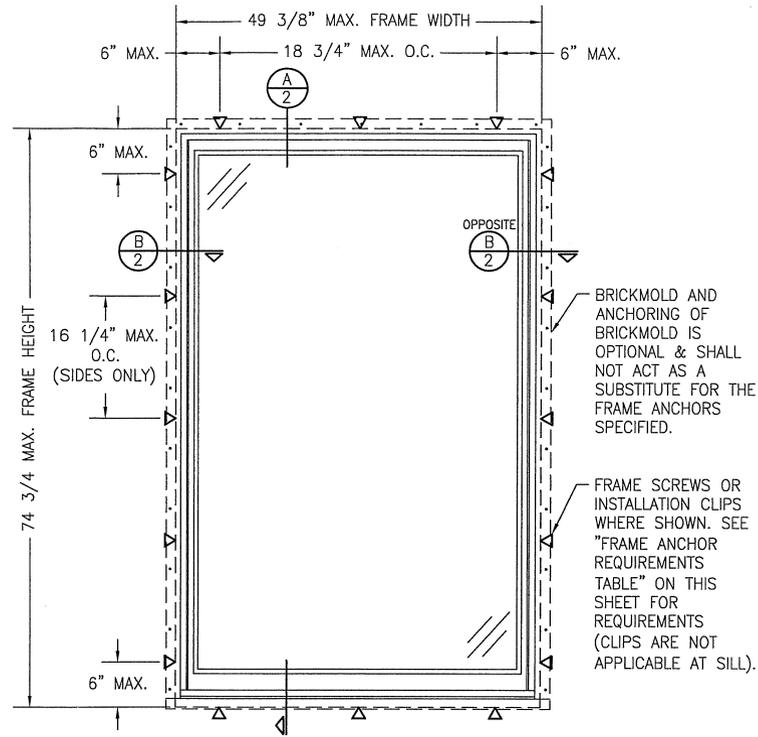


GENERAL NOTES:

- ALL FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS. SPECIFIED ANCHOR EMBED TO BASE MATERIAL SHALL BE BEYOND WALL FINISH OR STUCCO.
- OPENINGS, BUCKING & BUCKING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED TO TRANSFER WIND LOADS TO THE STRUCTURE.
- THESE LARGE MISSILE IMPACT RATED WINDOW SYSTEM INSTALLATIONS ARE IN ACCORDANCE WITH AND MEET THE REQUIREMENTS OF THE FLORIDA BUILDING CODE (FBC).
- ALL ANCHORS SECURING WINDOW FRAME TO PRESSURE TREATED BUCKS OR WOOD FRAMING SHALL BE CAPABLE OF RESISTING CORROSION CAUSED BY THE PRESSURE TREATING CHEMICALS IN THE WOOD.
- MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF FLORIDA BUILDING CODE CHAPTER 20.
- TO THE BEST OF OUR KNOWLEDGE, THE WINDOWS SHOWN HEREIN ARE CERTIFIED & QUALITY ASSURED BY A FLORIDA STATE APPROVED CERTIFICATION/OA ENTITY & SHALL BE LABELED IN ACCORDANCE WITH THE FBC AND THE 61G20-3 FLORIDA DEPARTMENT OF BUSINESS & PROFESSIONAL REGULATION SPECIFICATIONS. WINDOW ASSEMBLY IS NOT PART OF THIS DRAWING AND SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S QUALITY ASSURANCE SPECIFICATIONS & TESTING REPORTS.
- CERTIFICATION OF THESE WINDOW INSTALLATIONS SHALL BE CONSIDERED VOID IF ANY OF THE FOLLOWING APPLY: 1) THEY ARE INSTALLED WITHOUT A BUILDING PERMIT FROM THE APPLICABLE LOCAL BUILDING DEPARTMENT. 2) IF THEY ARE INSTALLED BY ANYONE OTHER THAN A LICENSED CONTRACTOR EXPERIENCED WITH WINDOW INSTALLATIONS. 3) IF CHANGES HAVE OCCURRED TO THE PRODUCT'S CERTIFICATION ENTITY'S CERTIFICATE THAT CAUSE THESE INSTALLATIONS TO BE INCORRECT OR INCONSISTENT WITH WHAT HAS BEEN TESTED.
- THE LEAST DESIGN PRESSURE SPECIFIED EITHER IN THIS DRAWING OR IN THE PRODUCTS CERTIFICATION SHALL CONTROL FOR THE INSTALLED WINDOW.
- THESE DRAWINGS CERTIFY THE WINDOW INSTALLATION ONLY. WATER PROOFING OF THE INSTALLED WINDOWS IS NOT PART OF THIS INSTALLATION CERTIFICATION. THAT RESPONSIBILITY SHALL BE THAT OF THE MANUFACTURER &/OR INSTALLER.

INSTALLATION EVALUATION IS BASED ON APPLICABLE ANCHOR STANDARDS AND/OR INFORMATION & RESULTS FROM APPLICABLE TEST REPORTS. THE FLORIDA BUILDING CODE VERSION CONSIDERED WITH THE 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 THE REFERENCED PRODUCT, PRIOR TO STATING CODE COMPLIANCE WITH THE STATE, THE MANUFACTURER SHALL CONFIRM WITH THE INSTALLATION EVALUATION ENGINEER OF RECORD THAT THE INSTALLATIONS SPECIFIED HERE-IN ARE CURRENT WITH THE THEN CURRENT TESTING, CODE AND APPLICABLE STANDARDS.

ALTERNATE ANCHOR/SUBSTRATE EVALUATION NOTE:
ALL ALTERNATE ANCHORS IN THEIR SPECIFIED SUBSTRATES HAVE BEEN ANALYZED IN ACCORDANCE WITH THEIR APPLICABLE STANDARD(S) AND ARE FOUND TO BE EQUIVALENT TO OR STRONGER THAN THE ANCHOR(S) USED IN TESTING WITH THIS PRODUCT.



**EXTERIOR ELEVATION;
SINGLE DOUBLE HUNG PICTURE WINDOW**

SCALE: 3/4"=1'-0"

**ALLOWABLE DESIGN PRESSURE
(INDIVIDUAL UNITS ONLY)**

+/-50 PSF

CONDITIONS SHOWN ON THIS DRAWING ARE GOVERNED BY INSTALLATION REQUIREMENTS ONLY. THE GOVERNING CONDITIONS ON ANY SPECIFIC WINDOW SHALL BE THE LESSER OF THOSE SPECIFIED IN THE WINDOWS STATE APPROVAL OR THAT SHOWN IN THESE DRAWINGS.

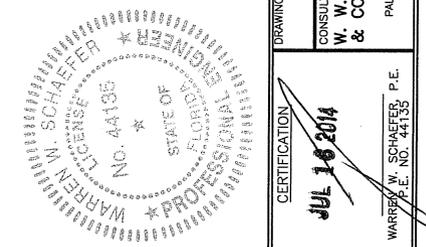
INSTALLATION NOTE:

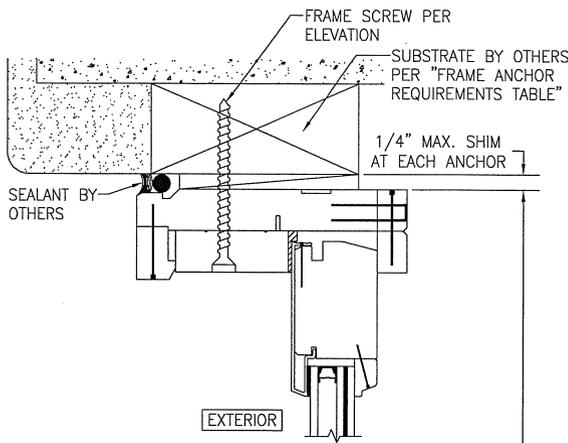
WHEN NECESSARY, INSTALLATION METHODS MAY BE MIXED WITH ANY ONE WINDOW SUCH THAT INDIVIDUAL SIDES OF THE WINDOW MAY USE ONE OR THE OTHER ANCHOR METHOD (EXAMPLE: SILL MAY USE FRAME SCREWS METHOD WHILE OTHER SIDES USE CLIPS)

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 LISTED ON THESE DRAWINGS.

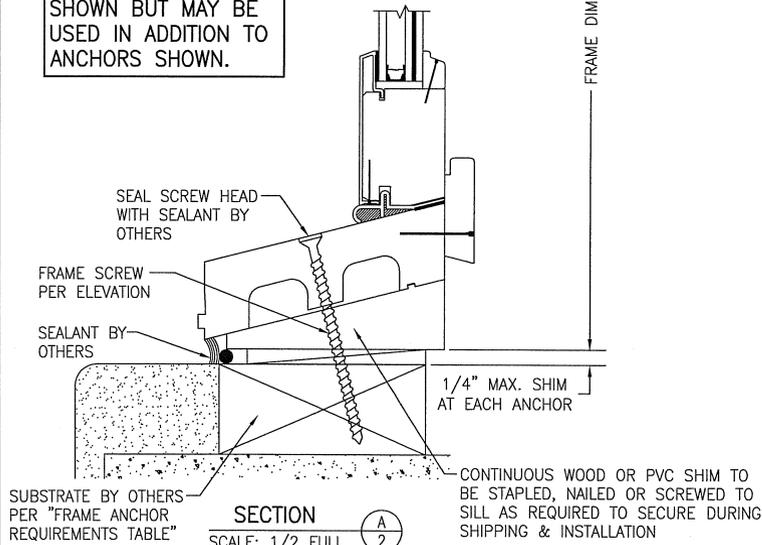
FRAME ANCHOR REQUIREMENTS TABLE			
OPENING TYPE (SUBSTRATE)	FRAME/CLIP/NAIL FIN TO OPENING FASTENER TYPE	MINIMUM EMBED	MINIMUM EDGE DIST.
FRAME SCREWS			
MIN. 2X4 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 10 SMS OR WOOD SCREW	1 1/4"	3/4"
MIN. 18 GA. 33 KSI METAL STUD	NO. 10 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL	NO. 10 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	NO. 10 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. C-90 CMU OR 2500 PSI CONCRETE	(1) 1/4" CONCRETE SCREW	1 1/4"	2"
INSTALLATION CLIP SCREWS			
MIN. 2X4 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 8 SMS SCREW	1 3/8"	1/2"
MIN. 18 GA. 33 KSI METAL STUD	NO. 8 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL	NO. 8 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	NO. 8 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
(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 KWIK-CON II (C.S OR S.S.).			

DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1-16	DATE: 04/15/09
DATE: 07/15/14	
BY: WWS	
NO. REVISION DESCRIPTION	
A1 UPDATE TO CURRENT TESTING	
DRAWING TITLE LEGEND HBR IMPACT DOUBLE HUNG PICTURE WINDOW	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH, SUITE 33418 PALM HARBOR, FLORIDA 34683 PHONE: 888-744-3424	MANUFACTURER WINDSOR WINDOWS & DOORS 900 S. 19TH STREET WEST DES MOINES, IA 50265 800-218-6186
CERTIFICATION JUL 16 2014 WARREN W. SCHAEFER, P.E. NO. 44133	DRAWING NO. 1663 SHEET NO. 1 OF 3

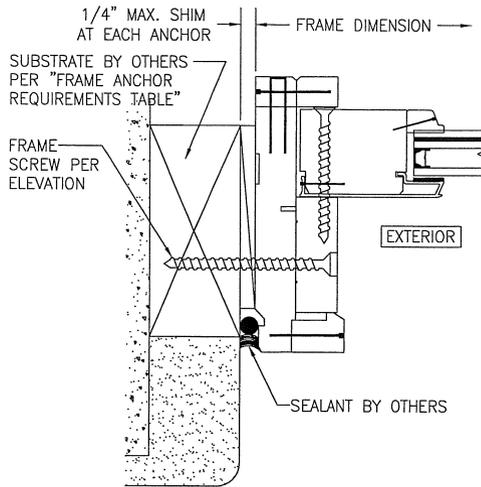




BRICKMOLDS ARE NOT SHOWN BUT MAY BE USED IN ADDITION TO ANCHORS SHOWN.



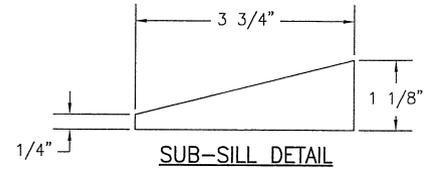
FRAME SCREW MOUNT SHOWN. SEE DETAILS ON SHEET 4 FOR DIRECT MOUNT & CLIP MOUNT DETAILS.



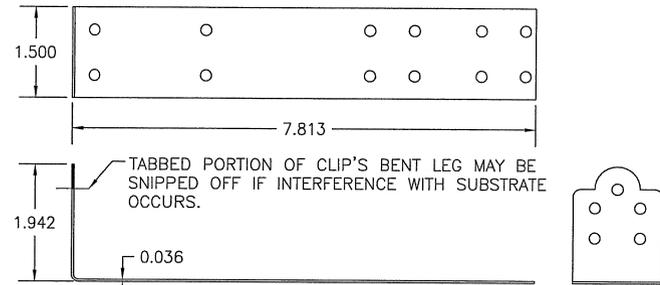
SECTION B

SCALE: 1/2 FULL

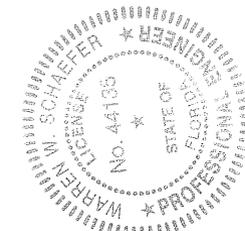
FRAME SCREW MOUNT SHOWN. SEE DETAILS ON SHEET 4 FOR DIRECT MOUNT & CLIP MOUNT DETAILS.



SUB-SILL MATERIAL SHALL BE WOOD (NO. 2 SOUTHERN PINE, SELECT WESTERN PINE OR FIR) OR PVC. IF WOOD, IT SHALL BE TREATED/COATED WITH A HIGH QUALITY WOOD PRESERVATIVE.



1 FRAME INSTALLATION CLIP (33 KSI STEEL)



DRAWN BY:	W.R.M.	CHECKED BY:	W.W.S.
PLOT:	1=2	DATE:	04/15/09

NO.	REVISION DESCRIPTION	DATE

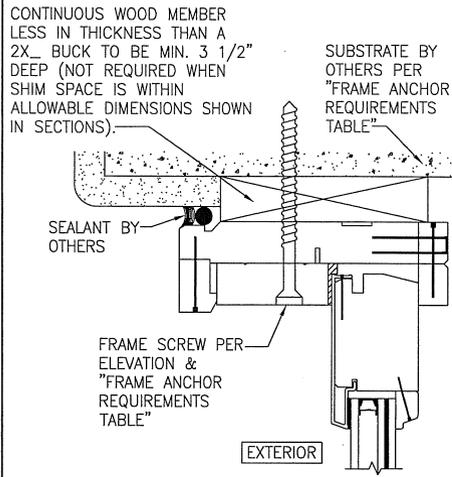
DRAWING TITLE: LEGEND HBR IMPACT DOUBLE HUNG PICTURE WINDOW

MANUFACTURER: WINDSOR WINDOWS & DOORS
102 MAIN STREET
WEST DES MOINES, IA 50265
800-218-6186

CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)
7480 150TH COURT NORTH, 33418
PALM BEACH PARKS, FL 33418
PHONE: 561-744-3464

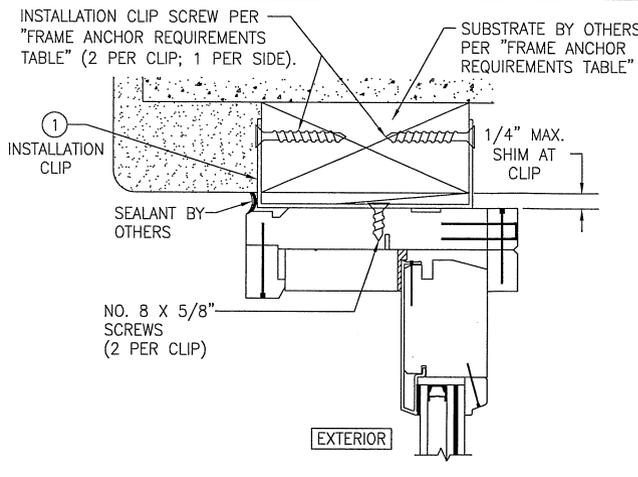
CERTIFICATION: JUL 16 2014
WARREN W. SCHAEFER, P.E.
P.E. NO. 44100

DRAWING NO.	REV.
1663	A
SHEET NO.	
2	OF 3



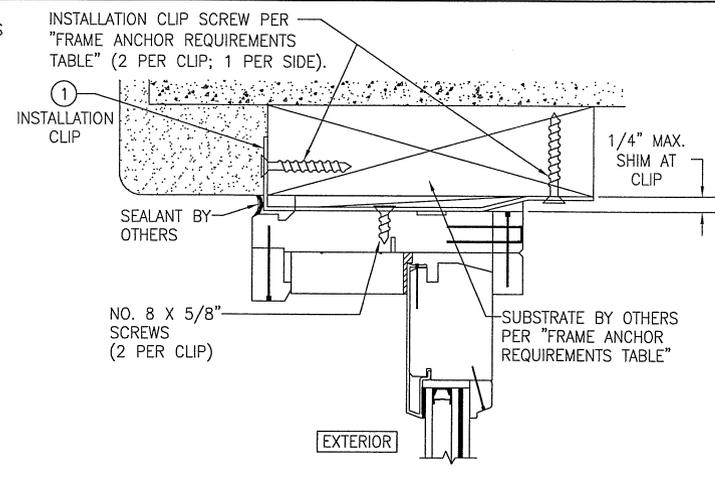
OPTIONAL DIRECT MOUNT DETAIL TO SUBSTRATE WITH SPACER

(HEAD SECTION SHOWN; SILL & SIDES ARE INSTALLED THE SAME)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



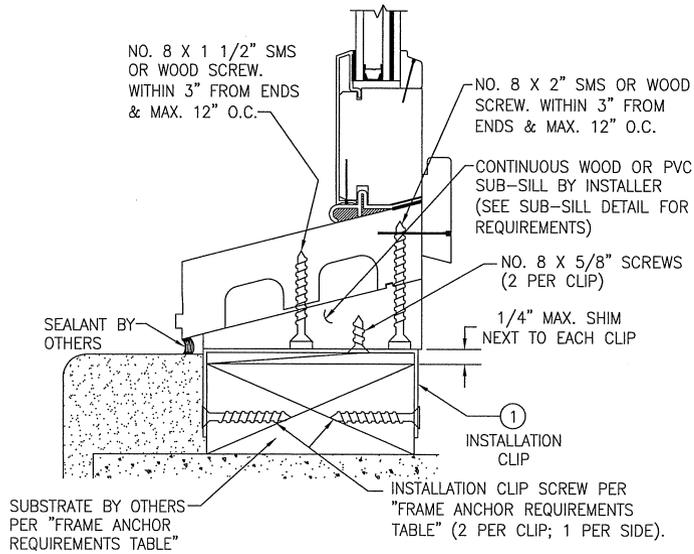
STANDARD INSTALLATION CLIP DETAIL

(HEAD SECTION SHOWN; SIDES ARE INSTALLED THE SAME)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

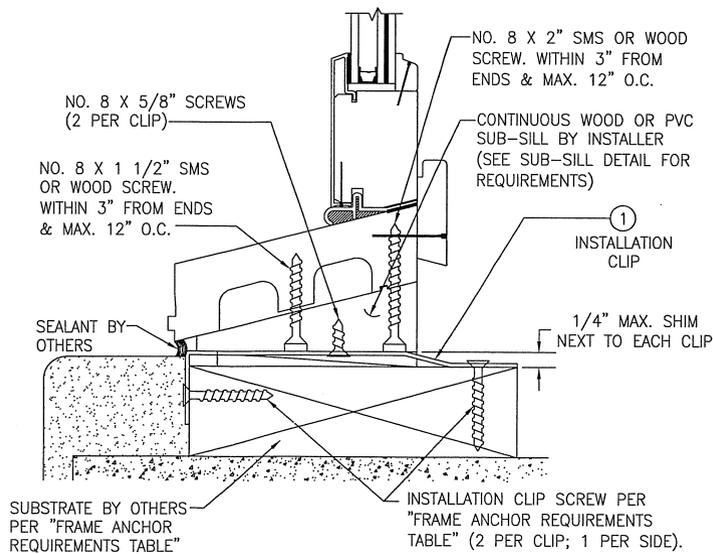


ALTERNATE INSTALLATION CLIP DETAIL

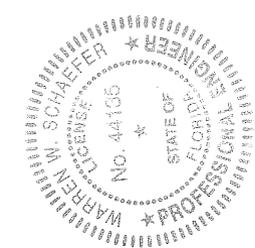
(HEAD SECTION SHOWN; SIDES ARE INSTALLED THE SAME)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



OPTIONAL INSTALLATION CLIP DETAIL AT SILL



ALTERNATE INSTALLATION CLIP DETAIL AT SILL



DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 04/15/09
DATE	
BY	
REVISION DESCRIPTION	
NO.	
LEGEND HBR IMPACT DOUBLE HUNG PICTURE WINDOW	
MANUFACTURER	
WINDSOR WINDOWS & DOORS	
102 MAIN STREET	
WEST DES MOINES, IA 50265	
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CONSULTANTS	
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)	
7480 150TH COURT NORTH	
PALM BEACH GARDENS, FL 33418	
PHONE: 561-744-3424	
DRAWING TITLE	
LEGEND HBR IMPACT DOUBLE HUNG PICTURE WINDOW	
CERTIFICATION	
JUL 16 2014	
WARREN W. SCHAEFER, P.E.	
P.E. NO. 44136	
DRAWING NO.	REV.
1663	A
SHEET NO.	
3	OF 3