LOADS:

RAFTER DESIGN LOADS.						Rafter_Wind_1		Rafter_Wind_2		Long		Aux_Load	
Load						Left	Right	Left	Right	Wind	Seis	Id	Coef
No	Id	Dead	Coll	Live	Snow								
13	1	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	2	0.60	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	3	0.60	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0	0.00
	4	0.60	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0	0.00

Augustal Design Loads For Building Components: 10/28/07 6:35pm

FRONT SIDEWALL:

BASIC LOADS:

Basic	Wind_Load_Ratio		-----Edge_Strip_Ratio-----			
Wind	Deflect	Factor	Zone			Col/
			Width	Girt	Panel	Jamb
29.9	1.00	1.00	3.70	1.00	1.00	1.00

WIND PRESSURE/SUCTION:

Wind	Wind	Wind	
Press	Suct	Long	
28.4	-31.0		.. Girt/Header
35.2	-47.2		.. Panel
28.4	-31.0		.. Jamb
53.7	-32.8		.. Parapet

BACK SIDEWALL:

BASIC LOADS:

Basic	Wind_Load_Ratio		-----Edge_Strip_Ratio-----			
Wind	Deflect	Factor	Zone			Col/
			Width	Girt	Panel	Jamb
29.9	1.00	1.00	3.70	1.00	1.00	1.00

WIND PRESSURE/SUCTION:

Wind	Wind	Wind	
Press	Suct	Long	
28.4	-31.0		.. Girt/Header
35.2	-47.2		.. Panel
28.4	-31.0		.. Jamb
53.7	-32.8		.. Parapet

LEFT ENDWALL:

BASIC LOADS:

Dead	Collat	Live	Snow	Basic	Wind_Load_Ratio	-----Edge_Strip_Ratio-----				
Load	Load	Load	Load	Wind	Deflect	Factor	Zone			Col/
							Width	Girt	Panel	Jamb
3.0	7.0	20.0	20.0	29.9	1.00	1.00	3.70	1.00	1.00	1.00

BASIC LOADS AT EAVE:

Seis	---Torsion---	
Load	Wind	Seismic
0.56	0.00	0.00

WIND PRESSURE/SUCTION:

Wind	Wind	
Press	Suct	
28.4	-31.0	.. Column
28.4	-31.0	.. Girt/Header
28.4	-31.0	.. Jamb
35.2	-47.2	.. Panel
53.7	-32.8	.. Parapet

WIND COEFFICIENTS:

ENGINEERING DATA

JOB AUGUSTA 1 DESIGN		MADE BY		DATE 11 04 07		Job NO.		PAGE 2	
Task Design Summary									
- The design is based on FBC 2004 and designed for the following loads: Dead Load = 3 psf Collateral Load = 7.0 psf Live Load = 20 psf Snow Load = 20 psf Wind speed = 140 mph, Exposure B - Steel studs used are 600S200-43 (6X2, 18 GA), 16" O.C. (Fy=33 ksi). - Stud Track is 6x3C, 14 GA, double track, two channels back to back. - All Mill sections are 50 ksi materials. - Note the tallest end wall column is W6x15 - Use ¾ Dia. A307 anchor bolt for the wind bracket. - Need three strap braced bays. - Purlin 6x2.5Z16, 1'0" laps min, at 3'-10.25" spacing max. - Use 2 rows of anchor bolts at the main building.									

BASE PLATE & BOLT SIZE:

--Column_Base--	Loc. Typ Depth	Width Length Thick	Row Diam	Gage
Left	P	5.9	6.1	6.00
		0.500	1	0.750
				4.00

BASE REACTIONS:

Column	-Max_Comp-	Ld Fy(k)	2.5	1	Left
Loc.	-Max_Tens-	Ld Fy(k)	7	-3.3	
		Ld Fx(k)	11	1.7	
-Weak_Axis--	-Max_Shear	Tens Moment	0.0	0.0	

WELDS:

[illegible]

1 AUGUST 1

Bolted-End-Plate Design

10/28/07 6:44pm

WELDS:

Splice Member	Web	-Splice (in)	Ten	Loc	Id	Ax1	Shr	Mom	Row	Diam	Space	Gage	
1 VFF	1-2	5.47	6.5	0.375	Top	7	-1	2	0	2	0.750	1.88	3.50
2 -FF	2-2	5.47	6.5	0.375	Top	7	1	-2	0	2	0.750	1.88	3.50

Splice		Id Side		Size Typ		Calc Allow		Shear (k/in)	
-----Web_To_Bep-----									
1	L	0.188	F1	0.10	2.78	0.188	F1	0.13	2.78
1	R	0.188	F1	0.13	2.78	0.188	F1	0.13	2.78
2	L	0.188	F1	0.14	2.78	0.188	F1	0.04	2.78
2	R	0.188	F1	0.14	2.78	0.188	F1	0.04	2.78
-----Web_To_Bep-----									
1	L	0.188	F1	0.34	2.78	0.188	F1	0.34	2.78
1	R	0.188	F1	0.34	2.78	0.188	F1	0.34	2.78
2	L	0.188	F1	0.36	2.78	0.188	F1	0.36	2.78
2	R	0.188	F1	0.36	2.78	0.188	F1	0.36	2.78

AUGUST 11

Stiffener Report

10/28/07 6:44pm

Stiffener Yield = 55.0 (ksi)

STIFFENER SIZE:

FRAME:

Id = 1
Type = BC
Line Id = 2 3 4 5

MEMBERS:

Mem Seg	Flange	Web	Depth	Plate	Thickness	Max	UCV	Max	UCO	Max	UCI
1	1	9.0	3.9	5.5	0.170	0.215	0.215	0.215	0.215	3	9
2	2	9.7	3.9	5.5	0.170	0.215	0.215	0.215	0.215	4	7
										5	11
										8	0.25
										2	8
										0.09	2
										5	11
										0.38	5
										0.28	2
										0.35	5

HOT ROLLED MEMBERS:

Surf	Member	Id	Part
1	1	1	W6X9
2	2	2	W6X9

LOAD COMBINATIONS:

7 - 0.60DL+WL1
8 - 0.60DL+WR1
9 - 0.60DL+WL2
11 - 0.60DL+WL1

WEIGHTS:

Member	Weight (lb)
1	80
2	85

Total Weight (lb)

Frame Members = 165
Interior Col. = 0
Conn. Plates = 16
Base Plates = 5
Trans Stiff = 0

REACTIONS: (Sidewall Columns)

Load	Id	Left Column	Right Column
1	1	-0.02	1.82
2	2	0.00	0.00
3	3	0.17	-0.02
4	4	1.08	0.52
5	5	-1.10	1.13
6	6	-0.18	1.68
7	7	0.24	-1.93
8	8	1.47	-1.20
9	9	-1.44	-0.39
10	10	-0.22	0.33
11	11	1.53	-1.67
12	12	1.53	-1.67
13	13	1.53	-1.67
14	14	1.53	-1.67

20	99999	99999	2019
21	99999	99999	2281
22	99999	99999	1999

MAX DEFLECTION:

Type	Deflect	Span/Deflect	Limit
Live Vertical	-0.10	1238.	180.
Horizontal Drift	0.00	26549.	60.

===== AUGUSTA11 Rigid Frame Clearances 10/28/07 6:44pm =====

VERTICAL CLEARANCE:

Location	Span	X_Coord	Y_Coord
Left_Col	8'07-11"	5-14"	8'07-11"
Right_Side	10'02-14"	10'00-00"	10'02-14"
Midspace			

HORIZONTAL CLEARANCE:

Location	Span	X_Coord1	X_Coord2
Left_Col	9'06-02"	5-14"	10'00-00"
- Right_Side			

===== AUGUSTA11 Rigid Frame Design Warnings 10/28/07 6:44pm =====

.. No Warnings

* (14) WIDE OPENING HEADER LOCATION:

```

(15) PARTIAL WATTS:
* Set-Of Base Full
* --Bay-Id-- Wall
* Bays Type Load Start End Height
0

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[illegible]

(18) RAFTERS:

Set	Rafter	8.000	'C
Depth	Select		'
Same	Same		'Y'
Flange	Brace		'Y'

(19) RAFTER SIZE:

No.	Surf	Rafter	Id	Size
2		Rafter	2	3
				3

(20) AFTER SPLICES:			
Surf	No.	Splice	Loc
Id			Type
3	1		0.0000
2	0		
1			

(21) GIRT DESIGN:	Girt Flg_Brace	Type Out In Offset Project Depth Set	Set	Max	Girt_To One_girt	Max_Unbr Length
	'ZF' 'C' 'N'	0.000	0.000	Lap	Rafter Depth/Bay	5.0000
			8.000	Space	'Y' 'Y'	
			0.0000	7.3333		
(22) GIRT LOCATION:	Set No. Girt	Loc Girt Location	P' 1			11.0000

(23) SPECIAL GIRT:
Sets_Of --Bay_Id-- Girt Girt Height Type Rotate Use
0
(24) ROOF PURLINS:

(44) RAFTER DESIGN LOADS:

COL-3	2	2.57	0.58	8.60	-2.22	1.76	20.00	8.89	-10.98	16.22
COL-3	3	1.11	0.25	8.60	-2.22	1.76	20.00	8.89	-10.98	16.22
COL-3	4	-2.41	-0.54	30.00	2.71	2.15	20.00	-10.87	-13.41	16.22
COL-3	5	-1.72	-0.39	30.00	-2.96	2.35	20.00	11.86	-14.64	16.22
COL-3	6	-1.94	-0.44	30.00	-2.96	2.35	20.00	11.86	-14.64	16.22
COL-3	7	4.32	0.98	8.60	0.00	0.00	20.00	0.00	0.00	16.22
COL-3	8	2.74	0.62	8.60	0.00	0.00	20.00	0.00	0.00	16.22
COL-3	9	2.43	0.55	8.60	0.00	0.00	20.00	0.00	0.00	16.22
COL-3	10	0.93	0.21	8.60	0.00	0.00	20.00	0.00	0.00	16.22
COL-3	11	4.42	1.00	8.60	0.00	0.00	20.00	0.00	0.00	16.22
COL-3	12	1.56	0.35	8.60	0.00	0.00	20.00	0.00	0.00	16.22
COL-4	1	7.35	1.66	16.65	0.00	0.00	20.00	0.00	0.00	23.40
COL-4	2	3.77	0.85	16.65	0.00	0.00	20.00	0.00	0.00	23.40
COL-4	3	3.71	0.84	16.65	0.00	0.00	20.00	0.00	0.00	23.40
COL-4	4	-1.26	-0.28	30.00	0.00	0.00	20.00	0.00	0.00	23.40
COL-4	5	-2.05	-0.46	30.00	0.00	0.00	20.00	0.00	0.00	23.40
COL-4	6	-2.15	-0.49	30.00	0.00	0.00	20.00	0.00	0.00	23.40
COL-4	7	5.79	1.31	16.65	0.00	0.00	20.00	0.00	0.00	23.40
COL-4	8	5.93	1.34	16.65	0.00	0.00	20.00	0.00	0.00	23.40
COL-4	9	0.56	0.13	16.65	0.00	0.00	20.00	0.00	0.00	23.40
COL-4	10	0.69	0.16	16.65	0.00	0.00	20.00	0.00	0.00	23.40
COL-4	11	2.03	0.46	16.65	0.00	0.00	20.00	0.00	0.00	23.40
COL-4	12	0.79	0.18	16.65	0.00	0.00	20.00	0.00	0.00	23.40

STRESS RATIO:

Mem Load	Id	Axial	Shear	Moment	Ax1+Mom	Shr+Mom	Max_UC
COL-1	1	0.16	0.00	0.00	0.16		0.16
COL-1	2	0.11	0.00	0.00	0.11		0.11
COL-1	3	0.11	0.00	0.00	0.11		0.11
COL-1	4	0.01	0.00	0.00	0.01		0.01
COL-1	5	0.01	0.00	0.00	0.01		0.01
COL-1	6	0.01	0.00	0.00	0.01		0.01
COL-1	7	0.12	0.00	0.00	0.12		0.12
COL-1	8	0.12	0.00	0.00	0.12		0.12
COL-1	9	0.01	0.00	0.00	0.01		0.01
COL-1	10	0.01	0.00	0.00	0.01		0.01
COL-1	11	0.01	0.00	0.00	0.01		0.01
COL-1	12	0.03	0.00	0.00	0.03		0.03
COL-2	1	0.22	0.00	0.00	0.22		0.22
COL-2	2	0.12	0.09	0.68	0.72		0.72
COL-2	3	0.16	0.09	0.68	0.76		0.76
COL-2	4	0.02	0.11	0.83	0.83		0.83
COL-2	5	0.02	0.12	0.90	0.90		0.90
COL-2	6	0.02	0.12	0.90	0.90		0.90
COL-2	7	0.17	0.00	0.00	0.17		0.17
COL-2	8	0.21	0.00	0.00	0.21		0.21
COL-2	9	0.02	0.00	0.00	0.02		0.02
COL-2	10	0.06	0.00	0.00	0.06		0.06
COL-2	11	0.04	0.00	0.00	0.04		0.04
COL-2	12	0.12	0.00	0.00	0.12		0.12
COL-3	1	0.08	0.00	0.00	0.08		0.08
COL-3	2	0.07	0.09	0.68	0.70		0.70
COL-3	3	0.03	0.09	0.68	0.68		0.68
COL-3	4	0.02	0.11	0.83	0.83		0.83
COL-3	5	0.01	0.12	0.90	0.90		0.90
COL-3	6	0.01	0.12	0.90	0.90		0.90
COL-3	7	0.11	0.00	0.00	0.11		0.11
COL-3	8	0.07	0.00	0.00	0.07		0.07
COL-3	9	0.06	0.00	0.00	0.06		0.06
COL-3	10	0.02	0.00	0.00	0.02		0.02
COL-3	11	0.12	0.00	0.00	0.12		0.12

Augustal Base Plate & Anchor Bolt Design 10/28/07 6:35pm

Column_Base	Id	Depth	Max_Reactions(k)	Comp	Tens	Shear	Width	Length	Thick	Row	Diam	Gage
Col-1	6.0	11.8	-1.3	0.0	6.0	6.0	6.0	0.250	6.0	1	0.625	3.50
Col-2	6.0	8.2	-2.2	3.0	6.0	6.0	6.0	0.250	6.0	1	0.625	3.50
Col-3	6.0	4.4	-2.3	3.0	6.0	6.0	6.0	0.250	6.0	1	0.625	3.50
Col-4	6.0	7.4	-2.0	0.0	6.0	6.0	6.0	0.250	6.0	1	0.625	3.50

Augustal Endwall Diagonal Bracing Summary 10/28/07 6:35pm

PANEL SHEAR WITH NO BRACING:

Base	Length	Transverse	Wind	Seismic	Wind	Seismic	Torsion
37.00	28.8	36.6	0.0	0.0	100.0	Allow	

DIAGONAL BRACING REQUIRED:

Bay	Level	Id	Height	Type	Size	Part	Diag_Brace	Wind	Seismic	Calc	Allow	Wind	Seismic	Calc	Allow	Max	UC
2	9.00	C	0.250	HW-3730	1.29	3.33	1.43	1.34	3.33	0.43	0.40	1.21	3.33	1.43	3.33	0.43	0.40

COLUMN BASE REACTIONS:

Bay	Col	Id	Horz	Wind_Max	Vert(+/-)	Horz	Seismic_Max	Vert(+/-)
2	2	-1.07	1.31	-1.18	1.45	1.18	1.45	1.45

.. No Warnings

Augustal Endwall Design Warning Report 10/28/07 6:35pm

Augustal Endwall Weight Summary 10/28/07 6:35pm

FORCED SPACING:

Total Column Weight	=	814.32
Total Rafter Weight	=	242.50
Total Girt Weight	=	0.00
Total Door Jamb Weight	=	0.00
Total Bracing Weight	=	4.85
Total Clips Weight	=	0.00
Total Endwall Weight	=	1061.67

(1)JOBID:
Augustal

(2)PROGRAM OPTIONS:

Run Run Run
Purlin Panel Brace
Stiff 0.50

(3)DESIGN CODE:

Design ---Steel-Code---
Code Cold Hot
WS AISI89 AISI89 AISI89
Country Code Year Seismic
Build--- Seismic
D

(4)DESIGN CONSTANTS:

---Strength-Factor---
---Seismic---
Purlin Panel Wind Frame Brace
1.0300 1.03 1.000 1.000 1.000

(5)STEEL YIELDS:

Web Flg C-Sec W-Sec R-Sec P-Sec T-Sec U-Sec EP BP
46.0 55.0 57.0 55.0 50.0 50.0 46.0 50.0 55.0 55.0

(6)DEFLECTION LIMITS:

Live Wind Total Live Wind Total Live Wind Total Live Wind Total Live Wind Total Live Wind Total
180.0 120.0 0.0 180.0 120.0 0.0 180.0 120.0 0.0 180.0 120.0 0.0 180.0 120.0 0.0 180.0 120.0 0.0
Purlin-Extension-Facia Facia Panel-Facia Facia Wind Panel Wind Frame Wind Seis
(7)REPORTS:

Input Purlin Eave Roof Cable
Echo Design Summary Strut Panel Brace

(8)BUILDING TYPE:

Build L-Expand-EW R-Expand-EW Use Offset L-EW F-SW R-EW B-SW
Type Use Offset Use Offset
FF- N 0.000 N 0.000

(9)SURFACE SHAPE:

No. X-Coord Y-Coord
Surt (ft) (ft)
4 0.000 11.7500 18.5000 37.0000 37.0000 0.0000

(10)WALL BAY SPACING:

Wall Sets-Of Bay No.
Id Bays Width Bays

(11)FRAMED OPENINGS:

Wall No. Bay Open
5 1 12.0000 5
4 1 12.0000 5
3 3 12.5000 1
2 1 12.0000 5
1 1 12.5000 1
1 1 12.0000 1
1 3 12.5000 1

Wall No. Bay Open
Open Open Open Open

* Id Opens Id Width Height Offset Type

1 0
2 0
3 0
4 0

*(12) PARTIAL WALLS:

* Wall Set-Of --Bay-Id-- Wall Base Full
* Id Bays Start End Height Type Load Use

1 0
2 0
3 0
4 0

*(13) SURFACE EXTENSION/FRAME RECESS:

* Surf ---Surf-Ext--- Frame-Recess
* Id Left Right Left Right
* Surf Purlin OS_Flg IS_Flg Set Depth Ext Int Length Max_Unbr

2 1.5000 1.5000 0.3333 0.3333 '8X35C14 ' '8X35C14 '
3 1.5000 1.5000 0.3333 0.3333 '8X35C14 ' '8X35C14 '

*(14) PURLINS:

* Surf Purlin OS_Flg IS_Flg Set Depth Ext Int Length Max_Unbr
* Id Type Brace Brace Depth Set_Lap Set_Lap Length Max_Unbr

2 'ZB' 'C' 'Y' 6.000 0.0000 0.0000 5.0000
3 'ZB' 'C' 'Y' 6.000 0.0000 0.0000 5.0000

*(15) PURLIN SPACING:

* Surf Peak Max Set Set-Of -Set-Space-
* Id Space Space Space Space No.

2 0.7500 5.0156 3.8542 0
3 0.7500 5.0156 3.8542 0

*(16) PURLIN SIZE:

* Surf Set No.
* Id Purl Purl Purlin-Size

2 'N' 'N' 0
3 'N' 'N' 0

*(17) PANELS:

* Wall
* Panel Roof Standing Seam Insulation
* Panel Panel '26 PBR ' 'N' 0.000

*(18) EAVE STRUT & GIRT:

* Wall Eave Girt Girt
* Id Type Type Size Offset Proj Gutter
* Id Type Type Size Offset Proj Gutter

2 'EO' 'ZF' '-----' 0.000 0.000 'N'
4 'EO' 'ZF' '-----' 0.000 0.000 'N'

*(19) WIND FRAMING SELECTION:

* Wall Panel Diagonal Wind Weak_Axis
* Id Shear Bracing Bent Column Bending
* Id Shear Bracing Bent Column Bending

2 'N' 'Y' 'N' 'N' 'N'
4 'N' 'Y' 'N' 'N' 'N'
5 'N' 'Y' 'N' 'N' 'N'

*(20) ROOF DIAGONAL BRACING:

* Max_Pan Brace Each User_Selected_Roof_Bays
* Shear Type EM No. Bay_Id
* Wall No. 100.0 'C' 'L' 0

*(21) ROOF BRACING ATTACHMENT:

* Wall No.

*Ext	*Id	Dead	Collat	Live	Snow	Attach_Beam	Wind	Press	Suct	Attach_Beam	Wind	Press	Suct	Panel
1	3.00	7.00	30.00	30.00	0.00	-65.68	0.00	0.00	0.00	-65.68	0.00	0.00	0.00	Wind
2	3.00	7.00	30.00	30.00	0.00	-65.68	0.00	0.00	0.00	-65.68	0.00	0.00	0.00	Wind

(43) PURLIN DESIGN LOADS:

*Surf	*Id	No.	Load	Id	Dead	Collat	Live	Snow	Wind	Press	Suct	Id	Aux_Load
2	13	13	13	1	1.00	1.00	0.00	1.50	0.00	0.00	0.00	0.00	0.00
				2	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
				3	1.00	1.00	0.00	0.75	0.00	0.75	0.00	0.00	0.00
				4	1.00	1.00	0.00	0.00	0.75	0.75	0.00	0.00	0.00
				5	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				6	1.00	1.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
				7	1.00	1.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
				8	1.00	1.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
				9	1.00	1.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
				10	1.00	1.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
				11	1.00	1.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
				12	1.00	1.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
				13	1.00	1.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00

(44) PURLIN DESIGN LOADS: Deflection

*Surf	*Id	No.	Load	Id	Dead	Collat	Live	Snow	Wind	Press	Suct	Id	Aux_Load
3	13	13	13	1	1.00	1.00	0.00	1.50	0.00	0.00	0.00	0.00	0.00
				2	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
				3	1.00	1.00	0.00	0.75	0.00	0.75	0.00	0.00	0.00
				4	1.00	1.00	0.00	0.00	0.75	0.75	0.00	0.00	0.00
				5	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				6	1.00	1.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
				7	1.00	1.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
				8	1.00	1.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
				9	1.00	1.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
				10	1.00	1.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
				11	1.00	1.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
				12	1.00	1.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
				13	1.00	1.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00

(45) BRACING DESIGN LOADS: Frame

*Surf	*Id	No.	Load	Id	Dead	Collat	Live	Snow	Wind	Press	Suct	Id	Aux_Load
0	0	0	0	1	1.00	1.00	0.00	0.75	0.00	0.75	0.00	0.00	0.00
				2	1.13	1.13	0.00	0.00	0.00	0.00	0.00	0.70	0.00
				3	0.60	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
				4	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0.00

(46) BRACING DESIGN LOADS: Brace

*Surf	*Id	No.	Load	Id	Dead	Collat	Live	Snow	Wind	Press	Suct	Id	Aux_Load
4	4	4	4	1	1.00	1.00	0.00	0.75	0.00	0.75	0.00	0.00	0.00
				2	1.13	1.13	0.00	0.00	0.00	0.00	0.00	0.70	0.00
				3	0.60	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
				4	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0.00

(47) EXTENSION DESIGN LOADS:

*Surf	*Id	No.	Load	Id	Dead	Collat	Live	Snow	Wind	Press	Suct	Id	Aux_Load
4	4	4	4	1	1.00	1.00	0.00	0.75	0.00	0.75	0.00	0.00	0.00
				2	1.13	1.13	0.00	0.00	0.00	0.00	0.00	0.70	0.00
				3	0.60	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
				4	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0.00

(47) EXTENSION DESIGN LOADS:

*Surf	*Id	No.	Load	Id	Dead	Collat	Live	Snow	Wind	Press	Suct	Id	Aux_Load
4	4	4	4	1	1.00	1.00	0.00	0.75	0.00	0.75	0.00	0.00	0.00
				2	1.13	1.13	0.00	0.00	0.00	0.00	0.00	0.70	0.00
				3	0.60	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
				4	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0.00

2 1 0

*(55) PURLIN STRAPS:

Data ---Set_1--- ---Set_2--- ---Set_3--- ---Set_4---
 Opt Sets Strap Quan Strap Quan Strap Quan Strap Quan
 0 0 0 0

*(56) PURLIN STRAPS: Extensions

*Ext Data ---Set_1--- ---Set_2--- ---Set_3--- ---Set_4---
 *Id Opt Sets Strap Quan Strap Quan Strap Quan Strap Quan
 1 0 0 0 0 0 0 0

*(57) PANEL SCREWS:

*No. *Zone Zone Part Screw Washer Dia Screw Space Screw Strength
 0

* Code file used was ROOFFBC.04 Version 1.0

Augustal Roof Design Code 10/28/07 6:20pm

STRUCTURAL CODE:

Design Basis : WS
 Hot Rolled Steel : AISC89
 Cold Formed Steel : AISI89

BUILDING CODE:

Wind Code : FBC
 Year : 04
 Seismic Zone : D

MODULUS OF ELASTICITY

Hot Rolled Steel : 29000 (ksi)
 Cold Formed Steel : 29000 (ksi)

Augustal Purlin Layout Report (Surface 2) 10/28/07 6:20pm

SURFACE LAYOUT:

Surface	No.	Length	Row	Space
Id				
2		20.042	5	0.750

PURLIN LOCATION:

Purlin	Surf	Offset	Space	Load	Dead	Edge	Show
Id							
1	3.854	3.854	3.854	0.73	Y	Y	
2	7.708	3.854	3.854	0.73	Y	Y	
3	11.563	3.854	3.854	0.73			
4	15.417	3.854	3.865	0.72	Y	Y	
5	19.292	3.875	2.687	1.04			
	20.042						

4	0.80	0.67	-0.67	-0.80	1.55	0.81	-0.86	6.00	0.81	1.55
5	0.77	0.64	-0.70	-0.83	1.55	0.84	-0.69	5.78	1.14	1.91
6	0.93	0.80		-0.63	1.91	1.05	-1.32	6.94	0.18	0.18
7	0.20			0.00	0.18		0.00	1.83		0.00

STRENGTH/DEFLECTION:

Span	Id	Loc	Calc Allow	UC	Loc	Calc Allow	UC	Mom+Shr	Deflection (in)
-----Shear (k) -----									
1	RS	-0.20	3.39	0.06	RS	0.18	3.48	0.05	0.01
2	RL	-0.80	3.39	0.24	MS	-1.32	3.48	0.38	0.15
3	LT	0.70	3.39	0.21	LT	1.14	3.48	0.33	0.15
4	RL	-0.67	3.39	0.20	MS	-0.86	3.48	0.25	0.09
5	RL	-0.70	3.39	0.21	RL	1.14	3.48	0.33	0.15
6	LT	0.80	3.39	0.24	MS	-1.32	3.48	0.38	0.15
7	LS	0.20	3.39	0.06	LS	0.18	3.48	0.05	0.01

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Lap	Shear (k)	Ratio
-----Left Right-----				
2			0.48	0.24
3		0.48	0.39	0.20
4		0.39	0.39	0.20
5		0.39	0.48	0.20
6		0.48		0.24

LOAD COMBINATION # 2 : DL+CL+WP

PURLIN ANALYSIS:

Span	Id	Left	Right	Sup	Left	Right	Sup	Left	Right	Sup
-----Shear (k) -----										
1		0.00			0.00			0.00		
2		0.42	-0.55	-0.64	0.02	-0.94	4.60	0.72	1.32	0.02
3		0.57	0.48	-0.52	1.32	0.80	6.26	0.57	1.04	1.32
4		0.54	-0.45	-0.54	1.04	0.54	6.00	0.54	1.04	0.02
5		0.52	-0.43	-0.57	1.04	0.57	5.74	0.80	1.32	0.02
6		0.64	0.55	-0.42	1.32	-0.94	7.06			
7		0.02			0.02		1.83			

STRENGTH/DEFLECTION:

Span	Id	Loc	Calc Allow	UC	Loc	Calc Allow	UC	Mom+Shr	Deflection (in)
-----Shear (k) -----									
1	RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01	0.00
2	RL	-0.55	3.39	0.16	MS	-0.94	3.48	0.27	0.07
3	LT	0.48	3.39	0.14	LT	0.80	3.48	0.23	0.07
4	RL	-0.45	3.39	0.13	MS	-0.59	3.48	0.17	0.04
5	RL	-0.48	3.39	0.14	RL	0.80	3.48	0.23	0.07
6	LT	0.55	3.39	0.16	MS	-0.94	3.48	0.27	0.07

PURLIN ANALYSIS:

Span	Id	Shear (k)		Moment (F-k)		Moment (F-k)		Deflection (In)	
Left	Sup	Left	Sup	Left	Sup	Left	Sup	Left	Sup
1		0.00	0.33	0.00	0.33	0.00	0.00	0.00	-0.30
2		-0.30	0.16	-0.30	0.18	0.19	0.00	-0.21	-0.38
3		-0.16	0.13	-0.38	0.14	0.12	6.30	-0.16	-0.29
4		-0.15	0.13	-0.29	0.15	0.17	6.00	-0.15	-0.29
5		-0.14	0.12	-0.29	0.16	0.12	5.70	-0.23	-0.38
6		-0.18	-0.16	-0.38	0.30	0.19	4.42		-0.30
7		-0.33		-0.30	0.00	0.00	1.83		0.00

STRENGTH/DEFLECTION:

Span	Id	Shear (k)		Moment (F-k)		Moment (F-k)		Deflection (In)	
Left	Loc	Left	Loc	Left	Loc	Left	Loc	Left	Loc
1	RS	0.33	3.39	-0.30	3.48	0.09	RS	0.02	-0.05
2	LS	-0.30	3.39	-0.30	3.48	0.09	LS	0.02	0.10
3	LS	-0.13	3.39	-0.23	3.48	0.07	LS	0.01	0.03
4	RL	0.13	3.39	0.17	2.66	0.06	RL	0.00	0.06
5	RL	0.13	3.39	-0.23	3.48	0.07	RL	0.01	1.20
6	RS	0.30	3.39	-0.30	3.48	0.09	RS	0.02	1.20
7	LS	-0.33	3.39	-0.30	3.48	0.09	LS	0.02	1.17

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Lap Shear (k)		Shear Ratio	
Left	Right	Left	Right	Left	Right
2		0.09	0.09	0.05	0.05
3		0.09	0.07	0.04	0.04
4		0.07	0.07	0.04	0.05
5		0.07	0.09	0.04	0.05
6		0.09			

LOAD COMBINATION # 5 : 0.6DL

PURLIN ANALYSIS:

Span	Id	Shear (k)		Moment (F-k)		Moment (F-k)		Deflection (In)	
Left	Sup	Left	Sup	Left	Sup	Left	Sup	Left	Sup
1		0.00	-0.01	0.00	0.00	0.00	0.00	0.01	0.01
2		0.03	-0.04	0.01	-0.06	-0.06	4.76	0.05	0.09
3		0.04	-0.03	0.09	-0.03	-0.03	6.22	0.04	0.07
4		0.04	-0.03	0.07	-0.04	-0.04	6.00	0.04	0.07
5		0.04	-0.04	0.07	-0.03	-0.03	5.78	0.05	0.09
6		0.04	-0.03	0.09	-0.06	-0.06	6.90		0.01

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Lap_Shear(k)	Shear_Ratio	Id
2	0.29	0.15	
3	0.29	0.03	
4	0.06	0.06	
5	0.11	0.06	
6	0.13	0.06	

LOAD COMBINATION # 7 : DL+CL+2.0AUX2

PURLIN ANALYSIS:

Span	Left	Right	Lap	Sup	Id
1	0.00	-0.05	-0.05	0.00	
2	0.51	-0.69	-0.81	0.02	
3	0.75	-0.64	-0.60	1.76	
4	0.26	-0.13	-0.17	0.82	
5	0.19	-0.20	-0.23	0.30	
6	0.25	0.22	-0.16	0.54	
7	0.02			0.02	

Span	Left	Right	Lap	Mom	Loc	Midspace	Right	Sup
1	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02
2	-0.69	-0.81	-0.60	1.76	-1.12	4.51	1.01	1.76
3	-0.64	-0.60	-0.17	0.82	-0.77	6.70	0.28	0.82
4	-0.13	-0.17	-0.23	0.30	-0.11	7.22	0.15	0.30
5	-0.20	-0.23	-0.16	0.54	-0.22	5.43	0.33	0.54
6	0.22	-0.16		0.31	-0.35	7.10		0.02
7				0.02	0.00	1.83		0.00

STRENGTH/DEFLECTION:

Span	Id	Loc	Calc Allow	UC	Loc	Calc Allow	UC	Mom+Shr	Deflection(in)
1	RS	-0.05	3.39	0.01	RS	0.02	3.48	0.01	0.08
2	RL	-0.69	3.39	0.20	MS	-1.12	3.48	0.32	-0.12
3	LT	0.64	3.39	0.19	LT	1.06	3.48	0.31	-0.09
4	LT	0.22	3.39	0.07	LT	0.58	3.48	0.17	-0.04
5	RL	-0.20	3.39	0.06	RL	0.33	3.48	0.09	-0.01
6	LT	0.22	3.39	0.06	MS	-0.35	3.48	0.10	0.00
7	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	0.00

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Lap_Shear(k)	Shear_Ratio	Id
2	0.44	0.22	
3	0.44	0.10	
4	0.20	0.04	
5	0.07	0.04	
6	0.14	0.07	

LOAD COMBINATION # 8 : DL+CL+2.0AUX3

Span	Id	Shear(k)	Loc	Calc Allow	UC	Loc	Calc Allow	UC	Moment (f-k)	Loc	UC	Mom+Shr	Deflection (in)
1	RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01	LS	0.01	LS	0.00	0.01
2	RL	-0.21	3.39	0.06	MS	-0.41	3.48	0.12	RL	0.01	RL	0.01	-0.02
3	RL	-0.21	3.39	0.06	RL	0.60	3.48	0.17	RL	0.03	RL	0.03	0.04
4	RL	-0.63	3.39	0.18	RL	0.91	3.48	0.26	RL	0.10	RL	0.10	-0.09
5	LL	0.62	3.39	0.18	LL	0.91	3.48	0.26	LL	0.10	LL	0.04	-0.09
6	LL	0.25	3.39	0.07	LL	0.65	3.48	0.19	LL	0.04	LL	0.04	0.05
7	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00	LS	0.00	-0.02

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Lap_Shear(k)	Left	Right	Shear_Ratio
2		0.10	0.10	0.05	0.05
3		0.10	0.21	0.05	0.11
4		0.21	0.40	0.11	0.20
5		0.40	0.23	0.20	0.12
6		0.23			0.12

LOAD COMBINATION #10 : DL+CL+2.0AUX5

PURLIN ANALYSIS:

Span	Id	Shear(k)	Left	Right	Sup	Left	Right	Sup	Moment (f-k)	Left	Right	Mom	Loc	Midspan	Right	Lap	Sup
1		0.00				0.00			0.00			0.00		0.00			0.02
2		0.16	-0.22	-0.25		0.02			0.33	-0.35		4.57		6.57	0.31		0.54
3		0.23	0.20	-0.16		0.54			0.30	-0.22		4.78		6.57	0.12		0.30
4		0.17	0.13	-0.22		0.82			0.15	-0.11		5.30		4.78	0.58		0.82
5		0.60	0.48	-0.64		0.82			0.28	-0.77		5.30		4.78	1.06		1.76
6		0.81	0.69	-0.51		1.76			1.01	-1.12		7.16		7.16			0.02
7		0.05				0.02						1.83					0.00

STRENGTH/DEFLECTION:

Span	Id	Shear(k)	Loc	Calc Allow	UC	Loc	Calc Allow	UC	Moment (f-k)	Loc	UC	Mom+Shr	Deflection (in)
1	RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01	LS	0.00	LS	0.00	0.00
2	RL	-0.22	3.39	0.06	MS	-0.35	3.48	0.10	RL	0.01	RL	0.01	0.00
3	RL	-0.20	3.39	0.06	LL	0.33	3.48	0.09	LL	0.01	LL	0.03	-0.01
4	RL	-0.22	3.39	0.07	RL	0.58	3.48	0.17	RL	0.03	RL	0.03	0.04
5	RL	-0.64	3.39	0.19	RL	1.06	3.48	0.31	RL	0.13	RL	0.13	-0.09
6	LL	0.69	3.39	0.20	MS	-1.12	3.48	0.32	LL	0.13	LL	0.13	-0.12
7	LS	0.05	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00	LS	0.00	0.08

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

STRENGTH/DEFLECTION:

Span	Id	Shear (k)	Moment (F-k)	Mom+Shr	Deflection (in)
1	Left	0.00	0.00	0.00	0.00
2	Left	0.13	0.14	0.00	0.14
3	Left	0.69	1.08	-0.09	1.08
4	Left	0.21	0.85	-1.07	0.85
5	Left	0.66	0.85	0.21	0.66
6	Left	0.29	1.08	-1.07	1.08
7	Left	0.14	0.14	0.00	0.14
1	Sup	0.00	0.00	0.00	0.00
2	Sup	-0.25	0.14	0.00	0.14
3	Sup	0.58	0.66	3.59	0.81
4	Sup	0.18	1.08	6.16	0.25
5	Sup	0.54	0.85	6.00	0.25
6	Sup	0.25	1.08	5.84	0.44
7	Sup	0.14	0.14	1.83	0.14

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Loc	Calc Allow	UC	Loc	Calc Allow	UC	Mom+Shr	Deflection (in)
1	RS	0.14	3.39	0.04	RS	0.04	0.00	0.00	-0.04
2	RL	-0.25	3.39	0.07	RL	0.23	0.06	0.06	0.08
3	LT	0.58	3.39	0.17	LT	0.31	0.05	0.05	-0.17
4	RL	-0.18	3.39	0.05	RL	0.26	0.04	0.04	0.12
5	RL	-0.58	3.39	0.17	RL	0.31	0.05	0.05	0.80
6	LT	0.25	3.39	0.07	LT	0.23	0.06	0.06	0.08
7	LS	0.14	3.39	0.04	LS	0.04	0.00	0.00	-0.04

LOAD COMBINATION #13 : DL+CL+2.0AUX8

Span	Id	Lap-Shear (k)	Shear-Ratio
2	Left	0.27	0.14
3	Left	0.27	0.14
4	Left	0.21	0.11
5	Left	0.21	0.11
6	Left	0.27	0.14

PURLIN ANALYSIS:

STRENGTH/DEFLECTION:

Span	Id	Shear (k)	Moment (F-k)	Mom+Shr	Deflection (in)
1	Left	0.00	0.00	0.00	0.00
2	Left	0.57	0.02	-1.42	1.05
3	Left	0.23	1.05	0.31	0.86
4	Left	0.68	0.86	-1.17	0.86
5	Left	0.20	0.86	0.31	1.05
6	Left	0.74	1.05	-1.42	0.02
7	Left	0.05	0.02	1.83	0.00
1	Sup	0.00	0.00	0.00	0.00
2	Sup	-0.63	0.02	0.00	0.02
3	Sup	-0.16	1.05	0.84	0.36
4	Sup	-0.56	0.86	0.24	0.84
5	Sup	-0.19	0.86	0.31	0.84
6	Sup	-0.57	1.05	-1.42	0.02
7	Sup	0.00	0.02	1.83	0.00

Span	Id	Shear(k)	Loc	Calc Allow	UC	Moment (F-k)	Loc	Mom+Shr	Deflection (in)
7	LS	0.20				0.18	LS	0.01	0.00
6	TL	0.80				-1.32	TL	0.15	-0.16
5	RL	-0.70				1.14	RL	0.15	-0.05
4	RL	-0.67				-0.86	RL	0.09	-0.09
3	TL	0.70				1.14	TL	0.15	-0.05
2	RL	-0.80				-1.32	RL	0.15	-0.16
1	RS	-0.20				0.18	RS	0.01	0.09

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Lap_Shear(k)	Shear_Ratio
2		0.48	0.24
3		0.48	0.20
4		0.39	0.20
5		0.39	0.20
6		0.48	0.24

LOAD COMBINATION # 2 : DL+CL+WP

FURLIN ANALYSIS:

Span	Id	Shear(k)	Loc	Calc Allow	UC	Moment (F-k)	Loc	Mom+Shr	Deflection (in)
1	Left	0.00				0.00	Left	0.00	0.00
2	Left	0.42				0.02	Left	-0.94	4.60
3	Left	0.57				1.32	Left	-0.45	6.26
4	Left	0.54				1.04	Left	-0.59	6.00
5	Left	0.52				1.04	Left	-0.45	5.74
6	Left	0.64				1.32	Left	-0.94	7.06
7	Left	0.02				0.02	Left	0.00	1.83

STRENGTH/DEFLECTION:

Span	Id	Shear(k)	Loc	Calc Allow	UC	Moment (F-k)	Loc	Mom+Shr	Deflection (in)
1	RS	-0.02				0.02	RS	0.01	0.00
2	RL	-0.55				-0.94	RL	0.07	-0.10
3	TL	0.48				0.80	TL	0.07	-0.03
4	RL	-0.45				-0.59	RL	0.04	-0.05
5	RL	-0.48				0.80	RL	0.07	-0.03
6	TL	0.55				-0.94	TL	0.07	-0.10
7	LS	0.02				0.02	LS	0.00	0.06

PURLIN ANALYSIS:

Span	Id	Shear (k)			Moment (f-k)			Deflection (in)		
		Left	Right	Sup	Left	Right	Sup	Left	Right	Sup
1		0.00			0.00			0.00		
2		-0.17			-0.30			-0.05		
3		-0.05			-0.09			-0.05		
4		-0.05			-0.09			-0.05		
5		-0.05			-0.09			-0.05		
6		-0.05			-0.09			-0.05		
7		-0.33			-0.30			-0.30		

STRENGTH/DEFLECTION:

Span	Id	Shear (k)			Moment (f-k)			Deflection (in)		
		Left	Right	UC	Left	Right	UC	Left	Right	UC
1		RS	LS	3.39	0.10	RS	-0.30	3.48	0.09	RS
2		LS	LS	-0.17	3.39	0.05	LS	-0.30	3.48	0.09
3		LS	LS	-0.04	3.39	0.01	LS	-0.05	3.48	0.01
4		RL	RL	0.04	3.39	0.01	RL	-0.05	3.48	0.01
5		RL	RL	0.04	3.39	0.01	RL	-0.05	3.48	0.01
6		RS	RS	0.17	3.39	0.05	RS	-0.30	3.48	0.09
7		LS	LS	-0.33	3.39	0.10	LS	-0.30	3.48	0.09

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Shear_Ratio		
		Left	Right	Sup
2		0.02		
3		0.02		
4		0.02		
5		0.02		
6		0.02		

LOAD COMBINATION # 5 : 0.6DL

PURLIN ANALYSIS:

Span	Id	Shear (k)			Moment (f-k)			Deflection (in)		
		Left	Right	Sup	Left	Right	Sup	Left	Right	Sup
1		0.00			0.00			0.00		
2		0.03			-0.04			-0.06		
3		0.04			-0.03			-0.03		
4		0.04			-0.04			-0.04		
5		0.04			-0.04			-0.04		
6		0.04			-0.03			-0.06		
7		0.01			-0.01			0.00		

Bolt = 0.500 (A307)

LOAD COMBINATION # 7 : DL+CL+2.0AUX2

Span	Lap_Shear(k)	Shear_Ratio	Id
2	0.29	0.15	2
3	0.29	0.15	3
4	0.06	0.03	4
5	0.11	0.06	5
6	0.13	0.06	6

PURLIN ANALYSIS:

Span	Left	Right	Sup	Id
1	0.00	0.00	0.00	1
2	0.51	-0.69	-0.81	2
3	0.75	-0.48	-0.60	3
4	0.26	-0.13	-0.17	4
5	0.19	-0.20	-0.23	5
6	0.25	0.22	-0.16	6
7	0.02		0.00	7

Span	Left	Right	Mom	Loc	Id
1	0.00	0.00	0.00	0.00	1
2	-1.12	-1.12	4.51	1.01	2
3	-0.77	-0.77	6.70	0.28	3
4	-0.11	-0.11	7.22	0.15	4
5	-0.22	-0.22	5.43	0.33	5
6	-0.35	-0.35	7.10	0.02	6
7	0.00	0.00	1.83	0.00	7

STRENGTH/DEFLECTION:

Span	Id	Loc	Calc Allow	UC	Loc	Calc Allow	UC	Moment (f-k)	UC	Loc	Mom+Shr	Deflection(in)
1	RS	-0.05	3.39	0.01	RS	0.02	3.48	0.01	LS	0.00	0.08	0.00
2	RL	-0.69	3.39	0.20	MS	-1.12	3.48	0.32	RL	0.13	-0.12	0.78
3	LT	0.64	3.39	0.19	LT	1.06	3.48	0.31	LT	0.13	-0.09	0.80
4	LT	0.22	3.39	0.07	LT	0.58	3.48	0.17	LT	0.03	0.04	0.80
5	RL	-0.20	3.39	0.06	RL	0.33	3.48	0.09	RL	0.01	-0.01	0.80
6	LT	0.22	3.39	0.06	MS	-0.35	3.48	0.10	LT	0.01	0.00	0.78
7	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00	0.00	0.00

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Lap_Shear(k)	Shear_Ratio	Id
2	0.44	0.22	2
3	0.44	0.20	3
4	0.20	0.07	4
5	0.07	0.14	5
6	0.14	0.07	6

LOAD COMBINATION # 8 : DL+CL+2.0AUX3

TAP BOLT SHEAR/BEARING:

Span	Id	Loc	Shear (k)	Loc	Calc Allow	UC	Loc	Moment (F-k)	Loc	Calc Allow	UC	Loc	Mom+Shr	Loc	Calc Allow	UC	Deflection (in)
1	RS		-0.02	3.39	0.01	RS		0.02	3.48	0.01	TS		0.00	0.00		0.00	0.08
2	RL		-0.22	3.39	0.06	MS		-0.35	3.48	0.10	RL		0.01	0.00		0.00	0.78
3	LT		0.20	3.39	0.06	LT		0.33	3.48	0.09	LT		0.01	0.01		0.01	0.80
4	RL		-0.22	3.39	0.07	RL		0.58	3.48	0.17	RL		0.03	0.03		0.04	0.80
5	RL		-0.64	3.39	0.19	RL		1.06	3.48	0.31	RL		0.13	-0.09		0.09	0.80
6	LT		0.69	3.39	0.20	MS		-1.12	3.48	0.32	LT		0.13	-0.12		0.12	0.78
7	LS		0.05	3.39	0.01	LS		0.02	3.48	0.01	LS		0.00	0.00		0.00	0.08

STRENGTH/DEFLECTION:

Span		Left		Right		Lap		Sup		Left		Right		Lap		Sup		Left		Right		Lap		Sup	
Id																									
1		0.00		-0.02		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
2		0.16		-0.22		-0.25		0.02		0.02		-0.35		4.57		0.00		4.57		0.31		0.54		0.30	
3		0.23		-0.16		-0.19		0.54		0.33		-0.22		6.57		0.12		6.57		0.12		0.82		1.76	
4		0.17		-0.22		-0.26		0.30		0.15		-0.11		4.78		0.58		4.78		0.58		0.82		1.76	
5		0.60		0.48		-0.75		0.82		0.28		-0.77		5.30		1.06		5.30		1.06		0.02		0.02	
6		0.81		0.69		-0.51		1.76		1.01		-1.12		7.16				7.16				0.02		0.02	
7		0.05				0.00		0.02				0.00		1.83				1.83				0.00		0.00	

PURLIN ANALYSIS:

LOAD COMBINATION #10 : DL+CL+2.0AUx5

Span	Id	Lap-Shear (k)	Left	Right	Shear-Ratio	Left	Right
2		0.10			0.05		
3		0.10	0.21		0.05	0.11	
4		0.21	0.40		0.11	0.20	
5		0.40	0.23		0.20	0.12	
6		0.23			0.12		

$$\text{Bolt} = 0.500 \text{ (A307)}$$

TAP BOLT SHEAR/BEARING:

Span	Id	Loc	Calc Allow	UC	Loc	Calc Allow	UC	Mom+Shr	Loc	UC	Deflection (in)
1	RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01	LS	0.00	0.01
2	RL	-0.21	3.39	0.06	MS	-0.41	3.48	0.12	RL	0.01	-0.02
3	RL	-0.21	3.39	0.06	RL	0.60	3.48	0.17	RL	0.03	0.04
4	RL	-0.63	3.39	0.18	RL	0.91	3.48	0.26	RL	0.10	-0.09
5	LT	0.62	3.39	0.18	LT	0.91	3.48	0.26	LT	0.10	0.80
6	LT	0.25	3.39	0.07	LT	0.65	3.48	0.19	LT	0.04	0.05
7	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00	-0.02

Span		Left		Right		Lap		Sup		Midspan		Mom		Loc		Right		Lap		Sup	
		Shear (k)								Moment (F-k)											
1		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
2		0.13		-0.25		0.14		-0.09		3.59		0.81		1.08		0.85		0.25		0.85	
3		0.69		0.58		1.08		-1.07		6.16		0.25		0.85		0.85		0.66		1.08	
4		0.21		0.18		0.85		0.21		6.00		0.44		0.85		0.85		0.66		1.08	
5		0.66		0.54		0.85		-1.07		5.84		0.44		0.85		0.85		0.66		1.08	
6		0.29		0.25		1.08		-0.09		8.08				0.14		0.14					
7		0.14				0.00				1.83				0.00		0.00					

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Span	Id	Shear (k)	Loc	Calc Allow	UC	Moment (F-k)	Loc	Calc Allow	UC	Mom+Shr	Loc	Calc Allow	UC	Deflection (in)
1	RS	-0.14	3.39	0.04	RS	0.14	3.48	0.04	RS	0.00	-0.04	0.00	0.00	-0.04
	RT	-0.25	3.39	0.07	RT	0.81	3.48	0.23	RT	0.06	0.08	0.06	0.08	0.78
2	RT	-0.25	3.39	0.07	RT	0.81	3.48	0.23	RT	0.06	0.08	0.06	0.08	0.78
	LT	0.58	3.39	0.17	MS	-1.07	3.48	0.31	LT	0.05	-0.17	0.05	-0.17	0.80
3	LT	0.58	3.39	0.17	MS	-1.07	3.48	0.31	LT	0.05	-0.17	0.05	-0.17	0.80
	RT	-0.18	3.39	0.05	RT	0.66	2.56	0.26	RT	0.04	0.12	0.04	0.12	0.80
4	RT	-0.18	3.39	0.05	RT	0.66	2.56	0.26	RT	0.04	0.12	0.04	0.12	0.80
	RL	-0.58	3.39	0.17	MS	-1.07	3.48	0.31	RL	0.05	-0.17	0.05	-0.17	0.80
5	RL	-0.58	3.39	0.17	MS	-1.07	3.48	0.31	RL	0.05	-0.17	0.05	-0.17	0.80
	LT	0.25	3.39	0.07	LT	0.81	3.48	0.23	LT	0.06	0.08	0.06	0.08	0.78
6	LT	0.25	3.39	0.07	LT	0.81	3.48	0.23	LT	0.06	0.08	0.06	0.08	0.78
	LS	0.14	3.39	0.04	LS	0.14	3.48	0.04	LS	0.00	-0.04	0.00	-0.04	0.78
7	LS	0.14	3.39	0.04	LS	0.14	3.48	0.04	LS	0.00	-0.04	0.00	-0.04	0.78

LAP BOLT SHEAR/BEARING:

$$\text{Bolt} = 0.500 \text{ (A307)}$$

Span	Id	Lap-Shear(k)	Shear-Ratio
2	0.27	0.21	0.14
3	0.27	0.21	0.14
4	0.21	0.21	0.11
5	0.21	0.27	0.11
6	0.27	0.14	0.14

LOAD COMBINATION #13 : DL+CL+2.0AUx8

PURLIN ANALYSIS:

Span		Id		Shear (k)				Moment (F-k)			
Left	Right	Left	Right	Left	Right	Lap	Sup	Left	Right	Midspan	Loc
1	0.00	0.00	-0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.57	-0.63	-0.74	0.02	0.00	0.02	0.00	-1.42	5.05	6.44	0.00
3	0.23	0.19	-0.20	1.05	0.86	0.84	0.31	0.31	6.00	5.56	0.00
4	0.68	0.56	-0.56	0.86	0.86	0.24	0.68	0.31	6.00	5.56	0.00
5	0.20	0.16	-0.19	-0.23	0.86	0.68	0.31	0.31	6.00	5.56	0.00
6	0.74	0.63	-0.57	1.05	0.86	0.36	0.68	-1.42	6.61	6.61	0.00
7	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	1.83	1.83	0.00

STRENGTH/DEFLECTION:

Span	Id	Shear(k)	Moment(F-k)	Deflection(in)
	Loc	Calc Allow	UC	Loc
	Loc	Calc Allow	UC	Calc Allow
	Loc	Calc Allow	UC	Mom+Shr
	Loc	Calc Allow	UC	Deflection(in)

5	0.78	0.64	-0.70	-0.84	1.55	0.84	-0.69	5.78	1.15	1.92	0.18	0.00
6	0.93	0.80		-0.64	1.92	1.05	-1.32	6.94		0.18	0.00	0.00
7	0.20				0.18		0.00	1.83				

STRENGTH/DEFLECTION:

Span	Id	Loc	Shear (k)	Calc Allow	UC	Loc	Mom+Shr	Deflection (in)
-----	-----	-----	-----	-----	-----	-----	-----	-----
1	RS	Loc	-0.20	3.39	0.06	RS	0.01	0.09
2	RL	Loc	-0.80	3.39	0.24	RL	0.15	-0.16
3	LT	Loc	0.70	3.39	0.21	LT	0.15	-0.05
4	RL	Loc	-0.67	3.39	0.20	RL	0.09	-0.09
5	RL	Loc	-0.70	3.39	0.21	RL	0.15	-0.05
6	LT	Loc	0.80	3.39	0.24	LT	0.15	-0.16
7	LS	Loc	0.20	3.39	0.06	LS	0.01	0.09

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Lap	Shear (k)	Left	Right	Shear_Ratio
-----	-----	-----	-----	-----	-----	-----
2			0.48			0.24
3			0.48	0.39	0.24	0.20
4			0.39	0.39	0.20	0.20
5			0.39	0.48	0.20	0.24
6			0.48			0.24

LOAD COMBINATION # 2 : DL+CL+WP

PURLIN ANALYSIS:

Span	Id	Left	Right	Lap	Sup	Shear (k)	-----	Left	Right	Lap	Sup	Moment (F-k)
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1						0.00						0.00
2						0.42						0.00
3						0.57						0.00
4						0.55						0.00
5						0.52						0.00
6						0.64						0.00
7						0.02						0.00

STRENGTH/DEFLECTION:

Span	Id	Loc	Shear (k)	Calc Allow	UC	Loc	Moment (F-k)	Calc Allow	UC	Mom+Shr	Deflection (in)
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1	RS	Loc	-0.02	3.39	0.01	RS	0.02	3.48	0.01	LS	0.00
2	RL	Loc	-0.55	3.39	0.16	MS	-0.95	3.48	0.27	LT	0.07
3	LT	Loc	0.48	3.39	0.14	LT	0.80	3.48	0.23	RL	0.07
4	RL	Loc	-0.45	3.39	0.13	MS	-0.59	3.48	0.17	RL	0.04
5	RL	Loc	-0.48	3.39	0.14	RL	0.80	3.48	0.23	LT	0.07
6	LT	Loc	0.55	3.39	0.16	MS	-0.95	3.48	0.27	LT	0.07
7	LS	Loc	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00

PURLIN ANALYSIS:

Span	Id	Shear (k)			Moment (f-k)			Deflection (in)		
		Left	Right	Sup	Left	Right	Sup	Left	Right	Sup
1		0.00			0.00			0.00		
2		-0.30	0.16		-0.30	0.18		-0.30	0.21	
3		-0.16	0.13		-0.38	0.14		-0.29	0.16	
4		-0.15	0.13		-0.29	0.15		-0.29	0.15	
5		-0.14	0.12	0.13	-0.29	0.16	0.30	-0.38	0.23	0.00
6		-0.18		-0.16	-0.38		0.30	-0.30		
7		-0.33			-0.30		0.00	-0.30		

STRENGTH/DEFLECTION:

Span	Id	Shear (k)			Moment (f-k)			Deflection (in)		
		Left	Right	Loc	Left	Right	Loc	Left	Right	Loc
1	RS	0.33	3.39	0.10	-0.30	3.48	0.09	RS	0.02	-0.05
2	LS	-0.30	3.39	0.09	-0.30	3.48	0.09	LS	0.02	-0.05
3	TL	-0.13	3.39	0.04	-0.23	3.48	0.07	TL	0.01	1.17
4	RL	0.13	3.39	0.04	0.17	2.66	0.06	RL	0.00	1.20
5	RL	0.13	3.39	0.04	-0.23	3.48	0.07	RL	0.01	1.20
6	RS	0.30	3.39	0.09	-0.30	3.48	0.09	RS	0.02	1.17
7	LS	-0.33	3.39	0.10	-0.30	3.48	0.09	LS	0.02	1.17

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Lap Shear (k)		Shear Ratio	
		Left	Right	Left	Right
2			0.09		0.05
3		0.09	0.07	0.05	0.04
4		0.07	0.07	0.04	0.04
5		0.07	0.09	0.04	0.05
6		0.09			

LOAD COMBINATION # 5 : 0.6DL

PURLIN ANALYSIS:

Span	Id	Shear (k)			Moment (f-k)			Deflection (in)		
		Left	Right	Sup	Left	Right	Sup	Left	Right	Sup
1		0.00			0.00			0.00		
2		0.03	-0.04		0.01	-0.06		0.09	0.05	
3		0.04	-0.03		0.09	-0.03		0.07	0.04	
4		0.04	-0.03		0.07	-0.04		0.09	0.07	
5		0.04	-0.03		0.07	-0.03		0.09	0.07	
6		0.04		0.04	0.09		0.06	0.01		0.01
7		0.01			0.01		1.83	0.00		

Bolt = 0.500 (A307)

LOAD COMBINATION # 7 : DL+CL+2.0AUX2

Span	Id	Lap_Shear(k)	Shear_Ratio
2	2	0.29	0.15
3	3	0.29	0.06
4	4	0.06	0.11
5	5	0.11	0.13
6	6	0.13	0.06

PURLIN ANALYSIS:

Span	Id	Left	Right	Lap	Sup	Left	Right	Lap	Sup	Mom	Loc	Midspan	Right	Lap	Sup	Moment (f-k)
1	1	0.00	0.51	0.64	-0.70	-0.81	0.02	0.00	0.00	0.00	0.00	4.51	1.01	0.28	1.76	0.02
2	2	0.00	0.76	0.64	-0.49	-0.60	1.76	1.06	-0.77	6.70	4.51	6.70	0.28	0.28	1.76	0.82
3	3	0.26	0.76	0.64	-0.13	-0.17	0.82	0.58	-0.11	7.22	0.15	7.22	0.15	0.30	0.82	0.30
4	4	0.19	0.26	0.16	-0.20	-0.23	0.30	0.12	-0.23	5.43	0.33	5.43	0.33	0.54	0.54	0.54
5	5	0.25	0.19	0.22	-0.16	-0.23	0.54	0.31	-0.35	7.10	0.02	7.10	0.02	0.02	0.02	0.02
6	6	0.25	0.25	0.22	-0.16	-0.16	0.54	0.31	-0.35	7.10	0.02	7.10	0.02	0.02	0.02	0.02
7	7	0.02	0.02				0.02			1.83		1.83				0.00

STRENGTH/DEFLECTION:

Span	Id	Loc	Calc Allow	UC	Loc	Calc Allow	UC	Moment (f-k)	UC	Loc	Mom+Shr	Deflection (in)
1	1	RS	-0.05	3.39	0.01	RS	0.02	3.48	0.01	LS	0.00	0.08
2	2	RL	-0.70	3.39	0.21	MS	-1.13	3.48	0.32	RL	0.13	-0.12
3	3	LT	0.64	3.39	0.19	LT	1.06	3.48	0.31	LT	0.13	-0.09
4	4	LT	0.22	3.39	0.07	LT	0.58	3.48	0.17	LT	0.03	0.04
5	5	RL	-0.20	3.39	0.06	RL	0.33	3.48	0.09	RL	0.01	-0.01
6	6	LT	0.22	3.39	0.06	MS	-0.35	3.48	0.10	LT	0.01	0.00
7	7	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00	0.00

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Lap_Shear(k)	Shear_Ratio
2	2	0.44	0.22
3	3	0.44	0.21
4	4	0.21	0.08
5	5	0.08	0.14
6	6	0.14	0.07

LOAD COMBINATION # 8 : DL+CL+2.0AUX3

Span	Id	-----Shear (k) -----		-----Moment (f-k) -----		Mom+Shr		Deflection (in)					
		Loc	Calc Allow	UC	Loc	Calc Allow	Loc	UC	Calc Allow				
1	RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01	LS	0.00	0.01	-0.02	0.78
2	RL	-0.21	3.39	0.06	MS	-0.41	3.48	0.12	RL	0.01	-0.02	0.80	0.80
3	RL	-0.21	3.39	0.06	RL	0.61	3.48	0.17	RL	0.03	0.04	0.80	0.80
4	RL	-0.63	3.39	0.19	RL	0.91	3.48	0.26	RL	0.10	-0.09	0.80	0.80
5	LL	0.62	3.39	0.18	LL	0.92	3.48	0.26	LL	0.10	-0.09	0.80	0.80
6	LL	0.25	3.39	0.07	LL	0.65	3.48	0.19	LL	0.04	0.05	0.78	0.78
7	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00	-0.02	0.78	0.78

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Lap_Shear (k)	Shear_Ratio	Left	Right
2		0.10		0.05	0.11
3		0.10	0.21	0.05	0.11
4		0.21	0.40	0.11	0.20
5		0.40	0.23	0.20	0.12
6		0.23		0.12	

LOAD COMBINATION #10 : DL+CL+2.0AUX5

PURLIN ANALYSIS:

Span	Id	Shear (k)	Left	Right	Lap	Sup	Left	Left	Left	Left	Mom	Midspan	Right	Right	Sup
1		0.00									0.00				0.02
2		0.16	-0.22	-0.25							0.00				0.02
3		0.23	0.20	-0.16							-0.35				0.31
4		0.17	0.13	-0.22							-0.11				0.58
5		0.60	0.49	-0.64							-0.77				1.06
6		0.81	0.70	-0.51							-1.13				0.02
7		0.05									0.00				0.00

STRENGTH/DEFLECTION:

Span	Id	Shear (k)	Loc	Calc Allow	UC	Loc	Moment (f-k)	UC	Loc	Mom+Shr	Deflection (in)	Calc Allow
1	RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01	LS	0.00	0.00	0.78
2	RL	-0.22	3.39	0.06	MS	-0.35	3.48	0.10	RL	0.01	0.00	0.78
3	RL	-0.22	3.39	0.06	LL	0.33	3.48	0.09	LL	0.01	-0.01	0.80
4	RL	-0.22	3.39	0.07	RL	0.58	3.48	0.17	RL	0.03	0.04	0.80
5	RL	-0.64	3.39	0.19	RL	1.06	3.48	0.31	RL	0.13	-0.09	0.80
6	LL	0.70	3.39	0.21	MS	-1.13	3.48	0.32	LL	0.13	-0.12	0.78
7	LS	0.05	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00	0.08	0.78

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap_Shear(k)		Shear_Ratio	
	Left	Right	Left	Right
2		0.14		0.07
3	0.14	0.08	0.07	0.04
4	0.08	0.21	0.04	0.10
5	0.21	0.44	0.10	0.22
6	0.44		0.22	

LOAD COMBINATION #11 : DL+CL+2.0AUX6

PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment(f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Loc	Right Lap	Right Sup
1	0.00			-0.02	0.00		0.00	0.00		0.02
2	0.17		-0.21	-0.25	0.02		-0.37	4.66	0.27	0.50
3	0.22	0.18	-0.17	-0.21	0.50	0.30	-0.16	6.11	0.27	0.46
4	0.23	0.20	-0.16	-0.20	0.46	0.24	-0.30	6.52	0.06	0.23
5	0.14	0.10	-0.26	-0.29	0.23	0.12	-0.02	3.79	0.90	1.18
6	0.75	0.63		-0.57	1.18	0.49	-1.29	6.61		0.15
7	0.16			0.00	0.15		0.00	1.83		0.00

STRENGTH/DEFLECTION:

Span Id	-----Shear(k)-----				-----Moment(f-k)-----				Mom+Shr		Deflection(in)	
	Loc	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01	LS	0.00	0.00	
2	RL	-0.21	3.39	0.06	MS	-0.37	3.48	0.11	RL	0.01	-0.01	0.78
3	LL	0.18	3.39	0.05	LL	0.30	3.48	0.09	LL	0.01	0.01	0.80
4	LL	0.20	3.39	0.06	MS	-0.30	3.48	0.09	LL	0.01	-0.02	0.80
5	RL	-0.26	3.39	0.08	RL	0.90	3.40	0.27	RL	0.07	0.06	0.80
6	LL	0.63	3.39	0.19	MS	-1.29	3.48	0.37	LL	0.05	-0.18	0.78
7	LS	0.16	3.39	0.05	LS	0.15	3.48	0.04	LS	0.00	0.09	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap_Shear(k)		Shear_Ratio	
	Left	Right	Left	Right
2		0.13		0.06
3	0.13	0.11	0.06	0.06
4	0.11	0.06	0.06	0.03
5	0.06	0.29	0.03	0.15
6	0.29		0.15	

LOAD COMBINATION #12 : DL+CL+2.0AUX7

PURLIN ANALYSIS:

PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Loc	Right Lap	Right Sup
1	0.00			-0.02	0.00		0.00	0.00		0.02
2	0.13		-0.25	-0.29	0.02		-0.22	3.66	0.65	0.92
3	0.62	0.51	-0.62	-0.73	0.92	0.36	-0.79	5.50	0.92	1.59
4	0.74	0.63	-0.50	-0.61	1.59	0.91	-0.84	6.56	0.28	0.84
5	0.25	0.21	-0.14	-0.18	0.84	0.61	-0.04	7.00	0.25	0.41
6	0.24	0.21		-0.17	0.41	0.18	-0.41	6.77		0.02
7	0.02			0.00	0.02		0.00	1.83		0.00

STRENGTH/DEFLECTION:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----				Mom+Shr		Deflection(in)	
	Loc	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01	LS	0.00	-0.02	
2	RL	-0.25	3.39	0.07	RL	0.65	3.48	0.19	RL	0.04	0.05	0.78
3	RL	-0.62	3.39	0.18	RL	0.92	3.48	0.26	RL	0.10	-0.09	0.80
4	LL	0.63	3.39	0.19	LL	0.91	3.48	0.26	LL	0.10	-0.09	0.80
5	LL	0.21	3.39	0.06	LL	0.61	3.48	0.17	LL	0.03	0.04	0.80
6	LL	0.21	3.39	0.06	MS	-0.41	3.48	0.12	LL	0.01	-0.02	0.78
7	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00	0.01	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap_Shear(k)		Shear_Ratio	
	Left	Right	Left	Right
2		0.23		0.12
3	0.23	0.40	0.12	0.20
4	0.40	0.21	0.20	0.11
5	0.21	0.10	0.11	0.05
6	0.10		0.05	

LOAD COMBINATION # 9 : DL+CL+2.0AUX4

PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Loc	Right Lap	Right Sup
1	0.00			-0.02	0.00		0.00	0.00		0.02
2	0.17		-0.21	-0.24	0.02		-0.41	4.90	0.18	0.41
3	0.18	0.14	-0.21	-0.25	0.41	0.25	-0.04	5.00	0.61	0.84
4	0.61	0.50	-0.63	-0.74	0.84	0.28	-0.84	5.44	0.91	1.59
5	0.73	0.62	-0.51	-0.62	1.59	0.92	-0.79	6.50	0.36	0.92
6	0.29	0.25		-0.13	0.92	0.65	-0.22	8.00		0.02
7	0.02			0.00	0.02		0.00	1.83		0.00

STRENGTH/DEFLECTION:

STRENGTH/DEFLECTION:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----				Mom+Shr		Deflection(in)	
	Loc	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	-0.01	3.39	0.00	RS	0.01	3.48	0.00	LS	0.00	0.00	
2	RL	-0.04	3.39	0.01	MS	-0.06	3.48	0.02	LS	0.00	0.00	0.78
3	LL	0.03	3.39	0.01	LL	0.05	3.47	0.02	LS	0.00	0.00	0.80
4	RL	-0.03	3.39	0.01	MS	-0.04	3.48	0.01	LS	0.00	0.00	0.80
5	RL	-0.03	3.39	0.01	RL	0.05	3.47	0.02	LS	0.00	0.00	0.80
6	LL	0.04	3.39	0.01	MS	-0.06	3.48	0.02	LS	0.00	0.00	0.78
7	LS	0.01	3.39	0.00	LS	0.01	3.48	0.00	LS	0.00	0.00	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap_Shear(k)		Shear_Ratio	
	Left	Right	Left	Right
2		0.02		0.01
3	0.02	0.02	0.01	0.01
4	0.02	0.02	0.01	0.01
5	0.02	0.02	0.01	0.01
6	0.02		0.01	

LOAD COMBINATION # 6 : DL+CL+2.0AUX1

PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Loc	Right Lap	Right Sup
1	0.00			-0.16	0.00		0.00	0.00		0.15
2	0.57		-0.63	-0.75	0.15		-1.29	5.05	0.49	1.18
3	0.29	0.26	-0.10	-0.14	1.18	0.90	-0.02	8.21	0.12	0.23
4	0.20	0.16	-0.20	-0.23	0.23	0.06	-0.30	5.48	0.24	0.46
5	0.21	0.17	-0.18	-0.22	0.46	0.27	-0.16	5.89	0.30	0.50
6	0.25	0.21		-0.17	0.50	0.27	-0.37	7.00		0.02
7	0.02			0.00	0.02		0.00	1.83		0.00

STRENGTH/DEFLECTION:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----				Mom+Shr		Deflection(in)	
	Loc	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	-0.16	3.39	0.05	RS	0.15	3.48	0.04	RS	0.00	0.09	
2	RL	-0.63	3.39	0.19	MS	-1.29	3.48	0.37	RL	0.05	-0.18	0.78
3	LL	0.26	3.39	0.08	LL	0.90	3.40	0.27	LL	0.07	0.06	0.80
4	RL	-0.20	3.39	0.06	MS	-0.30	3.48	0.09	RL	0.01	-0.02	0.80
5	RL	-0.18	3.39	0.05	RL	0.30	3.48	0.09	RL	0.01	0.01	0.80
6	LL	0.21	3.39	0.06	MS	-0.37	3.48	0.11	LL	0.01	-0.01	0.78
7	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00	0.00	

LAP BOLT SHEAR/BEARING:

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap_Shear(k)		Shear_Ratio	
	Left	Right	Left	Right
2		0.33		0.17
3	0.33	0.26	0.17	0.13
4	0.26	0.26	0.13	0.13
5	0.26	0.33	0.13	0.17
6	0.33		0.17	

LOAD COMBINATION # 3 : DL+CL+0.75SL+0.75WS

PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Loc	Right Lap	Right Sup
1	0.00			0.24	0.00		0.00	0.00		-0.22
2	-0.26		0.12	0.14	-0.22		0.13	7.61	-0.15	-0.28
3	-0.11	-0.09	0.08	0.10	-0.28	-0.18	0.08	6.44	-0.10	-0.19
4	-0.10	-0.09	0.09	0.10	-0.19	-0.10	0.12	6.00	-0.10	-0.19
5	-0.10	-0.08	0.09	0.11	-0.19	-0.10	0.08	5.56	-0.18	-0.28
6	-0.14	-0.12		0.26	-0.28	-0.15	0.13	4.05		-0.22
7	-0.24			0.00	-0.22		0.00	1.83		0.00

STRENGTH/DEFLECTION:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----				Mom+Shr		Deflection(in)	
	Loc	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	0.24	3.39	0.07	RS	-0.22	3.48	0.06	RS	0.01	-0.05	
2	LS	-0.26	3.39	0.08	LS	-0.22	3.48	0.06	LS	0.01	0.10	1.17
3	LL	-0.09	3.39	0.03	LL	-0.18	3.48	0.05	LL	0.00	0.03	1.20
4	RL	0.09	3.39	0.03	MS	0.12	2.61	0.05	RL	0.00	0.05	1.20
5	RL	0.09	3.39	0.03	RL	-0.18	3.48	0.05	RL	0.00	0.03	1.20
6	RS	0.26	3.39	0.08	RS	-0.22	3.48	0.06	RS	0.01	0.10	1.17
7	LS	-0.24	3.39	0.07	LS	-0.22	3.48	0.06	LS	0.01	-0.05	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap_Shear(k)		Shear_Ratio	
	Left	Right	Left	Right
2		0.07		0.04
3	0.07	0.05	0.04	0.02
4	0.05	0.05	0.02	0.02
5	0.05	0.07	0.02	0.04
6	0.07		0.04	

LOAD COMBINATION # 4 : DL+CL+0.75WP+0.75WS

1	RS	-0.05	3.39	0.01	RS	0.02	3.48	0.01	LS	0.00	0.11	
2	RL	-0.63	3.39	0.19	MS	-1.42	3.48	0.41	RL	0.05	-0.21	0.78
3	LL	0.19	3.39	0.06	LL	0.84	2.56	0.33	LL	0.06	0.13	0.80
4	LL	0.56	3.39	0.17	MS	-1.17	3.48	0.34	RL	0.03	-0.19	0.80
5	RL	-0.19	3.39	0.06	RL	0.84	2.56	0.33	RL	0.06	0.13	0.80
6	LL	0.63	3.39	0.19	MS	-1.42	3.48	0.41	LL	0.05	-0.21	0.78
7	LS	0.05	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00	0.11	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap_Shear(k)		Shear_Ratio	
	Left	Right	Left	Right
2		0.26		0.13
3	0.26	0.21	0.13	0.11
4	0.21	0.21	0.11	0.11
5	0.21	0.26	0.11	0.13
6	0.26		0.13	

Augustal

Purlin Design Report (Surface 2)

10/28/07 6:20pm

ROOF PURLIN

DESIGN RUN # 1, SURFACE # 2
(Edge Strip Zone= 3.70)

PURLIN LAYOUT: (Purlin Id= 4)

Bay Id	Span Id	Purlin Size	Span (ft)	---Lap(ft)---		Load Width	No. Brace
				Left	Right		
	1	6X25Z16	1.83			3.86	0
1	2	6X25Z16	11.67		1.00	3.86	0
2	3	6X25Z16	12.00	1.00	1.00	3.86	0
3	4	6X25Z16	12.00	1.00	1.00	3.86	0
4	5	6X25Z16	12.00	1.00	1.00	3.86	0
5	6	6X25Z16	11.67	1.00		3.86	0
	7	6X25Z16	1.83			3.86	0

LOAD COMBINATION # 1 : DL+CL+1.5SL

PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Loc	Right Lap	Right Sup
1	0.00			-0.20	0.00		0.00	0.00		0.18
2	0.64		-0.80	-0.93	0.18		-1.32	4.73	1.05	1.92
3	0.84	0.70	-0.64	-0.78	1.92	1.15	-0.69	6.22	0.84	1.55
4	0.81	0.67	-0.67	-0.81	1.55	0.81	-0.87	6.00	0.81	1.55

Span Id	Lap_Shear(k)		Shear_Ratio	
	Left	Right	Left	Right
2		0.14		0.07
3	0.14	0.07	0.07	0.04
4	0.07	0.20	0.04	0.10
5	0.20	0.44	0.10	0.22
6	0.44		0.22	

LOAD COMBINATION #11 : DL+CL+2.0AUX6

PURLIN ANALYSIS:

Span Id	Shear(k)				Moment(f-k)					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Loc	Right Lap	Right Sup
1	0.00			-0.02	0.00		0.00	0.00		0.02
2	0.17		-0.21	-0.25	0.02		-0.37	4.66	0.27	0.50
3	0.22	0.18	-0.17	-0.21	0.50	0.30	-0.16	6.11	0.26	0.46
4	0.23	0.20	-0.16	-0.19	0.46	0.24	-0.30	6.52	0.06	0.23
5	0.13	0.10	-0.26	-0.29	0.23	0.12	-0.02	3.79	0.90	1.17
6	0.75	0.63		-0.57	1.17	0.49	-1.29	6.61		0.15
7	0.16			0.00	0.15		0.00	1.83		0.00

STRENGTH/DEFLECTION:

Span Id	Shear(k)				Moment(f-k)				Mom+Shr		Deflection(in)	
	Loc	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01	LS	0.00	0.00	
2	RL	-0.21	3.39	0.06	MS	-0.37	3.48	0.11	RL	0.01	-0.01	0.78
3	LL	0.18	3.39	0.05	LL	0.30	3.48	0.09	LL	0.01	0.01	0.80
4	LL	0.20	3.39	0.06	MS	-0.30	3.48	0.09	LL	0.01	-0.02	0.80
5	RL	-0.26	3.39	0.08	RL	0.90	3.40	0.26	RL	0.07	0.06	0.80
6	LL	0.63	3.39	0.19	MS	-1.29	3.48	0.37	LL	0.05	-0.18	0.78
7	LS	0.16	3.39	0.05	LS	0.15	3.48	0.04	LS	0.00	0.09	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap_Shear(k)		Shear_Ratio	
	Left	Right	Left	Right
2		0.13		0.06
3	0.13	0.11	0.06	0.06
4	0.11	0.06	0.06	0.03
5	0.06	0.29	0.03	0.15
6	0.29		0.15	

LOAD COMBINATION #12 : DL+CL+2.0AUX7

PURLIN ANALYSIS:

PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Loc	Right Lap	Right Sup
1	0.00			-0.02	0.00		0.00	0.00		0.02
2	0.13		-0.25	-0.28	0.02		-0.22	3.66	0.65	0.92
3	0.62	0.51	-0.62	-0.73	0.92	0.36	-0.79	5.50	0.91	1.59
4	0.74	0.63	-0.50	-0.61	1.59	0.91	-0.83	6.56	0.28	0.84
5	0.25	0.21	-0.14	-0.18	0.84	0.60	-0.04	7.00	0.25	0.41
6	0.24	0.21		-0.17	0.41	0.18	-0.41	6.77		0.02
7	0.02			0.00	0.02		0.00	1.83		0.00

STRENGTH/DEFLECTION:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----				Mom+Shr		Deflection(in)	
	Loc	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01	LS	0.00	-0.02	
2	RL	-0.25	3.39	0.07	RL	0.65	3.48	0.19	RL	0.04	0.05	0.78
3	RL	-0.62	3.39	0.18	RL	0.91	3.48	0.26	RL	0.10	-0.09	0.80
4	LL	0.63	3.39	0.18	LL	0.91	3.48	0.26	LL	0.10	-0.09	0.80
5	LL	0.21	3.39	0.06	LL	0.60	3.48	0.17	LL	0.03	0.04	0.80
6	LL	0.21	3.39	0.06	MS	-0.41	3.48	0.12	LL	0.01	-0.02	0.78
7	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00	0.01	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap_Shear(k)		Shear_Ratio	
	Left	Right	Left	Right
2		0.23		0.12
3	0.23	0.40	0.12	0.20
4	0.40	0.21	0.20	0.11
5	0.21	0.10	0.11	0.05
6	0.10		0.05	

LOAD COMBINATION # 9 : DL+CL+2.0AUX4

PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Loc	Right Lap	Right Sup
1	0.00			-0.02	0.00		0.00	0.00		0.02
2	0.17		-0.21	-0.24	0.02		-0.41	4.90	0.18	0.41
3	0.18	0.14	-0.21	-0.25	0.41	0.25	-0.04	5.00	0.60	0.84
4	0.61	0.50	-0.63	-0.74	0.84	0.28	-0.83	5.44	0.91	1.59
5	0.73	0.62	-0.51	-0.62	1.59	0.91	-0.79	6.50	0.36	0.92
6	0.28	0.25		-0.13	0.92	0.65	-0.22	8.00		0.02
7	0.02			0.00	0.02		0.00	1.83		0.00

STRENGTH/DEFLECTION:

STRENGTH/DEFLECTION:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----				Mom+Shr		Deflection(in)	
	Loc	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	-0.01	3.39	0.00	RS	0.01	3.48	0.00	LS	0.00	0.00	
2	RL	-0.04	3.39	0.01	MS	-0.06	3.48	0.02	LS	0.00	0.00	0.78
3	LL	0.03	3.39	0.01	LL	0.05	3.47	0.02	LS	0.00	0.00	0.80
4	RL	-0.03	3.39	0.01	MS	-0.04	3.48	0.01	LS	0.00	0.00	0.80
5	RL	-0.03	3.39	0.01	RL	0.05	3.47	0.02	LS	0.00	0.00	0.80
6	LL	0.04	3.39	0.01	MS	-0.06	3.48	0.02	LS	0.00	0.00	0.78
7	LS	0.01	3.39	0.00	LS	0.01	3.48	0.00	LS	0.00	0.00	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap_Shear(k)		Shear_Ratio	
	Left	Right	Left	Right
2		0.02		0.01
3	0.02	0.02	0.01	0.01
4	0.02	0.02	0.01	0.01
5	0.02	0.02	0.01	0.01
6	0.02		0.01	

LOAD COMBINATION # 6 : DL+CL+2.0AUX1

PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Loc	Right Lap	Right Sup
1	0.00			-0.16	0.00		0.00	0.00		0.15
2	0.57		-0.63	-0.75	0.15		-1.29	5.05	0.49	1.17
3	0.29	0.26	-0.10	-0.13	1.17	0.90	-0.02	8.21	0.12	0.23
4	0.19	0.16	-0.20	-0.23	0.23	0.06	-0.30	5.48	0.24	0.46
5	0.21	0.17	-0.18	-0.22	0.46	0.26	-0.16	5.89	0.30	0.50
6	0.25	0.21		-0.17	0.50	0.27	-0.37	7.00		0.02
7	0.02			0.00	0.02		0.00	1.83		0.00

STRENGTH/DEFLECTION:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----				Mom+Shr		Deflection(in)	
	Loc	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	-0.16	3.39	0.05	RS	0.15	3.48	0.04	RS	0.00	0.09	
2	RL	-0.63	3.39	0.19	MS	-1.29	3.48	0.37	RL	0.05	-0.18	0.78
3	LL	0.26	3.39	0.08	LL	0.90	3.40	0.26	LL	0.07	0.06	0.80
4	RL	-0.20	3.39	0.06	MS	-0.30	3.48	0.09	RL	0.01	-0.02	0.80
5	RL	-0.18	3.39	0.05	RL	0.30	3.48	0.09	RL	0.01	0.01	0.80
6	LL	0.21	3.39	0.06	MS	-0.37	3.48	0.11	LL	0.01	-0.01	0.78
7	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00	0.00	

LAP BOLT SHEAR/BEARING:

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap_Shear(k)		Shear_Ratio	
	Left	Right	Left	Right
2		0.33		0.17
3	0.33	0.26	0.17	0.13
4	0.26	0.26	0.13	0.13
5	0.26	0.33	0.13	0.17
6	0.33		0.17	

LOAD COMBINATION # 3 : DL+CL+0.75SL+0.75WS

PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Loc	Right Lap	Right Sup
1	0.00			0.24	0.00		0.00	0.00		-0.22
2	-0.13		0.00	0.00	-0.22		0.00	11.59	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.92	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.08	0.00	0.00
6	0.00	0.00		0.13	0.00	0.00	0.00	0.07		-0.22
7	-0.24			0.00	-0.22		0.00	1.83		0.00

STRENGTH/DEFLECTION:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----				Mom+Shr		Deflection(in)	
	Loc	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	0.24	3.39	0.07	RS	-0.22	3.48	0.06	RS	0.01	-0.02	
2	LS	-0.13	3.39	0.04	LS	-0.22	3.48	0.06	LS	0.01	0.06	1.17
3	RL	0.00	3.39	0.00	MS	0.00	3.48	0.00	LS	0.00	0.02	1.20
4	LL	0.00	3.39	0.00	LL	0.00	3.48	0.00	LS	0.00	0.03	1.20
5	LL	0.00	3.39	0.00	MS	0.00	3.48	0.00	LS	0.00	0.02	1.20
6	RS	0.13	3.39	0.04	RS	-0.22	3.48	0.06	RS	0.01	0.06	1.17
7	LS	-0.24	3.39	0.07	LS	-0.22	3.48	0.06	LS	0.01	-0.02	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap_Shear(k)		Shear_Ratio	
	Left	Right	Left	Right
2		0.00		0.00
3	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00
6	0.00		0.00	

LOAD COMBINATION # 4 : DL+CL+0.75WP+0.75WS

Id	Loc	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	-0.05	3.39	0.01	RS	0.02	3.48	0.01	LS	0.00	0.11	
2	RL	-0.63	3.39	0.19	MS	-1.42	3.48	0.41	RL	0.05	-0.21	0.78
3	LL	0.19	3.39	0.06	LL	0.84	2.56	0.33	LL	0.06	0.13	0.80
4	LL	0.56	3.39	0.17	MS	-1.17	3.48	0.34	LL	0.03	-0.19	0.80
5	RL	-0.19	3.39	0.06	RL	0.84	2.56	0.33	RL	0.06	0.13	0.80
6	LL	0.63	3.39	0.19	MS	-1.42	3.48	0.41	LL	0.05	-0.21	0.78
7	LS	0.05	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00	0.11	

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LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Lap_Shear(k)		Shear_Ratio	
Id	Left	Right	Left	Right
2		0.26		0.13
3	0.26	0.21	0.13	0.11
4	0.21	0.21	0.11	0.11
5	0.21	0.26	0.11	0.13
6	0.26		0.13	

Augustal Purlin Design Report (Surface 2) 10/28/07 6:20pm

ROOF PURLIN

DESIGN RUN # 1, SURFACE # 2

PURLIN LAYOUT: (Purlin Id= 2)

Bay	Span	Purlin	Span	---Lap(ft)---		Load	No.
Id	Id	Size	(ft)	Left	Right	Width	Brace
	1	6X25Z16	1.83			3.85	0
1	2	6X25Z16	11.67		1.00	3.85	0
2	3	6X25Z16	12.00	1.00	1.00	3.85	0
3	4	6X25Z16	12.00	1.00	1.00	3.85	0
4	5	6X25Z16	12.00	1.00	1.00	3.85	0
5	6	6X25Z16	11.67	1.00		3.85	0
	7	6X25Z16	1.83			3.85	0

LOAD COMBINATION # 1 : DL+CL+1.5SL

PURLIN ANALYSIS:

Span	-----Shear(k)-----				-----Moment (f-k)-----					
	Left	Left	Right	Right	Left	Left	MidSpan	Right	Right	
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
1	0.00			-0.20	0.00		0.00	0.00		0.18
2	0.63		-0.80	-0.93	0.18		-1.32	4.73	1.05	1.91
3	0.83	0.70	-0.64	-0.77	1.91	1.14	-0.69	6.22	0.84	1.55
4	0.80	0.67	-0.67	-0.80	1.55	0.81	-0.86	6.00	0.81	1.55

Span Id	Lap_Shear(k)		Shear_Ratio	
	Left	Right	Left	Right
2		0.14		0.07
3	0.14	0.07	0.07	0.04
4	0.07	0.20	0.04	0.10
5	0.20	0.44	0.10	0.22
6	0.44		0.22	

LOAD COMBINATION #11 : DL+CL+2.0AUX6

PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
1	0.00			-0.02	0.00		0.00	0.00		0.02
2	0.17		-0.21	-0.25	0.02		-0.37	4.66	0.27	0.50
3	0.22	0.18	-0.17	-0.21	0.50	0.30	-0.16	6.11	0.26	0.46
4	0.23	0.20	-0.16	-0.19	0.46	0.24	-0.30	6.52	0.06	0.23
5	0.13	0.10	-0.26	-0.29	0.23	0.12	-0.02	3.79	0.90	1.17
6	0.75	0.63		-0.57	1.17	0.49	-1.29	6.61		0.15
7	0.16			0.00	0.15		0.00	1.83		0.00

STRENGTH/DEFLECTION:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----				Mom+Shr		Deflection(in)	
	Loc	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01	LS	0.00	0.00	
2	RL	-0.21	3.39	0.06	MS	-0.37	3.48	0.11	RL	0.01	-0.01	0.78
3	LL	0.18	3.39	0.05	LL	0.30	3.48	0.09	LL	0.01	0.01	0.80
4	LL	0.20	3.39	0.06	MS	-0.30	3.48	0.09	LL	0.01	-0.02	0.80
5	RL	-0.26	3.39	0.08	RL	0.90	3.40	0.26	RL	0.07	0.06	0.80
6	LL	0.63	3.39	0.19	MS	-1.29	3.48	0.37	LL	0.05	-0.18	0.78
7	LS	0.16	3.39	0.05	LS	0.15	3.48	0.04	LS	0.00	0.09	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap_Shear(k)		Shear_Ratio	
	Left	Right	Left	Right
2		0.13		0.06
3	0.13	0.11	0.06	0.06
4	0.11	0.06	0.06	0.03
5	0.06	0.29	0.03	0.15
6	0.29		0.15	

LOAD COMBINATION #12 : DL+CL+2.0AUX7

PURLIN ANALYSIS:

PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Loc	Right Lap	Right Sup
1	0.00			-0.02	0.00		0.00	0.00		0.02
2	0.13		-0.25	-0.28	0.02		-0.22	3.66	0.65	0.92
3	0.62	0.51	-0.62	-0.73	0.92	0.36	-0.79	5.50	0.91	1.59
4	0.74	0.63	-0.50	-0.61	1.59	0.91	-0.83	6.56	0.28	0.84
5	0.25	0.21	-0.14	-0.18	0.84	0.60	-0.04	7.00	0.25	0.41
6	0.24	0.21		-0.17	0.41	0.18	-0.41	6.77		0.02
7	0.02			0.00	0.02		0.00	1.83		0.00

STRENGTH/DEFLECTION:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----				Mom+Shr		Deflection(in)	
	Loc	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01	LS	0.00	-0.02	
2	RL	-0.25	3.39	0.07	RL	0.65	3.48	0.19	RL	0.04	0.05	0.78
3	RL	-0.62	3.39	0.18	RL	0.91	3.48	0.26	RL	0.10	-0.09	0.80
4	LL	0.63	3.39	0.18	LL	0.91	3.48	0.26	LL	0.10	-0.09	0.80
5	LL	0.21	3.39	0.06	LL	0.60	3.48	0.17	LL	0.03	0.04	0.80
6	LL	0.21	3.39	0.06	MS	-0.41	3.48	0.12	LL	0.01	-0.02	0.78
7	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00	0.01	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap_Shear(k)		Shear_Ratio	
	Left	Right	Left	Right
2		0.23		0.12
3	0.23	0.40	0.12	0.20
4	0.40	0.21	0.20	0.11
5	0.21	0.10	0.11	0.05
6	0.10		0.05	

LOAD COMBINATION # 9 : DL+CL+2.0AUX4

PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Loc	Right Lap	Right Sup
1	0.00			-0.02	0.00		0.00	0.00		0.02
2	0.17		-0.21	-0.24	0.02		-0.41	4.90	0.18	0.41
3	0.18	0.14	-0.21	-0.25	0.41	0.25	-0.04	5.00	0.60	0.84
4	0.61	0.50	-0.63	-0.74	0.84	0.28	-0.83	5.44	0.91	1.59
5	0.73	0.62	-0.51	-0.62	1.59	0.91	-0.79	6.50	0.36	0.92
6	0.28	0.25		-0.13	0.92	0.65	-0.22	8.00		0.02
7	0.02			0.00	0.02		0.00	1.83		0.00

STRENGTH/DEFLECTION:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----				Mom+Shr		Deflection(in)	
	Loc	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	-0.01	3.39	0.00	RS	0.01	3.48	0.00	LS	0.00	0.00	
2	RL	-0.04	3.39	0.01	MS	-0.06	3.48	0.02	LS	0.00	0.00	0.78
3	LL	0.03	3.39	0.01	LL	0.05	3.47	0.02	LS	0.00	0.00	0.80
4	RL	-0.03	3.39	0.01	MS	-0.04	3.48	0.01	LS	0.00	0.00	0.80
5	RL	-0.03	3.39	0.01	RL	0.05	3.47	0.02	LS	0.00	0.00	0.80
6	LL	0.04	3.39	0.01	MS	-0.06	3.48	0.02	LS	0.00	0.00	0.78
7	LS	0.01	3.39	0.00	LS	0.01	3.48	0.00	LS	0.00	0.00	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap_Shear(k)		Shear_Ratio	
	Left	Right	Left	Right
2		0.02		0.01
3	0.02	0.02	0.01	0.01
4	0.02	0.02	0.01	0.01
5	0.02	0.02	0.01	0.01
6	0.02		0.01	

LOAD COMBINATION # 6 : DL+CL+2.0AUX1

PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Loc	Right Lap	Right Sup
1	0.00			-0.16	0.00		0.00	0.00		0.15
2	0.57		-0.63	-0.75	0.15		-1.29	5.05	0.49	1.17
3	0.29	0.26	-0.10	-0.13	1.17	0.90	-0.02	8.21	0.12	0.23
4	0.19	0.16	-0.20	-0.23	0.23	0.06	-0.30	5.48	0.24	0.46
5	0.21	0.17	-0.18	-0.22	0.46	0.26	-0.16	5.89	0.30	0.50
6	0.25	0.21		-0.17	0.50	0.27	-0.37	7.00		0.02
7	0.02			0.00	0.02		0.00	1.83		0.00

STRENGTH/DEFLECTION:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----				Mom+Shr		Deflection(in)	
	Loc	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	-0.16	3.39	0.05	RS	0.15	3.48	0.04	RS	0.00	0.09	
2	RL	-0.63	3.39	0.19	MS	-1.29	3.48	0.37	RL	0.05	-0.18	0.78
3	LL	0.26	3.39	0.08	LL	0.90	3.40	0.26	LL	0.07	0.06	0.80
4	RL	-0.20	3.39	0.06	MS	-0.30	3.48	0.09	RL	0.01	-0.02	0.80
5	RL	-0.18	3.39	0.05	RL	0.30	3.48	0.09	RL	0.01	0.01	0.80
6	LL	0.21	3.39	0.06	MS	-0.37	3.48	0.11	LL	0.01	-0.01	0.78
7	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00	0.00	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap_Shear(k)		Shear_Ratio	
	Left	Right	Left	Right
2		0.33		0.17
3	0.33	0.26	0.17	0.13
4	0.26	0.26	0.13	0.13
5	0.26	0.33	0.13	0.17
6	0.33		0.17	

LOAD COMBINATION # 3 : DL+CL+0.75SL+0.75WS

PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Loc	Right Lap	Right Sup
1	0.00			0.24	0.00		0.00	0.00		-0.22
2	-0.26		0.12	0.14	-0.22		0.13	7.61	-0.15	-0.28
3	-0.11	-0.09	0.08	0.10	-0.28	-0.18	0.07	6.44	-0.10	-0.19
4	-0.10	-0.09	0.09	0.10	-0.19	-0.10	0.12	6.00	-0.10	-0.19
5	-0.10	-0.08	0.09	0.11	-0.19	-0.10	0.07	5.56	-0.18	-0.28
6	-0.14	-0.12		0.26	-0.28	-0.15	0.13	4.05		-0.22
7	-0.24			0.00	-0.22		0.00	1.83		0.00

STRENGTH/DEFLECTION:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----				Mom+Shr		Deflection(in)	
	Loc	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	0.24	3.39	0.07	RS	-0.22	3.48	0.06	RS	0.01	-0.05	
2	LS	-0.26	3.39	0.08	LS	-0.22	3.48	0.06	LS	0.01	0.09	1.17
3	LL	-0.09	3.39	0.03	LL	-0.18	3.48	0.05	LL	0.00	0.03	1.20
4	RL	0.09	3.39	0.03	MS	0.12	2.61	0.05	RL	0.00	0.05	1.20
5	RL	0.09	3.39	0.03	RL	-0.18	3.48	0.05	RL	0.00	0.03	1.20
6	RS	0.26	3.39	0.08	RS	-0.22	3.48	0.06	RS	0.01	0.09	1.17
7	LS	-0.24	3.39	0.07	LS	-0.22	3.48	0.06	LS	0.01	-0.05	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap_Shear(k)		Shear_Ratio	
	Left	Right	Left	Right
2		0.07		0.04
3	0.07	0.05	0.04	0.02
4	0.05	0.05	0.02	0.02
5	0.05	0.07	0.02	0.04
6	0.07		0.04	

PURLIN LAYOUT:

Bay Id	Span Id	Purlin Size	Span (ft)	---Lap(ft)---		No. Brace	Unit Weight	Total Weight
				Left	Right			
	1	6X25Z16	1.83			0	4.5	22.7
1	2	6X25Z16	11.67		1.00	0	31.4	157.1
2	3	6X25Z16	12.00	1.00	1.00	0	34.7	173.6
3	4	6X25Z16	12.00	1.00	1.00	0	34.7	173.6
4	5	6X25Z16	12.00	1.00	1.00	0	34.7	173.6
5	6	6X25Z16	11.67	1.00		0	31.4	157.1
	7	6X25Z16	1.83			0	4.5	22.7
Total (lb)=							176.1	880.4

SPECIAL LOADS:

Load_Location		Load_Type
Start	End	
0.000	3.700	Edge Zone Wind
16.342	20.042	Edge Zone Wind

Augustal Purlin Design Report (Surface 2) 10/28/07 6:20pm

ROOF PURLIN

DESIGN RUN # 1, SURFACE # 2
(Edge Strip Zone= 3.70)

PURLIN LAYOUT: (Purlin Id= 1)

Bay Id	Span Id	Purlin Size	Span (ft)	---Lap(ft)---		Load Width	No. Brace
				Left	Right		
	1	6X25Z16	1.83			3.85	0
1	2	6X25Z16	11.67		1.00	3.85	0
2	3	6X25Z16	12.00	1.00	1.00	3.85	0
3	4	6X25Z16	12.00	1.00	1.00	3.85	0
4	5	6X25Z16	12.00	1.00	1.00	3.85	0
5	6	6X25Z16	11.67	1.00		3.85	0
	7	6X25Z16	1.83			3.85	0

LOAD COMBINATION # 1 : DL+CL+1.5SL

PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Right Loc	Right Lap	Right Sup
1	0.00			-0.20	0.00		0.00	0.00		0.18
2	0.63		-0.80	-0.93	0.18		-1.32	4.73	1.05	1.91
3	0.83	0.70	-0.64	-0.77	1.91	1.14	-0.69	6.22	0.84	1.55

*	No.	Load					Wind	Wind	Aux_Load
*	Load	Id	Dead	Collat	Live	Snow	Press	Suct	Id Coef
	0								

* No.	Load					Wind	Wind
* Load	Id	Dead	Collat	Live	Snow	Press	Suct
3	1	1.00	1.00	0.00	1.00	0.00	0.00
	2	1.00	1.00	0.00	0.00	1.00	0.00
	3	1.00	0.00	0.00	0.00	0.00	1.00

*	No.	Load					Wind	Wind
*	Load	Id	Dead	Collat	Live	Snow	Press	Suct
	3	4	0.00	0.00	0.00	1.00	0.00	0.00
		5	0.00	0.00	0.00	0.00	1.00	0.00
		6	0.00	0.00	0.00	0.00	0.00	1.00

* No.	Aux	Aux	No._Add	Add_Load
* Aux	Id	Name	Combs	Id Coef
8	1	'-----'	2	1 0.50
				2 0.50
	2	'-----'	2	2 0.50
				3 0.50
	3	'-----'	2	3 0.50
				4 0.50
	4	'-----'	2	4 0.50
				5 0.50
	5	'-----'	2	5 0.50
				6 0.50
	6	'-----'	2	6 0.50
				7 0.50
	7	'-----'	4	1 0.50
				3 0.50
				5 0.50
				7 0.50
	8	'-----'	3	2 0.50
				4 0.50
				6 0.50

* No.	Add Id	Surf Id	Basic Load	Load Type	Fy W1	Fy W2	Dx Dx1	Dx Dx2	.. Conc	.. Dist
7	1	0	'-----'	'D '	-20.0	-20.0	0.00	1.50		
	2	0	'-----'	'D '	-20.0	-20.0	1.50	13.50		
	3	0	'-----'	'D '	-20.0	-20.0	13.50	25.50		
	4	0	'-----'	'D '	-20.0	-20.0	25.50	37.50		
	5	0	'-----'	'D '	-20.0	-20.0	37.50	49.50		
	6	0	'-----'	'D '	-20.0	-20.0	49.50	61.50		
	7	0	'-----'	'D '	-20.0	-20.0	61.50	63.00		

```

(55) FOREIGN DATA:
*Surf      Data      -----Set_1-----      -----Set_2-----      -----Set_3-----
* Id  Opt  Sets  Left      Right  Quan  Left      Right  Quan  Left      Right  Quan
  2  '-'    0
  3  '-'    0

```

```

*Ext      Data      -----Set_1-----      -----Set_2-----      -----Set_3-----
* Id  Opt  Sets  Left   Right  Quan  Left   Right  Quan  Left   Right  Quan
   1  '-'   0

```


* (33) FACIA/PARAPET LAYOUT:

*Wall	No.	Ext	--Bay_Id--		Edge_Extend		Eave	Use		
*Id	Extend	Id	Type	Start	End	Left	Right	Mount	Type	Gutter
1	0									
2	0									
3	0									
4	0									

* (34) FACIA/PARAPET SIZE:

*Ext	-----Extension_Size-----			-----Facia-----			Arm	Back	Facia
*Id	Height	Width	Slope	Elev	Height	Slope	Slope	Slope	Project

* (35) FACIA/PARAPET PURLINS:

*Ext	Purlin	OS_Flg	IS_Flg	Set	Set_Lap	Max_UnBr	Peak	Max	Set	
*Id	Type	Brace	Brace	Depth	Ext	Int	Length	Space	Space	Space

* (36) FACIA/PARAPET PANELS:

*Ext	---Roof_Panel--		----Soffit_Panel---		-Front_Panel--		----Back_Panel-----			
*Id	Size	SSeam	Size	Rot	Space	Size	SSeam	Size	Rot	Space

* (37) EXTENSION BRACING:

*Ext	Max_Pan	Brace	User_Selected_Bays
*Id	Shear	Type	No. Bay_Id
1	0.0	'--'	0
2	0.0	'--'	0

* (38) WALL BASE ELEVATION/DEAD:

*Wall	Base	Wall	Seis	%
* Id	Elev	Dead	Opt	Open
1	0.00	2.00	'Y'	0.00
2	0.00	2.00	'Y'	0.00
3	0.00	2.00	'Y'	0.00
4	0.00	2.00	'Y'	0.00
5	0.00	12.00	'Y'	0.00

* (39) BASIC LOADS:

					---Deflection---			Wind				Wall	Seis	
*	Dead	Collat	Live	Snow	Basic	Load_Ratio			Load	--Friction--		Edge	Ld_Rat	%
*	Load	Load	Load	Load	Wind	Snow	Wind	Seis	Factor	Wind	Coef	Zone	Factor	Snow
	3.0	7.0	20.0	20.0	29.9	1.00	1.00	1.00	1.00	29.9	0.0000	7.400	1.0000	0.00

* (40) WIND PRESSURE/SUCTION:

*Wind	Wind	Wind
* Press	Suct	Suct_Roof
14.3	-29.3	.. Purlins
0.0	-65.7	.. Purlins, Gable Extension
20.3	-32.2	.. Interior Roof Panels
11.9	-8.7	-20.6 .. Long Bracing, Building
18.2	-12.8	.. Long Bracing, Wall Edge Zone
53.7	-32.8	23.9 .. Long Bracing, Facia/Parapet

* (41) EDGE AND CORNER ZONES FOR PURLINS AND PANELS:

* (41) EDGE AND CORNER LINES FOR FORMING REINFORCEMENT												
		-----Left_End-----				-----Center-----			-----Right_End-----			
*Surface		-----Ratio----				-----Ratio----			-----Ratio----			
*Id	Loc	Width	Length	Purlin	Panel	Width	Purlin	Panel	Width	Length	Purlin	Panel
2	'L'	3.70	3.70	2.22	2.57	3.70	1.41	1.73	3.70	3.70	2.22	2.57
	'C'	0.00	3.70	1.41	1.73	0.00	1.00	1.00	0.00	3.70	1.41	1.73
	'R'	3.70	3.70	2.22	2.57	3.70	1.41	1.73	3.70	3.70	2.22	2.57
3	'L'	3.70	3.70	2.22	2.57	3.70	1.41	1.73	3.70	3.70	2.22	2.57
	'C'	0.00	3.70	1.41	1.73	0.00	1.00	1.00	0.00	3.70	1.41	1.73
	'R'	3.70	3.70	2.22	2.57	3.70	1.41	1.73	3.70	3.70	2.22	2.57

* (42) EXTENSION BASIC LOADS:

* Id	Attach	Attach_Location					
1	5	0.0000	12.5000	18.5000	24.5000	37.0000	
3	5	0.0000	12.5000	18.5000	24.5000	37.0000	

* (22) SIDEWALL DIAGONAL BRACING:

* Wall	Max_Pan	Brace	User_Selected_SW_Bays
* Id	Shear	Type	No. Bay_Id
2	100.0	'C'	0
4	100.0	'C'	0

* (23) WIND BENTS:

* Wall	Member	-----Column-----	-----Rafter-----	No.
* Id	Type	Depth	Size	Bays Bay_Id
2	'W'	0.00	'-----'	0
4	'W'	0.00	'-----'	0

* (24) WIND COLUMNS:

* Wall	Member	-----Column-----	No.	Left/
* Id	Type	Depth	Size	Col Bay_Id Right
2	'W'	0.00	'-----'	0
4	'W'	0.00	'-----'	0

* (25) WALL BRACING ATTACHMENT

* Wall	No.	Attach	--Bay_Id--	No.	----Level----
* Id	Attach	Id	Start End Connect Option	Level	Height Strut
2	1	1	1 5 'F' 0	1	11.7500 'E'
4	1	2	1 5 'F' 0	1	11.7500 'E'

* (26) INTERIOR BRACING

* No	Attach	Brace	User_Selected_Int_Bays
* Brace	Offset	Type	No. Bay_Id
0			

* (27) INTERIOR BRACING ATTACHMENT

* No.	Attach	--Bay_Id--	No.
* Attach	Offset	Start End	Level Level_Height
0			

* (28) EAVE EXTENSIONS SIZE:

* Wall	No.	Ext	--Bay_Id--	---Extension_Size---	Edge_Extend	Eave
* Id	Extend	Id	Start End	Height Width Slope	Left Right	Type
2	2	1	1 5	0.000 1.500 5.00	1.50 1.50	'ZO'
		2	1 5	0.000 1.500 5.00	1.50 1.50	'ZO'
4	0					

* (29) EAVE EXTENSIONS PURLINS:

* Ext	Purlin	OS_Flg	IS_Flg	Set	Set_Lap	Max_UnBr	Peak	Max	Set
* Id	Type	Brace	Brace	Depth	Ext Int	Length	Space	Space	Space
1	'ZB'	'C'	'Y'	0.000	0.0000 0.0000	5.0000	0.000	5.016	0.000
2	'ZB'	'C'	'Y'	0.000	0.0000 0.0000	5.0000	0.000	5.016	0.000

* (30) CANOPY SIZE:

* Wall	No.	Ext	--Bay_Id--	---Extension_Size---	Edge_Extend	Eave
* Id	Extend	Id	Start End	Height Width Slope	Left Right	Type
1	0					
2	0					
3	0					
4	0					

* (31) CANOPY PURLINS:

* Ext	Purlin	OS_Flg	IS_Flg	Set	Set_Lap	Max_UnBr	Peak	Max	Set
* Id	Type	Brace	Brace	Depth	Ext Int	Length	Space	Space	Space

* (32) CANOPY PANELS, GUTTER & DOWNSPOUT:

* Ext	Panel	Standing	Gutter	Downspout
-------	-------	----------	--------	-----------

Col-3	5	0.65	1.07
Col-3	6	0.65	1.07
Col-3	7	0.00	1.07
Col-3	8	0.00	1.07
Col-3	9	0.00	1.07
Col-3	10	0.00	1.07
Col-3	11	0.00	1.07
Col-3	12	0.00	1.07
Col-4	1	0.00	0.74
Col-4	2	0.00	0.74
Col-4	3	0.00	0.74
Col-4	4	0.00	0.74
Col-4	5	0.00	0.74
Col-4	6	0.00	0.74
Col-4	7	0.00	0.74
Col-4	8	0.00	0.74
Col-4	9	0.00	0.74
Col-4	10	0.00	0.74
Col-4	11	0.00	0.74
Col-4	12	0.00	0.74

RAFTER MEMBER DEFLECTIONS:

Mem Id	Load Id	Deflection(in)	
		Calc	Allow
Raf-1	1	-0.07	0.80
Raf-1	2	0.14	0.83
Raf-1	3	0.12	0.83
Raf-1	4	0.08	0.83
Raf-1	5	0.06	0.83
Raf-1	6	-0.03	0.83
Raf-1	7	-0.15	0.83
Raf-1	8	-0.10	0.83
Raf-1	9	-0.06	0.80
Raf-1	10	-0.14	0.83
Raf-1	11	-0.09	0.80
Raf-1	12	-0.06	0.83
Raf-1	13	-0.05	0.83
Raf-2	1	-0.07	0.80
Raf-2	2	0.11	0.83
Raf-2	3	0.11	0.83
Raf-2	4	-0.05	0.80
Raf-2	5	0.05	0.83
Raf-2	6	-0.14	0.83
Raf-2	7	-0.03	0.83
Raf-2	8	-0.06	0.80
Raf-2	9	-0.09	0.83
Raf-2	10	-0.14	0.83
Raf-2	11	-0.09	0.80
Raf-2	12	-0.04	0.83
Raf-2	13	-0.05	0.83

Augustal

Rafter Splice Report

10/28/07 6:35pm

Splice Id	Type	-Surface-		---Plate---		-----Design_Load-----				----Bolts (A325)----			
		Id	Locate	Width	Thick	Id	Ax1	Shr	Mom	Row	Diam	Space	Gage
1	M	3	0.0	6.0	0.375	10	0.0	0.0	0.6	2	0.625	4.00	0.00
						11	0.0	0.1	-2.3	2	0.625	4.00	0.00

Col-3	12	0.04	0.00	0.00	0.04	0.04
Col-4	1	0.10	0.00	0.00	0.10	0.10
Col-4	2	0.05	0.00	0.00	0.05	0.05
Col-4	3	0.05	0.00	0.00	0.05	0.05
Col-4	4	0.01	0.00	0.00	0.01	0.01
Col-4	5	0.02	0.00	0.00	0.02	0.02
Col-4	6	0.02	0.00	0.00	0.02	0.02
Col-4	7	0.08	0.00	0.00	0.08	0.08
Col-4	8	0.08	0.00	0.00	0.08	0.08
Col-4	9	0.01	0.00	0.00	0.01	0.01
Col-4	10	0.01	0.00	0.00	0.01	0.01
Col-4	11	0.03	0.00	0.00	0.03	0.03
Col-4	12	0.01	0.00	0.00	0.01	0.01

Raf-1	1	0.02	0.12	0.33	0.32	0.12	0.33
Raf-1	2	0.03	0.11	0.29	0.29	0.05	0.29
Raf-1	3	0.02	0.10	0.25	0.25	0.04	0.25
Raf-1	4	0.02	0.06	0.16	0.16	0.02	0.16
Raf-1	5	0.01	0.05	0.13	0.13	0.01	0.13
Raf-1	6	0.01	0.05	0.14	0.14	0.02	0.14
Raf-1	7	0.02	0.17	0.43	0.43	0.21	0.43
Raf-1	8	0.02	0.13	0.38	0.37	0.15	0.38
Raf-1	9	0.02	0.10	0.21	0.21	0.05	0.21
Raf-1	10	0.02	0.12	0.30	0.30	0.07	0.30
Raf-1	11	0.02	0.11	0.24	0.24	0.07	0.24
Raf-1	12	0.02	0.05	0.12	0.12	0.01	0.12
Raf-1	13	0.03	0.04	0.10	0.10	0.01	0.10
Raf-2	1	0.02	0.12	0.40	0.39	0.16	0.40
Raf-2	2	0.03	0.09	0.22	0.22	0.04	0.22
Raf-2	3	0.02	0.10	0.24	0.24	0.04	0.24
Raf-2	4	0.02	0.05	0.13	0.13	0.02	0.13
Raf-2	5	0.01	0.06	0.12	0.12	0.01	0.12
Raf-2	6	0.02	0.17	0.43	0.42	0.20	0.43
Raf-2	7	0.01	0.05	0.14	0.14	0.02	0.14
Raf-2	8	0.02	0.10	0.20	0.20	0.05	0.20
Raf-2	9	0.02	0.13	0.37	0.37	0.15	0.37
Raf-2	10	0.02	0.12	0.29	0.29	0.06	0.29
Raf-2	11	0.02	0.11	0.23	0.23	0.06	0.23
Raf-2	12	0.03	0.04	0.09	0.09	0.01	0.09
Raf-2	13	0.02	0.05	0.12	0.11	0.01	0.12

COLUMN REACTIONS:

Mem	Load	-----Reaction(k)-----		
Id	Id	Horz (OP)	Vert	Horz (IP)
Col-1	1	0.00	11.79	0.00
Col-1	2	0.00	7.97	0.00
Col-1	3	0.00	8.08	0.00
Col-1	4	0.00	-1.26	0.00
Col-1	5	0.00	-1.17	0.00
Col-1	6	0.00	-1.04	0.00
Col-1	7	0.00	9.19	0.00
Col-1	8	0.00	9.05	0.00
Col-1	9	0.00	0.57	0.00
Col-1	10	0.00	0.43	0.00
Col-1	11	0.00	0.62	0.00
Col-1	12	0.00	1.86	0.00
Col-2	1	0.00	8.21	0.00
Col-2	2	2.22	3.38	1.07
Col-2	3	2.22	6.07	0.00
Col-2	4	-2.71	-2.24	0.00
Col-2	5	2.96	-2.08	0.00
Col-2	6	2.96	-1.89	0.00

DESIGN ACTIONS/STRENGTH:

Mem Id	Load Id	---Axial(k)---		---Shear(k)---		-Moment(f-k)-	
		Calc	Allow	Calc	Allow	Calc	Allow
Raf-1	1	0.60	30.43	1.43	12.45	3.47	10.55
Raf-1	2	-1.64	60.61	1.38	12.45	2.99	10.47
Raf-1	3	-1.35	60.61	1.25	12.45	2.64	10.47
Raf-1	4	-1.04	60.61	0.77	12.45	1.71	10.47
Raf-1	5	-0.76	60.61	0.64	12.45	1.36	10.47
Raf-1	6	0.27	30.30	0.64	12.45	1.51	10.59
Raf-1	7	0.74	29.87	-2.13	12.45	4.56	10.51
Raf-1	8	0.65	30.10	-1.66	12.45	3.96	10.56
Raf-1	9	0.52	30.59	1.25	12.45	2.16	10.47
Raf-1	10	0.48	30.92	-1.53	12.45	-3.17	10.47
Raf-1	11	0.58	30.57	1.39	12.45	2.52	10.47
Raf-1	12	0.56	29.73	-0.65	12.45	-1.30	10.47
Raf-1	13	0.91	29.73	-0.49	12.45	-1.02	10.47
Raf-2	1	0.61	29.80	-1.46	12.45	4.16	10.47
Raf-2	2	-1.62	60.61	-1.13	12.45	2.34	10.47
Raf-2	3	-1.33	60.61	-1.29	12.45	2.48	10.47
Raf-2	4	-1.02	60.61	0.62	12.45	-1.36	10.64
Raf-2	5	-0.74	60.61	0.70	12.45	1.22	10.47
Raf-2	6	0.73	29.90	2.10	12.45	4.49	10.51
Raf-2	7	0.26	30.34	-0.63	12.45	1.44	10.59
Raf-2	8	0.52	30.60	-1.24	12.45	2.09	10.47
Raf-2	9	0.65	30.12	1.63	12.45	3.89	10.57
Raf-2	10	0.49	30.76	1.51	12.45	-3.08	10.47
Raf-2	11	0.58	30.58	-1.38	12.45	2.45	10.47
Raf-2	12	0.91	29.73	0.46	12.45	-0.93	10.47
Raf-2	13	0.55	29.73	0.63	12.45	-1.22	10.47

DESIGN ACTIONS/STRESSES:

Mem Id	Load Id	---Axial(k ,ksi)---			---Shear(k ,ksi)---			-Moment(f-k ,ksi)-		
		Design Load	Calc Stress	Allow Stress	Design Load	Calc Stress	Allow Stress	Design Load	Calc Stress	Allow Stress
Col-1	1	11.79	2.66	16.65	0.00	0.00	20.00	0.00	0.00	23.40
Col-1	2	7.97	1.80	16.65	0.00	0.00	20.00	0.00	0.00	23.40
Col-1	3	8.08	1.82	16.65	0.00	0.00	20.00	0.00	0.00	23.40
Col-1	4	-1.36	-0.31	30.00	0.00	0.00	20.00	0.00	0.00	23.40
Col-1	5	-1.27	-0.29	30.00	0.00	0.00	20.00	0.00	0.00	23.40
Col-1	6	-1.14	-0.26	30.00	0.00	0.00	20.00	0.00	0.00	23.40
Col-1	7	9.19	2.08	16.65	0.00	0.00	20.00	0.00	0.00	23.40
Col-1	8	9.05	2.04	16.65	0.00	0.00	20.00	0.00	0.00	23.40
Col-1	9	0.57	0.13	16.65	0.00	0.00	20.00	0.00	0.00	23.40
Col-1	10	0.43	0.10	16.65	0.00	0.00	20.00	0.00	0.00	23.40
Col-1	11	0.62	0.14	16.65	0.00	0.00	20.00	0.00	0.00	23.40
Col-1	12	1.86	0.42	16.65	0.00	0.00	20.00	0.00	0.00	23.40
Col-2	1	8.21	1.85	8.60	0.00	0.00	20.00	0.00	0.00	16.22
Col-2	2	4.66	1.05	8.60	-2.22	1.76	20.00	8.89	-10.98	16.22
Col-2	3	6.07	1.37	8.60	-2.22	1.76	20.00	8.89	-10.98	16.22
Col-2	4	-2.39	-0.54	30.00	2.71	2.15	20.00	-10.87	-13.41	16.22
Col-2	5	-2.22	-0.50	30.00	-2.96	2.35	20.00	11.86	-14.64	16.22
Col-2	6	-2.03	-0.46	30.00	-2.96	2.35	20.00	11.86	-14.64	16.22
Col-2	7	6.59	1.49	8.60	0.00	0.00	20.00	0.00	0.00	16.22
Col-2	8	8.17	1.84	8.60	0.00	0.00	20.00	0.00	0.00	16.22
Col-2	9	0.95	0.21	8.60	0.00	0.00	20.00	0.00	0.00	16.22
Col-2	10	2.46	0.55	8.60	0.00	0.00	20.00	0.00	0.00	16.22
Col-2	11	1.60	0.36	8.60	0.00	0.00	20.00	0.00	0.00	16.22
Col-2	12	4.45	1.00	8.60	0.00	0.00	20.00	0.00	0.00	16.22
Col-3	1	3.09	0.70	8.60	0.00	0.00	20.00	0.00	0.00	16.22

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*Load						Rafter_Wind_1		Rafter_Wind_2		Long	Aux_Load		
*No	Id	Dead	Collat	Live	Snow	Left	Right	Left	Right	Wind	Seis	Id	Coef
13	1	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	2	0.60	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	3	0.60	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0	0.00
	4	0.60	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0	0.00
	5	0.60	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0	0.00
	6	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1	1.00
	7	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2	1.00
	8	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3	1.00
	9	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4	1.00
	10	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5	1.00
	11	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6	1.00
	12	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0	0.00
	13	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	0	0.00

*(45) RAFTER DESIGN LOADS: Deflection

*Load						Rafter_Wind_1		Rafter_Wind_2		Long	Aux_Load		
*No	Id	Dead	Collat	Live	Snow	Left	Right	Left	Right	Wind	Seis	Id	Coef
0													

*(46) BRACING DESIGN LOADS:

*Load						Rafter_Wind		Brace_Wind		Long	Column_Wind		Aux_Load		
*No	Id	Dead	Coll	Live	Snow	Left	Right	Left	Right	Wind	Press	Suct	Seis	Id	Coef
12	1	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	2	1.00	1.00	0.75	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.75	0.00	0	0.00
	3	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.75	0.00	0	0.00
	4	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0	0.00
	5	0.60	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0	0.00
	6	0.60	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0	0.00
	7	1.13	1.13	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	0	0.00
	8	1.13	1.13	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.05	0	0.00
	9	0.73	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0	0.00
	10	0.73	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	0	0.00
	11	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1	1.00
	12	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2	1.00

*(47) AUXILIARY LOADS:

* No.	Aux	Aux	No._Add	Add_Load	
* Aux	Id	Name	Combs	Id	Coef
6	1	'E1UNB_SL 1'	2	1	0.00
				2	1.50
	2	'E1UNB_SL 2'	2	1	1.50
				2	0.00
	3	'E1PAT_LL 3'	3	3	1.00
				4	1.00
				5	1.00
	4	'E1PAT_LL 4'	3	4	1.00
				5	1.00
				6	1.00
	5	'E1PAT_LL 5'	2	3	1.00
				6	1.00
	6	'E1PAT_LL 6'	2	4	1.00
				5	1.00

*(48) ADDITIONAL LOADS:

* No.	Add	Surf	Basic	Load	FX	FY	Mom	X	Y	..Conc
* Add	Id	Id	Load	Type	W1	W2	Co	DL1	DL2	..Unif
14	1	2	'-----'	'D '	-0.133	-0.133	0.42	0.00	20.04	
	2	3	'-----'	'D '	-0.133	-0.133	-0.42	0.00	20.04	
	3	2	'-----'	'D '	-0.133	-0.133	0.42	0.00	13.54	
	4	2	'-----'	'D '	-0.133	-0.133	0.42	13.54	20.04	
	5	3	'-----'	'D '	-0.133	-0.133	-0.42	0.00	6.50	
	6	3	'-----'	'D '	-0.133	-0.133	-0.42	6.50	20.04	

*Surf	Surf	No.	Peak	Set_Of	Set_Space
* Id	Ext	Purlin	Space	Space	Space No.
2	1.500	5	0.750	1	3.854 6
3	1.500	5	0.750	1	3.854 6

* (25) PANELS/RF_COLUMNS:

* Wall	Insulation	RF_Interior_Columns
* Panel	Use Thick	No. Locate
'26 PBR '	'N' 0.000	0

* (26) WIND FRAMING SELECTION:

* Panel	Diagonal	Wind	Wind
* Shear	Bracing	Bent	Column
'N'	'Y'	'N'	'N'

* (27) WALL BRACING:

* Wind	Brace	No._Bay	Specified
* Shear	Type	Specified	Bays_For_Bracing
100.0	'C '	0	

* (28) WIND BENTS:

* --Member--	No.
* Type	Depth Bay Bay_Id
'-'	0.00 0

* (29) WIND COLUMNS:

* --Member--	No.	Left/
* Type	Depth Bay Bay_Id	Right
'-'	0.00 0	

* (30) WALL BRACING ATTACHMENT

* No.	Attach	--Bay_Id--	No.
* Attach	Id	Start End	Level Level_Height
1	1	1 3	2 9.000 30

* (31) EAVE EXTENSION:

*Wall	No.	Ext	-Bay_Id--	-Edge_Extend-	Ext
*Id	Ext	Id	Start End Height Width Slope	Left Right	Mount
2	1	1	1 5 11.750 1.500 5.000	1.500 1.500	'B'
4	0				

* (32) CANOPY:

*Wall	No.	Ext	-Bay_Id--	-Edge_Extend-	Ext
*Id	Ext	Id	Start End Height Width Slope	Left Right	Mount
1	0				
2	0				
4	0				

* (33) FACIA/PARAPET :

*Wall	No.	Ext	Fac	Bay_Id	----Attach_Beam----	---Facia/Parapet---	Edge_Extend	Ext
* Id	Ext	Id	Type	St End Height Width Slope Elev Height Slope	Left Right Mnt			
*			(C,E)	(ft)	(ft)	(?:12) (ft)	(ft) (?:12) (ft)	(ft)
1	0							
2	0							
4	0							

* (34) FACIA/PARAPET GIRTS:

*Ext	----Top----	--Interior--	---Back_Panel---	Angle
*Id	Type Rotate	Type Rotate	Part	Rotate Spacing

* (35) ADJACENT BUILDING:

*Wall	No.	Ext	-Bay_Id--	-Edge_Extend-	Ext

```

=====
*Augustal                Endwall Design Input                10/28/07  6:20pm
=====

*( 1)JOBID:
    'Augustal'

*( 2)PROGRAM OPTIONS:
* EW      Run      Run      Run      No.      Lap
* Id Col/Raf Girt Brace Panel Cycle Stiff
  'L'  'Y'      'N'  'Y'  'N'      4      0.50

*( 3)DESIGN CODE:
*Design ---Steel_Code---          ---Build--- Seismic
* Code   Cold      Hot      Country Code Year Zone
  'WS'   'AISI89' 'AISC89'  '----' 'FBC ' '04'  'D  '

*( 4)DESIGN CONSTANTS:
*
* ---Strength_Factors---
* ---Stress_Ratio---          ---Seismic---
* Col/Raf Girt Panel Wind Frame Brace
  1.03  1.03  1.03  1.0000  1.0000  1.0000

*( 5)STEEL YIELDS:
* Web Flg C_Sec W_Sec R_Sec P_Sec T_Sec U_Sec EP BP
  46.0  55.0  57.0  55.0  50.0  50.0  46.0  50.0  55.0  55.0

*( 6)DEFLECTION LIMITS:
* -----Rafter-----          ---Girt--- --Panel--- Part Wind
* Live Wind Total Column Wall Facia Wall Facia Wall Bent
  180.  180.   0.  180.   90.  90.   90.  90.   90.  60.

*( 7)REPORTS:
* Input Column Wall Door Wall Cable
* Echo Rafter Girt Jamb Panel Brace
  'Y'   'Y'   'Y'  'Y'  'Y'  'Y'

*( 8)BUILDING TYPE:
* Build      Build      Build      Expand_EW
* Type      Width      Length      Use Offset
  'FF-'    37.0000    60.0000  'N :-'  0.00

*( 9)SURFACE SHAPE:
* No.      X_Coord Y_Coord Offset
* Surf      (ft)   (ft)   (in)
   4      0.0000  11.7500  8.250
          18.5000  19.4583  6.250
          37.0000  11.7500  6.250
          37.0000   0.0000  8.250

*(10)BAY SPACING:
*No.Roof Roof Frame Sets_Of Bay No.
* Bay Bay Recess Bays Width Bays
   5  12.0000  0.3333   3  12.5000  1
                        12.0000  1
                        12.5000  1

*(11)FRAMED OPENINGS:
* No. Bay Open Open Open Open Sill Base Set Member Remove
* Open Id Width Height Offset Type Height Elev Depth Select Panel
   0

*(12)WIDE OPENING LAYOUT:
*-----Open--- Bay_Id --Clear_Opening-- Wedge Stub Column Total

```

15	-0.01	0.70	0.00	0.00	-0.29	0.44	0.00	0.00
16	-0.01	0.65	0.00	0.00	0.31	0.49	0.00	0.00
17	0.00	-0.22	1.23	0.00	0.00	0.38	1.18	0.00
18	-0.01	1.44	0.00	0.00	0.01	0.47	0.00	0.00
19	-0.01	1.07	0.00	0.00	-0.31	0.70	0.00	0.00
20	-0.01	1.02	0.00	0.00	0.32	0.75	0.00	0.00
21	-0.01	0.12	1.29	0.00	0.01	0.64	1.24	0.00
22	-0.01	1.85	0.00	0.00	0.01	0.72	0.00	0.00

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DEFLECTIONS : (in)

Load Id	Lateral Defl @ Top Of Col		Vert Defl @ Midspan
	Left	Right	
1	0.00	0.00	-0.15
2	0.00	0.00	-0.02
3	0.00	0.00	0.01
4	0.00	0.00	-0.02
5	0.00	0.00	-0.11
6	0.00	0.00	-0.14
7	0.00	0.00	0.17
8	0.00	0.00	0.13
9	0.00	0.00	0.01
10	0.00	0.00	-0.03
11	0.00	0.00	0.17
12	0.00	0.00	0.17
13	0.00	0.00	0.17
14	0.00	0.00	0.17
15	0.00	0.00	-0.04
16	0.00	0.00	-0.04
17	0.00	0.00	-0.03
18	0.00	0.00	-0.04
19	0.00	0.00	-0.06
20	0.00	0.00	-0.06
21	0.00	0.00	-0.05
22	0.00	0.00	-0.06

DEFLECTIONS RATIO:

Load Id	Lateral Defl @ Top Of Col		Vert Defl @ Midspan
	Left	Right	
1	99999	99999	802
2	99999	99999	6587
3	99999	99999	9516
4	43751	99999	5528
5	48461	99999	1117
6	99999	99999	847
7	58866	99999	693
8	28234	99999	943
9	44306	99999	9226
10	99999	99999	3664
11	26548	99999	705
12	27319	99999	706
13	26548	99999	705
14	27319	99999	706
15	99999	99999	3123
16	99999	99999	3126
17	99999	99999	3801
18	99999	99999	3080
19	99999	99999	2017

----Stiffener----	--Web(in)--	-Stiffener_Size(in)-
Location No. Depth Thick Width Thick Length		
-----	-----	-----

STIFFENER DESIGN:

Stiffener	---Tension(k)---	-Compression(k)--	Max
Location Load Calc Allow Load Calc Allow UC			
-----	-----	-----	-----

=====

AUGUSTA11	Flange Brace Report	10/28/07 6:44pm
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=====

Flange Brace Yield= 50.0 ksi
Girt/Purlin Yield= 57.0 ksi
Flange Brace Bolt = 0.500 (A307) (0 Washer)

Surf	No				Web	Brace	Calc	--Brace_UC--	Conn
Id	Brace	Loc	Side	Part	Depth	Dist	Force	Comp	Tens
1	0								
2	2	1	1	L2X2X14G	5.42	28.00	0.08	0.03	0.01
		3	1	L2X2X14G	5.32	28.00	0.04	0.01	0.00

=====

AUGUSTA11	Special Segment Report	10/28/07 6:44pm
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FLANGE PLATE: (a)

	--Initial--	-Required--
Locate	Width Thick	Width Thick
	(in) (in)	(in) (in)
Lt Col	3.9 0.215	5.0 0.250

WEB PLATE: (b)

	-----Load-----	Shear_Force	Web	Shear	Shear	
Locate	Axial Moment	Web Stiff	Thick	Calc	Allow	Stiffener
	Id (k) (f-k)	(k) (k)	(in)	(ksi)	(ksi)	Provided
Lt Col	11 -2.3 0.0	1.1 0.0	0.170	1.23	18.40	None

WEB DESIGN:

Locate	H	Av	Kv	Cv
Lt Col	5.47	5.09	10.17	2.78

(a)DS_BUILD(frame37)=1 .. see help.
(b)DS_BUILD(frame36)=4 .. see help.

=====

AUGUSTA11	Design Summary Report	10/28/07 6:44pm
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*(32) CABLES:

* Bay	No.	Cable	Cable	Cable	Cable
* Id	Cable	Id	Level	Type	Area
1	0				

*(33) CRANE BRACKET:

*Crane	BayId	Crane	Crane	----Beam----	----Offset----	-----Bracket-----	Col_Sup	Loa								
d	No	Id	Lt	Rt	Type	Height	Depth	Width	Left	Right	Type	Opt	Select	Lt	Rt	(k
)	0															

*(34) FRAME LINES:

*No.	Lines	Frame_Line
	4	2 3 4 5

*(35) DESIGN PLATES:

*No.	---Plate---	--Plate_Size--	Bolt	Bolt	---Top----	-Bottom--				
*Plt	Type	Id	Width	Thick	Dia	Gage	Row	Space	Row	Space
0										

*(36) SPECIAL FAB DATA

* No.	Piece	Piece
*Piece	Id	Key
0		

*(37) ENDWALL COLUMNS:

*Wall	Expand_EW	No.	Column	Column	
* Id	Use	Offset	Column	Locate	Offset
1	'N '	0.000	0		
3	'N '	0.000	0		

*(38) JACK BEAMS:

* No.	Beam	Beam	Beam	Beam	
*Beam	Id	Offset	Height	Length	Part
0					

* Code file used was RF_FBC.04 Version 1.0

*

*DS_RFDEP.Siz

*Surface	Span	--Required--	-----Selected-----				
* Id	Id	Type	Span	Type	Span	#Depth	#Splice
* 1	1	WR	9.6	No record selected			
* 2	1	SR	10.0	No record selected			

=====

AUGUSTA11

Rigid Frame Design Code

10/28/07 6:44pm

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STRUCTURAL CODE:

Design Basis : WS
 Hot Rolled Steel : AISC89
 Cold Formed Steel : AISI89

BUILDING CODE:

Wind Code : FBC
 Year : 04
 Seismic Zone : D

MODULUS OF ELASTICITY

Hot Rolled Steel : 29000 (ksi)
 Cold Formed Steel : 29000 (ksi)

Load_Location	Start	End	Load_Type
0.000	3.700	Edge Zone Wind	
16.342	20.042	Edge Zone Wind	

Augustal Purlin Design Report (Surface 3) 10/28/07 6:20pm

ROOF PURLIN

DESIGN RUN # 2, SURFACE # 3
(Edge Strip Zone= 3.70)

PURLIN LAYOUT: (Purlin Id= 2)

Bay	Span	Purlin	Id	Id Size	Span	---Lap (ft)---	Left	Right	Width	Load	No.	Brace
1	1	6X25Z16	1	1.83	1.83				3.86		0	
2	2	6X25Z16	2	11.67	11.67	1.00	1.00	1.00	3.86		0	
3	3	6X25Z16	3	12.00	12.00	1.00	1.00	1.00	3.86		0	
4	4	6X25Z16	4	12.00	12.00	1.00	1.00	1.00	3.86		0	
5	5	6X25Z16	5	12.00	12.00	1.00	1.00	1.00	3.86		0	
6	6	6X25Z16	6	11.67	11.67	1.00			3.86		0	
7	7	6X25Z16	7	1.83	1.83				3.86		0	

LOAD COMBINATION # 1 : DL+CL+1.5SL

PURLIN ANALYSIS:

Span	Id	Left	Right	Lap	Sup	Shear (k)	Left	Right	Lap	Sup	Left	Right	Mom	MidSpan	Loc	Right	Lap	Sup	Moment (f-k)
1	1	0.00	0.00			-0.20	0.00	0.00			0.00	0.00	0.00	0.00		0.00			0.00
2	2	0.64	-0.80			-0.80	-0.93	0.18			-1.32	4.73	6.22	1.05		1.05			1.92
3	3	0.84	0.70			-0.64	-0.78	1.92			1.15	-0.69	6.00	0.84		0.84			1.55
4	4	0.81	0.67			-0.67	-0.81	1.55			0.81	-0.87	6.00	0.81		0.81			1.55
5	5	0.78	0.64			-0.70	-0.84	1.55			0.84	-0.69	5.78	1.15		1.15			1.92
6	6	0.93	0.80			-0.64	-0.64	1.92			1.05	-1.32	6.94						0.18
7	7	0.20						0.18					1.83						0.00

STRENGTH/DEFLECTION:

Span	Id	Loc	Calc Allow	UC	Loc	Calc Allow	UC	Loc	Calc Allow	UC	Mom+Shr	Deflection (in)
1	RS	-0.20	3.39	0.06	RS	0.18	3.48	0.05	RS	0.01	0.09	0.09
2	RL	-0.80	3.39	0.24	MS	-1.32	3.48	0.38	RL	0.15	-0.16	0.78
3	LT	0.70	3.39	0.21	LT	1.15	3.48	0.33	LT	0.15	-0.05	0.80
4	RL	-0.67	3.39	0.20	MS	-0.87	3.48	0.25	RL	0.09	-0.09	0.80
5	RL	-0.70	3.39	0.21	RL	1.15	3.48	0.33	RL	0.15	-0.05	0.80
6	LT	0.80	3.39	0.24	MS	-1.32	3.48	0.38	LT	0.15	-0.16	0.78

PURLIN ANALYSIS:

Span	Id	Left	Right	Sup	Shear (k)	Left	Right	Sup	Shear (k)	Left	Right	Sup	Moment (F-k)
1	1	0.00	0.00	0.00	0.24	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00
2	2	-0.26	0.12	0.12	0.09	-0.28	0.14	0.14	-0.22	0.13	0.13	0.13	0.13
3	3	-0.11	-0.09	0.08	0.09	-0.10	0.10	0.10	-0.19	-0.10	-0.10	-0.10	-0.19
4	4	-0.10	-0.09	0.09	0.09	-0.10	0.10	0.10	-0.19	-0.10	-0.10	-0.10	-0.28
5	5	-0.10	-0.08	0.08	0.09	-0.10	0.11	0.11	-0.19	-0.10	-0.10	-0.10	-0.22
6	6	-0.14	-0.12	0.12	0.26	-0.28	0.26	0.26	-0.28	-0.15	0.13	0.13	4.05
7	7	-0.24	0.00	0.00	0.00	-0.22	0.00	0.00	-0.22	0.00	0.00	0.00	1.83

STRENGTH/DEFLECTION:

Span	Id	Loc	Calc Allow	UC	Loc	Calc Allow	UC	Loc	Calc Allow	UC	Loc	Calc Allow	Deflection (in)
1	1	RS	0.24	0.07	RS	-0.22	0.06	RS	0.01	0.01	RS	-0.05	-0.05
2	2	LS	-0.26	0.08	LS	-0.22	0.06	LS	0.01	0.01	LS	0.10	1.17
3	3	LT	-0.09	0.03	LT	-0.18	0.05	LT	0.00	0.00	LT	0.03	1.20
4	4	RT	0.09	0.03	MS	0.12	0.05	RT	0.00	0.00	RT	0.05	1.20
5	5	RL	0.09	0.03	RL	-0.18	0.05	RL	0.00	0.00	RL	0.03	1.20
6	6	RS	0.26	0.08	RS	-0.22	0.06	RS	0.01	0.01	RS	0.10	1.17
7	7	LS	-0.24	0.07	LS	-0.22	0.06	LS	0.01	0.01	LS	0.10	1.17

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Left	Right	Sup	Shear Ratio	Left	Right	Sup	Shear Ratio
2	2	0.07	0.07	0.04	0.04	0.07	0.07	0.04	0.04
3	3	0.07	0.05	0.02	0.02	0.07	0.05	0.02	0.02
4	4	0.05	0.05	0.02	0.02	0.05	0.05	0.02	0.02
5	5	0.05	0.07	0.02	0.02	0.05	0.07	0.02	0.02
6	6	0.07	0.04	0.04	0.04	0.07	0.04	0.04	0.04

LOAD COMBINATION # 4 : DL+CL+0.75WP+0.75WS

PURLIN ANALYSIS:

Span	Id	Left	Right	Sup	Shear (k)	Left	Right	Sup	Shear (k)	Left	Right	Sup	Moment (F-k)
1	1	0.00	0.00	0.00	0.33	0.00	0.33	0.00	0.00	0.00	0.00	0.00	-0.30
2	2	-0.30	0.16	0.16	0.18	-0.30	0.14	0.14	-0.38	0.12	0.12	0.12	-0.29
3	3	-0.16	-0.13	0.12	0.12	-0.16	0.13	0.13	-0.29	0.12	0.12	0.12	-0.29
4	4	-0.15	-0.13	0.13	0.15	-0.15	0.13	0.13	-0.29	0.12	0.12	0.12	-0.29
5	5	-0.14	-0.12	0.12	0.16	-0.14	0.13	0.13	-0.29	0.12	0.12	0.12	-0.29
6	6	-0.18	-0.16	0.16	0.30	-0.18	0.16	0.16	-0.38	0.12	0.12	0.12	-0.38

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Lap_Shear(k)	Shear_Ratio	Id
2	0.02	0.02	Left Right
3	0.02	0.02	Left Right
4	0.02	0.02	Left Right
5	0.02	0.02	Left Right
6	0.02	0.02	Left Right

LOAD COMBINATION # 6 : DL+CL+2.0AUX1

PURLIN ANALYSIS:

Span	Left	Right	Lap	Sup	Shear(k)	Left	Right	Lap	Sup	Moment(f-k)	Left	Right	Lap	Sup	Mom	Loc	Midspan	Right	Lap	Sup	Moment(f-k)
1	0.00	0.57	-0.63	-0.16	0.00	0.00	0.15	-1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.29	0.26	-0.10	-0.14	0.15	0.00	0.15	-1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.29	0.26	-0.10	-0.14	0.15	0.00	0.15	-1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.20	0.16	-0.20	-0.23	0.23	0.06	0.23	0.06	-0.30	5.48	0.12	0.23	0.06	-0.30	5.48	0.12	0.23	0.06	-0.30	5.48	0.12
5	0.21	0.17	-0.18	-0.22	0.46	0.06	0.46	0.06	-0.16	5.89	0.30	0.46	0.06	-0.16	5.89	0.30	0.46	0.06	-0.16	5.89	0.30
6	0.25	0.21	0.17	-0.17	0.50	0.02	0.50	0.02	-0.37	7.00	0.02	0.50	0.02	-0.37	7.00	0.02	0.50	0.02	-0.37	7.00	0.02
7	0.02	0.02			0.02	0.00	0.02	0.00	0.00	1.83	0.00	0.02	0.00	0.00	1.83	0.00	0.02	0.00	0.00	1.83	0.00

STRENGTH/DEFLECTION:

Span	Id	Loc	Calc Allow	UC	Loc	Calc Allow	UC	Moment(f-k)	Loc	Calc Allow	UC	Mom+Shr	Loc	Calc Allow	UC	Deflection(in)
1	RS	-0.16	3.39	0.05	RS	0.15	3.48	0.04	RS	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	RL	-0.63	3.39	0.19	MS	-1.29	3.48	0.37	RL	0.05	0.05	0.00	0.00	0.00	0.00	0.00
3	LT	0.26	3.39	0.08	LT	0.90	3.40	0.27	LT	0.07	0.07	0.00	0.00	0.00	0.00	0.00
4	RT	-0.20	3.39	0.06	MS	-0.30	3.48	0.09	RT	0.01	0.01	0.00	0.00	0.00	0.00	0.00
5	RT	-0.18	3.39	0.05	RL	0.30	3.48	0.09	RT	0.01	0.01	0.00	0.00	0.00	0.00	0.00
6	LT	0.21	3.39	0.06	MS	-0.37	3.48	0.11	LT	0.01	0.01	0.00	0.00	0.00	0.00	0.00
7	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00	0.00	0.00	0.00	0.00	0.00	0.00

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Lap_Shear(k)	Shear_Ratio	Id
2	0.29	0.15	Left Right
3	0.29	0.15	Left Right
4	0.06	0.03	Left Right
5	0.11	0.06	Left Right
6	0.13	0.06	Left Right

LOAD COMBINATION # 7 : DL+CL+2.0AUX2

Span	Id	Shear (k)	Loc	Calc Allow	UC	Loc	Mom+Shr	Deflection (in)
1	RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01
2	RL	-0.25	3.39	0.07	RL	0.65	3.48	0.19
3	RL	-0.62	3.39	0.18	RL	0.92	3.48	0.26
4	LT	0.63	3.39	0.19	LT	0.91	3.48	0.26
5	LT	0.21	3.39	0.06	LT	0.61	3.48	0.12
6	LT	0.21	3.39	0.06	MS	-0.41	3.48	0.12
7	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01
LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS
LT	0.25	3.39	0.07	LT	0.65	3.48	0.19	LT
LT	0.62	3.39	0.18	LT	0.92	3.48	0.26	LT
RL	-0.63	3.39	0.19	RL	0.91	3.48	0.26	RL
RL	-0.21	3.39	0.06	RL	0.61	3.48	0.12	RL
RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01	RS
Loc	Calc Allow	UC	Loc	Calc Allow	UC	Loc	Mom+Shr	Deflection (in)
1	RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01
2	RL	-0.25	3.39	0.07	RL	0.65	3.48	0.19
3	RL	-0.62	3.39	0.18	RL	0.92	3.48	0.26
4	LT	0.63	3.39	0.19	LT	0.91	3.48	0.26
5	LT	0.21	3.39	0.06	LT	0.61	3.48	0.12
6	LT	0.21	3.39	0.06	MS	-0.41	3.48	0.12
7	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01
LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS
LT	0.25	3.39	0.07	LT	0.65	3.48	0.19	LT
LT	0.62	3.39	0.18	LT	0.92	3.48	0.26	LT
RL	-0.63	3.39	0.19	RL	0.91	3.48	0.26	RL
RL	-0.21	3.39	0.06	RL	0.61	3.48	0.12	RL
RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01	RS
Loc	Calc Allow	UC	Loc	Calc Allow	UC	Loc	Mom+Shr	Deflection (in)

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Shear_Ratio	Left	Right
2		0.23		
3		0.23	0.40	0.20
4		0.40	0.21	0.11
5		0.21	0.10	0.05
6		0.10		
Left	Right			
Left	Right			

LOAD COMBINATION # 9 : DL+CL+2.0AUX4

PURLIN ANALYSIS:

-----Shear(k)-----												
Span	Id	Left	Sup	Left	Lap	Right	Sup	Left	Lap	Right	Sup	Left
1		0.00		-0.02		-0.21		0.00		0.02		0.00
2		0.17		-0.24		-0.21		0.02		-0.41		0.00
3		0.18		-0.21		-0.25		0.41		0.25		0.00
4		0.61		-0.63		-0.74		0.84		0.28		0.00
5		0.73		0.62		-0.62		1.59		0.92		0.00
6		0.29		0.25		-0.13		0.92		0.65		0.00
7		0.02						0.02				0.00
-----Moment(k)-----												
Span	Id	Left	Sup	Left	Lap	Right	Sup	Left	Lap	Right	Sup	Left
1		0.00		-0.02		-0.21		0.00		0.00		0.00
2		0.17		-0.24		-0.21		0.02		-0.41		0.00
3		0.18		-0.21		-0.25		0.41		0.25		0.00
4		0.61		-0.63		-0.74		0.84		0.28		0.00
5		0.73		0.62		-0.62		1.59		0.92		0.00
6		0.29		0.25		-0.13		0.92		0.65		0.00
7		0.02						0.02				0.00

STRENGTH/DEFLECTION:

Span	Id	Shear (k)	Loc	Calc Allow	UC	Loc	Mom+Shr	Deflection (in)
1	RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01
2	RL	-0.21	3.39	0.06	RL	0.61	3.48	0.12
3	RL	-0.63	3.39	0.19	RL	0.91	3.48	0.26
4	RL	-0.63	3.39	0.19	RL	0.91	3.48	0.26
5	LT	0.62	3.39	0.18	LT	0.92	3.48	0.26
6	LT	0.25	3.39	0.07	LT	0.65	3.48	0.19
7	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01
LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS
LT	0.25	3.39	0.07	LT	0.65	3.48	0.19	LT
LT	0.62	3.39	0.18	LT	0.92	3.48	0.26	LT
RL	-0.63	3.39	0.19	RL	0.91	3.48	0.26	RL
RL	-0.21	3.39	0.06	RL	0.61	3.48	0.12	RL
RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01	RS
Loc	Calc Allow	UC	Loc	Calc Allow	UC	Loc	Mom+Shr	Deflection (in)
1	RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01
2	RL	-0.21	3.39	0.06	RL	0.61	3.48	0.12
3	RL	-0.63	3.39	0.19	RL	0.91	3.48	0.26
4	RL	-0.63	3.39	0.19	RL	0.91	3.48	0.26
5	LT	0.62	3.39	0.18	LT	0.92	3.48	0.26
6	LT	0.25	3.39	0.07	LT	0.65	3.48	0.19
7	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01
LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS
LT	0.25	3.39	0.07	LT	0.65	3.48	0.19	LT
LT	0.62	3.39	0.18	LT	0.92	3.48	0.26	LT
RL	-0.63	3.39	0.19	RL	0.91	3.48	0.26	RL
RL	-0.21	3.39	0.06	RL	0.61	3.48	0.12	RL
RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01	RS
Loc	Calc Allow	UC	Loc	Calc Allow	UC	Loc	Mom+Shr	Deflection (in)

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Shear (k)	Moment (F-k)	Mom+Shr	Deflection (in)
1	Left	0.00	0.00	0.00	0.02
2	Left	0.17	0.02	0.00	0.50
3	Left	0.22	0.50	4.66	0.27
4	Left	0.23	0.46	6.11	0.27
5	Left	0.14	0.23	6.52	0.06
6	Left	0.75	1.18	6.61	0.90
7	Left	0.16	0.15	1.83	0.00
1	Sup	0.00	0.00	0.00	0.00
2	Sup	-0.21	0.02	0.00	0.02
3	Sup	-0.17	0.50	-0.37	0.27
4	Sup	-0.16	0.46	-0.30	0.27
5	Sup	-0.26	0.23	-0.02	0.06
6	Sup	0.63	1.18	-1.29	0.90
7	Sup	0.16	0.15	1.83	0.00

STRENGTH/DEFLECTION:

Span	Id	Shear (k)	Moment (F-k)	Mom+Shr	Deflection (in)
1	RS	-0.02	0.02	0.00	0.00
2	RL	-0.21	-0.37	0.01	-0.01
3	LL	0.18	0.30	0.01	0.01
4	LL	0.20	-0.30	0.01	-0.02
5	RL	-0.26	0.90	0.07	0.06
6	LL	0.63	-1.29	0.05	-0.18
7	LS	0.16	0.15	0.00	0.09
1	RS	0.01	0.02	0.00	0.00
2	MS	0.06	-0.37	0.11	-0.01
3	LL	0.05	0.30	0.09	0.01
4	MS	0.06	-0.30	0.09	0.01
5	RL	0.08	0.90	0.27	0.07
6	MS	0.19	-1.29	0.37	0.05
7	LS	0.05	0.15	0.04	0.09
1	Loc	Calc Allow	Calc Allow	Loc	Calc Allow
2	Loc	Calc Allow	Calc Allow	Loc	Calc Allow
3	Loc	Calc Allow	Calc Allow	Loc	Calc Allow
4	Loc	Calc Allow	Calc Allow	Loc	Calc Allow
5	Loc	Calc Allow	Calc Allow	Loc	Calc Allow
6	Loc	Calc Allow	Calc Allow	Loc	Calc Allow
7	Loc	Calc Allow	Calc Allow	Loc	Calc Allow

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Lap-Shear (k)	Shear-Ratio
2	Left	0.13	0.06
3	Left	0.11	0.06
4	Left	0.11	0.03
5	Left	0.06	0.15
6	Left	0.29	0.15

LOAD COMBINATION #12 : DL+CL+2.0AUX7

PURLIN ANALYSIS:

Span	Id	Shear (k)	Moment (F-k)	Mom+Shr	Deflection (in)
1	Left	0.00	0.00	0.00	0.14
2	Left	0.13	0.14	-0.09	1.08
3	Left	0.70	1.08	3.59	0.81
4	Left	0.21	0.85	6.00	0.85
5	Left	0.66	0.85	5.84	1.08
6	Left	0.29	1.08	8.08	0.14
7	Left	0.14	0.14	1.83	0.00
1	Sup	0.00	0.00	0.00	0.00
2	Sup	-0.25	0.14	-0.09	0.81
3	Sup	-0.55	1.08	-0.07	0.25
4	Sup	-0.18	0.85	0.21	0.66
5	Sup	-0.58	0.85	-1.07	0.66
6	Sup	-0.29	1.08	-0.09	0.44
7	Sup	0.14	0.14	1.83	0.00
1	Loc	Calc Allow	Calc Allow	Loc	Calc Allow
2	Loc	Calc Allow	Calc Allow	Loc	Calc Allow
3	Loc	Calc Allow	Calc Allow	Loc	Calc Allow
4	Loc	Calc Allow	Calc Allow	Loc	Calc Allow
5	Loc	Calc Allow	Calc Allow	Loc	Calc Allow
6	Loc	Calc Allow	Calc Allow	Loc	Calc Allow
7	Loc	Calc Allow	Calc Allow	Loc	Calc Allow

STRENGTH/DEFLECTION:

Span Shear (k) Moment (F-k) Mom+Shr Deflection (in)

2	0.26	0.13
3	0.26	0.13
4	0.22	0.11
5	0.22	0.11
6	0.26	0.13

Augustal Purlin Design Report (Surface 3) 10/28/07 6:20pm

ROOF PURLIN

DESIGN RUN # 2, SURFACE # 3

PURLIN LAYOUT: (Purlin Id= 3)

Bay	Span	Purlin	Id	Id Size	Span	--Lap (ft)--	Load	No.
1	1	6X25Z16	1	1.83	11.67	1.00	3.85	0
2	2	6X25Z16	2	11.67	12.00	1.00	3.85	0
3	3	6X25Z16	3	12.00	1.00	1.00	3.85	0
4	4	6X25Z16	4	12.00	1.00	1.00	3.85	0
5	5	6X25Z16	5	12.00	1.00	1.00	3.85	0
6	6	6X25Z16	6	11.67	1.00	1.00	3.85	0
7	7	6X25Z16	7	1.83	11.67	1.00	3.85	0

LOAD COMBINATION # 1 : DL+CL+1.5SL

PURLIN ANALYSIS:

Span	Id	Left	Right	Sup	Shear (k)	Left	Right	Sup	Left	Right	Sup	Moment (F-k)
1	1	0.00	0.00	0.00	-0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	2	0.63	-0.80	-0.93	-0.80	0.18	-1.32	0.00	4.73	1.05	0.18	-1.32
3	3	0.83	0.70	-0.64	-0.77	1.91	1.14	-0.69	6.22	0.84	1.55	-0.69
4	4	0.80	0.67	-0.67	-0.67	1.55	0.81	-0.86	6.00	0.81	1.55	-0.86
5	5	0.77	0.64	-0.70	-0.83	1.55	0.84	-0.69	5.78	1.14	1.91	-0.69
6	6	0.93	0.80	-0.63	-0.63	1.91	1.05	-1.32	6.94	1.83	0.18	-1.32
7	7	0.20	0.00	0.00	0.00	0.18	0.00	0.00	1.83	0.00	0.00	0.00

STRENGTH/DEFLECTION:

Span	Id	Loc	Calc Allow	UC	Loc	Calc Allow	UC	Mom+Shr	Deflection (in)
1	RS	-0.20	3.39	0.06	RS	0.18	3.48	0.05	0.01
2	RL	-0.80	3.39	0.24	MS	-1.32	3.48	0.38	0.15
3	LT	0.70	3.39	0.21	LT	1.14	3.48	0.33	0.15
4	RL	-0.67	3.39	0.20	MS	-0.86	3.48	0.25	0.09
5	RL	-0.70	3.39	0.21	RL	1.14	3.48	0.33	0.15
6	LT	0.80	3.39	0.24	MS	-1.32	3.48	0.38	0.15
7	LS	0.20	3.39	0.06	LS	0.18	3.48	0.05	0.01

PURLIN ANALYSIS:

Span	Id	Shear (k)	Left	Right	Lap	Sup	Moment (F-k)	Left	Right	Lap	Sup	Mom	Loc	Midspan	Right	Deflection (in)
1	1	0.00	0.00	-0.13	0.00	0.00	0.00	0.00	-0.22	0.00	0.00	0.00	0.00	11.59	0.00	-0.22
2	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.92	0.00	0.00
3	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00
4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.08	0.00	0.00
5	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	-0.22
6	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.83	0.00	0.00
7	7	-0.24	0.00	-0.13	0.00	0.00	-0.22	3.48	0.06	LS	RS	0.01	0.01	0.06	0.01	-0.02

STRENGTH/DEFLECTION:

Span	Id	Shear (k)	Loc	Calc Allow	UC	Loc	Calc Allow	UC	Moment (F-k)	Loc	Calc Allow	UC	Mom+Shr	Loc	UC	Deflection (in)
1	1	RS	0.24	3.39	0.07	RS	-0.22	3.48	0.06	RS	0.01	0.01	0.06	0.01	0.01	-0.02
2	2	LS	-0.13	3.39	0.04	LS	-0.22	3.48	0.06	LS	0.01	0.01	0.06	0.01	0.01	0.06
3	3	RT	0.00	3.39	0.00	MS	0.00	3.48	0.00	LS	0.00	0.00	0.00	0.00	0.00	0.02
4	4	LT	0.00	3.39	0.00	LT	0.00	3.48	0.00	LS	0.00	0.00	0.00	0.00	0.00	0.02
5	5	LT	0.00	3.39	0.00	MS	0.00	3.48	0.00	LS	0.00	0.00	0.00	0.00	0.00	0.02
6	6	RS	0.13	3.39	0.04	RS	-0.22	3.48	0.06	RS	0.01	0.01	0.06	0.01	0.01	0.06
7	7	LS	-0.24	3.39	0.07	LS	-0.22	3.48	0.06	LS	0.01	0.01	0.06	0.01	0.01	-0.02

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Lap	Shear (k)	Left	Right	Shear_Ratio
2	2	0.00	0.00	0.00	0.00	0.00
3	3	0.00	0.00	0.00	0.00	0.00
4	4	0.00	0.00	0.00	0.00	0.00
5	5	0.00	0.00	0.00	0.00	0.00
6	6	0.00	0.00	0.00	0.00	0.00

LOAD COMBINATION # 4 : DL+CL+0.75WP+0.75WS

PURLIN ANALYSIS:

Span	Id	Left	Sup	Shear (k)				Left	Right	Lap	Sup	Moment (F-k)				Left	Right	Lap	Sup
		Left	Sup	Left	Right	Lap	Sup	Left	Right	Lap	Sup	Left	Right	Lap	Sup	Left	Right	Lap	Sup
1	1	0.00	0.00	0.33	0.05	0.04	0.00	0.00	-0.30	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00
2	2	-0.17	0.04	0.05	-0.09	0.04	0.05	-0.30	-0.09	-0.05	0.00	0.00	9.11	-0.05	0.00	0.00	-0.09	-0.05	-0.30
3	3	-0.05	-0.04	-0.04	0.05	0.04	0.05	-0.09	-0.09	-0.05	0.05	0.05	6.01	-0.05	0.00	0.05	-0.09	-0.05	-0.09
4	4	-0.05	-0.04	0.04	0.05	0.04	0.05	-0.09	-0.09	-0.05	0.05	0.05	6.00	-0.05	0.00	0.05	-0.09	-0.05	-0.09
5	5	-0.05	-0.04	0.04	0.05	0.04	0.05	-0.09	-0.09	-0.05	0.05	0.05	5.99	-0.05	0.00	0.05	-0.09	-0.05	-0.09
6	6	-0.05	-0.04	0.17	-0.09	-0.04	0.00	-0.09	-0.09	-0.05	0.00	0.00	2.55	-0.05	0.00	0.00	-0.09	-0.05	-0.30
7	7	-0.33	0.00	0.33	0.00	0.00	0.00	0.00	-0.30	0.00	0.00	0.00	1.83	0.00	0.00	0.00	0.00	0.00	0.00

Bolt = 0.500 (A307)

LOAD COMBINATION # 6 : DL+CL+2.0AUX1

Span	Lap_Shear(k)	Shear_Ratio
Id	Left	Right
2	0.02	0.01
3	0.02	0.01
4	0.02	0.01
5	0.02	0.01
6	0.02	0.01

PURLIN ANALYSIS:

Span	Left	Right	Lap	Sup	Left	Right	Lap	Sup	Moment (f-k)	Mom	Loc	Deflection (in)
Id	Left	Right	Lap	Sup	Left	Right	Lap	Sup	Left	Right	Loc	Deflection (in)
1	0.00	0.57			0.00	0.15			0.00	0.00		0.00
2	0.29	-0.63			0.15	-0.75			-1.29	5.05		0.49
3	0.19	-0.10			1.17	-0.13			0.90	8.21		0.12
4	0.21	-0.20			0.46	-0.23			0.26	5.48		0.24
5	0.25	-0.17			0.50	-0.22			-0.37	5.89		0.30
6	0.25	-0.21			0.50	-0.17			-0.37	7.00		0.02
7	0.02	0.21			0.02	0.17			0.02	1.83		0.00

STRENGTH/DEFLECTION:

Span	Left	Right	Lap	Sup	Left	Right	Lap	Sup	Moment (f-k)	Mom+Shr	Loc	Deflection (in)
Id	Left	Right	Lap	Sup	Left	Right	Lap	Sup	Left	Right	Loc	Deflection (in)
1	0.16	-0.63			0.15	-0.75			0.04	0.00		0.09
2	0.39	-0.63			0.19	-0.75			-1.29	0.05		-0.18
3	0.39	-0.26			0.08	-0.13			0.90	0.07		0.06
4	0.39	-0.20			0.06	-0.23			0.30	0.01		-0.02
5	0.39	-0.18			0.05	-0.22			0.30	0.01		0.01
6	0.39	-0.21			0.06	-0.17			-0.37	0.01		-0.01
7	0.02	0.21			0.01	0.17			0.02	0.00		0.00

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Lap_Shear(k)	Shear_Ratio
Id	Left	Right
2	0.29	0.15
3	0.06	0.03
4	0.06	0.03
5	0.11	0.06
6	0.13	0.06

LOAD COMBINATION # 7 : DL+CL+2.0AUX2

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Span	Id	Shear (k)		Moment (F-k)		Deflection (in)							
		Loc	Calc Allow	Loc	Calc Allow	Mom+Shr	Calc Allow						
1	RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01	LS	0.00	-0.02	0.05	0.80
2	RL	-0.25	3.39	0.07	RL	0.65	3.48	0.19	RL	0.04	-0.02	0.05	0.80
3	RL	-0.62	3.39	0.18	RL	0.91	3.48	0.26	RL	0.10	-0.09	0.09	0.80
4	LL	0.63	3.39	0.18	LL	0.91	3.48	0.26	LL	0.10	-0.09	0.09	0.80
5	LL	0.21	3.39	0.06	LL	0.60	3.48	0.17	LL	0.03	-0.04	0.04	0.80
6	LL	0.21	3.39	0.06	MS	-0.41	3.48	0.12	LL	0.01	-0.02	0.04	0.78
7	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00	-0.01	0.01	0.01

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Lap_Shear (k)	Left	Right	Ratio
2		0.23			0.12
3		0.23	0.40	0.20	
4		0.40	0.21	0.11	
5		0.21	0.10	0.05	
6		0.10			0.05

LOAD COMBINATION # 9 : DL+CL+2.0AUX4

PURLIN ANALYSIS:

Span	Id	Shear (k)	Left	Right	Sup	Left	Right	Sup	Left	Right	Sup	Moment (f-k)
1		0.00										0.00
2		0.17	-0.21	-0.24								0.02
3		0.18	-0.14	-0.25								0.41
4		0.61	-0.50	-0.74								0.84
5		0.73	0.62	-0.62								1.59
6		0.28	0.25	-0.13								0.92
7		0.02										0.02

STRENGTH/DEFLECTION:

Span	Id	Shear (k)	Loc	Calc Allow	UC	Loc	Moment (f-k)	UC	Loc	Mom+Shr	Deflection (in)	Calc Allow
1	RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01	LS	0.00	0.01	0.02
2	RL	-0.21	3.39	0.06	MS	-0.41	3.48	0.12	RL	0.01	-0.02	0.05
3	RL	-0.63	3.39	0.18	RL	0.91	3.48	0.26	RL	0.03	-0.09	0.09
4	RL	-0.63	3.39	0.18	RL	0.91	3.48	0.26	RL	0.10	-0.09	0.09
5	LL	0.62	3.39	0.18	LL	0.91	3.48	0.26	LL	0.10	-0.09	0.09
6	LL	0.25	3.39	0.07	LL	0.65	3.48	0.19	LL	0.04	-0.05	0.05
7	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00	-0.02	0.05

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Shear (k)	Left	Right	Right	Sup	Moment (f-k)	Left	Lap	Mom	Loc	Mom+Shr	Deflection (in)
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1	1	0.00	0.17	0.22	0.23	0.00	0.00	0.00	-0.37	4.66	0.27	0.02	0.02
2	2	0.13	0.18	-0.17	-0.19	-0.25	0.02	0.50	0.30	6.11	0.26	0.46	0.50
3	3	0.22	0.20	-0.16	-0.19	-0.29	0.46	0.23	0.12	6.52	0.06	0.23	0.46
4	4	0.13	0.10	-0.26	-0.29	-0.57	1.17	0.23	0.49	6.61	0.90	1.17	0.15
5	5	0.75	0.63			0.00	1.17	0.15		1.29		0.15	0.00
6	6	0.16	0.39	0.05	LS	0.15	-1.29	3.48	0.37	0.05	0.09	-0.18	0.78
7	7	0.63	3.39	0.19	MS	0.15	0.90	3.48	0.26	0.07	0.06	0.06	0.80

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Lap	Shear (k)	Left	Right	Shear_Ratio
-----	-----	-----	-----	-----	-----	-----
2	2	0.13	0.13	0.06	0.06	0.06
3	3	0.13	0.11	0.06	0.06	0.06
4	4	0.11	0.06	0.03	0.03	0.15
5	5	0.06	0.29	0.03	0.15	
6	6	0.29				

LOAD COMBINATION #12 : DL+CL+2.0AUX7

PURLIN ANALYSIS:

Span	Id	Shear (k)	Left	Right	Right	Sup	Moment (f-k)	Left	Lap	Mom	Loc	Mom+Shr	Deflection (in)
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1	1	0.00	0.13	-0.25	-0.29	-0.14	0.00	0.14	0.00	0.00	0.00	0.00	0.14
2	2	0.69	0.58	-0.54	-0.66	0.14	0.08	1.08	0.44	-0.09	3.59	0.81	1.08
3	3	0.21	0.18	-0.18	-0.21	0.85	0.66	0.66	0.21	-1.07	6.16	0.25	0.85
4	4	0.66	0.54	-0.58	-0.69	0.85	0.25	0.81	-0.09	-1.07	5.84	0.66	0.85
5	5	0.29	0.25			1.08	-0.09	8.08			8.08	0.44	0.14
6	6	0.14	0.14			0.00	0.00	1.83			1.83		0.00
7	7	0.14				0.00							0.00

Augustal Purlin Design Report (Surface 3) 10/28/07 6:20pm

ROOF PURLIN

DESIGN RUN # 2, SURFACE # 3
(Edge Strip Zone= 3.70)

PURLIN LAYOUT: (Purlin Id= 5)

Bay	Span	Purlin	Id	Id	Size	Span	--Lap (ft)--	Load	No.	Brace
1	1	6X25Z16	1.83	1.83	3.85	0				
2	2	6X25Z16	11.67	1.00	3.85	0				
3	3	6X25Z16	12.00	1.00	3.85	0				
4	4	6X25Z16	12.00	1.00	3.85	0				
5	5	6X25Z16	12.00	1.00	3.85	0				
6	6	6X25Z16	11.67	1.00	3.85	0				
7	7	6X25Z16	1.83	1.83	3.85	0				

LOAD COMBINATION # 1 : DL+CL+1.5SL

PURLIN ANALYSIS:

Span	Id	Shear (k)	Left	Right	Lap	Sup	Left	Right	Sup	Left	Right	Moment (F-k)
1	1	0.00					0.00			0.00		0.00
2	2	0.63					0.18			-1.32		4.73
3	3	0.83	0.70	-0.64			1.91	1.14		-0.69		6.22
4	4	0.80	0.67	-0.67			1.55	0.81		-0.86		6.00
5	5	0.77	0.64	-0.70			1.55	0.84		-0.69	1.14	5.78
6	6	0.93					1.91			-1.32		6.94
7	7	0.20					0.18			0.00		1.83

STRENGTH/DEFLECTION:

Span	Id	Shear (k)	Loc	Calc Allow	UC	Moment (F-k)	Loc	Calc Allow	UC	Mom+Shr	Loc	UC	Deflection (in)
1	RS	-0.20	3.39	0.06	RS	0.18	3.48	0.05	RS	0.01			0.09
2	RL	-0.80	3.39	0.24	MS	-1.32	3.48	0.38	TL	0.15			-0.16
3	LT	0.70	3.39	0.21	RL	1.14	3.48	0.33	RL	0.15			-0.05
4	RL	-0.67	3.39	0.20	MS	-0.86	3.48	0.25	RL	0.09			-0.09
5	RL	-0.70	3.39	0.21	RL	1.14	3.48	0.33	RL	0.15			0.80
6	LT	0.80	3.39	0.24	MS	-1.32	3.48	0.38	TL	0.15			0.80
7	LS	0.20	3.39	0.06	LS	0.18	3.48	0.05	LS	0.01			0.78

PURLIN ANALYSIS:

Span	Id	Shear(k)		Moment (F-k)		Mom+Shr		Deflection(in)	
		Left	Right	Left	Right	Loc	UC	Loc	UC
1		Sup	Sup	Sup	Sup	0.00	0.00	0.00	0.00
2		Sup	Sup	Sup	Sup	0.00	0.00	0.00	0.00
3		Sup	Sup	Sup	Sup	0.00	0.00	0.00	0.00
4		Sup	Sup	Sup	Sup	0.00	0.00	0.00	0.00
5		Sup	Sup	Sup	Sup	0.00	0.00	0.00	0.00
6		Sup	Sup	Sup	Sup	0.00	0.00	0.00	0.00
7		Sup	Sup	Sup	Sup	0.00	0.00	0.00	0.00

STRENGTH/DEFLECTION:

Span	Id	Shear(k)		Moment (F-k)		Mom+Shr		Deflection(in)	
		Left	Right	Left	Right	Loc	UC	Loc	UC
1		LS	RS	LS	RS	0.01	0.01	0.01	0.01
2		LS	LS	LS	LS	0.01	0.01	0.01	0.01
3		LS	LS	LS	LS	0.01	0.01	0.01	0.01
4		LS	LS	LS	LS	0.01	0.01	0.01	0.01
5		LS	LS	LS	LS	0.01	0.01	0.01	0.01
6		LS	LS	LS	LS	0.01	0.01	0.01	0.01
7		LS	LS	LS	LS	0.01	0.01	0.01	0.01

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Shear_Ratio		Lap_Shear(k)	
		Left	Right	Left	Right
2		0.07	0.07	0.07	0.07
3		0.07	0.07	0.07	0.07
4		0.05	0.05	0.05	0.05
5		0.05	0.05	0.05	0.05
6		0.07	0.07	0.07	0.07

LOAD COMBINATION # 4 : DL+CL+0.75WP+0.75WS

PURLIN ANALYSIS:

Span	Id	Shear(k)		Moment (F-k)		Mom+Shr		Deflection(in)	
		Left	Right	Left	Right	Loc	UC	Loc	UC
1		Sup	Sup	Sup	Sup	0.00	0.00	0.00	0.00
2		Sup	Sup	Sup	Sup	0.00	0.00	0.00	0.00
3		Sup	Sup	Sup	Sup	0.00	0.00	0.00	0.00
4		Sup	Sup	Sup	Sup	0.00	0.00	0.00	0.00
5		Sup	Sup	Sup	Sup	0.00	0.00	0.00	0.00
6		Sup	Sup	Sup	Sup	0.00	0.00	0.00	0.00
7		Sup	Sup	Sup	Sup	0.00	0.00	0.00	0.00

Span	Lap-Shear(k)	Shear-Ratio
Id	Left	Right
2	0.02	0.01
3	0.02	0.01
4	0.02	0.01
5	0.02	0.01
6	0.02	0.01

[illegible]

Span	Id	Loc	Shear (k)	Loc	Moment (F-k)	Loc	Mom+Shr	Deflection (in)
1	RS	-0.16	3.39	0.05	RS	0.15	3.48	0.04
	RL	-0.63	3.39	0.19	MS	-1.29	3.48	0.37
2	TL	0.26	3.39	0.08	TL	0.90	3.40	0.26
	RL	-0.20	3.39	0.06	MS	-0.30	3.48	0.09
4	RL	-0.18	3.39	0.05	RL	0.30	3.48	0.09
	TL	0.21	3.39	0.06	MS	-0.37	3.48	0.11
6	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01
	7	LS	0.02	3.39	0.01	LS	0.02	3.48

$$\text{Bolt} = 0.500 \text{ (A307)}$$

Span	Id	Lap-Shear (k)	Shear-Ratio
2	Left	0.29	0.15
3	Left	0.29	0.15
4	Left	0.06	0.03
5	Left	0.11	0.06
6	Left	0.13	0.06

LOAD COMBINATION # 7 : DL+CL+2.0AUx2

Span	Id	Shear (k)		Calc Allow		UC	Loc	Moment (F-k)		UC	Loc	Mom+Shr		Deflection (in)
		Shear	Ratio	Shear	Ratio			Moment	Ratio	Moment	Ratio	Mom+Shr	Ratio	
1	RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01	LS	0.00	LS	0.00	0.01	-0.02
2	RL	-0.25	3.39	0.07	RL	0.65	3.48	0.19	RL	0.04	RL	0.03	0.04	0.80
3	RL	-0.62	3.39	0.18	RL	0.91	3.48	0.26	RL	0.10	RL	0.10	-0.09	0.80
4	LT	0.63	3.39	0.18	LT	0.91	3.48	0.26	LT	0.10	LT	0.10	-0.09	0.80
5	LT	0.21	3.39	0.06	LT	0.60	3.48	0.17	LT	0.03	LT	0.03	0.04	0.80
6	LT	0.21	3.39	0.06	MS	-0.41	3.48	0.12	LT	0.01	LT	0.01	-0.02	0.78
7	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00	LS	0.00	0.01	-0.02

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Left	Right	Left	Right
2		0.23	0.12	0.12	0.20
3		0.40	0.12	0.20	0.11
4		0.40	0.21	0.10	0.05
5		0.21	0.10	0.11	0.05
6		0.10	0.05	0.05	0.05

LOAD COMBINATION # 9 : DL+CL+2.0AUX4

PURLIN ANALYSIS:

Span	Id	Shear (k)		Calc Allow		UC	Loc	Moment (F-k)		UC	Loc	Mom+Shr		Deflection (in)
		Shear	Ratio	Shear	Ratio			Moment	Ratio	Moment	Ratio	Mom+Shr	Ratio	
1	Sup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	Left	0.17	-0.21	0.14	-0.21	0.02	-0.41	0.25	-0.04	4.90	0.18	0.00	0.18	0.41
3	Left	0.18	-0.21	0.50	-0.63	0.41	0.84	0.28	-0.83	5.00	0.60	0.00	0.60	0.84
4	Left	0.61	-0.63	0.73	-0.62	1.59	0.91	0.91	-0.79	6.50	0.91	0.00	0.91	1.59
5	Left	0.73	-0.62	0.62	-0.51	0.92	0.65	0.65	-0.22	8.00	0.02	0.00	0.02	0.92
6	Left	0.28	-0.13	0.25	-0.13	0.92	0.65	0.65	-0.22	8.00	0.02	0.00	0.02	0.92
7	Left	0.02	0.00	0.02	0.00	0.02	0.00	0.00	0.00	1.83	0.00	0.00	0.00	0.00

STRENGTH/DEFLECTION:

Span	Id	Shear (k)		Calc Allow		UC	Loc	Moment (F-k)		UC	Loc	Mom+Shr		Deflection (in)
		Shear	Ratio	Shear	Ratio			Moment	Ratio	Moment	Ratio	Mom+Shr	Ratio	
1	RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01	LS	0.00	LS	0.00	0.01	-0.02
2	RL	-0.21	3.39	0.06	MS	-0.41	3.48	0.12	RL	0.01	RL	0.01	-0.02	0.78
3	RL	-0.63	3.39	0.18	RL	0.60	3.48	0.17	RL	0.03	RL	0.03	0.04	0.80
4	RL	-0.63	3.39	0.18	RL	0.91	3.48	0.26	RL	0.10	RL	0.10	-0.09	0.80
5	LT	0.62	3.39	0.18	LT	0.91	3.48	0.26	LT	0.10	LT	0.10	-0.09	0.80
6	LT	0.25	3.39	0.07	LT	0.65	3.48	0.19	LT	0.04	LT	0.04	0.05	0.80
7	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00	LS	0.00	0.05	0.78

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Shear (k)	Moment (F-k)	Mom+Shr	Deflection (in)
Left	Sup	Left	Left	Midspan	Right
Right	Lap	Right	Lap	Loc	Sup
1	0.00	-0.21	0.00	0.00	0.02
2	0.17	-0.18	-0.37	4.66	0.50
3	0.22	-0.17	-0.16	6.11	0.26
4	0.23	-0.16	-0.30	6.52	0.06
5	0.13	-0.26	-0.02	3.79	0.90
6	0.75	0.63	-1.29	6.61	0.15
7	0.16		0.00	1.83	0.00

STRENGTH/DEFLECTION:

Span	Id	Shear (k)	Moment (F-k)	Mom+Shr	Deflection (in)
Left	Sup	Left	Left	Midspan	Right
Right	Lap	Right	Lap	Loc	Sup
1	RS	-0.02	0.02	0.01	0.00
2	RL	-0.21	-0.37	0.11	0.01
3	LL	0.18	0.30	0.09	0.01
4	LL	0.20	-0.30	0.09	0.01
5	RL	-0.26	0.90	0.26	0.07
6	LL	0.63	-1.29	0.37	0.05
7	LS	0.16	0.15	0.04	0.00

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Shear_Ratio
Left	Left	Left
Right	Right	Right
2	0.13	0.06
3	0.13	0.06
4	0.11	0.03
5	0.06	0.15
6	0.29	0.15

LOAD COMBINATION #12 : DL+CL+2.0AUX7

PURLIN ANALYSIS:

Span	Id	Shear (k)	Moment (F-k)	Mom+Shr	Deflection (in)
Left	Sup	Left	Left	Midspan	Right
Right	Lap	Right	Lap	Loc	Sup
1	0.00	-0.25	0.00	0.00	0.14
2	0.13	-0.29	-0.09	3.59	1.08
3	0.69	-0.54	-1.07	6.16	0.85
4	0.21	-0.18	-1.07	6.00	0.85
5	0.66	-0.58	-1.07	5.84	1.08
6	0.29	-0.13	-0.09	8.08	0.14
7	0.14		0.00	1.83	0.00

STRENGTH/DEFLECTION:

Span Id Shear (k) Moment (F-k) Mom+Shr Deflection (in)

Augusta1 Purlin Design Report (Extension 1) 10/28/07 6:20pm

EAVE EXTENSION TOP PURLIN
EXTENSION ID # 1, WALL # 2
(Extension width= 1.50)

.. No Purlins Required!

Augusta1 Eave Strut Design Report (Extension 1) 10/28/07 6:20pm

EAVE EXTENSION EAVE STRUT
EXTENSION ID # 1, WALL # 2
(Extension width= 1.50)

EAVE STRUT LAYOUT:

Bay	Span	Eave	Span	Space	No.	Weight
Id	Id	Part	(ft)	(ft)	Brace	
1	1	6X25Z16	1.83	1.31	0	4.5
2	2	6X25Z16	11.50	1.31	2	28.5
3	3	6X25Z16	11.67	1.31	2	28.9
4	4	6X25Z16	11.67	1.31	2	28.9
5	5	6X25Z16	11.67	1.31	2	28.9
6	6	6X25Z16	11.50	1.31	2	28.5
7	7	6X25Z16	1.83	1.31	0	4.5
Total (lb) =						152.9

STRESS/DEFLECTION:

Span	Load	Id	---Shear (k)---	Calc Allow	UC	---Moment (F-k)---	Calc Allow	UC	---Deflect (in)---	Calc Allow	UC
1	1	1	-0.10	3.39	0.03	0.09	3.48	0.03	0.08		
2	2	2	-0.01	3.39	0.00	0.01	3.48	0.00	0.00		
3	3	3	0.07	3.39	0.02	-0.06	3.48	0.02	-0.06		
4	4	4	0.11	3.39	0.03	-0.10	3.48	0.03	-0.10		
5	5	5	0.00	3.39	0.00	0.00	3.48	0.00	0.00		
1	1	1	0.32	3.39	0.09	-0.85	3.48	0.24	-0.16	0.7	0.21
2	2	2	0.02	3.39	0.01	-0.06	3.48	0.02	0.00	1.1	0.00
3	3	3	-0.21	3.39	0.06	0.56	3.48	0.16	0.12	1.1	0.11

Span	Id	Shear (k)	Left	Right	Left	Right	Left	Right	Left	Right	Sup
1	1	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14
2	2	0.58	0.70	-0.25	0.14	0.08	-0.09	3.59	0.81	0.25	1.08
3	3	0.18	0.21	-0.55	1.08	0.66	-1.07	6.16	0.25	0.85	0.85
4	4	0.66	0.66	-0.18	0.85	0.66	0.21	6.00	0.66	0.85	1.08
5	5	0.25	0.29	-0.58	1.08	0.85	-1.07	5.84	0.44	0.14	0.14
6	6	0.14	0.29	0.25	0.13	1.08	-0.09	8.08		0.00	0.00
7	7	0.14	0.14		0.00	0.14	0.00	1.83			

STRENGTH/DEFLECTION:

Span	Id	Shear (k)	Loc	Calc Allow	UC	Loc	Calc Allow	UC	Mom+Shr	Deflection (in)
1	RS	-0.14	3.39	0.04	RS	3.48	0.04	RS	0.00	-0.04
2	RL	-0.25	3.39	0.07	RL	3.48	0.23	RL	0.06	0.08
3	LT	0.58	3.39	0.17	LT	3.48	0.31	LT	0.05	-0.17
4	RL	-0.18	3.39	0.05	RL	2.56	0.26	RL	0.04	0.12
5	RL	-0.58	3.39	0.17	RL	3.48	0.31	RL	0.05	0.80
6	LT	0.25	3.39	0.07	LT	3.48	0.23	LT	0.06	0.80
7	LS	0.14	3.39	0.04	LS	3.48	0.04	LS	0.00	-0.04

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Lap_Shear (k)	Left	Right	Shear_Ratio
2	2	0.27	0.14	0.11	0.14
3	3	0.27	0.21	0.11	0.11
4	4	0.21	0.21	0.11	0.11
5	5	0.21	0.27	0.11	0.14
6	6	0.27			

LOAD COMBINATION #13 : DL+CL+2.0AUX8

PURLIN ANALYSIS:

Span	Id	Shear (k)	Left	Right	Left	Right	Left	Right	Left	Right	Sup
1	1	0.00	0.57	-0.63	0.02	0.00	0.00	0.00	0.00	0.02	0.00
2	2	0.23	0.19	-0.16	1.05	0.84	-1.42	5.05	0.36	1.05	0.86
3	3	0.68	0.56	-0.56	0.86	0.24	-1.17	6.44	0.68	0.86	1.05
4	4	0.20	0.16	-0.19	0.86	0.68	0.31	5.56	0.84	0.02	0.02
5	5	0.75	0.63	-0.57	1.05	0.36	-1.42	6.61		0.00	0.00
6	6	0.05			0.02		0.00	1.83			
7	7	0.05			0.00		0.00				

STRENGTH/DEFLECTION:

Span Id Shear (k) Loc Calc Allow UC Moment (f-k) UC Deflection (in) Mom+Shr UC Deflection (in) Calc Allow

Load_Location	Start	End	Load_Type
0.000	3.700	Edge Zone Wind	
16.342	20.042	Edge Zone Wind	

Augustal Purlin Design Report (Surface 3) 10/28/07 6:20pm

ROOF PURLIN

DESIGN RUN # 2, SURFACE # 3
(Edge Strip Zone= 3.70)

PURLIN LAYOUT: (Purlin Id= 2)

Bay	Span	Purlin	Id	Id	Size	Span	--Lap (ft)--	Left	Right	Width	Load	No.
1	1	6X25Z16	1.83					1.00	3.86	0		0
2	2	6X25Z16	11.67					1.00	3.86	0		0
3	3	6X25Z16	12.00					1.00	3.86	0		0
4	4	6X25Z16	12.00					1.00	3.86	0		0
5	5	6X25Z16	12.00					1.00	3.86	0		0
6	6	6X25Z16	11.67					1.00	3.86	0		0
7	7	6X25Z16	1.83						3.86	0		0

LOAD COMBINATION # 1 : DL+CL+1.5SL

PURLIN ANALYSIS:

Span	Id	Left	Sup	Shear (k)	Left	Right	Lap	Sup	Left	Right	Mom	MidSpan	Right	Sup
1	1	0.00	0.00	-0.20	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00
2	2	0.64	-0.80	-0.93	0.18	0.00			-1.32	4.73	0.00	1.05	1.92	0.18
3	3	0.84	0.70	-0.64	-0.78	1.92			1.15	-0.69	6.22	0.84	1.55	1.55
4	4	0.81	0.67	-0.67	-0.81	1.55			0.81	-0.87	6.00	0.81	1.55	1.55
5	5	0.78	0.64	-0.70	-0.84	1.55			0.84	-0.69	5.78	1.15	1.92	0.18
6	6	0.93	0.80	-0.64	-0.64	1.92			1.05	-1.32	6.94		0.18	0.00
7	7	0.20			0.18	0.00				0.00	1.83			

STRENGTH/DEFLECTION:

Span	Id	Loc	Calc Allow	Shear (k)	UC	Loc	Calc Allow	Moment (F-k)	UC	Loc	Mom+Shr	Deflection (in)
1	RS	-0.20	3.39	0.06	RS	0.18	3.48	0.05	RS	0.01	0.09	
2	RL	-0.80	3.39	0.24	MS	-1.32	3.48	0.38	RL	0.15	-0.16	0.78
3	LT	0.70	3.39	0.21	LT	1.15	3.48	0.33	LT	0.15	-0.05	0.80
4	RL	-0.67	3.39	0.20	MS	-0.87	3.48	0.25	RL	0.09	-0.09	0.80
5	RL	-0.70	3.39	0.21	RL	1.15	3.48	0.33	RL	0.15	-0.05	0.80
6	LT	0.80	3.39	0.24	MS	-1.32	3.48	0.38	LT	0.15	-0.16	0.78

PURLIN ANALYSIS:

Span	Id	Left	Right	Shear (k)	Left	Right	Shear (k)	Left	Right	Moment (F-k)	Left	Right	Moment (F-k)	Left	Right	Deflection (in)
1	1	Sup	Sup	0.00	0.24	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	2	Sup	Sup	-0.26	0.12	0.12	0.12	0.12	0.12	-0.22	0.13	0.13	-0.22	0.13	0.13	-0.22
3	3	Sup	Sup	-0.11	0.09	0.10	0.09	0.10	0.10	-0.18	0.08	0.08	-0.18	0.08	0.08	-0.18
4	4	Sup	Sup	-0.10	0.09	0.10	0.09	0.10	0.10	-0.19	0.12	0.12	-0.19	0.12	0.12	-0.19
5	5	Sup	Sup	-0.10	0.08	0.11	0.08	0.11	0.11	-0.19	0.10	0.10	-0.19	0.10	0.10	-0.19
6	6	Sup	Sup	-0.14	0.12	0.26	0.12	0.26	0.26	-0.28	0.15	0.15	-0.28	0.15	0.15	-0.28
7	7	Sup	Sup	-0.24	0.09	0.00	0.09	0.00	0.00	-0.22	0.00	0.00	-0.22	0.00	0.00	0.00

STRENGTH/DEFLECTION:

Span	Id	Loc	Calc Allow	UC	Loc	Calc Allow	UC	Moment (F-k)	Loc	Calc Allow	UC	Moment (F-k)	Loc	Calc Allow	UC	Deflection (in)
1	1	RS	0.24	0.07	RS	-0.22	0.06	3.48	RS	0.01	0.01	3.48	RS	0.01	0.01	-0.05
2	2	LS	-0.26	0.08	LS	-0.22	0.06	3.48	LS	0.01	0.01	3.48	LS	0.01	0.01	-0.05
3	3	LS	-0.09	0.03	LS	-0.18	0.05	3.48	LS	0.00	0.00	3.48	LS	0.00	0.00	0.10
4	4	RL	0.09	0.03	MS	0.12	0.05	2.61	RL	0.00	0.00	2.61	RL	0.00	0.00	0.03
5	5	RL	0.09	0.03	RL	-0.18	0.05	3.48	RL	0.00	0.00	3.48	RL	0.00	0.00	0.10
6	6	RS	0.26	0.08	RS	-0.22	0.06	3.48	RS	0.01	0.01	3.48	RS	0.01	0.01	0.10
7	7	LS	-0.24	0.07	LS	-0.22	0.06	3.48	LS	0.01	0.01	3.48	LS	0.01	0.01	0.10

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Left	Right	Shear Ratio	Left	Right	Shear Ratio
2	2	Sup	Sup	0.07	0.04	0.04	0.04
3	3	Sup	Sup	0.07	0.05	0.02	0.02
4	4	Sup	Sup	0.05	0.05	0.02	0.02
5	5	Sup	Sup	0.05	0.07	0.02	0.02
6	6	Sup	Sup	0.07	0.04	0.04	0.04

LOAD COMBINATION # 4 : DL+CL+0.75WP+0.75WS

PURLIN ANALYSIS:

Span	Id	Left	Right	Shear (k)	Left	Right	Shear (k)	Left	Right	Moment (F-k)	Left	Right	Moment (F-k)	Left	Right	Deflection (in)
1	1	Sup	Sup	0.00	0.33	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	2	Sup	Sup	-0.30	0.16	0.18	0.16	0.18	0.18	-0.30	0.19	0.19	-0.30	0.19	0.19	-0.30
3	3	Sup	Sup	-0.16	0.12	0.14	0.12	0.14	0.14	-0.38	0.12	0.12	-0.38	0.12	0.12	-0.38
4	4	Sup	Sup	-0.15	0.13	0.15	0.13	0.15	0.15	-0.29	0.17	0.17	-0.29	0.17	0.17	-0.29
5	5	Sup	Sup	-0.14	0.12	0.16	0.12	0.16	0.16	-0.29	0.12	0.12	-0.29	0.12	0.12	-0.29
6	6	Sup	Sup	-0.18	0.16	0.30	0.16	0.30	0.30	-0.38	0.19	0.19	-0.38	0.19	0.19	-0.38

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Lap_Shear(k)	Shear_Ratio
2	Left	0.02	0.01
3	Left	0.02	0.01
4	Left	0.02	0.01
5	Left	0.02	0.01
6	Left	0.02	0.01

LOAD COMBINATION # 6 : DL+CL+2.0AUX1

PURLIN ANALYSIS:

Span	Id	Left	Right	Lap	Sup	Shear(k)	Left	Right	Lap	Sup	Moment (F-k)	Midspan	Loc	Mom	Deflection (in)
1	Left	0.00	0.00			-0.16	0.00	0.00			0.00	0.00			0.15
2	Left	0.57	-0.63			-0.75	0.15	-1.29			-1.29	5.05			1.18
3	Left	0.29	-0.10			-0.14	1.18	0.90			-0.02	8.21			0.23
4	Left	0.20	-0.20			-0.23	0.23	0.06			-0.30	5.48			0.46
5	Left	0.21	-0.17			-0.22	0.46	0.27			-0.16	5.89			0.50
6	Left	0.25	0.21			-0.17	0.50	0.27			-0.37	7.00			0.02
7	Left	0.02				0.00	0.02				0.00	1.83			0.00

STRENGTH/DEFLECTION:

Span	Id	Loc	Calc Allow	UC	Loc	Calc Allow	UC	Moment (F-k)	Loc	Calc Allow	UC	Mom+Shr	Deflection (in)
1	RS	3.39	0.05	RS	0.15	3.48	0.04	3.48	0.04	RS	0.00	0.00	0.09
2	RL	-0.63	0.19	MS	-1.29	3.48	0.37	3.48	0.37	RL	0.05	0.05	-0.18
3	LT	0.26	0.08	LT	0.90	3.40	0.27	3.40	0.27	LT	0.07	0.07	0.80
4	RL	-0.20	0.06	MS	-0.30	3.48	0.09	3.48	0.09	RL	0.01	0.01	-0.02
5	RL	-0.18	0.05	RT	0.30	3.48	0.09	3.48	0.09	RL	0.01	0.01	0.01
6	LT	0.21	0.06	MS	-0.37	3.48	0.11	3.48	0.11	LT	0.01	0.01	-0.01
7	LS	0.02	0.01	LS	0.02	3.48	0.01	3.48	0.01	LS	0.00	0.00	0.00

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Lap_Shear(k)	Shear_Ratio
2	Left	0.29	0.15
3	Left	0.06	0.03
4	Left	0.06	0.03
5	Left	0.11	0.06
6	Left	0.13	0.06

LOAD COMBINATION # 7 : DL+CL+2.0AUX2

STRENGTH/DEFLECTION:

Span	Id	Shear (k)	Loc	Calc Allow	UC	Loc	Calc Allow	Mom+Shr	Deflection (in)
1	RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01	LS 0.00
2	RL	-0.25	3.39	0.07	RL	0.65	3.48	0.19	LS 0.00
3	RL	-0.62	3.39	0.18	RL	0.92	3.48	0.12	LS 0.00
4	LL	0.63	3.39	0.19	LL	0.91	3.48	0.26	LS 0.00
5	LL	0.21	3.39	0.06	LL	0.61	3.48	0.17	LS 0.00
6	LL	0.21	3.39	0.06	MS	-0.41	3.48	0.12	LS 0.00
7	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS 0.00

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Lap_Shear (k)	Shear_Ratio
2	Left	0.23	0.12
3	Left	0.40	0.20
4	Left	0.21	0.11
5	Left	0.21	0.10
6	Left	0.10	0.05

LOAD COMBINATION # 9 : DL+CL+2.0AUX4

PURLIN ANALYSIS:

Span	Id	Shear (k)	Left	Right	Lap	Sup	Left	Right	Lap	Sup	Moment (f-k)
1	Left	0.00					0.00				0.00
2	Left	0.17	-0.21	-0.24			-0.41				0.00
3	Left	0.18	-0.14	-0.25			-0.04				0.00
4	Left	0.61	-0.50	-0.74			0.28				0.00
5	Left	0.73	-0.62	-0.62			-0.79				0.00
6	Left	0.29	0.25	-0.13			-0.22				0.00
7	Left	0.02					0.00				0.00

STRENGTH/DEFLECTION:

Span	Id	Shear (k)	Loc	Calc Allow	UC	Loc	Calc Allow	Mom+Shr	Deflection (in)
1	RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01	LS 0.00
2	RL	-0.21	3.39	0.06	RL	0.61	3.48	0.12	LS 0.00
3	RL	-0.63	3.39	0.19	RL	0.91	3.48	0.26	LS 0.00
4	RL	-0.63	3.39	0.19	RL	0.91	3.48	0.26	LS 0.00
5	LL	0.62	3.39	0.18	LL	0.92	3.48	0.26	LS 0.00
6	LL	0.25	3.39	0.07	LL	0.65	3.48	0.19	LS 0.00
7	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS 0.00

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Shear (k)	Moment (f-k)	Mom+Shr	Deflection (in)
1	Left	0.00	0.00	0.00	0.02
2	Left	0.17	0.02	0.00	0.50
3	Left	0.22	0.50	4.66	0.27
4	Left	0.23	0.46	6.11	0.06
5	Left	0.14	0.23	6.52	0.90
6	Left	0.75	1.18	6.61	0.15
7	Left	0.16	0.15	1.83	0.00

STRENGTH/DEFLECTION:

Span	Id	Shear (k)	Moment (f-k)	Mom+Shr	Deflection (in)
1	RS	-0.02	0.02	0.00	0.00
2	RL	-0.21	-0.37	0.01	-0.01
3	LL	0.18	0.30	0.01	0.01
4	LL	0.20	-0.30	0.01	-0.02
5	RL	-0.26	0.30	0.07	0.06
6	LL	0.63	-1.29	0.05	-0.18
7	LS	0.16	0.15	0.00	0.09

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Lap_Shear (k)	Shear_Ratio
2	Left	0.13	0.06
3	Left	0.11	0.06
4	Left	0.06	0.03
5	Left	0.06	0.03
6	Left	0.29	0.15

LOAD COMBINATION #12 : DL+CL+2.0AUX7

PURLIN ANALYSIS:

Span	Id	Shear (k)	Moment (f-k)	Mom+Shr	Deflection (in)
1	Left	0.00	0.00	0.00	0.14
2	Left	0.13	0.14	0.00	1.08
3	Left	0.70	1.08	3.59	0.81
4	Left	0.21	0.85	6.00	0.25
5	Left	0.66	0.85	5.84	0.66
6	Left	0.29	1.08	8.08	0.14
7	Left	0.14	0.14	1.83	0.00

DESIGN RUN # 2, SURFACE # 3

[illegible]

0	3.85	1.83	6X25Z16	1
0	3.85	11.67	6X25Z16	2
0	3.85	12.00	6X25Z16	3
0	3.85	12.00	6X25Z16	4
0	3.85	12.00	6X25Z16	5
0	3.85	11.67	6X25Z16	6
0	3.85	1.83	6X25Z16	7

LOAD COMBINATION # 1 : DL+CL+1.5SL

-----Shear (k) -----									
Span	Id	Left	Sup	Left	Lap	Right	Lap	Right	Sup
1		0.00		-0.20		0.00		0.00	
2		0.63		-0.80		-0.93		0.18	
3		0.83		0.70		-0.77		1.91	
4		0.80		0.67		-0.80		1.55	
5		0.77		0.64		-0.83		1.55	
6		0.93		0.80		-0.63		1.91	
7		0.20				0.00		0.18	
-----Moment (F-k) -----									
Span	Id	Left	Sup	Left	Lap	Right	Lap	Right	Sup
1		0.00		0.00		0.00		0.00	
2		4.73		-1.32		4.73		0.00	
3		6.22		-0.69		6.22		1.83	
4		6.00		-0.86		6.00		1.83	
5		5.78		-0.69		5.78		1.83	
6		6.94		-1.32		6.94		1.83	
7		1.83		0.00		0.00		0.00	

Span	Id	-----Shear(k)	-----Calc Allow	UC	Loc	-----Moment(F-k)	-----Calc Allow	UC	Loc	Mom+Shr	Deflection(in)	Calc Allow
1	RS	-0.20	3.39	0.06	RS	0.18	3.48	0.05	RS	0.01	0.09	-----
2	RT	-0.80	3.39	0.24	MS	-1.32	3.48	0.38	RL	0.15	-0.16	0.78
3	LT	0.70	3.39	0.21	LT	1.14	3.48	0.33	LT	0.15	-0.05	0.80
4	RT	-0.67	3.39	0.20	MS	-0.86	3.48	0.25	RL	0.09	-0.09	0.80
5	RT	-0.70	3.39	0.21	RL	1.14	3.48	0.33	RL	0.15	-0.05	0.80
6	LT	0.80	3.39	0.24	MS	-1.32	3.48	0.38	LT	0.15	-0.16	0.78
7	LS	0.20	3.39	0.06	LS	0.18	3.48	0.05	LS	0.01	0.09	-----

PURLIN ANALYSIS:

Span	Id	Shear (k)		Moment (f-k)		Deflection (in)	
		Left	Right	Left	Right	Calc	Allow
1	Sup	0.00	0.00	0.00	0.00	0.00	0.00
2	Sup	-0.13	0.00	-0.22	0.00	0.00	0.00
3	Sup	0.00	0.00	0.00	0.00	0.00	0.00
4	Sup	0.00	0.00	0.00	0.00	0.00	0.00
5	Sup	0.00	0.00	0.00	0.00	0.00	0.00
6	Sup	0.00	0.00	0.00	0.00	0.00	0.00
7	Sup	-0.24	0.00	-0.22	0.00	0.00	0.00

STRENGTH/DEFLECTION:

Span	Id	Shear (k)		Moment (f-k)		Deflection (in)	
		Left	Right	Left	Right	Calc	Allow
1	Sup	0.00	0.00	0.00	0.00	0.00	0.00
2	Sup	-0.13	0.00	-0.22	0.00	0.00	0.00
3	Sup	0.00	0.00	0.00	0.00	0.00	0.00
4	Sup	0.00	0.00	0.00	0.00	0.00	0.00
5	Sup	0.00	0.00	0.00	0.00	0.00	0.00
6	Sup	0.00	0.00	0.00	0.00	0.00	0.00
7	Sup	-0.24	0.00	-0.22	0.00	0.00	0.00

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Shear Ratio	
		Left	Right
2	Sup	0.00	0.00
3	Sup	0.00	0.00
4	Sup	0.00	0.00
5	Sup	0.00	0.00
6	Sup	0.00	0.00

LOAD COMBINATION # 4 : DL+CL+0.75WP+0.75WS

PURLIN ANALYSIS:

Span	Id	Shear (k)		Moment (f-k)		Deflection (in)	
		Left	Right	Left	Right	Calc	Allow
1	Sup	0.00	0.00	0.00	0.00	0.00	0.00
2	Sup	-0.17	0.04	-0.30	0.00	0.00	0.00
3	Sup	-0.05	0.04	-0.09	0.05	0.00	0.00
4	Sup	-0.05	0.04	-0.09	0.05	0.00	0.00
5	Sup	-0.05	0.04	-0.09	0.05	0.00	0.00
6	Sup	-0.05	0.04	-0.09	0.05	0.00	0.00
7	Sup	-0.33	0.00	-0.30	0.00	0.00	0.00

Bolt = 0.500 (A307)

Span	Lap_Shear(k)	Shear_Ratio
Id	Left	Right
2	0.02	0.01
3	0.02	0.01
4	0.02	0.01
5	0.02	0.01
6	0.02	0.01

LOAD COMBINATION # 6 : DL+CL+2.0AUX1

PURLIN ANALYSIS:

Span	Left	Right	Sup	Left	Right	Sup	Left	Right	Sup
Id	Left	Right	Lap	Left	Right	Lap	Left	Right	Lap
1	0.00	0.57	-0.63	-0.16	0.15	0.00	0.00	0.00	0.00
2	0.29	0.26	-0.10	-0.75	0.90	-1.29	5.05	0.49	1.17
3	0.19	0.16	-0.20	-0.23	0.23	-0.30	5.48	0.24	0.46
4	0.21	0.17	-0.18	-0.22	0.46	-0.16	5.89	0.30	0.50
5	0.25	0.21	0.21	-0.17	0.50	-0.37	7.00		0.02
6	0.02	0.02		0.02	0.02		1.83		0.00

STRENGTH/DEFLECTION:

Span	Id	Loc	Calc Allow	UC	Loc	Calc Allow	UC	Mom+Shr	Deflection (in)	
7	RS	-0.16	3.39	0.05	RS	0.15	3.48	0.04	RS	0.00
	RL	-0.63	3.39	0.19	MS	-1.29	3.48	0.37	RL	0.05
	LT	0.26	3.39	0.08	LT	0.90	3.40	0.26	LT	0.07
	RL	-0.20	3.39	0.06	MS	-0.30	3.48	0.09	RL	0.01
	RL	-0.18	3.39	0.05	RL	0.30	3.48	0.09	RL	0.01
	LT	0.21	3.39	0.06	MS	-0.37	3.48	0.11	LT	0.01
	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00
6	RS	-0.16	3.39	0.05	RS	0.15	3.48	0.04	RS	0.00
	RL	-0.63	3.39	0.19	MS	-1.29	3.48	0.37	RL	0.05
	LT	0.26	3.39	0.08	LT	0.90	3.40	0.26	LT	0.07
	RL	-0.20	3.39	0.06	MS	-0.30	3.48	0.09	RL	0.01
	RL	-0.18	3.39	0.05	RL	0.30	3.48	0.09	RL	0.01
	LT	0.21	3.39	0.06	MS	-0.37	3.48	0.11	LT	0.01
	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00
5	RS	-0.16	3.39	0.05	RS	0.15	3.48	0.04	RS	0.00
	RL	-0.63	3.39	0.19	MS	-1.29	3.48	0.37	RL	0.05
	LT	0.26	3.39	0.08	LT	0.90	3.40	0.26	LT	0.07
	RL	-0.20	3.39	0.06	MS	-0.30	3.48	0.09	RL	0.01
	RL	-0.18	3.39	0.05	RL	0.30	3.48	0.09	RL	0.01
	LT	0.21	3.39	0.06	MS	-0.37	3.48	0.11	LT	0.01
	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00
4	RS	-0.16	3.39	0.05	RS	0.15	3.48	0.04	RS	0.00
	RL	-0.63	3.39	0.19	MS	-1.29	3.48	0.37	RL	0.05
	LT	0.26	3.39	0.08	LT	0.90	3.40	0.26	LT	0.07
	RL	-0.20	3.39	0.06	MS	-0.30	3.48	0.09	RL	0.01
	RL	-0.18	3.39	0.05	RL	0.30	3.48	0.09	RL	0.01
	LT	0.21	3.39	0.06	MS	-0.37	3.48	0.11	LT	0.01
	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00
3	RS	-0.16	3.39	0.05	RS	0.15	3.48	0.04	RS	0.00
	RL	-0.63	3.39	0.19	MS	-1.29	3.48	0.37	RL	0.05
	LT	0.26	3.39	0.08	LT	0.90	3.40	0.26	LT	0.07
	RL	-0.20	3.39	0.06	MS	-0.30	3.48	0.09	RL	0.01
	RL	-0.18	3.39	0.05	RL	0.30	3.48	0.09	RL	0.01
	LT	0.21	3.39	0.06	MS	-0.37	3.48	0.11	LT	0.01
	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00
2	RS	-0.16	3.39	0.05	RS	0.15	3.48	0.04	RS	0.00
	RL	-0.63	3.39	0.19	MS	-1.29	3.48	0.37	RL	0.05
	LT	0.26	3.39	0.08	LT	0.90	3.40	0.26	LT	0.07
	RL	-0.20	3.39	0.06	MS	-0.30	3.48	0.09	RL	0.01
	RL	-0.18	3.39	0.05	RL	0.30	3.48	0.09	RL	0.01
	LT	0.21	3.39	0.06	MS	-0.37	3.48	0.11	LT	0.01
	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00
1	RS	-0.16	3.39	0.05	RS	0.15	3.48	0.04	RS	0.00
	RL	-0.63	3.39	0.19	MS	-1.29	3.48	0.37	RL	0.05
	LT	0.26	3.39	0.08	LT	0.90	3.40	0.26	LT	0.07
	RL	-0.20	3.39	0.06	MS	-0.30	3.48	0.09	RL	0.01
	RL	-0.18	3.39	0.05	RL	0.30	3.48	0.09	RL	0.01
	LT	0.21	3.39	0.06	MS	-0.37	3.48	0.11	LT	0.01
	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Lap_Shear(k)	Shear_Ratio
Id	Left	Right
2	0.29	0.15
3	0.06	0.03
4	0.06	0.06
5	0.11	0.06
6	0.13	0.06

LOAD COMBINATION # 7 : DL+CL+2.0AUX2

Bolt = 0.500 (A307)

LAP BOLT SHEAR/BEARING:

Span	Id	Shear (k)	Loc	Calc Allow	UC	Loc	Moment (F-k)	UC	Loc	Mom+Shr	Deflection (in)
1	RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01	LS	0.00	0.01
2	RL	-0.21	3.39	0.06	MS	-0.41	3.48	0.12	RL	0.01	-0.02
3	RL	-0.21	3.39	0.06	RL	0.60	3.48	0.17	RL	0.03	0.04
4	RL	-0.63	3.39	0.18	RL	0.91	3.48	0.26	RL	0.10	-0.09
5	LT	0.62	3.39	0.18	LT	0.91	3.48	0.26	LT	0.10	-0.09
6	LT	0.25	3.39	0.07	LT	0.65	3.48	0.19	LT	0.04	0.05
7	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00	-0.02

STRENGTH/DEFLECTION:

Span	Id	Shear (k)	Loc	Calc Allow	UC	Loc	Moment (F-k)	UC	Loc	Mom+Shr	Deflection (in)
1	RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01	LS	0.00	0.01
2	RL	-0.21	3.39	0.06	MS	-0.41	3.48	0.12	RL	0.01	-0.02
3	RL	-0.21	3.39	0.06	RL	0.60	3.48	0.17	RL	0.03	0.04
4	RL	-0.63	3.39	0.18	RL	0.91	3.48	0.26	RL	0.10	-0.09
5	LT	0.62	3.39	0.18	LT	0.91	3.48	0.26	LT	0.10	-0.09
6	LT	0.25	3.39	0.07	LT	0.65	3.48	0.19	LT	0.04	0.05
7	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00	-0.02

PURLIN ANALYSIS:

LOAD COMBINATION # 9 : DL+CL+2.0AUX4

Span	Id	Shear (k)	Loc	Calc Allow	UC	Loc	Moment (F-k)	UC	Loc	Mom+Shr	Deflection (in)
1	RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01	LS	0.00	0.01
2	RL	-0.21	3.39	0.06	MS	-0.41	3.48	0.12	RL	0.01	-0.02
3	RL	-0.21	3.39	0.06	RL	0.60	3.48	0.17	RL	0.03	0.04
4	RL	-0.63	3.39	0.18	RL	0.91	3.48	0.26	RL	0.10	-0.09
5	LT	0.62	3.39	0.18	LT	0.91	3.48	0.26	LT	0.10	-0.09
6	LT	0.25	3.39	0.07	LT	0.65	3.48	0.19	LT	0.04	0.05
7	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00	-0.02

Bolt = 0.500 (A307)

LAP BOLT SHEAR/BEARING:

Span	Id	Shear (k)	Loc	Calc Allow	UC	Loc	Moment (F-k)	UC	Loc	Mom+Shr	Deflection (in)
1	RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01	LS	0.00	0.01
2	RL	-0.25	3.39	0.07	RL	0.65	3.48	0.19	RL	0.04	-0.02
3	RL	-0.62	3.39	0.18	RL	0.91	3.48	0.26	RL	0.10	-0.09
4	LT	0.63	3.39	0.18	LT	0.91	3.48	0.26	LT	0.10	-0.09
5	LT	0.21	3.39	0.06	LT	0.60	3.48	0.17	LT	0.03	0.04
6	LT	0.21	3.39	0.06	MS	-0.41	3.48	0.12	LT	0.01	-0.02
7	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00	-0.02

[illegible]

STRENGTH/DEFLECTION:									
Span	Id	Shear (k)		Moment (F-k)		Mom+Shr		Deflection (in)	
		Loc	Calc Allow	Loc	Calc Allow	Loc	UC	Calc Allow	
1	RS	-0.02	3.39	0.01	0.02	3.48	0.01	LS	0.00
2	RL	-0.21	3.39	0.06	-0.37	3.48	0.11	RL	0.01
3	LT	0.18	3.39	0.05	0.30	3.48	0.09	LT	0.01
4	LT	0.20	3.39	0.06	-0.30	3.48	0.09	LT	0.01
5	RL	-0.26	3.39	0.08	0.90	3.40	0.26	RL	0.07
6	LT	0.63	3.39	0.19	-1.29	3.48	0.37	LT	0.05
7	LS	0.16	3.39	0.05	0.15	3.48	0.04	LS	0.00

$$\text{Bolt} = 0.500 \text{ (A307)}$$

Span	Id	Lap-Shear (k)	Shear-Ratio
2	Left	0.13	0.06
3	Left	0.13	0.06
4	Left	0.11	0.03
5	Left	0.06	0.03
6	Left	0.29	0.15

PURLIN ANALYSIS:									
Span	Id	-----Shear (k) -----				-----Moment (F-k) -----			
		Left	Left	Lap	Sup	Left	Left	Lap	Sup
1		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2		0.13	-0.25	-0.29	0.14	0.00	-0.09	3.59	0.00
3		0.69	0.58	-0.54	1.08	0.44	-1.07	6.16	0.25
4		0.21	0.18	-0.18	0.85	0.66	0.21	6.00	0.66
5		0.66	0.54	-0.58	0.85	0.25	-1.07	5.84	0.44
6		0.29	0.25	-0.13	1.08	0.81	-0.09	8.08	0.14
7		0.14			0.14		0.00	1.83	0.00

STRENGTH/DEFLECTION:											
Span	Id	Shear (k)			Moment (f-k)			Mom+Shr			Deflection (in)
		Left	Right	Sup	Left	Right	Sup	Left	Midspan	Right	
1		0.00			0.00			0.00			
2		0.13			0.14			0.00			0.14
3		0.69	0.58	-0.25	-0.29	-0.14		-0.09	3.59	0.81	1.08
4		0.21	0.18	-0.54	-0.66	1.08	0.44	-1.07	6.16	0.25	0.85
5		0.66	0.54	-0.58	-0.69	0.85	0.66	0.21	6.00	0.66	1.08
6		0.29	0.25		-0.13	1.08	0.81	-0.09	8.08	0.44	0.14
7		0.14			0.00			0.00	1.83		0.00

2	0.26	0.26	0.13
3	0.26	0.21	0.11
4	0.21	0.21	0.11
5	0.21	0.26	0.13
6	0.26		0.13

Augustal Purlin Design Report (Surface 3) 10/28/07 6:20pm

ROOF PURLIN

DESIGN RUN # 2, SURFACE # 3

(Edge Strip Zone= 3.70)

PURLIN LAYOUT: (Purlin Id= 5)

Bay	Span	Purlin	Id	Id	Size	Span	--Lap (ft)--	Left	Right	Width	Load	No.
1	1	6X25Z16	1.83									0
2	2	6X25Z16	11.67	1.00								0
3	3	6X25Z16	12.00	1.00								0
4	4	6X25Z16	12.00	1.00								0
5	5	6X25Z16	12.00	1.00								0
6	6	6X25Z16	11.67	1.00								0
7	7	6X25Z16	1.83									0

LOAD COMBINATION # 1 : DL+CL+1.5SL

PURLIN ANALYSIS:

Span	Id	Shear (k)	Left	Right	Lap	Sup	Moment (f-k)	Left	Right	Lap	Mom	Midspan	Right	Right	Sup
1	1	0.00					0.00				0.00				0.18
2	2	0.63					0.18				-1.32				0.18
3	3	0.83	0.70	-0.64	-0.77	1.91	1.14	-0.69	6.22	0.84	1.05				0.18
4	4	0.80	0.67	-0.67	-0.80	1.55	0.81	-0.86	6.00	0.81	1.14				0.18
5	5	0.77	0.64	-0.70	-0.83	1.55	0.84	-0.69	5.78	0.81	1.14				0.18
6	6	0.93				-0.63	1.91		6.94		-1.32				0.18
7	7	0.20					0.18		1.83						0.00

STRENGTH/DEFLECTION:

Span	Id	Shear (k)	Loc	Calc Allow	UC	Moment (f-k)	Loc	Calc Allow	UC	Mom+Shr	Loc	Calc Allow	Deflection (in)
1	1	-0.20	RS	3.39	0.06	0.18	RS	3.48	0.05	0.01	RS	0.01	0.09
2	2	-0.80	RL	3.39	0.24	-1.32	MS	3.48	0.38	0.15	TL	0.15	-0.16
3	3	0.70	LT	3.39	0.21	1.14	LT	3.48	0.33	0.15	RL	0.15	-0.05
4	4	-0.67	RL	3.39	0.20	-0.86	MS	3.48	0.25	0.09	RL	0.09	-0.09
5	5	-0.70	RL	3.39	0.21	1.14	LT	3.48	0.33	0.15	RL	0.15	-0.05
6	6	0.80	LT	3.39	0.24	-1.32	MS	3.48	0.38	0.15	TL	0.15	-0.16
7	7	0.20	LS	3.39	0.06	0.18	LS	3.48	0.05	0.01	LS	0.01	0.09

PURLIN ANALYSIS:

Span	Id	Shear (k)	Moment (f-k)	Mom	Loc	Right	Sup
1	Left	0.00	0.00	0.00	0.00	-0.15	-0.22
2	Left	-0.26	-0.22	0.13	7.61	-0.10	-0.28
3	Left	-0.09	-0.28	0.07	6.44	-0.10	-0.19
4	Left	-0.09	-0.19	0.12	6.00	-0.10	-0.19
5	Left	-0.10	-0.19	0.07	5.56	-0.18	-0.28
6	Left	-0.14	-0.28	0.13	4.05		-0.22
7	Left	-0.24	-0.22	0.00	1.83		0.00

STRENGTH/DEFLECTION:

Span	Id	Shear (k)	Moment (f-k)	Mom+Shr	Deflection (in)
1	RS	0.24	-0.22	RS 0.01	-0.05
2	LS	-0.26	-0.22	LS 0.01	0.09
3	LT	-0.09	-0.18	LT 0.00	0.03
4	RL	0.09	0.12	RL 0.00	0.05
5	RL	0.09	-0.18	RL 0.00	0.03
6	RS	0.26	-0.22	RS 0.01	0.09
7	LS	-0.24	-0.22	LS 0.01	-0.05

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Lap_Shear (k)	Shear_Ratio
2	Left	0.07	0.04
3	Left	0.07	0.02
4	Left	0.05	0.02
5	Left	0.05	0.02
6	Left	0.07	0.04

LOAD COMBINATION # 4 : DL+CL+0.75WP+0.75WS

PURLIN ANALYSIS:

Span	Id	Shear (k)	Moment (f-k)	Left	Right	Sup	Right	Sup
1	Left	0.00	0.00	0.00	0.00	0.00	-0.30	-0.30
2	Left	-0.30	-0.30	0.19	7.25	-0.21	-0.38	-0.30
3	Left	-0.16	-0.38	0.12	6.30	-0.16	-0.29	-0.29
4	Left	-0.15	-0.29	0.17	6.00	-0.15	-0.29	-0.29
5	Left	-0.14	-0.29	0.12	5.70	-0.23	-0.38	-0.38
6	Left	-0.18	-0.38	0.19	4.42		-0.30	-0.30
7	Left	-0.33	-0.30	0.00	1.83		0.00	0.00

PURLIN ANALYSIS:

LOAD COMBINATION # 6 : DL+CL+2.0AUXL1

PURLIN ANALYSIS:

PURLIN ANALYSIS:

PURLIN ANALYSIS:

PURLIN ANALYSIS:

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PURLIN ANALYSIS:

PURLIN ANALYSIS:

Span	Id	Shear(k)	Loc	Calc Allow	UC	Loc	Calc Allow	UC	Mom+Shr	Deflection(in)
1	RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01	LS	0.00
2	RL	-0.25	3.39	0.07	RL	0.65	3.48	0.19	RL	0.01
3	RL	-0.62	3.39	0.18	RL	0.91	3.48	0.26	RL	0.10
4	LT	0.63	3.39	0.18	LT	0.91	3.48	0.26	LT	0.10
5	LT	0.21	3.39	0.06	LT	0.60	3.48	0.17	LT	0.03
6	LT	0.21	3.39	0.06	MS	-0.41	3.48	0.12	LT	0.01
7	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Lap_Shear(k) Shear_Ratio

Id Left Right Left Right

2 0.23 0.12

3 0.23 0.12

4 0.40 0.11

5 0.21 0.10

6 0.10 0.05

LOAD COMBINATION # 9 : DL+CL+2.0AUX4

PURLIN ANALYSIS:

Span	Id	Shear(k)	Loc	Calc Allow	UC	Loc	Calc Allow	UC	Mom+Shr	Deflection(in)
1	Sup	0.00	0.00	0.00	Sup	0.00	0.00	0.00	Sup	0.00
2	Left	0.17	-0.21	-0.24	Left	0.02	-0.41	-0.41	Left	0.00
3	Left	0.18	-0.21	-0.25	Left	0.41	0.25	-0.04	Left	0.00
4	Left	0.61	-0.63	-0.74	Left	0.84	0.28	-0.83	Left	0.00
5	Left	0.73	-0.62	-0.74	Left	1.59	0.91	-0.79	Left	0.00
6	Left	0.28	-0.13	-0.13	Left	0.92	0.65	-0.22	Left	0.00
7	Left	0.02	0.00	0.00	Left	0.02	0.00	0.00	Left	0.00

STRENGTH/DEFLECTION:

Span	Id	Shear(k)	Loc	Calc Allow	UC	Loc	Calc Allow	UC	Mom+Shr	Deflection(in)
1	RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01	LS	0.00
2	RL	-0.21	3.39	0.06	RL	0.60	3.48	0.12	RL	0.01
3	RL	-0.21	3.39	0.06	RL	0.60	3.48	0.17	RL	0.03
4	RL	-0.63	3.39	0.18	RL	0.91	3.48	0.26	RL	0.10
5	LT	0.62	3.39	0.18	LT	0.91	3.48	0.26	LT	0.10
6	LT	0.25	3.39	0.07	LT	0.65	3.48	0.19	LT	0.04
7	LS	0.02	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Shear (k)	Moment (F-k)	Deflection (in)
	Loc	Calc Allow	UC	Loc UC
	Loc	Calc Allow	UC	Mom+Shr
	Loc	Calc Allow	UC	Deflection (in)

Span		Shear (k)				Moment (F-k)			
Id	Span	Left		Right		Left		Right	
		Sup	Lap	Sup	Lap	Sup	Lap	Sup	Lap
1		0.00		-0.14		0.00		0.00	
2		0.13	-0.25	-0.29	0.14	0.00	-0.09	0.00	0.00
3		0.69	0.58	-0.54	-0.66	1.08	0.44	-1.07	6.16
4		0.21	0.18	-0.18	0.85	0.85	0.66	0.21	6.00
5		0.66	0.54	-0.58	-0.69	0.85	0.25	-1.07	5.84
6		0.29	0.25	-0.13	1.08	0.81	-0.09	8.08	1.83
7		0.14		0.00		0.14		0.00	

LOAD COMBINATION #12 : DL+CL+2.0AUXT

Span	Id	Lap-Shear(k)	Shear-Ratio
2	0.13	0.11	0.06
3	0.13	0.11	0.06
4	0.11	0.06	0.03
5	0.06	0.29	0.03
6	0.29	0.15	0.15

Bolt = 0.500 (A307)

TAP BOLT SHEAR/BEARING:

Span	Id	Loc	Calc Allow	UC	Shear (k)	Loc	Calc Allow	UC	Moment (F-k)	Loc	Calc Allow	UC	Mom+Shr	Loc	Calc Allow	UC	Deflection (in)
1	RS	-0.02	3.39	0.01	RS	0.02	3.48	0.01	LS	0.00	0.00	0.00	LS	0.00	0.00	0.00	0.00
2	RL	-0.21	3.39	0.06	MS	-0.37	3.48	0.11	RL	0.01	-0.01	0.78	RL	0.01	0.01	0.01	0.80
3	LT	0.18	3.39	0.05	LT	0.30	3.48	0.09	LT	0.01	0.01	0.80	LT	0.01	0.01	0.01	0.80
4	LT	0.20	3.39	0.06	MS	-0.30	3.48	0.09	LT	0.01	-0.02	0.80	LT	0.01	0.06	0.06	0.80
5	RL	-0.26	3.39	0.08	RL	0.90	3.40	0.26	RL	0.07	0.06	0.80	RL	0.07	0.05	-0.18	0.78
6	LT	0.63	3.39	0.19	MS	-1.29	3.48	0.37	LT	0.05	-0.18	0.78	LT	0.05	0.00	0.00	0.09
7	LS	0.16	3.39	0.05	LS	0.15	3.48	0.04	LS	0.00	0.00	0.00	LS	0.00	0.00	0.00	0.09

-----Shear(k)-----Left Left Right Right
-----Moment(F-k)-----Left Left Midspan Right Right

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Span		Shear (k)				Moment (F-k)			
Id	Sup	Left	Right	Lap	Sup	Left	Right	Lap	Sup
1	0.00	0.00	-0.21	-0.21	0.00	0.00	0.00	0.00	0.00
2	0.17	-0.25	-0.21	-0.21	0.02	0.02	-0.37	-0.37	0.00
3	0.22	0.18	-0.17	-0.17	0.50	0.50	-0.16	-0.16	6.11
4	0.23	0.20	-0.16	-0.16	0.46	0.46	-0.30	-0.30	6.52
5	0.13	0.10	-0.26	-0.26	0.23	0.23	-0.02	-0.02	3.79
6	0.75	0.63			-0.57	1.17	0.49	-1.29	6.61
7	0.16				0.00	0.15		0.00	1.83

2	0.26	0.13	0.13
3	0.26	0.21	0.11
4	0.21	0.21	0.11
5	0.21	0.26	0.13
6	0.26	0.13	0.13

Augustal

Purlin Design Report (Extension 1)

10/28/07 6:20pm

EAVE EXTENSION TOP PURLIN

EXTENSION ID # 1, WALL # 2

(Extension Width= 1.50)

.. No Purlins Required!

Augustal	Eave Strut Design Report (Extension 1)	10/28/07 6:20pm
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EAVE EXTENSION EAVE STRUT

EXTENSION ID # 1, WALL # 2

(Extension Width= 1.50)

EAVE STRUT LAYOUT:

Bay	Id	Span	Eave	Id	Part	Span	Space	No.	Brace	Weight
1	2	3	6X25Z16	11.50	1.31	2	28.5	2	28.5	4.5
2	3	4	6X25Z16	11.67	1.31	2	28.9	2	28.9	4.5
3	4	5	6X25Z16	11.67	1.31	2	28.9	2	28.9	4.5
4	5	6	6X25Z16	11.67	1.31	2	28.5	2	28.5	4.5
5	6	7	6X25Z16	11.50	1.31	0	4.5	0	4.5	152.9

Total (lb) =

STRESS/DEFLECTION:

Span	Id	Load	Id	Calc	Allow	UC	---Deflect (in) ---
1	1	-0.10	3.39	0.03	0.09	3.48	0.03
	2	-0.01	3.39	0.00	0.01	3.48	0.00
	3	0.07	3.39	0.02	-0.06	3.48	0.02
	4	0.11	3.39	0.03	-0.10	3.48	0.03
	5	0.00	3.39	0.00	0.00	3.48	0.00
	1	0.32	3.39	0.09	-0.85	3.48	0.24
2	2	0.02	3.39	0.01	-0.06	3.48	0.02
	3	-0.21	3.39	0.06	0.56	3.48	0.16

Span	Load	Id	Calc Allow	UC	---Shear (k) ---	---Moment (F-k) ---	Calc Allow	UC	---Deflect (in) ---	Calc Allow	UC
------	------	----	------------	----	------------------	---------------------	------------	----	---------------------	------------	----

[illegible]

Roof Panel Summary

10/28/07 6:20pm

Surf	Id	Part	Type	Gage	Yield	Surface Length	No. Purlin	Max Space
2	26 PBR	SR	26.00	80.00	20.04	5	3.854	
3	26 PBR	SR	26.00	80.00	20.04	5	3.854	

PANEL LAYOUT:

Ext	Id	Locate	Part	Type	Gage	Yield	Surface	No.	Max
							Length	Purlin	Space
1	1	Roof	26 PBR	SR	26.00	80.00	1.63	0	1.625
2	2	Roof	26 PBR	SR	26.00	80.00	1.63	0	1.625

PANEL STRENGTH:

Ext	Id	Locate	Load	Support_Moment (ft-lb/ft)	Locate	Calc Allow Ratio	Midspan_Moment (ft-lb/ft)	Locate	Calc Allow Ratio
1	1	Roof	1	0.0	0.0	130.8	0.00	0.8	-11.5 116.1 0.10
	2		2	0.0	0.0	130.8	0.00	0.8	-3.0 116.1 0.03
2	1	Roof	1	0.0	0.0	130.8	0.00	0.8	-11.5 116.1 0.10
	2		2	0.0	0.0	130.8	0.00	0.8	-3.0 116.1 0.03
	3		3	0.0	0.0	130.8	0.00	0.8	20.8 130.8 0.16

PANEL DEFLECTION:

Ext	Id	Locate	Load	Deflection (in)	Locate	Calc Limit Ratio
1	4	Roof	4	0.8	0.00	0.11 0.03
	5		5	0.0	0.00	0.11 0.00
	6		6	0.8	0.01	0.11 0.08
2	4	Roof	4	0.8	0.00	0.11 0.03
	5		5	0.0	0.00	0.11 0.00
	6		6	0.8	0.01	0.11 0.08

LOAD COMBINATION:

Load	Id	Description
1	DL+CL+SL	
2	DL+CL+WP	
3	DL+WS	
4	SL	
5	WP	
6	WS	

Augustal Roof Diagonal Bracing Report 10/28/07 6:20pm

PANEL SHEAR:

Allow = 0.0
Calc = 37.6
Wind = 35.9
Seismic = 35.9

DIAGONAL BRACING:

Bay	Id	Brace_Loc.	Start	End	Type	Size	Part	Calc Allow	Wind Allow	Seismic	Max
3	3	0.00	10.67	10.67	C	0.250	HW-3730	3.13	3.33	2.99	0.94
		18.50	18.50	18.50	C	0.250	HW-3730	0.64	3.33	0.78	0.23
		26.33	26.33	26.33	C	0.250	HW-3730	0.64	3.33	0.78	0.23
		37.00	37.00	37.00	C	0.250	HW-3730	3.13	3.33	2.99	0.94

PURLINS:

4 5 RF

4 6 EW

2 A307 0.500 0

2 A307 0.500 0

Surt Frm Line		Id Id		Type Type		Brace		Bolt Selected		Shear		Bearing		Capacity	
Id		Id		Type		Loc		No. Type		Calc Allow		Calc Allow		Ratio	
2	1	2	1	EW	10.67	2	A307	0.500	0	1.00	3.93	1.00	4.52	0.25	0.25
2	2	2	2	RF	10.67	2	A307	0.500	0	1.00	3.93	1.00	4.52	0.25	0.25
2	3	2	3	RF	10.67	2	A307	0.500	0	1.00	3.93	1.00	4.52	0.25	0.25
2	4	2	4	RF	10.67	2	A307	0.500	0	2.25	3.93	1.54	4.52	0.57	0.57
2	5	2	5	RF	10.67	2	A307	0.500	0	1.00	3.93	1.00	4.52	0.25	0.25
2	6	2	6	EW	10.67	2	A307	0.500	0	1.00	3.93	1.00	4.52	0.25	0.25
2	1	2	1	EW	18.50	2	A307	0.500	0	0.30	3.93	0.30	4.52	0.08	0.08
2	2	2	2	RF	18.50	2	A307	0.500	0	0.30	3.93	0.30	4.52	0.08	0.08
2	3	2	3	RF	18.50	2	A307	0.500	0	0.30	3.93	0.30	4.52	0.08	0.08
2	4	2	4	RF	18.50	2	A307	0.500	0	0.63	3.93	0.38	4.52	0.16	0.16
2	5	2	5	RF	18.50	2	A307	0.500	0	0.30	3.93	0.30	4.52	0.08	0.08
2	6	2	6	EW	18.50	2	A307	0.500	0	0.30	3.93	0.30	4.52	0.08	0.08
3	1	3	1	EW	18.50	2	A307	0.500	0	0.30	3.93	0.30	4.52	0.08	0.08
3	2	3	2	RF	18.50	2	A307	0.500	0	0.30	3.93	0.30	4.52	0.08	0.08
3	3	3	3	RF	18.50	2	A307	0.500	0	0.30	3.93	0.30	4.52	0.08	0.08
3	4	3	4	RF	18.50	2	A307	0.500	0	0.63	3.93	0.38	4.52	0.16	0.16
3	5	3	5	RF	18.50	2	A307	0.500	0	0.30	3.93	0.30	4.52	0.08	0.08
3	6	3	6	EW	18.50	2	A307	0.500	0	0.30	3.93	0.30	4.52	0.08	0.08
3	1	3	1	EW	26.33	2	A307	0.500	0	1.00	3.93	1.00	4.52	0.25	0.25
3	2	3	2	RF	26.33	2	A307	0.500	0	1.00	3.93	1.00	4.52	0.25	0.25
3	3	3	3	RF	26.33	2	A307	0.500	0	2.25	3.93	1.54	4.52	0.57	0.57
3	4	3	4	RF	26.33	2	A307	0.500	0	1.00	3.93	1.00	4.52	0.25	0.25
3	5	3	5	RF	26.33	2	A307	0.500	0	1.00	3.93	1.00	4.52	0.25	0.25
3	6	3	6	EW	26.33	2	A307	0.500	0	1.00	3.93	1.00	4.52	0.25	0.25

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Roof Design Weight Summary

10/28/07 6:20pm

Roof Purlins = 1760.80
Eave Struts = 483.73
Extension Eave Struts = 305.87
Roof Bracing = 15.18
Wall Bracing = 12.64
Total = 2884.08

Augustal

Roof Design Warning Report

10/28/07 6:20pm

.. No Warnings

(12) PARTIAL WALLS:

* Wall	Set-Of	--Bay-Id--	Wall	Base	Full	Use
Id	Bays	Start	End	Height	Type	Load
1	0					
2	0					
3	0					
4	0					

(13) SURFACE EXTENSION/FRAME RECESS:

* Surf	Left	Right	Left	Right	Frame-Recess	Surf-Ext--	Left	Right	After-Size----
Id	Left	Right	Left	Right					
2	1.5000	1.5000	0.3333	0.3333					'8X25C16 , '8X25C16 ,

(14) PURLINS:

* Surf	Purlin	OS_Flg	IS_Flg	Set	Set-Lap	Max_Unbr
Id	Type	Brace	Brace	Depth	Ext	Int
2	'ZB'	'C'	'Y'	6.000	0.0000	0.0000
						Length
						5.0000

(15) PURLIN SPACING:

* Surf	Peak	Max	Set	Set-Of	-Set-Space-
Id	Space	Space	Space	Space	No.
2	0.5500	5.0156	3.0000	0	

(16) PURLIN SIZE:

* Surf	Set	No.	Id	Purl	Purl	Purlin-Size
Id	Purl <td>Purl <td></td> <td></td> <td></td> <td></td> </td>	Purl <td></td> <td></td> <td></td> <td></td>				
2	'N'	0				

(17) PANELS:

* Wall	Panel	Roof	Standing	Seam	Use	Thick
Id	Panel	Panel	Seam	Use	Thick	
						0.000

(18) EAVE STRUT & GIRT:

* Wall	Eave	Girt	Girt	Type	Type	Size	Offset	Proj	Gutter
Id	Eave	Girt	Girt	Type	Type	Size	Offset	Proj	Gutter
2	'EO'	'ZF'	'ZF'				0.000	0.000	'N'
4	'EO'	'ZF'	'ZF'				0.000	0.000	'N'

(19) WIND FRAMING SELECTION:

-----Order-Of-Selection-----

* Wall	Panel	Diagonal	Wind	Wind	Weak_Axis
Id	Panel	Diagonal	Wind	Wind	Weak_Axis
2	'N'	'Y'	'N'	'N'	'N'
4	'N'	'Y'	'N'	'N'	'N'
5	'N'	'Y'	'N'	'N'	'N'

(20) ROOF DIAGONAL BRACING:

* Max_Pan	Brace	Each	User_Selected	Roof_Bays
Id	Brace <td>Each</td> <td>User_Selected</td> <td>Roof_Bays</td>	Each	User_Selected	Roof_Bays

(21) ROOF BRACING ATTACHMENT:

* Wall	No.	Id	Attach	Attach_Location
Id	No.	Id	Attach	Attach_Location
1	2	0.0000	10.0000	
3	2	0.0000	10.0000	

(22) SIDEWALL DIAGONAL BRACING:

* Wall	Max_Pan	Brace	User_Selected	SW_Bays
Id	Max_Pan	Brace	User_Selected	SW_Bays

* (35) FACIA/PARAPET PURLINS:

*Ext	PartIn	OS_Flg	Brace	IS_Flg	Brace	Depth	Set	Ext_Lap	Max_Unbr	Peak	Max	Set
*Id	Type	Brace	Brace	Depth	Ext	Int	Length	Space	Space	Space	Space	Space

* (36) FACIA/PARAPET PANELS:

```
*Ext *Id      Size    SSeam   Size    Rot Space   Size    SSeam   Size    Rot Space  
----Root_Panel-- ----Soft_Panel--- --Front_Panel--  ---Back_Panel-----  
Size          Size           Size         Size
```

* (37) EXTENSION BRACING:

*Ext	Max_Fan	Brace	User_Selected-Bays	*Id	Shear	Type	No.	Bay-Id
1	0.0	---	0					

* (38) WALT BASE ELEVATION/DEAD:

* Id	Elev	Dead	Opt	Open
1	0.00	2.00	1.00	0.00

* (39) BASIC LOADS:

[illegible]

* (40) WIND PRESSURE/SUCTION:

	Wind	Wind	Press	Suct	Suct-Roof	
.. Purlins	22.4	-49.3				
.. Purlins, Gable Extension	0.0	-65.7				
.. Interior Roof Panels	25.4	-49.3				
.. Long Bracing, Building	11.9	-8.7				-20.6
.. Long Bracing, Wall Edge Zone	18.2	-12.8				
.. Long Bracing, Façade/Parapet	53.7	-32.8				23.9

* (41) EDGE AND CORNER ZONES FOR PURLINS AND PANELS:

*Surface	2	'L'	'C'	'R'
Loc	0.00	0.00	0.00	0.00
Width	0.00	12.00	1.30	1.00
Length	0.00	1.00	1.91	1.00
Panel	0.00	0.00	0.00	0.00
Ratio----	Ratio----	Ratio----	Ratio----	Ratio----
Left_End	Center	Right_End		
Panel	Panel	Panel	Panel	Panel
Width	Width	Width	Width	Width
Length	Length	Length	Length	Length
Ratio----	Ratio----	Ratio----	Ratio----	Ratio----
1.00	1.00	1.00	1.00	1.00
0.00	0.00	0.00	0.00	0.00
1.30	1.24	1.30	1.30	1.00
0.00	0.00	0.00	0.00	0.00
12.00	12.00	1.30	1.30	1.00
0.00	0.00	0.00	0.00	0.00
1.00	1.00	1.00	1.00	1.00

* (42) EXTENSION BASIC LOADS:

*Ext	*Id	Dead	Collat	Live	Snow	Attach_Beam	Purlin_Wind	Attach_Beam	Press	Suct	Press	Suct	Panel_Wind	Attach_Beam	Press	Suct
1		3.00	7.00	20.00	20.00	0.00	-65.68	0.00	0.00	0.00	0.00	-41.20	0.00	0.00	0.00	0.00

* (43) PURLIN DESIGN LOADS:

[illegible]

* NO.	* Add.	Id	Surf	Basic	Load	Fy	W1	W2	Dx	.. Conc	.. Dist
7		Id	Id	Load	Type				Dx1	Dx2	
1		0	0	-----	'D	-20.0	-20.0	-20.0	0.00	1.50	
2		0	0	-----	'D	-20.0	-20.0	-20.0	1.50	13.50	
3		0	0	-----	'D	-20.0	-20.0	-20.0	13.50	25.50	
4		0	0	-----	'D	-20.0	-20.0	-20.0	25.50	37.50	
5		0	0	-----	'D	-20.0	-20.0	-20.0	37.50	49.50	
6		0	0	-----	'D	-20.0	-20.0	-20.0	49.50	61.50	
7		0	0	-----	'D	-20.0	-20.0	-20.0	61.50	63.00	

SURF	* Id	2	'-'	Opt	0
-----Set_1-----	Left	Right Quan	Left	Sets	
-----Set_2-----	Left	Right Quan	Left	Sets	
-----Set_3-----	Left	Right Quan	Left	Sets	

[illegible]

* * *	Opt Sets	0
---	Set_1---	Strap_Quan
---	Set_2---	Strap_Quan
---	Set_3---	Strap_Quan
---	Set_4---	Strap_Quan

	Ext	* Id	1
	Opt	Sets	0
	Data	---Set_1---	Strap Quan
		---Set_2---	Strap Quan
		---Set_3---	Strap Quan
		---Set_4---	Strap Quan

* No.	* Zone	0	Part	Screw	Dia	Washer	Dia	Screw	Space	Screw	Strength
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AUGUST 11 10/28/07 6:43pm Roof Design Code

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Design Basis      : MS
Hot Rolled Steel  : AISI89
Cold Formed Steel : AISI89
BUILDING CODE:
Wind Code        : FBC

```

PURLIN ANALYSIS:

Span		Id		Shear(k)		Moment(k)	
Left	Right	Left	Right	Left	Right	Left	Right
0.00	0.12	0.00	0.12	0.00	0.12	0.00	0.12
0.61	0.52	0.42	0.52	0.42	0.52	0.69	0.52
0.51	0.42	0.44	0.42	0.44	0.42	0.53	0.42
0.53	0.44	0.46	0.44	0.46	0.44	0.55	0.44
0.55	0.46	0.52	0.46	0.52	0.46	0.61	0.46
0.42	0.52	0.12	0.52	0.12	0.52	0.11	0.52
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.26	0.42	1.02	0.42	1.02	0.42	1.26	0.42
0.69	0.52	0.55	0.52	0.55	0.52	0.69	0.52
0.87	0.42	0.87	0.42	0.87	0.42	0.87	0.42
1.83	0.00	1.83	0.00	1.83	0.00	1.83	0.00
0.11	0.00	0.11	0.00	0.11	0.00	0.11	0.00
0.11	0.00	0.11	0.00	0.11	0.00	0.11	0.00

STRENGTH/DEFLECTION:

Span	Id	Loc	Shear (k)	Loc	Moment (F-k)	Loc	Mom+Shr	Deflection (in)				
1	RS	---	-0.12	3.39	0.04	RS	0.11	3.48	0.03	RS	0.00	0.05
	RL	---	-0.52	3.39	0.15	MS	-0.87	3.48	0.25	RL	0.06	-0.09
2	RS	---	-0.46	3.39	0.14	MS	-0.57	3.48	0.16	RL	0.04	-0.05
	RL	---	-0.44	3.39	0.13	MS	-0.75	3.48	0.22	LT	0.07	-0.03
3	RS	---	-0.46	3.39	0.14	LT	0.75	3.48	0.22	LT	0.07	-0.03
	RL	---	-0.52	3.39	0.15	MS	-0.87	3.48	0.25	RL	0.06	-0.09
4	RS	---	-0.46	3.39	0.14	LT	0.75	3.48	0.22	LT	0.07	-0.03
	RL	---	-0.44	3.39	0.13	MS	-0.57	3.48	0.16	RL	0.04	-0.05
5	RS	---	-0.46	3.39	0.14	LT	0.75	3.48	0.22	LT	0.07	-0.03
	RL	---	-0.52	3.39	0.15	MS	-0.87	3.48	0.25	RL	0.06	-0.09
6	RS	---	-0.12	3.39	0.04	RS	0.11	3.48	0.03	LS	0.00	0.05
	RL	---	-0.46	3.39	0.14	LT	0.75	3.48	0.22	LT	0.06	-0.09
7	RS	---	-0.46	3.39	0.14	LT	0.75	3.48	0.22	LT	0.06	-0.09
	RL	---	-0.52	3.39	0.15	MS	-0.87	3.48	0.25	LT	0.06	-0.09

LAP BOLT SHEAR/BEARING:

$$\text{Bolt} = 0.500 \text{ (A307)}$$

Span	Lap-Shear(k)	Id
2	0.31	Left Right
3	0.31 0.25	Left Right
4	0.25 0.25	Left Right
5	0.25 0.31	Left Right
6	0.31 0.16	Left Right

LOAD COMBINATION # 2 : DL+CL+WP

PURLIN ANALYSIS:

Span	Left	Left	Right	Right	Right	Right
Shear (k)	Left	Left	Right	Right	Right	Right
Moment (ft-k)	Left	Left	Right	Right	Right	Right
	Left	Left	Right	Right	Right	Right

$$\text{Bolt} = 0.500 \text{ (A307)}$$

Span	Id	Lap-Shear(k)	Shear-Ratio
2	Left	0.24	0.12
3	Left	0.24	0.12
4	Left	0.18	0.09
5	Left	0.18	0.09
6	Left	0.24	0.12

LOAD COMBINATION # 4 : DL+CL+0.75WP+0.75WS

PURLIN ANALYSIS:

Span		Left		Right		Lap		Sup		MidSpan		Mom		Loc		Right		Lap		Sup	
1		0.00		0.25		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
2		-0.32		0.36		0.43		-0.23		0.58		5.03		-0.44		-0.84		-0.23		-0.23	
3		-0.36		0.30		0.27		-0.84		0.29		6.26		-0.36		-0.66		-0.66		-0.66	
4		-0.35		0.29		0.35		-0.66		0.37		6.00		-0.34		-0.66		-0.66		-0.66	
5		-0.33		0.27		0.36		-0.66		0.29		5.74		-0.36		-0.84		-0.84		-0.84	
6		-0.43		0.32		-0.84		-0.44		0.58		6.64		0.58		-0.23		-0.23		-0.23	
7		-0.25		0.00		-0.23		0.00		0.00		1.83		0.00		0.00		0.00		0.00	

STRENGTH/DEFLECTION:

Span	Id	Loc	Calc	Allow	Deflection (in)
1	RS	0.25	3.39	0.08	RS
	LT	-0.30	3.39	0.09	LT
	RT	0.36	3.39	0.11	MS
	MS	0.58	2.44	0.24	RL
2	RS	0.25	3.39	0.08	RS
	LT	-0.30	3.39	0.09	LT
	RT	0.36	3.39	0.11	MS
	MS	0.58	2.44	0.24	RL
3	LT	-0.30	3.39	0.09	LT
	RT	0.29	3.39	0.08	MS
	MS	0.37	2.68	0.14	RL
	RL	0.02	0.03	0.05	1.20
4	RT	0.29	3.39	0.08	MS
	LT	-0.30	3.39	0.09	LT
	RL	0.30	3.39	0.09	RL
	MS	0.51	3.48	0.15	RL
5	RL	0.30	3.39	0.09	RL
	LT	-0.36	3.39	0.11	MS
	LT	-0.25	3.39	0.08	LS
	LS	3.39	0.08	-0.23	3.48
6	LT	-0.36	3.39	0.11	MS
	RT	0.36	3.39	0.11	MS
	LT	-0.25	3.39	0.08	LS
	LS	3.39	0.08	-0.23	3.48
7	LS	-0.25	3.39	0.08	LS
	LT	-0.36	3.39	0.11	MS
	RT	0.36	3.39	0.11	MS
	MS	0.58	2.44	0.24	LT

LAP BOLT SHEAR/BEARING:

$$\text{Bolt} = 0.500 \text{ (A307)}$$

Span	Id	Lap-Shear(k)	(k)	Shear-Ratio
2	Left	Right	Left	Right
3	0.21	0.17	0.11	0.08

Span	Id	Shear (k)	Loc	Calc Allow	UC	Loc	Mom+Shr	Deflection (in)
2	7	0.45	0.02	0.02	0.00	0.00	1.83	0.00
	6	0.21	0.18	0.21	0.01	0.01	7.00	0.01
	5	0.17	0.14	0.17	0.01	0.01	5.88	0.42
	4	0.16	0.13	0.16	0.01	0.01	5.51	0.20
	3	0.24	0.21	0.24	0.02	0.02	8.08	0.10
	2	0.45	0.21	0.45	0.04	0.04	5.04	0.39

STRENGTH/DEFLECTION:

Span	Id	Shear (k)	Loc	Calc Allow	UC	Loc	Mom+Shr	Deflection (in)
1	RS	-0.13	3.39	0.04	RS	0.03	3.48	0.00
2	RL	-0.50	3.39	0.15	MS	-1.02	3.48	0.03
3	LT	0.21	3.39	0.06	LT	0.72	3.43	0.21
4	RL	-0.16	3.39	0.05	MS	-0.25	3.48	0.07
5	RL	-0.15	3.39	0.04	RL	0.25	3.48	0.09
6	LT	0.18	3.39	0.05	MS	-0.31	3.48	0.09
7	LS	0.02	3.39	0.00	LS	0.01	3.48	0.00

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Lap-Shear (k)	Left	Right	Shear Ratio
2		0.24	0.05	0.12	0.12
3		0.24	0.09	0.03	0.03
4		0.05	0.09	0.05	0.05
5		0.09	0.10	0.05	0.05
6		0.10	0.05	0.05	0.05

LOAD COMBINATION # 7 : DL+CL+2.0AUX2

PURLIN ANALYSIS:

Span	Id	Left	Sup	Shear (k)	Left	Right	Lap	Mom	MidSpan	Left	Right	Sup
1		0.00	0.00	-0.04	0.00	-0.04	0.00	0.00	0.00	0.00	0.00	0.00
2		0.40	0.40	-0.55	-0.64	0.02	-0.89	4.51	0.80	0.02	1.40	0.02
3		0.60	0.60	0.51	-0.39	1.40	0.84	-0.61	6.69	0.23	0.66	0.66
4		0.21	0.21	0.18	-0.11	0.66	0.46	-0.09	7.14	0.13	0.26	0.26
5		0.16	0.16	0.13	-0.16	0.26	0.11	-0.18	5.45	0.27	0.45	0.45
6		0.21	0.21	0.18	-0.14	0.45	0.25	-0.29	7.09	0.01	0.01	0.01
7		0.02	0.02		0.01	0.01	0.00	1.83	0.00	0.00	0.00	0.00

STRENGTH/DEFLECTION:

Span	Id	Loc	Calc Allow	UC	Loc	Calc Allow	UC	Mom+Shr	Deflection (in)
1	RS	-0.04	3.39	0.01	RS	0.02	3.48	0.01	0.00
2	RL	-0.55	3.39	0.16	MS	-0.89	3.48	0.26	0.08
3	LT	0.51	3.39	0.15	LT	0.84	3.48	0.24	0.08
4	LT	0.18	3.39	0.05	LT	0.46	3.48	0.13	0.02

LOAD COMBINATION # 9 : DL+CL+2.0AUX4

PURLIN ANALYSIS:

Span	Id	Shear (k)		Moment (F-k)		Moment (F-k)		Moment (F-k)	
		Left	Right	Left	Right	Left	Right	Left	Right
Sup	Sup			Sup	Sup	Mom	Loc		
1		0.00		-0.02	0.00	0.00	0.00	0.00	0.01
2		0.14	-0.17	-0.20	0.01	-0.34	4.88	0.16	0.34
3		0.15	0.12	-0.18	0.20	-0.04	5.08	0.48	0.67
4		0.49	0.40	-0.50	0.59	-0.66	5.45	0.72	1.26
5		0.58	0.49	-0.40	0.49	-0.62	6.48	0.29	0.74
6		0.24	0.21	-0.11	0.74	-0.19	7.94		0.01
7		0.02		0.00	0.01	0.00	1.83		0.00

STRENGTH/DEFLECTION:

Span	Id	Shear (k)		Moment (F-k)		Moment (F-k)		Deflection (in)	
		Loc	UC	Loc	UC	Loc	UC	Calc Allow	
1	RS	-0.02	3.39	0.00	RS	0.01	3.48	0.00	0.01
2	RL	-0.17	3.39	0.05	MS	-0.34	3.48	0.10	-0.01
3	RL	-0.18	3.39	0.05	RL	0.48	3.48	0.14	0.03
4	RL	-0.50	3.39	0.15	RL	0.72	3.48	0.21	-0.07
5	LL	0.49	3.39	0.14	LL	0.72	3.48	0.21	-0.07
6	LL	0.21	3.39	0.06	LL	0.52	3.48	0.15	0.04
7	LS	0.02	3.39	0.00	LS	0.01	3.48	0.00	-0.01

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Id	Lap_Shear (k)		Shear_Ratio	
		Left	Right	Left	Right
2		0.09		0.04	0.09
3		0.09	0.17	0.09	0.09
4		0.17	0.31	0.09	0.16
5		0.31	0.19	0.16	0.09
6		0.19			0.09

LOAD COMBINATION #10 : DL+CL+2.0AUX5

PURLIN ANALYSIS:

Span	Id	Shear (k)		Moment (F-k)		Moment (F-k)		Moment (F-k)	
		Left	Right	Left	Right	Left	Right	Left	Right
Sup	Sup			Sup	Sup	Mom	Loc		
1		0.00		-0.02	0.00	0.00	0.00	0.00	0.01
2		0.14	-0.18	-0.21	0.01	-0.29	4.57	0.25	0.45
3		0.19	-0.13	-0.16	0.45	-0.18	6.55	0.11	0.26
4		0.14	0.11	-0.18	0.26	-0.09	4.86	0.46	0.66

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Lap_Shear(k)	Shear_Ratio	Id
2	0.10	0.05	Left Right
3	0.10	0.05	Left Right
4	0.09	0.03	Left Right
5	0.05	0.12	Left Right
6	0.24	0.12	Left Right

LOAD COMBINATION #12 : DL+CL+2.0AUX7

PURLIN ANALYSIS:

Span	Left	Right	Id
1	0.00	0.11	Sup
2	0.11	-0.21	Sup
3	0.55	-0.43	Sup
4	0.18	-0.15	Sup
5	0.52	-0.43	Sup
6	0.24	0.21	Sup
7	0.11	0.11	Sup
1	0.00	0.00	Left
2	-0.24	0.11	Left
3	-0.52	0.86	Left
4	-0.15	0.69	Left
5	-0.43	0.69	Left
6	-0.11	0.86	Left
7	-0.11	0.11	Left
1	0.00	0.00	Mom
2	-0.09	3.66	Mom
3	-0.17	6.17	Mom
4	-0.15	6.00	Mom
5	-0.84	5.83	Mom
6	-0.09	8.01	Mom
7	0.00	1.83	Mom

STRENGTH/DEFLECTION:

Span	Loc	Calc Allow	UC	Loc	Calc Allow	UC	Mom+Shr	Deflection(in)
1	RS	-0.11	3.39	0.03	RS	0.00	0.00	-0.03
2	RL	-0.21	3.39	0.06	RL	0.04	0.04	0.06
3	LT	0.46	3.39	0.14	LT	0.02	0.02	-0.13
4	RT	-0.15	3.39	0.04	RT	0.03	0.03	0.09
5	RL	-0.46	3.39	0.14	RL	0.03	0.03	0.80
6	LT	0.21	3.39	0.06	LT	0.04	0.04	0.80
7	LS	0.11	3.39	0.03	LS	0.00	0.00	0.78

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span	Lap_Shear(k)	Shear_Ratio	Id
2	0.22	0.11	Left Right
3	0.22	0.11	Left Right
4	0.17	0.09	Left Right
5	0.17	0.09	Left Right
6	0.22	0.11	Left Right

LOAD COMBINATION #13 : DL+CL+2.0AUX8

EXTENSION ID # 1, WALT # 4

EAVE STRUT LAYOUT:

Bay Id	Span Id	Eave Part	Span (ft)	Space (ft)	No. Brace	Weight
	1	6X25Z16	1.83	1.26	0	4.5
1	2	6X25Z16	11.50	1.26	2	28.5
2	3	6X25Z16	11.67	1.26	2	28.9
3	4	6X25Z16	11.67	1.26	2	28.9
4	5	6X25Z16	11.67	1.26	2	28.9
5	6	6X25Z16	11.50	1.26	2	28.5
7		6X25Z16	1.83	1.26	0	4.5

STRESS/DEFLECTION:

Span	Id	Load	Id	Shear (k)	Moment (F-k)	Calc	Allow	UC	Deflect (in)	Calc	Allow	UC
1	1	-0.05	3.39	0.02	0.05	3.48	0.01	0.04	-0.08	0.00	0.00	0.00
	2	-0.01	3.39	0.00	0.01	3.48	0.00	0.00	-0.07	0.00	0.00	0.00
	3	0.07	3.39	0.02	-0.07	3.48	0.02	-0.07	0.00	0.00	0.00	0.00
	4	0.11	3.39	0.03	-0.10	3.48	0.03	-0.09	0.00	0.00	0.00	0.00
	5	0.00	3.39	0.00	0.00	3.48	0.00	0.00	0.00	0.00	0.00	0.00
	1	0.17	3.39	0.05	-0.44	3.48	0.13	-0.08	0.00	0.00	0.00	0.00
	2	0.02	3.39	0.01	-0.06	3.48	0.02	0.00	0.00	0.00	0.00	0.00
2	1	0.17	3.39	0.05	-0.44	3.48	0.13	-0.08	0.00	0.00	0.00	0.00
	2	0.02	3.39	0.01	-0.06	3.48	0.02	0.00	0.00	0.00	0.00	0.00
	3	-0.24	3.39	0.07	0.63	3.48	0.18	0.14	1.1	0.12	1.1	0.10
	4	-0.34	3.39	0.10	0.92	3.48	0.26	0.19	1.1	0.17	1.1	0.17
	5	-0.01	3.39	0.00	-0.04	3.48	0.01	0.00	0.00	0.00	0.00	0.00
	1	0.05	3.39	0.02	0.05	3.48	0.01	0.04	0.00	0.00	0.00	0.00
	2	0.01	3.39	0.00	0.01	3.48	0.00	0.00	0.00	0.00	0.00	0.00
3	1	-0.16	3.39	0.05	-0.48	3.48	0.14	-0.09	0.00	0.00	0.00	0.00
	2	0.02	3.39	0.01	-0.06	3.48	0.02	0.00	0.00	0.00	0.00	0.00
	3	0.23	3.39	0.07	0.68	3.48	0.20	0.15	1.1	0.13	1.1	0.13
	4	-0.34	3.39	0.10	0.99	3.48	0.29	0.22	1.1	0.19	1.1	0.19
	5	0.01	3.39	0.00	-0.04	3.48	0.01	0.00	0.00	0.00	0.00	0.00
	1	-0.16	3.39	0.05	-0.48	3.48	0.14	-0.09	0.00	0.00	0.00	0.00
	2	0.02	3.39	0.01	-0.06	3.48	0.02	0.00	0.00	0.00	0.00	0.00
4	1	-0.16	3.39	0.05	-0.48	3.48	0.14	-0.09	0.00	0.00	0.00	0.00
	2	0.02	3.39	0.01	-0.06	3.48	0.02	0.00	0.00	0.00	0.00	0.00
	3	0.23	3.39	0.07	0.68	3.48	0.20	0.15	1.1	0.13	1.1	0.13
	4	-0.34	3.39	0.10	0.99	3.48	0.29	0.22	1.1	0.19	1.1	0.19
	5	0.01	3.39	0.00	-0.04	3.48	0.01	0.00	0.00	0.00	0.00	0.00
	1	-0.16	3.39	0.05	-0.48	3.48	0.14	-0.09	0.00	0.00	0.00	0.00
	2	0.02	3.39	0.01	-0.06	3.48	0.02	0.00	0.00	0.00	0.00	0.00
5	1	-0.16	3.39	0.05	-0.48	3.48	0.14	-0.09	0.00	0.00	0.00	0.00
	2	0.02	3.39	0.01	-0.06	3.48	0.02	0.00	0.00	0.00	0.00	0.00
	3	0.23	3.39	0.07	0.68	3.48	0.20	0.15	1.1	0.13	1.1	0.13
	4	-0.34	3.39	0.10	0.99	3.48	0.29	0.22	1.1	0.19	1.1	0.19
	5	0.01	3.39	0.00	-0.04	3.48	0.01	0.00	0.00	0.00	0.00	0.00
	1	-0.16	3.39	0.05	-0.48	3.48	0.14	-0.09	0.00	0.00	0.00	0.00
	2	0.02	3.39	0.01	-0.06	3.48	0.02	0.00	0.00	0.00	0.00	0.00
6	1	-0.17	3.39	0.05	-0.44	3.48	0.13	-0.08	0.00	0.00	0.00	0.00
	2	-0.02	3.39	0.01	-0.06	3.48	0.02	0.00	0.00	0.00	0.00	0.00
	3	0.24	3.39	0.07	0.63	3.48	0.18	0.14	1.1	0.12	1.1	0.10
	4	0.34	3.39	0.10	0.92	3.48	0.26	0.19	1.1	0.17	1.1	0.17
	5	-0.01	3.39	0.00	-0.04	3.48	0.01	0.00	0.00	0.00	0.00	0.00
	1	0.05	3.39	0.02	0.05	3.48	0.01	0.04	0.00	0.00	0.00	0.00
	2	0.01	3.39	0.00	0.01	3.48	0.00	0.00	0.00	0.00	0.00	0.00
7	1	0.05	3.39	0.02	0.05	3.48	0.01	0.04	0.00	0.00	0.00	0.00
	2	0.01	3.39	0.00	0.01	3.48	0.00	0.00	0.00	0.00	0.00	0.00
	3	-0.07	3.39	0.02	-0.07	3.48	0.02	-0.07	0.00	0.00	0.00	0.00

Ext	Id	Locate	Load	Support_Moment (ft-lb/ft)	Locate	Calc Allow Ratio	Midspan_Moment (ft-lb/ft)	Locate	Calc Allow Ratio
1	1	Roof	1	0.0	0.0	0.0	0.8	-8.5	116.1
	2		3	0.0	0.0	0.0	0.8	-2.9	116.1
				0.0	0.0	0.0	0.8	11.1	130.8
				0.0	0.0	0.0			0.08

PANEL DEFLECTION:

Ext	Id	Locate	Load	Deflection (in)	Locate	Calc Limit Ratio
1	4	Roof	0.8	0.00	0.10	0.02
	5		0.0	0.00	0.10	0.00
	6		0.8	0.00	0.10	0.04

LOAD COMBINATION:

Load	Id	Description
1	DL+CL+SL	
2	DL+CL+WP	
3	DL+WS	
4	SL	
5	WP	
6	WS	

PANEL SHEAR:	Allow	=	0.0
	Calc		
	Wind	=	0.0
	Seismic	=	0.0

AUGUST11

Roof Diagonal Bracing Report

10/28/07 6:43pm

DIAGONAL BRACING:

Bay	Id	Brace_Loc.	End	Type	Size	Part	Calc Allow	Wind	Seismic	Max UC
3			10.00	C	0.250	HW-3730	0.00	3.33	0.00	0.00

AUGUST11

Sidewall Diagonal Bracing Report

10/28/07 6:43pm

PANEL SHEAR:	Wall Base	Wind	Seismic	Calc Allow
	Id	Length	Calc	
2		60.0	0.0	100.0
4		60.0	13.8	14.4
				100.0

DIAGONAL BRACING:

Brace_Tension(k)

10/28/07 6:43pm

location	Purlin	Eave Strut
Left EW	Welded clip	Direct Bolt
Right RF	Welded clip	Direct Bolt
Right EW	Welded clip	Direct Bolt

Wall Line	Id	Id Type	No. Type	Dia	Wshr	Bolt Selected	Bolt Capacity	Calc Shear	Bear Ratio
4	1	EW	2	A307	0.500	0	0.49	3.93	5.19
4	2	RF	2	A307	0.500	0	0.49	3.93	5.19
4	3	RF	2	A307	0.500	0	0.52	3.93	5.19
4	4	RF	2	A307	0.500	0	0.52	3.93	5.19
4	5	RF	2	A307	0.500	0	0.49	3.93	5.19
4	6	EW	2	A307	0.500	0	0.49	3.93	5.19

Surf Frm Line		Brace		Bolt Selected		Shear		Bolt Capacity	
Id	Id Type	Loc	No. Type	Wshr	Calc Allow	Calc Allow	--Bearing--	Ratio	
2	1	EW	2	A307	0.500	0.82	3.93	0.82	
2	2	RF	2	A307	0.500	0.66	3.93	0.66	
2	3	RF	2	A307	0.500	0.53	3.93	0.53	
2	4	RF	2	A307	0.500	0.53	3.93	0.53	
2	5	RF	2	A307	0.500	0.66	3.93	0.66	
2	6	EW	2	A307	0.500	0.82	3.93	0.82	

Root Design Weight Summary

10/28/07 6:43pm

Roof Pullins	=	704.32
Eave Struts	=	241.87
Extension Eave Struts	=	152.93
Roof Bracing	=	3.80
Wall Bracing	=	7.08

Analysis Inputs

Members
Section File 1 600S200-43.sct
Revision Date and Time 1/9/2003 12:00:00 PM

Start Loc.	End Loc.	Braced	R	ex	ey
(ft)	(ft)	Flange	0.0000	(in)	(in)
1	0.0000	10.0000	None	0.0000	0.0000

Supports	Type	Location	(ft)	(in)	Bearing	Fastened	K
1 Y	0.0000	2.000	Yes	1.0000			
2 XT	0.0000	2.000	No	0.0000			
3 Y	10.0000	2.000	Yes	1.0000			
4 XT	10.0000	2.000	No	0.0000			

Loading: Dead Load	Type	Angle	Start Loc.	End Loc.	Magnitude	Start	End
1 Axial	(deg)	NA	0.0000	10.0000	0.0010	0.0010	0.0010
	(ft)						

Loading: Wind Load	Type	Angle	Start Loc.	End Loc.	Magnitude	Start	End
1 Distributed	(deg)	90.000	0.0000	10.0000	-0.06	-0.06	-0.06
	(ft)						

Load Combination: D	Specification:	2001 AISI Specification - US (ASD)	Inflection Point Bracing:	Yes	Factor
1 Dead Load					1.0000

Load Combination: D+W	Specification:	2001 AISI Specification - US (ASD)	Inflection Point Bracing:	Yes	Factor
1 Dead Load					1.0000
2 Wind Load					1.0000

M. Almahayni
Structural Design Concepts

Rev. Date: 6/7/2004 12:28:55 PM
By: M. Almahayni

CFS Version 4.14
Analysis: Analysis 5.ani
10 ft Tall Beam-Column

AISI Eq. C3.3.1-1 (Mx, Vy) $0.315 + 0.000 = 0.315 \leq 1.0$
AISI Eq. C3.3.1-1 (My, Vx) $0.000 + 0.000 = 0.000 \leq 1.0$

Web Crippling Check - 2001 AISI Specification - US (ASD)

Load Combination: D+W
Parameters at 0.000 ft:
Total Load: 0.28000 k on bottom flange
Total Moment: 0.0000 k-in
Bearing: 2.0000 in
Flange fastened to bearing surface: Yes
Distance from edge of bearing to edge of opposite load: 10.0000 ft
Section: 600S200-43.sct
Applied Load: 0.28000 k on bottom flange
Applied Moment: 0.000 k-in
Distance from edge of bearing to end of member: 0.0000 ft
Part Elem Calculation Type Pa (k) Pay (k) Notes
1 3 Cee, FS-EOF 0.28323 0.28323
Web Crippling Strength 0.28323
Web Crippling Check: $\leq$ 0.28000 k $\leq$ 0.28323 k
Moment Check: $\leq$ 0.000 k-in $\leq$ 14.965 k-in
Interaction Equations AISI Eq. C3.5.1-1 (P, M) $1.186 + 0.000 = 1.186 \leq 1.5$

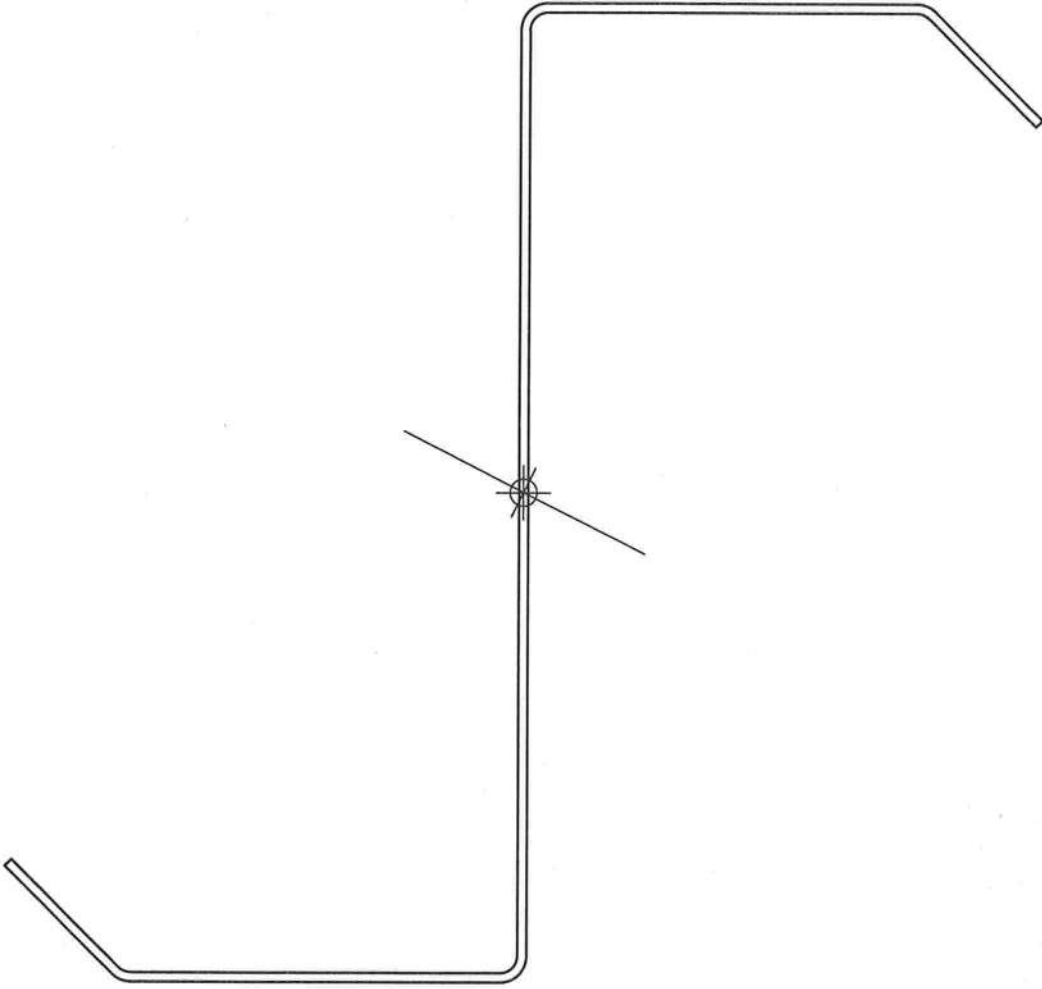
M. Almahan
Structural Design Concepts

CFS Version 4.13
Section: 14 GA DOUBLE TRACK.sct
600T200-68, 50 ksi Double Track
SSMA Library
Rev. Date: 1/16/2004 6:45:38 AM
By: M. Almahan

Material: A653 SQ Grade 50/1
Apply strength increase from cold work of forming.
Modulus of Elasticity, E 29500 ksi
Yield Strength, Fy 50 ksi
Tensile Strength, Fu 65 ksi
Warping Constant Override, Cw 0 in^6
Torsion Constant Override, J 0 in^4
Connector Spacing 0 in

Track, Thickness 0.0713 in (14 Gage)									
Placement of Part from Origin:									
X to center of gravity 0.42341 in									
Y to center of gravity 0 in									
Outside dimensions, Open shape									
1	Length	Angle	Radius	Web	k	Hole Size	Distance		
	(in)	(deg)	(in)		Coef.	(in)	(in)		
2.0000	180.000	0.13600	Single	0.000	0.0000	0.0000	1.0000		
6.2496	90.000	0.13600	Cee	0.000	0.0000	0.0000	3.1248		
2.0000	0.000	0.13600	Single	0.000	0.0000	0.0000	1.0000		
2.0000	180.000	0.13600	Single	0.000	0.0000	0.0000	1.0000		
Part 2, Thickness 0.0713 in (14 Gage)									
Placement of Part from Origin:									
X to center of gravity -0.4234 in									
Y to center of gravity 0 in									
Outside dimensions, Open shape									
1	Length	Angle	Radius	Web	k	Hole Size	Distance		
	(in)	(deg)	(in)		Coef.	(in)	(in)		
2.0000	180.000	0.13600	Single	0.000	0.0000	0.0000	1.0000		
6.2496	90.000	0.13600	Cee	0.000	0.0000	0.0000	3.1248		
2.0000	0.000	0.13600	Single	0.000	0.0000	0.0000	1.0000		
2.0000	180.000	0.13600	Single	0.000	0.0000	0.0000	1.0000		

Load Combination: D+W									
Design Parameters at 7.501 ft:									
Lx	15.000 ft	Ly	15.000 ft	Lt	15.000 ft	Kx	1.0000	Ky	1.0000
Section: 14 GA DOUBLE TRACK.sect									
Cbx	1.1363	Cby	1.0000	ex	0.0000 in	Cmx	1.0000	cmx	1.0000
Braced Flange: Bottom									
Loads:	P	Mx	Vy	My	Vx	Total	Applied	Strength	
	(k)	(k-in)	(k)	(k-in)	(k)	0.000	0.000	13.168	
						-50.697	-50.697	58.565	
						0.000	0.000	10.701	
						0.000	0.000	5.918	
						0.000	0.000	9.586	
Effective section properties at applied loads:									
Ae	1.34786 in ²	Ixe	7.2177 in ⁴	Iye	0.5398 in ⁴	Sxe(l)	2.4393 in ³	Sye(l)	0.2699 in ³
						Sxe(b)	2.1934 in ³	Sye(r)	0.2699 in ³
Interaction Equations									
AISI Eq. C5.2.1-1 (P, Mx, My)	0.000 + 0.866 + 0.000 = 0.866	<= 1.0							
AISI Eq. C5.2.1-2 (P, Mx, My)	0.000 + 0.866 + 0.000 = 0.866	<= 1.0							
AISI Eq. C3.3.1-1 (Mx, Vy)	0.749 + 0.000 = 0.749	<= 1.0							
AISI Eq. C3.3.1-1 (My, Vx)	0.000 + 0.000 = 0.000	<= 1.0							

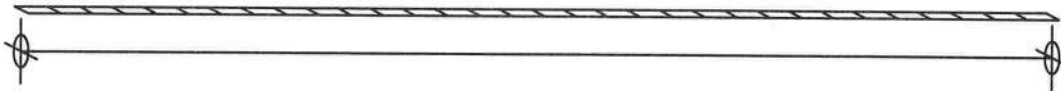


CFS Version 4.14
Section: 6x2.5x1-16 Gage
Zee 6x2.5x1-16 Gage

Rev. Date: 5/2/2005 10:13:05 AM
By: M. Almahayni

M. Almahayni
Structural Design Concepts

CFS Version 4.14
Analysis: Analysis 4.ani
14.75 ft Span Simple Beam
Ceiling Joist
Rev. Date: 5/2/2005 10:24:27 AM
By: M. Almahayni
M. Almahayni
Structural Design Concepts



Analysis Inputs

Members
Section File 1 6x25C16ga.sct
Revision Date and Time 5/2/2005 10:13:05 AM

Start Loc.	End Loc.	Braced	R	ex	ey
1	0.000	14.750	Bottom	0.0000	0.0000

Supports

Type	Location	(ft)	(in)	Bearing	Fastened	K
1 XLT	0.000	2.000	Yes	1.0000		
2 XLT	14.750	2.000	Yes	1.0000		

Loading: Dead Load

Type	Angle	Start Loc.	End Loc.	(ft)	(ft)	Magnitude	End
1 Distributed	90.000	0.000	14.750	-0.01	-0.01 k/ft		

Loading: Live Load

Type	Angle	Start Loc.	End Loc.	(ft)	(ft)	Magnitude	End
1 Distributed	90.000	0.000	14.750	-0.03	-0.03 k/ft		

Load Combination: D

Specification: 2001 AISI Specification - US (ASD)

Inflection Point Bracing: Yes

Loading

1 Beam Self Weight

2 Dead Load

Factor 1.0000

Load Combination: D+L

Specification: 2001 AISI Specification - US (ASD)

Inflection Point Bracing: Yes

Loading

1 Beam Self Weight

2 Dead Load

3 Live Load

Factor 1.0000

Member Check - 2001 AISI Specification - US (ASD)

Load Combination: D+L										
Design Parameters at 7.375 ft:										
Lx	14.750	ft	Ly	14.750	ft	Kx	1.0000	Ky	1.0000	
Section: 6x25C16ga.sct										
Cbx	1.1364		Cby	1.0000		ex	0.0000	ey	0.0000	
Cmx	1.0000		Cmy	1.0000		Moment Reduction, R: 0.0000				
Braced Flange: Bottom										
Loads:										
P		(k)	Mx		(k-in)	Vy		(k)	My	(k-in)
Total		0.0000	11.241		0.0000	0.0000		0.000	0.0000	
Applied		0.0000	11.241		0.0000	0.0000		0.000	0.0000	
Strength		7.1743	11.814		2.8453	11.067		5.2934		
Effective section properties at applied loads:										
Ae		0.71945	in ²	Ixe		4.1582	in ⁴	Iye		1.4453
				Sxe(t)		1.3861	in ³	Sye(l)		0.4547
				Sxe(b)		1.3861	in ³	Sye(r)		0.4547
Interaction Equations										
AISI Eq. C5.2.1-1	(P, Mx, My)	0.000 + 0.952	+ 0.000	= 0.952	<= 1.0					
AISI Eq. C5.2.1-2	(P, Mx, My)	0.000 + 0.952	+ 0.000	= 0.952	<= 1.0					
AISI Eq. C3.3.1-1	(Mx, Vy)	0.083 + 0.000	= 0.083	<= 1.0						
AISI Eq. C3.3.1-1	(My, Vx)	0.000 + 0.000	= 0.000	<= 1.0						

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Rev. Date: 5/2/2005 10:34:17 AM
By: M. Almahayni

CFS Version 4.14
Section: 6x25Z12.sct
Zee 6x2.5x1-12 Gage

Material: A607 Class 2 Grade 55
No strength increase from cold work of forming.
Modulus of Elasticity, E 29500 ksi
Yield Strength, Fy 55 ksi
Tensile Strength, Fu 65 ksi
Warping Constant Override, Cw 0 in^6
Torsion Constant Override, J 0 in^4

Stiffened Zee, Thickness 0.1017 in (12 Gage)

Placement of Part from Origin:

X to center of gravity 0 in
Y to center of gravity 0 in

Outside dimensions, Open shape

Length (in)	Angle (deg)	Radius (in)	Web Coef.	Hole Size (in)	Distance (in)
1.0000	-45.000	0.19400	0.000	0.0000	0.5000
2.5000	0.000	0.19400	0.000	0.0000	1.2500
6.0000	90.000	0.19400	0.000	0.0000	3.0000
2.5000	0.000	0.19400	0.000	0.0000	1.2500
1.0000	-45.000	0.19400	0.000	0.0000	0.5000
1.0000	-45.000	0.19400	0.000	0.0000	0.5000
2.5000	0.000	0.19400	0.000	0.0000	1.2500
6.0000	90.000	0.19400	0.000	0.0000	3.0000
2.5000	0.000	0.19400	0.000	0.0000	1.2500
1.0000	-45.000	0.19400	0.000	0.0000	0.5000

M. Almahayni
Structural Design Concepts

CFS Version 4.14
Analysis: Analysis 1.aml
3-Span Continuous Beam
Ceiling Main Beam
Rev. Date: 5/2/2005 10:36:54 AM
By: M. Almahayni

Load Combination: D+0.75(L+Lr)
Specification: 2001 AISI Specification - US (ASD)
Inflection Point Bracing: Yes
Loading
1 Beam Self Weight 1.0000
2 Dead Load 1.0000
3 Live Load 0.7500
4 Roof Live Load 0.7500
Load Combination: D+0.7E+L+Lr
Specification: 2001 AISI Specification - US (ASD)
Inflection Point Bracing: Yes
Loading
1 Beam Self Weight 1.0000
2 Dead Load 1.0000
3 Live Load 1.0000
4 Roof Live Load 1.0000
5 Earthquake Load 0.7000
Load Combination: 0.6D+W
Specification: 2001 AISI Specification - US (ASD)
Inflection Point Bracing: Yes
Loading
1 Beam Self Weight 0.6000
2 Dead Load 0.6000
3 Wind Load 1.0000
Load Combination: 0.6D+0.7E
Specification: 2001 AISI Specification - US (ASD)
Inflection Point Bracing: Yes
Loading
1 Beam Self Weight 0.6000
2 Dead Load 0.6000
3 Earthquake Load 0.7000

CFS Version 4.14
Analysis: Analysis 1.anl
3-Span Continuous Beam
Ceiling Main Beam
Rev. Date: 5/2/2005 10:36:54 AM
By: M. Almahayni

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Structural Design Concepts

Member Check - 2001 AISI Specification - US (ASD)

Load Combination: D+L

Design Parameters at 5.333 ft:

Lx	13.333 ft	Ly	10.667 ft	Lt	10.667 ft
Kx	1.0000	Ky	1.0000	Kt	1.0000

Section: 6x25Z12.sct

Cbx	1.1364	Cby	1.0000	ex	0.0000 in
Cmx	1.0000	Cmy	1.0000	ey	0.0000 in
Braced Flange: Bottom Moment Reduction, R: 0.0000					

Loads:	P	Mx	Vy	My	Vx
	(k)	(k-in)	(k)	(k-in)	(k)
Total	0.000	34.017	0.000	0.000	0.000
Applied	0.000	34.017	0.000	0.000	0.000
Strength	13.328	40.008	11.345	24.577	8.733

Effective section properties at applied loads:

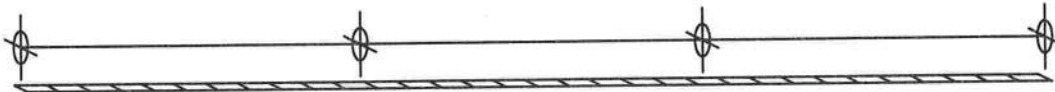
Ae	1.2693 in ²	Ixe	7.1831 in ⁴	Iye	2.4988 in ⁴
		Sxe(t)	2.3944 in ³	Sye(l)	0.7917 in ³
		Sxe(b)	2.3944 in ³	Sye(r)	0.7917 in ³

Interaction Equations

AISI Eq. C5.2.1-1 (P, Mx, My)	0.000 + 0.850 + 0.000 = 0.850 <= 1.0
AISI Eq. C5.2.1-2 (P, Mx, My)	0.000 + 0.850 + 0.000 = 0.850 <= 1.0
AISI Eq. C3.3.1-1 (Mx, Vy)	0.186 + 0.000 = 0.186 <= 1.0
AISI Eq. C3.3.1-1 (My, Vx)	0.000 + 0.000 = 0.000 <= 1.0

CFS Version 4.14
 Analysis: Analysis 1.anl
 3-Span Continuous Beam
 Ceiling Main Beam
 Rev. Date: 5/2/2005 10:36:54 AM
 By: M. Almahayni

M. Almahayni
 Structural Design Concepts



Analysis Inputs

Members

Section File	Revision Date and Time
1 6x25Z12.sct	5/2/2005 10:34:17 AM

	Start Loc. (ft)	End Loc. (ft)	Braced Flange	R	ex (in)	ey (in)
1	0.000	39.993	Bottom	0.0000	0.0000	0.0000

Supports

Type	Location (ft)	Bearing (in)	Fastened	K
1 XYT	0.000	2.000	Yes	1.0000
2 XYT	13.333	2.000	Yes	1.0000
3 XYT	26.663	2.000	Yes	1.0000
4 XYT	39.993	2.000	Yes	1.0000

Loading: Dead Load

Type	Angle (deg)	Start Loc. (ft)	End Loc. (ft)	Start Magnitude	End Magnitude
1 Distributed	90.000	0.000	39.993	-0.04	-0.04 k/ft

Loading: Live Load

Type	Angle (deg)	Start Loc. (ft)	End Loc. (ft)	Start Magnitude	End Magnitude
1 Distributed	90.000	0.000	39.993	-0.15	-0.15 k/ft

Load Combination: D

Specification: 2001 AISI Specification - US (ASD)

Inflection Point Bracing: Yes

Loading	Factor
1 Beam Self Weight	1.0000
2 Dead Load	1.0000

Load Combination: D+L

Specification: 2001 AISI Specification - US (ASD)

Inflection Point Bracing: Yes

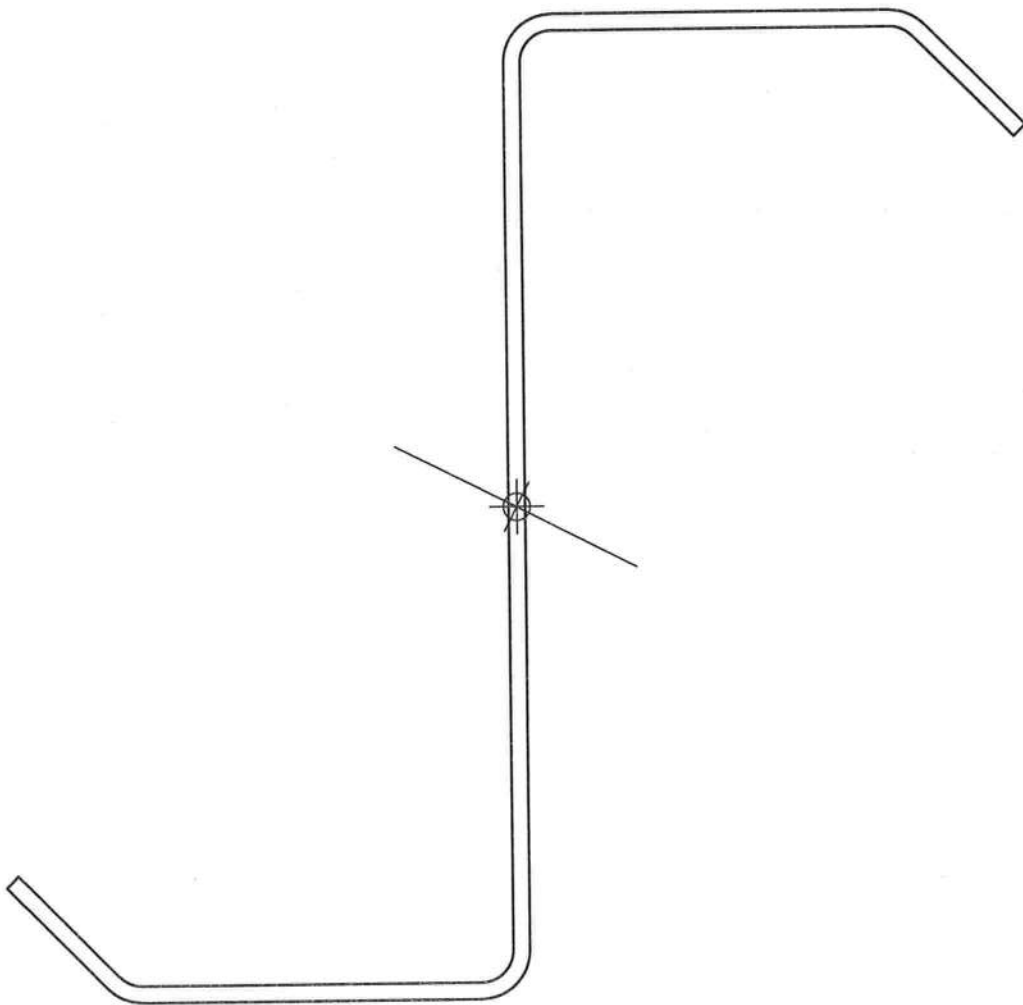
Loading	Factor
1 Beam Self Weight	1.0000
2 Dead Load	1.0000
3 Live Load	1.0000

CFS Version 4.14
Section: 6x25Z12.sct
Zee 6x2.5x1-12 Gage

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Page 1

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By: M. Almahayni



Section Inputs

CFS Version 4.14

Analysis: Analysis 4.anl

14.75 ft Span Simple Beam

Ceiling Joist

Rev. Date: 5/2/2005 10:24:27 AM

By: M. Almahayni

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Structural Design Concepts

Load Combination: $D+0.75(L+Lr)$

Specification: 2001 AISI Specification - US (ASD)

Inflection Point Bracing: Yes

Loading	Factor
1 Beam Self Weight	1.0000
2 Dead Load	1.0000
3 Live Load	0.7500
4 Roof Live Load	0.7500

Load Combination: $D+0.7E+L+Lr$

Specification: 2001 AISI Specification - US (ASD)

Inflection Point Bracing: Yes

Loading	Factor
1 Beam Self Weight	1.0000
2 Dead Load	1.0000
3 Live Load	1.0000
4 Roof Live Load	1.0000
5 Earthquake Load	0.7000

Load Combination: $0.6D+W$

Specification: 2001 AISI Specification - US (ASD)

Inflection Point Bracing: Yes

Loading	Factor
1 Beam Self Weight	0.6000
2 Dead Load	0.6000
3 Wind Load	1.0000

Load Combination: $0.6D+0.7E$

Specification: 2001 AISI Specification - US (ASD)

Inflection Point Bracing: Yes

Loading	Factor
1 Beam Self Weight	0.6000
2 Dead Load	0.6000
3 Earthquake Load	0.7000

CFS Version 4.14
 Section: 6x25C16ga.sct
 Zee 6x2.5x1-16 Gage

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 Structural Design Concepts

Rev. Date: 5/2/2005 10:13:05 AM
 By: M. Almahayni

Material: A607 Class 2 Grade 55
 No strength increase from cold work of forming.
 Modulus of Elasticity, E 29500 ksi
 Yield Strength, Fy 55 ksi
 Tensile Strength, Fu 65 ksi
 Warping Constant Override, Cw 0 in⁶
 Torsion Constant Override, J 0 in⁴

Stiffened Zee, Thickness 0.0566 in (16 Gage)

Placement of Part from Origin:

X to center of gravity 0 in
 Y to center of gravity 0 in

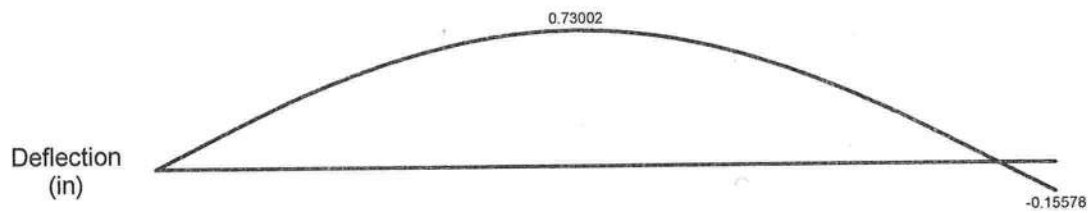
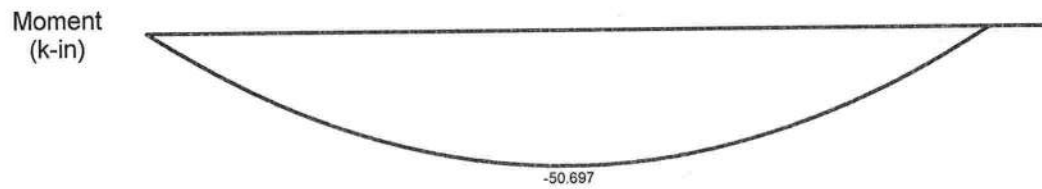
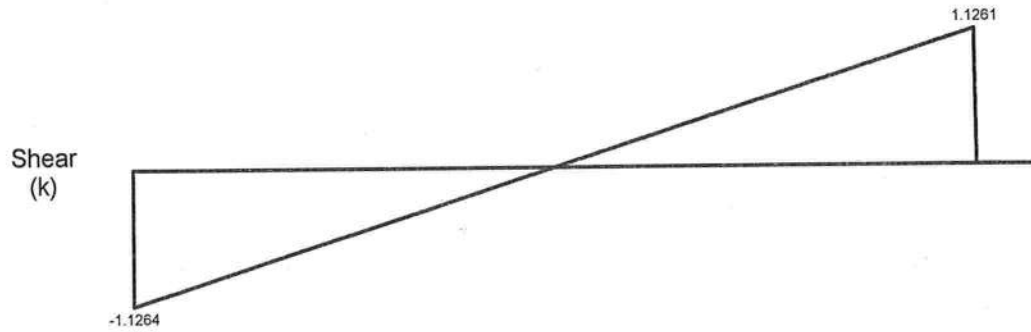
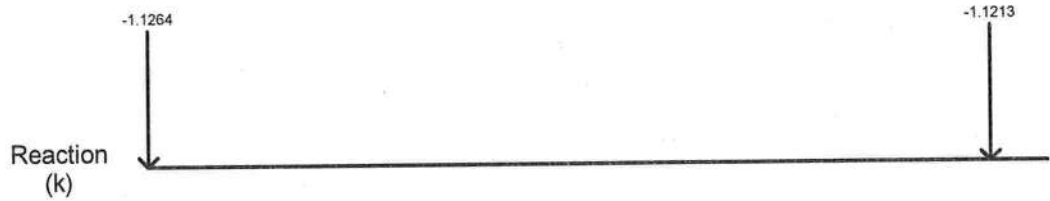
Outside dimensions, Open shape

	Length (in)	Angle (deg)	Radius (in)	Web	k Coef.	Hole Size (in)	Distance (in)
1	1.0000	-45.000	0.10800	None	0.000	0.0000	0.5000
2	2.5000	0.000	0.10800	Single	0.000	0.0000	1.2500
3	6.0000	90.000	0.10800	Zee	0.000	0.0000	3.0000
4	2.5000	0.000	0.10800	Single	0.000	0.0000	1.2500
5	1.0000	-45.000	0.10800	None	0.000	0.0000	0.5000

CFS Version 4.13
 Analysis: DOUBLE TRACK ANALYSIS.anl
 DOUBLE TRACK
 H04-101
 Rev. Date: 1/16/2004 7:38:35 AM
 By: M. Almahayni

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 structural Design Concepts

Load Combination: D+W, Y Direction



CFS Version 4.13

Analysis: DOUBLE TRACK ANALYSIS.anl

DOUBLE TRACK

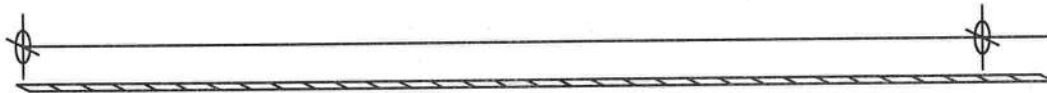
H04-101

Rev. Date: 1/16/2004 7:38:35 AM

By: M. Almahayni

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structural Design Concepts



Analysis Inputs

Members

Section File	Revision Date and Time
1 14 GA DOUBLE TRACK.sct	1/16/2004 6:45:38 AM

	Start Loc. (ft)	End Loc. (ft)	Braced Flange	R	ex (in)	ey (in)
1	0.000	16.000	Bottom	0.0000	0.0000	0.0000

Supports

Type	Location (ft)	Bearing (in)	Fastened	K
1 XYT	0.000	4.000	No	1.0000
2 XYT	15.000	4.000	No	1.0000

Loading: Wind Load

Type	Angle (deg)	Start Loc. (ft)	End Loc. (ft)	Start Magnitude	End Magnitude
1 Distributed	90.000	0.000	15.000	0.16	0.16 k/ft

Load Combination: D+W

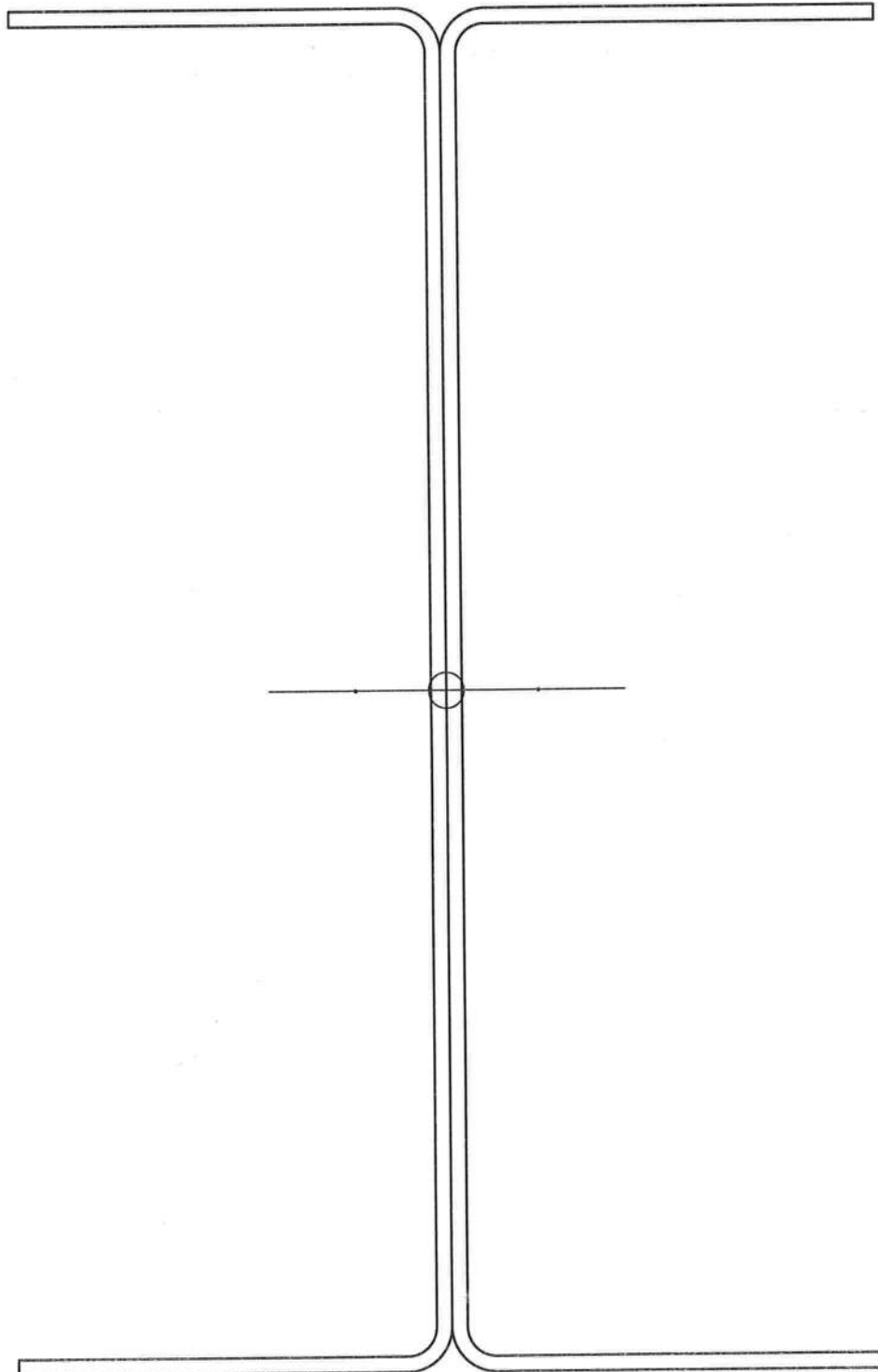
Specification: 2001 AISI Specification - US (ASD)

Inflection Point Bracing: Yes

Loading	Factor
1 Beam Self Weight	1.0000
2 Dead Load	1.0000
3 Wind Load	1.0000

CFS Version 4.13
Section: 14 GA DOUBLE TRACK.sct
600T200-68, 50 ksi Double Track
SSMA Library
Rev. Date: 1/16/2004 6:45:38 AM
By: M. Almahayni

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Section Inputs

CFS Version 4.14

Analysis: Analysis 5.anl

10 ft Tall Beam-Column

M. Almahayni

Structural Design Concepts

Rev. Date: 6/7/2004 12:28:55 PM

By: M. Almahayni

Load Combination: D+0.75(W+L+Lr)

Specification: 2001 AISI Specification - US (ASD)

Inflection Point Bracing: Yes

Loading	Factor
1 Dead Load	1.0000
2 Live Load	0.7500
3 Roof Live Load	0.7500
4 Wind Load	0.7500

Load Combination: D+0.7E+L+Lr

Specification: 2001 AISI Specification - US (ASD)

Inflection Point Bracing: Yes

Loading	Factor
1 Dead Load	1.0000
2 Live Load	1.0000
3 Roof Live Load	1.0000
4 Earthquake Load	0.7000

Load Combination: 0.6D+W

Specification: 2001 AISI Specification - US (ASD)

Inflection Point Bracing: Yes

Loading	Factor
1 Dead Load	0.6000
2 Wind Load	1.0000

Load Combination: 0.6D+0.7E

Specification: 2001 AISI Specification - US (ASD)

Inflection Point Bracing: Yes

Loading	Factor
1 Dead Load	0.6000
2 Earthquake Load	0.7000

Member Check - 2001 AISI Specification - US (ASD)

Load Combination: D+W

Design Parameters at 5.0000 ft:

Lx	10.0000 ft	Ly	10.0000 ft	Lt	10.0000 ft
Kx	1.0000	Ky	0.0000	Kt	0.0000

Section: 600S200-43.sct

Cbx	1.0000	Cby	1.0000	ex	0.0000 in
Cmx	1.0000	Cmy	1.0000	ey	0.0000 in
Braced Flange: None		Moment Reduction, R: 0.0000			

Loads:	P (k)	Mx (k-in)	Vy (k)	My (k-in)	Vx (k)
Total	0.0010	8.400	0.0000	0.000	0.0000
Applied	0.0010	8.400	0.0000	0.000	0.0000
Strength	4.8576	14.965	0.9494	3.959	1.9728

Effective section properties at applied loads:

Ae	0.49198 in ²	Ixe	2.6829 in ⁴	Iye	0.2685 in ⁴
		Sxe(t)	0.89430 in ³	Sye(l)	0.46746 in ³
		Sxe(b)	0.89430 in ³	Sye(r)	0.18834 in ³

Interaction Equations

AISI Eq. C5.2.1-1 (P, Mx, My) 0.000 + 0.561 + 0.000 = 0.562 <= 1.0

AISI Eq. C5.2.1-2 (P, Mx, My) 0.000 + 0.561 + 0.000 = 0.561 <= 1.0

Total

= 1262.93

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AUGUSTA11

Roof Design Warning Report

10/28/07 6:43pm

=====

.. No Warnings

Wall Id	Bay Id	Brace_Loc		-----Diag_Brace-----			----Wind----		--Seismic--		Max UC
		Bot	Top	Type	Size	Part	Calc	Allow	Calc	Allow	
2	3	0.0	11.3	C	0.250	HW-3730	1.13	3.33	1.04	3.33	0.34
4	3	0.0	9.6	C	0.250	HW-3730	0.98	3.33	1.02	3.33	0.31

BASE REACTIONS:

Wall Id	Bay Id	Col Id	Wind_Max		Seismic_Max	
			Horz	Vert (+/-)	Horz	Vert (+/-)
2	3	3	-0.89	0.68	-0.83	0.63
2	3	4	0.89	0.68	0.83	0.63
4	3	3	-0.83	0.52	-0.86	0.54
4	3	4	0.83	0.52	0.86	0.54

=====

AUGUSTA11	Extension Diagonal Bracing Report	10/28/07 6:43pm
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=====

PANEL SHEAR

Ext Id	--Panel_Shear--	
	Calc	Allow
1	0.00	0.00

=====

AUGUSTA11	Braced Purlin Report	10/28/07 6:43pm
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=====

Surf Id	Span Id	Brace Loc.	Purlin Size	Load Id	----Axial(k)----			--Moment(f-k)--			Axl+Mom UC
					Calc	Allow	UC	Calc	Allow	UC	
2	2	10.0	6X25Z16	1	0.39	12.52	0.03	-0.07	3.48	0.02	0.05
				2	0.82	12.52	0.07	-0.06	3.48	0.02	0.08
				3	0.53	12.52	0.04	0.08	2.44	0.03	0.07
				4	0.82	12.52	0.07	-0.01	3.48	0.00	0.07
2	3	10.0	6X25Z16	1	0.39	12.42	0.03	0.05	3.48	0.02	0.04
				2	0.66	12.42	0.05	0.06	3.48	0.02	0.07
				3	0.53	12.42	0.04	-0.08	3.48	0.02	0.06
				4	0.66	12.42	0.05	0.01	3.47	0.00	0.06
2	4	10.0	6X25Z16	1	0.39	12.42	0.03	-0.03	3.48	0.01	0.04
				2	0.50	12.42	0.04	-0.04	3.48	0.01	0.05
				3	0.53	12.42	0.04	0.07	2.73	0.02	0.06
				4	0.50	12.42	0.04	-0.01	3.48	0.00	0.04
2	5	10.0	6X25Z16	1	0.39	12.42	0.03	0.05	3.48	0.02	0.04
				2	0.66	12.42	0.05	0.06	3.48	0.02	0.07
				3	0.53	12.42	0.04	-0.08	3.48	0.02	0.06
				4	0.66	12.42	0.05	0.01	3.47	0.00	0.06
2	6	10.0	6X25Z16	1	0.39	12.52	0.03	-0.07	3.48	0.02	0.05
				2	0.82	12.52	0.07	-0.06	3.48	0.02	0.08
				3	0.53	12.52	0.04	0.08	2.44	0.03	0.07
				4	0.82	12.52	0.07	-0.01	3.48	0.00	0.07

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AUGUSTA11	Eave Strut Report (Wall 4)	10/28/07 6:43pm
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4	-0.11	3.39	0.03	-0.10	3.48	0.03	-0.09
5	0.00	3.39	0.00	0.00	3.48	0.00	0.00

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AUGUSTA11 Roof Panel Summary

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10/28/07 6:43pm

PANEL LAYOUT:

Surf Id	Part	Type	Gage	Yield	Surface Length	No. Purlin	Max Space
2	26 PBR	SR	26.00	80.00	10.14	4	3.000

PANEL STRENGTH:

Surf Id	Locate	Load Id	Support_Moment (ft-lb/ft)				Midspan_Moment (ft-lb/ft)			
			Locate	Calc	Allow	Ratio	Locate	Calc	Allow	Ratio
2	Left	1	3.0	27.7	130.8	0.21	1.2	-20.6	116.1	0.18
		2	3.0	33.3	130.8	0.25	1.2	-24.8	116.1	0.21
		3	3.0	-86.1	116.1	0.74	1.2	64.1	130.8	0.49
2	Center	1	3.0	27.7	130.8	0.21	1.2	-20.6	116.1	0.18
		2	3.0	33.3	130.8	0.25	1.2	-24.8	116.1	0.21
		3	3.0	-57.7	116.1	0.50	1.2	43.0	130.8	0.33
2	Right	1	3.0	27.7	130.8	0.21	1.2	-20.6	116.1	0.18
		2	3.0	33.3	130.8	0.25	1.2	-24.8	116.1	0.21
		3	3.0	-86.1	116.1	0.74	1.2	64.1	130.8	0.49

PANEL DEFLECTION:

Surf Id	Locate	Load Id	-----Deflection(in)-----			
			Locate	Calc	Limit	Ratio
2	Left	4	1.5	-0.01	0.20	0.07
		5	1.5	-0.02	0.20	0.09
		6	1.5	0.07	0.20	0.35
2	Center	4	1.5	-0.01	0.20	0.07
		5	1.5	-0.02	0.20	0.09
		6	1.5	0.05	0.20	0.24
2	Right	4	1.5	-0.01	0.20	0.07
		5	1.5	-0.02	0.20	0.09
		6	1.5	0.07	0.20	0.35

LOAD COMBINATION:

Load Id	Description
1	DL+CL+SL
2	DL+CL+WP
3	DL+WS
4	SL
5	WP
6	WS

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AUGUSTA11 Extension Panel Summary

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10/28/07 6:43pm

PANEL LAYOUT:

Ext Id	Locate	Part	Type	Gage	Yield	Surface Length	No. Purlin	Max Space
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PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Loc	Right Lap	Right Sup
1	0.00			-0.04	0.00		0.00	0.00		0.02
2	0.45		-0.50	-0.59	0.02		-1.12	5.05	0.29	0.84
3	0.19	0.16	-0.14	-0.16	0.84	0.67	0.23	6.43	0.54	0.69
4	0.54	0.45	-0.45	-0.54	0.69	0.20	-0.92	6.00	0.20	0.69
5	0.16	0.14	-0.16	-0.19	0.69	0.54	0.23	5.57	0.67	0.84
6	0.59	0.50		-0.45	0.84	0.29	-1.12	6.62		0.02
7	0.04			0.00	0.02		0.00	1.83		0.00

STRENGTH/DEFLECTION:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----				Mom+Shr		Deflection(in)	
	Loc	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	-0.04	3.39	0.01	RS	0.02	3.48	0.01	LS	0.00	0.09	
2	RL	-0.50	3.39	0.15	MS	-1.12	3.48	0.32	RL	0.03	-0.16	0.78
3	LL	0.16	3.39	0.05	LL	0.67	2.56	0.26	LL	0.04	0.10	0.80
4	LL	0.45	3.39	0.13	MS	-0.92	3.48	0.27	LL	0.02	-0.15	0.80
5	RL	-0.16	3.39	0.05	RL	0.67	2.56	0.26	RL	0.04	0.10	0.80
6	LL	0.50	3.39	0.15	MS	-1.12	3.48	0.32	LL	0.03	-0.16	0.78
7	LS	0.04	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00	0.09	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap_Shear(k)		Shear_Ratio	
	Left	Right	Left	Right
2		0.21		0.11
3	0.21	0.17	0.11	0.09
4	0.17	0.17	0.09	0.09
5	0.17	0.21	0.09	0.11
6	0.21		0.11	

AUGUSTA11

Purlin Design Report (Extension 1)

10/28/07 6:43pm

EAVE EXTENSION TOP PURLIN

EXTENSION ID # 1, WALL # 4

(Extension Width= 1.50)

.. No Purlins Required!

5	0.48	0.39	-0.51	-0.60	0.66	0.23	-0.61	5.31	0.84	1.40
6	0.64	0.55		-0.40	1.40	0.80	-0.89	7.15		0.02
7	0.04			0.00	0.02		0.00	1.83		0.00

STRENGTH/DEFLECTION:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----				Mom+Shr		Deflection(in)	
	Loc	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	-0.02	3.39	0.00	RS	0.01	3.48	0.00	LS	0.00	0.00	
2	RL	-0.18	3.39	0.05	MS	-0.29	3.48	0.08	RL	0.01	0.00	0.78
3	LL	0.16	3.39	0.05	LL	0.27	3.48	0.08	LL	0.01	-0.01	0.80
4	RL	-0.18	3.39	0.05	RL	0.46	3.48	0.13	RL	0.02	0.03	0.80
5	RL	-0.51	3.39	0.15	RL	0.84	3.48	0.24	RL	0.08	-0.07	0.80
6	LL	0.55	3.39	0.16	MS	-0.89	3.48	0.26	LL	0.08	-0.09	0.78
7	LS	0.04	3.39	0.01	LS	0.02	3.48	0.01	LS	0.00	0.06	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap_Shear(k)		Shear_Ratio	
	Left	Right	Left	Right
2		0.11		0.06
3	0.11	0.06	0.06	0.03
4	0.06	0.16	0.03	0.08
5	0.16	0.35	0.08	0.18
6	0.35		0.18	

LOAD COMBINATION #11 : DL+CL+2.0AUX6

PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Loc	Right Lap	Right Sup
1	0.00			-0.02	0.00		0.00	0.00		0.01
2	0.14		-0.18	-0.21	0.01		-0.31	4.66	0.23	0.42
3	0.18	0.15	-0.14	-0.17	0.42	0.25	-0.13	6.12	0.22	0.38
4	0.19	0.16	-0.13	-0.16	0.38	0.20	-0.25	6.49	0.05	0.20
5	0.12	0.09	-0.21	-0.24	0.20	0.10	-0.02	3.92	0.72	0.94
6	0.59	0.50		-0.45	0.94	0.39	-1.02	6.62		0.12
7	0.13			0.00	0.12		0.00	1.83		0.00

STRENGTH/DEFLECTION:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----				Mom+Shr		Deflection(in)	
	Loc	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	-0.02	3.39	0.00	RS	0.01	3.48	0.00	LS	0.00	0.00	
2	RL	-0.18	3.39	0.05	MS	-0.31	3.48	0.09	RL	0.01	0.00	0.78
3	LL	0.15	3.39	0.04	LL	0.25	3.48	0.07	LL	0.01	0.00	0.80
4	LL	0.16	3.39	0.05	MS	-0.25	3.48	0.07	LL	0.01	-0.01	0.80
5	RL	-0.21	3.39	0.06	RL	0.72	3.43	0.21	RL	0.05	0.05	0.80
6	LL	0.50	3.39	0.15	MS	-1.02	3.48	0.29	LL	0.03	-0.14	0.78
7	LS	0.13	3.39	0.04	LS	0.12	3.48	0.03	LS	0.00	0.07	

5	RL	-0.16	3.39	0.05	RL	0.27	3.48	0.08	RL	0.01	-0.01	0.80
6	LL	0.18	3.39	0.05	MS	-0.29	3.48	0.08	LL	0.01	0.00	0.78
7	LS	0.02	3.39	0.00	LS	0.01	3.48	0.00	LS	0.00	0.00	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap_Shear(k)		Shear_Ratio	
	Left	Right	Left	Right
2		0.35		0.18
3	0.35	0.16	0.18	0.08
4	0.16	0.06	0.08	0.03
5	0.06	0.11	0.03	0.06
6	0.11		0.06	

LOAD COMBINATION # 8 : DL+CL+2.0AUX3

PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Loc	Right Lap	Right Sup
1	0.00			-0.02	0.00		0.00	0.00		0.01
2	0.11		-0.21	-0.24	0.01		-0.19	3.72	0.52	0.74
3	0.49	0.40	-0.49	-0.58	0.74	0.29	-0.62	5.52	0.72	1.26
4	0.59	0.50	-0.40	-0.49	1.26	0.72	-0.66	6.55	0.23	0.67
5	0.20	0.18	-0.12	-0.15	0.67	0.48	-0.04	6.92	0.21	0.34
6	0.20	0.17		-0.14	0.34	0.16	-0.34	6.79		0.01
7	0.02			0.00	0.01		0.00	1.83		0.00

STRENGTH/DEFLECTION:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----				Mom+Shr		Deflection(in)	
	Loc	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	-0.02	3.39	0.00	RS	0.01	3.48	0.00	LS	0.00	-0.01	
2	RL	-0.21	3.39	0.06	RL	0.52	3.48	0.15	RL	0.03	0.04	0.78
3	RL	-0.49	3.39	0.14	RL	0.72	3.48	0.21	RL	0.06	-0.07	0.80
4	LL	0.50	3.39	0.15	LL	0.72	3.48	0.21	LL	0.06	-0.07	0.80
5	LL	0.18	3.39	0.05	LL	0.48	3.48	0.14	LL	0.02	0.03	0.80
6	LL	0.17	3.39	0.05	MS	-0.34	3.48	0.10	LL	0.00	-0.01	0.78
7	LS	0.02	3.39	0.00	LS	0.01	3.48	0.00	LS	0.00	0.01	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap_Shear(k)		Shear_Ratio	
	Left	Right	Left	Right
2		0.19		0.09
3	0.19	0.31	0.09	0.16
4	0.31	0.17	0.16	0.09
5	0.17	0.09	0.09	0.04
6	0.09		0.04	

4	0.17	0.17	0.08	0.08
5	0.17	0.21	0.08	0.11
6	0.21		0.11	

LOAD COMBINATION # 5 : 0.6DL

PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Loc	Right Lap	Right Sup
1	0.00			-0.01	0.00		0.00	0.00		0.01
2	0.03		-0.03	-0.04	0.01		-0.05	4.76	0.04	0.08
3	0.03	0.03	-0.03	-0.03	0.08	0.05	-0.03	6.22	0.03	0.06
4	0.03	0.03	-0.03	-0.03	0.06	0.03	-0.03	6.00	0.03	0.06
5	0.03	0.03	-0.03	-0.03	0.06	0.03	-0.03	5.78	0.05	0.08
6	0.04	0.03		-0.03	0.08	0.04	-0.05	6.90		0.01
7	0.01			0.00	0.01		0.00	1.83		0.00

STRENGTH/DEFLECTION:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----				Mom+Shr		Deflection(in)	
	Loc	Calc	Allow	UC	Loc	Calc	Allow	UC	Loc	UC	Calc	Allow
1	RS	-0.01	3.39	0.00	RS	0.01	3.48	0.00	LS	0.00	0.00	
2	RL	-0.03	3.39	0.01	MS	-0.05	3.48	0.01	LS	0.00	0.00	0.78
3	LL	0.03	3.39	0.01	LL	0.05	3.47	0.01	LS	0.00	0.00	0.80
4	LL	0.03	3.39	0.01	MS	-0.03	3.48	0.01	LS	0.00	0.00	0.80
5	RL	-0.03	3.39	0.01	RL	0.05	3.47	0.01	LS	0.00	0.00	0.80
6	LL	0.03	3.39	0.01	MS	-0.05	3.48	0.01	LS	0.00	0.00	0.78
7	LS	0.01	3.39	0.00	LS	0.01	3.48	0.00	LS	0.00	0.00	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap_Shear(k)		Shear_Ratio	
	Left	Right	Left	Right
2		0.02		0.01
3	0.02	0.02	0.01	0.01
4	0.02	0.02	0.01	0.01
5	0.02	0.02	0.01	0.01
6	0.02		0.01	

LOAD COMBINATION # 6 : DL+CL+2.0AUX1

PURLIN ANALYSIS:

Span Id	-----Shear(k)-----				-----Moment (f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Loc	Right Lap	Right Sup
1	0.00			-0.13	0.00		0.00	0.00		0.12

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Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
1	0.00			-0.02	0.00		0.00	0.00		0.01
2	0.45		-0.59	-0.68	0.01		-1.01	4.60	0.77	1.41
3	0.61	0.51	-0.46	-0.56	1.41	0.85	-0.48	6.26	0.60	1.11
4	0.58	0.48	-0.48	-0.58	1.11	0.58	-0.63	6.00	0.58	1.11
5	0.56	0.46	-0.51	-0.61	1.11	0.60	-0.48	5.74	0.85	1.41
6	0.68	0.59		-0.45	1.41	0.77	-1.01	7.07		0.01
7	0.02			0.00	0.01		0.00	1.83		0.00

STRENGTH/DEFLECTION:

Span Id	Shear(k)			Moment(f-k)				Mom+Shr		Deflection(in)	
	Loc	Calc	Allow UC	Loc	Calc	Allow UC		Loc	UC	Calc	Allow
1	RS	-0.02	3.39 0.00	RS	0.01	3.48 0.00		LS	0.00	0.07	
2	RL	-0.59	3.39 0.17	MS	-1.01	3.48 0.29		RL	0.08	-0.12	1.17
3	LL	0.51	3.39 0.15	LL	0.85	3.48 0.24		LL	0.08	-0.03	1.20
4	RL	-0.48	3.39 0.14	MS	-0.63	3.48 0.18		RL	0.05	-0.06	1.20
5	RL	-0.51	3.39 0.15	RL	0.85	3.48 0.24		RL	0.08	-0.03	1.20
6	LL	0.59	3.39 0.17	MS	-1.01	3.48 0.29		LL	0.08	-0.12	1.17
7	LS	0.02	3.39 0.00	LS	0.01	3.48 0.00		LS	0.00	0.07	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Span Id	Lap_Shear(k)		Shear_Ratio	
	Left	Right	Left	Right
2		0.35		0.18
3	0.35	0.28	0.18	0.14
4	0.28	0.28	0.14	0.14
5	0.28	0.35	0.14	0.18
6	0.35		0.18	

LOAD COMBINATION # 3 : DL+CL+0.75SL+0.75WS

PURLIN ANALYSIS:

Span Id	Shear(k)				Moment(f-k)					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Right Loc	Right Lap	Right Sup
1	0.00			0.17	0.00		0.00	0.00		-0.16
2	-0.35		0.41	0.48	-0.16		0.68	4.87	-0.51	-0.95
3	-0.40	-0.34	0.30	0.37	-0.95	-0.58	0.31	6.29	-0.40	-0.73
4	-0.39	-0.32	0.32	0.39	-0.73	-0.38	0.42	6.00	-0.38	-0.73
5	-0.37	-0.30	0.34	0.40	-0.73	-0.40	0.31	5.71	-0.58	-0.95
6	-0.48	-0.41		0.35	-0.95	-0.51	0.68	6.79		-0.16
7	-0.17			0.00	-0.16		0.00	1.83		0.00

STRENGTH/DEFLECTION:

Span Id	Shear(k)			Moment(f-k)				Mom+Shr		Deflection(in)	
	Loc	Calc	Allow UC	Loc	Calc	Allow UC		Loc	UC	Calc	Allow
1	RS	0.17	3.39 0.05	RS	-0.16	3.48 0.05		RS	0.00	-0.08	

Year : 04
Seismic Zone : D

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MODULUS OF ELASTICITY

Hot Rolled Steel : 29000 (ksi)
Cold Formed Steel : 29000 (ksi)

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AUGUSTA11	Purlin Layout Report (Surface 2)	10/28/07 6:43pm
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SURFACE LAYOUT:

Surface Id	Length	No. Row	Peak Space
2	10.138	4	0.550

PURLIN LOCATION:

Purlin Id	Surf Offset	Space	Load Width	Dead Load	Edge Wind	Show Report
1	3.000	3.000	3.000	0.93		Y
2	6.000	3.000	3.000	0.93		
3	9.000	3.000	1.794	1.56		
4	9.588	0.588	0.569	4.91		
	10.138	0.550				

PURLIN LAYOUT:

Bay Id	Span Id	Purlin Size	Span (ft)	---Lap(ft)---		No. Brace	Unit Weight	Total Weight
				Left	Right			
	1	6X25Z16	1.83			0	4.5	18.2
1	2	6X25Z16	11.67		1.00	0	31.4	125.7
2	3	6X25Z16	12.00	1.00	1.00	0	34.7	138.9
3	4	6X25Z16	12.00	1.00	1.00	0	34.7	138.9
4	5	6X25Z16	12.00	1.00	1.00	0	34.7	138.9
5	6	6X25Z16	11.67	1.00		0	31.4	125.7
	7	6X25Z16	1.83			0	4.5	18.2
Total (lb)=							176.1	704.3

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AUGUSTA11	Purlin Design Report (Surface 2)	10/28/07 6:43pm
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ROOF PURLIN

DESIGN RUN # 1, SURFACE # 2

PURLIN LAYOUT: (Purlin Id= 1)

Bay Id	Span Id	Purlin Size	Span (ft)	---Lap(ft)---		Load Width	No. Brace
				Left	Right		
	1	6X25Z16	1.83			3.00	0

8	1.00	1.00	0.00	0.00	0.00	0.00	3	2.00
9	1.00	1.00	0.00	0.00	0.00	0.00	4	2.00
10	1.00	1.00	0.00	0.00	0.00	0.00	5	2.00
11	1.00	1.00	0.00	0.00	0.00	0.00	6	2.00
12	1.00	1.00	0.00	0.00	0.00	0.00	7	2.00
13	1.00	1.00	0.00	0.00	0.00	0.00	8	2.00

*(44) PURLIN DESIGN LOADS: Deflection

Surf	No.	Load					Wind	Wind	Aux_Load	
Id	Load	Id	Dead	Collat	Live	Snow	Press	Suct	Id	Coef
2	0									

*(45) BRACING DESIGN LOADS: Frame

No.	Load						Wind	Wind	Aux_Load	
Id	Id	Dead	Collat	Live	Snow	EW	Roof	Seis	Id	Coef
4	1	1.00	1.00	0.00	0.75	0.75	0.75	0.00	0	0.00
	2	1.13	1.13	0.00	0.00	0.00	0.00	0.70	0	0.00
	3	0.60	0.00	0.00	0.00	1.00	1.00	0.00	0	0.00
	4	0.73	0.00	0.00	0.00	0.00	0.00	0.70	0	0.00

*(46) BRACING DESIGN LOADS: Brace

No.	Load						Wind	Wind	Aux_Load	
Id	Id	Dead	Collat	Live	Snow	EW	Roof	Seis	Id	Coef
4	5	1.00	1.00	0.00	0.75	0.75	0.75	0.00	0	0.00
	6	1.13	1.13	0.00	0.00	0.00	0.00	0.70	0	0.00
	7	0.60	0.00	0.00	0.00	1.00	1.00	0.00	0	0.00
	8	0.73	0.00	0.00	0.00	0.00	0.00	0.70	0	0.00

*(47) EXTENSION DESIGN LOADS:

(47) EXTENSION DESIGN LOADS:										
*	No.	Load					Wind	Wind	Aux_Load	
*	Load	Id	Dead	Collat	Live	Snow	Press	Suct	Id	Coef
	5	1	1.00	0.00	0.00	1.00	0.00	0.00	0	0.00
		2	1.00	0.00	0.00	0.00	1.00	0.00	0	0.00
		3	1.00	0.00	0.00	0.75	0.00	0.75	0	0.00
		4	1.00	0.00	0.00	0.00	0.75	0.75	0	0.00
		5	0.60	0.00	0.00	0.00	0.00	0.00	0	0.00

*(48) EXTENSION DESIGN LOADS: Deflection

* (48) EXTENSION DESIGN LOADS: DEPRESSION										
*	No.	Load					Wind	Wind	Aux_Load	
*	Load	Id	Dead	Collat	Live	Snow	Press	Suct	Id	Coef
	0									

*(49) PANEL DESIGN LOADS:

(45) PANEL DESIGN LOADS:							
* No.	Load					Wind	Wind
* Load	Id	Dead	Collat	Live	Snow	Press	Suct
3	1	1.00	1.00	0.00	1.00	0.00	0.00
	2	1.00	1.00	0.00	0.00	1.00	0.00
	3	1.00	0.00	0.00	0.00	0.00	1.00

*(50) PANEL DESIGN LOADS: Deflection

* No.	Load					Wind	Wind
* Load	Id	Dead	Collat	Live	Snow	Press	Suct
3	4	0.00	0.00	0.00	1.00	0.00	0.00
	5	0.00	0.00	0.00	0.00	1.00	0.00
	6	0.00	0.00	0.00	0.00	0.00	1.00

*(51) AUXILIARY LOADS:

No.	Aux	Aux	No._Add	Add_Load	
Aux	Id	Name	Combs	Id	Coef
8	1	'-----'	2	1	0.50
				2	0.50
	2	'-----'	2	2	0.50
				3	0.50
	3	'-----'	2	3	0.50
				4	0.50

* (23) WIND BENTS:

*Wall	Member	-----Column-----	-----Rafter-----	No.	
* Id	Type	Depth	Size	Depth	Size
2	'W'	0.00	'-----'	0.00	'-----'
4	'W'	0.00	'-----'	0.00	'-----'

* (24) WIND COLUMNS:

*Wall	Member	-----Column-----	No.		Left/
* Id	Type	Depth	Size	Col	Bay_Id
2	'W'	0.00	'-----'	0	
4	'W'	0.00	'-----'	0	

* (25) WALL BRACING ATTACHMENT

*Wall	No.	Attach	--Bay_Id--	No.	-----Level-----
* Id	Attach	Id	Start	End	Connect
2	1	1	1	5	'F'
4	1	2	1	5	'F'

* (26) INTERIOR BRACING

*No	Attach	Brace	User_Selected_Int_Bays
*Brace	Offset	Type	No. Bay_Id
0			

* (27) INTERIOR BRACING ATTACHMENT

* No.	Attach	--Bay_Id--	No.
* Attach	Offset	Start	End
0			

* (28) EAVE EXTENSIONS SIZE:

*Wall	No.	Ext	--Bay_Id--	---Extension_Size---	Edge_Extend	Eave
*Id	Extend	Id	Start	End	Height	Type
2	0					
4	1	1	1	5	0.000 1.500 2.00	'ZO'

* (29) EAVE EXTENSIONS PURLINS:

*Ext	Purlin	OS_Flg	IS_Flg	Set	Set_Lap	Max_UnBr	Peak	Max	Set
*Id	Type	Brace	Brace	Depth	Ext	Int	Length	Space	Space
1	'ZB'	'C'	'Y'	0.000	0.0000	0.0000	5.0000	0.000	5.016 0.000

* (30) CANOPY SIZE:

*Wall	No.	Ext	--Bay_Id--	---Extension_Size---	Edge_Extend	Eave
*Id	Extend	Id	Start	End	Height	Type
1	0					
2	0					
3	0					
4	0					

* (31) CANOPY PURLINS:

*Ext	Purlin	OS_Flg	IS_Flg	Set	Set_Lap	Max_UnBr	Peak	Max	Set
*Id	Type	Brace	Brace	Depth	Ext	Int	Length	Space	Space

* (32) CANOPY PANELS, GUTTER & DOWNSPOUT:

*Ext	Panel	Standing	Gutter	Downspout
*Id	Size	Seam	Use Color	No. Color

* (33) FACIA/PARAPET LAYOUT:

*Wall	No.	Ext	--Bay_Id--	Edge_Extend	Eave	Use
*Id	Extend	Id	Type	Start	End	Gutter
1	0					
2	0					
3	0					
4	0					

* (34) FACIA/PARAPET SIZE:

*AUGUSTA11 Roof Design Input

10/28/07 6:43pm

*(1)JOBID:
'AUGUSTA11'

*(2)PROGRAM OPTIONS:

Run	Run	Run	Lap
Purlin	Panel	Brace	Stiff
'Y'	'Y'	'Y'	0.50

*(3)DESIGN CODE:

---Steel_Code---			---Build---			Seismic
Design	Cold	Hot	Country	Code	Year	Zone
'WS'	'AISI89'	'AISC89'	'----	'FBC'	'04'	'D'

*(4)DESIGN CONSTANTS:

---Strength_Factor---					
-----Stress_Ratio-----			---Seismic---		
Purlin	Panel	Wind_Frame	Wind	Frame	Brace
1.0300	1.03	1.03	1.000	1.000	1.000

*(5)STEEL YIELDS:

Web	Flg	C_Sec	W_Sec	R_Sec	P_Sec	T_Sec	U_Sec	EP	BP
46.0	55.0	57.0	55.0	50.0	50.0	46.0	50.0	55.0	55.0

*(6)DEFLECTION LIMITS:

-----Purlin-----			----Extension----			Facia	---Panel---		Facia	Wind_Frame	
Live	Wind	Total	Live	Wind	Total	Girt	Live	Wind	Panel	Wind	Seis
180.0	120.0	0.0	180.0	120.0	0.0	90.0	180.0	120.0	90.0	60.0	60.0

*(7)REPORTS:

Input	Purlin	Purlin	Eave	Roof	Cable
Echo	Design	Summary	Strut	Panel	Brace
'Y'	'Y'	'Y'	'Y'	'Y'	'Y'

*(8)BUILDING TYPE:

Build	L_Expand_EW	R_Expand_EW	-----Open_Wall-----					
Type	Use	Offset	Use	Offset	L_EW	F_SW	R_EW	B_SW
'LT-'	'N'	0.000	'N'	0.000	'Y'	'Y'	'Y'	'Y'

*(9)SURFACE SHAPE:

No.	X_Coord	Y_Coord
Surf	(ft)	(ft)
3	0.0000	9.5833
	10.0000	11.2500
	10.0000	0.0000

*(10)WALL BAY SPACING:

Wall	Sets_Of	Bay	No.
Id	Bays	Width	Bays
1	1	10.0000	1
2	1	12.0000	5
3	1	10.0000	1
4	1	12.0000	5
5	1	12.0000	5

*(11)FRAMED OPENINGS:

Wall	No.	Bay	Open	Open	Open	Open
Id	Opens	Id	Width	Height	Offset	Type
1	0					
2	0					
3	0					
4	0					

3	5	26.3	6X25Z16	1	0.75	12.42	0.06	0.27	3.48	0.08	Page 120 of 162
				2	0.61	12.42	0.05	0.35	3.48	0.10	
				3	1.00	12.42	0.08	-0.55	3.48	0.16	
				4	0.61	12.42	0.05	0.07	3.47	0.02	
3	6	26.3	6X25Z16	1	0.75	12.52	0.06	-0.39	3.48	0.11	
				2	0.32	12.52	0.03	-0.41	3.48	0.12	
				3	1.00	12.52	0.08	0.57	2.44	0.23	
				4	0.32	12.52	0.03	-0.08	3.48	0.02	

Augustal Eave Strut Report (Wall 4) 10/28/07 6:20pm

Wall Id	Bay Id	Eave Size	Bay Width	Axial_Calc Wind	Axial_Calc Seis	Axial Allow	Axial Ratio
2	1	8ES1L14	12.00	0.72	0.24	17.39	0.04
2	2	8ES1L14	12.00	0.72	0.47	17.39	0.04
2	3	8ES1L14	12.00	2.98	2.85	17.39	0.17
2	4	8ES1L14	12.00	0.72	0.47	17.39	0.04
2	5	8ES1L14	12.00	0.72	0.24	17.39	0.04
4	5	8ES1L14	12.00	0.72	0.22	17.39	0.04
4	4	8ES1L14	12.00	0.72	0.41	17.39	0.04
4	3	8ES1L14	12.00	2.98	2.77	17.39	0.17
4	2	8ES1L14	12.00	0.72	0.41	17.39	0.04
4	1	8ES1L14	12.00	0.72	0.22	17.39	0.04

Augustal Strut Bolt Report 10/28/07 6:20pm

RAFTER CONNECTION:

Location	Purlin	Eave Strut
Left EW	Welded Clip	Direct Bolt
RF	Welded Clip	Direct Bolt
Right EW	Welded Clip	Direct Bolt

EAVE STRUTS:

Wall Id	Frm_Line Id	Type	----Bolt_Selected----				----Bolt_Capacity----			
			No.	Type	Dia	Wshr	Calc	Shear	Bear	Ratio
2	1	EW	2	A307	0.500	0	0.72	3.93	5.19	0.18
2	2	RF	2	A307	0.500	0	0.72	3.93	5.19	0.18
2	3	RF	2	A307	0.500	0	2.98	3.93	5.19	0.76
2	4	RF	2	A307	0.500	0	2.98	3.93	5.19	0.76
2	5	RF	2	A307	0.500	0	0.72	3.93	5.19	0.18
2	6	EW	2	A307	0.500	0	0.72	3.93	5.19	0.18
4	1	EW	2	A307	0.500	0	0.72	3.93	5.19	0.18
4	2	RF	2	A307	0.500	0	0.72	3.93	5.19	0.18
4	3	RF	2	A307	0.500	0	2.98	3.93	5.19	0.76
4	4	RF	2	A307	0.500	0	2.98	3.93	5.19	0.76

Augustal

Sidewall Diagonal Bracing Report

10/28/07 6:20pm

PANEL SHEAR:

Wall Id	Base Length	Wind Calc	Seismic Calc	Allow
2	60.0	58.1	55.2	100.0
4	60.0	58.1	53.0	100.0

DIAGONAL BRACING:

Wall Id	Bay Id	Brace_Loc		-----Diag_Brace-----			Brace_Tension(k)		-----Wind----		--Seismic--		Max UC
		Bot	Top	Type	Size	Part	Calc	Allow	Calc	Allow	Calc	Allow	
2	3	0.0	11.8	C	0.313	HW-3732	4.47	5.60	4.25	5.60			0.80
4	3	0.0	11.8	C	0.313	HW-3732	4.47	5.60	4.08	5.60			0.80

BASE REACTIONS:

Wall Id	Bay Id	Col Id	Wind_Max		Seismic_Max	
			Horz	Vert (+/-)	Horz	Vert (+/-)
2	3	3	-3.48	2.81	-3.31	2.67
2	3	4	3.48	2.81	3.31	2.67
4	3	3	-3.48	2.81	-3.18	2.56
4	3	4	3.48	2.81	3.18	2.56

Augustal

Extension Diagonal Bracing Report

10/28/07 6:20pm

PANEL SHEAR

Ext Id	--Panel_Shear-- Calc	Allow
1	0.00	0.00
2	0.00	0.00

Augustal

Braced Purlin Report

10/28/07 6:20pm

Surf Id	Span Id	Brace Loc.	Purlin Size	Load Id	----Axial(k)----			--Moment (f-k)--			Axl+Mom UC
					Calc	Allow	UC	Calc	Allow	UC	
2	2	10.7	6X25Z16	1	0.75	12.52	0.06	-0.39	3.48	0.11	0.16
				2	0.32	12.52	0.03	-0.41	3.48	0.12	0.13
				3	1.00	12.52	0.08	0.57	2.44	0.23	0.29
				4	0.32	12.52	0.03	-0.08	3.48	0.02	0.04
2	3	10.7	6X25Z16	1	0.75	12.42	0.06	0.27	3.48	0.08	0.13
				2	0.61	12.42	0.05	0.35	3.48	0.10	0.14
				3	1.00	12.42	0.08	-0.55	3.48	0.16	0.22
				4	0.61	12.42	0.05	0.07	3.47	0.02	0.07
2	4	10.7	6X25Z16	1	1.15	12.42	0.09	-0.18	3.48	0.05	0.14
				2	1.54	12.42	0.12	-0.26	3.48	0.07	0.19
				3	1.53	12.42	0.12	0.45	2.73	0.17	0.27

Surf Id	Locate	Load Id	Support_Moment (ft-lb/ft)				Midspan_Moment (ft-lb/ft)			
			Locate	Calc	Allow	Ratio	Locate	Calc	Allow	Ratio
2	Left	1	3.9	41.1	130.8	0.31	1.5	-30.4	116.1	0.26
		2	3.9	46.2	130.8	0.35	1.5	-34.2	116.1	0.29
		3	3.9	-109	116.1	0.94	1.6	98.8	130.8	0.76
2	Center	1	3.9	41.1	130.8	0.31	1.5	-30.4	116.1	0.26
		2	3.9	46.2	130.8	0.35	1.5	-34.2	116.1	0.29
		3	3.9	-69.0	116.1	0.59	1.6	66.7	130.8	0.51
2	Right	1	3.9	41.1	130.8	0.31	1.5	-30.4	116.1	0.26
		2	3.9	46.2	130.8	0.35	1.5	-34.2	116.1	0.29
		3	3.9	-109	116.1	0.94	1.6	98.8	130.8	0.76
3	Left	1	16.2	41.1	130.8	0.31	18.5	-30.4	116.1	0.26
		2	16.2	46.2	130.8	0.35	18.5	-34.2	116.1	0.29
		3	16.2	-109	116.1	0.94	18.4	98.8	130.8	0.76
3	Center	1	16.2	41.1	130.8	0.31	18.5	-30.4	116.1	0.26
		2	16.2	46.2	130.8	0.35	18.5	-34.2	116.1	0.29
		3	16.2	-69.0	116.1	0.59	18.4	66.7	130.8	0.51
3	Right	1	16.2	41.1	130.8	0.31	18.5	-30.4	116.1	0.26
		2	16.2	46.2	130.8	0.35	18.5	-34.2	116.1	0.29
		3	16.2	-109	116.1	0.94	18.4	98.8	130.8	0.76

PANEL DEFLECTION:

Surf Id	Locate	Load Id	-----Deflection(in)-----			
			Locate	Calc	Limit	Ratio
2	Left	4	1.9	-0.03	0.26	0.13
		5	1.9	-0.04	0.26	0.16
		6	1.9	0.19	0.26	0.72
2	Center	4	1.9	-0.03	0.26	0.13
		5	1.9	-0.04	0.26	0.16
		6	1.9	0.13	0.26	0.50
2	Right	4	1.9	-0.03	0.26	0.13
		5	1.9	-0.04	0.26	0.16
		6	1.9	0.19	0.26	0.72
3	Left	4	18.1	-0.03	0.26	0.13
		5	18.1	-0.04	0.26	0.16
		6	18.1	0.19	0.26	0.72
3	Center	4	18.1	-0.03	0.26	0.13
		5	18.1	-0.04	0.26	0.16
		6	18.1	0.13	0.26	0.50
3	Right	4	18.1	-0.03	0.26	0.13
		5	18.1	-0.04	0.26	0.16
		6	18.1	0.19	0.26	0.72

LOAD COMBINATION:

Load Id	Description
1	DL+CL+SL
2	DL+CL+WP
3	DL+WS
4	SL
5	WP
6	WS