

GENERAL NOTES:

1. THIS PRODUCT HAS BEEN TESTED, ANALYZED & APPROVED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN IN THE "ALLOWABLE DESIGN PRESSURE TABLE(S)".
2. OPENINGS, BUCKING & BUCKING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED TO TRANSFER WIND LOADS TO THE STRUCTURE.
3. ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS & SHALL NOT VARY UNLESS SPECIFICALLY MENTIONED ON THE DRAWINGS. SPECIFIED ANCHOR EMBED TO BASE MATERIAL SHALL BE BEYOND WALL FINISH OR STUCCO.
4. THIS PRODUCT HAS BEEN DESIGNED IN ACCORDANCE WITH AND MEETS THE REQUIREMENTS OF THE FLORIDA BUILDING CODE (FBC) INCLUDING HIGH VELOCITY HURRICANE ZONES (HVHZ) & IS LARGE MISSILE IMPACT RATED.
5. IMPACT SHUTTERS ARE NOT REQUIRED WITH THIS PRODUCT.
6. ALL ANCHORS SECURING PRODUCT FRAMES TO PRESSURE TREATED BUCKS OR WOOD FRAMING SHALL BE CAPABLE OF RESISTING CORROSION CAUSED BY THE PRESSURE TREATING CHEMICALS IN THE WOOD.
7. DETERMINE THE POSITIVE & NEGATIVE DESIGN LOADS TO USE WHEN REFERENCING THESE DOCUMENTS IN ACCORDANCE WITH THE GOVERNING CODE AND GOVERNING WIND VELOCITY. FOR WIND LOAD CALCULATIONS IN ACCORDANCE WITH THE FLORIDA BUILDING CODE, A DIRECTIONALITY FACTOR OF Kd = 0.85 MAY BE APPLIED PER THE ASCE-7 STANDARD.
8. MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF FLORIDA BUILDING CODE.
9. TO THE BEST OF OUR KNOWLEDGE, THE PRODUCT SHOWN HEREIN IS QUALITY ASSURED BY A FLORIDA STATE APPROVED CERTIFICATION/QA ENTITY & SHALL BE LABELED IN ACCORDANCE WITH THE FBC AND THE FLORIDA DEPARTMENT OF BUSINESS & PROFESSIONAL REGULATION SPECIFICATIONS. THESE DRAWINGS SHOW ALL APPLICABLE ELEVATION, COMBINATION, INSTALLATION & COMPARATIVE ANALYSIS CONDITIONS AS DETERMINED THROUGH TESTING & ENGINEERING RATIONAL ANALYSIS. PRODUCT ASSEMBLY SHALL BE IN ACCORDANCE WITH THESE DRAWINGS, THE MANUFACTURER'S QUALITY ASSURANCE SPECIFICATIONS & TESTING REPORTS.
10. CERTIFICATION OF THIS PRODUCT SHALL BE CONSIDERED VOID IF IT IS INSTALLED WITHOUT A BUILDING PERMIT FROM THE APPLICABLE LOCAL BUILDING DEPARTMENT OR IF IT IS INSTALLED BY ANYONE OTHER THAN A LICENSED CONTRACTOR EXPERIENCED WITH INSTALLATIONS OF THIS TYPE OF PRODUCT.

CORNER CONSTRUCTION:

FRAME & SASH: MITER CUT, BUTTED AND FULLY WELDED
MID-RAIL ENDS: MID-RAIL ENDS ARE CUT TO FIT, BUTTED TO STILES & FULLY WELDED.

EVALUATION OF THIS PRODUCT IS BASED ON APPLICABLE STANDARDS AND/OR INFORMATION & RESULTS FROM APPLICABLE TEST REPORTS. THE FLORIDA BUILDING CODE VERSION CONSIDERED WITH THIS EVALUATION WAS THAT IN FORCE AT THE TIME OF THE EVALUATION. IN THE EVENT OF CODE VERSION CHANGES/UPDATES OR IN THE EVENT THAT NEW OR ADDITIONAL TESTING IS COMPLETED ON THIS PRODUCT, PRIOR TO STATING CODE COMPLIANCE WITH THE STATE, THE MANUFACTURER SHALL CONFIRM WITH THE EVALUATION ENGINEER OF RECORD THAT EVERYTHING SPECIFIED HERE-IN IS CURRENT WITH ALL CURRENT TESTING, CODES AND APPLICABLE STANDARDS.

INSTALLATION NOTE:

WHEN NECESSARY, INSTALLATION METHODS MAY BE MIXED WITH ANY ONE WINDOW SUCH THAT INDIVIDUAL SIDES OF THE WINDOW MAY USE ONE OR THE OTHER ANCHOR METHOD (EXAMPLE: STILL MAY USE FRAME SCREWS METHOD WHILE OTHER SIDES USE CLIP)

ANCHOR/SUBSTRATE EVALUATION NOTE:

ALL ANCHORS IN THEIR SPECIFIED SUBSTRATES HAVE BEEN ANALYZED IN ACCORDANCE WITH THEIR APPLICABLE STANDARD(S) AND ARE FOUND TO BE CAPABLE OF SUPPORTING ALL LOADS IMPOSED ON THEM UNDER THE GUIDELINES OF THIS DOCUMENT. ANY SUBSTRATES OR CONDITIONS OUTSIDE OF WHAT IS SHOWN HERE-IN SHALL BE SUBJECT TO JOB SPECIFIC ENGINEERS' REVIEW & CERTIFICATION.

FRAME ANCHOR REQUIREMENTS TABLE

OPENING TYPE (SUBSTRATE)	FRAME/CLIP TO OPENING FASTENER TYPE	MINIMUM EMBED	MINIMUM EDGE DIST.
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FRAME SCREWS

MIN. 2X4 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 14 SMS OR WOOD SCREW	1 1/4"	3/4"
MIN. 16 GA. 50 KSI METAL STUD	1/4-20 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL	1/4-20 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	1/4-20 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. C-90 CMU	(1) 1/4" CONCRETE SCREW	1 1/4"	2"
MIN. 2500 PSI CONCRETE	(1) 1/4" CONCRETE SCREW	1 1/2"	2"

INSTALLATION CLIP SCREWS

(2) MIN. 2X6 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 14 SMS SCREW	1 3/8"	3/4"
MIN. 16 GA. 50 KSI METAL STUD	NO. 14 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL	1/4-20 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	1/4-20 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. C-90 CMU	(1) 1/4" CONCRETE SCREW	1 1/4"	2"
MIN. 2500 PSI CONCRETE	(1) 1/4" CONCRETE SCREW	1 1/2"	2"

ALLOWABLE PRESSURE TABLE
(SINGLE WINDOWS)

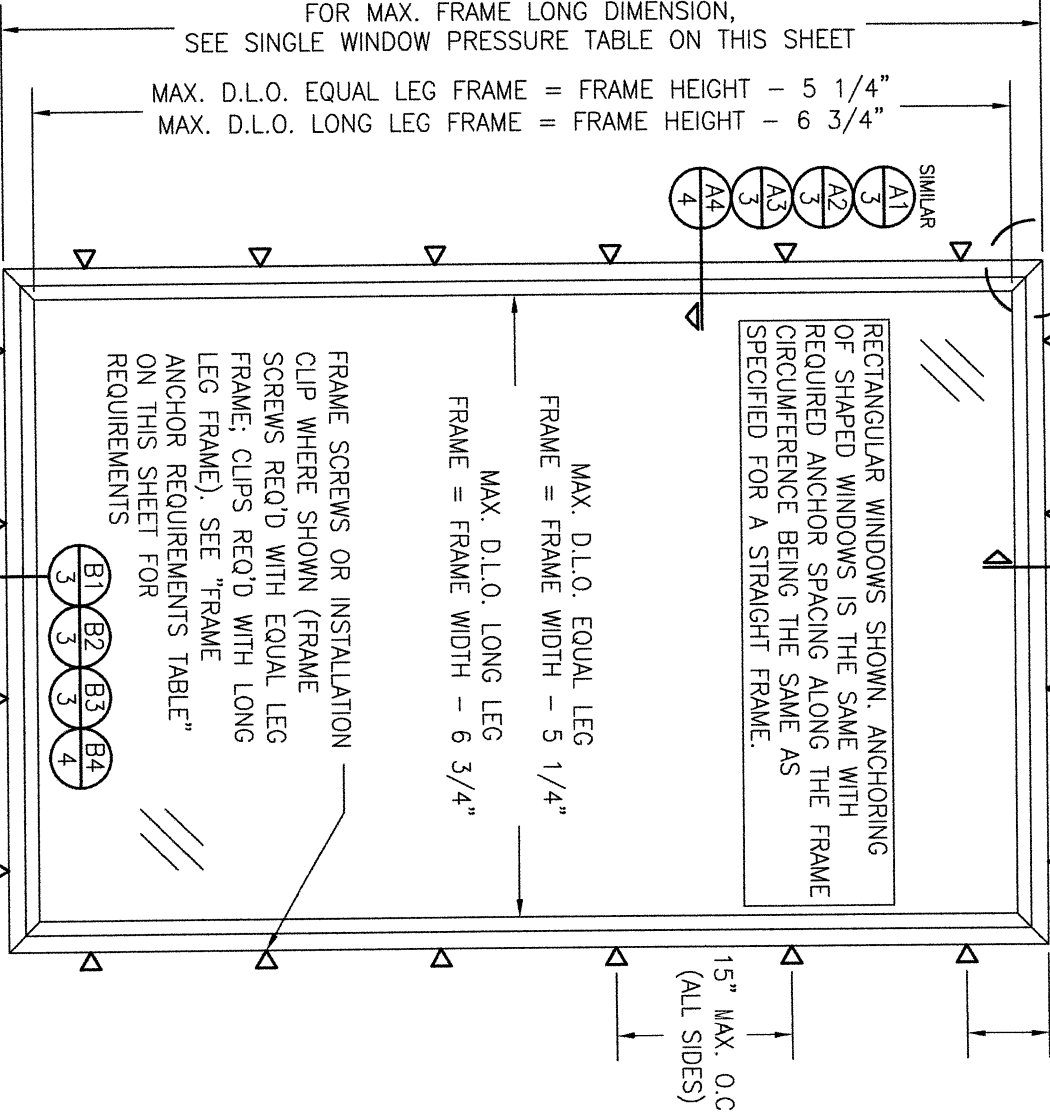
MAXIMUM FRAME LONG DIMENSION (IN.)	MAXIMUM FRAME SHORT DIMENSION (IN.)	ALLOWABLE PRESSURE (+/-PSF)	MAXIMUM FRAME LONG DIMENSION (IN.)	MAXIMUM FRAME SHORT DIMENSION (IN.)	ALLOWABLE PRESSURE (+/-PSF)
WITH EQUAL LEG FRAME			WITH LONG LEG FRAME		
60			61 1/2		
132			133 1/2		
54			55 1/2		
49			50 1/2		
55			56 1/2		
48			49 1/2		
144			145 1/2		
45			46 1/2		
70.0			70.0		
77.8			77.8		
85.0			85.0		
70.0			70.0		
80.2			80.2		
85.0			85.0		

1. WINDOW SIZES SHOWN ARE MAXIMUM SIZES. SMALLER SIZES SHALL APPLY TO LOADS EQUAL TO THE NEAREST LARGER SIZE SHOWN IN TABLE.
2. LONG DIMENSION MAY BE HORIZONTAL OR VERTICAL.
3. ALLOWABLE PRESSURE ON WINDOWS WITH LONG DIMENSION LESS THAN 132" WITH EQUAL LEG FRAME & 133 1/2" WITH LONG LEG FRAME SHALL BE GOVERNED BY PRESSURES SHOWN WITH THE 132" LONG DIMENSION.

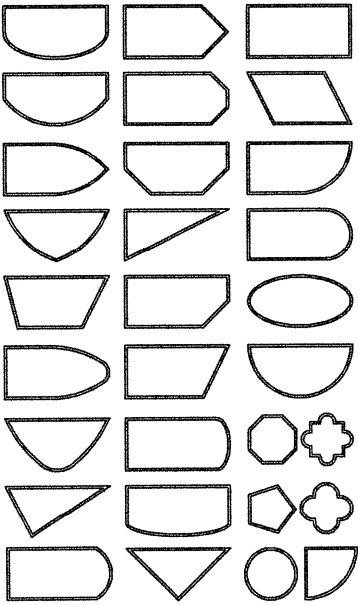
SEE "CORNER
CONSTRUCTION"
DESCRIPTION
ON THIS SHEET

7" MAX. WITH EQUAL LEG FRAME;
7 3/4" MAX. WITH LONG LEG FRAME
(TYP. ALL CORNERS)

FOR MAX. FRAME SHORT DIMENSION, SEE SINGLE
WINDOW PRESSURE TABLE ON THIS SHEET



APPROVED SHAPES



NOTES:

1. OTHER SHAPES MAY APPLY PROVIDING THEY ARE SIMILAR TO THOSE SHOWN & HAVE CORNER CONSTRUCTION AS DESCRIBED IN THIS DRAWING.
2. ALL SHAPED UNITS MUST FIT INSCRIBED INTO THE ALLOWABLE RECTANGULAR UNITS & BE GOVERNED BY THE ALLOWABLE PRESSURE OF THE RESPECTIVE RECTANGULAR UNIT.



Digitally signed

by Warren W

Schaefer

Date:

2024.09.05

08:00:44 -04'00'

THESE DRAWINGS ARE APPLICABLE ONLY TO THE PRODUCT SPECIFIED. THEY MAY NOT BE USED FOR THE ASSEMBLY AND/OR INSTALLATION OF ANY OTHER PRODUCT NOR MAY THEY BE USED FOR RATIONAL AND/OR LOCAL APPROVAL OF ANY PRODUCT NOT PRODUCED BY THE MANUFACTURER STATED ON THESE DRAWINGS.

NO.	REVISION DESCRIPTION	BY	DATE
A1	UPDATE TO CURRENT STANDARDS	W.R.M.	08/17/11
B1	UPDATE PER NEW TESTING	W.R.M.	08/17/11
C1	ADD ALTERNATE GLAZING BEAD	W.R.M.	09/25/13
D1	UPDATE TO CURRENT STANDARDS	W.W.S.	12/10/14
E1	UPDATE PART PROFILES	W.W.S.	01/31/23
F1	INCREASE SHIM SPACE	W.W.S.	09/04/24

DRAWING TITLE
JAMESTOWN 175 STEEL SERIES FIXED CASEMENT IMPACT WINDOW

CONSULTANTS
W. W. SCHAEFER ENGINEERING
& CONSULTING, P.A.

25601 AYSEN DRIVE
PUNTA GORDA, FL 33983
PHONE: 561-744-3424

MANUFACTURER

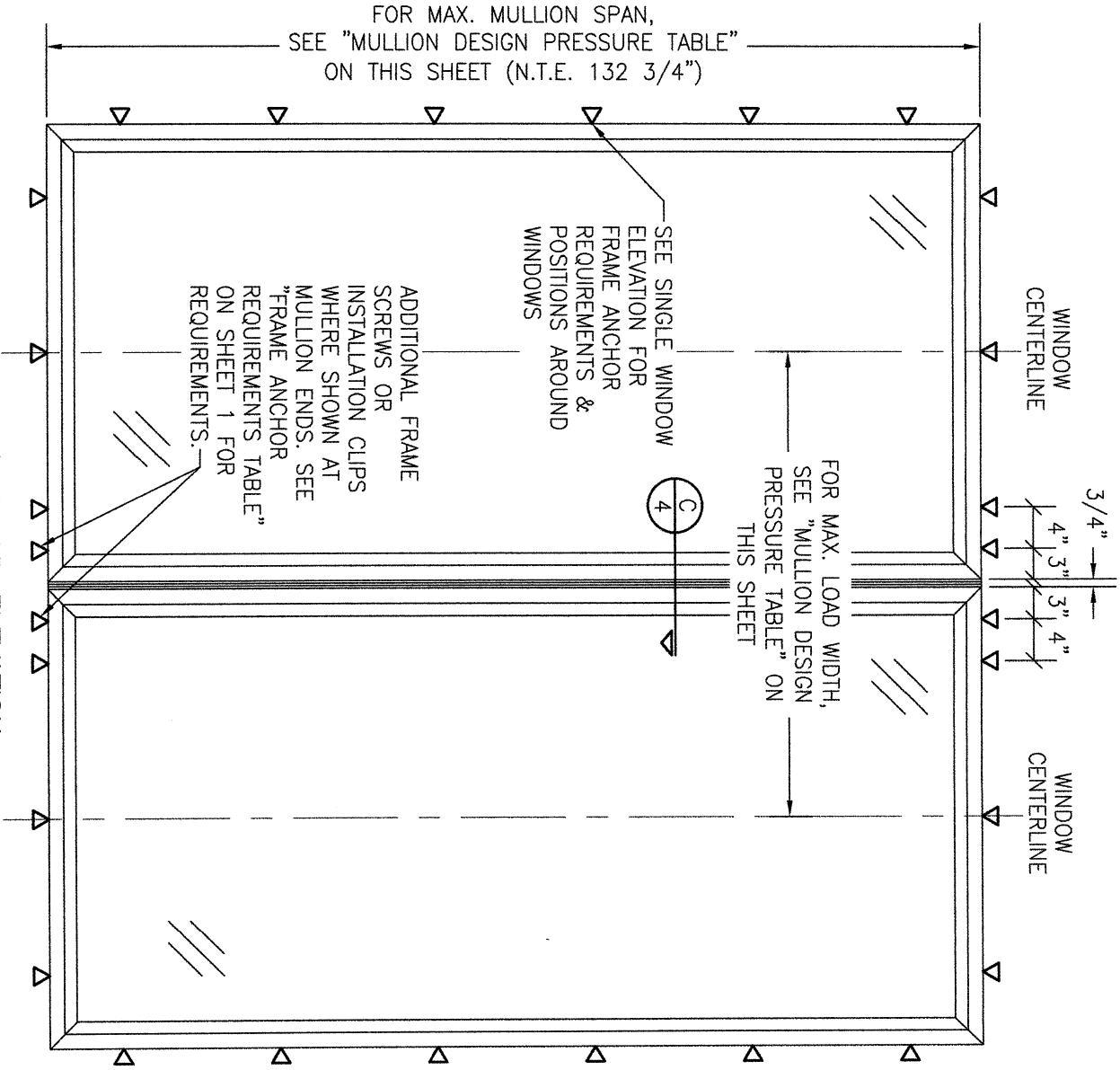
HOPE'S WINDOWS, INC.
84 HOPKINS AVENUE
JAMESTOWN, NY 14702
(716) 665-5124

CERTIFICATION

WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

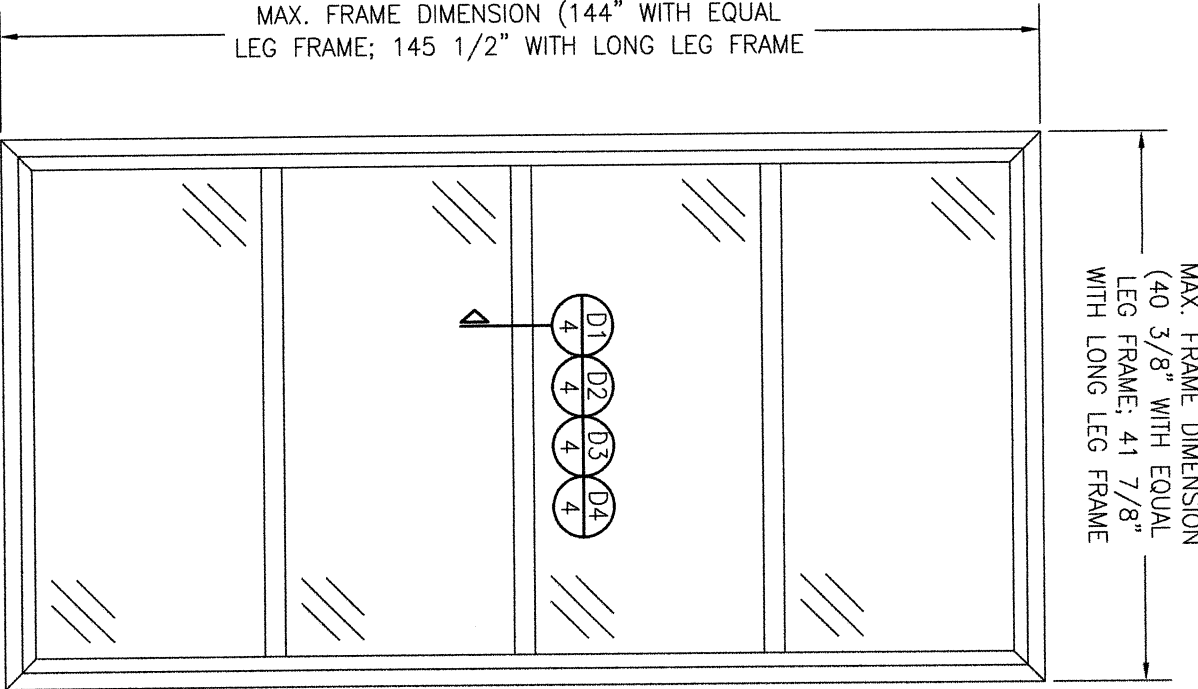
DRAWING NO.	REV.
1700	F
SHEET NO.	OF
1	6

MULLION DESIGN PRESSURE TABLE		
MAXIMUM MULLION SPAN (IN.)	MAXIMUM LOAD WIDTH (IN.)	ALLOWABLE PRESSURE (+/-PSF)
132 3/4	62	33.6
	56	36.7
	50	40.6
	44	45.6
	38	52.3
121 1/2	36	55.0
	32	60.8
	26	73.0
	21	85.0
	62	40.5
109 1/2	56	43.4
	50	47.1
	44	51.9
	38	58.3
	32	67.3
97 1/2	26	80.5
	24	85.0
	62	46.7
	56	49.8
	50	53.8
91 1/2	44	59.0
	38	66.1
	32	75.9
	28	85.0
	62	55.1
85 1/2	56	58.4
	50	62.7
	44	68.4
	38	76.2
	33	85.0
79 1/2	62	60.6
	56	63.9
	50	68.3
	44	74.3
	38	82.5
73 1/2	36	85.0
	62	67.2
	56	70.6
	50	75.1
	44	81.3
62	41	85.0
	62	75.6
	56	78.8
	50	83.4
	48	85.0
62	62	85.0
	62 OR MORE	85.0



**EXTERIOR ELEVATION:
MULTIPLE FIXED WINDOWS**

SCALE: 3/4" = 1'-0"
(RECTANGULAR WINDOW SHOWN, SHAPED WINDOWS ALSO APPLY. SEE "APPROVED SHAPES" TABLE ON THIS SHEET)



**EXTERIOR ELEVATION:
FIXED WINDOW WITH MID-RAILS**

SCALE: 3/4" = 1'-0"
MID-RAIL NOTES:
1. THERE IS NO LIMIT TO THE NUMBER OF MID-RAILS THAT CAN BE PLACED IN ONE WINDOW.
2. MID-RAILS MAY ONLY BE PLACED IN ONE DIRECTION WITHIN WINDOW.
3. MID-RAILS MAY ALSO BE REFERENCED AS "MUNTINS".
4. SLOPED GLAZING BEADS (PART ITEM #5B) ARE NOT APPLICABLE WITH MID-RAILS.

DRAWING TITLE
JAMESTOWN 175 STEEL SERIES FIXED CASEMENT IMPACT WINDOW

CONSULTANTS
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.
25601 AYSEN DRIVE
PUNTA GORDA, FL 33983
PHONE: 561-744-3424

MANUFACTURER
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JAMESTOWN, NY 14702
(716) 665-5124

NO. REVISION DESCRIPTION BY DATE				PLOT: 1=16	DRAWN BY: W.W.S.	CHECKED BY: W.W.S.
					DATE: 07/06/10	

CERTIFICATION

WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

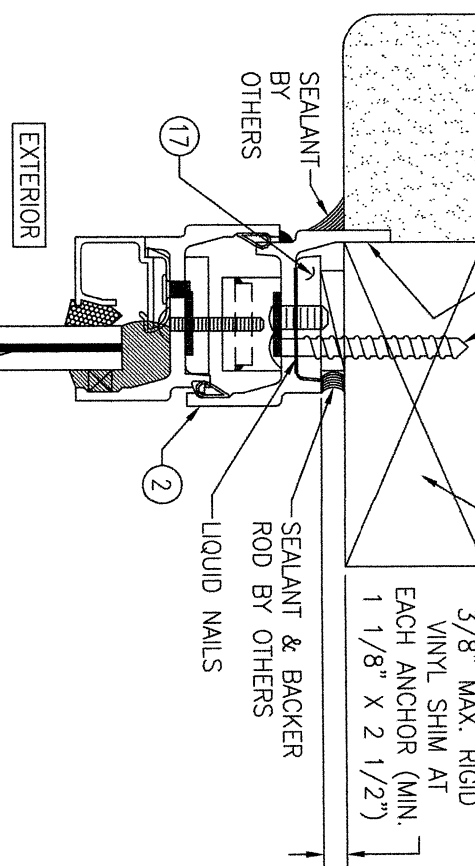
DRAWING NO. 1700

REV. F

SHEET NO. 2 OF 6

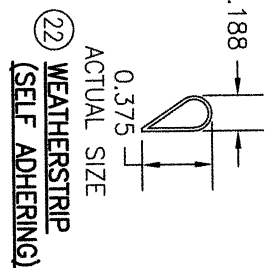
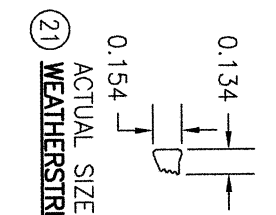
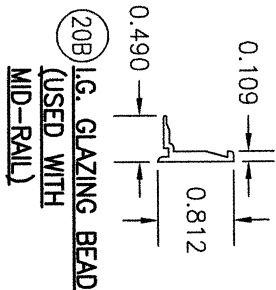
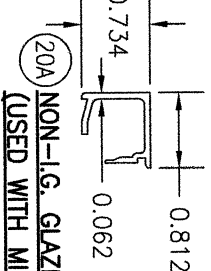
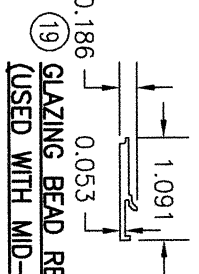
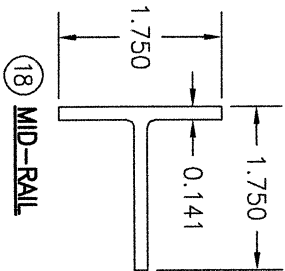
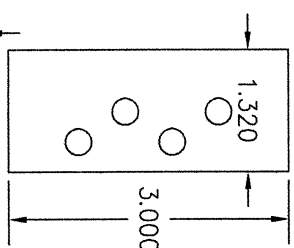
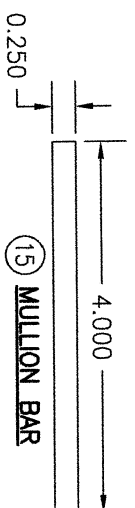
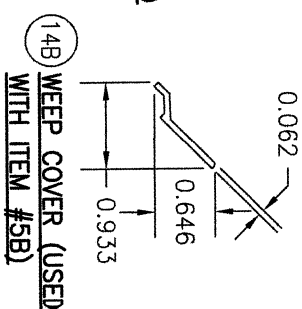
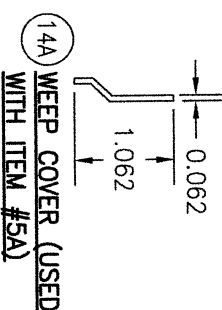
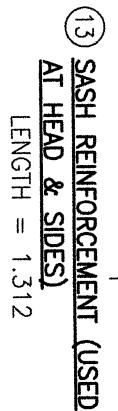
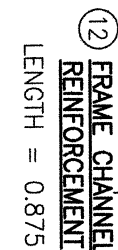
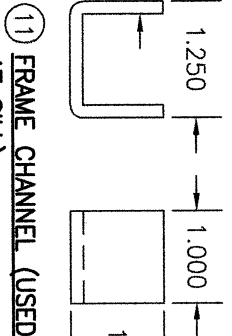
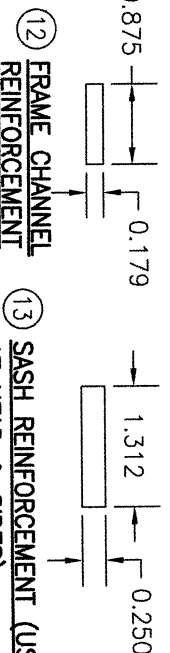
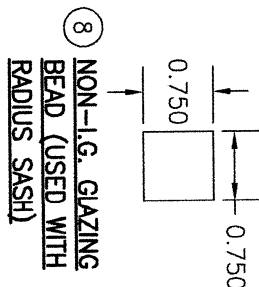
-SUBSTRATE BY OTHERS
PER "FRAME ANCHOR"
REQUIREMENTS TABLE"

3/8" MAX. RIGID
VINYL SHIM AT
EACH ANCHOR (MIN.
1 1/8" X 2 1/2")



OPTIONAL FLANGE MOUNT DETAIL

(HEAD SECTION SHOWN; SILL & SIDES ARE INSTALLED THE SAME)
(EXTERIOR GLAZED CONDITION SHOWN. INTERIOR GLAZED CONDITION ALSO APPLIES.)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

[illegible]

DRAWING TITLE
JAMESTOWN 175 STEEL SERIES FIXED CASEMENT IMPACT WINDOW

CONSULTANTS
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& CONSULTING, P.A.
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MANUFACTURER

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(716) 665-5124

CERTIFICATION

WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

DRAWING NO.	REV
1700	F
SHEET NO.	
5	OF 6

ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS		
1	FRAME (EQUAL LEG)	A-36 STEEL
2	FRAME (LONG LEG)	A-36 STEEL
3	SASH (USED WITH INTERIOR GLAZING)	A-36 STEEL
4	SASH (USED WITH EXTERIOR GLAZING)	A-36 STEEL
5A	STANDARD NON-I.G. GLAZING BEAD (USED WITH STRAIGHT SASH)	6063-T5 ALUMINUM
5B	SLOPED NON-I.G. GLAZING BEAD (USED WITH STRAIGHT SASH)	6063-T5 ALUMINUM
6	I.G. GLAZING BEAD	6063-T5 ALUMINUM
7	GLAZING BEAD RETAINER (USED WITH STRAIGHT SASH)	6063-T5 ALUMINUM
8	NON-I.G. GLAZING BEAD (USED WITH RADIUS SASH)	6063-T5 ALUMINUM
9	GLAZING BEAD SHIM (USED WITH RADIUS SASH)	A-36 STEEL
10	FRAME CHANNEL (USED AT HEAD & SIDES)	A-36 STEEL
11	FRAME CHANNEL (USED AT SILL)	A-36 STEEL
12	FRAME CHANNEL REINFORCEMENT	A-36 STEEL
13	SASH REINFORCEMENT (USED AT HEAD & SIDES)	A-36 STEEL
14A	WEEP COVER (USED WITH ITEM #5A)	6063-T5 ALUMINUM
14B	WEEP COVER (USED WITH ITEM #5B)	6063-T5 ALUMINUM
15	MULLION BAR	A-36 STEEL
16	INSTALLATION CLIP	10 GA. GALVINIZED STEEL
17	FIXING HOLE FILLER SHIM	RIGID VINYL
18	MID-RAIL	A-36 STEEL
19	GLAZING BEAD RETAINER (USED WITH MID-RAIL)	6063-T5 ALUMINUM
20A	NON-I.G. GLAZING BEAD (USED WITH MID-RAIL)	6063-T5 ALUMINUM
20B	I.G. GLAZING BEAD (USED WITH MID-RAIL)	6063-T5 ALUMINUM
SEALS & SEALANTS		
21	WEATHERSTRIP	TREMCO TR11688E EPDM
22	WEATHERSTRIP (SELF ADHERING)	REESE 638CH SILICONE
23	DOUBLE SIDED TAPE	3M VBH 4941 FOAM/ACRYLIC
24	GLAZING WEDGE (USED WITH NON-I.G. & RADIUS CONDITIONS)	TREMCO 496E EPDM
25	GLAZING WEDGE (USED WITH I.G. CONDITIONS)	TREMCO PS1125E EPDM
26	NON-I.G. GLAZING SHIM	TREMCO TR2178W EPDM
27	I.G. GLAZING SHIM	TREMCO TR1488W EPDM
28	NON-I.G. GLAZING SHIM	TREMCO TR6087W EPDM
29	I.G. GLAZING SHIM	TREMCO TR2178W EPDM
FASTENERS		
30	10-24 X 1/4" S.S. SELF SEALING MACHINE SCREW	2 1/2" FROM D.L.O. EDGE & 12" MAX. O.C.
31	10-24 X 1 1/8" S.S. MACHINE SCREW	2 1/2" FROM D.L.O. EDGE & 12" MAX. O.C.
32	1/4-20 SELF CLINCHING NUT INSERT	1 PER CLIP
33	1/4-20 S.S. MACHINE SCREW	2 1/2" FROM D.L.O. EDGE & 12" MAX. O.C.

DRAWN BY: W.M.S.		CHECKED BY:		
DATE: 07/06/10				
PLOT: 1=2				
NO.	REVISION	DESCRIPTION	BY	DATE

DRAWING TITLE	MANUFACTURER
JAMESTOWN 175 STEEL SERIES FIXED CASEMENT IMPACT WINDOW	HOPE'S WINDOWS, INC. 84 HOPKINS AVENUE JAMESTOWN, NY 14702 (716) 665-5124

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DRAWING NO. 1700	REV. F
SHEET NO. 6	OF 6