

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/OA ENTRY & 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.

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.

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 ENGINEER'S REVIEW & CERTIFICATION.

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: LEFT SIDE MAY USE CLIP METHOD WHILE OTHER SIDES USE FRAME SCREWS.)

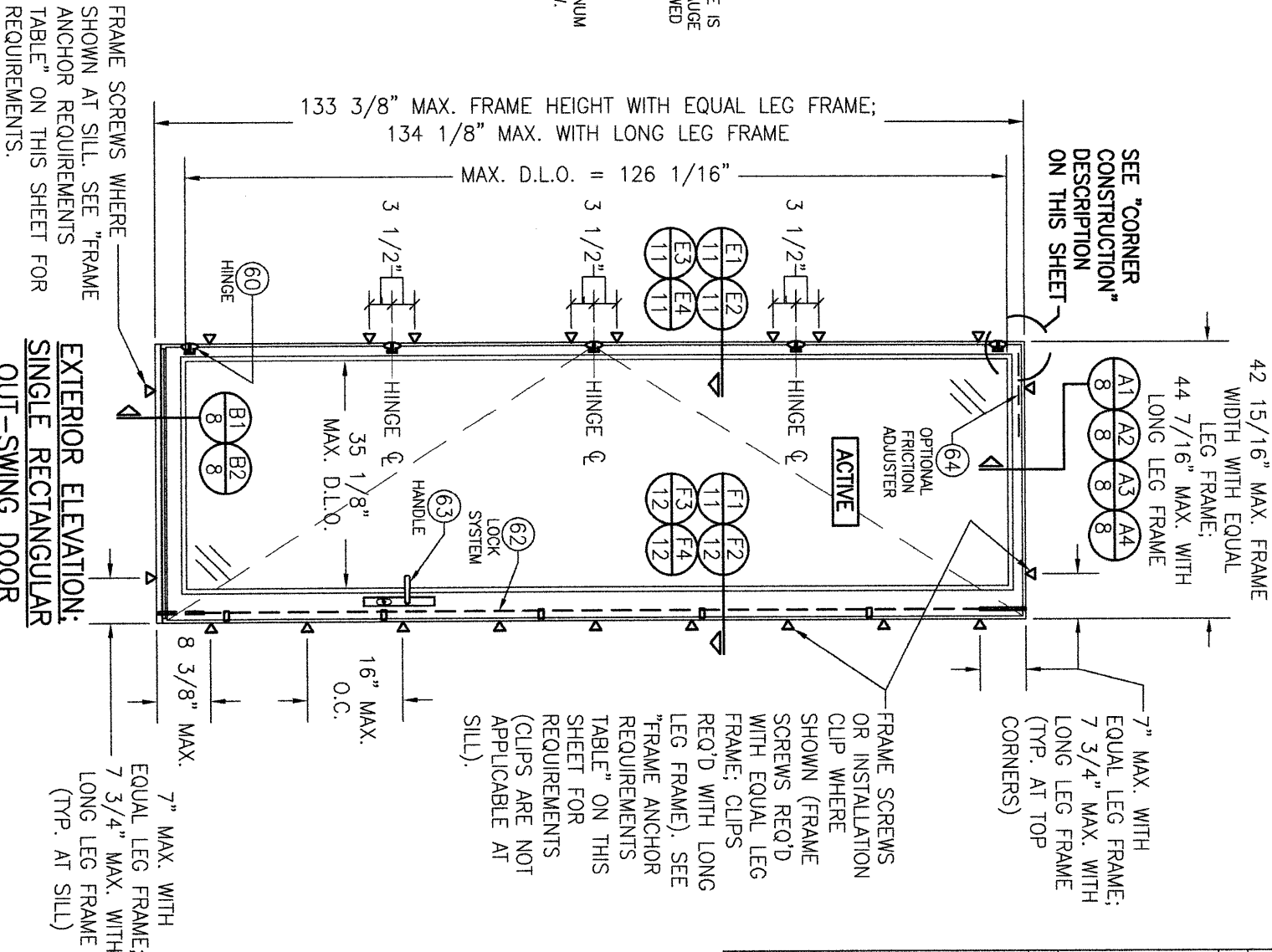
FRAME ANCHOR REQUIREMENTS TABLE

(3) OPENING TYPE (SUBSTRATE)	FRAME/CLIP TO OPENING FASTENER TYPE	MINIMUM EMBED	MINIMUM EDGE DIST.
FRAME SCREWS			
(3) 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"

- (1) CONCRETE SCREWS SHALL BE ELCO ULTRACONS (C.S.), ELCO CRETE-FLEX (S.S.), ITW RAMSET/RED HEAD TAPCONS (C.S. OR S.S.) OR HILTI KIM-CON II (C.S OR S.S.).
- (2) 2X6 BUCKS MAY BE RIPPED DOWN TO AS LITTLE AS 4" PROVIDING THE REQUIRED SCREW EDGE DISTANCE IS HELD & THE BUCK EXTENDS TO WITHIN 3/16" OF THE EXTERIOR EDGE OF THE WINDOW FRAME.
- (3) SUBSTRATE BENEATH DOOR THRESHOLDS SHALL BE OF A DEPTH EQUAL TO OR GREATER THAN THE THRESHOLD DEPTH (MIN. 4 3/4").

CORNER CONSTRUCTION:

FRAME & PANELS: MITER CUT, BUTTED AND FULLY WELDED.
THRESHOLD ENDS (SECTION B1 ON SHEET 9): FRAME IS BUTTED TO THRESHOLD AND SECURED WITH A 10 GAUGE THICK STEEL ANCHOR WELDED TO FRAME AND SCREWED TO THRESHOLD WITH 2 NO. 10-24 X 3/8" S.S. MACHINE SCREWS.
THRESHOLD ENDS (SECTION B2 ON SHEET 9): SILL FRAME BARS ARE MITER CUT, BUTTED AND FULLY WELDED. SILL BAR IS THEN SET ON TOP OF ALUMINUM PAN AND ATTACHED WITH A 1/4-20 MACHINE SCREW. MID-RAIL ENDS: MID-RAIL ENDS ARE CUT TO FIT, BUTTED TO STILES & FULLY WELDED.



FRAME SCREWS WHERE _____ SHOWN AT SILL. SEE "FRAME ANCHOR REQUIREMENTS TABLE" ON THIS SHEET FOR REQUIREMENTS.

EXTERIOR ELEVATION:
SINGLE RECTANGULAR
OUT-SWING DOOR
SCALE: 1/2" = 1'-0"

SINGLE DOOR LOCK NOTE: IF DESIRED, HOPES MAY REPLACE THE TOP &/OR BOTTOM SHOOT BOLTS IN LOCK SYSTEM ITEM 62 WITH SURFACE BOLTS ITEM 65.

ALLOWABLE DESIGN PRESSURE
(ALL DOOR UNITS)

+/-65 PSF

(1)HINGE REQUIREMENTS

RECTANGULAR FRAME
HINGE CENTERS SHALL BE LOCATED APPROXIMATELY 4" FROM TOP & 5 3/8" FROM BOTTOM OF FRAME AND SPACED 31" MAX. O.C. BETWEEN.
SHAPED FRAME
HINGE CENTERS SHALL BE LOCATED APPROXIMATELY 4" FROM TOP & 5 3/8" FROM BOTTOM OF FRAME AND SPACED 28" MAX. O.C. BETWEEN.

(1) WHEN LONG LEG FRAME IS USED, HINGE CENTER DISTANCE FROM TOP OF FRAME MAY INCREASE TO APPROXIMATELY 4 3/4"

LOCK REQUIREMENTS
(ACTIVE PANEL –
MULTI-POINT LOCK)

MAXIMUM FRAME HEIGHT	LOCK POINT QUANTITY PER PANEL
EQUAL LEG FRAME	
133 3/8"	7
129 3/8"	6
97 7/16"	5
LONG LEG FRAME	
134 1/8"	7
130 1/8"	6
98 3/16"	5

NOTES:
MULTI-POINT LOCK

- 1) LOCK POINTS CONSIST OF HEAD & SILL SHOOTBOLTS, A DEADBOLT & HOOKBOLTS.
- 2) FOR SINGLE ACTIVE DOORS THE TOP SHOOTBOLT IS OPTIONAL AND MAY BE REMOVED.

NO.	REVISION DESCRIPTION	BY	DATE	DRAWN BY:	CHECKED BY:
				W.R.M.	W.M.S.
1=24	DATE: 02/14/11				
C1	ADD ALTERNATE GLAZING BEAD	W.R.M.	10/01/13		
D1	ADD MORTISE LOCK OPTION	W.R.M.	12/19/13		
E1	UPDATE TO CURRENT STANDARDS	W.W.S.	12/10/14		
F1	CORRECT REFERENCE NOTES ON SHEETS 3, 4 & 9.	W.W.S.	12/10/14		
G1	REMOVE LOCK OPTION 2 DOORS	W.W.S.	05/03/22		
H1	INCREASE SHIM SPACE	W.W.S.	09/04/24		

DRAWING TITLE	
JAMESTOWN 175 STEEL SERIES IMPACT OUT-SWING DOORS	
CONSULTANTS	MANUFACTURER
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 25601 AYSEN DRIVE PUNTA GORDA, FL 33983 PHONE: 561-744-3424	HOPE'S WINDOWS, INC. 84 HOPKINS AVENUE JAMESTOWN, NY 14702 (716) 665-5124

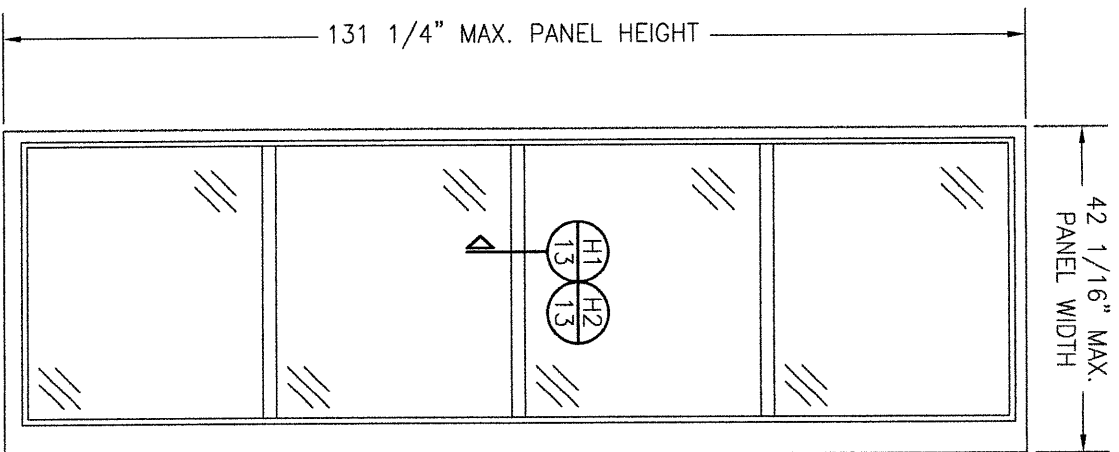
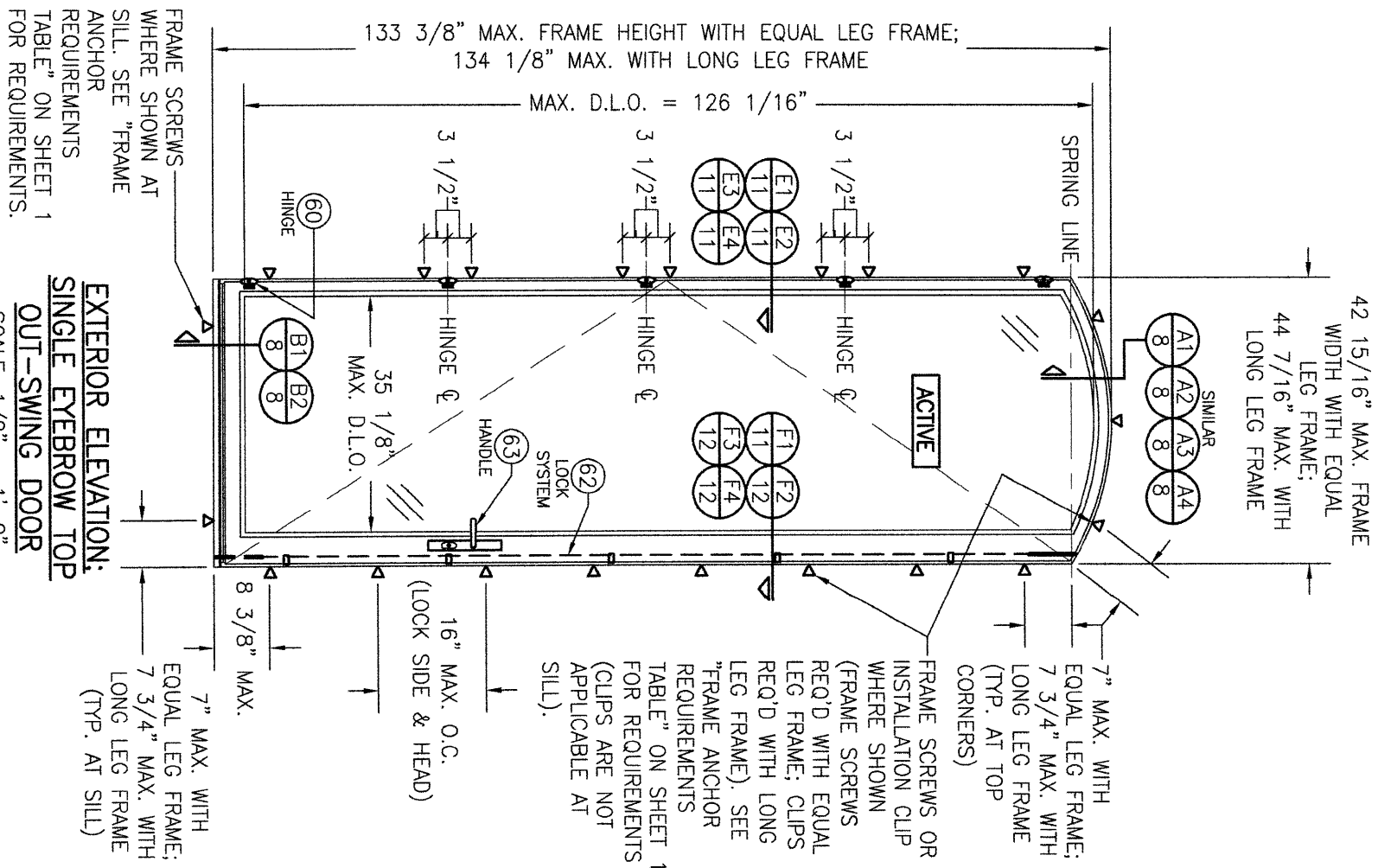
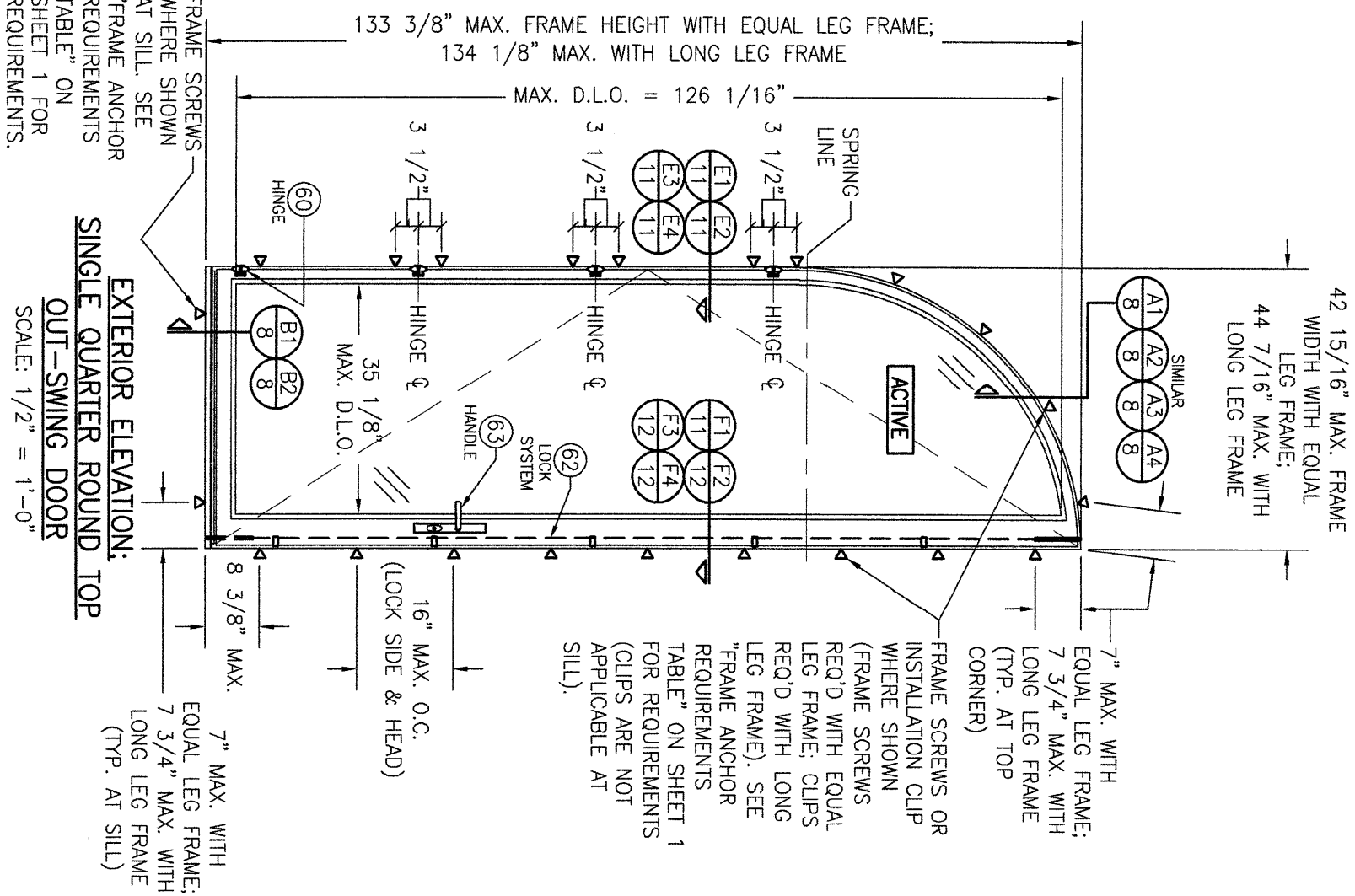
CERTIFICATION

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

DRAWING NO.	REV.
1739	H
SHEET NO.	
1	OF 18



Digitally signed
by Warren W
Schaefer
Date:
2024.09.05
08:11:03 -04'00'



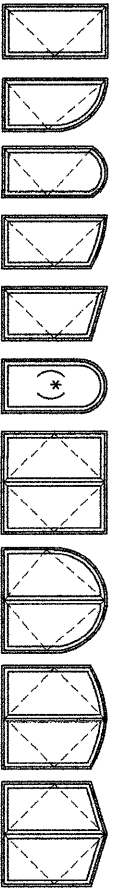
PANEL VIEW WITH HORIZONTAL

SCALE: 1/2" = 1'-0"

PANEL NOTES:

1. USE OF MID-RAILS MAY APPLY TO ALL SINGLE & DOUBLE OPERABLE DOORS & SINGLE FIXED PANEL DOORS, REGARDLESS OF SHAPE.
2. MID-RAILS MAY BE HORIZONTAL ONLY.
3. THERE IS NO LIMIT TO THE NUMBER OF MID-RAILS THAT CAN BE PLACED IN ANY DOOR PANEL.
4. MID-RAILS MAY ALSO BE REFERENCED AS "MUNTINS".

APPROVED SHAPES



EXTERIOR ELEVATION:
SINGLE QUARTER ROUND TOP

001-SWING DOOR
SCALE: 1/2" = 1'-0"

“FRAME ANCHOR REQUIREMENTS TABLE” ON SHEET 1 FOR REQUIREMENTS.

SINGLE QUARTER ROUND TOP

OUT-SWING DOOR

SCALE: $1/2" = 1'-0"$

(TYP. AT SILL)

NOTE: ANCHORING OF TRIANGULAR TOP DOOR IS SAME AS SHOWN WITH THIS EYEBROW TYPE DOOR.

SINGLE DOOR LOCK NOTE: IF DESIRED, HOPES MAY REPLACE THE TOP &/OR BOTTOM SHOOT BOLTS IN LOCK SYSTEM ITEM 62 WITH SURFACE BOLTS ITEM 65.

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.
3. THE SHAPE(S) LABELLED (*) ARE ONLY APPLICABLE TO FIXED PANEL DOORS (NOT APPLICABLE TO OPERABLE DOORS).

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MANUFACTURER

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

DRAWING TITLE

JAMESTOWN 175 STEEL
CONSULTANTS
**W. W. SCHAEFER ENGINEERING
& CONSULTING, P.A.**

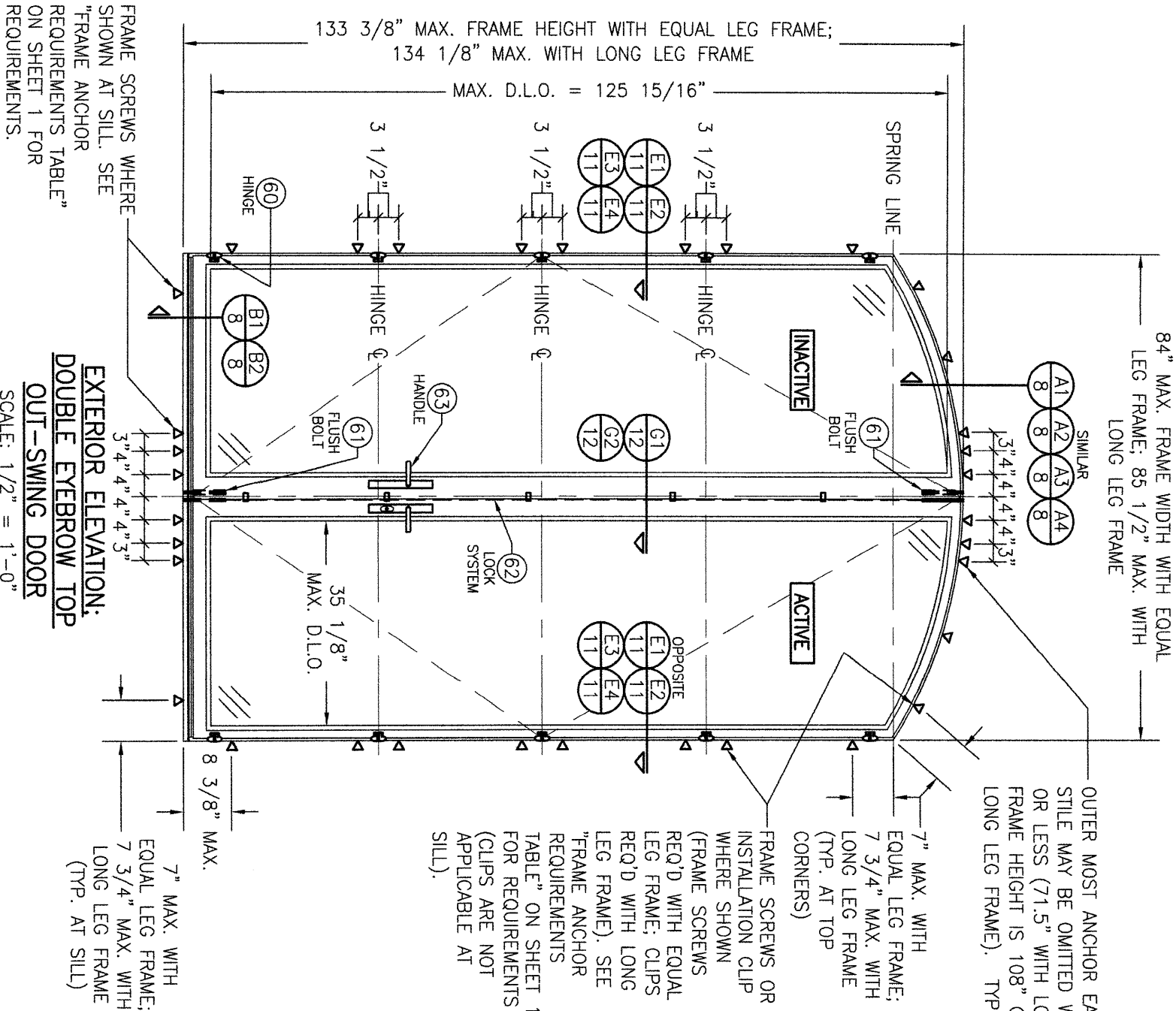
25601 AYSEN DRIVE
PUNTA GORDA, FL 33983
PHONE: 561-744-3424

CERTIFICATION

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

DRAWING NO.	REV.
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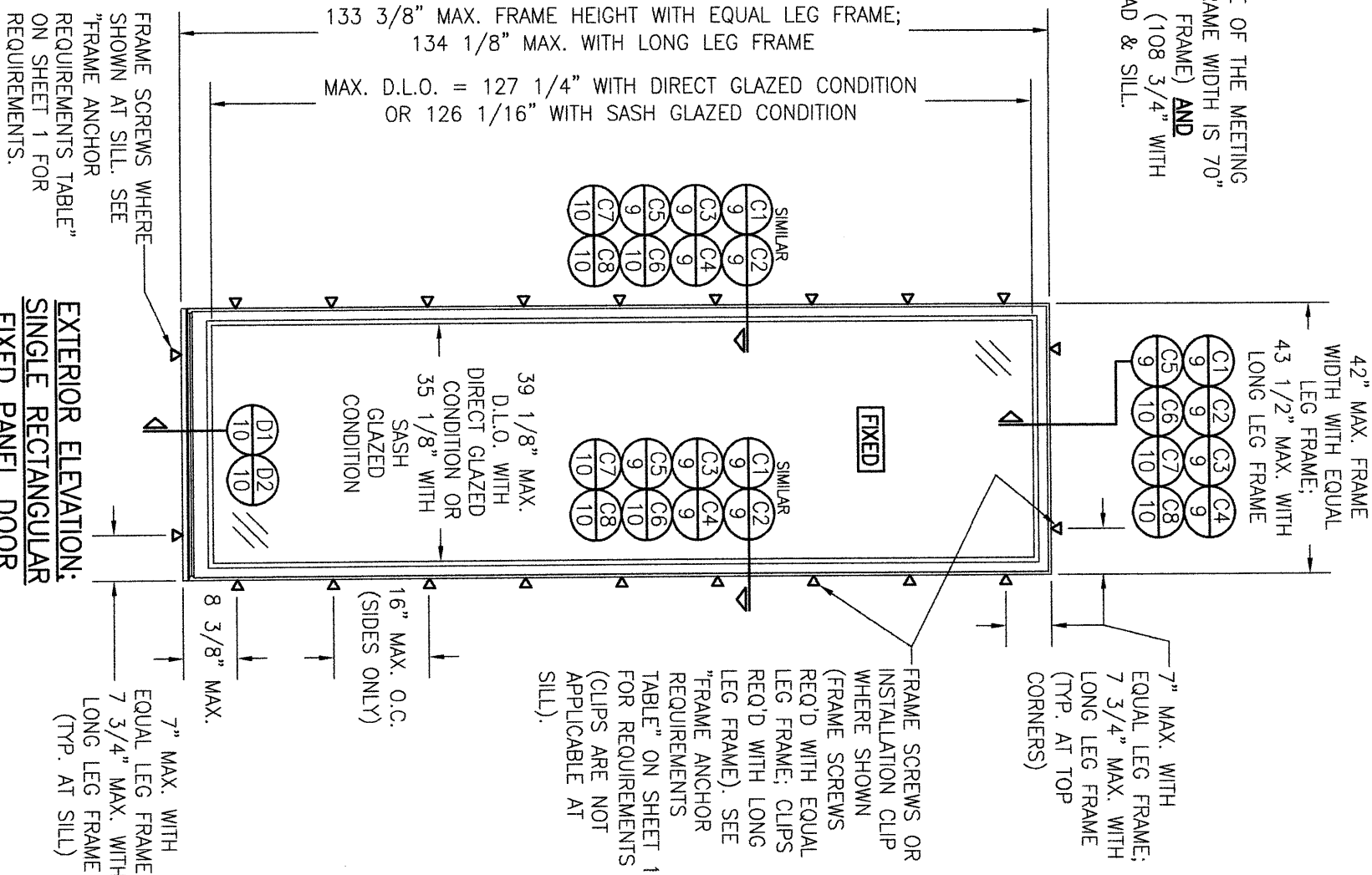
SHEET NO. 2 OF 18



NOTE: ANCHORING OF TRIANGULAR TOP DOOR IS SAME AS SHOWN WITH THIS EYEBROW TYPE DOOR.

DOUBLE DOOR LOCK NOTES:

- 1. WHEN DOUBLE DOOR FRAME HEIGHT IS 102 11/16" OR LESS, HOPES MAY REPLACE THE FLUSH BOLT ITEM 61 AND THE TOP &/OR BOTTOM SHOOT BOLTS OF LOCK SYSTEM ITEM 62 WITH SURFACE BOLTS ITEM 65.



SCALE: 1/2" = 1'-0"

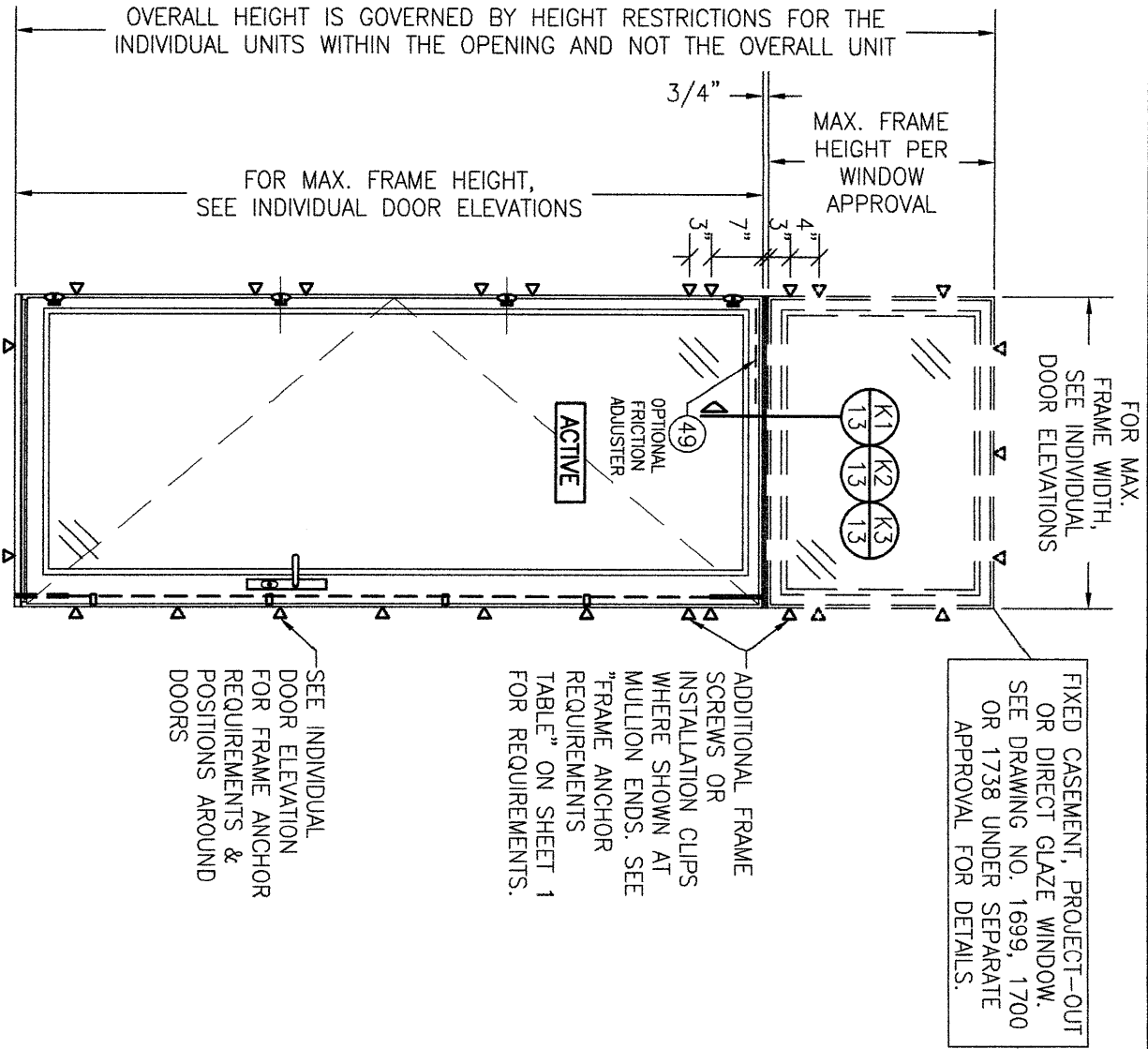
EXTERIOR ELEVATION:
SINGLE RECTANGULAR
FIXED PANEL DOOR

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

DRAWING TITLE
JAMESTOWN 175 STEEL SERIES IMPACT OUT-SWING DOORS
CONSULTANTS
W. W. SCHAEFER ENGINEERING
& CONSULTING, P.A.
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MANUFACTURER
HOPE'S WINDOWS, INC.
84 HOPKINS AVENUE
JAMESTOWN, NY 14702
(716) 665-5124

NO.	REVISION	DESCRIPTION	BY	DATE

DRAWN BY: W.R.M.	CHECKED BY: W.M.S.
PLOT: 1=24	DATE: 02/14/11

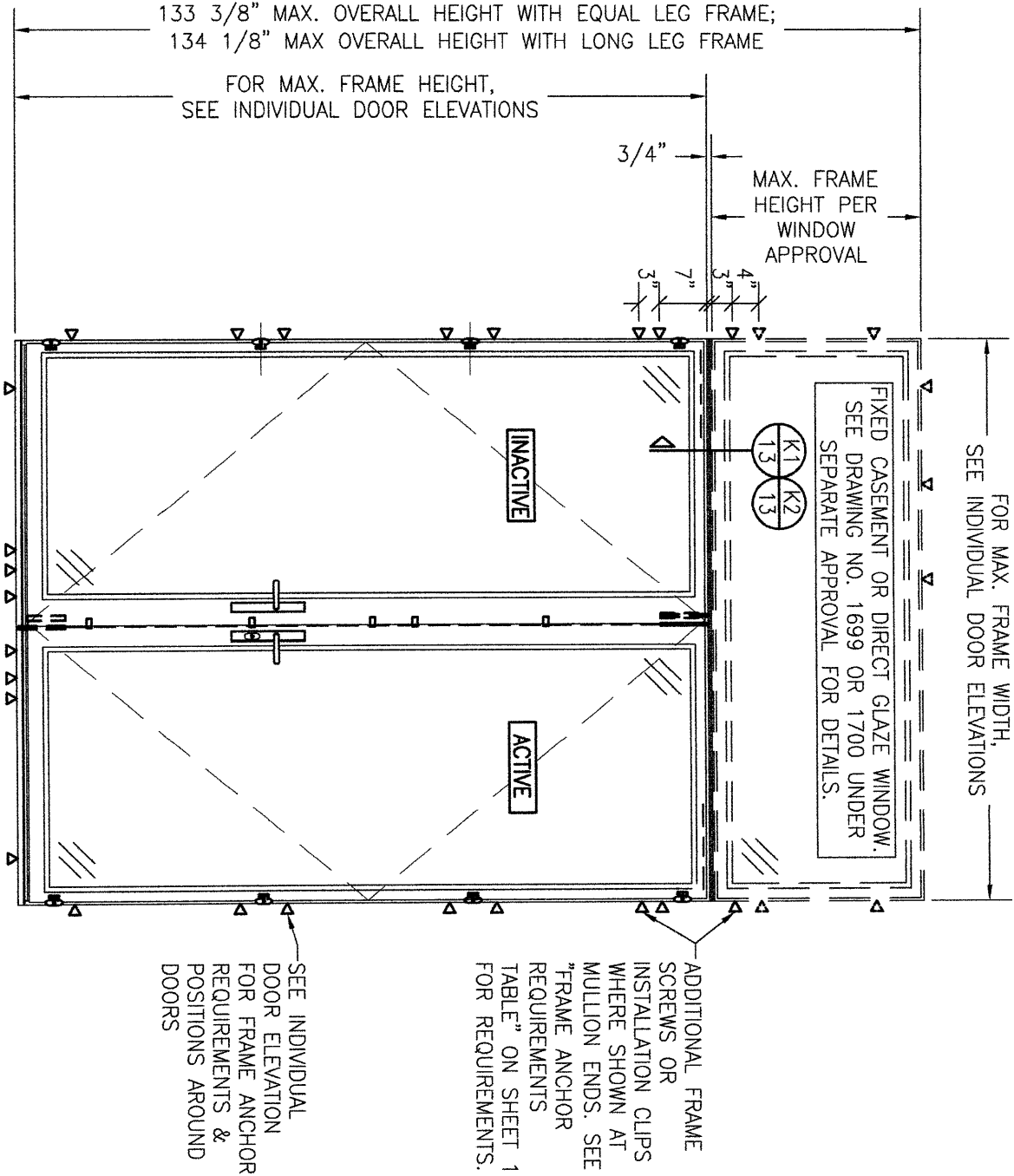


**EXTERIOR ELEVATION:
SINGLE DOOR MULLIED TO TRANSOM**

SCALE: 1/2" = 1'-0"

(SEE SINGLE RECTANGULAR DOOR ELEVATIONS ON SHEETS 1 & 4
FOR DOOR DETAIL NOT SHOWN)

(SWING DOOR CONDITION SHOWN. FIXED PANEL DOOR WITH TRANSOM
ALSO APPLIES)



**EXTERIOR ELEVATION:
DOUBLE RECTANGULAR OUT-SWING DOOR WITH TRANSOM**

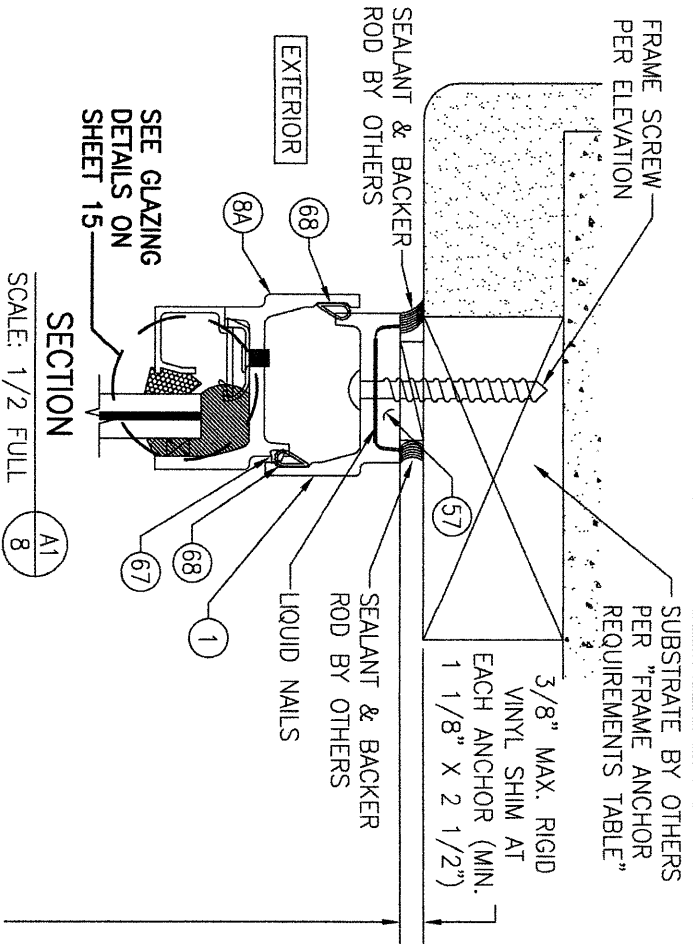
SCALE: 1/2" = 1'-0"

NOTE: THIS DOUBLE DOOR WITH TRANSOM UNIT IS NOT APPROVED FOR WATER INFILTRATION RESISTANCE WHEN JOB REQUIRED POSITIVE DESIGN PRESSURE IS GREATER THAN +55 PSF. WHEN REQUIRED POSITIVE DESIGN PRESSURE IS GREATER THAN +55 PSF, UNIT SHALL BE EITHER INSTALLED IN A NON-HABITABLE AREA WHERE THE UNIT & THE AREA ARE DESIGNED TO ACCEPT WATER INFILTRATION OR IN A LOCATION PROTECTED BY A CANOPY OR OVERHANG WHERE-BY THE OVERHANG(OH) RATIO IS EQUAL TO OR MORE THAN 1.0.

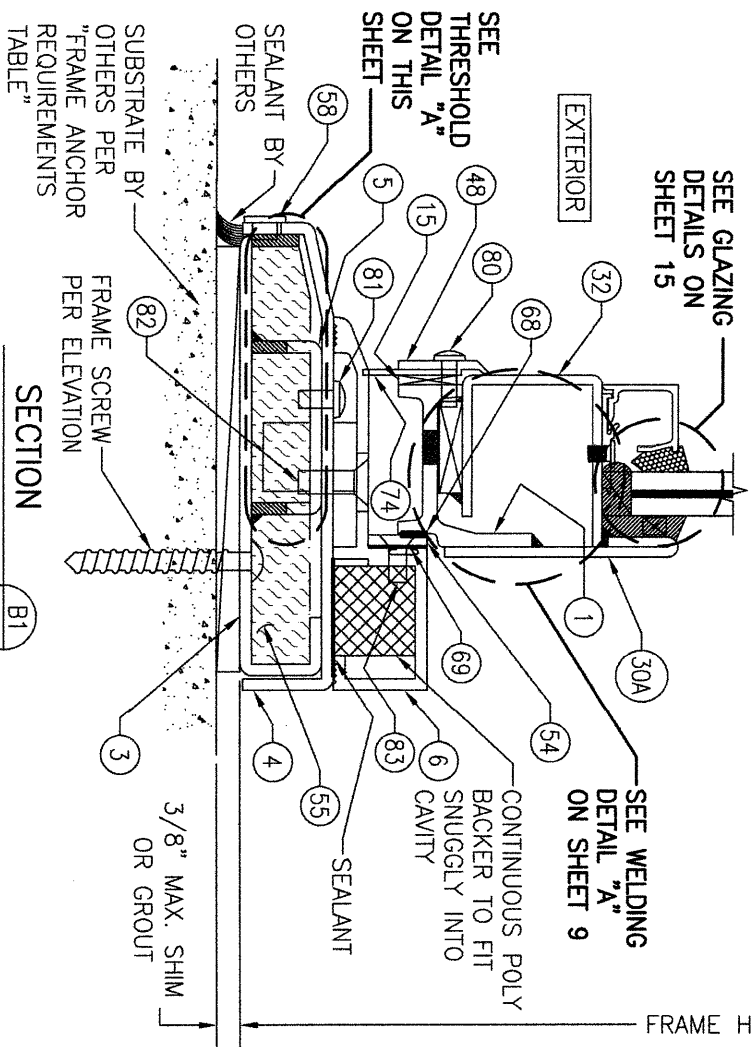
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						1-24	W.R.M.	W.M.S.

DRAWING TITLE	
JAMESTOWN 175 STEEL SERIES IMPACT OUT-SWING DOORS	
CONSULTANTS	MANUFACTURER
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 25601 AYSEN DRIVE PUNTA GORDA, FL 33983 PHONE: 561-744-3424	HOPE'S WINDOWS, INC. 84 HOPKINS AVENUE JAMESTOWN, NY 14702 (716) 665-5124

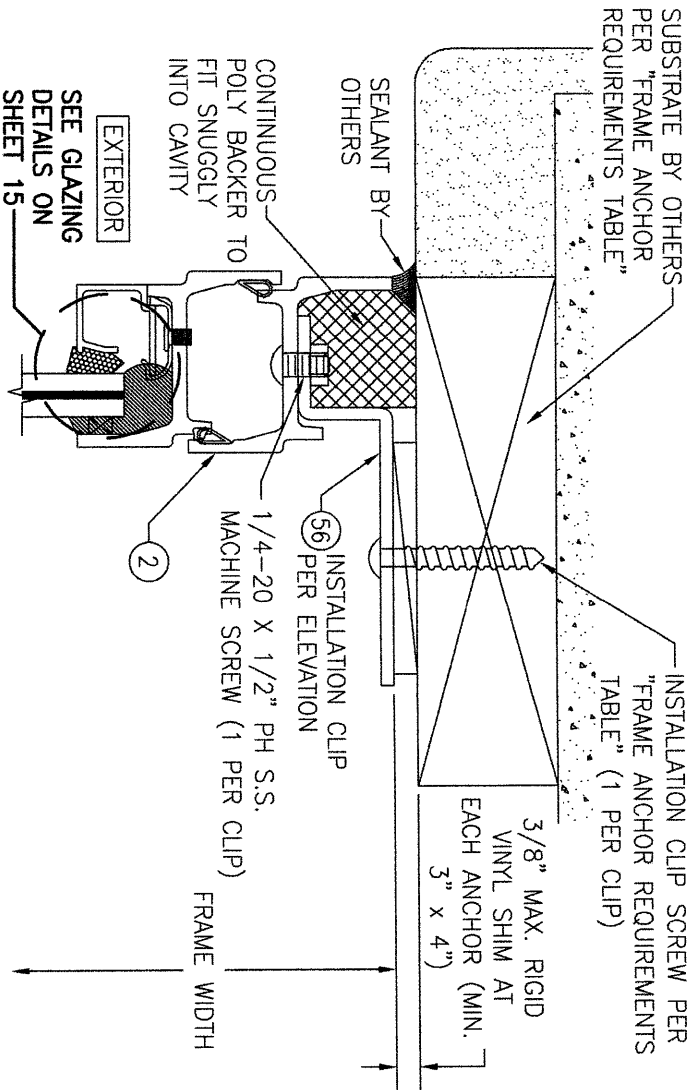
CERTIFICATION	
WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. 1739 SHEET NO. 7 OF 18	REV. H



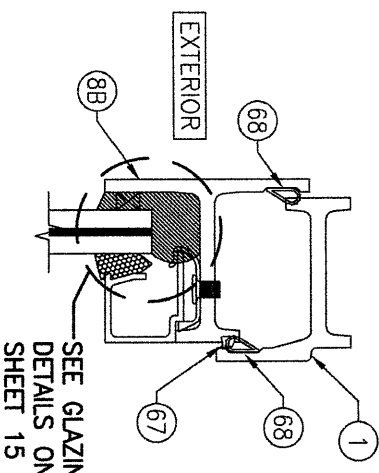
EQUAL LEG FRAME; EXTERIOR GLAZED CONDITION



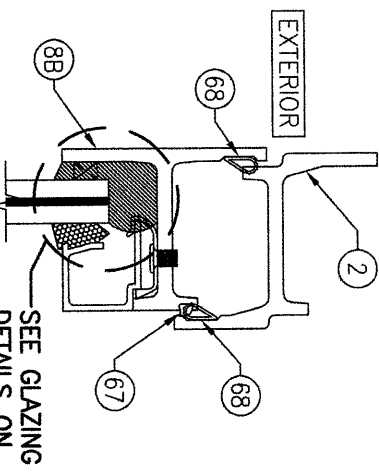
EXTERIOR GLAZED CONDITION



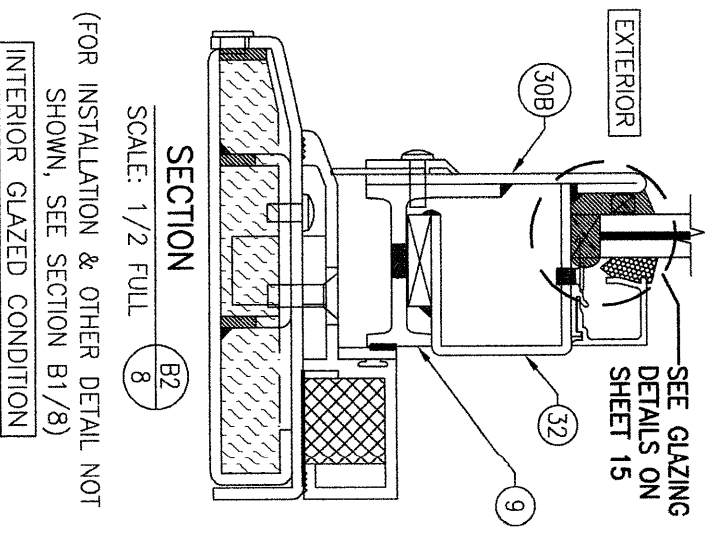
LONG LEG FRAME; EXTERIOR GLAZED CONDITION



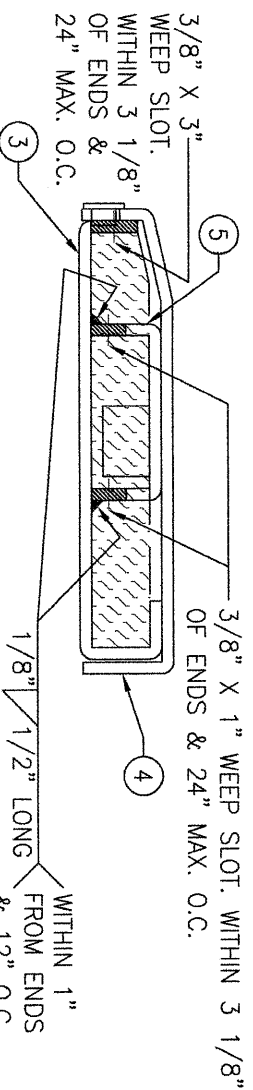
SECTION A3
SCALE: 1/2 FULL
(FOR INSTALLATION & OTHER DETAIL NOT SHOWN, SEE SECTION A1/8)
EQUAL LEG FRAME; INTERIOR GLAZED CONDITION



SECTION A4
SCALE: 1/2 FULL
(FOR INSTALLATION & OTHER DETAIL NOT SHOWN, SEE SECTION A2/8)
LONG LEG FRAME; INTERIOR GLAZED CONDITION



SECTION B2
SCALE: 1/2 FULL
(FOR INSTALLATION & OTHER DETAIL NOT SHOWN, SEE SECTION B1/8)
INTERIOR GLAZED CONDITION

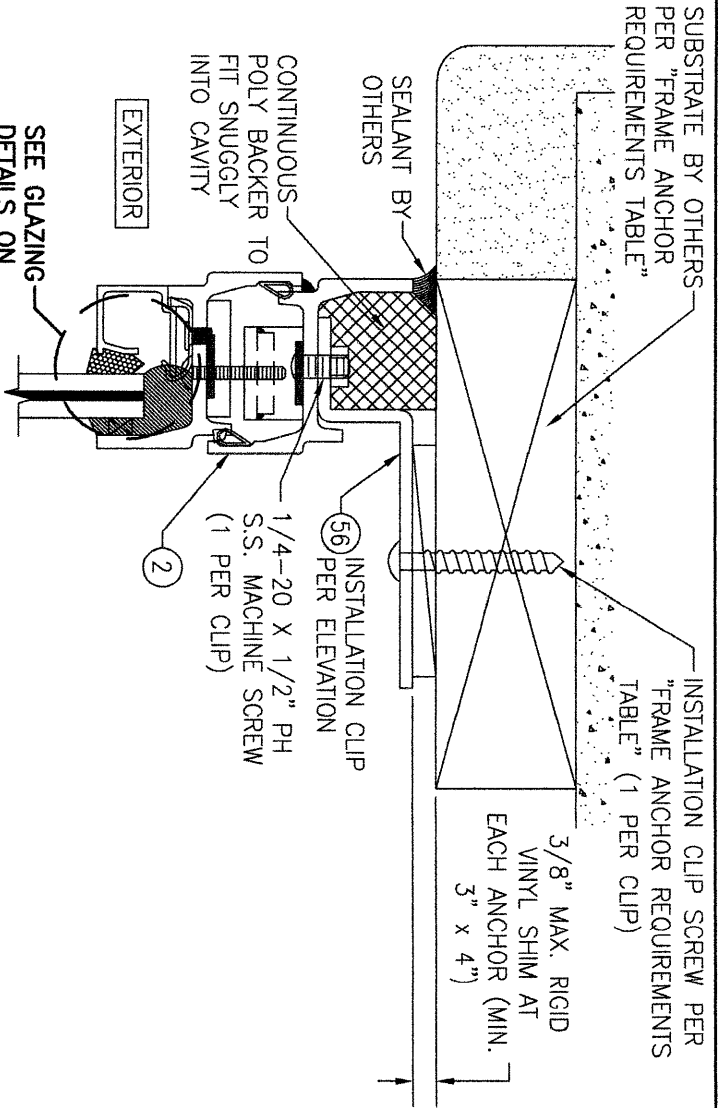


THRESHOLD DETAIL "A"

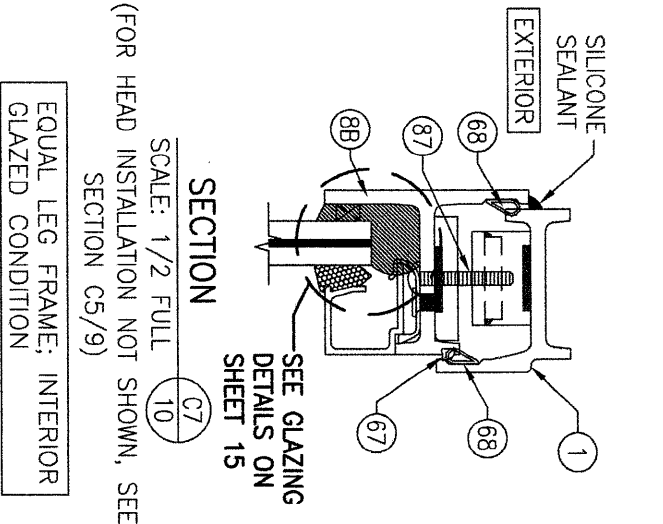
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1-2				

DRAWING TITLE		MANUFACTURER	
JAMESTOWN 175 STEEL SERIES IMPACT OUT-SWING DOORS		HOPE'S WINDOWS, INC. 84 HOPKINS AVENUE JAMESTOWN, NY 14702 (716) 665-5124	
CONSULTANTS			
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 25601 AYSEN DRIVE PUNTA GORDA, FL 33983 PHONE: 561-744-3424			

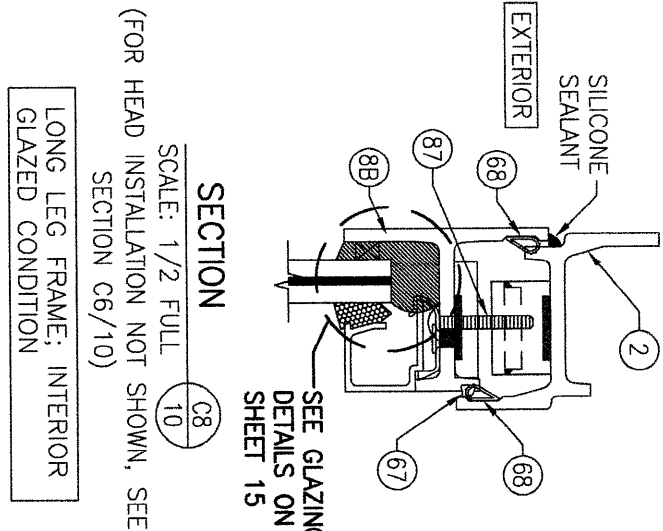
CERTIFICATION		DRAWING NO. REV.	
WARREN W. SCHAEFER, P.E. P.E. NO. 44135		1739 H	
		SHEET NO. 8 OF 18	



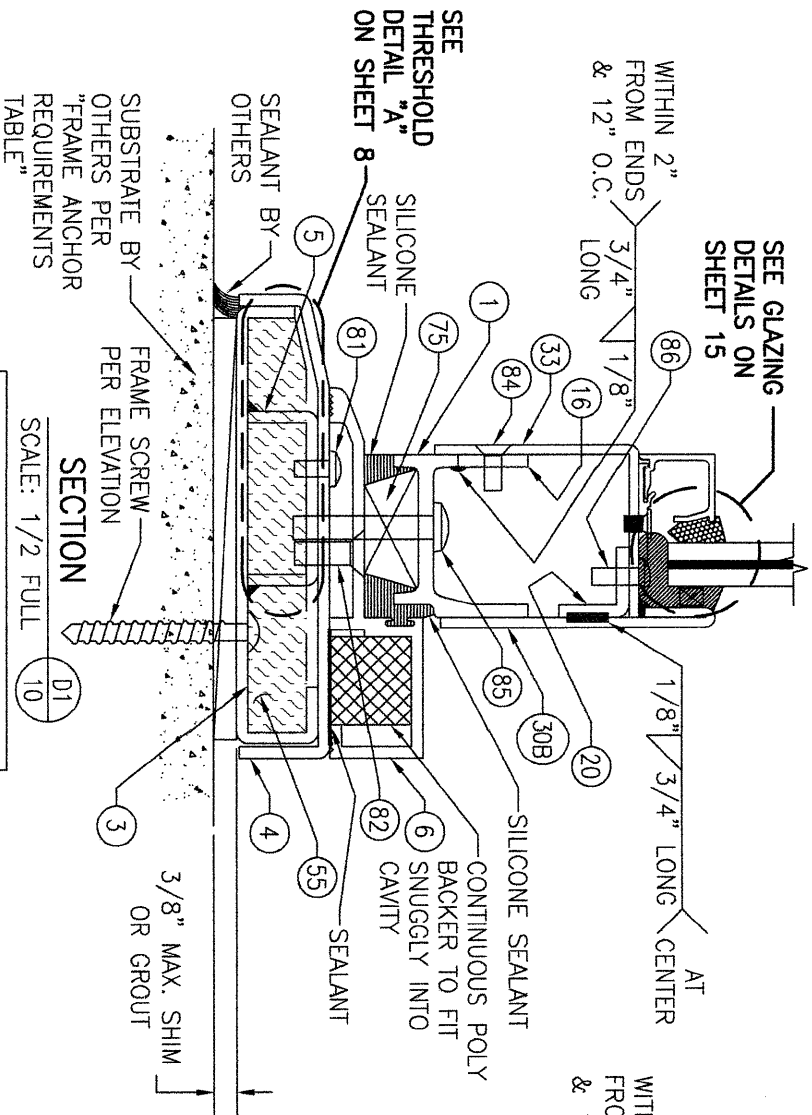
SCALE: 1/2 FULL (C6)
 (FOR HEAD DETAIL NOT SHOWN, SEE SECTION C5/12)
 LONG LEG FRAME; EXTERIOR GLAZED CONDITION



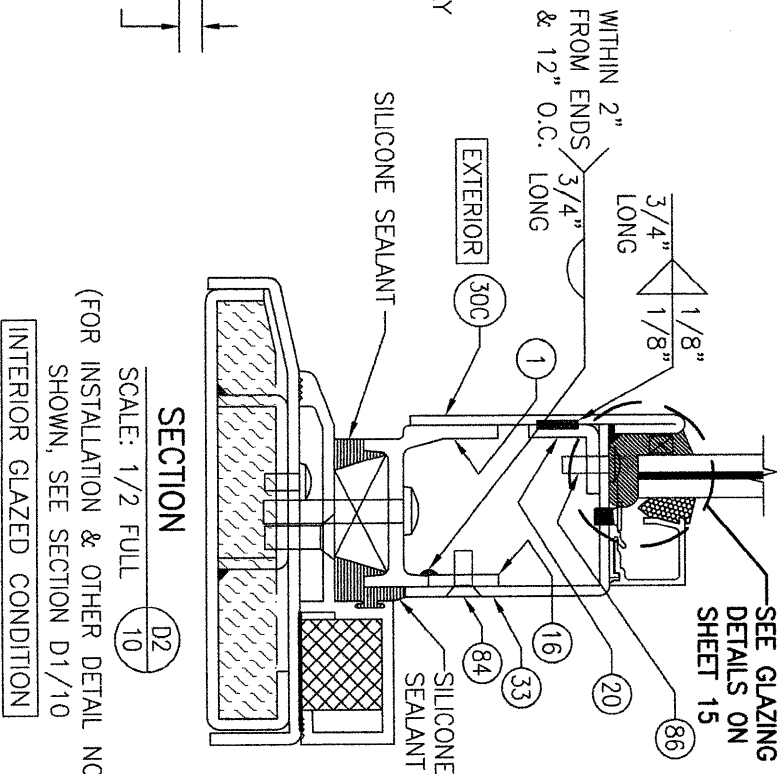
SECTION (C7)
 SCALE: 1/2 FULL (10)
 (FOR HEAD INSTALLATION NOT SHOWN, SEE SECTION C5/9)
 EQUAL LEG FRAME; INTERIOR GLAZED CONDITION



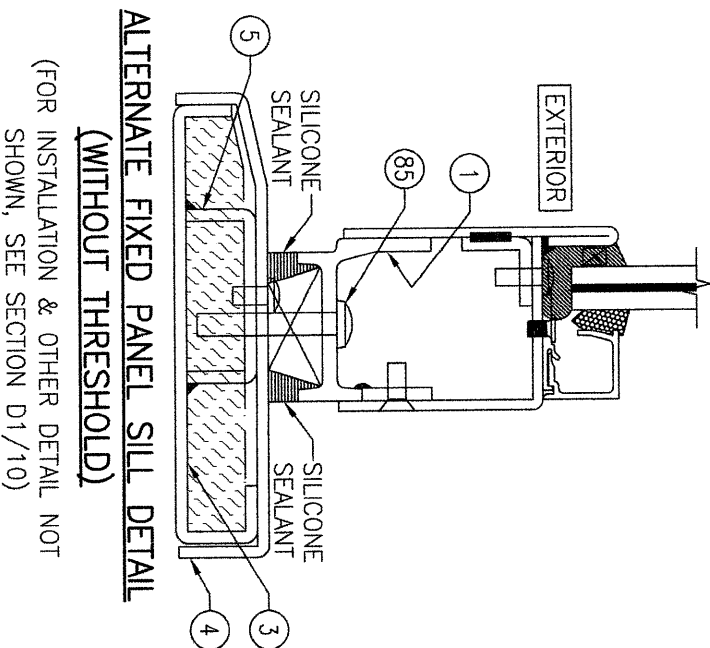
SECTION (C8)
 SCALE: 1/2 FULL (10)
 (FOR HEAD INSTALLATION NOT SHOWN, SEE SECTION C6/10)
 LONG LEG FRAME; INTERIOR GLAZED CONDITION



SCALE: 1/2 FULL (D1)
 SECTION
 EXTERIOR GLAZED CONDITION



SECTION (D2)
 SCALE: 1/2 FULL (10)
 (FOR INSTALLATION & OTHER DETAIL NOT SHOWN, SEE SECTION D1/10)
 INTERIOR GLAZED CONDITION



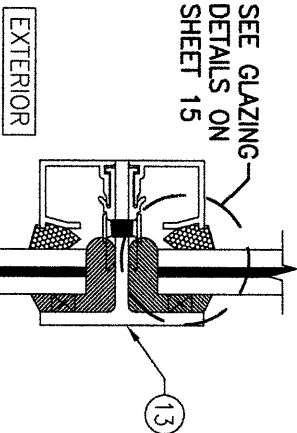
SECTION (D3)
 SCALE: 1/2 FULL (10)
 (FOR INSTALLATION & OTHER DETAIL NOT SHOWN, SEE SECTION D1/10)
 ALTERNATE FIXED PANEL SILL DETAIL (WITHOUT THRESHOLD)

NO.	REVISION	DESCRIPTION	BY	DATE
1	2			

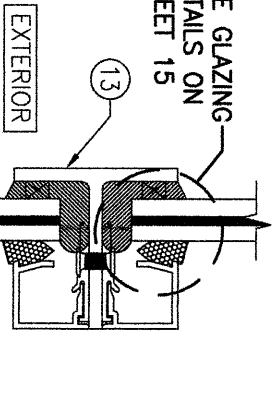
DRAWING TITLE	CONSULTANTS	MANUFACTURER
JAMESTOWN 175 STEEL SERIES IMPACT OUT-SWING DOORS	W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.	HOPE'S WINDOWS, INC.
	25601 AYSEN DRIVE PUNTA GORDA, FL 33983 PHONE: 561-744-3424	84 HOPKINS AVENUE JAMESTOWN, NY 14702 (716) 665-5124

CERTIFICATION	DRAWING NO.	REV.	SHEET NO.
WARREN W. SCHAEFER, P.E. P.E. NO. 44135	1739	H	10 OF 18

SEE GLAZING
DETAILS ON
SHEET 15



SEE GLAZING
DETAILS ON
SHEET 15



SECTION

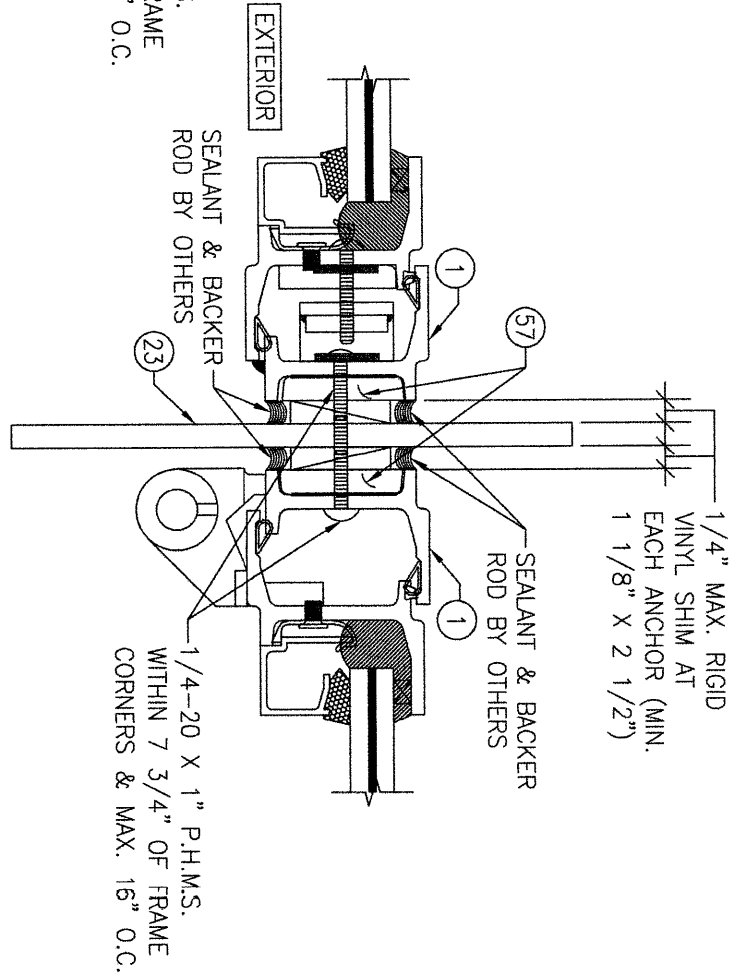
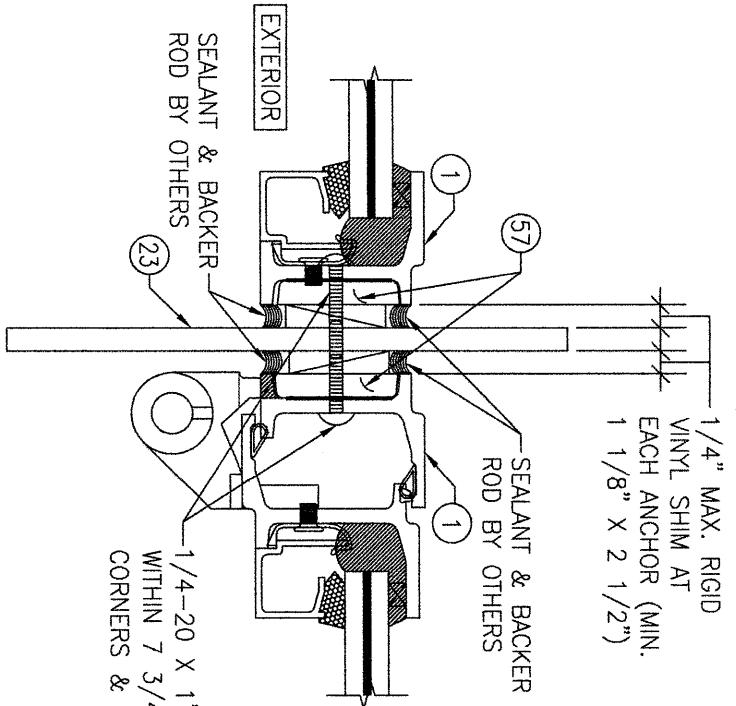
SCALE: 1/2 FULL (H1) 13

EXTERIOR GLAZED CONDITION

SECTION

SCALE: 1/2 FULL (H2) 13

INTERIOR GLAZED CONDITION



SECTION

SCALE: 1/2 FULL (J1) 13

(EXTERIOR GLAZED CONDITION SHOWN.
INTERIOR GLAZED CONDITION ALSO APPLIES.)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

SECTION

SCALE: 1/2 FULL (J2) 13

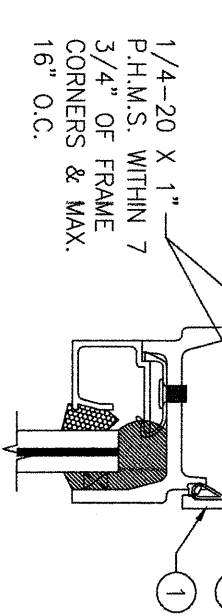
(EXTERIOR GLAZED CONDITION SHOWN.
INTERIOR GLAZED CONDITION ALSO APPLIES.)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

DIRECT GLAZED
WINDOW UNDER
SEPARATE APPROVAL

EXTERIOR

SEALANT & BACKER
ROD BY OTHERS

1/4-20 X 1"
P.H.M.S. WITHIN 7
3/4" OF FRAME
CORNERS & MAX.
16" O.C.



SECTION

SCALE: 1/2 FULL (K1) 13

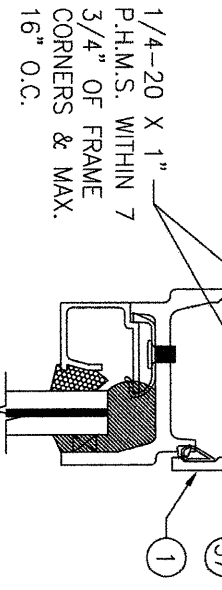
(EXTERIOR GLAZED CONDITION SHOWN.
INTERIOR GLAZED CONDITION ALSO APPLIES.)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

FIXED CASEMENT
WINDOW UNDER
SEPARATE
APPROVAL

EXTERIOR

SEALANT &
BACKER ROD
BY OTHERS

1/4-20 X 1"
P.H.M.S. WITHIN 7
3/4" OF FRAME
CORNERS & MAX.
16" O.C.



SECTION

SCALE: 1/2 FULL (K2) 13

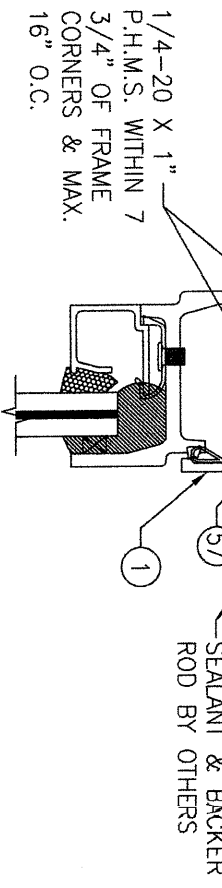
(EXTERIOR GLAZED CONDITION SHOWN.
INTERIOR GLAZED CONDITION ALSO APPLIES.)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

PROJECT-OUT
WINDOW UNDER
SEPARATE
APPROVAL

EXTERIOR

SEALANT &
BACKER ROD
BY OTHERS

1/4-20 X 1"
P.H.M.S. WITHIN 7
3/4" OF FRAME
CORNERS & MAX.
16" O.C.



SECTION

SCALE: 1/2 FULL (K3) 13

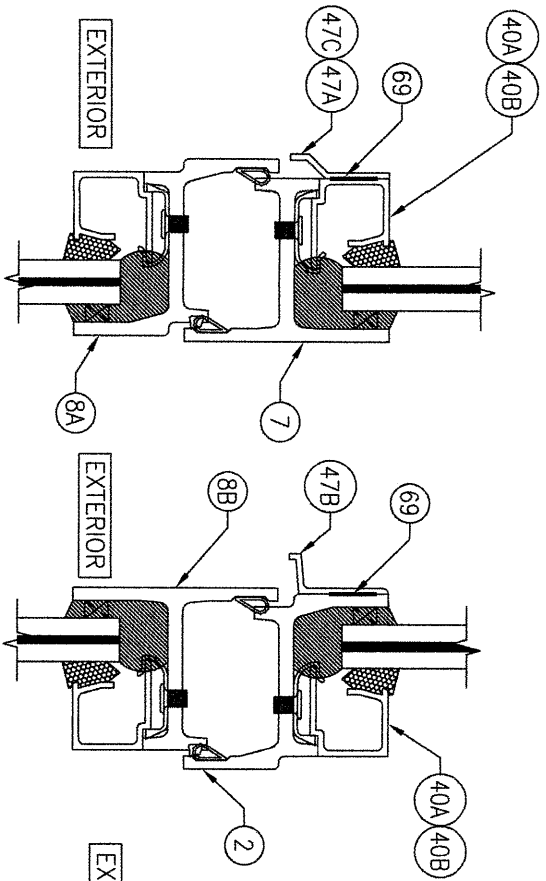
(EXTERIOR GLAZED CONDITION SHOWN.
INTERIOR GLAZED CONDITION ALSO APPLIES.)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

NO.	REVISION	DESCRIPTION	BY	DATE

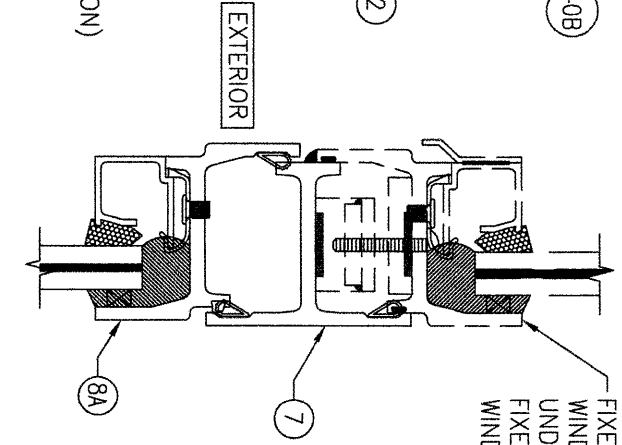
DRAWING TITLE		CONSULTANTS		MANUFACTURER	
JAMESTOWN 175 STEEL SERIES IMPACT OUT-SWING DOORS		W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.		HOPE'S WINDOWS, INC.	
		25601 AYSEN DRIVE PUNTA GORDA, FL 33983 PHONE: 561-744-3424		84 HOPKINS AVENUE JAMESTOWN, NY 14702 (716) 665-5124	

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

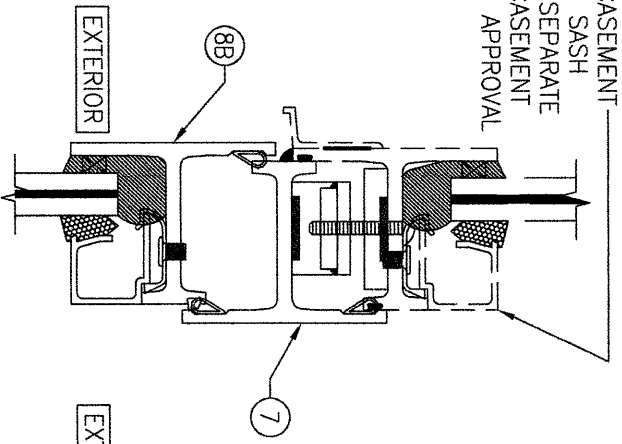
DRAWING NO.	REV.
1739	H
SHEET NO.	13 OF 18



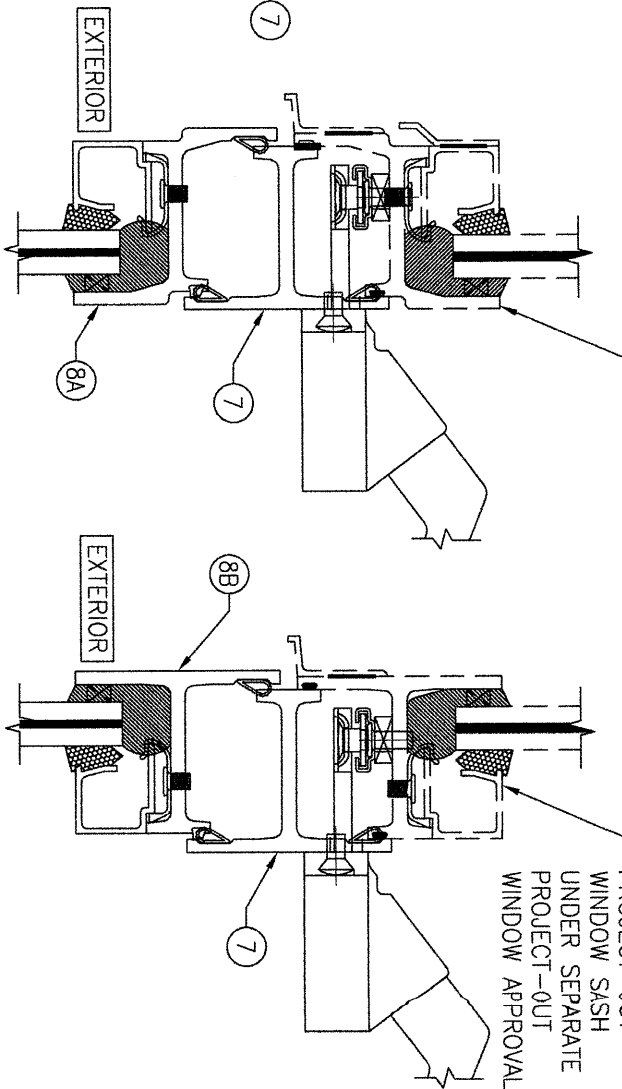
(EXTERIOR GLAZED CONDITION) (INTERIOR GLAZED CONDITION)
SECTION L1
SCALE: 1/2 FULL 14
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



(EXTERIOR GLAZED CONDITION) (INTERIOR GLAZED CONDITION)
SECTION L2
SCALE: 1/2 FULL 14
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



(EXTERIOR GLAZED CONDITION) (INTERIOR GLAZED CONDITION)
SECTION L3
SCALE: 1/2 FULL 14
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



CONTINUOUS WOOD MEMBER LESS IN THICKNESS THAN A 2X BUCK TO BE MIN. 3 1/2" DEEP AT HEAD & SIDES OR MIN. 4 3/4" AT SILL (NOT REQUIRED WHEN SHIM SPACE IS WITHIN ALLOWABLE DIMENSIONS)

SEALANT BY OTHERS

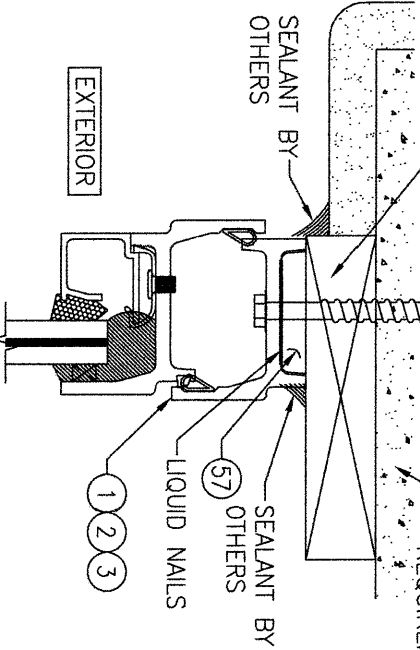
SEALANT BY OTHERS

LIQUID NAILS

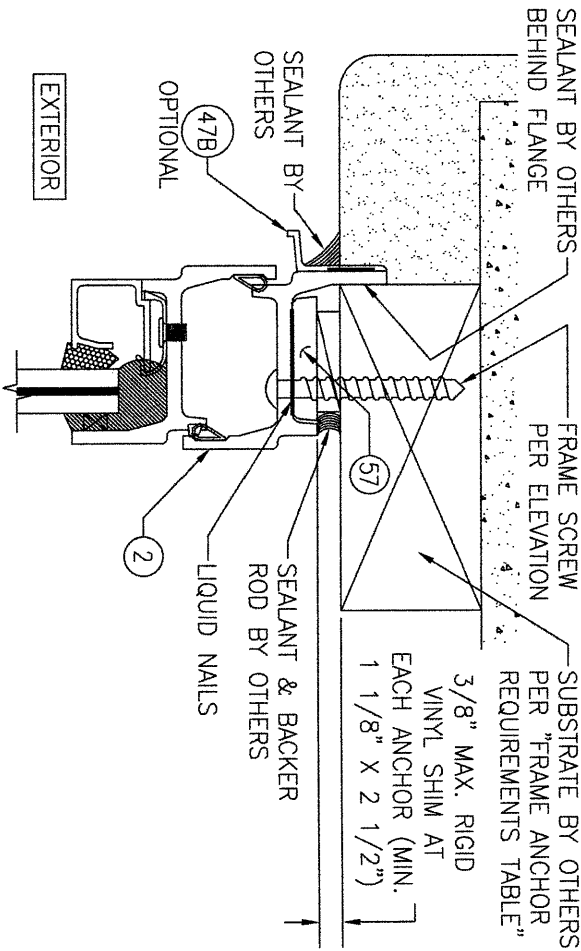
1 2 3

FRAME SCREW PER ELEVATION & "FRAME ANCHOR" REQUIREMENTS TABLE

SUBSTRATE BY OTHERS PER "FRAME ANCHOR" REQUIREMENTS TABLE



OPTIONAL DIRECT MOUNT DETAIL TO SUBSTRATE WITH SPACER
(HEAD SECTION SHOWN. SIDES ARE INSTALLED THE SAME. SILL IS INSTALLED SIMILAR.)
(EXTERIOR GLAZED CONDITION SHOWN. INTERIOR GLAZED CONDITION ALSO APPLIES.)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

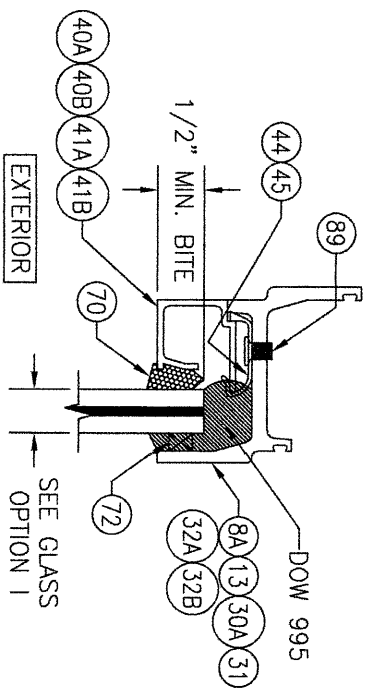


OPTIONAL FLANGE MOUNT DETAIL
(HEAD SECTION SHOWN; SIDES ARE INSTALLED THE SAME)
(EXTERIOR GLAZED CONDITION SHOWN. INTERIOR GLAZED CONDITION ALSO APPLIES.)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

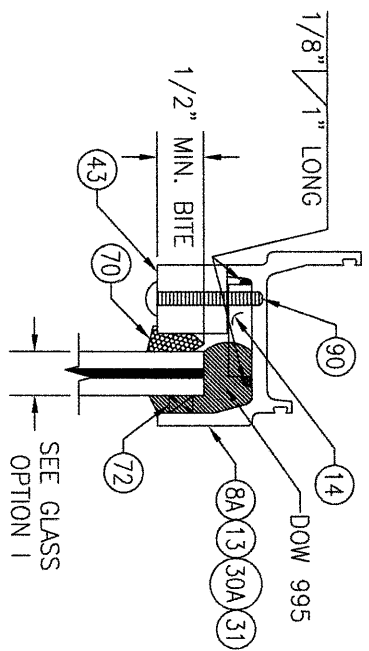
NO.	REVISION	DESCRIPTION	BY	DATE
1	2			

DRAWING TITLE		CONSULTANTS	MANUFACTURER
JAMESTOWN 175 STEEL SERIES IMPACT OUT-SWING DOORS		W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 25601 AYSSEN DRIVE PUNTA GORDA, FL 33983 PHONE: 561-744-3424	HOPE'S WINDOWS, INC. 84 HOPKINS AVENUE JAMESTOWN, NY 14702 (716) 665-5124

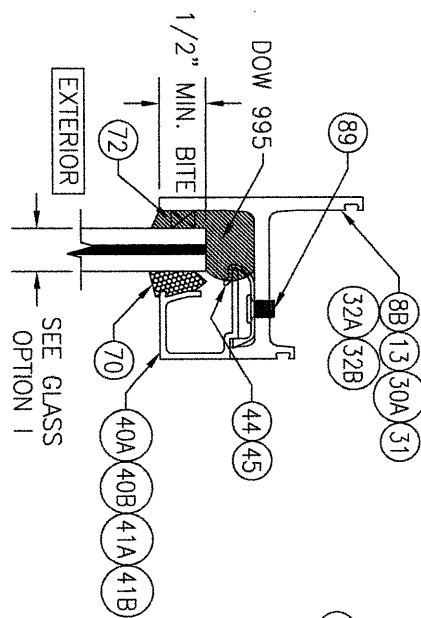
CERTIFICATION		DRAWING NO.	REV.
WARREN W. SCHAEFER, P.E. P.E. NO. 44135		1739	H
SHEET NO.		14	OF 18



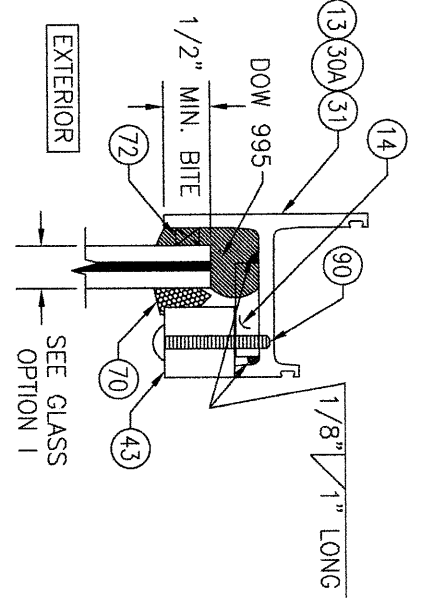
GLAZING DETAIL 1
(RECTANGULAR DOOR, EXTERIOR
GLAZED WITH MONOLITHIC GLASS)



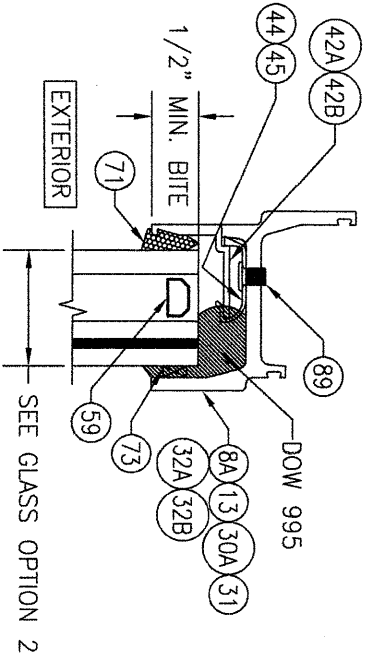
GLAZING DETAIL 2
(RADIUS DOOR, EXTERIOR GLAZED
WITH MONOLITHIC GLASS)



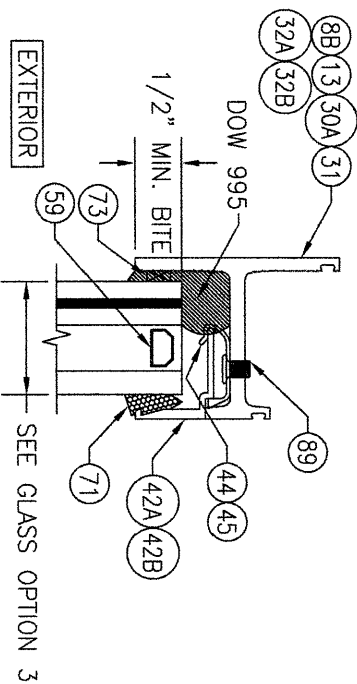
GLAZING DETAIL 3
(RECTANGULAR DOOR, INTERIOR
GLAZED WITH MONOLITHIC GLASS)



GLAZING DETAIL 4
(RADIUS DOOR, INTERIOR GLAZED
WITH MONOLITHIC GLASS)



GLAZING DETAIL 5
(RECTANGULAR DOOR, EXTERIOR
GLAZED WITH I.G. GLASS)



GLAZING DETAIL 6
(RECTANGULAR DOOR, INTERIOR
GLAZED WITH I.G. GLASS)

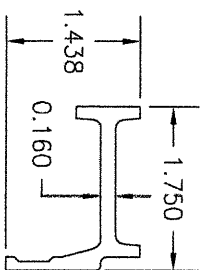
GLASS OPTIONS

- OPTION 1 (MONOLITHIC GLASS, INTERIOR OR EXTERIOR GLAZED):
7/16" LAMINATED GLASS (3/16" H.S./0.09" KURARAY SG/3/16" H.S.)
OPTION 2 (I.G. GLASS, EXTERIOR GLAZED):
1 1/4" I.G. LAMINATED GLASS (1/4" TEMP. EXTERIOR, 1/2" SPACER & 3/16" H.S./0.09" KURARAY SG/3/16" H.S. INTERIOR)
OPTION 3 (I.G. GLASS, INTERIOR GLAZED):
1 1/4" I.G. LAMINATED GLASS (3/16" H.S./0.09" KURARAY SG/3/16" H.S. EXTERIOR, 1/2" SPACER & 1/4" TEMP. INTERIOR)
NOTE: I.G. GLASS DOES NOT APPLY TO RADIUS UNITS.

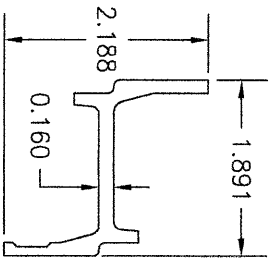
DRAWN BY:		CHECKED BY:		
W.R.M.		W.M.S.		
PLOT: 1-2		DATE: 02/14/11		
NO.	REVISION	DESCRIPTION	BY	DATE

DRAWING TITLE	
JAMESTOWN 175 STEEL SERIES IMPACT OUT-SWING DOORS	
CONSULTANTS	MANUFACTURER
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 25601 AYSEN DRIVE PUNTA GORDA, FL 33983 PHONE: 561-744-3424	HOPE'S WINDOWS, INC. 84 HOPKINS AVENUE JAMESTOWN, NY 14702 (716) 665-5124

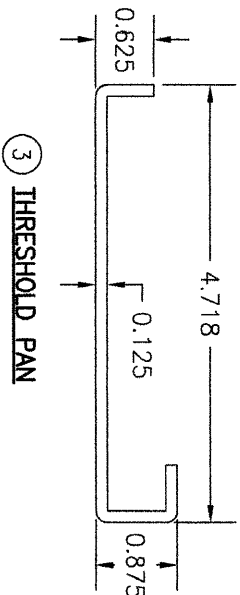
CERTIFICATION	
WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. REV.	1739 H
SHEET NO.	15 OF 18



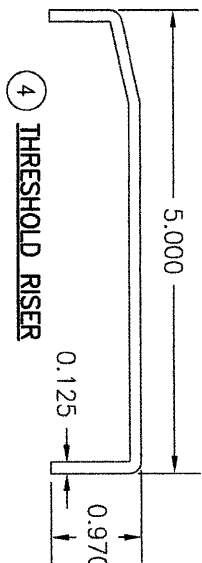
1 EQUAL LEG FRAME & BOTTOM RAIL EXTENSION (USED WITH EXTERIOR GLAZING)



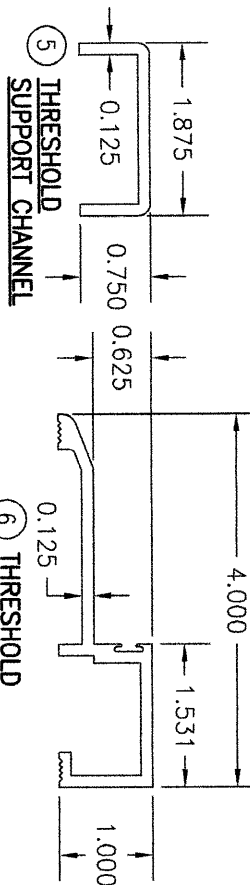
2 LONG LEG FRAME OR FIXED ASTRAGAL



3 THRESHOLD PAN

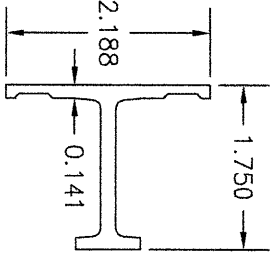


4 THRESHOLD RISER

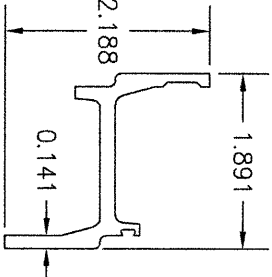


5 THRESHOLD SUPPORT CHANNEL

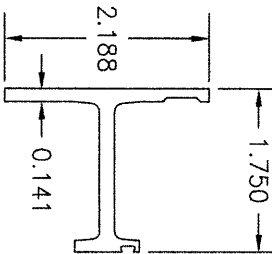
6 THRESHOLD



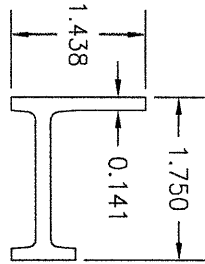
7 FIXED ASTRAGAL



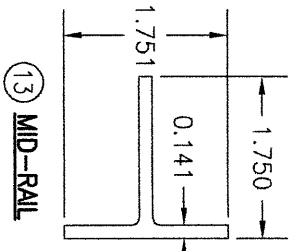
8A TOP RAIL, HINGE STYLE & LOCK STILE EXTENSION (USED WITH EXTERIOR GLAZING)



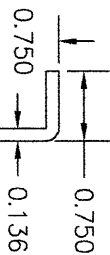
8B TOP RAIL, HINGE STYLE & LOCK STILE EXTENSION (USED WITH INTERIOR GLAZING)



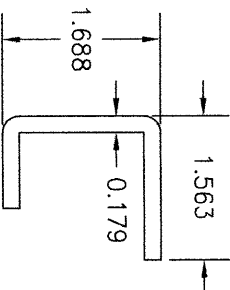
9 OPERABLE DOOR BOTTOM RAIL EXTENSION (USED WITH INTERIOR GLAZING)



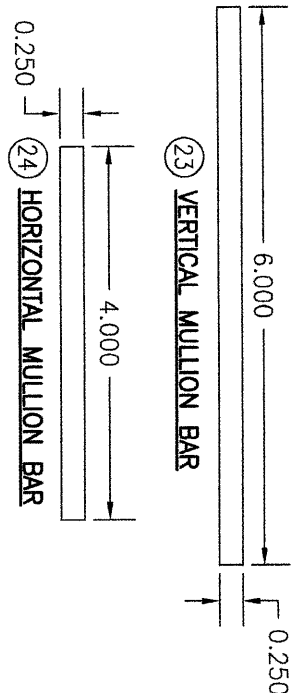
13 MID-RAIL



20 FIXED PANEL BOTTOM RAIL BRACKET

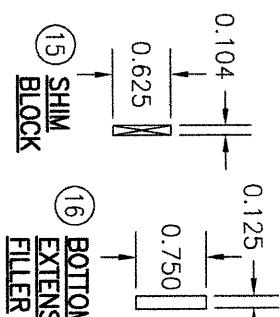


21 MEETING STILE REINFORCEMENT (LENGTH = 62 1/4")



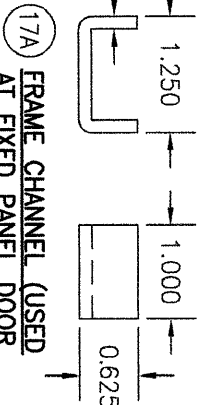
23 VERTICAL MULLION BAR

24 HORIZONTAL MULLION BAR

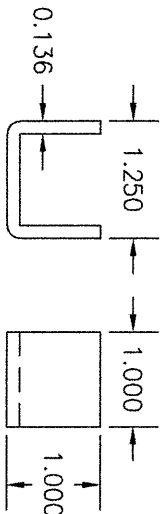


15 SHIM BLOCK

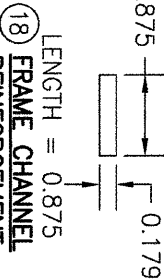
16 BOTTOM RAIL EXTENSION FILLER



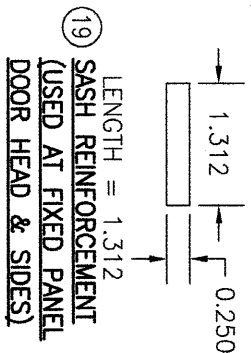
17A FRAME CHANNEL (USED AT FIXED PANEL DOOR HEAD & SIDES)



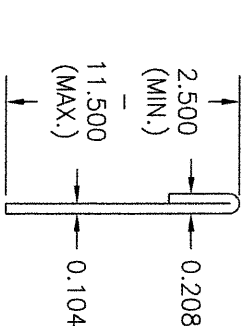
17B FRAME CHANNEL (USED AT FIXED PANEL DOOR BOTTOM)



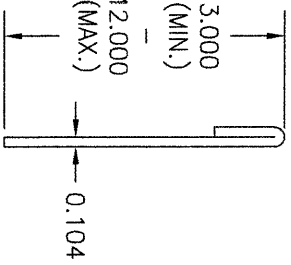
18 FRAME CHANNEL REINFORCEMENT



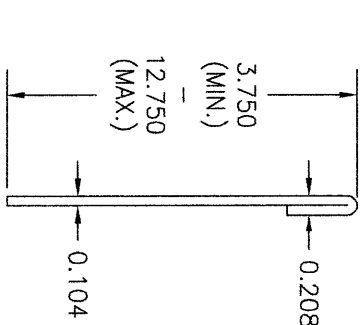
19 SASH REINFORCEMENT (USED AT FIXED PANEL DOOR HEAD & SIDES)



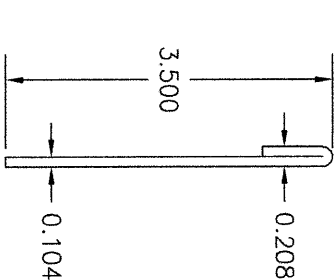
30A BOTTOM RAIL FLAT ADAPTOR (USED WITH EXTERIOR GLAZING)



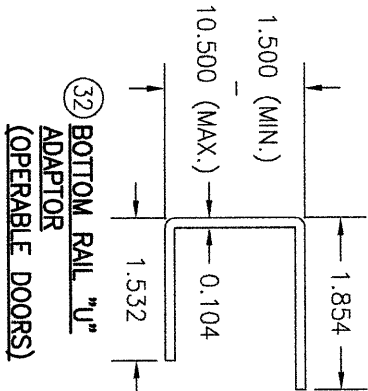
30B BOTTOM RAIL FLAT ADAPTOR (USED WITH INTERIOR GLAZING)



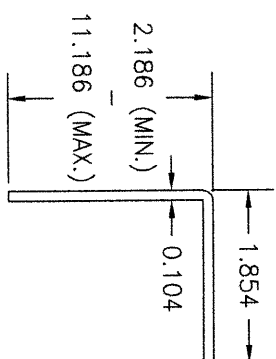
30C BOTTOM RAIL FLAT ADAPTOR (USED WITH INTERIOR GLAZING)



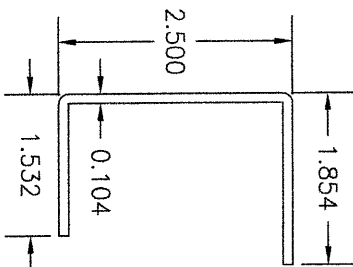
31 LOCK & MEETING STILE FLAT ADAPTOR (USED WITH LOCK OPTION 1)



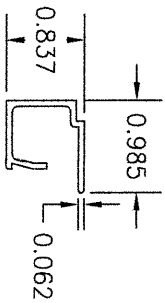
32 BOTTOM RAIL "U" ADAPTOR (OPERABLE DOORS)



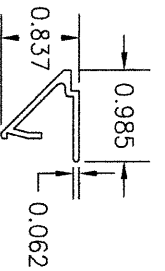
33 BOTTOM RAIL SASH ADAPTOR (FIXED PANEL DOORS)



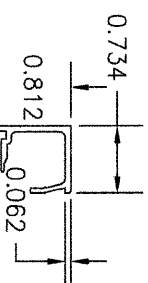
34 LOCK & MEETING STILE "U" ADAPTOR



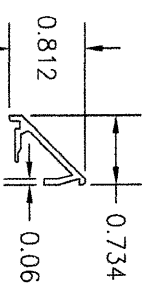
40A STANDARD MONOLITHIC GLAZING BEAD (USED WITH PART 44)



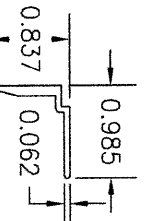
40B SLOPED MONOLITHIC GLAZING BEAD (USED WITH PART 44)



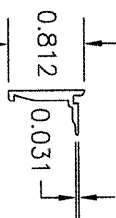
41A STANDARD MONOLITHIC GLAZING BEAD (USED WITH PART 45)



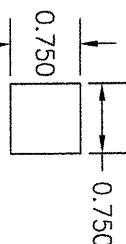
41B SLOPED MONOLITHIC GLAZING BEAD (USED WITH PART 45)



42A I.G. GLAZING BEAD (USED WITH TOP RAIL, HINGE & FIXED PANEL STILES)



42B I.G. GLAZING BEAD (USED WITH BOTTOM RAILS, MID-RAILS & LOCK/MEETING STILES)



43 MONOLITHIC GLAZING BEAD (USED WITH RADIUS SASH)

NO.	REVISION	DESCRIPTION	BY	DATE

DRAWING TITLE
JAMESTOWN 175 STEEL SERIES IMPACT OUT-SWING DOORS

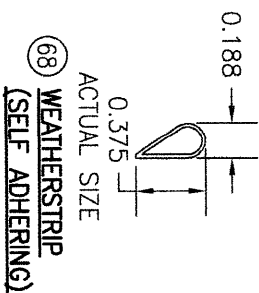
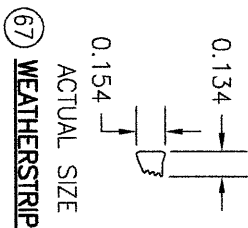
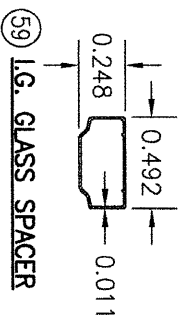
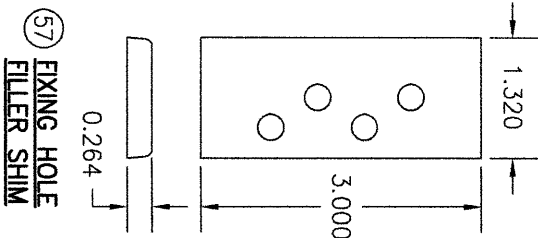
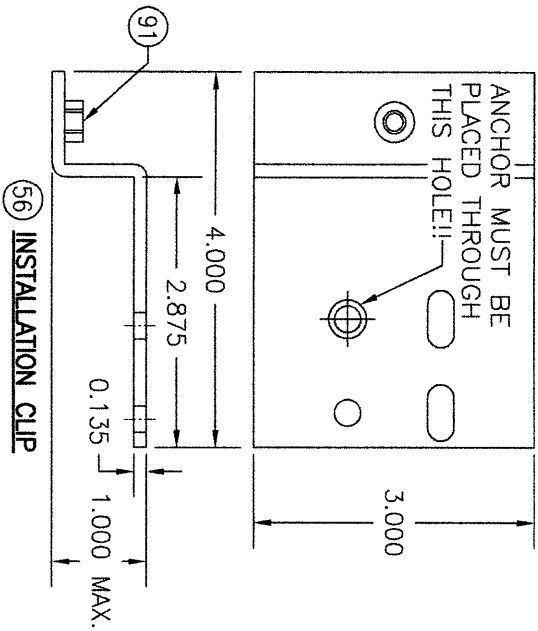
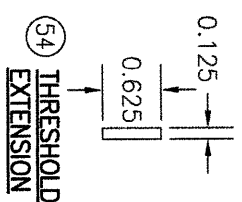
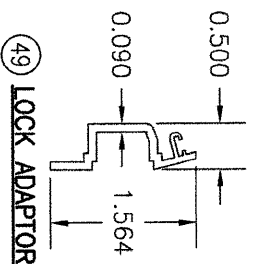
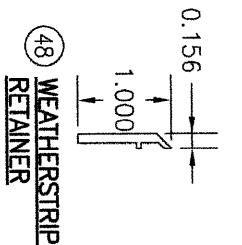
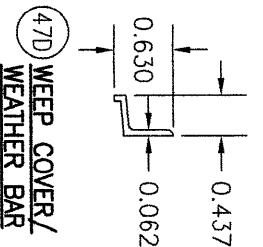
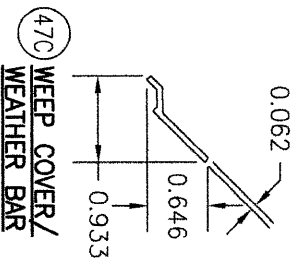
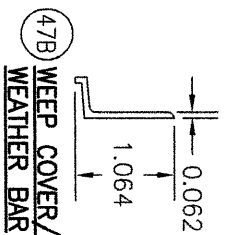
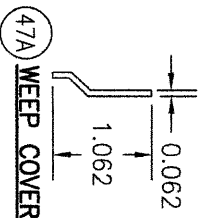
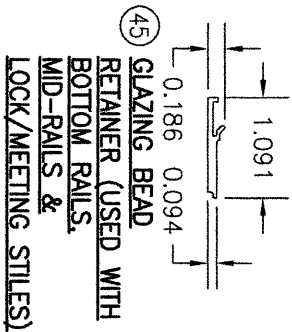
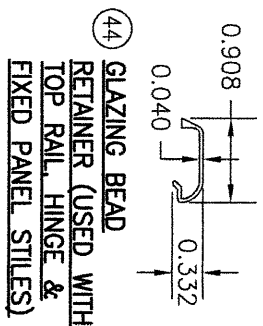
CONSULTANTS
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.
25601 AYSEN DRIVE
PUNTA GORDA, FL 33983
PHONE: 561-744-3424

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. 1739
SHEET NO. 16 OF 18



DRAWING NO. 1739 SHEET NO. 17 OF 18	CERTIFICATION WARREN W. SCHAEFER, P.E. P.E. NO. 44135	DRAWING TITLE JAMESTOWN 175 STEEL SERIES IMPACT OUT-SWING DOORS		NO.	REVISION	DESCRIPTION	BY	DATE	PLOT: 1= 2=
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ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS		
1	EQUAL LEG FRAME & BOTTOM RAIL EXTENSION (USED WITH EXTERIOR GLAZING)	A-36 STEEL
2	LONG LEG FRAME OR FIXED ASTRAGAL	A-36 STEEL
3	THRESHOLD PAN	5052-H32 ALUMINUM OR BRONZE
4	THRESHOLD RISER	5052-H32 ALUMINUM OR BRONZE
5	THRESHOLD SUPPORT CHANNEL	5052-H32 ALUMINUM OR BRONZE
6	THRESHOLD	5052-H32 ALUMINUM OR BRONZE
7	FIXED ASTRAGAL	A-36 STEEL
8A	TOP RAIL, HINGE STILE & LOCK STILE EXTENSION (USED WITH EXTERIOR GLAZING)	A-36 STEEL
8B	TOP RAIL, HINGE STILE & LOCK STILE EXTENSION (USED WITH INTERIOR GLAZING)	A-36 STEEL
9	OPERABLE DOOR BOTTOM RAIL EXTENSION (USED WITH INTERIOR GLAZING)	A-36 STEEL
13	MID-RAIL	A-36 STEEL
14	SHIM	A-36 STEEL
15	SHIM BLOCK	A-36 STEEL
16	BOTTOM RAIL EXTENSION FILLER	A-36 STEEL
17A	FRAME CHANNEL (USED AT FIXED PANEL DOOR HEAD & SIDES)	A-36 STEEL
17B	FRAME CHANNEL (USED AT FIXED PANEL BOTTOM)	A-36 STEEL
18	FRAME CHANNEL REINFORCEMENT	A-36 STEEL
19	SASH REINFORCEMENT (USED AT FIXED PANEL DOOR HEAD & SIDES)	A-36 STEEL
20	FIXED PANEL BOTTOM RAIL BRACKET (3 PER RAIL)	A-36 STEEL
21	MEETING STILE REINFORCEMENT	A-36 STEEL
23	VERTICAL MULLION BAR	A-36 STEEL
24	HORIZONTAL MULLION BAR	A-36 STEEL
30A	BOTTOM RAIL FLAT ADAPTOR (USED WITH EXTERIOR GLAZING)	409 S.S.
30B	BOTTOM RAIL FLAT ADAPTOR (USED WITH INTERIOR GLAZING)	409 S.S.
30C	BOTTOM RAIL FLAT ADAPTOR (USED WITH INTERIOR GLAZING)	409 S.S.
31	LOCK & MEETING STILE FLAT ADAPTOR	409 S.S.
32	BOTTOM RAIL "U" ADAPTOR (OPERABLE DOORS)	409 S.S.
33	BOTTOM RAIL SASH ADAPTOR (FIXED PANEL DOORS)	409 S.S.
34	LOCK & MEETING STILE "U" ADAPTOR	409 S.S.
40A	STANDARD MONOLITHIC GLAZING BEAD (USED WITH PART #44)	6063-T5 ALUMINUM
40B	SLOPED MONOLITHIC GLAZING BEAD (USED WITH PART #44)	6063-T5 ALUMINUM
41A	STANDARD MONOLITHIC GLAZING BEAD (USED WITH PART #45)	6063-T5 ALUMINUM
41B	SLOPED MONOLITHIC GLAZING BEAD (USED WITH PART #45)	6063-T5 ALUMINUM
42A	I.G. GLAZING BEAD (USED WITH TOP RAIL, HINGE & FIXED PANEL STILES)	6063-T5 ALUMINUM
42B	I.G. GLAZING BEAD (USED WITH BOTTOM RAIL, MID-RAILS & LOCK/MEETING STILES)	6063-T5 ALUMINUM
43	MONOLITHIC GLAZING BEAD (USED WITH RADIUS SASH)	6063-T5 ALUMINUM
44	GLAZING BEAD RETAINER (USED WITH TOP RAIL, HINGE & FIXED PANEL STILES)	6063-T5 ALUMINUM
45	GLAZING BEAD RETAINER (USED WITH BOTTOM RAIL, MID-RAIL & LOCK/MEETING STILES)	6063-T5 ALUMINUM
47A	WEEP COVER	6063-T5 ALUMINUM
47B	WEEP COVER/WEATHER BAR	6063-T5 ALUMINUM

ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS		
47C	WEEP COVER/WEATHER BAR	6063-T5 ALUMINUM
48	WEATHERSTRIP RETAINER	6063-T5 ALUMINUM
49	LOCK ADAPTOR	6063-T5 ALUMINUM
54	THRESHOLD EXTENSION	5052-H32 ALUMINUM OR BRONZE
55	SILL END CLOSURE	1/8" THICK ALUMINUM OR BRONZE WELDED & CAULKED
56	INSTALLATION CLIP	10 GA. GALVANIZED STEEL
57	FIXING HOLE FILLER SHIM	RIGID VINYL
58	WEEP HOOD	PVC BY PREFERRED ENGINEERING PRODUCTS
59	I.G. SPACER	ALUMINUM SPACER
HARDWARE		
60	STANDARD WELDED ON PIVOT HINGE	HOPE'S PART NO. 237
61	FLUSH BOLT (INACTIVE PANEL)	IVES FB458
62	MULTI-POINT LOCK	G-U RHINO W/55 mm BACKSET
63	HANDLE	AS REQUIRED TO OPERATE LOCK
64	OPTIONAL FRICTION ADJUSTER	HOPE'S PART NO. 846
65	SURFACE BOLTS (MIN. 12" LONG AT HEAD, MIN. 5" LONG AT SILL	HOPE'S PART NO. 20-50M3
SEALS & SEALANTS		
67	WEATHERSTRIP	TREMCO TR11688E EPDM
68	WEATHERSTRIP (SELF ADHERING)	REESE 638CH SILICONE
69	DOUBLE SIDED TAPE	3M VBH 4941 FOAM/ACRYLIC
70	GLAZING WEDGE (USED WITH NON-I.G. & RADIUS CONDITIONS)	TREMCO 496E EPDM

BOTTOM END TO BE POSITIONED 8" BELOW CENTERLINE OF
 DOOR HANDLE. WHEN THE DOOR HEIGHT IS SUCH THAT THE
 REINFORCEMENT EXTENDS BEYOND THE TOP OF THE DOOR
 STILE, THE REINFORCEMENT SHALL EITHER BE CUT BACK
 ACCORDINGLY OR DROPPED DOWN LOWER IN THE STILE.

71	GLAZING WEDGE (USED WITH I.G. CONDITIONS)	TREMCO PS1125E EPDM
72	NON-I.G. GLAZING SHIM	TREMCO TR2178W EPDM
73	I.G. GLAZING SHIM	TREMCO TR1488W EPDM
74	SILL WEATHERSTRIP	SIMOLEX FLEXIBLE SILICONE
75	POLYBLOCK BACKER FOR CAULK	STYRAFOAM
FASTENERS		
80	8-32 X 3/8" TRUSS HEAD S.S. MACHINE SCREW	WITHIN 1 1/2" OF ENDS & 12" MAX. O.C.
81	10-24 X 3/8" PBH SS MACHINE SCREW	WITHIN 1" OF ENDS & 12" MAX. O.C.
82	1/4-20 X 3/4" PFH SS MACHINE SCREW	WITHIN 2" OF ENDS & 12" MAX. O.C.
83	10-24 X 1/2" PFH S.S. MACHINE SCREW	WITHIN 2" OF ENDS & 24" MAX. O.C.
84	10-24 X 1/2" PFH S.S. MACHINE SCREW	WITHIN 2" OF ENDS & 1 AT MID-SPAN
85	1/4-20 X 1 1/2" PPH S.S. MACHINE SCREW	2 PER FIXED PANEL BOTTOM RAIL EACH
86	10-24 X 1/2" PPH S.S. MACHINE SCREW	WITHIN 2" OF PANEL CORNERS
87	1/4-20 PPH S.S. MACHINE SCREW	2 1/2" FROM D.L.O. EDGE & 12" MAX. O.C.
88	8-32 X 3/8" TRUSS HEAD S.S. MACHINE SCREW	WITHIN 2" OF ENDS & 24" MAX. O.C.
89	10-24 X 1/4" S.S. SELF SEALING MACHINE SCREW	2 1/2" FROM D.L.O. EDGE & 12" MAX. O.C.
90	10-24 X 1 1/8" S.S. MACHINE SCREW	2 1/2" FROM D.L.O. EDGE & 12" MAX. O.C.
91	1/4-20 SELF CLINCHING NUT INSERT	1 PER CLIP

DRAWN BY:	CHECKED BY:
W.R.M.	W.N.S.
DATE:	DATE:
02/14/11	

NO.	REVISION	DESCRIPTION	BY	DATE

DRAWING TITLE	
JAMESTOWN 175 STEEL SERIES IMPACT OUT-SWING DOORS	
CONSULTANTS	MANUFACTURER
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 25601 AYSEN DRIVE PUNTA GORDA, FL 33983 PHONE: 561-744-3424	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.
1739	H