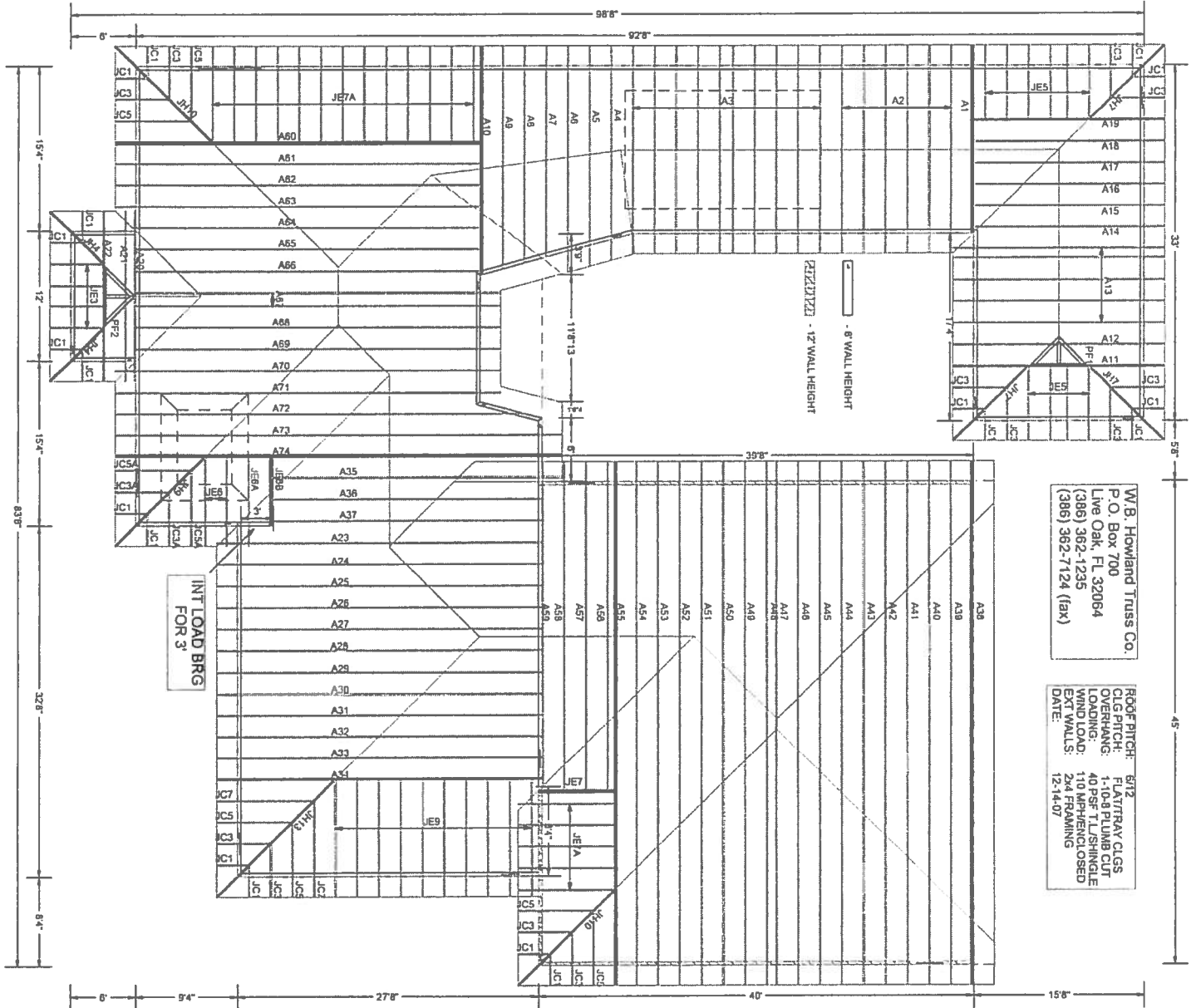




1 OF 1

0712-62
Lagoni



W.B. Howland Truss Co.
P.O. Box 700
Live Oak, FL 32064
(386) 362-1235
(386) 362-7124 (fax)

ROOF PITCH: 6/12
CLG PITCH: 1-10/3 PLUMB CUT
OVERHANG: 40 PSF T.L./SHINGLE
LOADING: 110 MPH/WIND/CLOSED
EXT WALLS: 2x4 FRAMING
DATE: 12-14-07

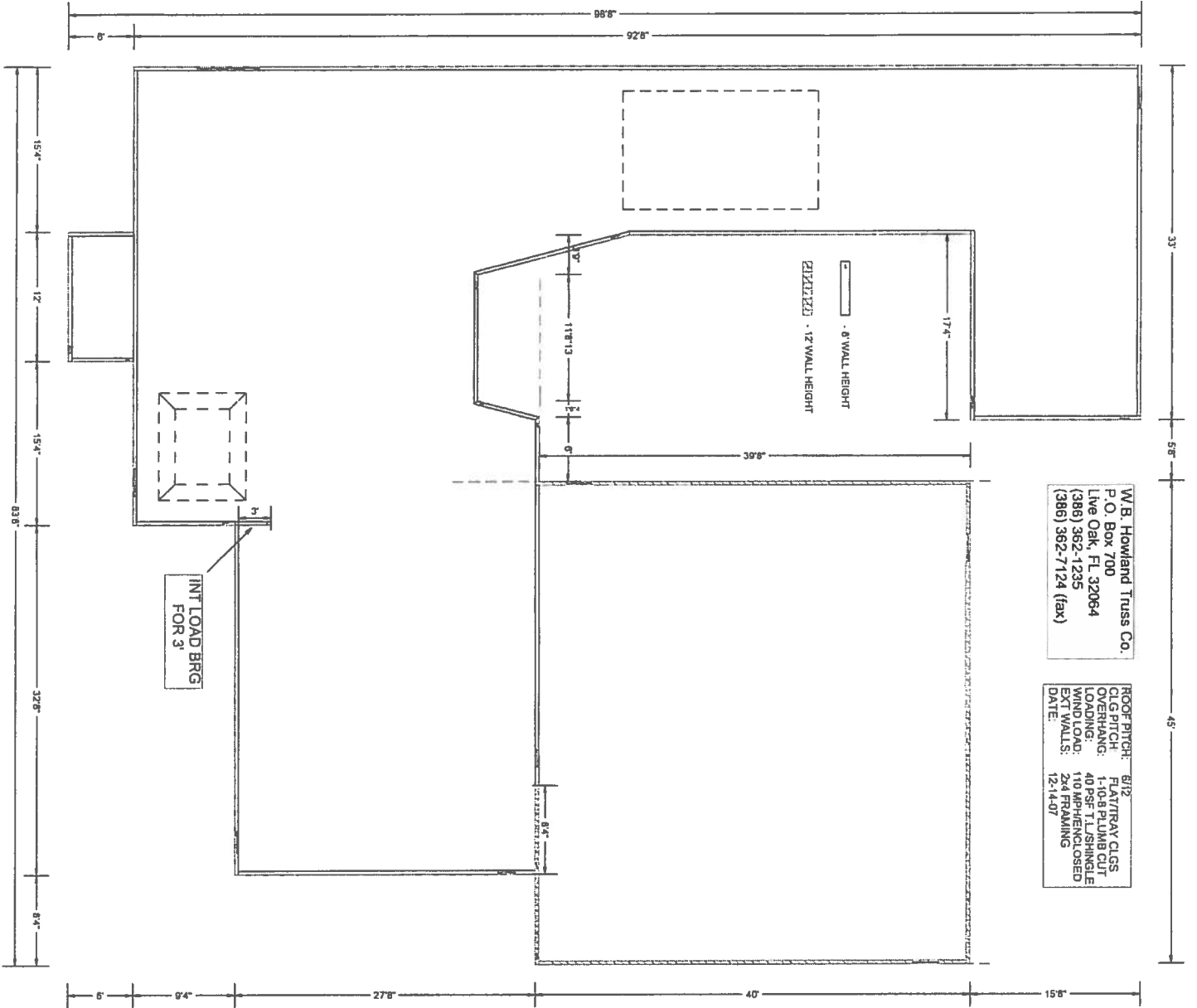
Job Name: LAGONI
Customer: EDGELY CONSTRUCTION
Designer: Chris McCall

JOB NO:

5119

PAGE NO:

1 OF 1



W.B. Howland Truss Co.
P.O. Box 700
Live Oak, FL 32064
(386) 362-1235
(386) 362-7124 (fax)

ROOF PITCH: 6/12
CLG PITCH: FLAT/RAV CLGS
OVERHANG: 1-10.8 PLUMB CUT
LOADING: 40 PSF T.L./SHINGLE
WIND LOAD: 110 MPH/ENCLOSED
EXT WALLS: 2x4 FRAMING
DATE: 12-14-07

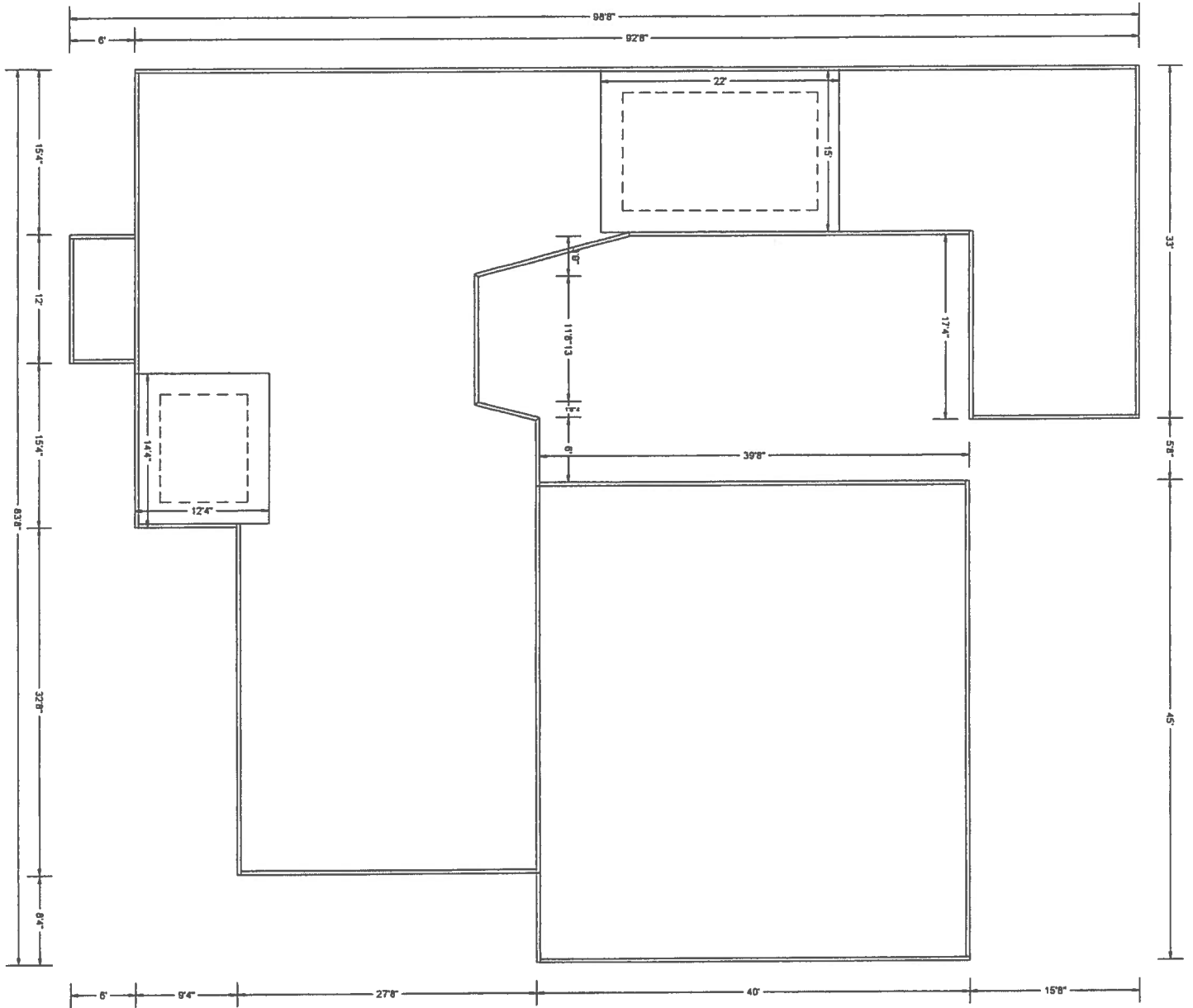
Job Name: LAGONI
Customer: EDGELY CONSTRUCTION
Designer: Chris McCall

JOB NO:

5119

PAGE NO:

1 OF 1

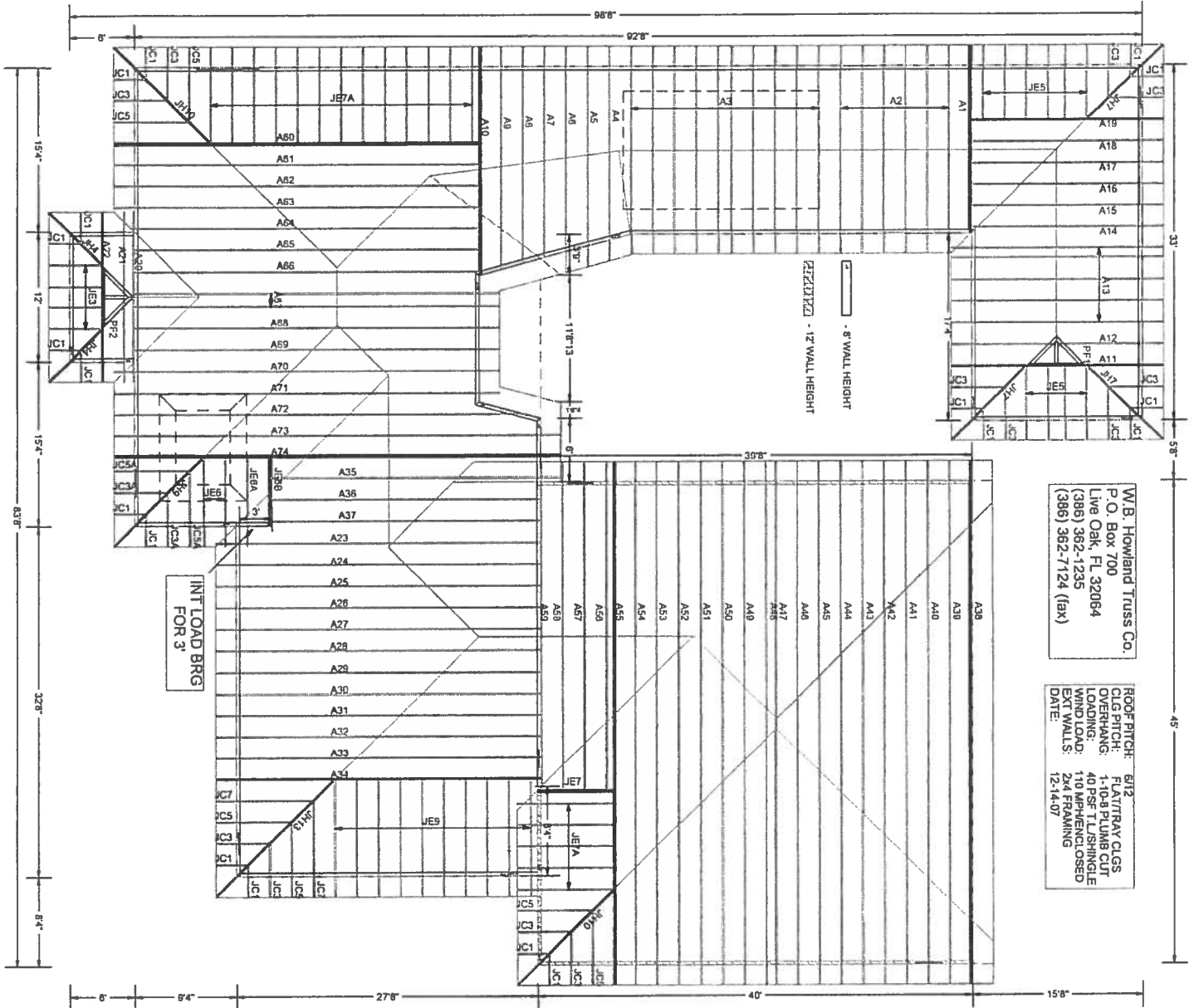


Job Name: LAGONI
 Customer: EDGELY CONSTRUCTION
 Designer: Chris McCall

JOB NO:
 5119

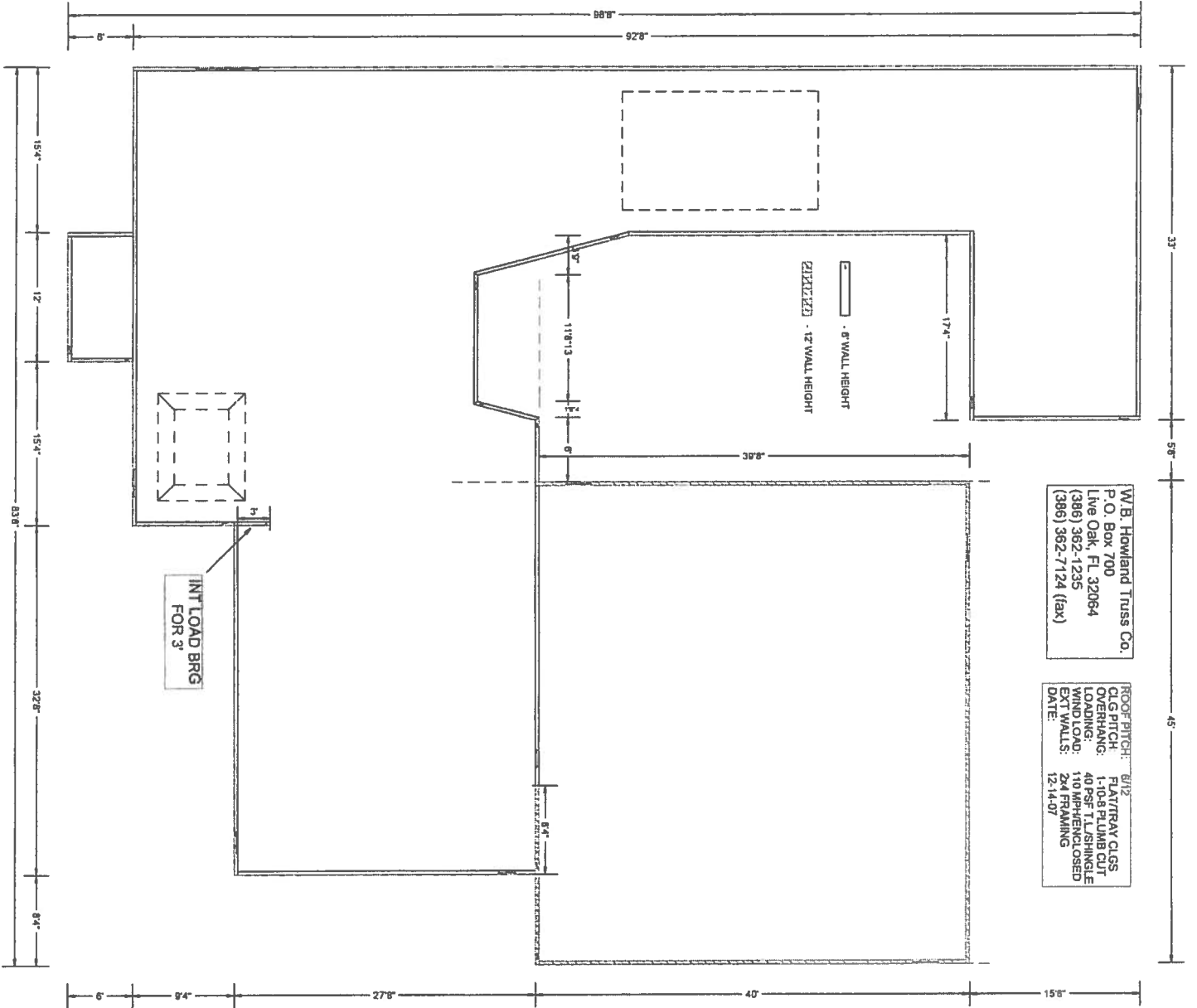
PAGE NO:
 1 OF 1

0712-62
Lagoni



W.B. Howland Truss Co.
P.O. Box 700
Live Oak, FL 32064
(386) 362-1235
(386) 362-7124 (fax)

ROOF PITCH:	6/12
CLG PITCH:	FLAT/TRAY CLGS
OVERHANG:	1'-10-8 PLUMB CUT
LOADING:	40 PSF T L/SINGLE
WIND LOAD:	110 MPH/ENCLOSED
EXT WALLS:	2x4 FRAMING
DATE:	12-14-07



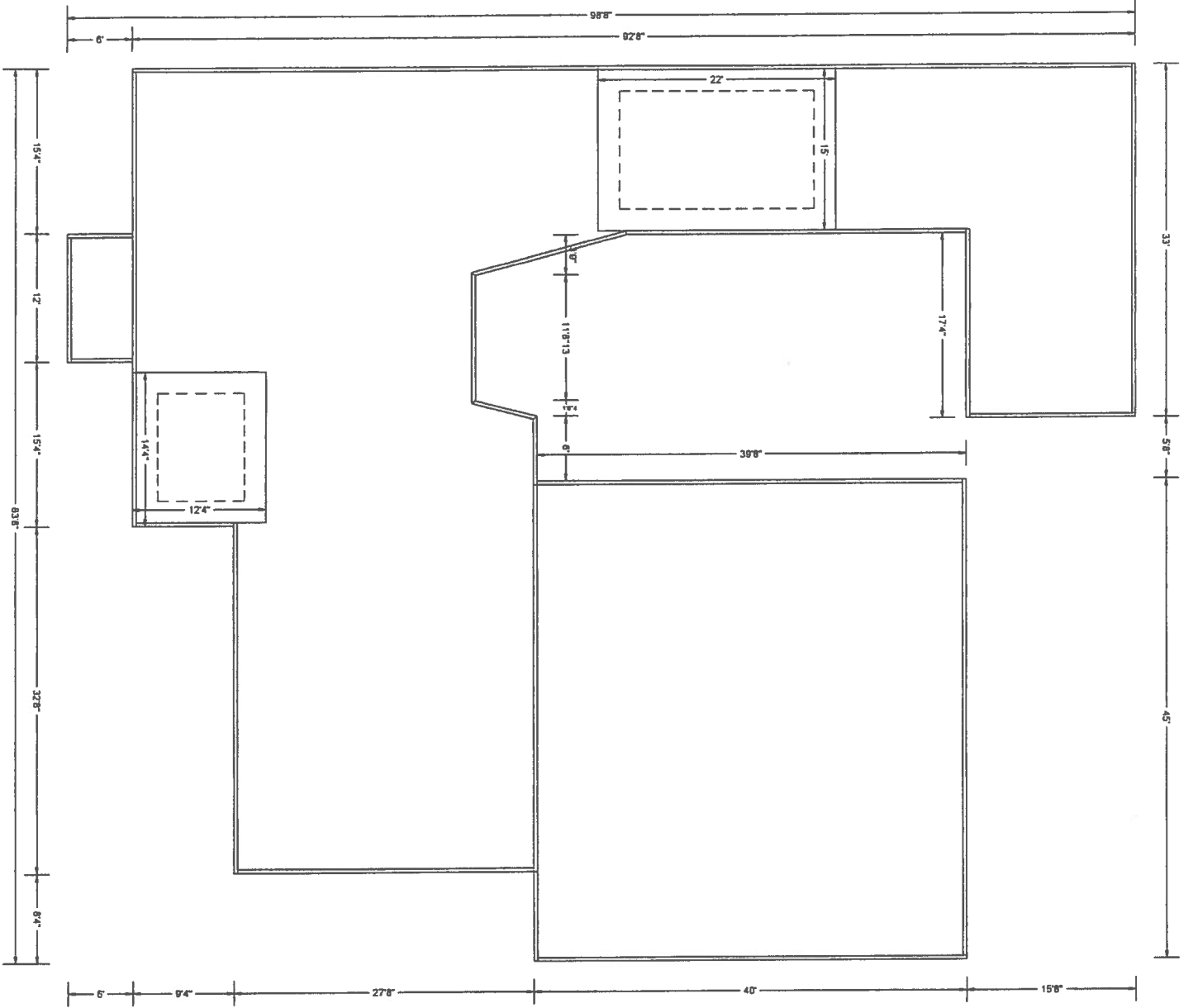
W.B. Howland Truss Co.
P.O. Box 700
Live Oak, FL 32064
(386) 362-1235
(386) 362-7124 (fax)

ROOF PITCH: 8/12
CLG PITCH: FLAT/TRAY CLGS
OVERHANG: 1-10.8 PLUMB CUT
LOADING: 40 PSF T.L./SHINGLE
WIND LOAD: 110 MPH/ENCLOSED
EXT WALLS: 2x4 FRAMING
DATE: 12-14-07

Job Name: LAGONI
Customer: EDGELY CONSTRUCTION
Designer: Chris McCall

JOB NO:
5119

PAGE NO:
1 OF 1



Job Name: LAGONI
Customer: EDGELY CONSTRUCTION
Designer: Chris McCall

Dorey Edgley

**AAMA/NWWDA 101/I.S.2-97
TEST REPORT SUMMARY**

Rendered to:

MI HOME PRODUCTS, INC.

**SERIES/MODEL: 650 Fin
TYPE: Aluminum Single Hung Window**

Title of Test	Results
Rating	H-R40 52 x 72
Overall Design Pressure	+45.0 psf -47.2 psf
Operating Force	11 lb max.
Air Infiltration	0.13 cfm/ft ²
Water Resistance	6.00 psf
Structural Test Pressure	+67.5 psf -70.8 psf
Deglazing	Passed
Forced Entry Resistance	Grade 10

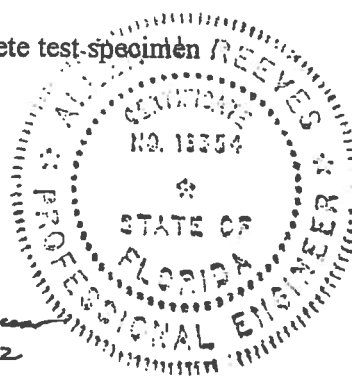
Reference should be made to Report No. 01-41134.01 dated 03/26/02 for complete test specimen description and data.

For ARCHITECTURAL TESTING, INC.

Mark A. Hess
Mark A. Hess, Technician

MAH:nlb

Allen H. Reeves
1 APRIL 2002



Architectural Testing

AAMA/NWWDA 101/I.S.2-97 TEST REPORT

Rendered to

MI HOME PRODUCTS, INC.
650 West Market Street
P.O. Box 370
Gratz, Pennsylvania 17030-0370

Report No: 01-41134.01
Test Date: 03/07/02
Report Date: 03/26/02
Expiration Date: 03/07/06

Project Summary: Architectural Testing, Inc. (ATI) was contracted by MI Home Products, Inc. to perform tests on Series/Model 650 Fin, aluminum single hung window at their facility located in Elizabethville, Pennsylvania. The samples tested successfully met the performance requirements for a H-R40 52 x 72 rating.

Test Specification: The test specimen was evaluated in accordance with AAMA/NWWDA 101/I.S.2-97, *Voluntary Specifications for Aluminum, Vinyl (PVC) and Wood Windows and Glass Doors*.

Test Specimen Description

Series/Model: 650 Fin

Type: Aluminum Single Hung Window

Overall Size: 4' 4-1/4" wide by 6' 0-3/8" high

Active Sash Size: 4' 1-3/4" wide by 3' 0-5/8" high

Daylight Opening Size: 3' 11-3/8" wide by 2' 9-1/2" high

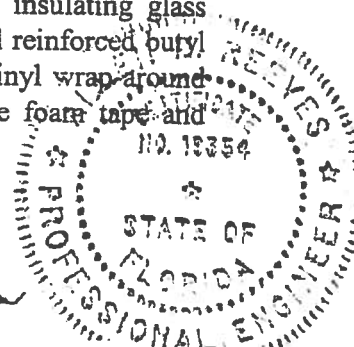
Screen Size: 4' 0-1/4" wide by 2' 11-1/8" high

Finish: All aluminum was white.

Glazing Details: The active and fixed lites utilized 5/8" thick, sealed insulating glass constructed from two sheets of 1/8" thick, clear annealed glass and a metal reinforced butyl spacer system. The active sash was channel glazed utilizing a flexible vinyl wrap around gasket. The fixed lite was interior glazed against double-sided adhesive foam tape and secured with PVC snap-in glazing beads.

130 Derry Court
York, PA 17402-9405
phone: 717.764.7700
fax: 717.764.4129
www.archtest.com

Allen N. Reun
1 APRIL 2002



Test Specimen Description: (Continued)

Weatherstripping:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
0.230" high by 0.270" backed polypile with center fin	1 Row	Fixed meeting rail
0.250" high by 0.187" backed polypile with center fin	2 Rows	Active sash stiles
1/2" x 1/2" dust plug	4 Pieces	Active sash, top and bottom of stiles
1/4" foam-filled vinyl bulb seal	1 Row	Active sash, bottom rail

Frame Construction: The frame was constructed of extruded aluminum with coped, butted, and sealed corners fastened with two #8 x 1" screws through the head and sill into each jamb screw boss. End caps were utilized on the ends of the fixed meeting rail and secured with two 1-1/4" screws per cap. Meeting rail was secured to the frame utilizing two 1-1/4" screws.

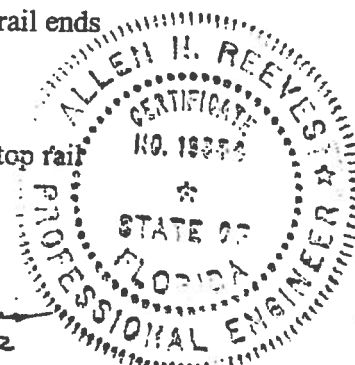
Sash Construction: The sash was constructed of extruded aluminum with coped, butted, and sealed corners fastened with two #8 x 1-1/2" screws through the rails into each jamb screw boss.

Screen Construction: The screen was constructed from roll-formed aluminum with keyed corners. The fiberglass mesh was secured with a flexible spline.

Hardware:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
Metal cam lock with keeper		Midspan, active meeting rail with keeper adjacent on fixed meeting rail
Plastic tilt latch	2	Active sash, meeting rail ends
Metal tilt pin	2	Active sash, bottom rail ends
Balance assembly	2	One in each jamb
Screen plunger	2	4" from rail ends on top rail

Allen H. Reeves
1 APRIL 2002



Test Specimen Description: (Continued)

Drainage: Sloped sill

Reinforcement: No reinforcement was utilized.

Installation: The test specimen was installed into a 2 x 8 #2 Spruce-Pine-Fir wood test buck with #8 x 1-5/8" drywall screws every 8" on center around the nail fin. Polyurethane was used as a sealant under the nail fin and around the exterior perimeter.

Test Results:

The results are tabulated as follows:

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
2.2.1.6.1	Operating Force	11 lbs	30 lbs max
	Air Infiltration (ASTM E 283-91) @ 1.57 psf (25 mph)	0.13 cfm/ft ²	0.3 cfm/ft ² max
	Water Resistance (ASTM E 547-00) (with and without screen) WTP = 2.86 psf	No leakage	No leakage
2.1.4.1	Uniform Load Deflection (ASTM E 330-97) (Measurements reported were taken on the meeting rail) (Loads were held for 33 seconds) @ 25.9 psf (positive) @ 34.7 psf (negative)	0.42"* 0.43"*	0.26" max. 0.26" max.

**Exceeds L/175 for deflection, but passes all other test requirements.*

2.1.4.2	Uniform Load Structural (ASTM E 330-97) (Measurements reported were taken on the meeting rail) (Loads were held for 10 seconds) @ 38.9 psf (positive) @ 52.1 psf (negative)	0.02" 0.02"	0.18" max. 0.18" max.
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Allen H. Reeves
1 APRIL 2002



Test Specimen Description: (Continued)

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
2.2.1.6.2	Deglazing Test (ASTM E 987) In operating direction at 70 lbs		
	Meeting rail	0.12"/25%	0.50"/100%
	Bottom rail	0.12"/25%	0.50"/100%
	In remaining direction at 50 lbs		
	Left stile	0.06"/12%	0.50"/100%
	Right stile	0.06"/12%	0.50"/100%
	Forced Entry Resistance (ASTM F 588-97)		
	Type: A		
	Grade: 10		
	Lock Manipulation Test	No entry	No entry
	Tests A1 through A5	No entry	No entry
	Test A7	No entry	No entry
	Lock Manipulation Test	No entry	No entry

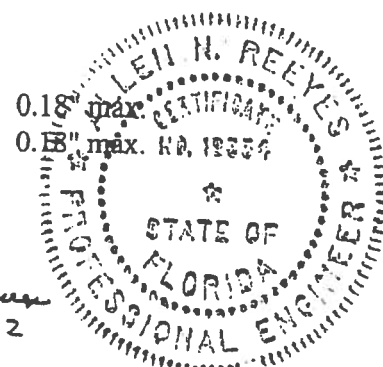
Optional Performance

4.3	Water Resistance (ASTM E 547-00) (with and without screen) WTP = 6.00 psf	No leakage	No leakage
	Uniform Load Deflection (ASTM E 330-97) (Measurements reported were taken on the meeting rail) (Loads were held for 33 seconds)		
	@ 45.0 psf (positive)	0.47"*	0.26" max.
	@ 47.2 psf (negative)	0.46"*	0.26" max.

**Exceeds L/175 for deflection, but passes all other test requirements.*

Uniform Load Structural (ASTM E 330-97) (Measurements reported were taken on the meeting rail) (Loads were held for 10 seconds)		
@ 67.5 psf (positive)	0.05"	0.18" max.
@ 70.8 psf (negative)	0.05"	0.18" max.

Allen N. Reeves
1 APRIL 2002



Detailed drawings, representative samples of the test specimen, and a copy of this report will be retained by ATI for a period of four years. The above results were secured by using the designated test methods and they indicate compliance with the performance requirements of the above referenced specification. This report does not constitute certification of this product, which may only be granted by the certification program administrator.

For ARCHITECTURAL TESTING, INC:

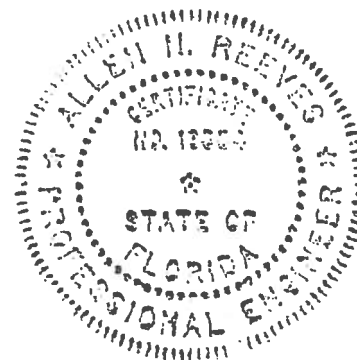


Mark A. Hess
Technician

MAH:nlb
01-41134.01



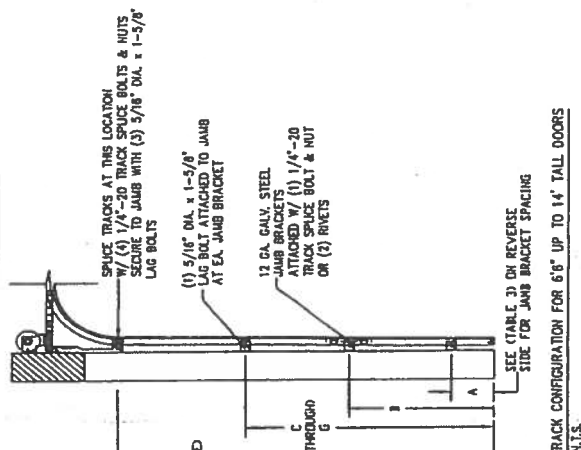
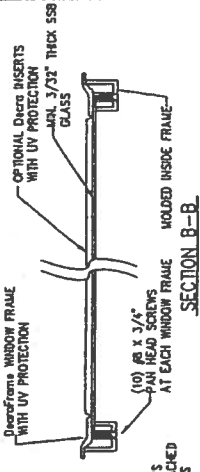
Allen N. Reeves, P.E.
Director - Engineering Services
1 APRIL 2002



GLAZING OPTION CROSS SECTION

GLAZING NOT AVAILABLE IN VIND-BURNE DEBRIS REGION

TEST No. IRC-6009-108-15 ON OCTOBER 10, 2002 INCLUDED GLAZING IN THE TESTED DOOR. THE TEST PRESSURES WERE +47.9 PSF AND -37.2 PSF BY COMPARISON UP TO EIGHT (8) WINDOWS MAY BE INSTALLED IN (1) ONE SECTION OF EITHER THE MODEL 600 OR 650 DOORS CONSTRUCTED PER THIS DRAWING.



REV	DESCRIPTION OF REVISIONS	DATE	BY
MAX SIZE	16" x 14"		
DESIGN LOADS	+21.8 PSF -24.8 PSF		
TEST LOADS	+32.7 PSF -37.2 PSF		

Amarr
CORPORATION

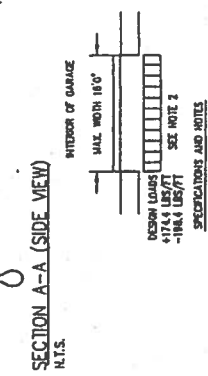
165 CARRIAGE COURT WINDSTORM-SALUD, NC 27105

MODEL #800 STRATFORD w/DuraSafe

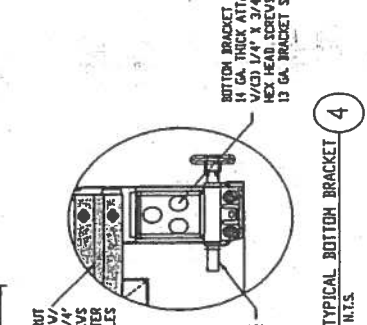
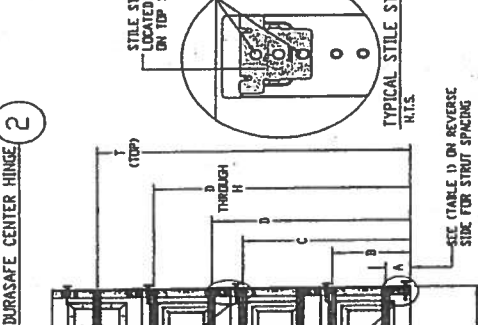
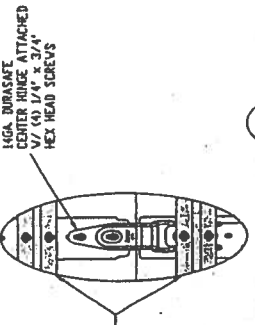
MODEL #950 HERITAGE w/DuraSafe

Short Panel, Jamb Panel, and Flush Panel

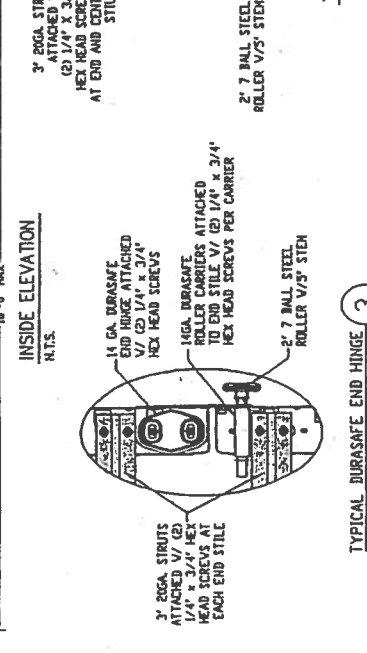
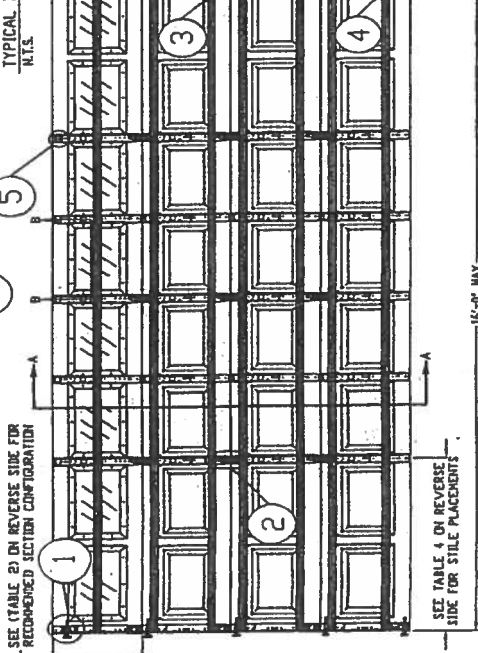
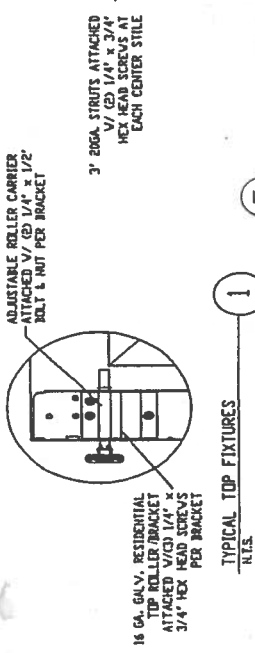
SIZE DRAWN BY DJ DATE 04/15/00
B CHECKED BY AE DATE 04/15/00
CIR-6016-120-15



1. ALL THE LOAD FROM THE DOOR IS TRANSFERRED TO THE VERTICAL TRACK FROM THE TRACK THE LOAD IS TRANSFERRED TO THE VERTICAL JAMBS TRANSFERRED FROM THE DOOR.
2. EACH VERTICAL JAMB RECEIVES MAXIMUM DESIGN LOADS OF: +174.4 LBS/FT & -184.4 LBS/FT
3. DOORS AND HARDWARE WILL BE DESIGNED, MANUFACTURED AND INSTALLED WITH STANDARDS AS SET FORTH BY DASHA.
4. DOOR SECTIONS SHALL BE 23 GA. W/ (10") ROLLED FORMED LIGHT COMMERCIAL QUALITY, 0-40 GALVANIZATION
5. SUPPORTS FOR THE DOORS SHALL BE DESIGNED TO WITHSTAND THE LOADS INDICATED ON THIS DRAWING IN ADDITION TO OTHER LOADS
6. THE METHOD OF TESTING WAS IN SUBSTANTIAL COMPLIANCE WITH THE PROCEDURE DESCRIBED IN DASHA 101, ASTM E330, AND THE SOUTHERN BUILDING CODE SECTION 1908 FOR WIND LOAD DESIGN CRITERIA
7. REFER TO TABLES ON THE REVERSE SIDE FOR ADDITIONAL DOOR WIDTHS AND TEST DESIGN PRESSURES



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7. REFER TO TABLES ON THE REVERSE SIDE FOR ADDITIONAL DOOR WIDTHS AND TEST DESIGN PRESSURES

TABLE 5

Section	Width (ft)	Panel Type	Max Design Loads Allowed	
			Positive (PSF)	Negative (PSF)
16' 2"	Long	Long	23.9	27.1
16' 4"	Long	Long	23.7	26.8
16' 6"	Long	Long	23.4	26.5
16' 8"	Long	Long	23.2	26.3
16' 10"	Long	Long	23.0	26.1
17' 0"	Long	Long	22.7	25.8
17' 2"	Long	Long	22.4	25.5
17' 4"	Long	Long	22.2	25.3
17' 6"	Long	Long	21.9	24.8
17' 8"	Long	Long	21.9	24.8
17' 10"	Long	Long	21.7	24.5
18' 0"	Long	Long	21.5	24.4

TABLE 1

DOOR HEIGHT	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
6' 0"	5 1/2"	16 1/4"	23 1/2"	30 1/4"	36 1/4"	43 1/2"	50 1/4"	57 1/4"	64 1/4"	71 1/4"	78 1/4"	85 1/4"	92 1/4"	99 1/4"	106 1/4"	113 1/4"	120 1/4"	127 1/4"	134 1/4"	141 1/4"	148 1/4"	155 1/4"	162 1/4"	169 1/4"	176 1/4"	
6' 6"	5 1/2"	16 1/4"	23 1/2"	30 1/4"	36 1/4"	43 1/2"	50 1/4"	57 1/4"	64 1/4"	71 1/4"	78 1/4"	85 1/4"	92 1/4"	99 1/4"	106 1/4"	113 1/4"	120 1/4"	127 1/4"	134 1/4"	141 1/4"	148 1/4"	155 1/4"	162 1/4"	169 1/4"	176 1/4"	
7' 0"	5 1/2"	18 1/4"	25 1/2"	32 1/4"	38 1/4"	45 1/2"	52 1/4"	59 1/4"	66 1/4"	73 1/4"	80 1/4"	87 1/4"	94 1/4"	101 1/4"	108 1/4"	115 1/4"	122 1/4"	129 1/4"	136 1/4"	143 1/4"	150 1/4"	157 1/4"	164 1/4"	171 1/4"	178 1/4"	
7' 6"	5 1/2"	18 1/4"	25 1/2"	32 1/4"	38 1/4"	45 1/2"	52 1/4"	59 1/4"	66 1/4"	73 1/4"	80 1/4"	87 1/4"	94 1/4"	101 1/4"	108 1/4"	115 1/4"	122 1/4"	129 1/4"	136 1/4"	143 1/4"	150 1/4"	157 1/4"	164 1/4"	171 1/4"	178 1/4"	
8' 0"	5 1/2"	18 1/4"	25 1/2"	32 1/4"	38 1/4"	45 1/2"	52 1/4"	59 1/4"	66 1/4"	73 1/4"	80 1/4"	87 1/4"	94 1/4"	101 1/4"	108 1/4"	115 1/4"	122 1/4"	129 1/4"	136 1/4"	143 1/4"	150 1/4"	157 1/4"	164 1/4"	171 1/4"	178 1/4"	
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9' 0"	5 1/2"	18 1/4"	25 1/2"	32 1/4"	38 1/4"	45 1/2"	52 1/4"	59 1/4"	66 1/4"	73 1/4"	80 1/4"	87 1/4"	94 1/4"	101 1/4"	108 1/4"	115 1/4"	122 1/4"	129 1/4"	136 1/4"	143 1/4"	150 1/4"	157 1/4"	164 1/4"	171 1/4"	178 1/4"	
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10' 0"	5 1/2"	18 1/4"	25 1/2"	32 1/4"	38 1/4"	45 1/2"	52 1/4"	59 1/4"	66 1/4"	73 1/4"	80 1/4"	87 1/4"	94 1/4"	101 1/4"	108 1/4"	115 1/4"	122 1/4"	129 1/4"	136 1/4"	143 1/4"	150 1/4"	157 1/4"	164 1/4"	171 1/4"	178 1/4"	
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11' 0"	5 1/2"	18 1/4"	25 1/2"	32 1/4"	38 1/4"	45 1/2"	52 1/4"	59 1/4"	66 1/4"	73 1/4"	80 1/4"	87 1/4"	94 1/4"	101 1/4"	108 1/4"	115 1/4"	122 1/4"	129 1/4"	136 1/4"	143 1/4"	150 1/4"	157 1/4"	164 1/4"	171 1/4"	178 1/4"	
11' 6"	5 1/2"	18 1/4"	25 1/2"	32 1/4"	38 1/4"	45 1/2"	52 1/4"	59 1/4"	66 1/4"	73 1/4"	80 1/4"	87 1/4"	94 1/4"	101 1/4"	108 1/4"	115 1/4"	122 1/4"	129 1/4"	136 1/4"	143 1/4"	150 1/4"	157 1/4"	164 1/4"	171 1/4"	178 1/4"	
12' 0"	5 1/2"	18 1/4"	25 1/2"	32 1/4"	38 1/4"	45 1/2"	52 1/4"	59 1/4"	66 1/4"	73 1/4"	80 1/4"	87 1/4"	94 1/4"	101 1/4"	108 1/4"	115 1/4"	122 1/4"	129 1/4"	136 1/4"	143 1/4"	150 1/4"	157 1/4"	164 1/4"	171 1/4"	178 1/4"	
12' 6"	5 1/2"	18 1/4"	25 1/2"	32 1/4"	38 1/4"	45 1/2"	52 1/4"	59 1/4"	66 1/4"	73 1/4"	80 1/4"	87 1/4"	94 1/4"	101 1/4"	108 1/4"	115 1/4"	122 1/4"	129 1/4"	136 1/4"	143 1/4"	150 1/4"	157 1/4"	164 1/4"	171 1/4"	178 1/4"	
13' 0"	5 1/2"	18 1/4"	25 1/2"	32 1/4"	38 1/4"	45 1/2"	52 1/4"	59 1/4"	66 1/4"	73 1/4"	80 1/4"	87 1/4"	94 1/4"	101 1/4"	108 1/4"	115 1/4"	122 1/4"	129 1/4"	136 1/4"	143 1/4"	150 1/4"	157 1/4"	164 1/4"	171 1/4"	178 1/4"	
13' 6"	5 1/2"	18 1/4"	25 1/2"	32 1/4"	38 1/4"	45 1/2"	52 1/4"	59 1/4"	66 1/4"	73 1/4"	80 1/4"	87 1/4"	94 1/4"	101 1/4"	108 1/4"	115 1/4"	122 1/4"	129 1/4"	136 1/4"	143 1/4"	150 1/4"	157 1/4"	164 1/4"	171 1/4"	178 1/4"	
14' 0"	5 1/2"	18 1/4"	25 1/2"	32 1/4"	38 1/4"	45 1/2"	52 1/4"	59 1/4"	66 1/4"	73 1/4"	80 1/4"	87 1/4"	94 1/4"	101 1/4"	108 1/4"	115 1/4"	122 1/4"	129 1/4"	136 1/4"	143 1/4"	150 1/4"	157 1/4"	164 1/4"	171 1/4"	178 1/4"	
14' 6"	5 1/2"	18 1/4"	25 1/2"	32 1/4"	38 1/4"	45 1/2"	52 1/4"	59 1/4"	66 1/4"	73 1/4"	80 1/4"	87 1/4"	94 1/4"	101 1/4"	108 1/4"	115 1/4"	122 1/4"	129 1/4"	136 1/4"	143 1/4"	150 1/4"	157 1/4"	164 1/4"	171 1/4"	178 1/4"	

SHOULDER COLLARS DONATED 2" FROM STRUCTURE

SQUARED COLUMNS SQUARES 3' 30" SQUARES

TABLE 2

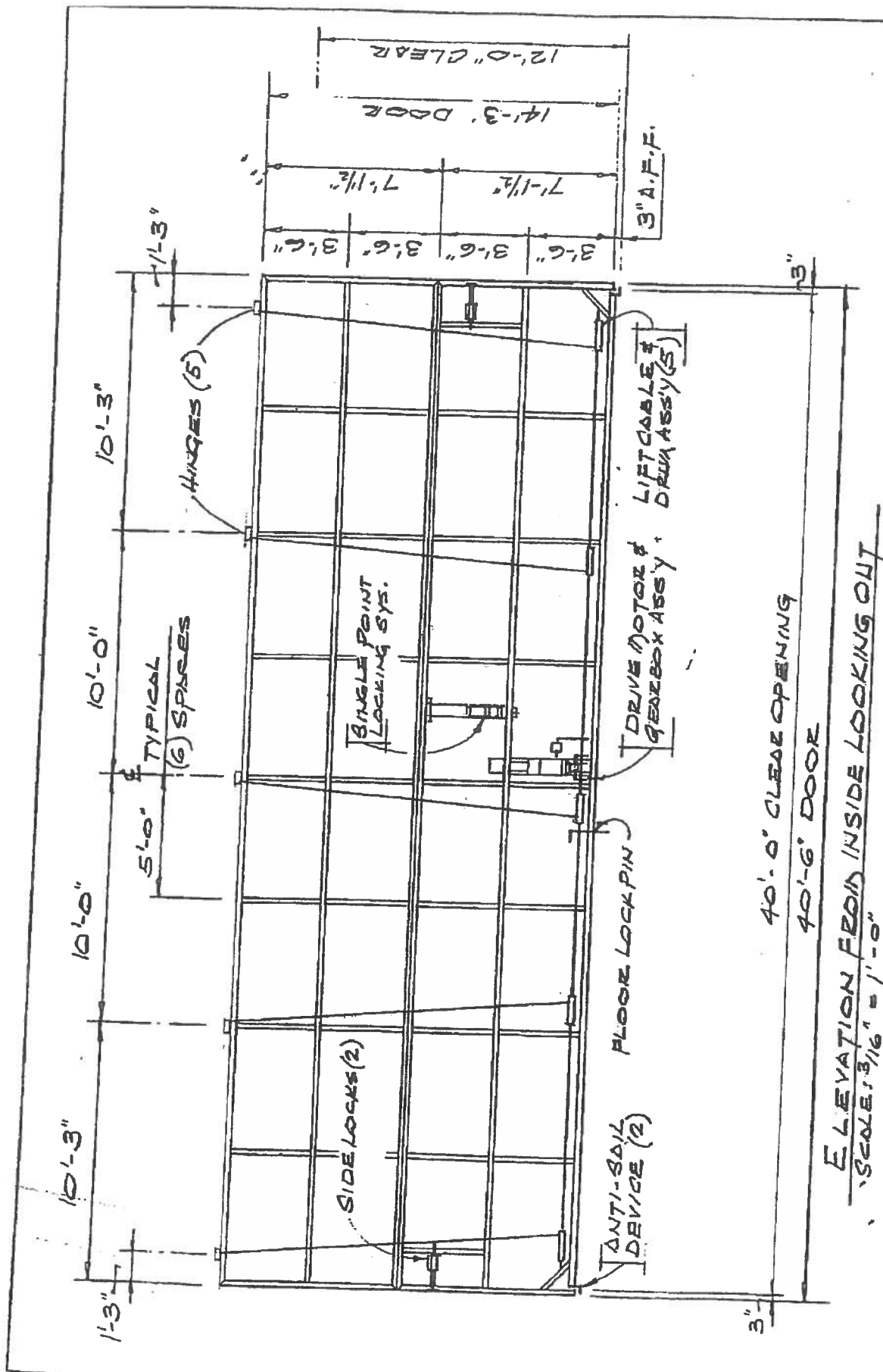
DOOR HEIGHT	SECTION HEIGHTS									
	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
14' 0"	21"	21"	21"	21"	21"	21"	21"	21"	21"	21"
13' 6"	21"	21"	21"	21"	21"	21"	21"	21"	21"	21"
13' 0"	21"	21"	21"	21"	21"	21"	21"	21"	21"	21"
12' 6"	21"	21"	21"	21"	21"	21"	21"	21"	21"	21"
12' 0"	21"	21"	21"	21"	21"	21"	21"	21"	21"	21"
11' 6"	21"	21"	21"	21"	21"	21"	21"	21"	21"	21"
11' 0"	21"	21"	21"	21"	21"	21"	21"	21"	21"	21"
10' 6"	21"	21"	21"	21"	21"	21"	21"	21"	21"	21"
10' 0"	21"	21"	21"	21"	21"	21"	21"	21"	21"	21"
9' 6"	21"	21"	21"	21"	21"	21"	21"	21"	21"	21"
9' 0"	21"	21"	21"	21"	21"	21"	21"	21"	21"	21"
8' 6"	21"	21"	21"	21"	21"	21"	21"	21"	21"	21"
8' 0"	21"	21"	21"	21"	21"	21"	21"	21"	21"	21"
7' 6"	21"	21"	21"	21"	21"	21"	21"	21"	21"	21"
7' 0"	21"	21"	21"	21"	21"	21"	21"	21"	21"	21"
6' 6"	21"	21"	21"	21"	21"	21"	21"	21"	21"	21"

TABLE 3

Section	Width (ft)	Panel Type	Center Sill Locations (Measured from Left Edge)				
			1st (in)	2nd (in)	3rd (in)	4th (in)	5th (in)
16' 2"	Long	Long	50,272	73,636	97,000	120,364	143,728
16' 4"	Long	Long	51,168	74,532	97,888	121,256	144,624
16' 6"	Long	Long	52,064	75,428	98,784	122,152	145,520
16' 8"	Long	Long	52,960	76,324	99,680	123,048	146,416
16' 10"	Long	Long	53,856	77,220	100,576	123,944	147,312
17' 0"	Long	Long	54,752	78,116	101,472	124,840	148,208
17' 2"	Long	Long	55,648	79,012	102,368	125,736	149,104
17' 4"	Long	Long	56,544	79,908	103,264	126,632	150,000
17' 6"	Long	Long	57,440	80,804	104,160	127,528	150,896
17' 8"	Long	Long	58,336	81,700	105,056	128,424	151,792
17' 10"	Long	Long	59,232	82,596	105,952	129,320	152,688
18' 0"	Long	Long	60,128	83,492	106,848	130,216	153,584

TABLE 4

DOOR HEIGHT	TRACK ATTACHMENT										SPUCE	
	A	B	C	D	E	F	G	H		S		
1' 6" 6"	10"	21"	39"	57"	75"	93"	111"	129"	147"	165"	70"	
7"	10"	21"	42"	63"							76"	
7' 6"	10"	18"	36"	54"	72"	90"	108"	126"	144"	162"	82"	
8"	10"	21"	39"	57"	75"						88"	
8' 6"	10"	21"	42"	63"	81"						94"	
9"	10"	18"	36"	54"	72"	90"					100"	
9' 6"	10"	21"	39"	57"	75"	93"					106"	
10"	10"	21"	42"	63"	81"	99"					112"	
10' 6"	10"	21"	42"	63"	84"	105"					118"	
11"	10"	21"	39"	57"	75"	93"	111"				124"	
11' 6"	10"	21"	42"	63"	81"	99"	117"				130"	
12"	10"	21"	42"	63"	84"	105"	123"				136"	
12' 6"	10"	21"	39"	57"	75"	93"	111"	129"			142"	
13"	10"	21"	42"	63"	81"	99"	117"	135"			148"	
13' 6"	10"	21"	42"	63"	84"	105"	123"	141"			154"	
14"	10"	21"	42"	63"	84"	105"	126"	147"			160"	



NOTE! VERIFY WHICH SIDE ELECTRICAL CONN. WILL BE LOCATED.

APPROVED FOR FABRICATION:
DATE:

ELECTRICAL
230V-1Ø

DRAWN: 09-09-02

CUSTOMER: TYPICAL

40'-0" x 14'-3" BI-FOLD DOOR

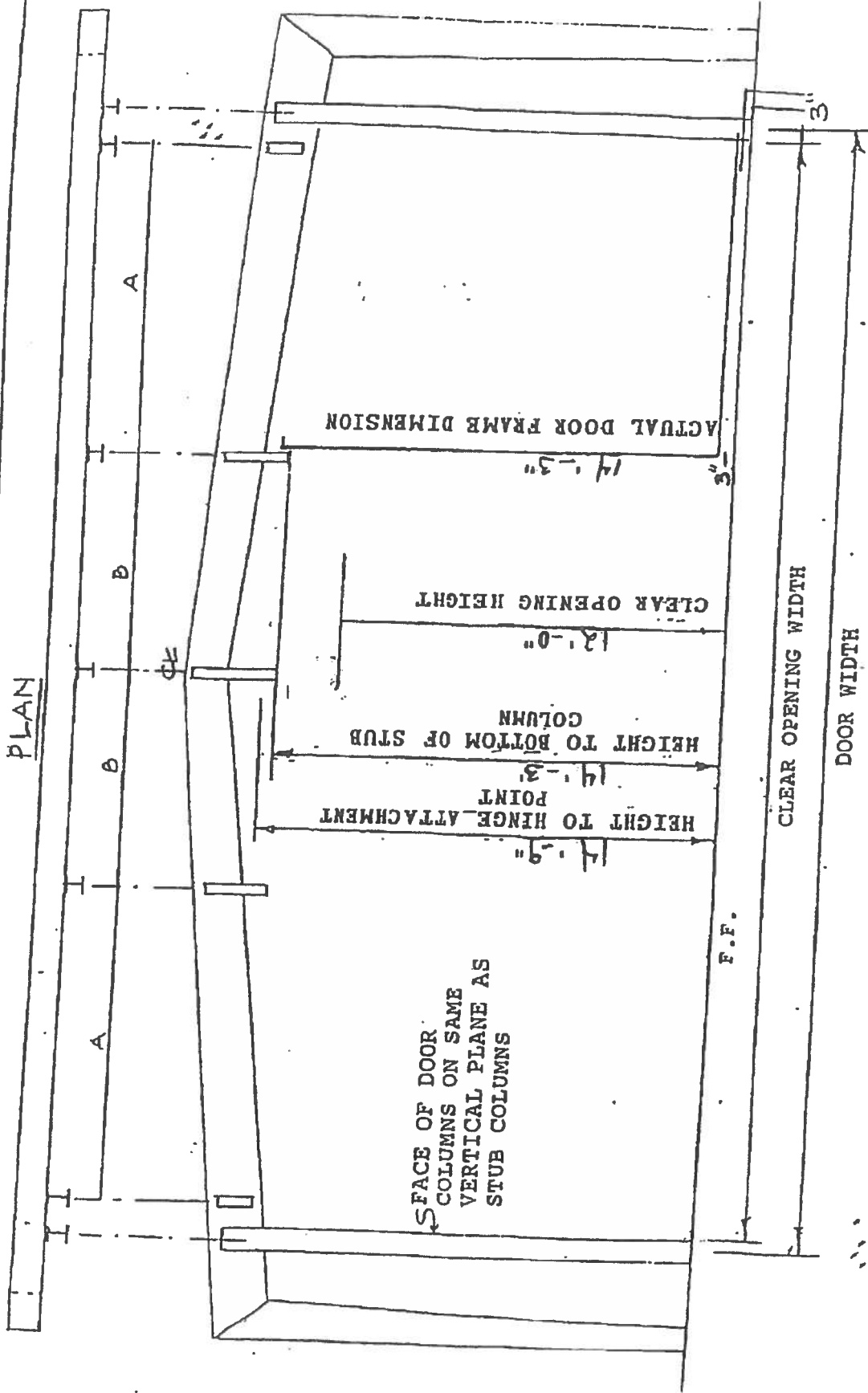
W.L. 110 MPH

WIELL-BUILT
INDUSTRIES

ELEVATION FROM INSIDE LOOKING OUT
SCALE: 3/16" = 1'-0"

40'-0" CLEAR OPENING
40'-6" DOOR

PLAN



FACE OF DOOR
COLUMNS ON SAME
VERTICAL PLANE AS
STUB COLUMNS

HEIGHT TO HINGE ATTACHMENT
14'-9"

HEIGHT TO BOTTOM OF STUB
COLUMN
14'-3"

CLEAR OPENING HEIGHT
12'-0"

ACTUAL DOOR FRAME DIMENSION
14'-3"

F.F.

CLEAR OPENING WIDTH

DOOR WIDTH

N.T.S.

STUB COLUMN ELEVATION

TYPICAL

APPROVED FOR FABRICATION _____

DATE _____

WELL-BUILT

WELL BILT INDUSTRIES

1 Well Bilt Road
PO Box 100
Williston, FL 32696-0100
phone (352) 528-5566 toll-free (800) 940-BILT
fax (352) 528-5614
E-mail MWellBilt@aol.com
Web-Site wellbiltdoors.com

WEIGHTS AND BALANCE

Date :

To :

From : Merle Loock, Office Manager

Company :

Fax:

Phone :

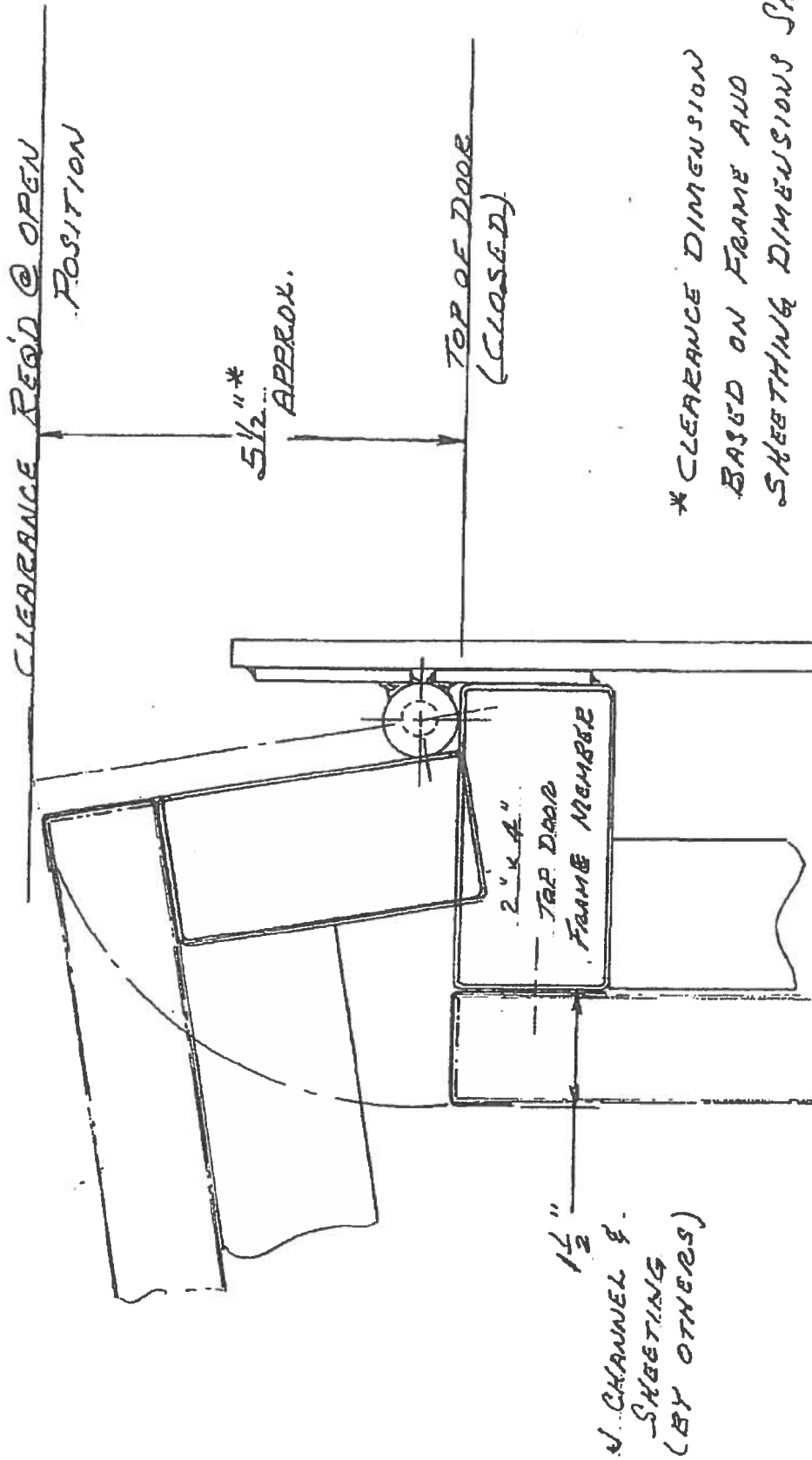
TYPICAL

PROJECT:

DOOR DOWN AND LOCKED

BI-FOLD DOOR CLEAR OPENING SIZE	40'-0" X 12'-0"
ACTUAL DOOR SIZE	40'-6" X 14'-3"
DEAD WEIGHT	2,020 LBS.
LOCKS/OPTIONS	INCLUDED IN ABOVE WEIGHT
SHEETING WEIGHT, EXTERIOR (ESTIMATE 1 # per sq. ft.)	577 LBS.
DEAD WEIGHT TOTAL	2,600 LBS.
VERTICAL COLUMN WIND LOAD TRANSFER	75 %
HEADER LOAD TRANSFER	25 %
HORIZONTAL COMPONENT, 2.0 X'S DEAD WEIGHT	5,200 LBS.
HINGE POINTS, WEIGHT EACH (5)	1,040 LBS. HORIZONTAL 520 LBS. VERTICAL
HORIZONTAL COMPRESSION ON EACH VERTICAL COLUMN	2,600 LBS.

THANK YOU FOR YOUR INTEREST IN WELL BILT INDUSTRIES



DRAWN 10-02-98
CUSTOMER

OPEN DOOR CLEARANCE - TYPICAL

WELLS-BUILT
INDUSTRIES

CONTINUOUS WELD PERIMETER
OF HINGE TO BUILDING STEEL

BUILDING HEADER OR
STUB DOWN

PLUG WELD HOLES

APPROX. 2"

TOP OF DOOR

5 1/4"

1 1/4"

WELL BILT INDUSTRIES

TEL: 352-528-5566 FAX: 352-528-5614

**HINGE MOUNTING INSTALLATION
DETAILS**

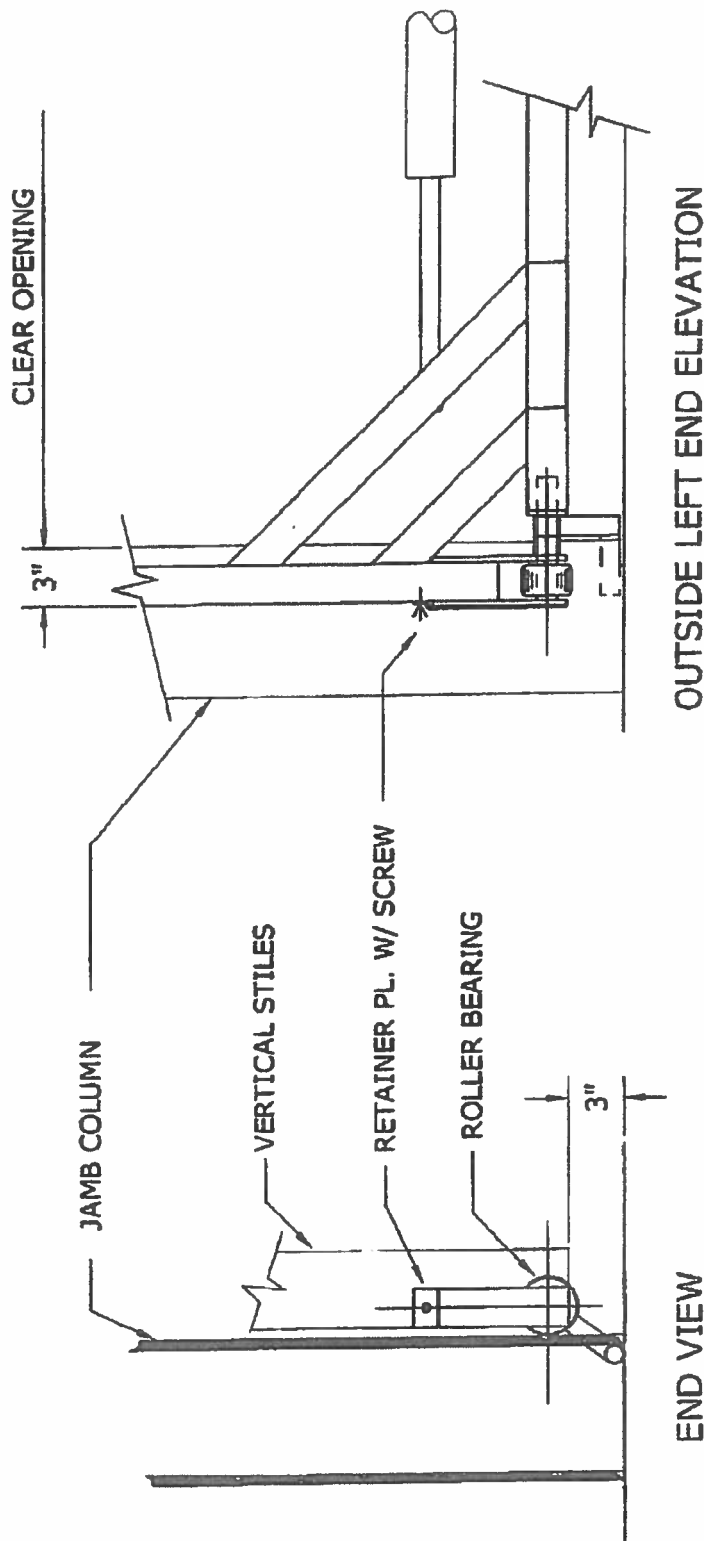
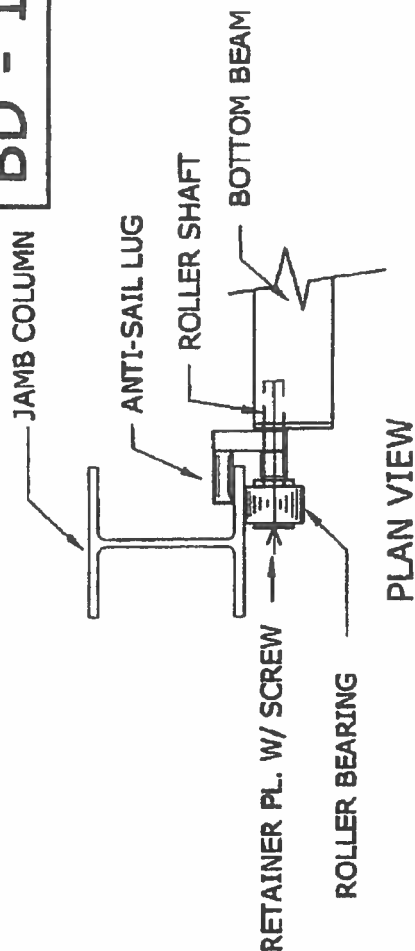
DRAWN:
K. MARTIN

DATE:
05-24-04

INSTRUCTIONS WHEN INSTALLING DOOR

REMOVE RETAINER PLATE SCREW FROM BOTH ENDS OF DOOR.
SLIDE SHAFT OUT FAR ENOUGH TO REMOVE ANTI SAIL LUG.

WHEN DOOR IS PERMANENTLY ATTACHED TO BUILDING - REVERSE PROCEEDURE.



WELL BILT INDUSTRIES

TEL: 352-528-5566 FAX: 352-528-5614

ANTI SAIL INSTALLATION DETAILS

DRAWN: K. MARTIN

DATE: 02-03-04

WEATHER SEAL BY WELL BILT
INSTALLED BY OTHERS

HINGE MOUNTING STUB DOWN
BY OTHERS

SHEETING BY OTHERS

WEATHERSEAL BY WELLBILT
INSTALLED BY OTHERS

FINISHED FLOOR

ALTERNATE

SECTION

DRAWN: K. MARTIN

DATE: 11-16-04

BI-FOLD SHEETING INSTALLATION

WELL BILT INDUSTRIES

TEL: 352-528-5566 FAX: 352-528-5614

Residential System Sizing Calculation

Summary

Lagoni, William

Project Title:
708212Lagoni, William

Class 3 Rating
Registration No. 0
Climate: North

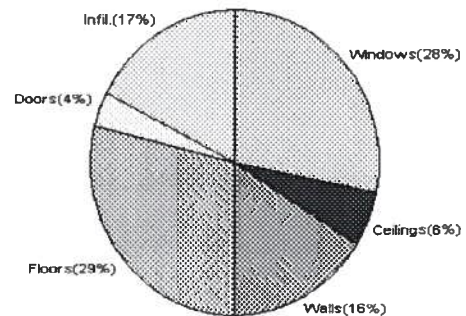
12/17/2007

Location for weather data: Gainesville - Defaults: Latitude(29) Altitude(152 ft.) Temp Range(M)					
Humidity data: Interior RH (50%) Outdoor wet bulb (77F) Humidity difference(54gr.)					
Winter design temperature	33	F	Summer design temperature	92	F
Winter setpoint	70	F	Summer setpoint	75	F
Winter temperature difference	37	F	Summer temperature difference	17	F
Total heating load calculation	62570	Btuh	Total cooling load calculation	53746	Btuh
Submitted heating capacity	% of calc	Btuh	Submitted cooling capacity	% of calc	Btuh
Total (Electric Heat Pump)	118.3	74000	Sensible (SHR = 0.75)	116.7	55500
Heat Pump + Auxiliary(0.0kW)	118.3	74000	Latent	298.2	18500
			Total (Electric Heat Pump)	137.7	74000

WINTER CALCULATIONS

Winter Heating Load (for 3043 sqft)

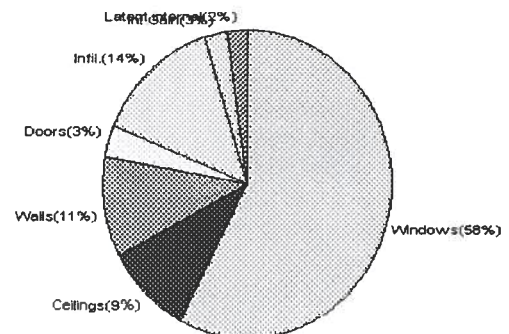
Load component	Load		
Window total	552	sqft	17753 Btuh
Wall total	3013	sqft	9893 Btuh
Door total	180	sqft	2331 Btuh
Ceiling total	3072	sqft	3620 Btuh
Floor total	418	sqft	18250 Btuh
Infiltration	265	cfm	10724 Btuh
Duct loss			0 Btuh
Subtotal			62570 Btuh
Ventilation	0	cfm	0 Btuh
TOTAL HEAT LOSS			62570 Btuh



SUMMER CALCULATIONS

Summer Cooling Load (for 3043 sqft)

Load component	Load		
Window total	552	sqft	31005 Btuh
Wall total	3013	sqft	5757 Btuh
Door total	180	sqft	1764 Btuh
Ceiling total	3072	sqft	5087 Btuh
Floor total			0 Btuh
Infiltration	137	cfm	2549 Btuh
Internal gain			1380 Btuh
Duct gain			0 Btuh
Sens. Ventilation	0	cfm	0 Btuh
Total sensible gain			47542 Btuh
Latent gain(ducts)			0 Btuh
Latent gain(infiltration)			5004 Btuh
Latent gain(ventilation)			0 Btuh
Latent gain(internal/occupants/other)			1200 Btuh
Total latent gain			6204 Btuh
TOTAL HEAT GAIN			53746 Btuh



For Florida residences only

EnergyGauge® System Sizing

PREPARED BY: *[Signature]*

DATE: 12-17-07

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

Lagoni, William

Project Title:
708212Lagoni, William

Class 3 Rating
Registration No. 0
Climate: North

, FL

Reference City: Gainesville (Defaults) Winter Temperature Difference: 37.0 F
This calculation is for Worst Case. The house has been rotated 315 degrees.

12/17/2007

Component Loads for Whole House

Window	Panes/SHGC/Frame/U	Orientation	Area(sqft) X	HTM=	Load
1	2, Clear, Metal, 0.87	NW	40.0	32.2	1288 Btuh
2	2, Clear, Metal, 0.87	NW	16.0	32.2	515 Btuh
3	2, Clear, Metal, 0.87	NE	16.0	32.2	515 Btuh
4	2, Clear, Metal, 0.87	NE	120.0	32.2	3863 Btuh
5	2, Clear, Metal, 0.87	NE	40.0	32.2	1288 Btuh
6	2, Clear, Metal, 0.87	NW	20.0	32.2	644 Btuh
7	2, Clear, Metal, 0.87	NW	20.0	32.2	644 Btuh
8	2, Clear, Metal, 0.87	SW	20.0	32.2	644 Btuh
9	2, Clear, Metal, 0.87	NW	12.0	32.2	386 Btuh
10	2, Clear, Metal, 0.87	SW	14.0	32.2	451 Btuh
11	2, Clear, Metal, 0.87	SE	80.0	32.2	2575 Btuh
12	2, Clear, Metal, 0.87	SE	13.5	32.2	435 Btuh
13	2, Clear, Metal, 0.87	SW	80.0	32.2	2575 Btuh
14	2, Clear, Metal, 0.87	SW	24.0	32.2	773 Btuh
15	2, Clear, Metal, 0.87	SW	36.0	32.2	1159 Btuh
Window Total			552(sqft)		17753 Btuh
Walls	Type	R-Value	Area X	HTM=	Load
1	Frame - Wood - Ext(0.09)	13.0	2101	3.3	6898 Btuh
2	Frame - Wood - Adj(0.09)	13.0	912	3.3	2995 Btuh
Wall Total			3013		9893 Btuh
Doors	Type		Area X	HTM=	Load
1	Insulated - Exterior		60	12.9	777 Btuh
2	Insulated - Adjacent		60	12.9	777 Btuh
3	Insulated - Exterior		60	12.9	777 Btuh
Door Total			180		2331 Btuh
Ceilings	Type/Color/Surface	R-Value	Area X	HTM=	Load
1	Vented Attic/D/Shin)	30.0	3072	1.2	3620 Btuh
Ceiling Total			3072		3620 Btuh
Floors	Type	R-Value	Size X	HTM=	Load
1	Slab On Grade	0	418.0 ft(p)	43.7	18250 Btuh
Floor Total			418		18250 Btuh
Zone Envelope Subtotal:					51847 Btuh
Infiltration	Type	ACH X	Zone Volume	CFM=	
	Natural	0.58	27387	264.7	10724 Btuh
Ductload	Average sealed, R6.0, Supply(Attic), Return(Attic) (DLM of 0.00)				0 Btuh
Zone #1	Sensible Zone Subtotal				62570 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

Lagoni, William
, FL

Project Title:
708212Lagoni,William

Class 3 Rating
Registration No. 0
Climate: North

12/17/2007

WHOLE HOUSE TOTALS

	Subtotal Sensible	62570 Btuh
	Ventilation Sensible	0 Btuh
	Total Btuh Loss	62570 Btuh

Key: Window types (SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)
(Frame types - metal, wood or insulated metal)
(U - Window U-Factor or 'DEF' for default)
(HTM - ManualJ Heat Transfer Multiplier)

Key: Floor size (perimeter(p) for slab-on-grade or area for all other floor types)



For Florida residences only

System Sizing Calculations - Winter

Residential Load - Room by Room Component Details

Lagoni, William
, FL

Project Title:
708212Lagoni,William

Class 3 Rating
Registration No. 0
Climate: North

Reference City: Gainesville (Defaults) Winter Temperature Difference: 37.0 F
This calculation is for Worst Case. The house has been rotated 315 degrees.

12/17/2007

Component Loads for Zone #1: Main						
Window	Panes/SHGC/Frame/U	Orientation	Area(sqft)	X	HTM=	Load
1	2, Clear, Metal, 0.87	NW	40.0		32.2	1288 Btuh
2	2, Clear, Metal, 0.87	NW	16.0		32.2	515 Btuh
3	2, Clear, Metal, 0.87	NE	16.0		32.2	515 Btuh
4	2, Clear, Metal, 0.87	NE	120.0		32.2	3863 Btuh
5	2, Clear, Metal, 0.87	NE	40.0		32.2	1288 Btuh
6	2, Clear, Metal, 0.87	NW	20.0		32.2	644 Btuh
7	2, Clear, Metal, 0.87	NW	20.0		32.2	644 Btuh
8	2, Clear, Metal, 0.87	SW	20.0		32.2	644 Btuh
9	2, Clear, Metal, 0.87	NW	12.0		32.2	386 Btuh
10	2, Clear, Metal, 0.87	SW	14.0		32.2	451 Btuh
11	2, Clear, Metal, 0.87	SE	80.0		32.2	2575 Btuh
12	2, Clear, Metal, 0.87	SE	13.5		32.2	435 Btuh
13	2, Clear, Metal, 0.87	SW	80.0		32.2	2575 Btuh
14	2, Clear, Metal, 0.87	SW	24.0		32.2	773 Btuh
15	2, Clear, Metal, 0.87	SW	36.0		32.2	1159 Btuh
Window Total			552(sqft)			17753 Btuh
Walls	Type	R-Value	Area	X	HTM=	Load
1	Frame - Wood - Ext(0.09)	13.0	2101		3.3	6898 Btuh
2	Frame - Wood - Adj(0.09)	13.0	912		3.3	2995 Btuh
Wall Total			3013			9893 Btuh
Doors	Type		Area	X	HTM=	Load
1	Insulated - Exterior		60		12.9	777 Btuh
2	Insulated - Adjacent		60		12.9	777 Btuh
3	Insulated - Exterior		60		12.9	777 Btuh
Door Total			180			2331Btuh
Ceilings	Type/Color/Surface	R-Value	Area	X	HTM=	Load
1	Vented Attic/D/Shin)	30.0	3072		1.2	3620 Btuh
Ceiling Total			3072			3620Btuh
Floors	Type	R-Value	Size	X	HTM=	Load
1	Slab On Grade	0	418.0 ft(p)		43.7	18250 Btuh
Floor Total			418			18250 Btuh
Zone Envelope Subtotal:						51847 Btuh
Infiltration	Type	ACH X	Zone Volume	CFM=		
	Natural	0.58	27387	264.7		10724 Btuh
Ductload	Average sealed, R6.0, Supply(Attic), Return(Attic)				(DLM of 0.00)	0 Btuh
Zone #1	Sensible Zone Subtotal					62570 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

Lagoni, William
, FL

Project Title:
708212Lagoni, William

Class 3 Rating
Registration No. 0
Climate: North

12/17/2007

WHOLE HOUSE TOTALS

	Subtotal Sensible Ventilation Sensible Total Btuh Loss	62570 Btuh 0 Btuh 62570 Btuh
--	--	------------------------------------

Key: Window types (SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)
(Frame types - metal, wood or insulated metal)
(U - Window U-Factor or 'DEF' for default)
(HTM - ManualJ Heat Transfer Multiplier)

Key: Floor size (perimeter(p) for slab-on-grade or area for all other floor types)



For Florida residences only

System Sizing Calculations - Summer

Residential Load - Whole House Component Details

Lagoni, William

Project Title:
708212Lagoni,William

Class 3 Rating
Registration No. 0
Climate: North

, FL

Reference City: Gainesville (Defaults) Summer Temperature Difference: 17.0 F
This calculation is for Worst Case. The house has been rotated 315 degrees.

12/17/2007

Component Loads for Whole House

Window	Type*		Overhang		Window Area(sqft)			HTM		Load	
	Pn/SHGC/U/InSh/ExSh/IS	Ornt	Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded		
1	2, Clear, 0.87, None,N,N	NW	1.5ft.	5.5ft.	40.0	0.0	40.0	29	60	2401	Btuh
2	2, Clear, 0.87, None,N,N	NW	1.5ft.	5.5ft.	16.0	0.0	16.0	29	60	961	Btuh
3	2, Clear, 0.87, None,N,N	NE	1.5ft.	5.5ft.	16.0	0.0	16.0	29	60	961	Btuh
4	2, Clear, 0.87, None,N,N	NE	3ft.	6.5ft.	120.0	0.0	120.0	29	60	7204	Btuh
5	2, Clear, 0.87, None,N,N	NE	3ft.	6.5ft.	40.0	0.0	40.0	29	60	2401	Btuh
6	2, Clear, 0.87, None,N,N	NW	1.5ft.	6.5ft.	20.0	0.0	20.0	29	60	1201	Btuh
7	2, Clear, 0.87, None,N,N	NW	1.5ft.	6.5ft.	20.0	0.0	20.0	29	60	1201	Btuh
8	2, Clear, 0.87, None,N,N	SW	99ft.	6.5ft.	20.0	20.0	0.0	29	63	579	Btuh
9	2, Clear, 0.87, None,N,N	NW	1.5ft.	4.5ft.	12.0	0.0	12.0	29	60	720	Btuh
10	2, Clear, 0.87, None,N,N	SW	1.5ft.	6.5ft.	14.0	0.0	14.0	29	63	875	Btuh
11	2, Clear, 0.87, None,N,N	SE	1.5ft.	6.5ft.	80.0	16.4	63.6	29	63	4453	Btuh
12	2, Clear, 0.87, None,N,N	SE	6ft.	7.33	13.5	13.5	0.0	29	63	391	Btuh
13	2, Clear, 0.87, None,N,N	SW	1.5ft.	5.5ft.	80.0	20.5	59.5	29	63	4316	Btuh
14	2, Clear, 0.87, None,N,N	SW	1.5ft.	5.5ft.	24.0	6.1	17.9	29	63	1295	Btuh
15	2, Clear, 0.87, None,N,N	SW	1.5ft.	7.5ft.	36.0	6.1	29.9	29	63	2045	Btuh
	Window Total				552 (sqft)					31005 Btuh	
Walls	Type		R-Value/U-Value		Area(sqft)			HTM		Load	
1	Frame - Wood - Ext		13.0/0.09		2100.5			2.1		4381 Btuh	
2	Frame - Wood - Adj		13.0/0.09		912.0			1.5		1376 Btuh	
	Wall Total				3013 (sqft)					5757 Btuh	
Doors	Type				Area (sqft)			HTM		Load	
1	Insulated - Exterior				60.0			9.8		588 Btuh	
2	Insulated - Adjacent				60.0			9.8		588 Btuh	
3	Insulated - Exterior				60.0			9.8		588 Btuh	
	Door Total				180 (sqft)					1764 Btuh	
Ceilings	Type/Color/Surface		R-Value		Area(sqft)			HTM		Load	
1	Vented Attic/DarkShingle		30.0		3072.0			1.7		5087 Btuh	
	Ceiling Total				3072 (sqft)					5087 Btuh	
Floors	Type		R-Value		Size			HTM		Load	
1	Slab On Grade		0.0		418 (ft(p))			0.0		0 Btuh	
	Floor Total				418.0 (sqft)					0 Btuh	
	Zone Envelope Subtotal:									43613 Btuh	
Infiltration	Type		ACH		Volume(cuft)			CFM=		Load	
	SensibleNatural		0.30		27387			136.9		2549 Btuh	
Internal gain			Occupants		Btuh/occupant			Appliance		Load	
			6		X 230 +			0		1380 Btuh	
Duct load	Average sealed, R6.0, Supply(Attic), Return(Attic)									DGM = 0.00	
	Sensible Zone Load									47542 Btuh	

Manual J Summer Calculations

Residential Load - Component Details (continued)

Lagoni, William
, FL

Project Title:
708212Lagoni,William

Class 3 Rating
Registration No. 0
Climate: North

12/17/2007

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	Sensible Envelope Load All Zones	47542 Btuh
	Sensible Duct Load	0 Btuh
	Total Sensible Zone Loads	47542 Btuh
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	Total sensible gain	47542 Btuh
	Latent infiltration gain (for 54 gr. humidity difference)	5004 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	0 Btuh
	Latent occupant gain (6 people @ 200 Btuh per person)	1200 Btuh
	Latent other gain	0 Btuh
	Latent total gain	6204 Btuh
	TOTAL GAIN	53746 Btuh

*Key: Window types (Pn - Number of panes of glass)
 (SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)
 (U - Window U-Factor or 'DEF' for default)
 (InSh - Interior shading device: none(N), Blinds(B), Draperies(D) or Roller Shades(R))
 (ExSh - Exterior shading device: none(N) or numerical value)
 (BS - Insect screen: none(N), Full(F) or Half(H))
 (Ornt - compass orientation)



For Florida residences only

System Sizing Calculations - Summer

Residential Load - Room by Room Component Details

Lagoni, William

Project Title:
708212Lagoni,William

Class 3 Rating
Registration No. 0
Climate: North

, FL

Reference City: Gainesville (Defaults) Summer Temperature Difference: 17.0 F
This calculation is for Worst Case. The house has been rotated 315 degrees.

12/17/2007

Component Loads for Zone #1: Main

Window	Type*		Overhang		Window Area(sqft)			HTM		Load	
	Pn/SHGC/U/InSh/ExSh/IS	Ornt	Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded		
1	2, Clear, 0.87, None,N,N	NW	1.5ft.	5.5ft.	40.0	0.0	40.0	29	60	2401	Btuh
2	2, Clear, 0.87, None,N,N	NW	1.5ft.	5.5ft.	16.0	0.0	16.0	29	60	961	Btuh
3	2, Clear, 0.87, None,N,N	NE	1.5ft.	5.5ft.	16.0	0.0	16.0	29	60	961	Btuh
4	2, Clear, 0.87, None,N,N	NE	3ft.	6.5ft.	120.0	0.0	120.0	29	60	7204	Btuh
5	2, Clear, 0.87, None,N,N	NE	3ft.	6.5ft.	40.0	0.0	40.0	29	60	2401	Btuh
6	2, Clear, 0.87, None,N,N	NW	1.5ft.	6.5ft.	20.0	0.0	20.0	29	60	1201	Btuh
7	2, Clear, 0.87, None,N,N	NW	1.5ft.	6.5ft.	20.0	0.0	20.0	29	60	1201	Btuh
8	2, Clear, 0.87, None,N,N	SW	99ft.	6.5ft.	20.0	20.0	0.0	29	63	579	Btuh
9	2, Clear, 0.87, None,N,N	NW	1.5ft.	4.5ft.	12.0	0.0	12.0	29	60	720	Btuh
10	2, Clear, 0.87, None,N,N	SW	1.5ft.	6.5ft.	14.0	0.0	14.0	29	63	875	Btuh
11	2, Clear, 0.87, None,N,N	SE	1.5ft.	6.5ft.	80.0	16.4	63.6	29	63	4453	Btuh
12	2, Clear, 0.87, None,N,N	SE	6ft.	7.33	13.5	13.5	0.0	29	63	391	Btuh
13	2, Clear, 0.87, None,N,N	SW	1.5ft.	5.5ft.	80.0	20.5	59.5	29	63	4316	Btuh
14	2, Clear, 0.87, None,N,N	SW	1.5ft.	5.5ft.	24.0	6.1	17.9	29	63	1295	Btuh
15	2, Clear, 0.87, None,N,N	SW	1.5ft.	7.5ft.	36.0	6.1	29.9	29	63	2045	Btuh
	Window Total				552 (sqft)					31005 Btuh	
Walls	Type	R-Value/U-Value		Area(sqft)			HTM		Load		
1	Frame - Wood - Ext	13.0/0.09		2100.5			2.1		4381 Btuh		
2	Frame - Wood - Adj	13.0/0.09		912.0			1.5		1376 Btuh		
	Wall Total			3013 (sqft)					5757 Btuh		
Doors	Type			Area (sqft)			HTM		Load		
1	Insulated - Exterior			60.0			9.8		588 Btuh		
2	Insulated - Adjacent			60.0			9.8		588 Btuh		
3	Insulated - Exterior			60.0			9.8		588 Btuh		
	Door Total			180 (sqft)					1764 Btuh		
Ceilings	Type/Color/Surface	R-Value		Area(sqft)			HTM		Load		
1	Vented Attic/DarkShingle	30.0		3072.0			1.7		5087 Btuh		
	Ceiling Total			3072 (sqft)					5087 Btuh		
Floors	Type	R-Value		Size			HTM		Load		
1	Slab On Grade	0.0		418 (ft(p))			0.0		0 Btuh		
	Floor Total			418.0 (sqft)					0 Btuh		
	Zone Envelope Subtotal:									43613 Btuh	
Infiltration	Type	ACH		Volume(cuft)			CFM=		Load		
	SensibleNatural	0.30		27387			136.9		2549 Btuh		
Internal gain	Occupants		Btuh/occupant			Appliance		Load			
	6		X 230			+		0		1380 Btuh	
Duct load	Average sealed, R6.0, Supply(Attic), Return(Attic)							DGM = 0.00		0.0 Btuh	
	Sensible Zone Load									47542 Btuh	

Manual J Summer Calculations

Residential Load - Component Details (continued)

Lagoni, William
, FL

Project Title:
708212Lagoni,William

Class 3 Rating
Registration No. 0
Climate: North

12/17/2007

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	Sensible Envelope Load All Zones	47542 Btuh
	Sensible Duct Load	0 Btuh
	Total Sensible Zone Loads	47542 Btuh
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	Total sensible gain	47542 Btuh
	Latent infiltration gain (for 54 gr. humidity difference)	5004 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	0 Btuh
	Latent occupant gain (6 people @ 200 Btuh per person)	1200 Btuh
	Latent other gain	0 Btuh
	Latent total gain	6204 Btuh
	TOTAL GAIN	53746 Btuh

*Key: Window types (Pn - Number of panes of glass)

(SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)

(U - Window U-Factor or 'DEF' for default)

(InSh - Interior shading device: none(N), Blinds(B), Draperies(D) or Roller Shades(R))

(ExSh - Exterior shading device: none(N) or numerical value)

(BS - Insect screen: none(N), Full(F) or Half(H))

(Ornt - compass orientation)



For Florida residences only

Residential Window Diversity

MidSummer

Lagoni, William

Project Title:
708212Lagoni,William

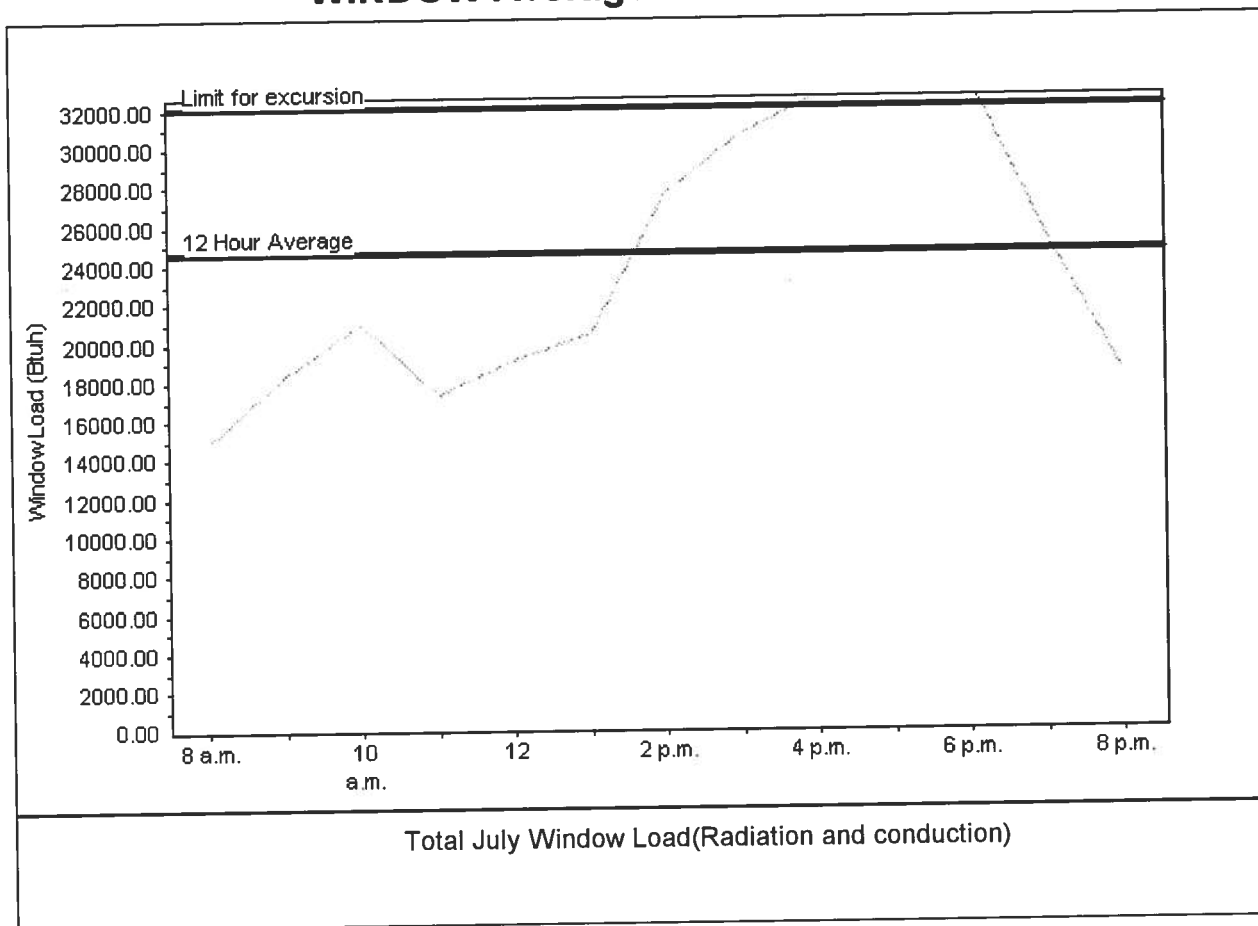
Class 3 Rating
Registration No. 0
Climate: North

12/17/2007

Weather data for: Gainesville - Defaults

Summer design temperature	92 F	Average window load for July	24653 Btu
Summer setpoint	75 F	Peak window load for July	34967 Btu
Summer temperature difference	17 F	Excursion limit(130% of Ave.)	32049 Btu
Latitude	29 North	Window excursion (July)	2919 Btuh

WINDOW Average and Peak Loads



Warning: This application has glass areas that produce relatively large heat gains for part of the day. Variable air volume devices may be required to overcome spikes in solar gain for one or more rooms. A zoned system may be required or some rooms may require zone control.

EnergyGauge® System Sizing for Florida residences only

PREPARED BY: *[Signature]*

DATE: *12-17-07*

EnergyGauge® FLR2PB v4.1

