

GENERAL NOTES:

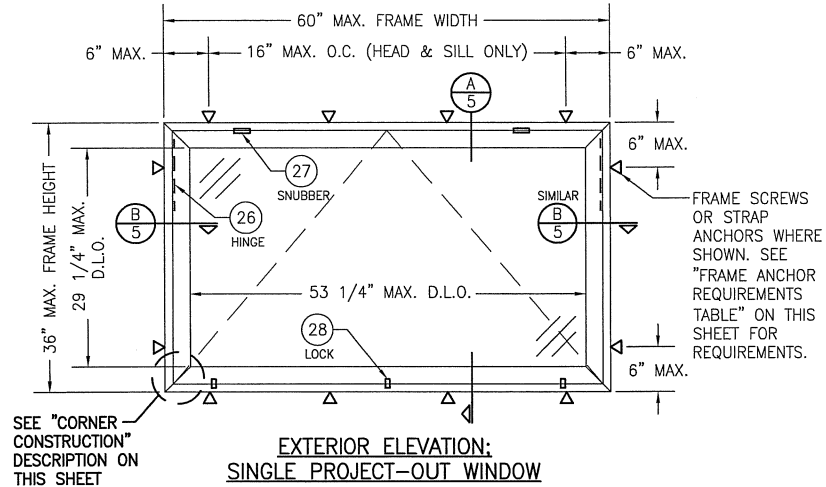
1. THIS PRODUCT HAS BEEN TESTED, ANALYZED & APPROVED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN IN THE "ALLOWABLE DESIGN PRESSURE TABLE(S)".
2. OPENINGS, BUCKING & BUCKING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED TO TRANSFER WIND LOADS TO THE STRUCTURE.
3. ALL HARDWARE & FASTENERS SHALL BE 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 BOTH SMALL & LARGE MISSILE IMPACT RATED.
5. WHEN GLAZED FOR SMALL MISSILE IMPACT, THIS PRODUCT MAY NOT BE INSTALLED AT ELEVATIONS BELOW 30 FT. ABOVE GRADE OR AT ANY CODE DESIGNATED LARGE MISSILE IMPACT LOCATION WITHOUT AN APPROVED SHUTTER.
6. WHEN LARGE MISSILE IMPACT GLAZED, IMPACT SHUTTERS ARE NOT REQUIRED WITH THIS PRODUCT.
7. 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.
8. 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 $K_d = 0.85$ MAY BE APPLIED PER THE ASCE-7 STANDARD.
9. MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF FLORIDA BUILDING CODE.
10. 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.
11. 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: MEMBERS ARE MITERED & JOINED VIA A FRAME SPICE JOINT KEY (ITEM #15) AND A FRAME CORNER KEY (ITEM #12). CORNERS ARE SEALED WITH SILICONE SEALANT.
SASH: MEMBERS ARE MITERED & JOINED VIA TWO SASH CORNER KEYS (ITEMS #13 & #14). CORNERS ARE SEALED WITH SILICONE SEALANT.

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.

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.



EXTERIOR ELEVATION:
SINGLE PROJECT-OUT WINDOW
SCALE: 3/4" = 1'-0"

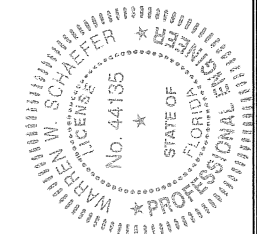
FRAME ANCHOR REQUIREMENTS TABLE

FRAME, STRAP ANCHOR & MULLION CLIP SCREWS

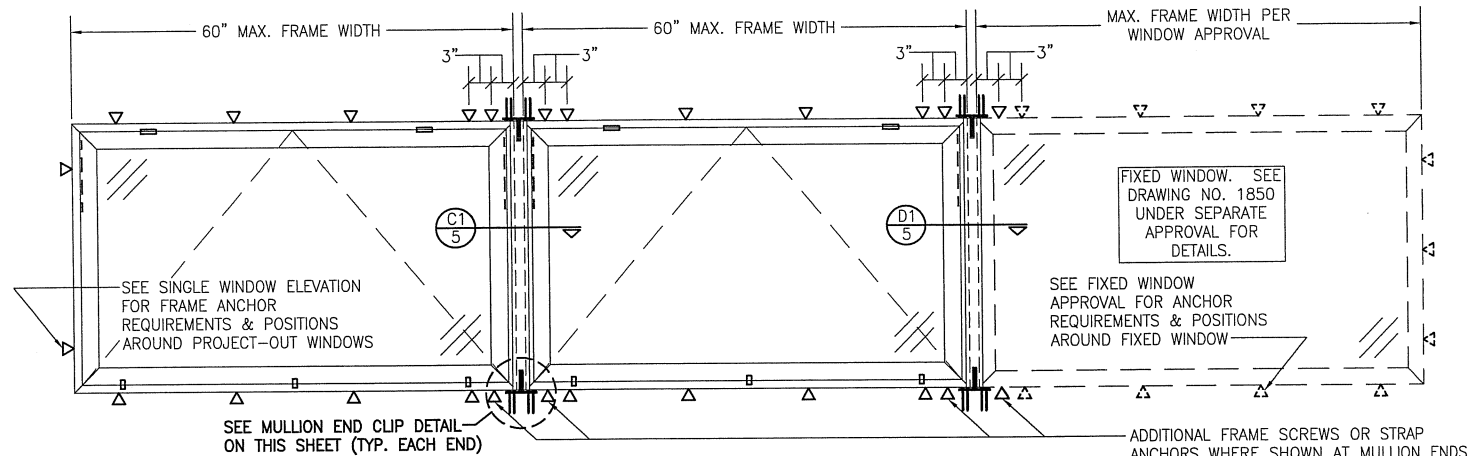
OPENING TYPE (SUBSTRATE)	FRAME/STRAP/MULLION CLIP TO OPENING FASTENER TYPE	MINIMUM EMBED	MINIMUM EDGE DIST.
(2) MIN. 2X_ WOOD FRAME OR BUCK (MIN. GR. 3 & C=0.55)	NO. 14 SMS OR WOOD SCREW	1 1/4"	1"
MIN. 16 GA. 50 KSI METAL STUD	1/4" GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL	1/4" GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 0.100" THK 6063-T5 ALUM.	1/4" GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. C-90 CMU/2500 PSI CONCRETE	(1) 1/4" CONCRETE SCREW	1 1/4"	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.).
- (2) WHEN STRAP ANCHOR INSTALLED, THE 2X_ BUCK SHALL BE OF A MINIMUM DEPTH REQUIRED TO MEET ANCHOR EDGE DISTANCE REQUIREMENTS BUT NO LESS THAN 5"

ALLOWABLE DESIGN PRESSURE
(ALL CONDITIONS SHOWN)
+/-80 PSF



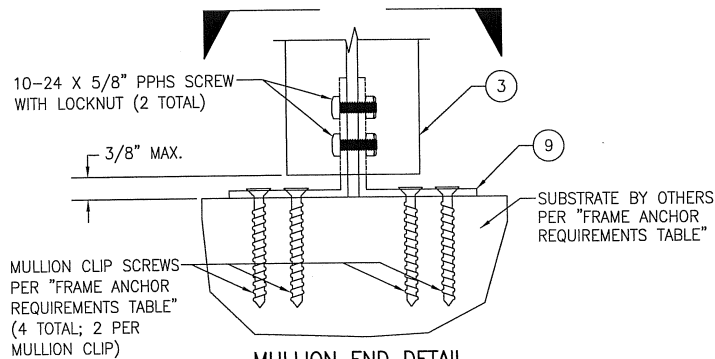
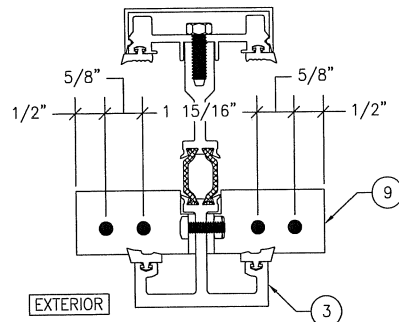
DRAWN BY: W.S.		CHECKED BY: W.S.	
PLOT: 1-16		DATE: 01/09/14	
DATE: 12/19/14	BY: W.S.		
REVISION DESCRIPTION			
NO. 1	UPDATE TO PRESENT STANDARDS		
DRAWING TITLE: AA4325 LARGE & SMALL IMPACT PROJECT-OUT WINDOW		MANUFACTURER: KAWNEER COMPANY, INC. 555 GUTHRIE COURT NORCROSS, GA 30092 770-449-5555	
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 130TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 361-744-3424		REV. A	
CERTIFICATION: JAN 06 2015		WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. 1852		SHEET NO. 1 OF 8	



**EXTERIOR ELEVATION:
MULTIPLE PROJECT-OUT/FIXED WINDOWS
IN SEPARATE FRAMES**
SCALE: 3/4" = 1'-0"

MULTIPLE UNIT NOTES:

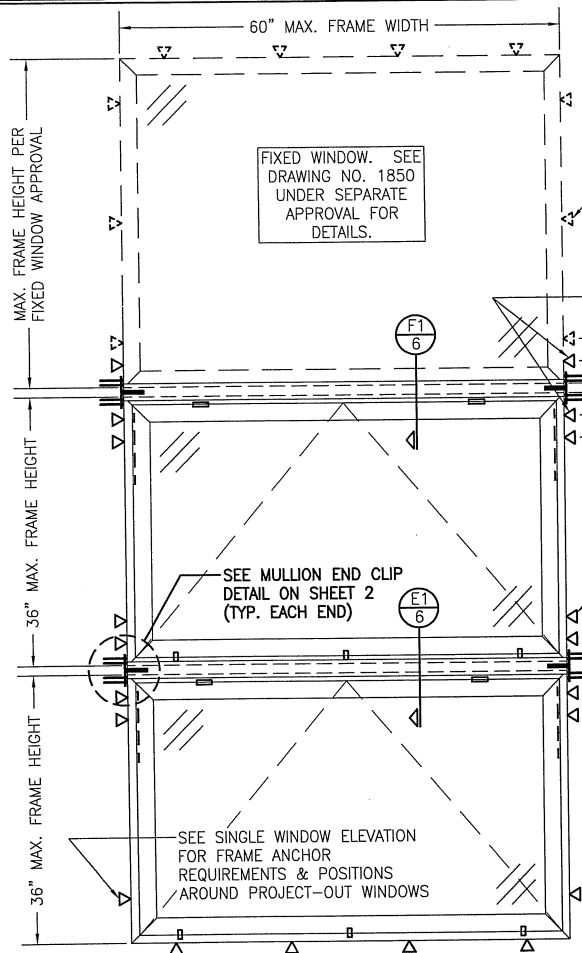
1. FOR PROJECT-OUT DETAIL NOT SHOWN, SEE INDIVIDUAL WINDOW ELEVATION.
2. THERE IS NO LIMIT ON THE NUMBER OF WINDOWS THAT MAY BE COMBINED HORIZONTALLY IN ONE DIRECTION INTO ONE OPENING PROVIDING THE OPENING IS DESIGNED TO SUPPORT ALL LOADS TRANSFERRED FROM THE WINDOWS & THEIR MULLIONS.
3. ANY COMBINATION OF FIXED/OPERABLE WINDOWS IN ONE OPENING SHALL APPLY.
4. INDIVIDUAL WINDOW SIZES SHALL BE RESTRICTED AS SPECIFIED IN THE SINGLE UNIT ELEVATION.



MULLION END DETAIL
(WINDOW FRAMES NOT SHOWN FOR CLARITY)



DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1-18	DATE: 01/09/14
DATE	BY
REVISION DESCRIPTION	NO.
DRAWING TITLE AA4325 LARGE & SMALL IMPACT PROJECT-OUT WINDOW	
MANUFACTURER KAWNEER COMPANY, INC. 555 GUTHRIE COURT NORCROSS, GA 30092 770-449-5555	CONSULTANTS W. W. SCHAEFFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424
CERTIFICATION JAN 06 2015	REV. A
DRAWING NO. 1852	SHEET NO. 2 OF 8



**EXTERIOR ELEVATION:
MULTIPLE PROJECT-OUT WINDOWS WITH FIXED
TRANSOM IN SEPARATE FRAMES**

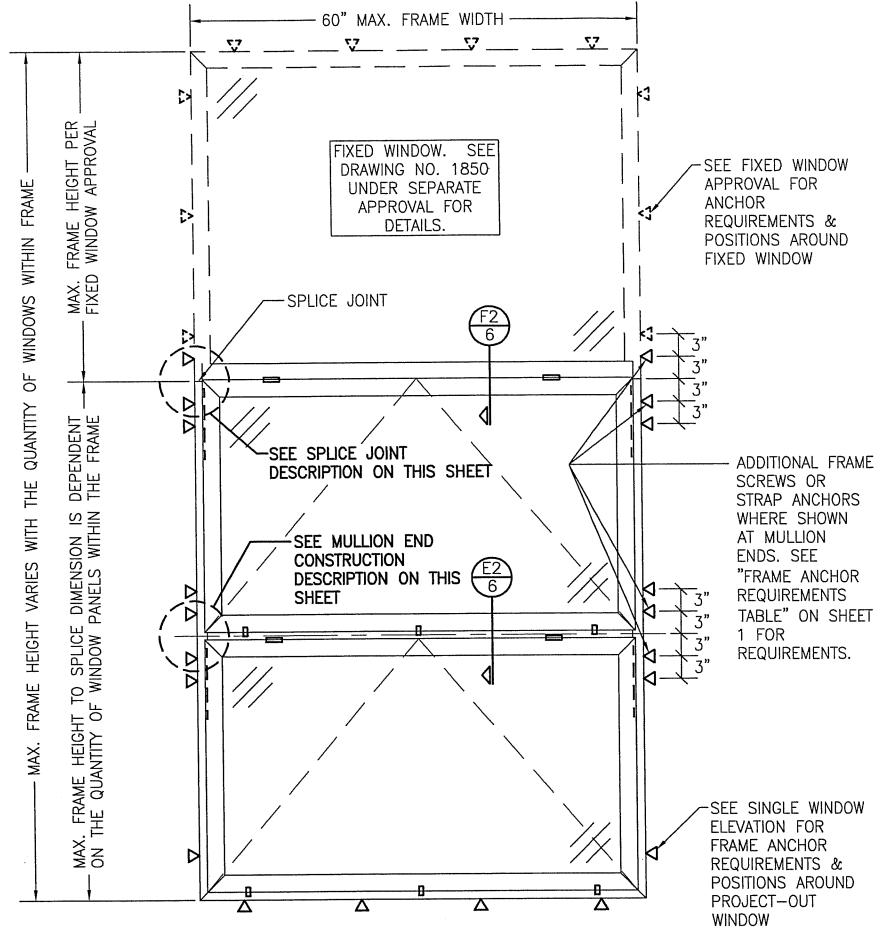
SCALE: 3/4" = 1'-0"

SPLICE JOINT DESCRIPTION:

HORIZONTAL MEMBERS ARE NOTCHED, BUTTED & JOINED VIA TWO SPLICE JOINT KEYS (ITEM #17). THE VERTICAL STANDARD MULLION IS SQUARE CUT AND JOINED TO EACH HORIZONTAL FRAME MEMBER WITH 4 NO. 10 X 1 1/2" S.S. PPHS (2 PER JOINT KEY) THROUGH THE HORIZONTAL MEMBERS INTO THE VERTICAL MEMBER SCREW SPLINES. SPLICE JOINT AND ENDS ARE SEALED WITH SILICONE SEALANT.

MULLION END CONSTRUCTION DESCRIPTION:

VERTICAL MEMBER RUNS THROUGH WHILE THE HORIZONTAL MEMBER IS COPEDED, BUTTED & JOINED THROUGH THE HORIZONTAL MEMBERS INTO THE VERTICAL MEMBER SCREW SPLINES WITH 4 NO. 10 X 1 1/2" S.S. PPHS. ENDS ARE SEALED WITH SILICONE SEALANT.



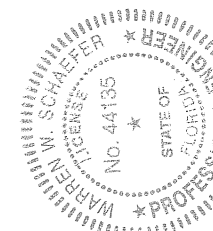
**EXTERIOR ELEVATION:
MULTIPLE PROJECT-OUT WINDOWS WITH FIXED
TRANSOM IN ONE FRAME**

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

MULTIPLE UNIT NOTES:

1. FOR PROJECT-OUT DETAIL NOT SHOWN, SEE INDIVIDUAL WINDOW ELEVATION.
2. THERE IS NO LIMIT ON THE NUMBER OF WINDOWS THAT MAY BE COMBINED VERTICALLY IN ONE DIRECTION INTO ONE OPENING PROVIDING THE OPENING IS DESIGNED TO SUPPORT ALL LOADS TRANSFERRED FROM THE WINDOWS & THEIR MULLIONS.
3. ANY COMBINATION OF FIXED/OPERABLE WINDOWS IN ONE OPENING SHALL APPLY.
4. INDIVIDUAL WINDOW SIZES SHALL BE RESTRICTED AS SPECIFIED IN THE SINGLE UNIT ELEVATION.

DRAWN BY: W.R.M.	CHECKED BY: W.R.S.
PLOT: 1=16	DATE: 01/09/14
DATE	BY
REVISION	DESCRIPTION
NO.	
DRAWING TITLE AA4325 LARGE & SMALL IMPACT PROJECT-OUT WINDOW	MANUFACTURER KAWNEER COMPANY, INC. 555 GUTHRIE COURT NORCROSS, GA 30092 770-449-5555
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 130TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	REV. A
CERTIFICATION JAN 06 2015	WARREN W. SCHAEFER, P.E. P.E. NO. 44135
DRAWING NO. 1852	SHEET NO. 4 OF 8

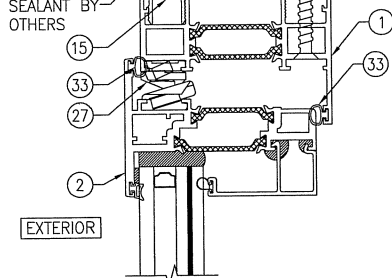


SUBSTRATE BY OTHERS PER
"FRAME ANCHOR REQUIREMENTS
TABLE"

FRAME SCREW
PER ELEVATION

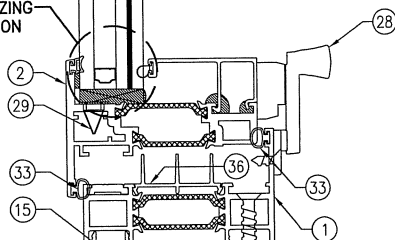
3/8" MAX.
SHIM AT
EACH ANCHOR

SEALANT BY
OTHERS



EXTERIOR

SEE GLAZING
DETAILS ON
SHEET 7



SEALANT BY
OTHERS

3/8" MAX.
SHIM AT
EACH ANCHOR

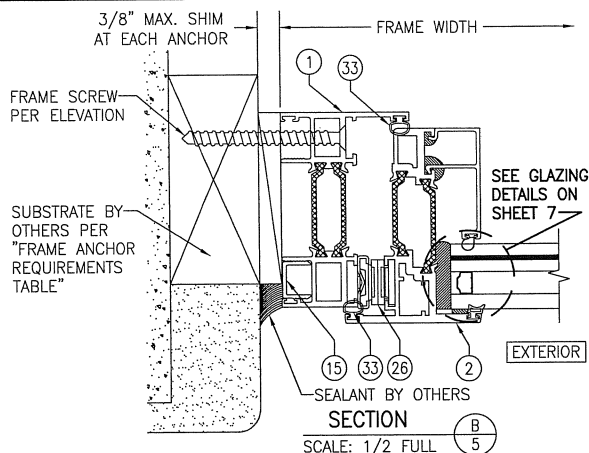
SUBSTRATE BY OTHERS
PER "FRAME ANCHOR
REQUIREMENTS TABLE"

SECTION

SCALE: 1/2 FULL

(A)
5

FRAME SCREW MOUNT SHOWN. SEE
DETAILS ON SHEET 6 FOR DIRECT MOUNT
& STRAP ANCHOR MOUNT DETAILS.



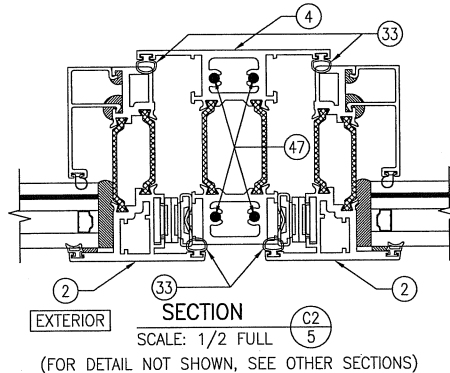
EXTERIOR

SECTION

SCALE: 1/2 FULL

(B)
5

FRAME SCREW MOUNT SHOWN. SEE DETAILS ON SHEET 6
FOR DIRECT MOUNT & STRAP ANCHOR MOUNT DETAILS.



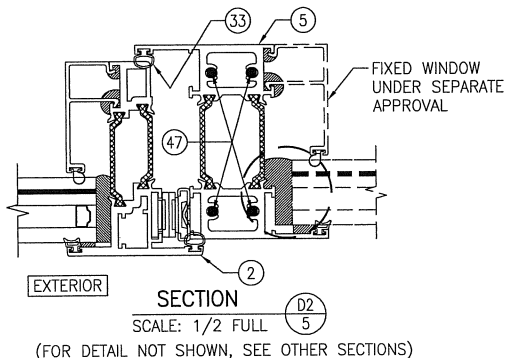
EXTERIOR

SECTION

SCALE: 1/2 FULL

(C2)
5

(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



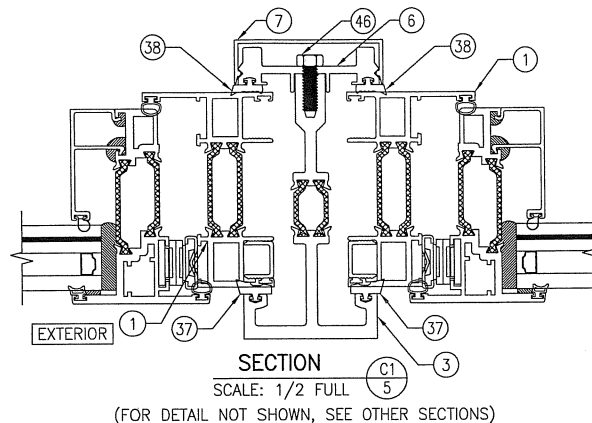
EXTERIOR

SECTION

SCALE: 1/2 FULL

(D2)
5

(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



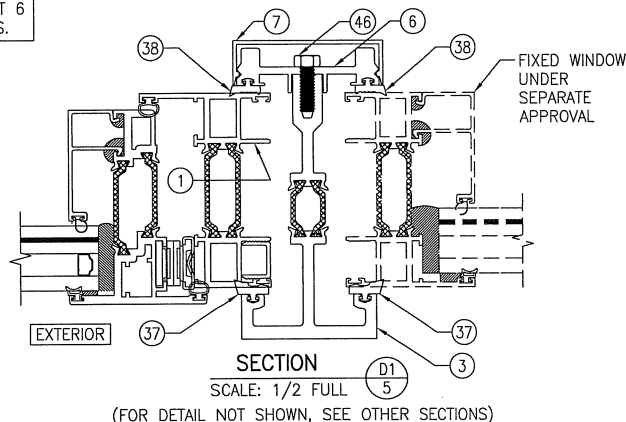
EXTERIOR

SECTION

SCALE: 1/2 FULL

(C1)
5

(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



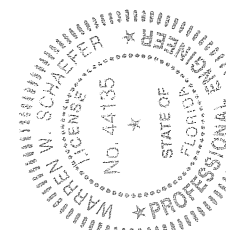
EXTERIOR

SECTION

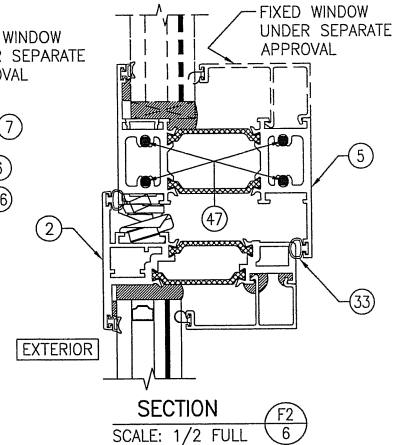
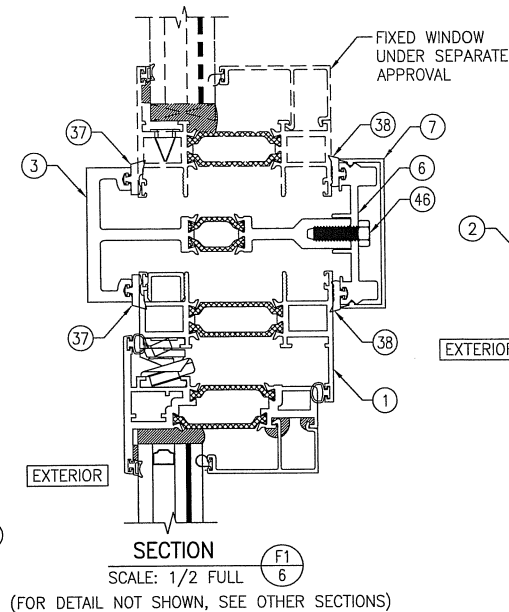
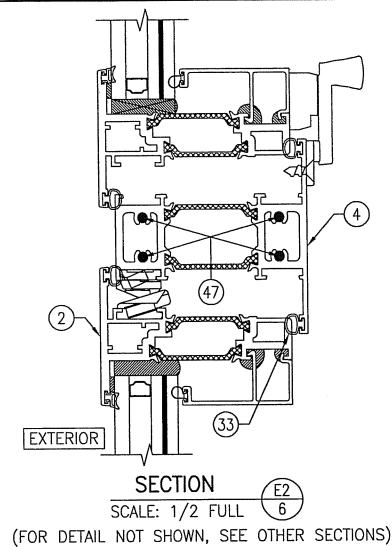
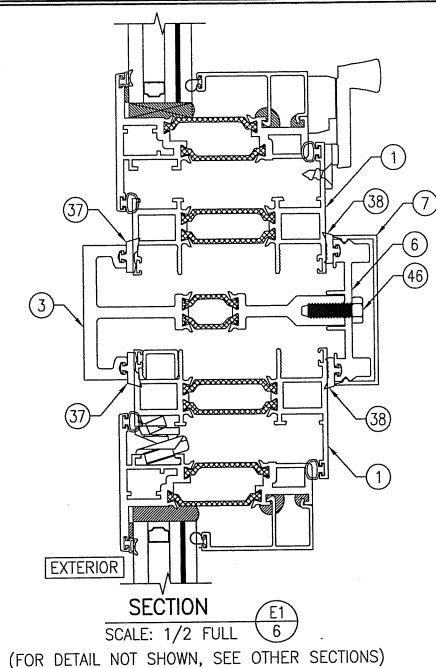
SCALE: 1/2 FULL

(D1)
5

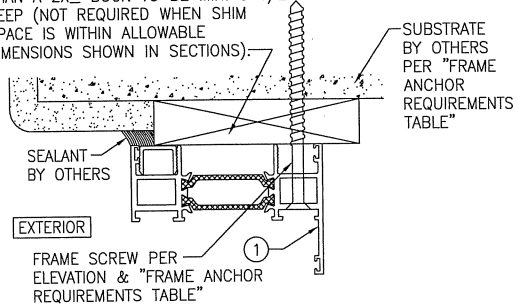
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



DRAWN BY: W.R.M.		CHECKED BY: W.W.S.	
PLOT: 1=2		DATE: 01/09/14	
NO.	REVISION	DESCRIPTION	DATE
1			
2			
3			
4			
5			
DRAWING TITLE: AA4325 LARGE & SMALL IMPACT PROJECT-OUT WINDOW			
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)			
MANUFACTURER: KAWNEER COMPANY, INC.			
7480 150TH COURT NORTH, 33418			
PALM BEACH GARDENS, FL			
PHONE: 561-744-3424			
770-449-5555			
CERTIFICATION: JAN 06 2015			
DRAWING NO. 1852			
SHEET NO. 5 OF 8			
REV. A			

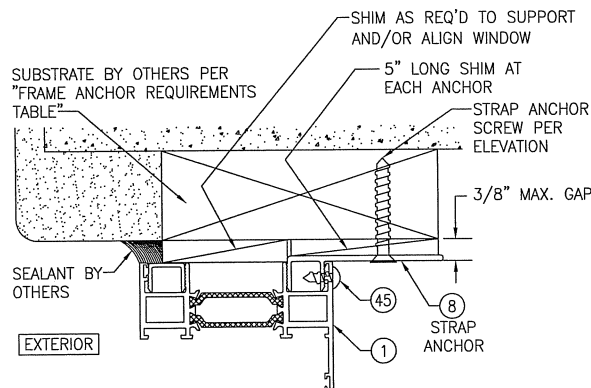


CONTINUOUS WOOD MEMBER LESS IN THICKNESS THAN A 2X BUCK TO BE MIN. 3 1/2" DEEP (NOT REQUIRED WHEN SHIM SPACE IS WITHIN ALLOWABLE DIMENSIONS SHOWN IN SECTIONS).



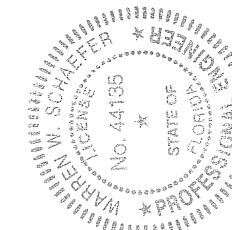
OPTIONAL DIRECT MOUNT DETAIL TO SUBSTRATE WITH SPACER

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

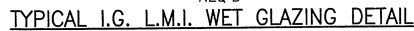


OPTIONAL STRAP ANCHOR DETAIL

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



DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 01/09/14
DATE	BY
REVISION	DESCRIPTION
NO.	
DRAWING TITLE AA4325 LARGE & SMALL IMPACT PROJECT-OUT WINDOW	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)	MANUFACTURER KAWNEER COMPANY, INC. 555 GUTHRIE COURT NORCROSS, GA 30092 770-449-5555
CERTIFICATION JAN 06 2015	WARRREN W. SCHAEFER, P.E. P.E. NO. 44135
DRAWING NO. 1852	REV. A
SHEET NO. 6	OF 8

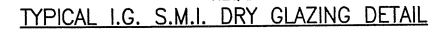


TYPICAL DOUBLE I.G. L.M.I. WET GLAZING DETAIL

TYPICAL I.G. L.M.I. DRY GLAZING DETAIL

TYPICAL DOUBLE I.G. L.M.I. DRY GLAZING DETAIL

⑥ HD MULLION
PRESSURE PLATE



TYPICAL DOUBLE I.G. S.M.I. DRY GLAZING DETAIL

OPTION 8: 1 3/4" THICK DOUBLE 1.G LAMINATED GLASS (1/4" TEMP.
EXTERIOR; 3/8" AIR SPACE; 1/4" HT. ST./3/8" AIR SPACE; 3/16" HT.
ST./0.060" EASTMAN CHEMICAL CO. SAFLEX/3/16" HT. ST. INTERIOR)

DRAWING NO.		REV.	
1852		A	
SHEET		OF 8	
CERTIFICATION JAN 06 2015 WARREN W. SCHAEFER, P.E. P.E. NO. 44135			
DRAWING TITLE AA4325 LARGE & SMALL IMPACT PROJECT-OUT WINDOW			
CONSULTANTS		MANUFACTURER	
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424		KAWNEER COMPANY, INC. 555 GUTHRIEDGE COURT NORCROSS, GA 30092 770-449-5555	
DRAWN BY: W.R.M. CHECKED BY: W.R.S.		DATE: 01/09/14	
PLOT:		1=2	
NO.		REVISION DESCRIPTION	
BY		DATE	

