Columbia County Building Permit Application

Revised 9-23-

For Office Use Only Application # 0610-98 Date Received 10/31/06 By GP Permit # 25185

Application Approved by - Zoning Official BLK Date 01.11.06 Plans Examiner OK JTH Date 11-1-06

Flood Zone N/A Development Permit N/A Zoning CI Land Use Plan Map Category COMMERCIAL

Comments

Applicants Name O'NEAL CONTRACTING, INC. Phone (386)752-7578

Address P.O. BOX 3505, LAKE CITY, FL 32056

Owners Name G.W. HUNTER, INC. Phone (386)752-5890

911 Address 1414 U.S. HWY 90 WEST, LAKE CITY, FL 32055

Contractors Name O'NEAL CONTRACTING, INC. Phone (386)752-7578

Address P.O. BOX 3505, LAKE CITY, FL 32056

Fee Simple Owner Name & Address G.W. HUNTER, INC. P.O. BOX 958, LAKE CITY, FL 32056

Bonding Co. Name & Address N/A

Architect/Engineer Name & Address NICHOLAS R. GEISLER 1758 NW BROWN RD. LAKE CITY, FL 32055

Mortgage Lenders Name & Address N/A

Circle the correct power company - (FL Power & Light) - Clay Elec. - Suwannee Valley Elec. - Progressive Ener

Property ID Number 31-35-17-05958-000 Estimated Cost of Construction $106,000

Subdivision Name Lot Block Unit Phase

Driving Directions U.S. 90 WEST ON LEFT PAST FLORIDA HIGHWAY PATROL STATION.

Type of Construction MASONRY renovation of comm. Number of Existing Dwellings on Property

Total Acreage Lot Size Do you need a - Culvert Permit or Culvert Waiver or (Have an Existing Dri

Actual Distance of Structure from Property Lines - Front Side Side Rear

Total Building Height 15 Number of Stories 1 Heated Floor Area 2400 Roof Pitch 1/4/12

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 o all laws regulating construction in this jurisdiction.

OWNERS AFFIDAVIT: 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.

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

John W. O'Neal

Owner Builder or Agent (Including Contractor)

STATE OF FLORIDA
COUNTY OF COLUMBIA

Sworn to (or affirmed) and subscribed before me this 31st day of October 2006.

Personally known ✓ or Produced Identification

John W. O'Neal

Contractor Signature

Contractors License Number CBC057550

Competency Card Number

NOTARY STAMP/SEAL

Cindy Edge

Notary Signature

Cindy Edge
Commission # DD30837
Expires July 20, 2008
Bonded Troy Fain - Insurance, Inc. 800-385-

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@ CAM112M01     S  CamaUSA Appraisal System                          Columbia Count
11/01/2006  9:34  Legal Description Maintenance          375000  Land  001
Year T Property                              Sel                     AG    000
2007 R 31-3S-17-05958-000 . . . . . ... . .                106673  Bldg  002
         SUWANNEE SWIFTY #255                               37343  Xfea  006
        HUNTER G W INC                                     519016  TOTAL     1

  1  COMM SW COR OF NE1/4 OF SW1/4,  RUN E 251.6 FT TO W R/W ACL . . .  2
  3  RD, NE ALONG R/W 209.77 FT, N   50 DEG W 468.85 FT FOR POB, . . .  4
  5  CONT N 50 DEG W 250 FT TO A PT  ON SE'LY R/W US-90, RUN NE . . .  6
  7  ALONG R/W 200 FT, SE 250 FT, .  SW 200 FT TO POB. . . . . .  8
  9  ORB 428-151,52, 540-681, . . .  674-636-650, 844-1277, . . . . 10
 11  . . . . . . . . . . . . . . .  . . . . . . . . . . . . . . . . 12
 13  . . . . . . . . . . . . . . .  . . . . . . . . . . . . . . . . 14
 15  . . . . . . . . . . . . . . .  . . . . . . . . . . . . . . . . 16
 17  . . . . . . . . . . . . . . .  . . . . . . . . . . . . . . . . 18
 19  . . . . . . . . . . . . . . .  . . . . . . . . . . . . . . . . 20
 21  . . . . . . . . . . . . . . .  . . . . . . . . . . . . . . . . 22
 23  . . . . . . . . . . . . . . .  . . . . . . . . . . . . . . . . 24
 25  . . . . . . . . . . . . . . .  . . . . . . . . . . . . . . . . 26
 27  . . . . . . . . . . . . . . .  . . . . . . . . . . . . . . . . 28
                                                  Mnt 12/14/2001 TERRY
F1=Task  F3=Exit  F4=Prompt  F10=GoTo  PgUp/PgDn  F24=More
```

Project Information for:	L215251		
Builder:	ONEAL ROOFING	Date:	10/24/2006
Lot:	N/A	Start Number:	**1107**
Subdivision:	1414 W US HWY 90	SEI Ref:	L215251
County or City:	COLUMBIA COUNTY		
Truss Page Count:	10		

Truss Design Load Information (UNO) Design Program: MiTek

Gravity		Wind		Building Code:	FBC2004
Roof (psf):	42	Wind Standard:	ASCE 7-02		
Floor (psf):	55	Wind Speed (mph):	110		

Note: See individual truss drawings for special loading conditions

Building Designer, responsible for Structural Engineering: (See attached)

ONEAL,JOHN WINSTON CBC057750
Address: PO BOX 2166
LAKE CITY, FLORIDA 32056 Designer: 117

Truss Design Engineer: Thomas, E. Miller, P.E., 56877 - Byron K. Anderson, PE FL 60987
Company: Structural Engineering and Inspections, Inc. EB 9196
Address 16105 N. Florida Ave, Ste B, Lutz, FL 33549 Phone: 813-849-5769

Notes:

1. Truss Design Engineer is responsible for the individual trusses as components only.
2. Determination as to the suitability and use of these truss components for the structure is the responsibility of the Building Designer of Record, as defined in ANSI/TPI
3. The seal date shown on the individual truss component drawings must match the seal date on this index sheet.
4. Trusses designed for veritcal loads only, unless noted otherwise.
5. Where hangers are shown, Carried Member hanger capacity per Simpson C-2006 (SYP/Full Nailing Value) as an individual component. Building Designer shall verify the suitablity and use of Carrying Member hanger capacity.

#	Truss ID	Dwg. #	Seal Date	#	Truss ID	Dwg. #	Seal Date
1	CJ1	1024061107	10/24/2006				
2	CJ1A	1024061108	10/24/2006				
3	CJ3	1024061109	10/24/2006				
4	CJ3A	1024061110	10/24/2006				
5	CJ5	1024061111	10/24/2006				
6	EJ7	1024061112	10/24/2006				
7	HJ9	1024061113	10/24/2006				
8	HJ9A	1024061114	10/24/2006				
9	T01	1024061115	10/24/2006				
10	T02	1024061116	10/24/2006				

OCT 24 2006

Dwg.#1024061106

Licensee Details

Licensee Information

Name:	**O'NEAL, JOHN WINSTON (Primary Name)** **O'NEAL CONTRACTING INC (DBA Name)**
Main Address:	**PO BOX 2166** **LAKE CITY Florida 32056**
County:	**COLUMBIA**
License Mailing:	
LicenseLocation:	**818 HICKORY LANE** **LAKE CITY FL 32025**
County:	**COLUMBIA**

License Information

License Type:	**Certified Building Contractor**
Rank:	**Cert Building**
License Number:	**CBC057550**
Status:	**Current,Active**
Licensure Date:	**02/22/1996**
Expires:	**08/31/2006**

Special Qualifications	**Qualification Effective**
Bldg Code Core Course Credit	
Qualified Business License Required	**02/20/2004**

View Related License Information

View License Complaint

OCTOBER 24, 2006 TRUSS DESIGN ENGINEER:
THOMAS E. MILLER PE 56877, BYRON K. ANDERSON PE 60987
STRUCTURAL ENGINEERING AND INSPECTIONS, INC. EB 9196
16105 N. FLORIDA AVE. STE B, LUTZ, FL 33549

Dwg.#1024061107

Job	Truss	Truss Type	Qty	Ply	ONEAL - HUNTER OIL STORE #48
L215251	CJ1	JACK	4	1	Job Reference (optional)

Builders FirstSource, Lake City, FI 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Tue Oct 24 09:26:15 2006 Page 1

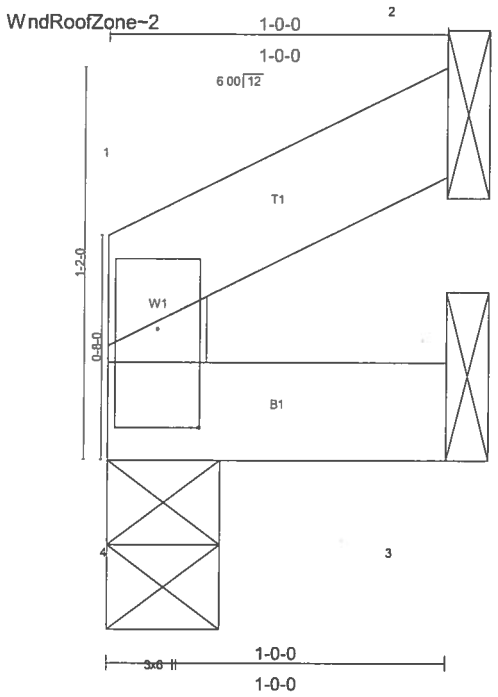


Plate Offsets (X,Y): [4:0-3-8,0-1-8]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.02	Vert(LL)	-0.00	4	>999	240	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.01	Vert(TL)	-0.00	4	>999	180		
BCLL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(TL)	-0.00	2	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 4 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2
WEBS 2 X 4 SYP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 1-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 4=35/0-4-0, 3=13/Mechanical, 2=22/Mechanical
Max Horz 4=29(load case 5)
Max Uplift3=-6(load case 5), 2=-25(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-4=-23/7, 1-2=-14/8
BOT CHORD 3-4=0/0

JOINT STRESS INDEX
1 = 0.00 and 4 = 0.06

NOTES
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Interior(1) zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 6 lb uplift at joint 3 and 25 lb uplift at joint 2.

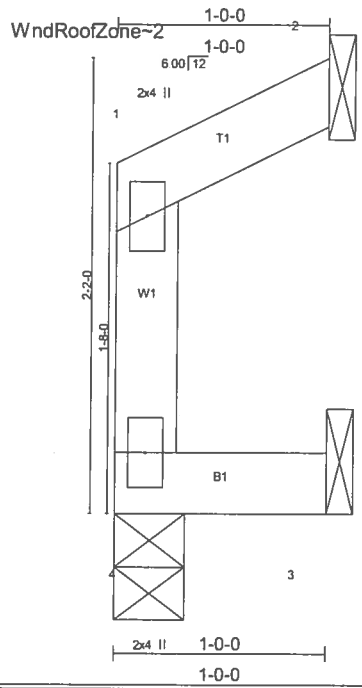
LOAD CASE(S) Standard

OCTOBER 24, 2006 TRUSS DESIGN ENGINEER:
THOMAS E. MILLER PE 56877, BYRON K. ANDERSON PE 60987
STRUCTURAL ENGINEERING AND INSPECTIONS, INC. EB 9196
16105 N. FLORIDA AVE. STE B, LUTZ, FL 33549

Dwg.#1024061108

Job	Truss	Truss Type	Qty	Ply	ONEAL - HUNTER OIL STORE #48
L215251	CJ1A	JACK	2	1	Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Tue Oct 24 09:26:16 2006 Page 1



Scale = 1.10 5

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.11	Vert(LL)	-0.00	4	>999	240	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.06	Vert(TL)	-0.00	4	>999	180		
BCLL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(TL)	-0.01	2	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 5 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2
WEBS 2 X 4 SYP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 1-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 4=35/0-4-0, 3=13/Mechanical, 2=22/Mechanical
Max Horz 4=53(load case 5)
Max Uplift4=-11(load case 3), 3=-33(load case 5), 2=-46(load case 5)
Max Grav 4=53(load case 5), 3=13(load case 1), 2=22(load case 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-4=-25/5, 1-2=-26/8
BOT CHORD 3-4=0/0

JOINT STRESS INDEX
1 = 0.22 and 4 = 0.35

NOTES
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Interior(1) zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 11 lb uplift at joint 4, 33 lb uplift at joint 3 and 46 lb uplift at joint 2.

LOAD CASE(S) Standard

OCTOBER 24, 2006 TRUSS DESIGN ENGINEER:
THOMAS E. MILLER PE 56877, BYRON K. ANDERSON PE 60987
STRUCTURAL ENGINEERING AND INSPECTIONS, INC. EB 9196
16105 N. FLORIDA AVE. STE B, LUTZ, FL 33549

Dwg.#1024061109

Job	Truss	Truss Type	Qty	Ply	ONEAL - HUNTER OIL STORE #48
L215251	CJ3	JACK	6	1	Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Tue Oct 24 09:26:17 2006 Page 1

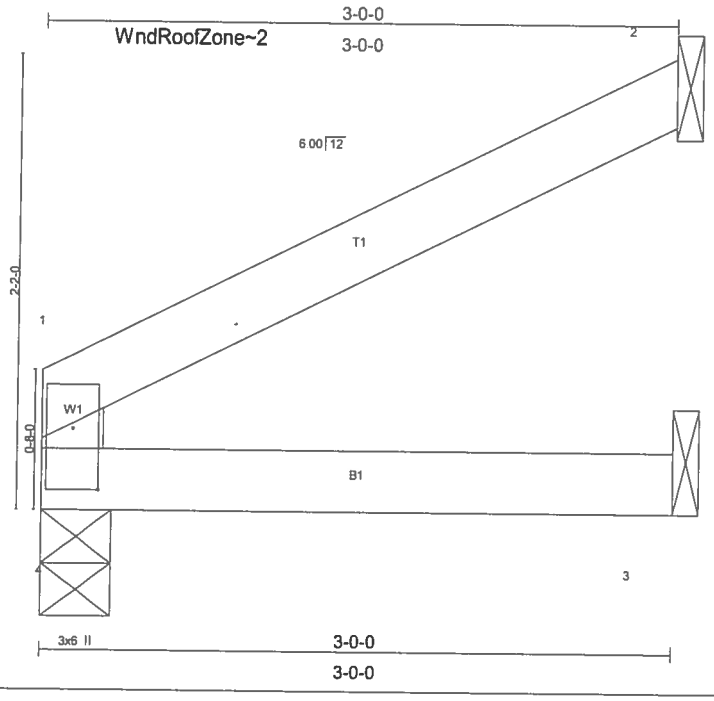


Plate Offsets (X,Y): [4:0-3-8,0-1-8]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.11	Vert(LL)	-0.00	3-4	>999	240	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.07	Vert(TL)	-0.01	3-4	>999	180		
BCLL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(TL)	-0.00	2	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 10 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2
WEBS 2 X 4 SYP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 4=117/0-4-0, 2=71/Mechanical, 3=46/Mechanical
Max Horz 4=74(load case 5)
Max Uplift4=-17(load case 5), 2=-66(load case 5), 3=-5(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-4=-79/40, 1-2=-39/25
BOT CHORD 3-4=0/0

JOINT STRESS INDEX
1 = 0.00 and 4 = 0.28

NOTES
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Interior(1) zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 4, 66 lb uplift at joint 2 and 5 lb uplift at joint 3.

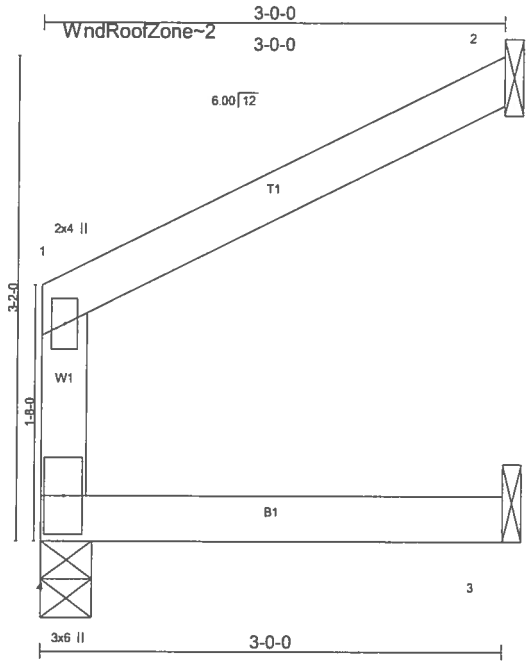
LOAD CASE(S) Standard

OCTOBER 24, 2006 TRUSS DESIGN ENGINEER:
THOMAS E. MILLER PE 56877, BYRON K. ANDERSON PE 60987
STRUCTURAL ENGINEERING AND INSPECTIONS, INC. EB 9196
16105 N. FLORIDA AVE. STE B, LUTZ, FL 33549

Dwg.#1024061110

Job	Truss	Truss Type	Qty	Ply	ONEAL - HUNTER OIL STORE #48
L215251	CJ3A	JACK	2	1	Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Tue Oct 24 09:26:17 2006 Page 1



LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.22	Vert(LL)	0.01	3-4	>999	240	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.12	Vert(TL)	-0.01	3-4	>999	180		
BCLL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(TL)	-0.03	2	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 11 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2
WEBS 2 X 4 SYP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 4=117/0-4-0, 2=73/Mechanical, 3=45/Mechanical
Max Horz 4=98(load case 5)
Max Uplift2=-83(load case 5), 3=-19(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-4=-78/23, 1-2=-46/26
BOT CHORD 3-4=0/0

JOINT STRESS INDEX
1 = 0.51 and 4 = 0.24

NOTES
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Interior(1) zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 83 lb uplift at joint 2 and 19 lb uplift at joint 3.

LOAD CASE(S) Standard

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THOMAS E. MILLER PE 56877, BYRON K. ANDERSON PE 60987
STRUCTURAL ENGINEERING AND INSPECTIONS, INC. EB 9196
16105 N. FLORIDA AVE. STE B, LUTZ, FL 33549

Dwg.#1024061111

Job	Truss	Truss Type	Qty	Ply	ONEAL - HUNTER OIL STORE #48
L215251	CJ5	JACK	6	1	Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Tue Oct 24 09:26:18 2006 Page 1

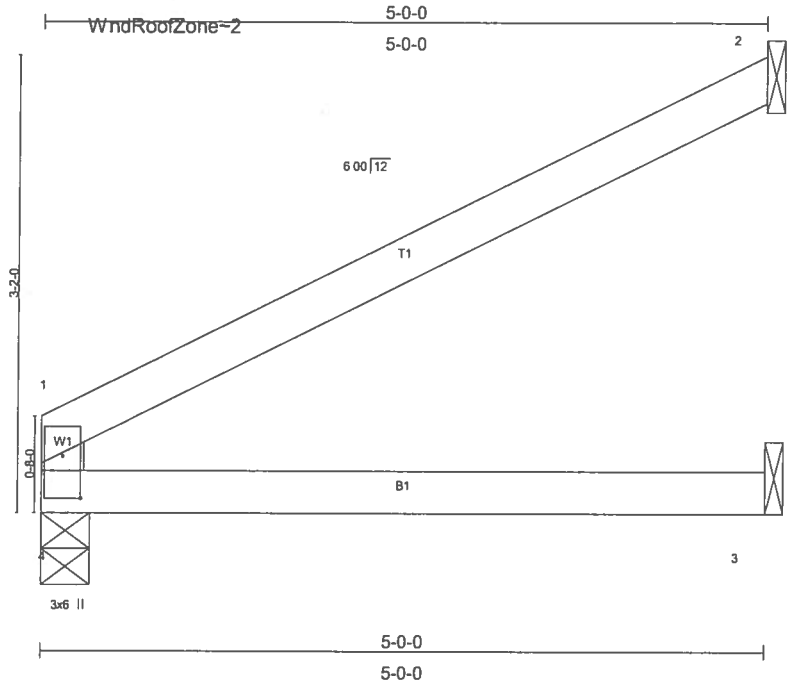


Plate Offsets (X,Y): [4:0-3-8,0-1-8]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.27	Vert(LL)	-0.04	3-4	>999	240	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.20	Vert(TL)	-0.06	3-4	>961	180		
BCLL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(TL)	0.02	2	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 16 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2
WEBS 2 X 4 SYP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 4=201/0-4-0, 2=122/Mechanical, 3=79/Mechanical
Max Horz 4=120(load case 5)
Max Uplift4=-38(load case 5), 2=-108(load case 5), 3=-6(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-4=-137/73, 1-2=-66/43
BOT CHORD 3-4=0/0

JOINT STRESS INDEX
1 = 0.00 and 4 = 0.70

NOTES
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Interior(1) zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 4, 108 lb uplift at joint 2 and 6 lb uplift at joint 3.

LOAD CASE(S) Standard

OCTOBER 24, 2006 TRUSS DESIGN ENGINEER:
THOMAS E. MILLER PE 56877, BYRON K. ANDERSON PE 60987
STRUCTURAL ENGINEERING AND INSPECTIONS, INC. EB 9196
16105 N. FLORIDA AVE. STE B, LUTZ, FL 33549

Dwg.#1024061112

Job	Truss	Truss Type	Qty	Ply	ONEAL - HUNTER OIL STORE #48
L215251	EJ7	MONO TRUSS	8	1	Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Tue Oct 24 09:26:19 2006 Page 1

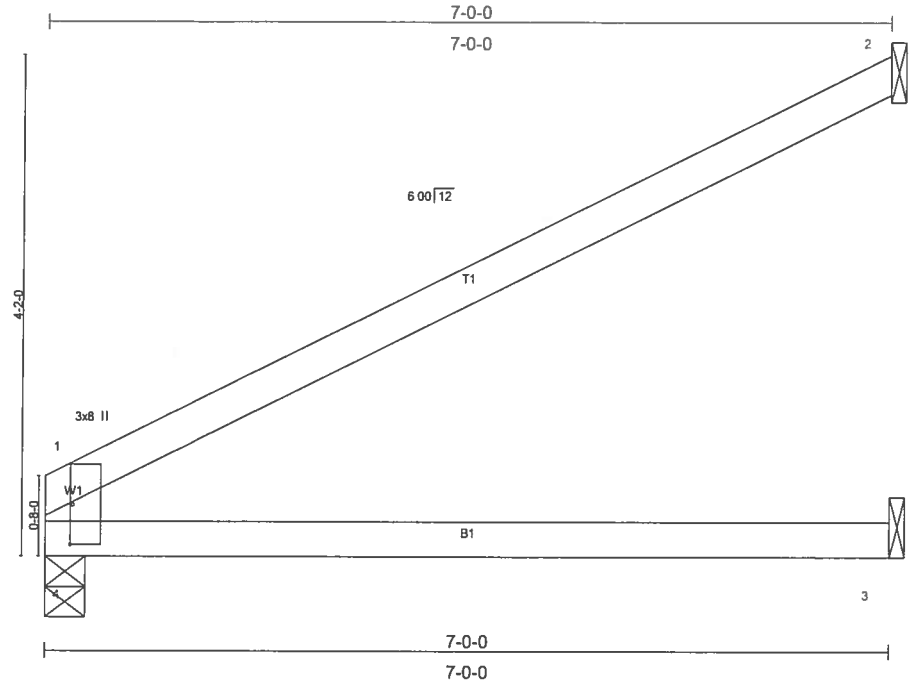


Plate Offsets (X,Y): [1:0-4-0,0-0-4]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.48	Vert(LL)	-0.14	3-4	>563	240	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.40	Vert(TL)	-0.24	3-4	>342	180		
BCLL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(TL)	0.06	2	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 23 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2
WEBS 2 X 6 SYP No.1D

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=169/Mechanical, 4=282/0-4-0, 3=112/Mechanical
Max Horz 4=166(load case 5)
Max Uplift2=-147(load case 5), 4=-56(load case 5), 3=-9(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-91/60, 1-4=-193/106
BOT CHORD 3-4=0/0

JOINT STRESS INDEX
1 = 0.83 and 4 = 0.00

NOTES
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Interior(1) zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 147 lb uplift at joint 2, 56 lb uplift at joint 4 and 9 lb uplift at joint 3.

LOAD CASE(S) Standard

OCTOBER 24, 2006 TRUSS DESIGN ENGINEER:
THOMAS E. MILLER PE 56877, BYRON K. ANDERSON PE 60987
STRUCTURAL ENGINEERING AND INSPECTIONS, INC. EB 9196
16105 N. FLORIDA AVE. STE B, LUTZ, FL 33549

Dwg.#102406l113

Job	Truss	Truss Type	Qty	Ply	ONEAL - HUNTER OIL STORE #48
L215251	HJ9	MONO TRUSS	2	1	Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Tue Oct 24 09:26:20 2006 Page 1

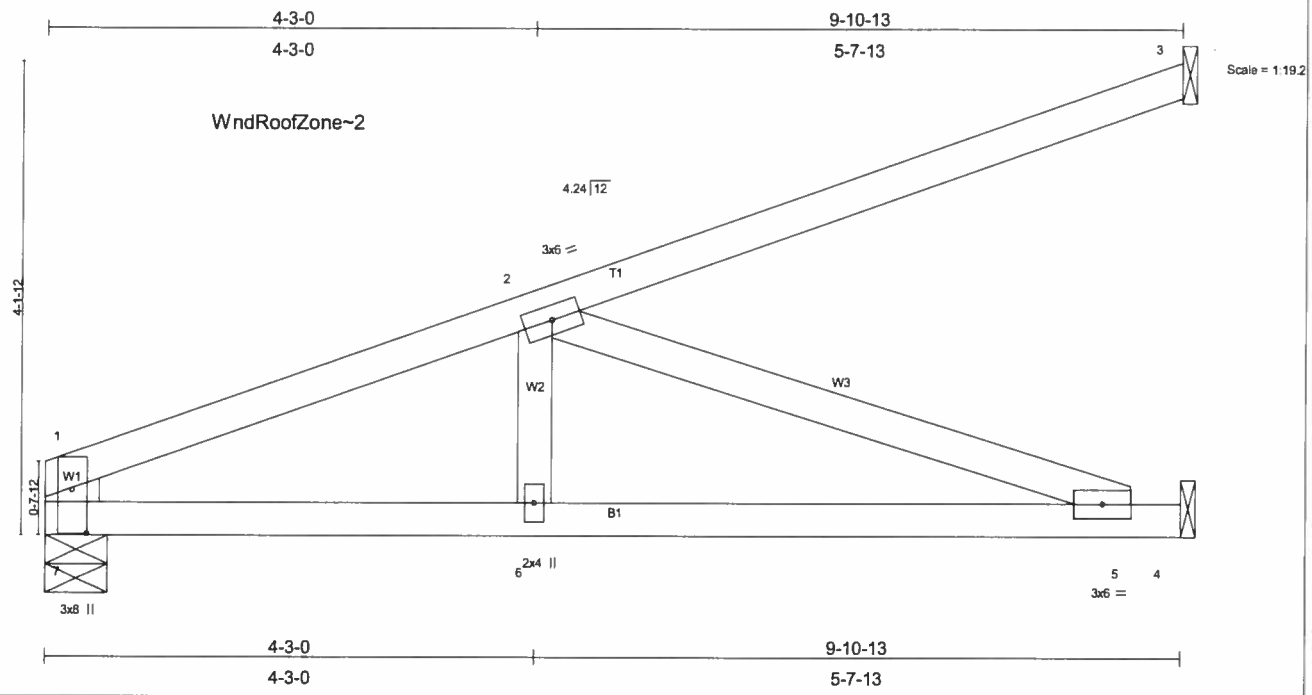


Plate Offsets (X,Y): [7:0-4-9,0-1-8]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.63	Vert(LL)	-0.12	5-6	>937	240	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.62	Vert(TL)	-0.21	5-6	>561	180		
BCLL	10.0	Rep Stress Incr	NO	WB	0.44	Horz(TL)	-0.02	3	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 41 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2
WEBS 2 X 4 SYP No.3 *Except*
W1 2 X 6 SYP No.1D

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-11-14 oc bracing.

REACTIONS (lb/size) 7=333/0-6-7, 3=272/Mechanical, 4=394/Mechanical
Max Horz 7=208(load case 4)
Max Uplift7=-64(load case 2), 3=-228(load case 2), 4=-99(load case 4)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-7=-289/40, 1-2=-781/187, 2-3=-103/66
BOT CHORD 6-7=-377/727, 5-6=-377/727, 4-5=0/0
WEBS 2-6=0/176, 2-5=-771/400

JOINT STRESS INDEX
1 = 0.00, 2 = 0.21, 5 = 0.21, 6 = 0.13 and 7 = 0.81

NOTES
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60.
2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 64 lb uplift at joint 7, 228 lb uplift at joint 3 and 99 lb uplift at joint 4.
5) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

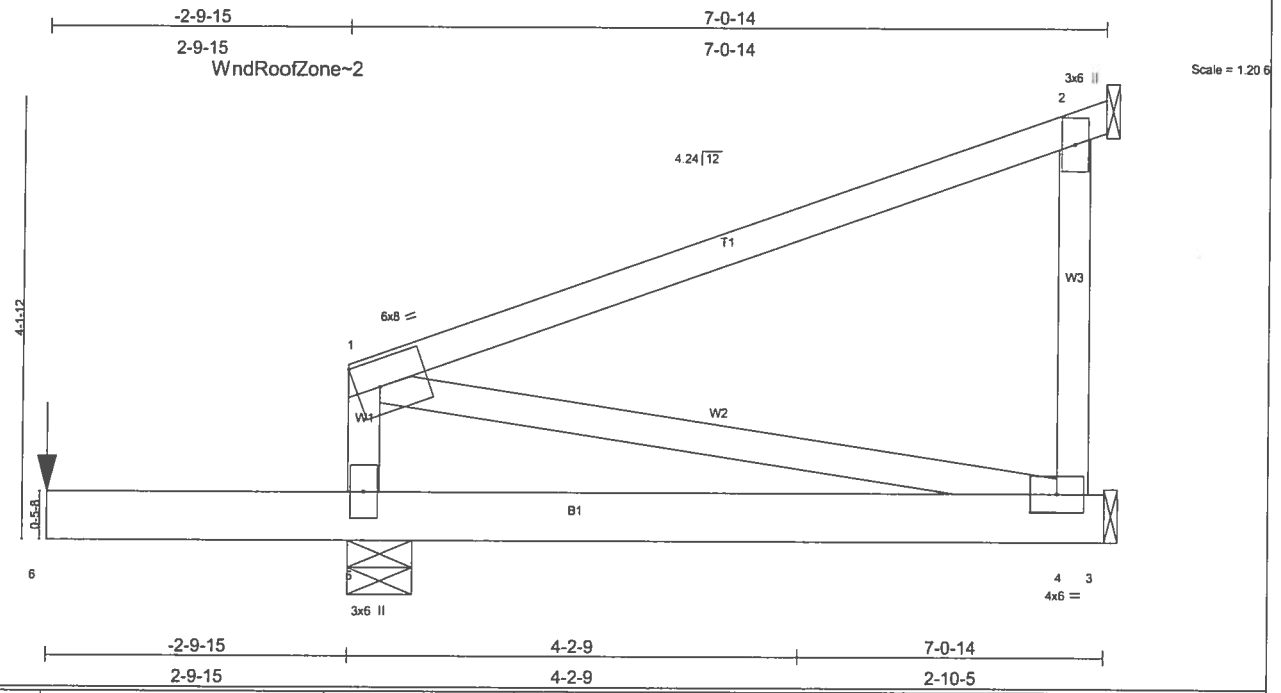
LOAD CASE(S) Standard
1) Regular: Lumber Increase=1.25, Plate Increase=1.25
Trapezoidal Loads (plf)
Vert: 1=-0(F=27, B=27)-to-3=-134(F=-40, B=-40), 7=-0(F=15, B=15)-to-4=-74(F=-22, B=-22)

OCTOBER 24, 2006 TRUSS DESIGN ENGINEER:
THOMAS E. MILLER PE 56877, BYRON K. ANDERSON PE 60987
STRUCTURAL ENGINEERING AND INSPECTIONS, INC. EB 9196
16105 N. FLORIDA AVE. STE B, LUTZ, FL 33549

Dwg.#1024061114

Job	Truss	Truss Type	Qty	Ply	ONEAL - HUNTER OIL STORE #48
L215251	HJ9A	MONO TRUSS	2	1	Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Tue Oct 24 09:27:10 2006 Page 1



LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.75	Vert(LL)	-0.03	4-5	>999	240	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.39	Vert(TL)	-0.03	4-5	>999	180		
BCLL	10.0	Rep Stress Incr	NO	WB	0.03	Horz(TL)	-0.00	2	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 50 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 6 SYP No.1D
WEBS 2 X 4 SYP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 5=571/0-7-3, 2=271/Mechanical, 4=125/Mechanical
Max Horz 5=168(load case 4)
Max Uplift5=-267(load case 2), 2=-236(load case 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-5=-182/70, 1-2=-129/19, 2-4=0/0
BOT CHORD 5-6=0/0, 4-5=-153/30, 3-4=0/0
WEBS 1-4=0/113

JOINT STRESS INDEX
1 = 0.78, 2 = 0.84, 4 = 0.47 and 5 = 0.48

NOTES
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone; cantilever left exposed ; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60.
2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 267 lb uplift at joint 5 and 236 lb uplift at joint 2.
5) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 100 lb down and 26 lb up at -2-9-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Regular: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 5-6=-54
Concentrated Loads (lb)
Vert: 6=-100(F)
Trapezoidal Loads (plf)
Vert: 1=0(F=27, B=27)-to-2=-134(F=-40, B=-40), 5=-2(F=14, B=14)-to-3=-74(F=-22, B=-22)

OCTOBER 24, 2006 TRUSS DESIGN ENGINEER:
THOMAS E. MILLER PE 56877, BYRON K. ANDERSON PE 60987
STRUCTURAL ENGINEERING AND INSPECTIONS, INC. EB 9196
16105 N. FLORIDA AVE. STE B, LUTZ, FL 33549

Dwg.#1024061115

Job	Truss	Truss Type	Qty	Ply	ONEAL - HUNTER OIL STORE #48
L215251	T01	HIP	2	1	Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Tue Oct 24 09:26:22 2006 Page 1

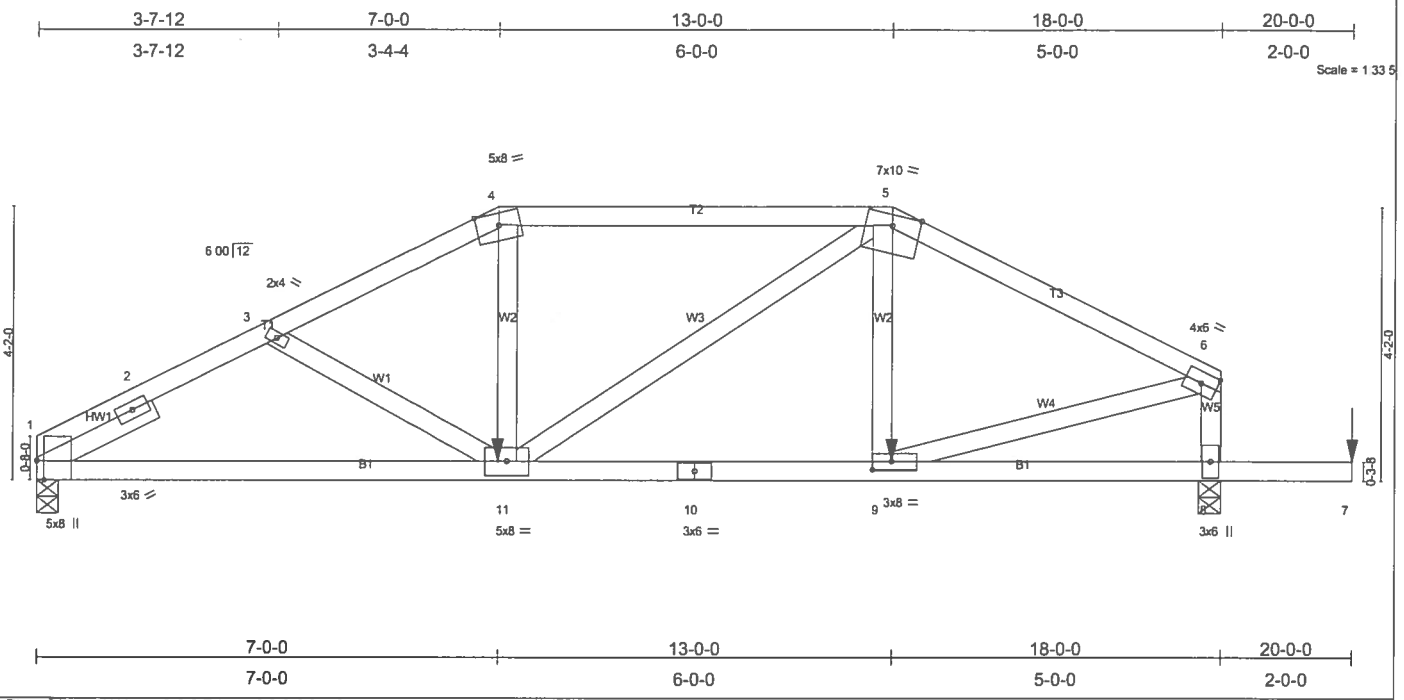


Plate Offsets (X,Y): [1:0-3-8,Edge], [9:0-3-8,0-1-8]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.74	Vert(LL)	-0.12	9-11	>999	240	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.71	Vert(TL)	-0.20	9-11	>999	180		
BCLL	10.0	Rep Stress Incr	NO	WB	0.66	Horz(TL)	0.04	8	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 97 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2
WEBS 2 X 4 SYP No.3
SLIDER Left 2 X 4 SYP No.3 1-11-11

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-4-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 1=1445/0-4-0, 8=1894/0-4-0
Max Horz 1=100(load case 4)
Max Uplift1=-594(load case 4), 8=-842(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-2462/1040, 2-3=-2408/1044, 3-4=-2444/1056, 4-5=-2213/1009, 5-6=-2129/901, 6-8=-1589/688
BOT CHORD 1-11=-930/2067, 10-11=-770/1876, 9-10=-770/1876, 8-9=-109/124, 7-8=0/0
WEBS 3-11=-170/278, 4-11=-121/547, 5-11=-195/446, 5-9=-21/250, 6-9=-916/2054

JOINT STRESS INDEX
1 = 0.93, 1 = 0.90, 2 = 0.00, 3 = 0.34, 4 = 0.76, 5 = 0.80, 6 = 0.74, 8 = 0.62, 9 = 0.80, 10 = 0.92 and 11 = 0.28

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone; cantilever right exposed ; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60.
3) Provide adequate drainage to prevent water ponding.
4) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 594 lb uplift at joint 1 and 842 lb uplift at joint 8.
6) Girder carries hip end with 7-0-0 end setback.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 100 lb down and 26 lb up at 20-0-0, and 539 lb down and 277 lb up at 13-0-0, and 539 lb down and 277 lb up at 7-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Regular: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-4=-54, 4-5=-113(F=-59), 5-6=-54, 1-11=-30, 9-11=-63(F=-33), 8-9=-30, 7-8=-54
Concentrated Loads (lb)
Vert: 11=-539(F) 9=-539(F) 7=-100(F)

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16105 N. FLORIDA AVE. STE B, LUTZ, FL 33549

Dwg.#1024061116

Job	Truss	Truss Type	Qty	Ply	ONEAL - HUNTER OIL STORE #48
L215251	T02	HIP	2	1	Job Reference (optional)

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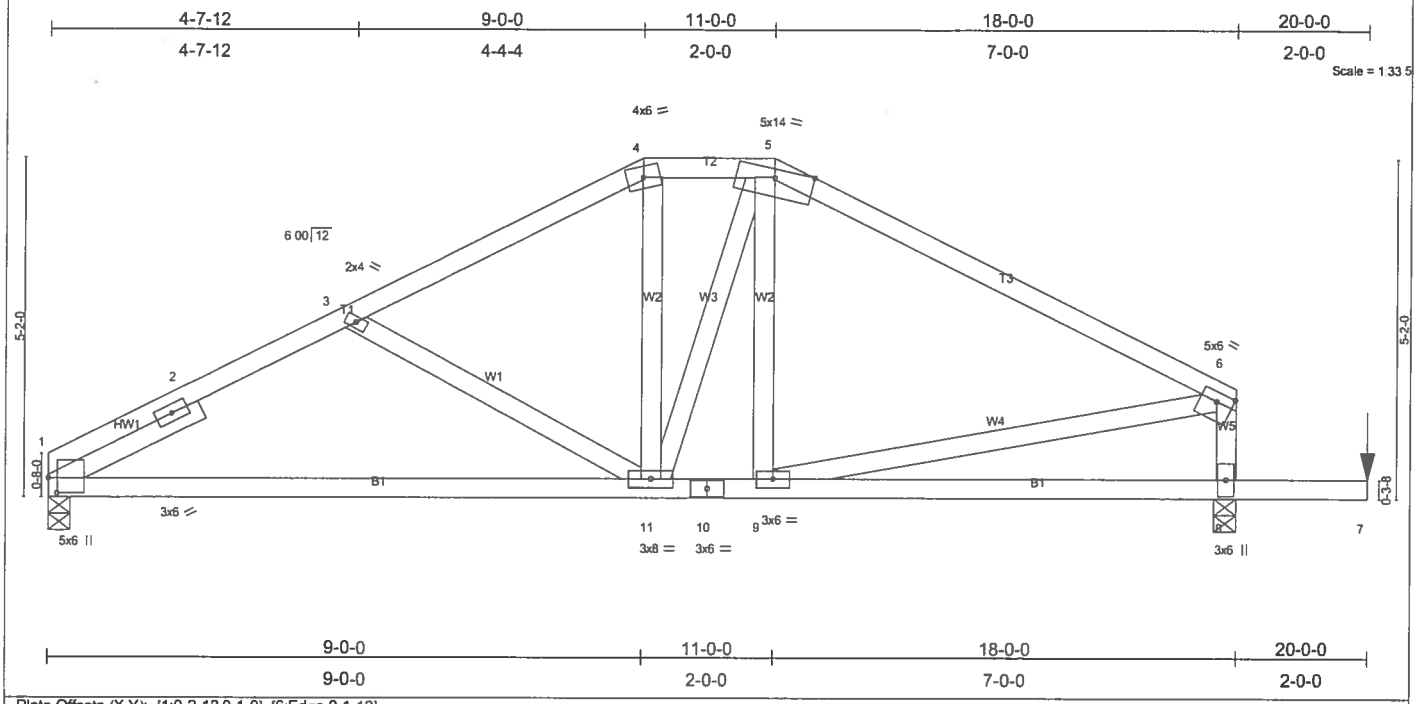

Plate Offsets (X,Y): [1:0-2-12,0-1-9], [6:Edge,0-1-12]

LOADING (psf)		SPACING 2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.70	Vert(LL)	-0.12	1-11	>999	240	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.71	Vert(TL)	-0.21	1-11	>999	180		
BCLL	10.0	Rep Stress Incr	NO	WB	0.20	Horz(TL)	0.02	8	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 104 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2
WEBS 2 X 4 SYP No.3
SLIDER Left 2 X 4 SYP No.3 2-6-6

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=731/0-4-0, 8=985/0-4-0
Max Horz 1=114(load case 5)
Max Uplift1=-236(load case 5), 8=-385(load case 6)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1092/371, 2-3=-989/383, 3-4=-831/272, 4-5=-698/287, 5-6=-814/257, 6-8=-637/248
BOT CHORD 1-11=-375/919, 10-11=-161/650, 9-10=-161/650, 8-9=-18/98, 7-8=0/0
WEBS 3-11=-264/228, 4-11=-104/271, 5-11=-65/247, 5-9=-96/72, 6-9=-170/614

JOINT STRESS INDEX
1 = 0.90, 1 = 0.40, 2 = 0.00, 3 = 0.34, 4 = 0.29, 5 = 0.86, 6 = 0.71, 8 = 0.46, 9 = 0.35, 10 = 0.42 and 11 = 0.67

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Interior(1) zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) Provide adequate drainage to prevent water ponding.
4) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 236 lb uplift at joint 1 and 385 lb uplift at joint 8.
6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 100 lb down and 26 lb up at 20-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Regular: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-4=-54, 4-5=-54, 5-6=-54, 1-8=-30, 7-8=-54
Concentrated Loads (lb)
Vert: 7=-100(F)

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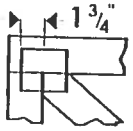
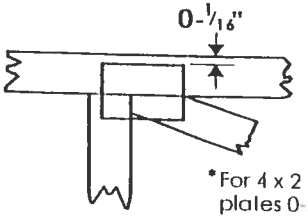
Symbols

PLATE LOCATION AND ORIENTATION



*Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and securely seat.



*For 4 x 2 orientation, locate plates 0-1/16" from outside edge of truss.

*This symbol indicates the required direction of slots in connector plates.

***Plate location details available in MiTek 20/20 software or upon request.**

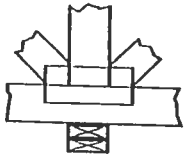
PLATE SIZE

4 X 4 — The first dimension is the width perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING

Indicated by symbol shown and/or by text in the bracing section of the output. Use T, I or Eliminator bracing if indicated.

BEARING

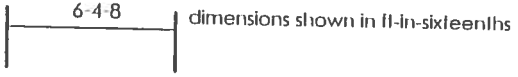


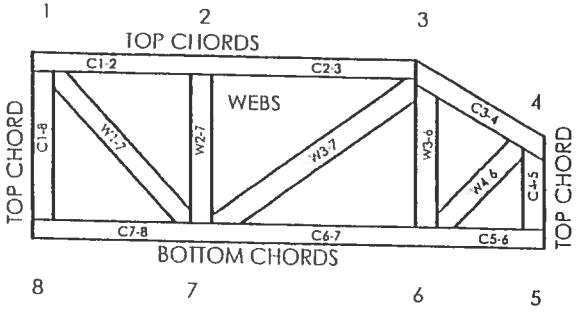
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI1: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System





JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

CONNECTOR PLATE CODE APPROVALS

BOCA	96-31, 95-43, 96-20-1, 96-67, 84-32
ICBO	4922, 5243, 5363, 3907
SBCCI	9667, 9730, 9604B, 9511, 9432A

MiTek®

TEE-LOK®

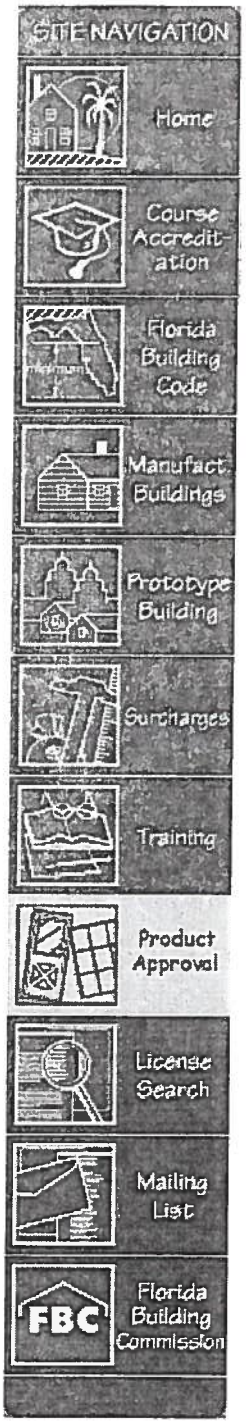
MiTek Engineering Reference Sheet: MII-7473

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI1.
2. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
3. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
4. Cut members to bear tightly against each other.
5. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI1.
6. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI1.
7. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
8. Unless expressly noted, this design is not applicable for use with fire retardant or preservative treated lumber.
9. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
10. Plate type, size, orientation and location dimensions shown indicate minimum plating requirements.
11. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
12. Top chords must be sheathed or purlins provided at spacing shown on design.
13. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
14. Connections not shown are the responsibility of others.
15. Do not cut or alter truss member or plate without prior approval of a professional engineer.
16. Install and load vertically unless indicated otherwise.

The Florida Department of Community Affairs
Building Code Information System



PRODUCT APPROVAL

Product Type Detail

Overview | Product Search | Organization Search | Product Application

User: Public User - Not Associated with Organization -

Need Help ?

Application #:	FL3531
Date Submitted:	10/16/2004
Product Manufacturer:	Englert Inc.
Address/Phone/email:	5110 Causeway Blvd. Tampa, FL 33619 (813) 248-2296
Technical Representative:	Joe F. Tripod
Technical Representative Address/Phone/email:	1200 Amboy Avenue Perth Amboy, NJ 08862 J.Tripod@englertinc.com
Quality Assurance Representative:	Gene Johnson
Quality Assurance Representative Address/Phone/email:	1200 Amboy Avenue Perth Amboy, NJ 08862 G.Johnson@EnglertInc.com
Category:	Roofing
Subcategory:	Non-structural Metal Roofing
Evaluation Method:	Evaluation Report from a Florida Registered Architect or Florida Professional Engineer

Referenced Standards from the Florida Building Code:	Section	Standard	Year
	1507.5	UL 580	1994

Florida Engineer or Architect Name:	James L. Buckner
Florida License:	PE-31242
Quality Assurance Entity:	Underwriters Laboratories Inc.
Validation Entity:	Warren W. Schaefer, P.E.

Authorized Signature:	James Buckner jimmy@cbuckinc.net
Evaluation/Test Reports Uploaded:	PTID_3531_T_1-Series1100_032AlumOnWood_16in_EVALREPORT.pdf PTID_3531_T_2-Series1101_24GaSteelOnWood_16in_EVALREPORT.pdf PTID_3531_T_3-Series1101_032AlumOnWood_16in_EVALREPORT.pdf PTID_3531_T_4-Series2000_040AlumOnWood_18in_EVALREPORT.pdf PTID_3531_T_CertOfIndep&QA.pdf
Installation Documents Uploaded:	
Product Approval Method:	Method 1 Option D
Application Status:	Approved
Date Validated:	10/25/2004
Date Approved:	12/08/2004

Page: Go

Page 1 / 1

App/Seq #	Product Model # or Name	Model Description	Limits of Use
3531.1	1- "Series 1100"	Minimum 0.032" Aluminum, 16" Wide Panel over Wood Deck	Design Pressure = 37.5 psf Increased design pressures at perimeter and corner areas, in compliance with Florida Building Code, Chapter 16, may be met through rational analysis. The required design wind loads shall be determined for each project. The maximum fastener spacing listed herein shall not be exceeded. All rational analysis computations shall be prepared by a qualified design professional, as required by Florida Building Code, Section 104. This product is not approved for use in the High Velocity Hurricane Zone. Refer to Evaluation Report.
			Design Pressure = 123.5 psf Increased design pressures at perimeter and corner areas, in compliance with Florida Building Code, Chapter 16, may be met through

3531.2	2- "Series 1101"	Minimum 24 GA Steel, 16" Wide Panel over Wood Deck	rational analysis. The required design wind loads shall be determined for each project. The maximum fastener spacing listed herein shall not be exceeded. All rational analysis computations shall be prepared by a qualified design professional, as required by Florida Building Code, Section 104. This product is not approved for use in the High Velocity Hurricane Zone. Refer to Evaluation Report.
3531.3	3- "Series 1101"	Minimum 0.032" Aluminum, 16" Wide Panel over Wood Deck	Design Pressure = 37.5 psf Increased design pressures at perimeter and corner areas, in compliance with Florida Building Code, Chapter 16, may be met through rational analysis. The required design wind loads shall be determined for each project. The maximum fastener spacing listed herein shall not be exceeded. All rational analysis computations shall be prepared by a qualified design professional, as required by Florida Building Code, Section 104. This product is not approved for use in the High Velocity Hurricane Zone. Refer to Evaluation Report.
3531.4	4- "Series 2000"	Minimum 0.040" Aluminum, 18" Wide Panel over Wood Deck	Design Pressure @ Clips spaced 24" o.c. = 70 psf Design Pressure @ Clips spaced 8" o.c. = 123.5 psf Increased design pressures at perimeter and corner areas, in compliance with Florida Building Code, Chapter 16, may be met through rational analysis. The required design wind loads shall be determined for each project. The maximum fastener spacing listed herein shall not be exceeded. All

			rational analysis computations shall be prepared by a qualified design professional, as required by Florida Building Code, Section 104. This product is not approved for use in the High Velocity Hurricane Zone. Refer to Evaluation Report.

Next

Lavi & Associates
Consulting Engineers

9550 Forest Ln.
Suite 108
Dallas, TX 75243

Tel: (214) 340-0049
Fax: (214) 340-0067

February 6, 2003

Mr. Joseph Tripod
Englert, Inc.
1200 Amboy Avenue
Perth Amboy, NJ 08862

RE: Englert Series 1101, 1" high × 16" wide
0.0239" (24 gauge) steel panel
UL rating over 19/32" APA-approved plywood sheathing
Our Job #03-031

Dear Mr. Tripod:

Following is the result of the engineering study conducted by our office to verify that the Englert Series 1101 panel, 16" wide × 1" high × 0.0239" (24 gauge) thick steel installed over 19/32" thick APA-approved plywood sheathing will meet the requirements of the UL-90 rating when tested in accordance with the Underwriters Laboratories Standard 580. Refer to "Tests for Uplift Resistance of Roof Assemblies" published by Underwriters Laboratories for the test procedure.

1. **Metal Roof Deck Panels:** Englert Series 1101 panel, 0.0239" (24 gauge) thick steel, 16" wide × 1" high at side ribs. Panels continuous over two or more spans without end laps. Material to meet ASTM A653 with minimum yield strength of 50 ksi.

2. **Attachment to plywood deck:** Use #10-12 × 1" long Pancake-head screws with #2 Phillips-drive plated steel wood screws spaced at 8" o.c. Screws must protrude plywood a minimum of ¼".

3. **Plywood decking:** Plywood decking to be graded per PS83 specification, 19/32" thick, exposure 1, APA rated sheathing with square edges. Support for plywood deck must be of sufficient strength to meet UL forces with maximum 24" o.c. spacing.

It should be noted that the above suggested construction is based on an engineering study and has not been tested by the Underwriters Laboratories in accordance to the UL 580 standard.

Roof system must also be designed to withstand the uplift load specified by the local building codes, using appropriate factor of safeties for each component.

Sincerely,

Yoosef Lavi, P.E.
YL/jb

Enclosure:

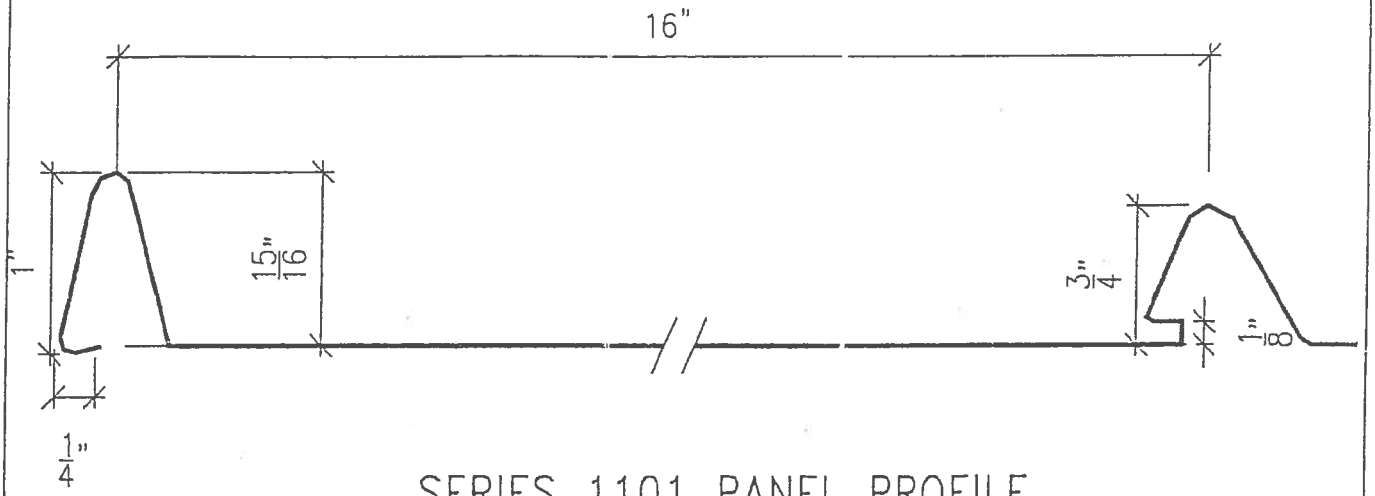
1) Panel profile

STATE OF TEXAS
YOOSEF LAVI
59858
LICENSED PROFESSIONAL ENGINEER

2-6-03

3 Pages

ENGLERT. INC. 1200 AMBOY AVENUE PERTH AMBOY, NJ 08862	ENGLERT SERIES 1101 STANDING SEAM PANEL PROFILE	DATE: FEBRUARY 6, 2003 JOB: 03-031 PAGE: 3



SERIES 1101 PANEL PROFILE

NOTES:
1. ALL DIMENSIONS ARE TO CENTER LINE OF MATERIAL
2. COATING: PAINTED GALVANIZED
3. THICKNESS: 0.024" STEEL (24 GAUGE)

The Florida Department of Community Affairs
Building Code Information System

SITE NAVIGATION

Home | Florida Building Code | Manufactured Buildings | Prototype Building | Variances | Training | [illegible] | License Search | Mailing List | Florida Building Commission

PRODUCT APPROVAL

Product Type Detail

Overview | Product Search | Organization Search | Product Application

User: Public User - Not Associated with Organization -

Need Help ?

Application #:	FL2484
Date Submitted:	05/03/2004
Product Manufacturer:	Vistawall Group
Address/Phone/email:	8655 Elm Fair Blvd Tampa, FL 33610 (770) 252-3090
Technical Representative:	William Smith
Technical Representative Address/Phone/email:	8655 Elm Fair Blvd Tampa, FL 33610 (800) 366-0349 bsmith@vistawall.com
Quality Assurance Representative:	Architectural Testing Inc.
Quality Assurance Representative Address/Phone/email:	130 Derry Court York, PA 17402-9405 (717) 764-7700 surich@architest.com
Category:	Panel Walls
Subcategory:	Storefronts
Evaluation Method:	Evaluation Report from a Florida Registered Architect or Florida Professional Engineer

Referenced Standards from the Florida Building Code:

Section	Standard	Year
FBC 2400	ASTM E 283-91	1991
	ASTM E 331-96	1996
	ASTM E 330-96	1996
	ASTM E 330-96	1996

Florida Engineer or Architect Name: Elizabeth Broadway

Post-it® Fax Note 7671	Date	# of pages ▶ 13
To CARL	From JOHN	
Co./Dept. LAKE CITY	Co. V'WALL	
Phone #	Phone #	
Fax # 386-752-5952	Fax #	

Florida License:	PE- 38558
Quality Assurance Entity:	Architectural Testing, Inc.
Validation Entity:	Architectural Testing, Inc
Authorized Signature:	William Smith bsmith@vistawall.com
Evaluation/Test Reports Uploaded:	PTID_2484_T_FG1000 RPT.pdf PTID_2484_T_FG2000 RPT.pdf PTID_2484_T_FG3000 RPT INSIDE.pdf PTID_2484_T_FG3000S RPT.pdf PTID_2484_T_letterofindpen [1].pdf
Installation Documents Uploaded:	
Product Approval Method:	Method 1 Option D
Application Status: Date Validated:	Approved 07/13/2004

Page: Go

Page 1 / 1

App/Seq #	Product Model # or Name	Model Description	Limits of Use
2484.1	FG-1000	1 3/4" x 4" Flush Glaze	The structural capabilities of the system shall be determined based on the test report data and in conjunction with accepted engineering guidelines.
2484.2	FG-2000	1 3/4" x 4 1/2" Flush Glaze OG	The structural capabilities of the system shall be determined based on the test report data and in conjunction with accepted engineering guidelines.
2484.3	FG-2000	1 3/4" x 4 1/2" Flush Glaze IG	The structural capabilities of the system shall be determined based on the test report data and in conjunction with accepted engineering guidelines.
2484.4	FG-3000	2" x 4 1/2" Flush Glaze OG/IG	The structural capabilities of the system shall be determined based on the test report data and in conjunction with accepted engineering guidelines.
			The structural capabilities of the system shall be

2484.5	FG-3000S	2" x 4 1/2" Flush Glaze Thermal Slotted	determined based on the test report data and in conjunction with accepted engineering guidelines.

Next

TELEPHONE (AREA CODE 214)
565-0593
565-0594
421-1400

CABLE ADDRESS "DALAB"

DALLAS LABORATORIES, INC.

CONSULTANTS AND TECHNOLOGISTS
ANALYTICAL AND RESEARCH CHEMISTS —
CHEMICAL ENGINEERS — PETROLEUM ENGINEERS

P. O. BOX 152837
1323 WALL ST

DALLAS, TEXAS 75315

MEMBERS
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NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS
TEXAS SOCIETY OF PROFESSIONAL ENGINEERS
ASM INTERNATIONAL
SOCIETY OF PETROLEUM ENGINEERS OF AIME

MEMBERS
AMERICAN CHEMICAL SOCIETY
AMERICAN SOCIETY FOR TESTING MATERIAL
AMERICAN NATIONAL STANDARDS INSTITUTE
AMERICAN SOCIETY FOR QUALITY CONTROL

Submitted By: Vistawall Architectural Products
Products Development Group
P. O. Box 629
750 Airport Rd.
Terrell, TX 75160

Attn: Larry Biebuyck

Date: February 2, 2004
(Original Issue Date: 2/20/1997)

Report No. 25221-R-1R

REPORT

Subject: Performance testing in accordance with ASTM E 283-91 (Air Infiltration), ASTM E 331-96 (Water Resistance), ASTM E 330-96 (Uniform Load Deflection), and ASTM E 330-96 (Uniform Load Structural).

Product Type: Store Front

Series/Model: FG-2000 (Outside Glazed)

Overall Size: 12'9-1/4"x 9'11"

Configuration:
O.O.O
O.O.O

PRODUCT DESCRIPTION

Note: Mock-up was tested using two types of intermediate mullions. One mullion was a typical stationary mullion (part #FG-2100 mull) and (part #FG-2102 filler). The second mull was an expansion mull that would allow for lateral movements (part #FG-2109) and (part #FG-2108).

Weatherstripping: Two fingered gasket part #(V-11) at the interior and exterior face of expansion mull part #(FG-2108).

Glass: 1/4" tempered.

Glazing: Outside glazed with gasket #(FG-1133) at the interior and exterior of glass. Snap-in glazing bead part #(FG-2106) at the exterior of glass.

Weep Arrangement: 1/2"break in perimeter sealant at each intermediate vertical mullion. Water diverter part #(FG-1000-PP-1) installed at each end of horizontal rail.

Sealant: Perimeter caulked with a foam backer rod and sealant at the interior and exterior of mock-up, full span of frame head and jambs. Frame sill sealed exterior with sealant and backer rod and structural silicone only at interior. Exterior seal has 1/2" break at vertical mullions for weepage (See Weep description). Glazing gasket part #(FG-1133), ends are mitered and sealed prior to installation. Butyl gasket at all frame connections. Sealant applied to joint between part #(FG-2169) and (FG-2104) at frame sill. Sealant applied between exterior joint of filler part #(FG-2102), and mull part #(FG-2100).

Other Features: Frame corners are connected with two (2) #14x1" screws per corner. Mock-up was anchored to the test buck using 3" anchors 4" off center of vertical mullions and jambs eight clips at sill and three clips per jamb, and frame head.

Date Testing Started: February 17, 1997

Date Testing Completed: February 17, 1997

Testing Performed At: Vistawall testing facility in Terrell, Texas.

PERFORMANCE TEST RESULTS

TITLE OF TEST	TEST METHOD	MEASURED	ALLOWED
Air Infiltration @ 1.57 psf	ASTM E 283-91	0.002 CFM/Ft^2	0.06 CFM/Ft^2
Air Infiltration @ 6.24 psf	ASTM E 283-91	0.003 CFM/Ft^2	0.06 CFM/Ft^2
Water Resistance @ 6.24 psf	ASTM E 331-96	No Leakage	No Leakage
Water Resistance @ 8.00 psf	ASTM E 331-96	No Leakage	No Leakage
Water Resistance @ 9.00 psf	ASTM E 331-96	No Leakage	No Leakage
Water Resistance @ 10.00 psf	ASTM E 331-96	No Leakage	No Leakage
Uniform Load Deflection - Stationay Mull	ASTM E 330-96		
- Exterior @ 20.00 psf		0.580"	0.680"
- Interior @ 20.00 psf		0.560"	0.680"
Uniform Load Deflection - Expansion Mull	ASTM E 330-96		
- Exterior @ 20.00 psf		0.495"	0.680"
- Interior @ 20.00 psf		0.485"	0.680"
Uniform Load Structural	ASTM E 330-96		
- Exterior		30.0 psf*	30.0 psf*
- Interior		30.0 psf*	30.0 psf*
- Permanent Set			
- Stationary Mull		Negligible	0.476"
- Expansion Mull		Negligible	0.476"

* No glass breakage, permanent deformation, or any other condition exists that caused any damage to the unit.

The above results were secured by using the designated test methods and they indicate compliance with the performance requirements of the above referenced specifications.

DALLAS LABORATORIES, INC.
TESTING LABORATORY

Ken Ness

KN:td

BROADWAY ENGINEERING, P.A.

3335 W. Cass Street
Tampa, FL 33609
(813) 251-9244
Fax: 251-9330
www.broadway-eng.com

CIVIL
MECHANICAL
STRUCTURAL
BUILDING DESIGN

March 31, 2004

STATE OF FLORIDA
DEPARTMENT OF COMMUNITY AFFAIRS
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2100

Manufacturer: Vistawall Architectural Products
Products Development Group
P.O. Box 629
750 Airport Rd.
Terrell, TX 75160

Testing Laboratory: Dallas Laboratories, Inc.
P.O. Box 152837
Dallas, TX 75315
Original Issue Date: February 20, 1997
Revised Date: February 2, 2004
Report No. 25221-R-1R

Product Category: Windows

Product Type: Store Front

Series/Model: FG-2000 (Outside Glazed)

To Whom It May Concern:

I have reviewed the test report prepared by Dallas Laboratories, Inc., dated February 20, 1997, and revised February 2, 2004, for the above referenced product. According to this report, the Vistawall Series FG-2000 storefront system was tested in accordance with the following standards:

1. ASTM E 283-91 for air infiltration;
2. ASTM E 331-96 for water infiltration;
3. ASTM E 330-96 for uniform load deflection; and
4. ASTM E 330-96 for uniform load structural.

According to the information provided in the test report, the Vistawall Series FG-2000 storefront system was tested in accordance with ASTM E 283-91 for air infiltration, ASTM E 331-96 for water infiltration, and ASTM E 330-96 for uniform load deflection and uniform

structural load. Based on the test report data and in conjunction with accepted engineering guidelines to determine the structural capabilities of the system, we hereby certify that the Vistawall Series FG-2000 storefront system fulfills the requirements of the 2001 Florida Building Code Chapter 24.

Sincerely,

BROADWAY ENGINEERING, P.A.

Elizabeth A. Broadway, P.E.
President
Florida Registration No. 38558

2787-2000.ltr.wpd/eab

MIAMI-DADE

BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908

NOTICE OF ACCEPTANCE (NOA)

Vistawall Architectural Products
803 Airport Road
Terrell, TX 75160

SCOPE:
This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Series "FG-2000" Flush Glazed Aluminum Storefront System

APPROVAL DOCUMENT: Drawing No. FG-2000, titled "FG-2000 Framing System", sheets 1 through 3 of 3, dated 10/24/03, prepared by the manufacturer, signed and sealed by William M. Meyers, P.E., bearing the Miami-Dade County Product Control Renewal stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: None

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.
This NOA **revises and renews NOA # 00-0124.02** and consists of this page 1 and evidence page E-1, as well as approval document mentioned above.
The submitted documentation was reviewed by **Manuel Perez, P.E.**

Vistawall Architectural Products

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No. **FG-2000**, titled "FG-2000 Framing System", sheets 1 through 3 of 3, dated 10/24/03, prepared by the manufacturer, signed and sealed by William M. Meyers, P.E.

B. TESTS

Submitted under NOA#96-1023.02

1. Test reports on 1) Air Infiltration Test, per FBC, TAS 202-94
   2) Uniform Static Air Pressure Test, Loading per FBC, TAS 20294
   3) Water Resistance Test, per FBC, TAS 202-94

   along with installation diagram of an aluminum flush glazed storefront system 10' 0" high x 4'0" mullion spacing, prepared by Hurricane Test Laboratory, Inc., Test Report No. **HTL-0105-0803-96**, dated 08/02/96, signed and sealed by Timothy S. Marshall, P.E.

C. CALCULATIONS

Submitted under NOA#00-0124.02

1. Anchor Calculations and structural analysis, prepared by R.E. Fisher & Associates, Inc., dated October 15, 1996, signed and sealed by William M. Meyers, P.E. Complies with ASTM E1300-98

D. QUALITY ASSURANCE

1. Miami Dade County Building Code Compliance Office.

E. STATEMENTS

1. Statement letter of no change, issued by The Vistawall Group, signed by Fred Grunewald, dated 8/27/03.

F. MATERIAL CERTIFICATIONS

1. None

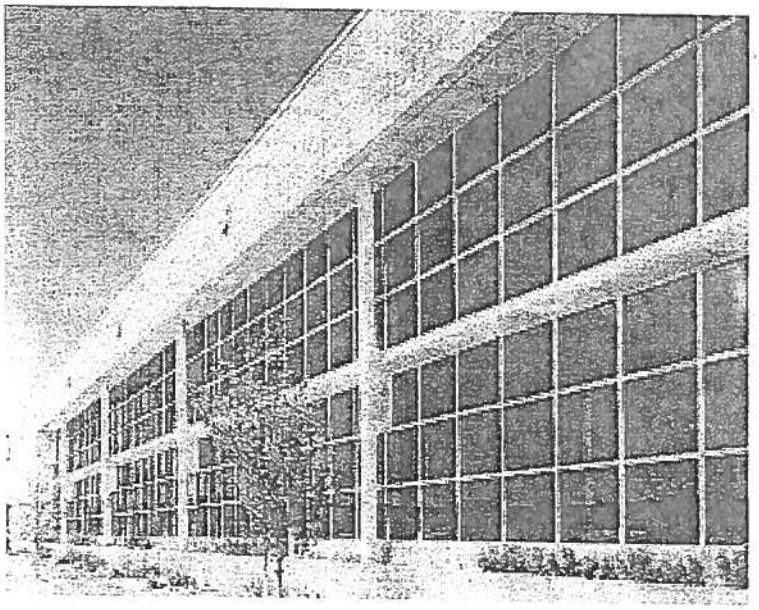
G. OTHER

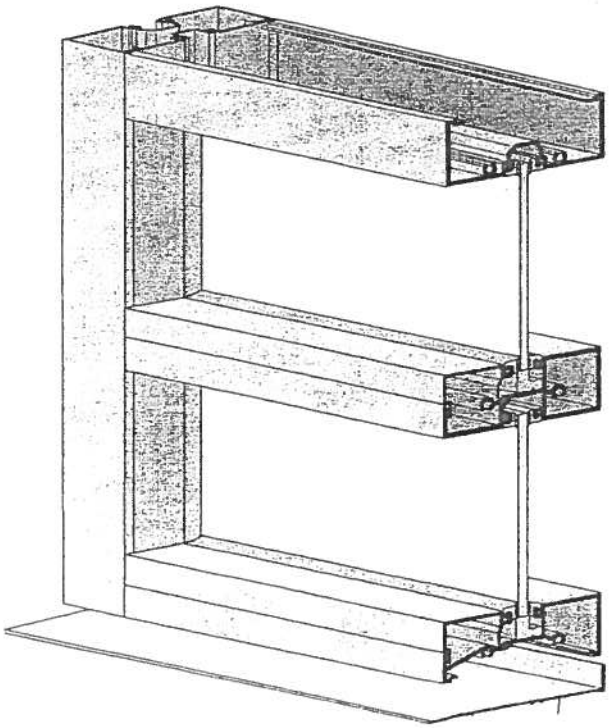
1. Notice of Acceptance No. **00-0124.02** Vistawall Architectural Products, Series "FG-2000" Aluminum Storefront System, approved on 5/26/00 and expiring on 10/02/03.

Manuel Perez, P.E.
Product Control Examiner
NOA No 03-0903.02
Expiration Date: October 02, 2008
Approval Date: November 06, 2003

VISTAWALL

Standard Flush Glaze Systems



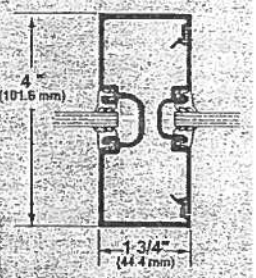


Vistawall offers a complete line of storefront framing systems to meet virtually any application and condition. The Series 1000 is 1¾" x 4" and the Series 2000 is 1¾" x 4½". Both are designed for ¼" glazing but are easily adapted to ⅛" or ⅜" infills. The Series 3000 (2" x 4½") is designed for 1" but is adaptable to many different infills ranging from ¼" to 1⅛".

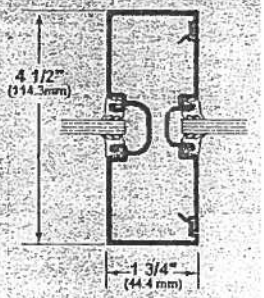
Features:

- Three different assembly methods: Screw Spline, Shear Block, and Stacking
- Installation manuals
- Tested by independant laboratories
  - Air Infiltration: <.06 allowable at 6.24 PSF
  - Water Resistance: 9PSF
- Door framing components
- Sidelite bases to match door bottom rails
- Multiple corner post configurations
- Adjustable and 135° mullions
- Anodized or painted finishes

FG-1000



FG-2000



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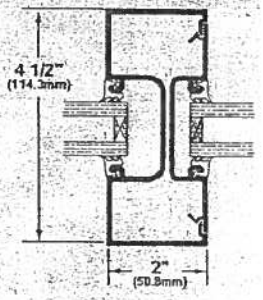


For more information on how Vistawall can meet or exceed your design ideas, call your local sales representative

Vistawall locations:

Headquarters
PO Box 629, Terrell, TX 75160
972-551-6100
www.vistawall.com

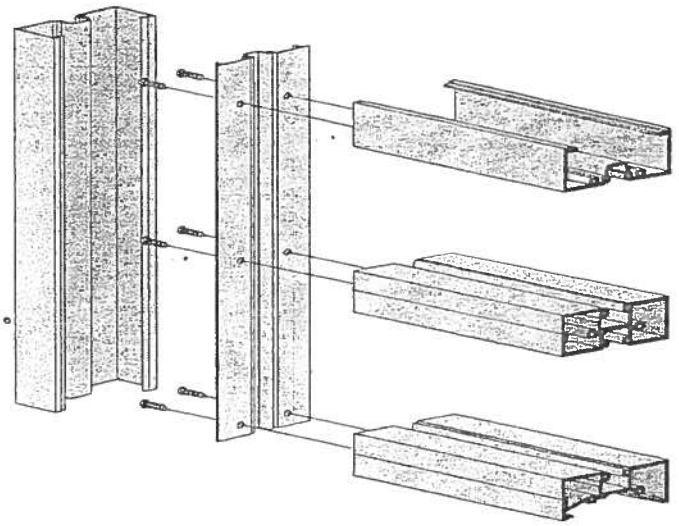
Atlanta, GA	Houston, TX	Seattle, WA
Chicago, IL	Las Vegas, NV	St. Louis, MO
Cincinnati, OH	Los Angeles, CA	Tampa, FL
Cleveland, OH	Modesto, CA	Terrell, TX
Dallas, TX	Newnan, GA	Warwick, RI
Denver, CO	San Francisco, CA	Washington, DC

VISTAWALL
ARCHITECTURAL PRODUCTS

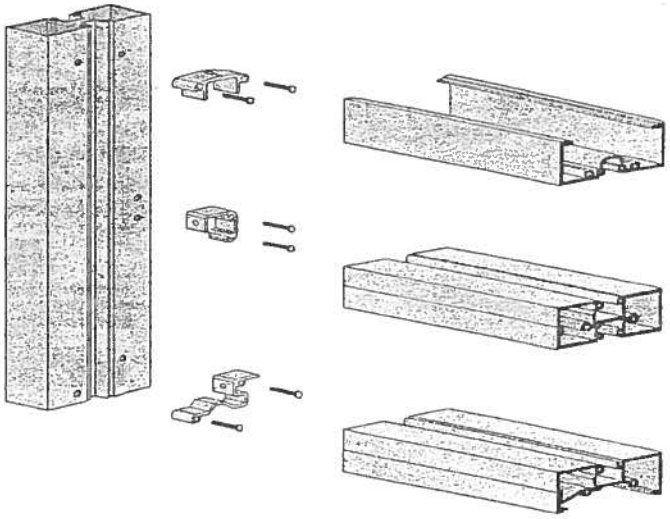
ENGINEERED TO LAST™

Standard Flush Glaze Systems

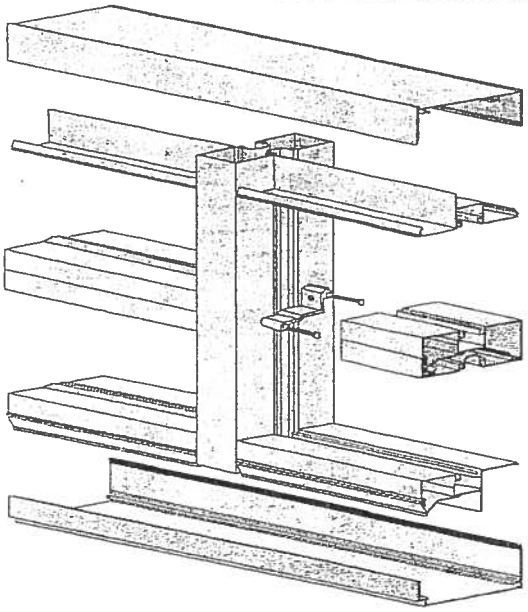
SCREW SPLINE ASSEMBLY



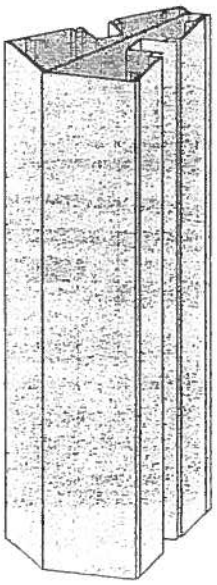
SHEAR BLOCK ASSEMBLY



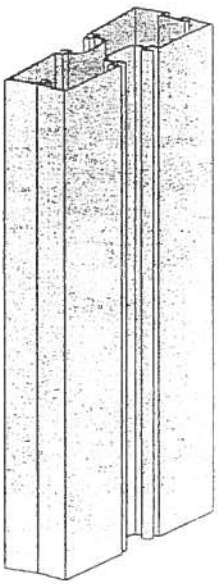
STACK ASSEMBLY



135° CORNER



ADJUSTABLE MULLION



FG-2000
TABLE OF CONTENTS

Note: All Details are shown at 1/4 scale.

NOTE:
Most details shown in this catalog are standard systems for Vistawall. Optional details are non-standard and are meant to illustrate how modifications can be made to meet various design requirements. For more information on our systems and how they can be customized to meet your application, please contact Vistawall via email at design_support@vistawall.com or by phone at 972-551-6100.

FG-2000
FEATURES

- 1 3/4" x 4 1/2" Framing
- Three different assembly methods: Screw Spline, Shear Block, and Stacking
- Installation Manual available
- Door framing components
- Sidelite bases to match door
- Multiple corner post configurations
- Adjustable and 135° mullions
- Anodized and painted finishes

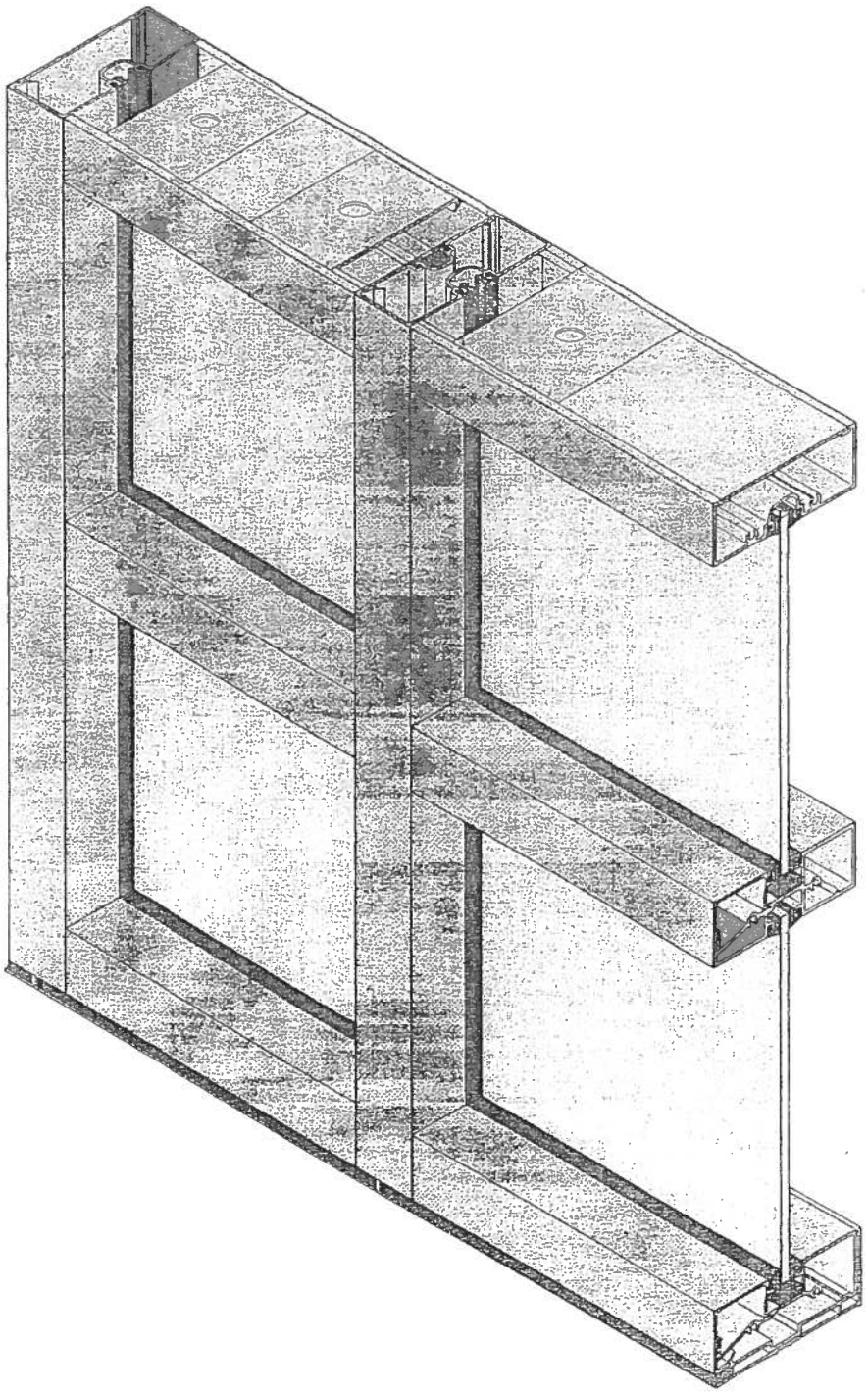
AIR: 0.06 CFM/FT2@6.24psf

Water: No leakage @10.00psf

Structural: 30.0psf

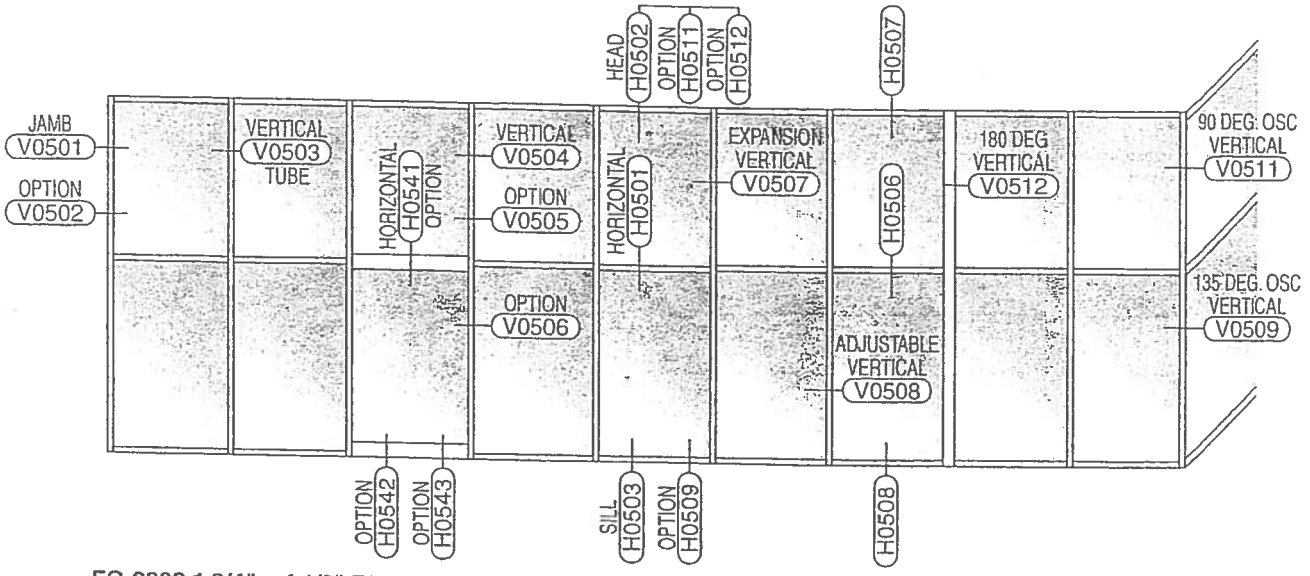
To download 3-part specification go to:

www.vistawall.com/specs/FG2000



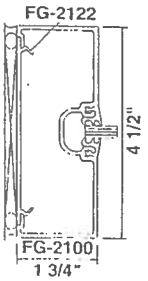
FG-2000 STOREFRONT SYSTEM

Detail Scale = 1/4 Size

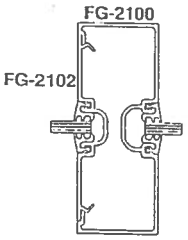


FG-2000 1 3/4" x 4 1/2" FRAMING - 1/4" GLASS
WEBSITE MODEL NO. 35FG2
To download full size details: **www.vistawall.com/fg2000**
Drawing numbers shown (ie H0503) are reference to electronic details only.

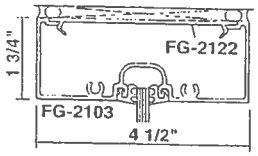
SCREW SPLINE SYSTEM



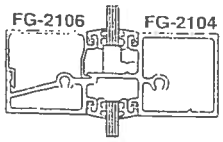
V0501



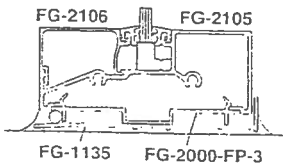
V0504



H0502

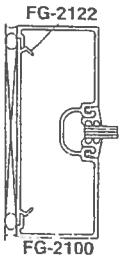


H0501

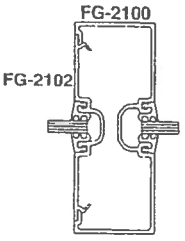


H0503

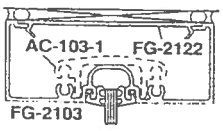
SHEAR BLOCK SYSTEM



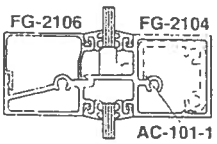
V0501



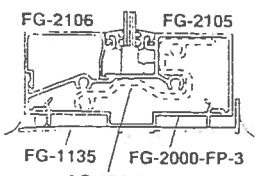
V0504



H0502

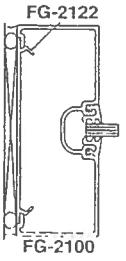


H0501

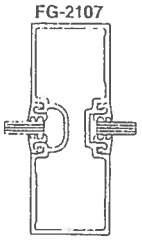


H0503

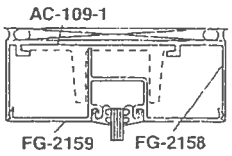
STACKED SYSTEM



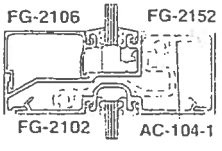
V0501



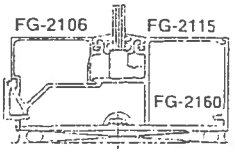
V0503



H0507



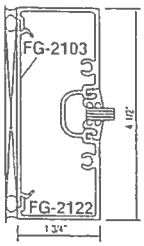
H0506



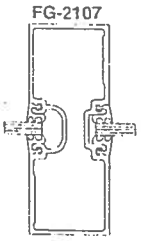
H0508

Detail Scale = 1/4 Size

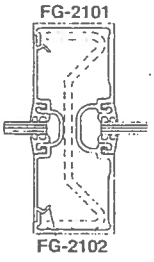
OPTIONAL FRAMING



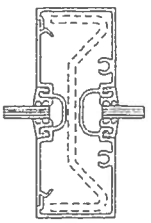
V0502



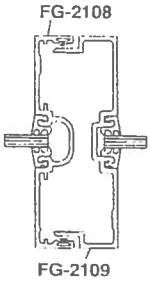
V0503



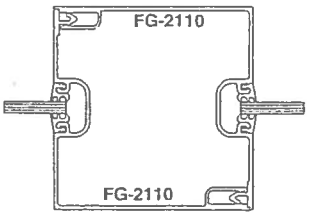
V0505



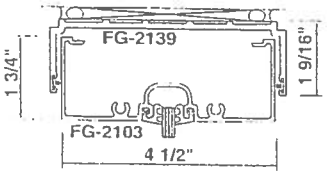
V0506



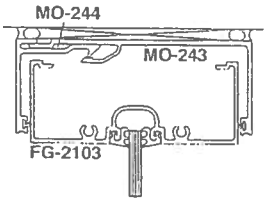
V0507 EXPANSION VERTICAL



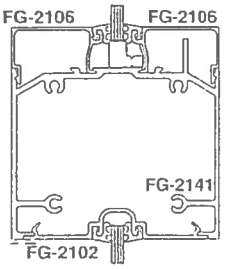
V0512



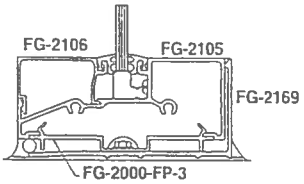
H0511



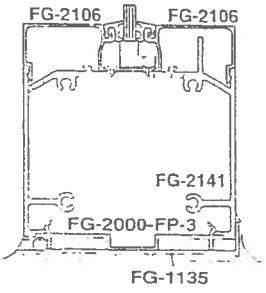
H0512



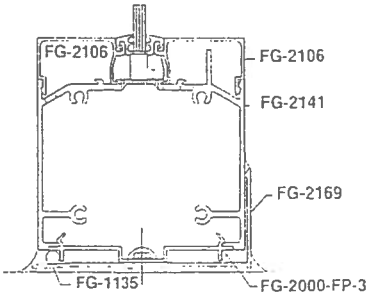
H0541



H0509



H0542

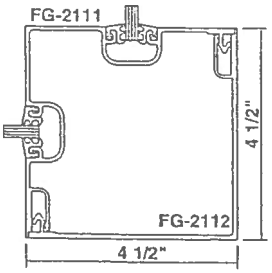


H0543

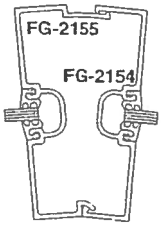
FG-2000 STOREFRONT SYSTEM

Detail Scale = 1/4 Size

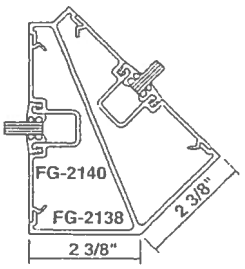
CORNERS



V0511 90° OSC



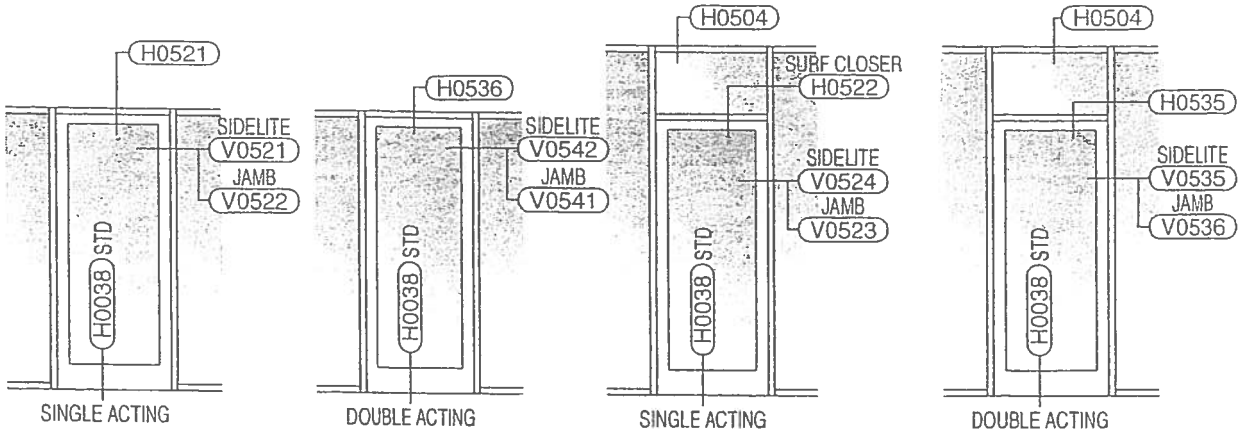
V0508 ADJUSTABLE VERTICAL



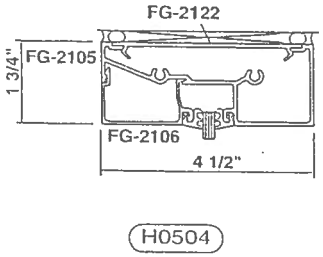
V0509 135° OSC

FG-2000 STOREFRONT SYSTEM - ENTRANCE FRAMING

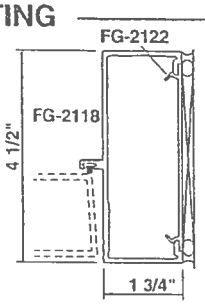
Detail Scale = 1/4 Size



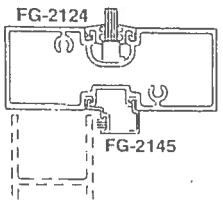
SINGLE ACTING



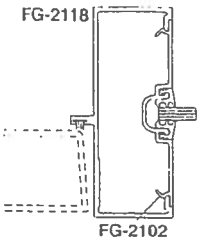
H0504



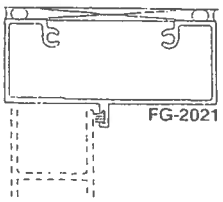
V0522



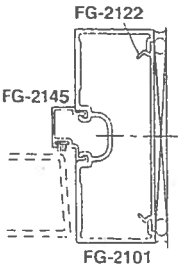
H0522



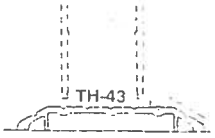
V0521



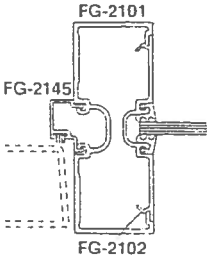
H0521



V0523

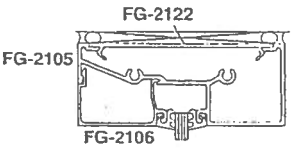


H0038

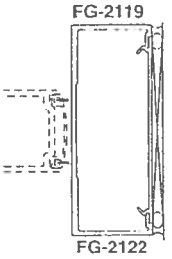


V0524

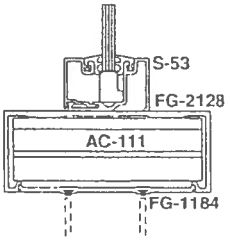
DOUBLE ACTING



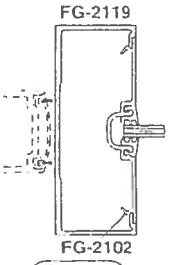
H0504



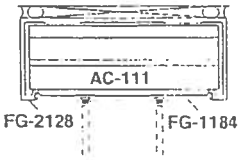
V0541



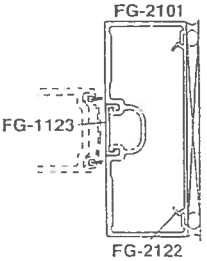
H0535



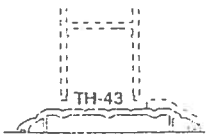
V0542



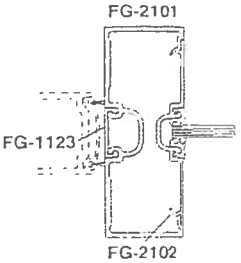
H0536



V0536



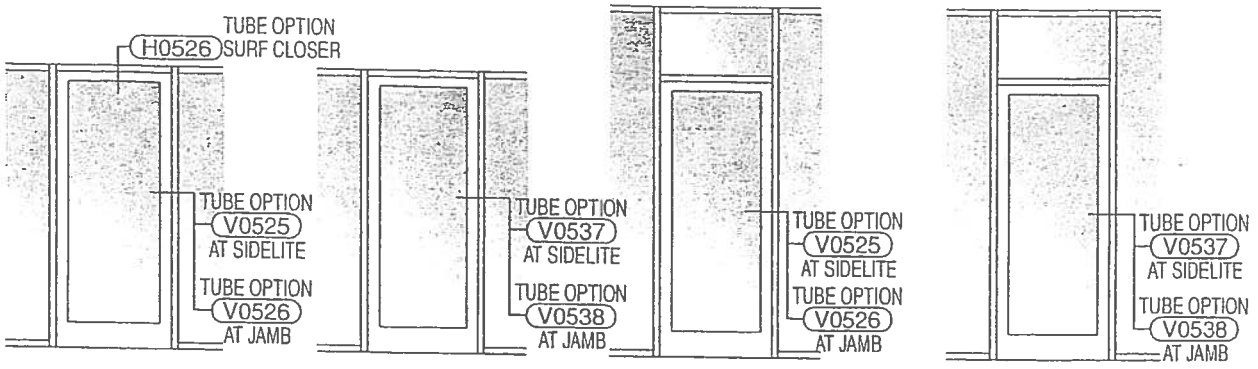
H0038



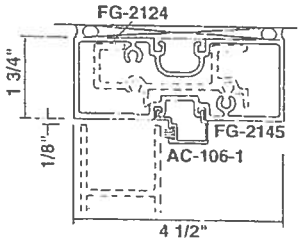
V0535

FG-2000 STOREFRONT SYSTEM

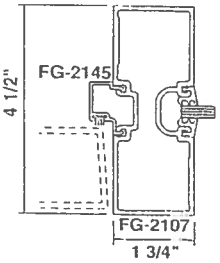
Detail Scale = 1/4 Size



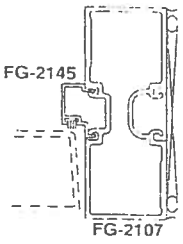
SINGLE ACTING



H0526

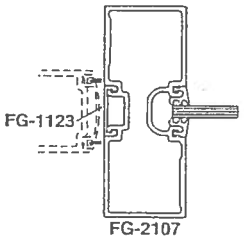


V0525

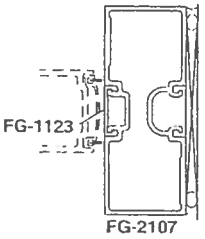


V0526

DOUBLE ACTING



V0537

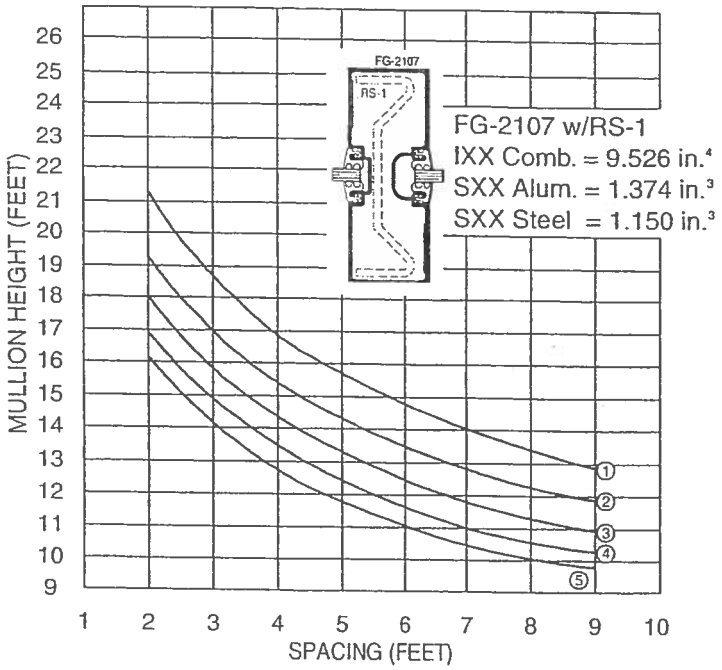


V0538

WIND LOAD CHARTS

DEFLECTION LIMITED TO L/175

6063-T5



DEFINITION OF CURVES

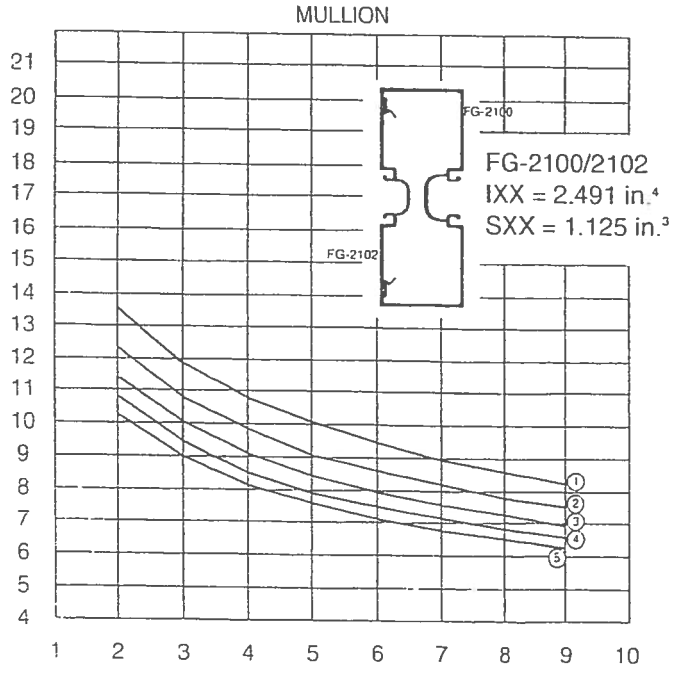
① = **15 P. S. F.**

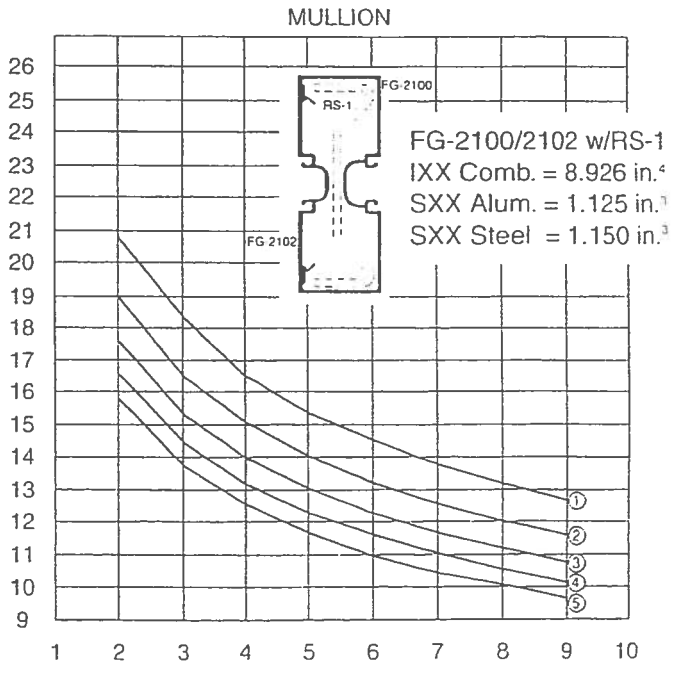
② = **20 P. S. F.**

③ = **25 P. S. F.**

④ = **30 P. S. F.**

⑤ = **35 P. S. F.**



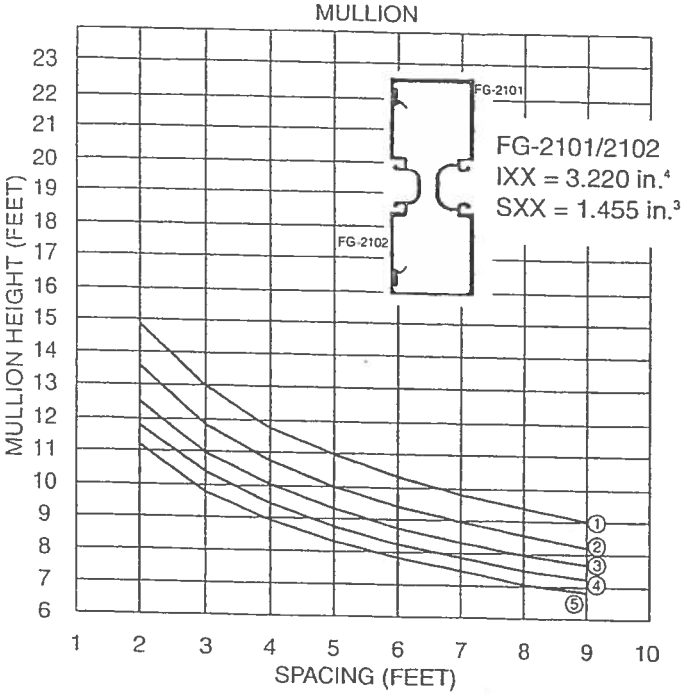


WIND LOAD CHARTS

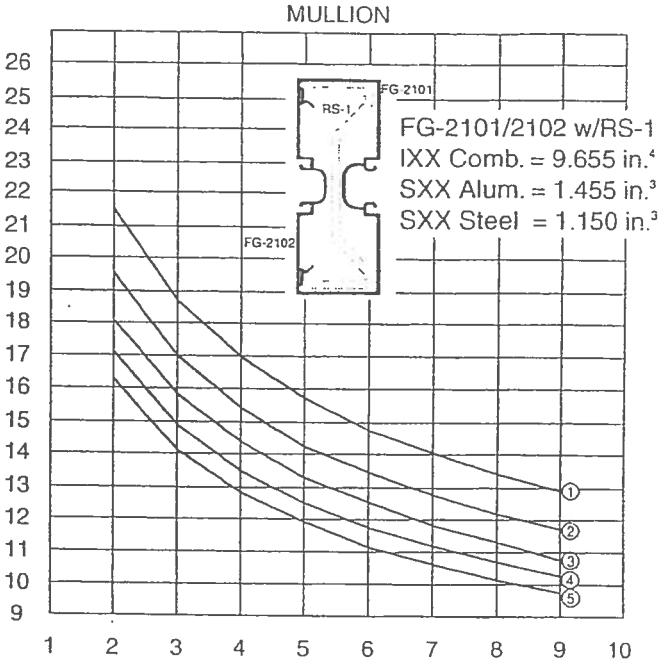
DEFLECTION LIMITED TO L/175

6063-T5

MULLION



MULLION

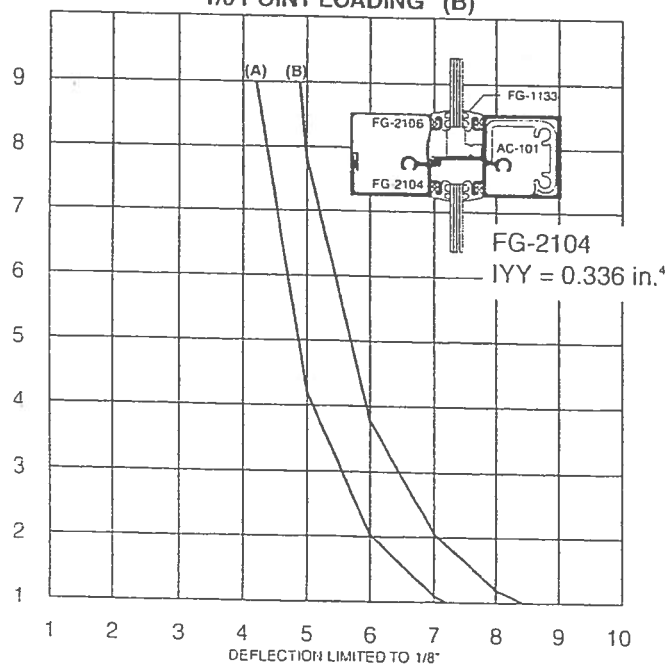


DEFINITION OF CURVES

① = 15 P. S. F.
② = 20 P. S. F.
③ = 25 P. S. F.
④ = 30 P. S. F.
⑤ = 35 P. S. F.

DEAD LOAD CHART

1/4 POINT LOADING (A)
1/8 POINT LOADING (B)



FG-1000, FG-2000 & FG-3000 FLUSH GLAZE SYSTEMS FASTENER CHART

FOR USE IN HIGH WIND LOAD AREAS

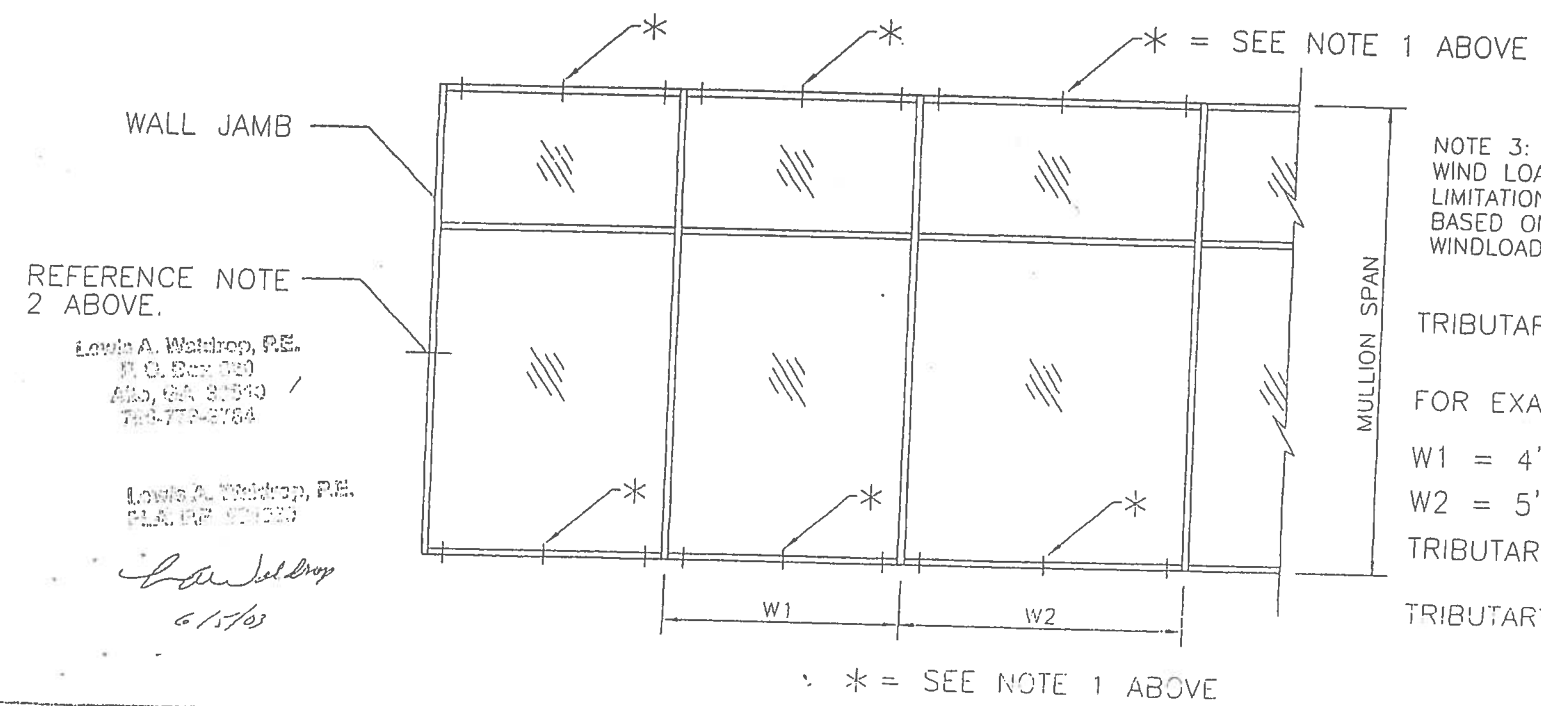
SEE SHEETS 5-15 FOR DOOR FRAME FASTENER CHARTS

<u>GRAPHS ON SHEETS 2-4 SHOW THE REQUIRED NUMBER OF FASTENERS AT EACH SIDE OF VERTICAL MULLIONS</u>

NOTE 1:
IF THE <u>VERTICAL</u> MULLION <u>SPACING</u> EXCEEDS 3/4 OF THE VERTICAL MULLION HEIGHT, ONE (1) EACH FASTENER IS REQUIRED AT MIDPOINT OF THE <u>HEAD</u> AND <u>SILL</u> MEMBER. FOR EXAMPLE: VERTICAL MULLION HEIGHT IS 70". VERTICAL MULLION SPACING IS 58". MIDPOINT FASTENER CHECK: 70"x0.75=52 ½". 58" IS GREATER THAN 52 ½", THEREFORE ONE (1) EACH ADDITIONAL FASTENER IS REQUIRED AT MIDPOINT OF <u>HEAD</u> AND <u>SILL</u>.

NOTE 2:
JAMB MULLIONS <u>EXCEEDING 6 FT. IN HEIGHT</u> REQUIRE ONE (1) EACH FASTENER AT MIDPOINT.

NOTE: THESE DETAILS ONLY REPRESENT FASTENERS LOCATIONS. PLEASE REFERENCE SHOP DRAWINGS AND VISTAWALL INSTALLATION INSTRUCTIONS FOR PROPER LOCATION AND APPLICATION OF SEALANTS.



NOTE 3: REFERENCE VISTAWALL WIND LOAD CHARTS FOR STRUCTURAL LIMITATIONS OF VERTICAL MULLIONS BASED ON TRIBUTARY WIDTH & WINDLOADS.

$$\text{TRIBUTARY WIDTH} = \frac{W1 + W2}{2}$$

FOR EXAMPLE:

W1 = 4'-0"

W2 = 5'-0"

$$\text{TRIBUTARY WIDTH} = \frac{4' + 5'}{2}$$

TRIBUTARY WIDTH = 4'-6'

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6/5/03

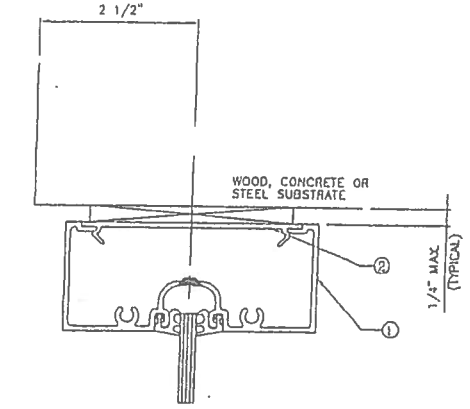
VISTAWALL ARCHITECTURAL PRODUCTS
311 WALT SANDERS MEMORIAL BLVD NEWNAN, GA 30265 (770) 253-5050
THE VISTAWALL GROUP
BUTLER MANUFACTURING COMPANY

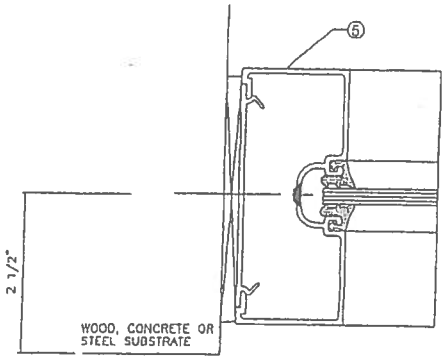
MANUAL COMP

PROJECT
FG-1000, FG-2000 & FG-3000
FASTENER CHART

DRAWN: DSG
DATE: 5/15/03
SCALE: FULL

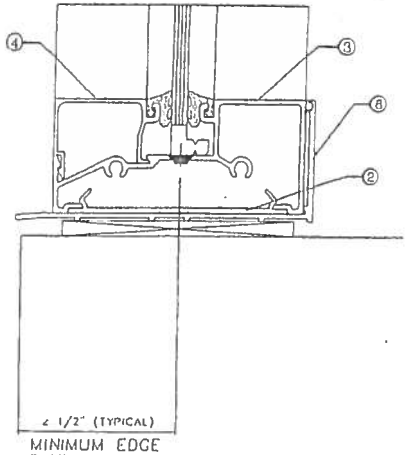
HEAD





JAMB

SILL



RECOMMENDED SPACING OF FASTENERS ON EACH SIDE OF VERTICAL MULLIONS AT HEAD & SILL:

1. EDGE OF VERTICAL TO ℄ OF 1ST FASTENER = 2"
2. ADDITIONAL FASTENERS WILL NOT IMPROVE STRUCTURAL PERFORMANCE.

NOTE: POSITION A SNAP-IN FLAT FILLER NO LESS THAN 18" IN LENGTH AT FASTENER LOCATIONS.

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6/1/05

STANDARD FRAMING MEMBERS FOR STOREFRONT SYSTEMS

ITEM NO.	DESCRIPTION	FG-1000	FG-2000	FG-3000
1	HEAD	FG-1103	FG-2103	FG-3103
2	FILLER	FG-1122	FG-2122	FG-2122
3	SILL	FG-1105	FG-2105	FG-3161
4	GLASS STOP	FG-1106	FG-2106	FG-3144
5	JAMB	FG-1100	FG-2100	FG-3100
* 6	FLASHING	FG-223;	FG-2231	FG-3380

DETAILS SHOWN ARE FOR 1/4" GLAZING
1" GLAZING SYSTEM IS SIMILAR.
*NON-STRUCTURAL: ANY FLASHING MEMBER MAY BE SUBSTITUTED

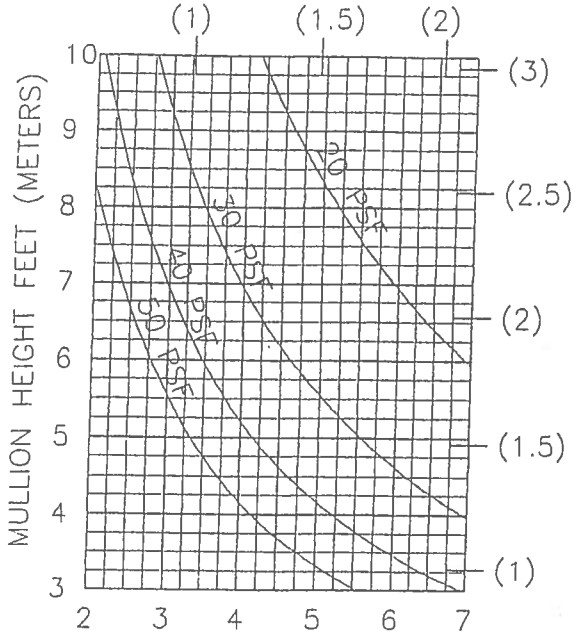
MANUAL COMP

VISTAWALL ARCHITECTURAL PRODUCTS
714 WALT SANDERS MEMORIAL BLVD NEWNAN GA 30264 (770) 253-3256
THE VISTAWALL GROUP
BUTLER MANUFACTURING COMPANY

FG-1000, FG-2000 & FG-3000
FASTENER CHART

PROJECT
PROJECT NO.
DRAWN DSG DATE 3/15/05
SCALE FULL
DRAWING NO.
SHEET 2 OF

ANCHOR CHART

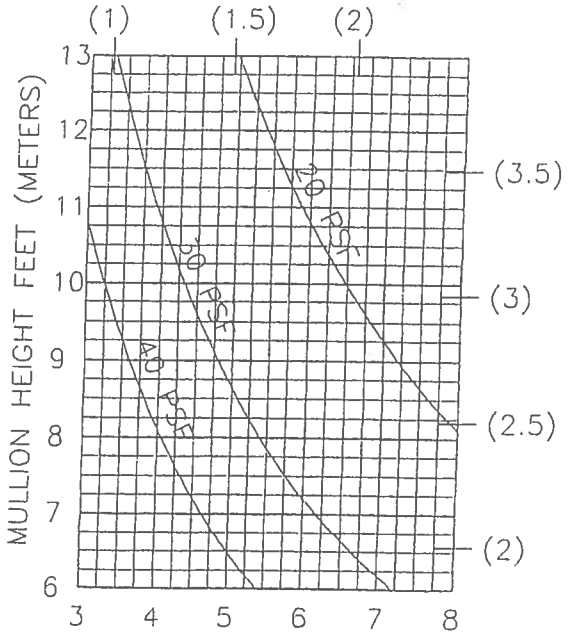


TRIBUTARY WIDTH IN FEET (METERS)

WOOD SUBSTRATE

ONE (1) 1/4" WOOD SCREW W/ 2" MIN. PENETRATION INTO WOOD EACH SIDE OF MULL

ANCHOR CHART



TRIBUTARY WIDTH IN FEET (METERS)

2500 & 3000 PSI CONCRETE SUBSTRATES

ONE (1) 1/4" SLEEVE ANCHOR (ITW RAMSET/RED HEAD OR EQUIV.) WITH 1 3/4" MIN. EMBED. INTO CONCRETE EACH SIDE OF MULL

6/15/03

MANUAL COMP

VISTAWALL ARCHITECTURAL PRODUCTS

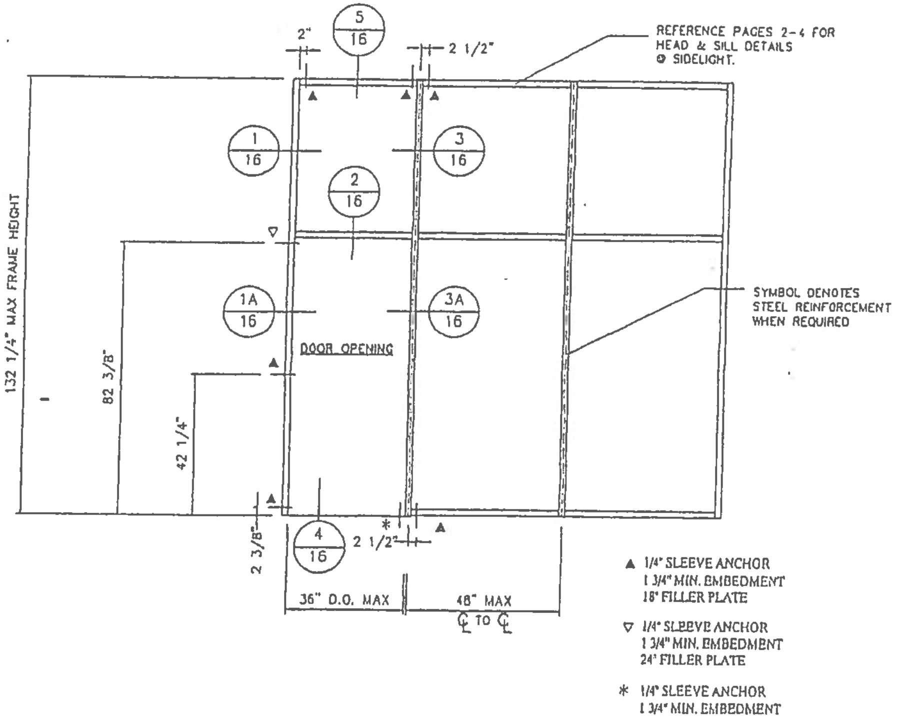
FG-1000, FG-2000 & FG-3000 FASTENER CHART

DRAWN DSC DATE 5/12/03

SCALE FULL

SHEET 3 OF 11

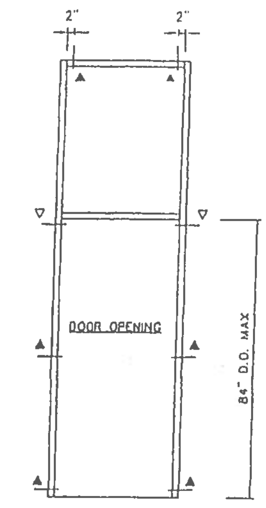
DOOR FRAME FASTENER CHART FOR FG-1000, FG-2000 & FG-3000 FLUSH GLAZE SYSTEMS



▲ 1/4" SLEEVE ANCHOR 1 3/4" MIN. EMBEDMENT 18" FILLER PLATE

▽ 1/4" SLEEVE ANCHOR 1 3/4" MIN. EMBEDMENT 24" FILLER PLATE

* 1/4" SLEEVE ANCHOR 1 3/4" MIN. EMBEDMENT



FRAMES WITHOUT SIDELITE

NON-STRUCTURAL FASTENERS MAY BE REQUIRED FOR ATTACHING THE THRESHOLD IN THE OPENING

2500 OR 3000 PSI CONCRETE SUBSTRATE

WIND LOAD	ANCHOR SIZE AND TYPE [1]					
	JAMB ADJACENT TO SIDE LIGHT [2]		JAMB ADJACENT TO STRUCTURE			
	HEAD	SILL	HEAD	TRANSOM [3]	MID DOOR	SILL
20 PSF	2 EA 1/4" DIA SLEEVE ANCHORS	2 EA 1/4" DIA SLEEVE ANCHORS	1 EA 1/4" DIA SLEEVE ANCHORS	1 EA 1/4" DIA SLEEVE ANCHORS	1 EA 1/4" DIA SLEEVE ANCHORS	1 EA 1/4" DIA SLEEVE ANCHORS
30 PSF	2 EA 1/4" DIA SLEEVE ANCHORS	2 EA 1/4" DIA SLEEVE ANCHORS	1 EA 1/4" DIA SLEEVE ANCHORS	1 EA 1/4" DIA SLEEVE ANCHORS	1 EA 1/4" DIA SLEEVE ANCHORS	1 EA 1/4" DIA SLEEVE ANCHORS
40 PSF	2 EA 1/4" DIA SLEEVE ANCHORS	2 EA 1/4" DIA SLEEVE ANCHORS	1 EA 1/4" DIA SLEEVE ANCHORS	1 EA 1/4" DIA SLEEVE ANCHORS	1 EA 1/4" DIA SLEEVE ANCHORS	1 EA 1/4" DIA SLEEVE ANCHORS

1. ANCHOR LOCATION AND DIMENSION SHOWN ON ELEVATION ARE FOR MAXIMUM NUMBER OF ANCHORS. FOR WINDLOADS REQUIRING LESS THAN MAXIMUM NUMBER OF ANCHORS, DELETE THE ONES ON THE OUTSIDE OF THE GROUP.
2. SIDE LIGHT UP TO AND INCLUDING 48" WIDE
3. USE 24" FILLER PLATE WITH LAG BOLTS AT THIS LOCATION (SEE TRANSOM)

NOTE: HILTI HLC, RAMSET/REDHEAD, POWERBOLT, OR DYNABOLT SLEEVE ANCHORS MAY BE USED.

STAINLESS STEEL SLEEVE TYPE ANCHORS MAY BE SUBSTITUTED FOR SLEEVE ANCHORS, PROVIDED FASTENER MANUFACTURER WARRANTS THEIR PRODUCT FOR THIS TYPE OF INSTALLATION.

FASTENERS HAVING A ROCKWELL HARDNESS GREATER THAN 35 ARE SUBJECT TO HYDROGEN ASSISTED CORROSION CRACKING (HASCC) WHEN IN CONTACT WITH ALUMINUM IN THE PRESENCE OF MOISTURE.

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[illegible]
Alto, GA [illegible]
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Lewis A. [illegible], P.E.
FLA. PE. #[illegible]

[signature]
4/15/03

TH-58 THRESHOLD MUST BE USED ON DOOR FRAME FOR WIND LOADS EXCEEDING 40 PSF. TWO (2) EACH SPLINE JOINERY SCREWS ARE USED TO ATTACH THRESHOLD TO EACH JAMB

TH-43 THRESHOLD WITH TH-FP-1 CLIP MAY BE SUBSTITUTED FOR TH-58 THRESHOLD WHEN WIND LOADS DO NOT EXCEED 40 PSF

MANUAL | COMP

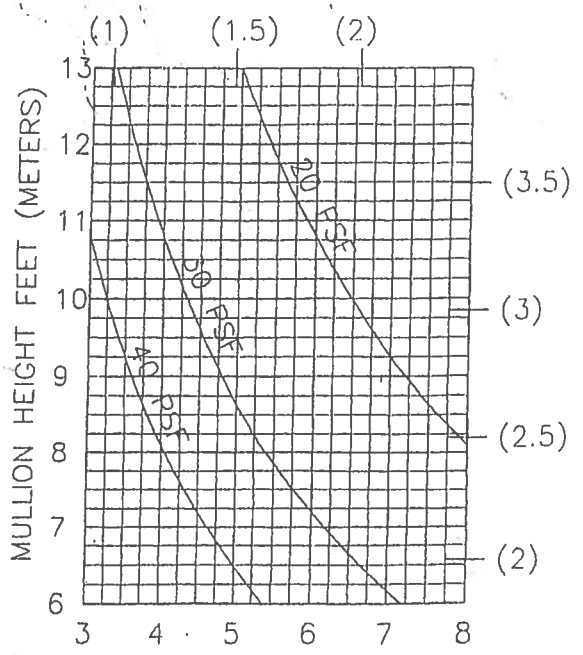
VISTAWALL ARCHITECTURAL PRODUCTS
314 WALT SANDERS MEMORIAL BLVD NEWNAN, GA 30265 (770) 253-3594

THE VISTAWALL GROUP
BUTLER MANUFACTURING COMPANY

FG-1000, FG-2000 & FG-3000
FASTENER CHART

PROJECT
PROJECT NO.
DRAWN: DSG | DATE: 5/15/03
SCALE: FULL
DRAWING NO.
SHEET: 8

ANCHOR CHART



STEEL SUBSTRATE

ONE (1) 1/4" DIAM. TEK EACH SIDE OF MULL
STEEL : FY = 36 KSI MIN.
MINIMUM EDGE DISTANCE EQUALS 1.5 X BOLT DIAMETER.

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6/13/03

VISTAWALL ARCHITECTURAL PRODUCTS
THE VISTAWALL GROUP

FG-1000, FG-2000 & FG-3000
FASTENER CHART

PROJECT NO.

DRAWN DSG DATE 5/13/0

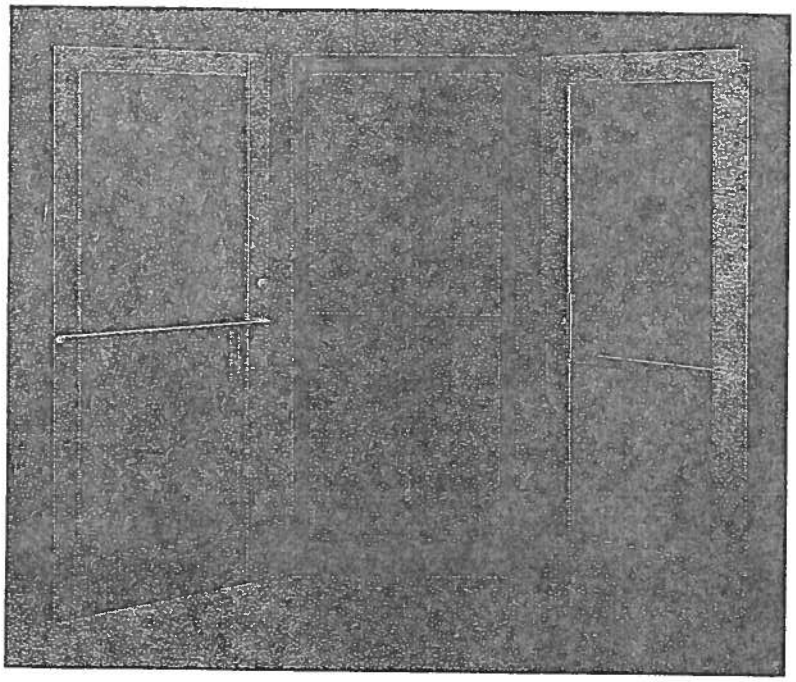
SCALE FULL

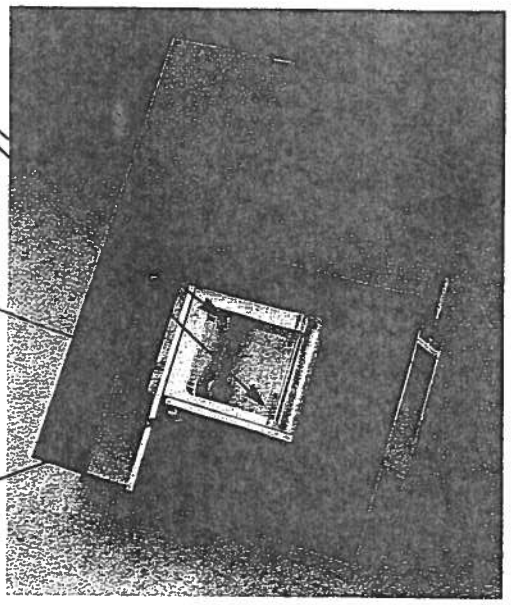
DRAWING NO.

SHEET 4 OF 17

VISTAWALL

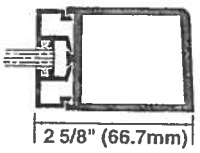
Standard Entrances



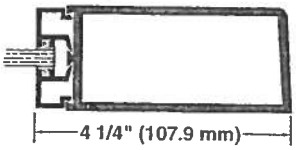


Vistawall offers standard narrow, medium and wide stile entrances to meet a wide range of traffic requirments. All standard Vistawall entrances (3'-0" wide) are ADA compliant and have built-in features that include:

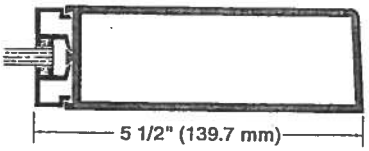
- Maximum security hook bolt locks
- Heavy extruded push/pulls
- Adjustable astragal with dual weathering on pairs of doors
- Mechanically fastened shear blocks and welded corner construction
- Adaptable to virtually all hardware
- 4" to 10" one piece bottom rail options
- Glass stops with bulb gaskets
- 1/4", 3/8" 5/8" and 1" glazing options
- Adaptable to meet local building codes
- Limited lifetime warranty



Series 212 – Narrow Stile



Series 375 – Medium Stile



Series 500 – Wide Stile

Vistawall entrances are durable and virtually maintenance free. Vistawall also offers a complete line of custom, specialty and all glass entrances. For more information on how Vistawall can meet or exceed your design ideas, call your local sales representative or contact the customer service department in Terrell, Texas.

Vistawall locations:
Headquarters
P.O. Box 629, Terrell, TX 75160
972-551-6100
www.vistawall.com

Atlanta, GA	Houston, TX	Seattle, WA
Chicago, IL	Las Vegas, NV	St. Louis, MO
Cincinnati, OH	Los Angeles, CA	Tampa, FL
Cleveland, OH	Modesto, CA	Terrell, TX
Dallas, TX	Newnan, GA	Warwick, RI
Denver, CO.	San Francisco, CA	Washington, DC

VISTAWALL
ARCHITECTURAL PRODUCTS

212 - 375 - 500 ENTRANCES

Specifications

General

All aluminum entrances shall be Series _____ (212, 375 or 500 — Architect to specify) as shown on the architectural drawings and manufactured by Vistawall Architectural Products. The immediate door frames, sidelights and fixed windows shall be of the same manufacturer. If substitute materials are to be considered they must be supported by technical literature such as drawings and samples no less than ten (10) days prior to bid for proper evaluation.

Materials

All door and framing sections shall be of extruded aluminum alloy and temper to meet or exceed finishing and structural criteria as specified. Door stiles and rails, excluding glass stops, shall be tubular and have .125 wall thickness. All weathering shall be a hardbacked silicone treated polypropylene. Any exposed fasteners shall be aluminum, stainless steel or other non-corrosive material.

Finish

All exposed surfaces shall be free of unsightly scratches and blemishes. The exposed sections shall receive a caustic etch followed by an anodic coating.

Color shall be...

Enduracolor Bronze or Black with an architectural class anodic coating.

Clear finish with an architectural class anodic coating.

Construction and Design

Door stiles and rails shall be accurately joined at corners with heavy concealed reinforcement brackets secured with bolts and screws, and shall be MIG welded. Doors shall have snap-in stops with bulb glazing vinyl on both sides of the glass. No exposed screws shall be permitted. Each door leaf shall be equipped with an adjusting mechanism located in the top rail near the lock stile which provides for minor clearance adjustments after installation. Weathering shall be installed in the hinge stiles of pairs or single center hung doors. The lock stile of a single center hung door, active meeting stile at a pair of butt hung, offset pivot, or center hung doors shall have an adjustable astragal weatherstrip.

Door frame and sidelight framing shall be accurately joined at corners with unexposed screws. All glazing shall be flush, including the horizontal muntins and sills and held in place by E.P.D.M. glazing gaskets on both sides. No applied stops shall be permitted except at the transom bar of center hung doors. All butt-hung and offset pivot door frames shall have door stops at jambs and head with continuous weathering.

Standard Hardware

All doors shall be equipped with a maximum security hookbolt lock. Pairs of doors shall be equipped with lever type flush bolts in the top and bottom of the inactive meeting stile. Operating hardware shall be butt hinges, offset pivots or center pivots as supplied by the door manufacturer. Closers for butt hung and offset pivoted doors shall be door manufacturer's standard surface closer. Closers for center pivoted doors shall be door manufacturer's standard overhead concealed closers. All butt hung and offset pivoted doors shall have PH-10 pull handle and PB-11 push bar. All center pivoted doors shall have PB-11 push bars on both sides. Bronze finished hardware shall have an integral accent strip.

(see VIP section for VIP specification).

Custom Hardware (Architect may specify)

If hardware items are to be supplied to the door manufacturer by others, templates and physical hardware must be submitted to the door manufacturer prior to fabrication.

Erection

All openings shall be prepared plumb and square by others and shall be of sufficient size to provide clearance at jambs, head and sill as shown on the architectural drawings. Installation, glass and glazing shall be performed by experienced technicians according to the manufacturer's recommended procedures. All units shall be securely anchored with all joints fully caulked to insure a water tight seal.

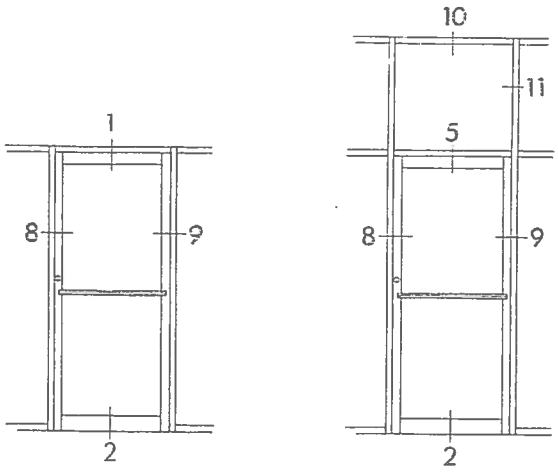
Cleaning

Upon completion of construction, the general contractor shall be responsible for cleaning all aluminum, employing methods recommended by the manufacturer as follows: Anodized aluminum shall be cleaned with plain water containing a mild detergent, or a petroleum product such as white gasoline, kerosene or distillate. No abrasive agent shall be used.

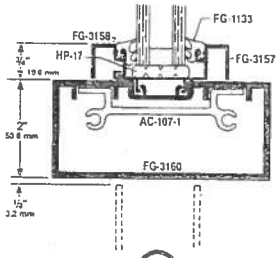
SERIES 3000 2" x 4-1/2" FLUSH GLAZE

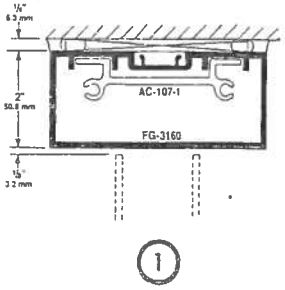
SCALE = 1/4 SIZE

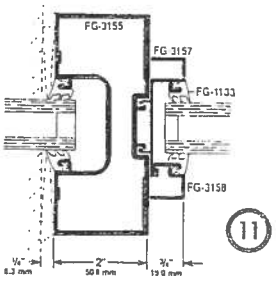
Double Acting Doors

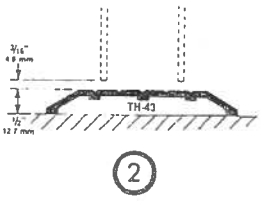


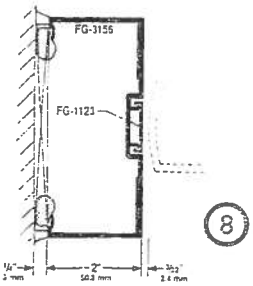
Door framing members do not receive THERMAL SLOT™

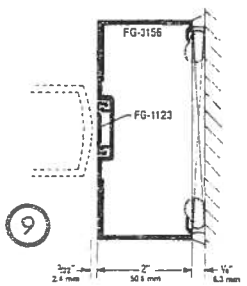


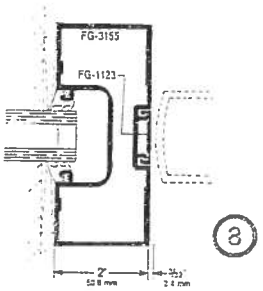


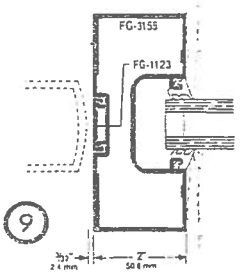




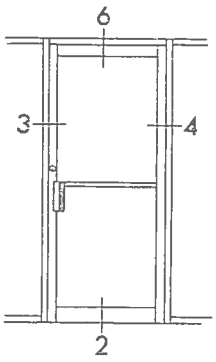


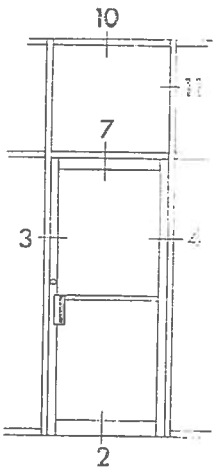


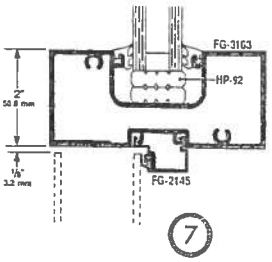


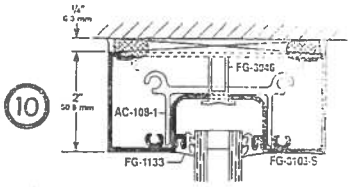


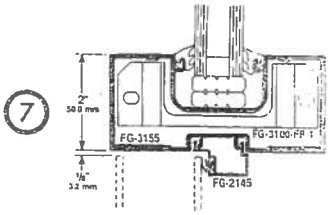
Single Acting Doors

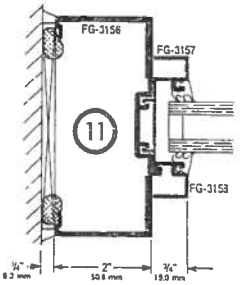


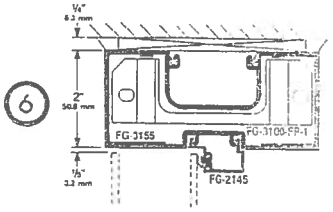


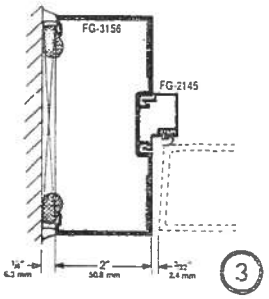


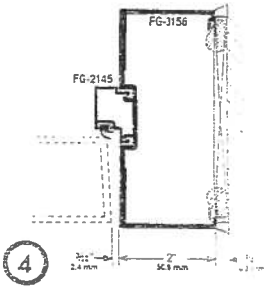


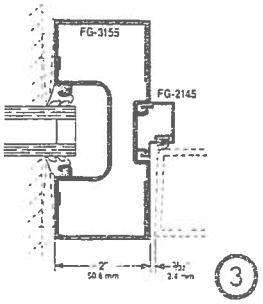


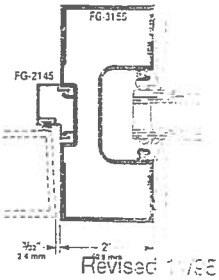






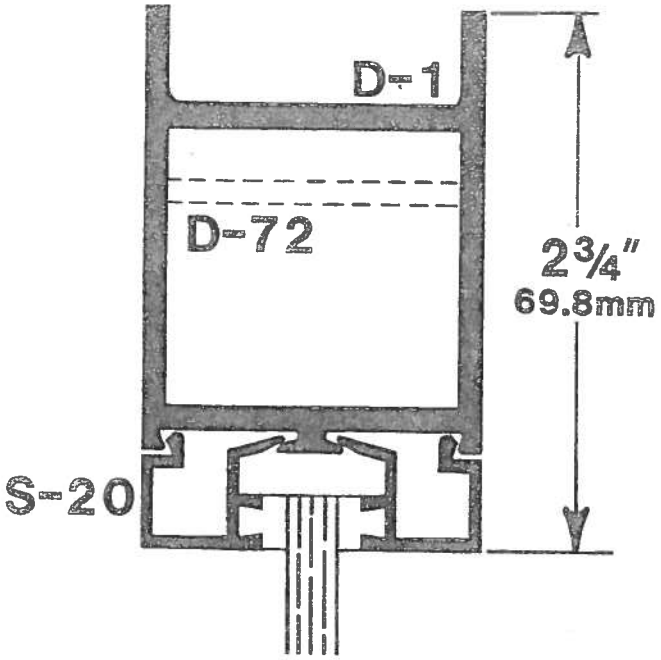


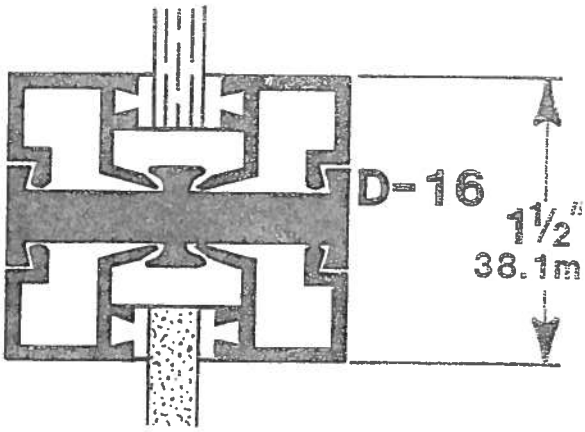




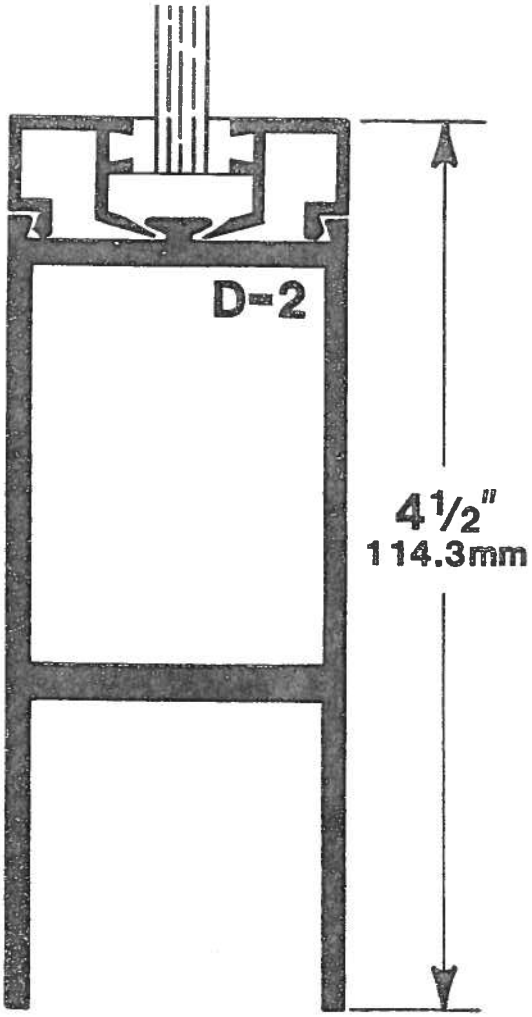
Revised 1/95

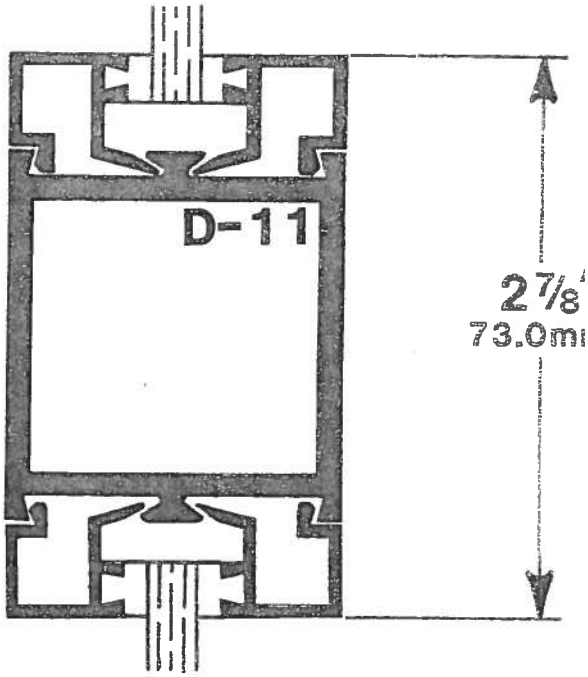
NOTE: D-72 Top rail is required with standard offset arm assembly.





MUNTIN BAR





MUNTIN BAR

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AMERICAN SOCIETY FOR QUALITY CONTROL

mitted by: Vistawall Architectural Products
P. O. Box 629
803 Airport Road
Terrell, TX 75160

Attn: Mr. Tom Merrell

Date January 25, 1989

Report No. 13403

e:

REPORT

Door Corner Joint Strength Test

Test specimens were top corner assembly of the following: Narrow Stile Door - Series 212, Medium Stile Door - Series 375, and Wide Stile Door - Series 500.

Corner Construction is as follows: The rail is notched (3/4" x 3/16" w/ 5/32 radius) at both inside and outside corners, welded at both notches to stile and corner block, a threaded (1½" x 2-7/8" x 1/8") steel back-up plate, four #10x3/4" screws, two ¼"(20)x1" hex bolts and two split washers.

Test Method

Methods and procedures of test were provided by Vistawall Architectural Products and are attached to this report.

Test Results

Specimen	Load (lbs)	Deflection (inch)	Rotation (Degrees)	Joint Opening (inch) Inside/Outside	Corner Condition
Narrow Stile #1	108.31	0.110	1°03'	0.020/0.010	Good
	124.01	0.133	1°16'	0.033/0.014	Good
	135.75	0.160	1°32'	0.041/0.020	Good
	151.45	0.200	1°55'	0.054/0.033	Good
	167.15	0.250	2°23'	0.085/0.045	Good
	182.85	0.320	3°03'	-	Good
	198.55	-	-	-	Welds torn
	214.25	-	-	-	<45° Rotation
	229.95	-	-	-	>45° Rotation - Failure

(Continued)

Test Results (Continued)

Specimen	Load (lbs)	Deflection (inch)	Rotation (Degrees)	Joint Opening (inch) Inside/Outside	Corner Condition
Narrow Stile #2	108.31				
	124.01	0.127	1°13'	0.036/0.022	Good
	135.75	0.157	1°30'	0.050/0.027	Good
	151.45	0.200	1°55'	0.068/0.042	Good
	167.15	0.279	2°40'	0.096/0.063	Good
	182.85	0.420	4°12'	-	Good
	198.55	-	-	-	>45° Rotation Welds torn - failure
	214.25	-	-	-	No change
	229.95	-	-	-	56° Rotation
Narrow Stile #3	108.31	0.107	1°01'	0.015/0.002	Good
	124.01	0.133	1°16'	0.022/0.005	Good
	135.75	0.158	1°31'	0.031/0.008	Good
	151.45	0.200	1°55'	0.046/0.013	Good
	167.15	0.242	2°19'	0.055/0.025	Good
	182.85	0.275	2°37'	0.069/0.034	Good
	198.55	0.350	3°20'	0.105/0.050	Good
	214.25	0.417	3°58'	-	Corner intact
	229.95	0.509	4°51'	-	<45° Rotation No separation of parts.
Medium Stile #1	108.87	0.120	1°09'	0.016/0.012	Good
	124.57	0.123	1°10'	0.022/0.014	Good
	140.27	0.152	1°27'	0.031/0.020	Good
	155.97	0.182	1°44'	0.042/0.028	Good
	177.67	0.310	2°58'	0.068/0.054	Good
	187.37	0.470	4°29'	-	Good
	203.07	-	-	-	40° Rotation - Welds tore
	218.77	-	-	-	42° Rotation
	229.62	-	-	-	43° Rotation - No Separation of parts.
Medium Stile #2	108.87	0.100	0°90'	0.011/0.0	Good
	124.57	0.123	1°10'	0.016/0.004	Good
	135.42	0.137	1°19'	0.018/0.006	Good
	151.12	0.175	1°40'	0.022/0.008	Good
	166.82	0.200	1°55'	0.033/0.016	Good
	182.52	0.240	2°17'	0.042/0.025	Good
	198.22	0.287	2°44'	0.063/0.038	<45° Rotation - Good
	213.92	0.720	7°07'	-	Good
	229.62	-	-	-	Complete failure - Welds and screws sheared off.

(Continued)

Test Results (Continued)

Specimen	Load (lbs)	Deflection (inch)	Rotation (Degrees)	Joint Opening (inch) Inside/Outside	Corner Condition
Medium Stile #3	108.87	0.100	0°57'	0.014/0.0	Good
	124.57	0.120	1°08'	0.016/0.003	Good
	135.42	0.140	1°20'	0.022/0.006	Good
	151.12	0.175	1°40'	0.032/0.011	Good
	166.82	0.192	1°50'	0.038/0.014	Good
	182.52	0.220	2°06'	0.047/0.020	Good
	198.22	0.258	2°28'	0.060/0.030	< 45° Rotation
	213.92	0.297	2°50'	0.067/0.040	Good
	229.62	0.348	-	-	No Separation of Parts
Wide Stile #1	108.90	0.082	0°47'	0.016/0.013	Good
	124.60	0.100	0°57'	0.025/0.016	Good
	135.45	0.112	1°04'	0.029/0.018	Good
	151.15	0.137	1°19'	0.038/0.022	Good
	166.85	0.174	1°40'	0.047/0.028	Good
	182.55	0.198	1°53'	0.060/0.040	Good
	198.25	0.242	2°19'	0.082/0.055	Good
	213.95	0.320	3°03'	0.103/0.076	Good
	229.65	0.372	3°37'	-	< 45° Rotation - No Separation of Parts
Wide Stile #2	108.90	0.062	0°35'	0.012/0.008	Good
	124.60	0.075	0°43'	0.016/0.013	Good
	135.45	0.087	0°50'	0.020/0.016	Good
	151.15	0.100	0°57'	0.022/0.018	Good
	166.85	0.120	1°09'	0.033/0.025	Good
	182.55	0.142	1°22'	0.048/0.033	Good
	198.25	0.170	1°37'	0.064/0.045	Good
	213.95	0.240	2°17'	0.084/0.056	Good
	229.65	0.260	2°29'	-	< 45° Rotation - No Separation of Parts

(Continued)

Test Results (Continued)

Specimen	Load (lbs)	Deflection (inch)	Rotation (Degrees)	Joint Opening (inch) Inside/Outside	Corner Condition
Wide Stile #3	108.90	0.070	0°40'	0.018/0.008	Good
	124.60	0.082	0°47'	0.022/0.010	Good
	135.45	0.092	0°53'	0.025/0.012	Good
	151.15	0.103	0°59'	0.025/0.014	Good
	166.85	0.118	1°08'	0.032/0.016	Good
	182.55	0.138	1°19'	0.042/0.020	Good
	198.25	0.160	1°32'	0.054/0.025	Good
	213.95	0.195	1°52'	0.072/0.036	Good
	229.65	0.230	2°12'	0.087/0.042	<45° Rotation - No Separation of Parts

DALLAS LABORATORIES, INC.

Jeffrey A. Johnson

JAJ:td

Encl.