RELIANCE STORMMAX HIGH PERFORMANCE CURTAIN WALL SYSTEM WITH MULTIPLE GLAZING INFILLS FOR USE IN HURRICANE ZONES REQUIRING LARGE MISSILE IMPACT PROTECTION.

GENERAL NOTES:

1. RELIANCE STORMMAX HIGH PERFORMANCE CURTAIN WALL SYSTEM W/ MULTIPLE GLAZING INFILLS LARGE MISSILE IMPACT, SHOWN ON THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE 2006 EDITION OF THE INTERNATIONAL BUILDING CODE, (I.B.C) AND INTERNATIONAL RESIDENTIAL CODE, (I.R.C) WITH THE 2006 TEXAS REVISIONS, EFFECTIVE JANUARY 1, 2008.

   DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTION 1609 OF THE INTERNATIONAL BUILDING CODE, FOR A BASIC WIND SPEED AS REQUIRED BY THE JURISDICTION WHERE PRODUCT WILL BE INSTALLED, AND FOR A DIRECTIONALITY FACTOR Kd = 0.85, IN ACCORDANCE WITH ASCE 7-05 STANDARD, AND SHALL NOT EXCEED THE DESIGN PRESSURE RATING INDICATED ON NOTE 2.

   IN ORDER TO VERIFY THAT ANCHORS ON THIS P.E.D., AS TESTED, WERE NOT OVERSTRESSED, A 33% INCREASE IN ALLOWABLE STRESS FOR WIND LOADS WAS NOT USED IN THEIR ANALYSIS. FASTENERS SPACING TO WOOD HAS BEEN DETERMINED IN ACCORDANCE WITH N.D.S. 2005.

   THIS PRODUCT'S ADEQUACY FOR IMPACT AND CYCLIC RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH SECTIONS 1609.1.4 AND R301.2.1.2 OF THE ABOVE MENTIONED CODE RESPECTIVELY, AS PER FLORIDA BUILDING CODE HIGH VELOCITY HURRICANE ZONES PROTOCOLS TAS-201, TAS-202, TAS-203 PER CONSTRUCTION CONSULTING LABORATORY REPORT # CCLI-12-222, AND AS PER SUBMITTED STRUCTURAL CALCULATIONS, PERFORMED AS PER SECTION 1604 OF THE ABOVE MENTIONED BUILDING CODE.

2. MAXIMUM DESIGN PRESSURE RATING FOR THIS CURTAIN WALL SHALL BE AS SHOWN ON SHEETS 7, 9, 10 & 11.

3. THIS PRODUCT WILL NOT REQUIRE A HURRICANE PROTECTION DEVICE FOR INSTALLATIONS UP TO 30 FEET ABOVE GRADE.

4. THIS PRODUCT IS APPROVED FOR AIR/WATER INFILTRATION (15.0 PSF WATER PRESSURE).

5. RELIANCE STORMMAX HIGH PERFORMANCE CURTAIN WALL SYSTEM WITH MULTIPLE GLAZING INFILLS LARGE MISSILE IMPACT, SHALL COMPLY WITH SECTION 2406 OF THE INTERNATIONAL BUILDING CODE.

6. GASKETS (COMPONENT ⑧) AND SETTING BLOCKS (COMPONENT ①) USED AT INSTALLATIONS COMPLY WITH SECTION ASTM E-2203 STANDARD.

7. PROVIDE 1/2" MAX. LOAD BEARING SHIM (TYP.), WHEN ALLOWED BY THIS P.A.D.

8. SEE ANCHOR SCHEDULES ON SHEETS 10 AND 11 FOR ANCHOR TYPE IDENTIFICATION AND SPACING.

9. REMAINING COMPONENTS FOR THIS CURTAIN WALL SYSTEM SHALL BE AS INDICATED ON BILL OF MATERIALS, SHEET 3 OF THIS DRAWING.

10. ALL ALUMINUM EXTRUSIONS IN CONTACT WITH STEEL AND CONCRETE SHALL COMPLY WITH SECTION 6.7 OF THE ALUMINUM DESIGN MANUAL 2005 EDITION.

11. SHOP DRAWINGS PREPARED BASED ON THIS APPROVAL AND TAKING INTO ACCOUNT THE SPECIFIC JOB CONDITIONS, SHALL BE SUBMITTED TO THE BUILDING OFFICIAL AS PART OF THE PERMIT DOCUMENTS.

12. SUBSTRATE MATERIAL NOTED ON THESE DRAWINGS AS "BY OTHERS" MUST WITHSTAND THE LOADS IMPOSED BY THE CURTAIN WALL SYSTEM.

13. THIS PRODUCT'S INSTALLATION SHALL COMPLY WITH ALL SPECS INDICATED IN THIS DRAWING PLUS ANY BUILDING AND ZONING REGULATIONS PROVIDED BY THE JURISDICTION WHERE PERMIT IS APPLIED TO.

14. (a) THIS P.E.D. PREPARED BY THIS ENGINEER IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT; i.e. WHERE THE SITE CONDITIONS DEVIATE FROM THE P.E.D.

    (b) CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION INCLUDING LIFE SAFETY OF THIS PRODUCT, BASED ON THIS P.E.D., PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT. CONSTRUCTION SAFETY AT SITE IS THE CONTRACTOR'S RESPONSIBILITY.

    (c) THIS P.E.D. WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS.

    (d) SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A PROFESSIONAL ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.E.D. ENGINEER OF RECORD, ACTING AS A DELEGATED ENGINEER TO THE P.E.D. ENGINEER, SHALL SUBMIT TO THIS LATTER THE SITE SPECIFIC DRAWINGS FOR REVIEW.

    (e) ORIGINAL P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.

15. PRODUCT MANUFACTURE'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION AT PRODUCT IN ACCORDANCE WITH TEXAS DEPARTMENT OF INSURANCE REQUIREMENTS. ONE LABEL SHALL BE PLACED FOR EVERY OPENING.

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SHEET 4: ISOMETRIC ELEVATION FOR RELIANCE STORMMAX HIGH PERFORMANCE IMPACT RESISTANT CURTAIN WALL SYSTEM.
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SHEET 6: TYPICAL WET AND DRY GLAZING DETAILS.
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SHEET 14: HORIZONTAL CONNECTION DETAILS (SIDE VIEWS) WET GLAZED.
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SHEET 18: SILL/HEAD CONNECTION DETAILS FOR STANDARD & JAMB MULLION (PLAN).
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SHEET 20: HORIZONTAL SECTIONS AT JAMB MULLIONS (PLAN).
SHEET 21: HORIZONTAL SECTIONS AT STANDARD MULLIONS (PLAN).
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SHEET 27: DOOR JAMBS CONNECTION TO CURTAIN WALL.
SHEET 28: SILL CONNECTION FOR JAMB MULLION & DOOR JAMB MULLION FOR DOORS INSTALLED AT EXISTING STRUCTURE OR ADJACENT TO CURTAIN WALL.
SHEET 29: SILL CONNECTION FOR JAMB MULLION & DOOR JAMB MULLION FOR DOORS INSTALLED AT EXISTING STRUCTURE OR ADJACENT TO CURTAIN WALL.
SHEET 30: ZONE PLUG INSTALLATION.
SHEET 31: PRESSURE PLATE AND FACE CAP INSTALLATION.

INSTRUCTIONS

STEP 1 DETERMINE DESIGN WIND LOAD REQUIREMENTS BASED ON WIND VELOCITY, BUILDING HEIGHT, RISK CATEGORY BUILDING, WIND ZONE, USING APPLICABLE ASCE 7 STANDARD.

STEP 2 GO TO SCHEDULE ON SHEET 7 TO DETERMINE MAXIMUM DESIGN PRESSURE RATING "W" (psf) OF DESIRED GLASS SIZE BASED ON GLASS PANEL DIMENSIONS.

STEP 3 DETERMINE MAXIMUM MULLION AND JAMB SPAN "L"(FT) FOR A GIVEN MULLION EFFECTIVE SPACING "b", FOR SINGLE SPAN ON SCHEDULE ON SHEET 9.

STEP 4: USING SCHEDULES ON SHEETS 10 AND 11 SELECT ANCHOR OPTION FOR MULLIONS AND JAMBS WITH DESIGN PRESSURE RATING EQUAL OR GREATER THAN DESIGN LOAD SPECIFIED IN STEP 1.

STEP 5 THE LOWEST VALUE OF DESIGN PRESSURE RATING RESULTING FROM STEPS 2, 3, AND 4 SHALL APPLY TO THE ENTIRE SYSTEM.

STEP 6 THE LOWEST IMPACT RESISTANCE FOR GLASS BASED ON SHEETS 5 & 6 WILL DETERMINE FINAL LEVEL OF IMPACT RESISTANCE OF CURTAIN WALL SYSTEM (80 OR 50 FT/SEC LARGE MISSILE SPEED).

THIS DRAWING SHALL ONLY BE USED TO OBTAIN PERMITS UNDER THE TEXAS DEPARTMENT OF INSURANCE JURISDICTION

TEXAS DEPARTMENT OF INSURANCE - 2006

RELIANCE STORMMAX HIGH PERFORMANCE CURTAIN WALL SYSTEM LARGE MISSILE IMPACT INSULATED GLASS

DRAWN BY: F.R.L
DATE: 10/16/14
DRAWING No: 14-080
SHEET 1 OF 31

REV. No | DESCRIPTION | DATE

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PROFESSIONAL ENGINNER
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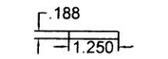
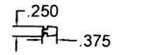
TEXAS LIC. # 90691
FIRM REGISTRATION # F-13790

STATE OF TEXAS — 90691 — LICENSED PROFESSIONAL ENGINEER
10/15/14
P.E. SEAL/SIGNATURE/DATE

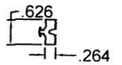
RELIANCE STORMMAX HIGH PERFORMANCE CURTAIN WALL SYSTEM COMPONENTS



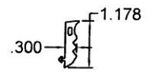
1 CW-2102 SETTING BLOCK



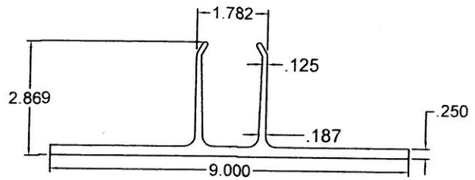
2 FG-5185S GASKET



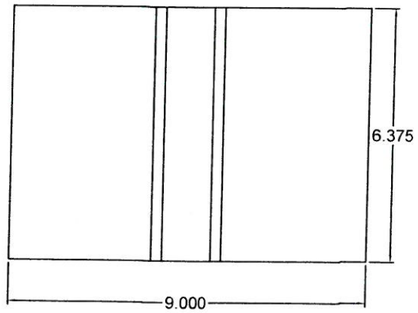
8 GP-107 ISOLATOR

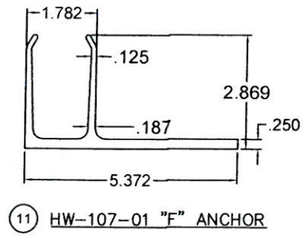


9 GP-165 GASKET

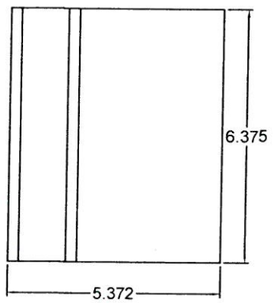


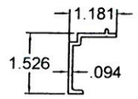
10 HW-106-01 "T" ANCHOR



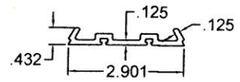


11 HW-107-01 "F" ANCHOR

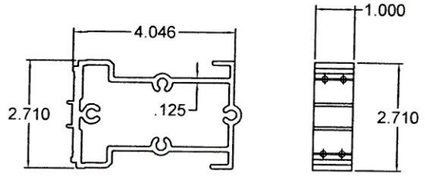




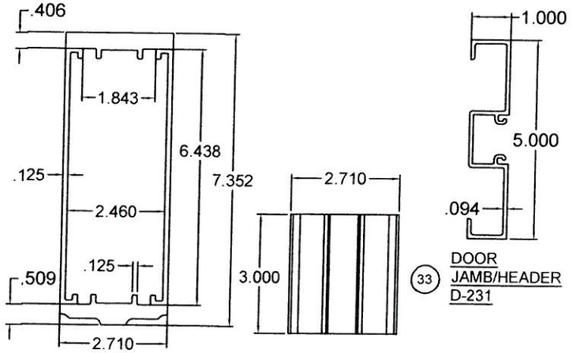
12 HW-123 FILLER



13 HW-163 PRESSURE PLATE

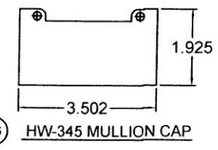


14 HW-185-01 SHEAR BLOCK

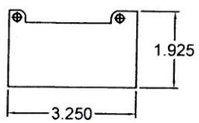


15 HW-202 ANCHOR SLEEVE

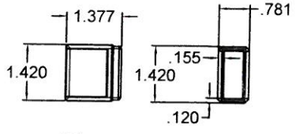
33 DOOR JAMB/HEADER D-231



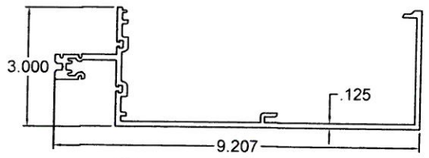
16 HW-345 MULLION CAP



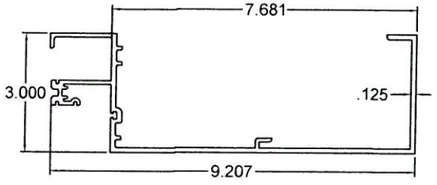
17 HW-348 JAMB CAP



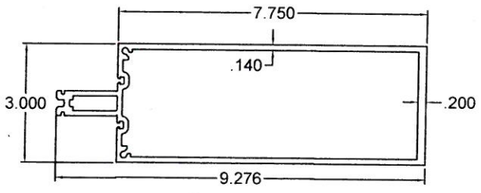
18 HW-355 ZONE PLUG



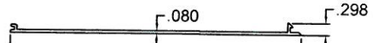
23 HW-733 ROLL UNDER HORIZONTAL



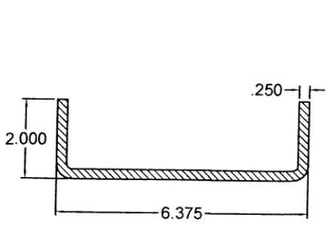
19 HW-701 HEAD



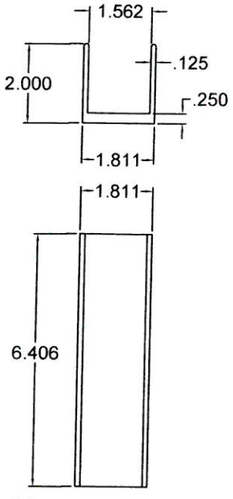
21 HW-710 MULLION



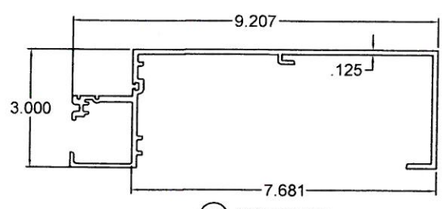
24 HW-737 FILLER



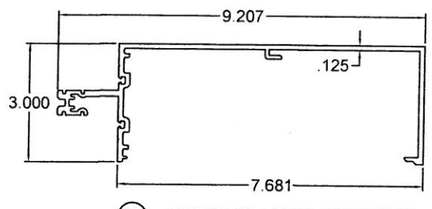
26 RS-36 REINFORCEMENT STEEL



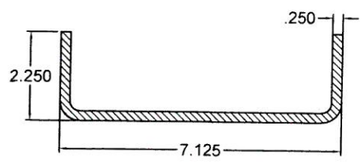
32 HW-109-01 HIGH PERFORMANCE "U" ANCHOR



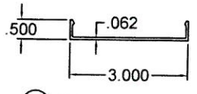
20 HW-702 SILL



22 HW-732 ROLL OVER HORIZONTAL



25 RS-35 REINFORCEMENT STEEL



27 WW-1328 FACE CAP

TEXAS DEPARTMENT OF INSURANCE – 2006

RELIANCE STORMMAX HIGH PERFORMANCE CURTAIN WALL SYSTEM LARGE MISSILE IMPACT INSULATED GLASS

DRAWN BY: F.R.L
DATE: 10/16/14
DRAWING No: 14-080
SHEET 2 OF 31

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REV. No	DESCRIPTION	DATE

WALTER A. TILLIT Jr P.E.
PROFESSIONAL ENGINEER
6355 N.W 36 STREET, STE. 305
VIRGINA GARDENS, FL 33166
PHONE(305) 871-1530 FAX (305) 871-1531
TEXAS LIC. # 90691
FIRM REGISTRATION # F-13790

STATE OF TEXAS — WALTER A. TILLIT — 90691 — REGISTERED PROFESSIONAL ENGINEER — 10/15/15

P.E. SEAL/SIGNATURE/DATE

BILL OF MATERIALS

ITEM No.	PART NUMBER	DESCRIPTION	DIMENSIONS	MATERIAL	MANUFACTURER	NOTES
1.	CW-2102	SETTING BLOCK	1.250 X .188 X 4.00	EPDM 80 DUROMETER	EPG	
2.	FG-5185	INTERIOR SPACER GASKET	.375 X .25	EPDM 70 DUROMETER	EPG	
3.	FS-9	SHEAR BLOCK ASSEMBLY SCREW	#14 x 1-1/2" HH	ZINC COATED STEEL	VARIES	
4.	FS-118	HORIZ. TO SHEAR BLOCK FASTENER	#10 x 1" PFH	ZINC COATED STEEL	VARIES	
5.	FS-320	END CAP SCREW	#12-14 x 1" HH	ZINC COATED STEEL	VARIES	
6.	FS-322	POCKET FILLER SCREW	#10 x 1/2" DRIVE SCR	ZINC COATED STEEL	VARIES	SPACED @ 9" O.C.
7.	FS-325	PRESSURE PLATE SCREW	12-14 x 1-1/2" HH	STALGARD STEEL	ELCO	SPACED @ 9" O.C.
8.	GP-107	ISOLATOR GASKET	.264 X .626	EPDM 70 DUROMETER	EPG	
9.	GP-165	EXTERIOR & INTERIOR GASKET	.300 X 1.173	EPDM 60 DUROMETER	TREMCO	
10.	HW-106-01	"T" ANCHOR	9.00 X 1.745 X .25XVARIES	6063-T6 ALUMINUM	OBE	
11.	HW-107-01	"F" ANCHOR	5.372 X 1.792 X .25XVARIES	6063-T6 ALUMINUM	OBE	
12.	HW-123	POCKET FILLER	1.526 X 1.181 X .094	6063-T5 ALUMINUM	OBE	
13.	HW-163	PRESSURE PLATE	.432 X 2.901 X .125	6063-T6 ALUMINUM	OBE	
14.	HW-185-01	SHEAR BLOCK	4.046 X 2.710 X .125	6063-T6 ALUMINUM	OBE	
15.	HW-202-01	ANCHOR SLEEVE	2.710 X 7.352 X .125XVARIES	6063-T6 ALUMINUM	OBE	
16.	HW-345	MULLION END CAP	3.502 X 1.925 X .063	5005 H32 ALUMINUM	OBE	
17.	HW-348	JAMB END CAP	3.25 X 1.925 X .063	5005 H32 ALUMINUM	OBE	
18.	HW-355	ZONE PLUG	1.377 X 1.416 X .781	HIVAL ABS HG6 RESIN	CHARLOMA	
19.	HW-701	HEAD	3.00 X 7.681 X .125	6063-T6 ALUMINUM	OBE	
20.	HW-702	SILL	3.00 X 7.681 X .125	6063-T6 ALUMINUM	OBE	
21.	HW-710	MULLION	3.00 X 7.75 X .140 X 0.200	6063-T6 ALUMINUM	OBE	
22.	HW-732	ROLL OVER HORIZONTAL	3.00 X 7.681 X .125	6063-T6 ALUMINUM	OBE	
23.	HW-733	ROLL UNDER HORIZONTAL	3.00 X 7.681 X .125	6063-T6 ALUMINUM	OBE	
24.	HW-737	FILLER	7.341 X .298 X .080	6063-T5 ALUMINUM	OBE	
25.	RS-35	REINFORCEMENT STEEL	2.25 X 7.125 X .25	ZINC PAINTED STEEL	OBE	
26.	RS-36	REINFORCEMENT STEEL	2.00 X 6.375 x .25	ZINC PAINTED STEEL	OBE	
27.	WW-1328	FACE CAP	3.00 X .50 X .062	6063-T5 ALUMINUM	OBE	
28.	795	PERIMETER SEAL		SILICONE	DOW CORNING	
29.	995	POCKET SEAL		SILICONE	DOW CORNING	
30.	PROGLAZE SSG	PERIMETER SEAL		SILICONE	TREMCO	
31.	PROGLAZE II	POCKET SEAL		SILICONE	TREMCO	
32.	HW-109-01 HIGH PERFORMANCE "U" ANCHOR	AT DOOR JAMB MULLION & AT JAMB MULLION AT DOOR W/ SIDELITE OR W/O SIDELITE	2.00 X 1.811 X 0.125 X 6.406	6063-T6 ALUMINUM	OBE	USE ONLY AT BOTT.
33.	D-231	DOOR JAMB/HEADER	1.00" X 5.00" X .094"	6063-T6 ALUMINUM	OBE	
34.	INSULATING GLASS UNIT SPACER	MODEL H 6.5	1/2" or 3/8" WIDE X 1/4" HIGH x 0.014" THK.	3105-H24 ALUM. ALLOY	VARIES	SEE GLASS SCHEDULE

TEXAS DEPARTMENT OF INSURANCE – 2006

RELIANCE STORMMAX HIGH PERFORMANCE CURTAIN WALL SYSTEM LARGE MISSILE IMPACT INSULATED GLASS

DRAWN BY: F.R.L 10/16/14

DATE

14–080 DRAWING No

SHEET 3 OF 31

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TEXAS LIC. # 90691
FIRM REGISTRATION # F–13790

STATE OF TEXAS WALTER A. TILLIT 90691 PROFESSIONAL ENGINEER

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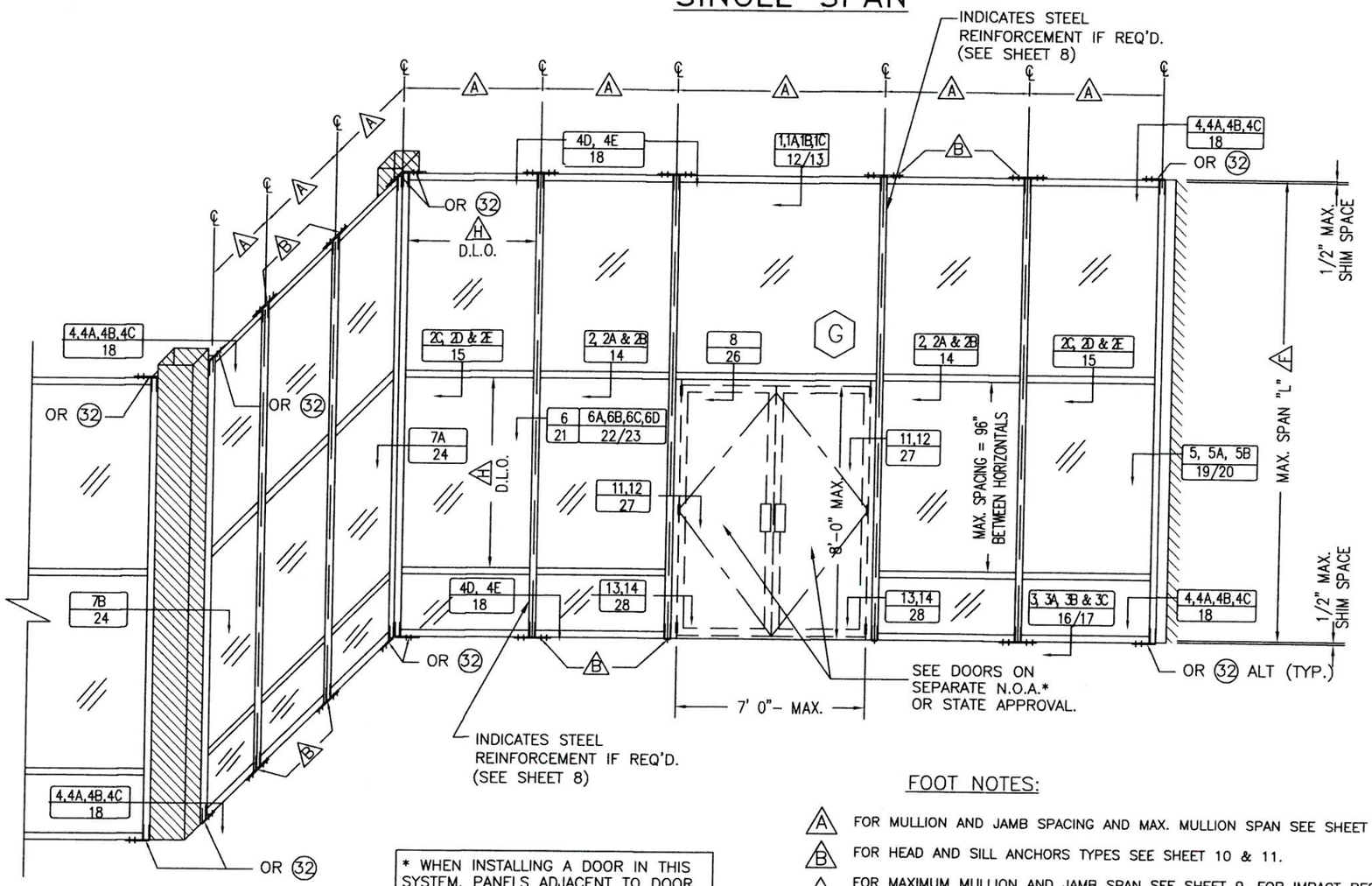
ISOMETRIC ELEVATION FOR RELIANCE STORMMAX HIGH PERFORMANCE CURTAIN WALL SYSTEM

N.T.S.

SINGLE SPAN



* WHEN INSTALLING A DOOR IN THIS SYSTEM, PANELS ADJACENT TO DOOR MUST BE GLAZED WITH SAFETY GLASS, PER GLASS TYPES ON SHEETS 5 & 6

FOOT NOTES:

- (A) FOR MULLION AND JAMB SPACING AND MAX. MULLION SPAN SEE SHEET 9.
- (B) FOR HEAD AND SILL ANCHORS TYPES SEE SHEET 10 & 11.
- (F) FOR MAXIMUM MULLION AND JAMB SPAN SEE SHEET 9, FOR IMPACT RESISTANCE OF MULLIONS SEE SHEET 8.
- (G) FOR WET AND DRY GLAZING DETAILS, GLASS SCHEDULE AND IMPACT RESISTANCE OF GLASS SEE SHEETS 5 & 6.
- (H) FOR MAXIMUM D.L.O. OF GLASS SEE SCHEDULE ON SHEET 7.

TEXAS DEPARTMENT OF INSURANCE - 2006

RELIANCE STORMMAX HIGH PERFORMANCE CURTAIN WALL SYSTEM LARGE MISSILE IMPACT INSULATED GLASS

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STATE OF TEXAS — WALTER A. TILLIT JR. — 90691 — LICENSED PROFESSIONAL ENGINEER

10/15/14

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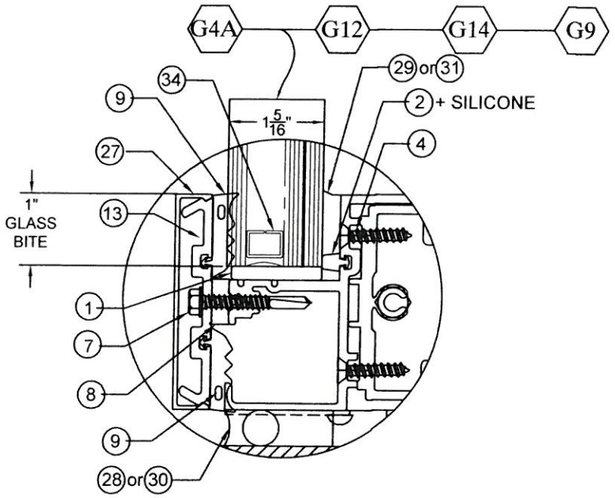
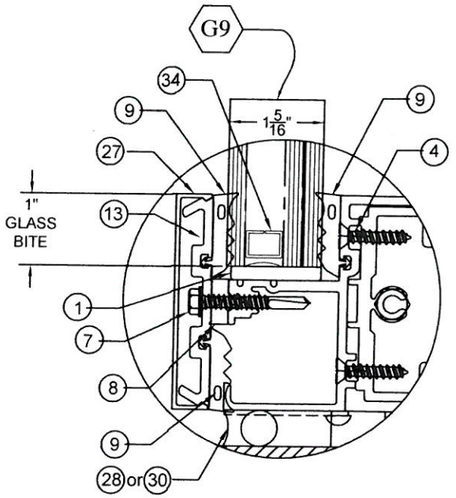


INSULATING LAMINATED WET GLAZING DETAIL

50 FT/SEC 9 LB 2"x4" LARGE MISSILE WET GLAZED GLASS SCHEDULE				
GLASS LABEL	GLASS COMPOSITION	MANUFACTURER NAME	MAX. D.L.O.	MISSILE TYPE
G4A	1 5/16" INSULATED LAMINATED GLASS CONSISTING OF EXTERIOR 1/4" TEMP. - 1/2" AIR SPACE - 1/4" H.S. - O90" SENTRYGLAS IONOPLAST APPROVED INTERLAYER - 1/4" H.S.	DUPONT	SEE SCHEDULE ON SHEET 7	LARGE MISSILE IMPACT
G12	1 5/16" INSULATED LAMINATED GLASS CONSISTING OF EXTERIOR 1/4" TEMP. - 1/2" AIR SPACE -1/4" H.S. - 0.075" VANCEVA INTERLAYER - 1/4" H.S.	EASTMAN CHEMICAL COMPANY	SEE SCHEDULE ON SHEET 7	LARGE MISSILE IMPACT
G14	1 5/16" INSULATED LAMINATED GLASS CONSISTING OF EXTERIOR 1/4" TEMP. - 3/8" AIR SPACE - 1/4" H.S. -.150" VANCEVA INTERLAYER - 1/4" H.S.	EASTMAN CHEMICAL COMPANY	SEE SCHEDULE ON SHEET 7	LARGE MISSILE IMPACT
G9	1 5/16" INSULATED LAMINATED GLASS CONSISTING OF EXTERIOR 1/4" TEMP. - 3/8" AIR SPACE - 1/4" H.S. - 180" SENTRYGLAS IONOPLAST APPROVED INTERLAYER - 1/4" H.S.	DUPONT	SEE SCHEDULE ON SHEET 7	LARGE MISSILE IMPACT



INSULATING LAMINATED DRY GLAZING DETAIL

50 FT/SEC 9 LB 2"x4" LARGE MISSILE DRY GLAZED GLASS SCHEDULE				
GLASS LABEL	GLASS COMPOSITION	MANUFACTURER NAME	MAX. D.L.O.	MISSILE TYPE
G9	1 5/16" INSULATED LAMINATED GLASS CONSISTING OF EXTERIOR 1/4" TEMP. - 3/8" AIR SPACE - 1/4" H.S. - 180" SENTRYGLAS IONOPLAST APPROVED INTERLAYER - 1/4" H.S.	DUPONT	SEE SCHEDULE ON SHEET 7	LARGE MISSILE IMPACT

TEXAS DEPARTMENT OF INSURANCE - 2006

RELIANCE STORMMAX HIGH PERFORMANCE CURTAIN WALL SYSTEM LARGE MISSILE IMPACT INSULATED GLASS

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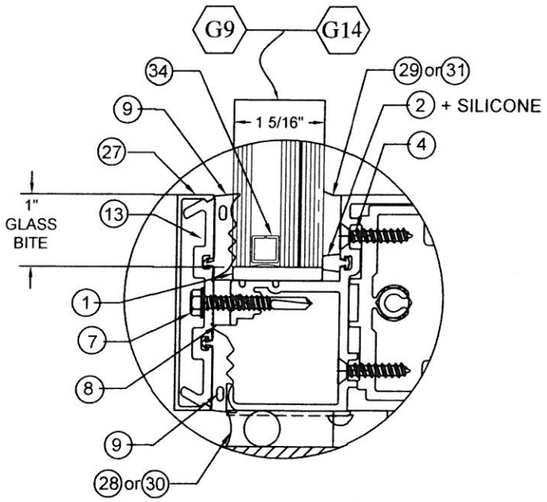
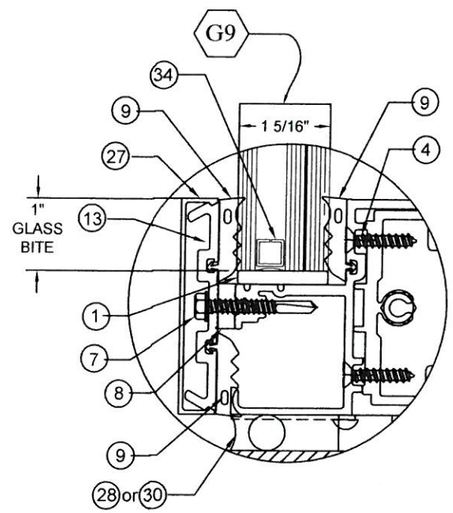


INSULATING LAMINATED WET GLAZING DETAIL

80 FT/SEC 9 LBS 2"x4" LARGE MISSILE WET GLAZED GLASS SCHEDULE				
GLASS LABEL	GLASS COMPOSITION	MANUFACTURER NAME	MAX. D.L.O.	MISSILE TYPE
G14	1 5/16" INSULATED LAMINATED GLASS CONSISTING OF EXTERIOR 1/4" TEMP. - 3/8" AIR SPACE - 1/4" H.S. -.150" VANCEVA INTERLAYER - 1/4" H.S.	EASTMAN CHEMICAL COMPANY	SEE SCHEDULE ON SHEET 7	LARGE MISSILE IMPACT
G9	1 5/16" INSULATED LAMINATED GLASS CONSISTING OF EXTERIOR 1/4" TEMP. - 3/8" AIR SPACE - 1/4" H.S. - 180" SENTRYGLAS IONOPLAST APPROVED INTERLAYER - 1/4" H.S.	DUPONT	SEE SCHEDULE ON SHEET 7	LARGE MISSILE IMPACT



INSULATING LAMINATED DRY GLAZING DETAIL

80 FT/SEC 9 LBS 2"x4" LARGE MISSILE DRY GLAZED GLASS SCHEDULE				
GLASS LABEL	GLASS COMPOSITION	MANUFACTURER NAME	MAX. D.L.O.	MISSILE TYPE
G9	1 5/16" INSULATED LAMINATED GLASS CONSISTING OF EXTERIOR 1/4" TEMP. - 3/8" AIR SPACE - 1/4" H.S. - 180" SENTRYGLAS IONOPLAST APPROVED INTERLAYER - 1/4" H.S.	DUPONT	SEE SCHEDULE ON SHEET 7	LARGE MISSILE IMPACT

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RELIANCE STORMMAX HIGH PERFORMANCE CURTAIN WALL SYSTEM LARGE MISSILE IMPACT INSULATED GLASS

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MAXIMUM FRAME WIDTH "a" AND FRAME LENGTH "b" VERSUS DESIGN PRESSURE RATING (psf) SCHEDULE *

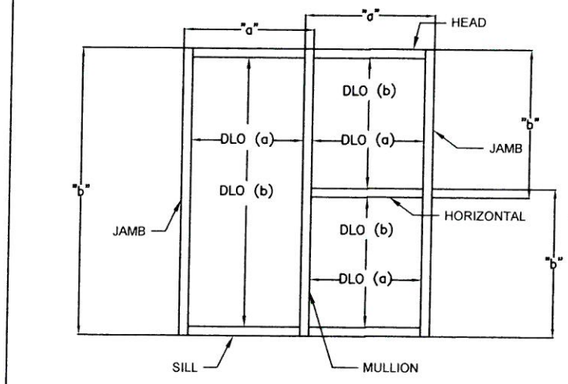
GLASS TYPE ⟨G9⟩⟨G14⟩		
DIMENSION "a"	DIMENSION "b"	MAXIMUM DESIGN PRESSURE RATING (psf)
63" OR LESS	FROM 63" TO 102"	± 92

* MIN a= 20 3/4" FOR b/a EQUAL OR GREATER THAN 5.0 @ HEAD & SILL AND MIN a= 28 5/8" FOR b/a EQUAL OR GREATER THAN 5.0 @ JAMBS & MULLIONS.

GLASS TYPE ⟨G4A⟩⟨G12⟩		
DIMENSION "a"	DIMENSION "b"	MAXIMUM DESIGN PRESSURE RATING (psf)
63" OR LESS	FROM 63" TO 102"	± 80

* MIN a= 20 3/4" FOR b/a EQUAL OR GREATER THAN 5.0 @ HEAD & SILL AND MIN a= 28 5/8" FOR b/a EQUAL OR GREATER THAN 5.0 @ JAMBS & MULLIONS.

DIMENSIONS LEGEND**



** SIDE "a" IS ALWAYS EQUAL OR SHORTER THAN "b". "a", "b" MAY BE ORIENTED IN ANY DIRECTION.

DETERMINATION OF MAXIMUM DAY LIGHT OPENING (D.L.O.) AT EACH END OF GLASS GIVEN "a" & "b"

SIDE	MAX. DAY LIGHT OPENING
	(D.L.O) FORMULA
MAXIMUM DLO (a) (SHORT SIDE)	"a" – 6.00"
MAXIMUM DLO (b) (LONG SIDE)	"b" – 6.00"

TEXAS DEPARTMENT OF INSURANCE – 2006

RELIANCE STORMMAX HIGH PERFORMANCE CURTAIN WALL SYSTEM LARGE MISSILE IMPACT INSULATED GLASS

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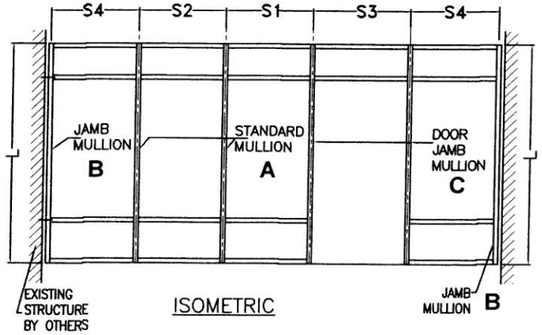
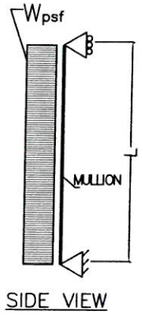
RELIANCE STORMMAX HIGH PERFORMANCE SINGLE SPAN MULLION



ISOMETRIC



SIDE VIEW

DEFINITIONS OF MULLION SECTIONS	
SECTION 1 :	SINGLE SPAN UNREINFORCED STANDARD MULLION A OPTION 1 (SEE SECT. 6/21)
SECTION 2 :	SINGLE SPAN REINFORCED STANDARD MULLION A OPTION 2 (SEE SECT. 6A & 6B/22)
SECTION 3 :	SINGLE SPAN DOUBLELLY REINFORCED STANDARD MULLION A OPTION 3 (SEE SECT. 6C & 6D/23)
SECTION 4 :	SINGLE SPAN UNREINFORCED JAMB MULLION B OPTION 1 (SEE DET. 5/19)
SECTION 5 :	SINGLE SPAN REINFORCED JAMB MULLION B OPTION 2 (SEE DET. 5A & 5B/20)
SECTION 6 :	SINGLE SPAN REINFORCED DOOR JAMB MULLION C (SEE DET. 12/27)

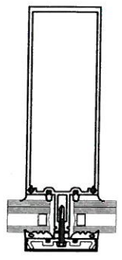
L = MULLION SPAN ; S_1, S_2, S_3, S_4 & S_5 = MULLION SPACING

EFFECTIVE SPACING b = $\frac{S_1 + S_2}{2}$ or $\frac{S_2 + S_4}{2}$ (FOR STANDARD MULLION)

EFFECTIVE SPACING b = $\frac{S_1 + S_3}{2}$ or $\frac{S_3 + S_4}{2}$ (FOR DOOR JAMB MULLION)

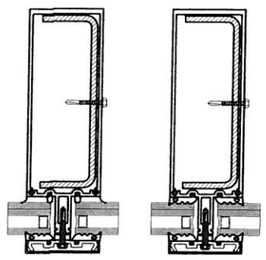
EFFECTIVE SPACING b = $\frac{S_4}{2}$ (FOR JAMB MULLION)

STANDARD MULLION OPTION 1			
A	SECTION:1 STD MULLION (21)	Ix= 34.8107 in4 Sx= 7.1339 in3	IN TERMS OF ALUM.



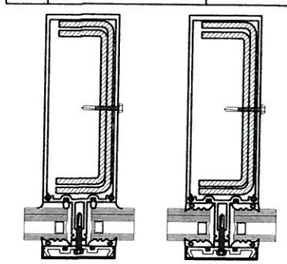
WET GLAZED ONLY

STANDARD MULLION OPTION 2			
A	SECTION:2 STD MULLION (21) W/ STEEL CHANNEL (25)	Ix= 90.7837 in4 Sx= 17.1876 in3	IN TERMS OF ALUM.



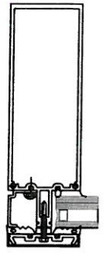
WET GLAZED DRY GLAZED

STANDARD MULLION OPTION 3			
A	SECTION:3 STD MULLION (21) W/ STEEL CHANNELS (25) + (26)	Ix= 130.3060 in4 Sx= 24.3435 in3	IN TERMS OF ALUM.



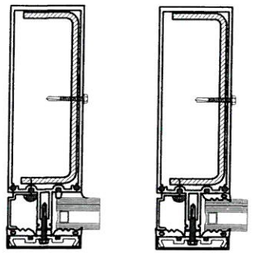
WET GLAZED DRY GLAZED

JAMB MULLION OPTION 1			
B	SECTION:4 JAMB MULLION (21)	Ix= 34.8107 in4 Sx= 7.1339 in3	IN TERMS OF ALUM.



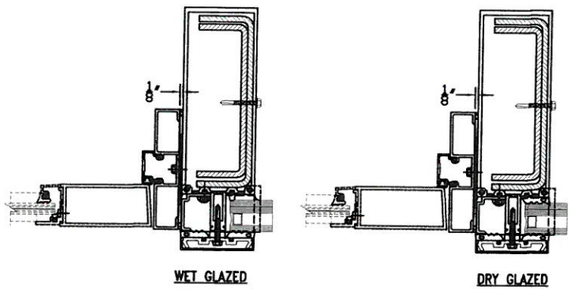
WET GLAZED ONLY

JAMB MULLION OPTION 2			
B	SECTION:5 JAMB MULLION (21) W/ STEEL CHANNEL (25)	Ix= 90.7837 in4 Sx= 17.1876 in3	IN TERMS OF ALUM.



WET GLAZED DRY GLAZED

DOOR JAMB MULLION			
C	SECTION:6 JAMB MULLION (21) W/ STEEL CHANNELS (25) + (26)	Ix= 130.3060 in4 Sx= 24.3435 in3	IN TERMS OF ALUM.



WET GLAZED DRY GLAZED

IMPACT RESISTANCE SCHEDULE FOR MULLIONS

MULLION TYPE	OPTION	SECTION	LARGE MISSILE SPEED
A	1	1	80 FT/SEC
A	2	2	80 FT/SEC
A	3	3	80 FT/SEC
B	1	4	80 FT/SEC
B	2	5	80 FT/SEC
C	–	6	80 FT/SEC

TEXAS DEPARTMENT OF INSURANCE – 2006

RELIANCE STORMMAX HIGH PERFORMANCE CURTAIN WALL SYSTEM LARGE MISSILE IMPACT INSULATED GLASS

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DATE 10/16/14

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MAXIMUM DESIGN PRESSURE RATING
FOR STANDARD & DOOR JAMB MULLIONS
MAXIMUM MULLION SINGLE SPAN "L"(FT) SCHEDULE FOR A GIVEN DESIGN PRESSURE RATING (psf) AND A GIVEN MULLION EFFECTIVE SPACING "b" *

MAX. DESIGN PRESSURE RATING (psf)	EFFECTIVE SPACING "b"(ft–in)	SINGLE SPAN MULLION SECTION 1 STANDARD MULLION A OPTION 1 "L"(ft–in)	SECTION 2 STANDARD MULLION A OPTION 2 "L"(ft–in)	SECTION 3 STANDARD MULLION A OPTION 3 "L"(ft–in)	SECTION 6 DOOR JAMB MULLION C "L"(ft–in)
60.0	5'–0"	14'–3"	16'–9"	20'–0"	20'–0"
	5'–6"	14'–3"	16'–9"	20'–0"	20'–0"
	6'–0"	13'–10"	16'–9"	20'–0"	20'–0"
	6'–6"	12'–9"	16'–9"	20'–0"	20'–0"
	7'–0"	11'–11"	16'–9"	19'–1"	19'–1"
	7'–6"	11'–1"	16'–9"	17'–9"	17'–9"
	8'–3"	10'–1"	15'–7"	16'–9"	16'–9"
65.0	5'–0"	14'–3"	16'–9"	20'–0"	20'–0"
	5'–6"	13'–11"	16'–9"	20'–0"	20'–0"
	6'–0"	12'–9"	16'–9"	20'–0"	20'–0"
	6'–6"	11'–10"	16'–9"	18'–11"	18'–11"
	7'–0"	11'–0"	16'–9"	17'–7"	17'–7"
	7'–6"	10'–3"	15'–10"	16'–9"	16'–9"
	8'–3"	9'–3"	14'–4"	16'–9"	16'–9"
70.0	5'–0"	14'–3"	16'–9"	20'–0"	20'–0"
	5'–6"	12'–11"	16'–9"	20'–0"	20'–0"
	6'–0"	11'–11"	16'–9"	19'–1"	19'–1"
	6'–6"	11'–0"	16'–9"	17'–7"	17'–7"
	7'–0"	10'–2"	15'–9"	16'–9"	16'–9"
	7'–6"	9'–6"	14'–8"	16'–9"	16'–9"
	8'–3"	8'–8"	13'–4"	16'–9"	16'–9"
75.0	5'–0"	—	16'–9"	20'–0"	20'–0"
	5'–6"	—	16'–9"	19'–5"	19'–5"
	6'–0"	—	16'–9"	17'–9"	17'–9"
	6'–6"	—	15'–10"	16'–9"	16'–9"
	7'–0"	—	14'–8"	16'–9"	16'–9"
	7'–6"	—	13'–8"	16'–9"	16'–9"
	8'–3"	—	12'–5"	16'–6"	16'–6"
80.0	5'–0"	—	16'–9"	20'–0"	20'–0"
	5'–6"	—	16'–9"	18'–2"	18'–2"
	6'–0"	—	16'–1"	16'–9"	16'–9"
	6'–6"	—	14'–10"	16'–9"	16'–9"
	7'–0"	—	13'–9"	16'–9"	16'–9"
	7'–6"	—	12'–10"	16'–9"	16'–9"
	8'–3"	—	11'–8"	15'–6"	15'–6"
85.0	5'–0"	—	16'–9"	16'–9"	
	5'–6"	—	16'–6"	16'–9"	—
	6'–0"	—	15'–1"	16'–9"	—
	6'–6"	—	13'–11"	16'–9"	—
	7'–0"	—	12'–11"	16'–9"	—
	7'–6"	—	12'–1"	16'–9"	—
	8'–3"	—	11'–0"	14'–7"	—
92.0	5'–0"	—	16'–9"	16'–9"	—
	5'–6"	—	15'–3"	16'–9"	—
	6'–0"	—	14'–0"	16'–9"	—
	6'–6"	—	12'–11"	16'–9"	—
	7'–0"	—	12'–0"	15'–10"	—
	7'–6"	—	11'–2"	14'–10"	—
	8'–3"	—	10'–2"	13'–5"	—

* SEE SHEET 8 FOR IMPACT RESISTANCE SCHEDULE FOR MULLIONS

MAXIMUM DESIGN PRESSURE RATING
FOR JAMB MULLIONS
MAXIMUM MULLION SINGLE SPAN "L"(FT) SCHEDULE FOR A GIVEN DESIGN PRESSURE RATING (psf) AND A GIVEN MULLION EFFECTIVE SPACING "b" *

MAX. DESIGN PRESSURE RATING (psf)	EFFECTIVE SPACING "b"(ft–in)	SINGLE SPAN MULLION SECTION 4 JAMB MULLION B OPTION 1 "L"(ft–in)	SECTION 5 JAMB MULLION B OPTION 2 "L"(ft–in)
60.0	2'–6"	14'–3"	20'–0"
	2'–9"	14'–3"	20'–0"
	3'–0"	13'–10"	20'–0"
	3'–3"	12'–9"	20'–0"
	3'–6"	11'–11"	18'–11"
	3'–9"	11'–1"	17'–9"
	4'–1 1/2"	10'–1"	16'–9"
65.0	2'–6"	14'–3"	20'–0"
	2'–9"	13'–11"	20'–0"
	3'–0"	12'–9"	20'–0"
	3'–3"	11'–10"	19'–1"
	3'–6"	11'–0"	17'–6"
	3'–9"	10'–3"	16'–9"
	4'–1 1/2"	9'–3"	16'–9"
70.0	2'–6"	14'–3"	20'–0"
	2'–9"	12'–11"	20'–0"
	3'–0"	11'–11"	19'–1"
	3'–3"	11'–0"	17'–9"
	3'–6"	10'–2"	16'–9"
	3'–9"	9'–6"	15'–9"
	4'–1 1/2"	8'–8"	16'–9"
75.0	2'–6"	—	20'–0"
	2'–9"	—	19'–5"
	3'–0"	—	17'–9"
	3'–3"	—	16'–9"
	3'–6"	—	16'–9"
	3'–9"	—	16'–9"
	4'–1 1/2"	—	16'–9"
80.0	2'–6"	—	19'–8"
	2'–9"	—	18'–2"
	3'–0"	—	16'–9"
	3'–3"	—	16'–9"
	3'–6"	—	16'–9"
	3'–9"	—	16'–9"
	4'–1 1/2"	—	16'–9"
85.0	2'–6"	—	16'–9"
	2'–9"	—	16'–9"
	3'–0"	—	16'–9"
	3'–3"	—	16'–9"
	3'–6"	—	16'–9"
	3'–9"	—	16'–9"
	4'–1 1/2"	—	16'–9"
92.0	2'–6"	—	16'–9"
	2'–9"	—	16'–9"
	3'–0"	—	16'–9"
	3'–3"	—	16'–9"
	3'–6"	—	16'–9"
	3'–9"	—	16'–9"
	4'–1 1/2"	—	16'–9"

TEXAS DEPARTMENT OF INSURANCE – 2006

RELIANCE STORMMAX HIGH PERFORMANCE CURTAIN WALL SYSTEM LARGE MISSILE IMPACT INSULATED GLASS

DRAWN BY: F.R.L. 10/16/14 | DATE | 14–080 DRAWING No | SHEET 9 OF 31

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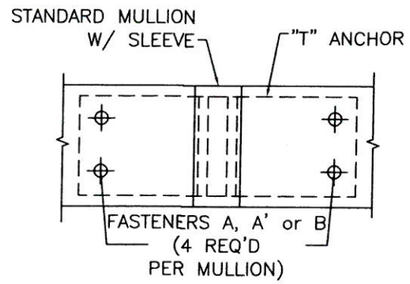
WALTER A. TILLIT Jr P.E.
PROFESSIONAL ENGINNER
6355 N.W 36 STREET, STE. 305
VIRGINA GARDENS, FL 33166
PHONE(305) 871–1530 FAX (305) 871–1531
TEXAS LIC. # 90691
FIRM REGISTRATION # F–13790

P.E. SEAL/SIGNATURE/DATE

SINGLE SPAN HEAD & SILL CONNECTION AT STANDARD MULLION			
MAX. MULLION SPAN	EFFECTIVE SPACING	MAX. DESIGN PRESSURE RATING	
		POURED CONCRETE MIN. (fc=3ksi) SUBSTRATE	1/4" MIN. THK ASTM A-36 STEEL SUBSTRATE
		FASTENER	FASTENER
"L"(ft-in)	"b"(ft-in)	A or A'	B
10'-0" OR LESS	5'-0"	92.0	92.0
	5'-6"	92.0	92.0
	6'-0"	92.0	92.0
	6'-6"	92.0	92.0
	7'-0"	92.0	92.0
	7'-6"	92.0	92.0
	8'-3"	92.0	92.0
12'-0"	5'-0"	92.0	92.0
	5'-6"	92.0	92.0
	6'-0"	92.0	92.0
	6'-6"	92.0	92.0
	7'-0"	92.0	92.0
	7'-6"	92.0	92.0
	8'-3"	92.0	92.0
14'-0"	5'-0"	92.0	92.0
	5'-6"	92.0	92.0
	6'-0"	92.0	92.0
	6'-6"	92.0	92.0
	7'-0"	92.0	92.0
	7'-6"	92.0	92.0
	8'-3"	90.5	92.0
15'-0"	5'-0"	92.0	92.0
	5'-6"	92.0	92.0
	6'-0"	92.0	92.0
	6'-6"	92.0	92.0
	7'-0"	92.0	92.0
	7'-6"	92.0	92.0
	8'-3"	84.5	92.0
16'-0"	5'-0"	92.0	92.0
	5'-6"	92.0	92.0
	6'-0"	92.0	92.0
	6'-6"	92.0	92.0
	7'-0"	92.0	92.0
	7'-6"	87.1	92.0
	8'-3"	79.2	92.0
18'-0"	5'-0"	92.0	92.0
	5'-6"	92.0	92.0
	6'-0"	92.0	92.0
	6'-6"	89.4	92.0
	7'-0"	83.0	92.0
	7'-6"	77.5	92.0
	8'-3"	70.4	88.6
19'-0"	5'-0"	92.0	92.0
	5'-6"	92.0	92.0
	6'-0"	91.7	92.0
	6'-6"	84.7	92.0
	7'-0"	78.6	92.0
	7'-6"	73.4	46.2
	8'-3"	66.7	42.0
20'-0"	5'-0"	92.0	92.0
	5'-6"	92.0	92.0
	6'-0"	87.1	92.0
	6'-6"	80.4	92.0
	7'-0"	74.7	92.0
	7'-6"	69.7	87.7
	8'-3"	63.4	79.7

MAXIMUM DESIGN PRESSURE RATING FOR SINGLE SPAN HEAD & SILL STANDARD MULLION CONNECTIONS



SCHEMATIC "T" ANCHOR/SLEEVE CONNECTION DETAIL FOR FASTENERS A, A' & B *

* SEE CONNECTION DETAILS ON SHEETS 18 & 25 FOR FASTENERS QUANTITY & LOCATIONS AT MULLION.

FOOT NOTE : (B) FASTENERS TYPES REQUIREMENTS

A - 1/2"Ø POWER FASTENERS WEDGE BOLT W/ 4" Min. EMBEDMENT INTO 6" Min. THICK POURED CONCRETE (Min. f'c = 3 ksi) BEYOND ANY FINISH MATERIAL, W/ 6" MIN. EDGE DISTANCE.

A' - 1/2"Ø POWERS FASTENERS WEDGE BOLT W/4" Min. EMBEDMENT INTO 6" Min. THICK POURED CONCRETE (Min. f'c= 3 ksi) BEYOND ANY FINISH MATERIAL W/6" Min. EDGE DISTANCE.

B - 1/2"Ø-13 TYPE "F" GRADE 5 BOLT TO 1/4" MIN. THK. ASTM A-36 STEEL W/ 1" Min. EDGE DISTANCE.

TEXAS DEPARTMENT OF INSURANCE - 2006

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SHEET 10 OF 31

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TEXAS LIC. # 90691
FIRM REGISTRATION # F-13790

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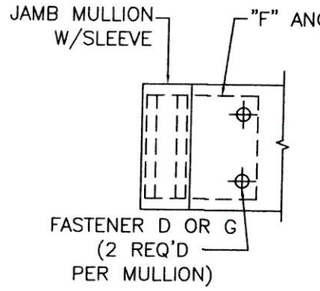
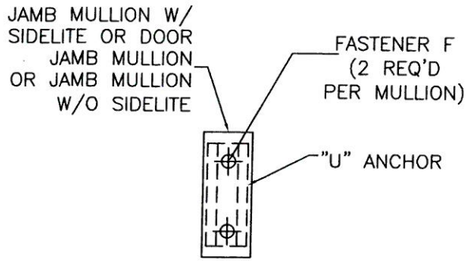
MAXIMUM DESIGN PRESSURE RATING FOR SINGLE SPAN HEAD & SILL JAMB OR DOOR JAMB MULLION CONNECTIONS

SINGLE SPAN HEAD & SILL CONNECTION AT JAMB MULLION			
MAX. MULLION SPAN	EFFECTIVE SPACING	MAX. DESIGN PRESSURE RATING	
		1/4" MIN. THK ASTM A-36 STEEL SUBSTRATE	POURED CONCRETE MIN. (fc=3ksi) SUBSTRATE
		FASTENER	FASTENER
"L"(ft-in)	"b"(ft-in)	D	G
10'-0" OR LESS	2'-6"	92.0	92.0
	2'-9"	92.0	92.0
	3'-0"	92.0	92.0
	3'-3"	92.0	92.0
	3'-6"	92.0	92.0
	3'-9"	92.0	92.0
	4'-1 1/2"	92.0	92.0
12'-0"	2'-6"	92.0	92.0
	2'-9"	92.0	92.0
	3'-0"	92.0	92.0
	3'-3"	92.0	92.0
	3'-6"	92.0	92.0
	3'-9"	92.0	92.0
	4'-1 1/2"	92.0	92.0
14'-0"	2'-6"	92.0	92.0
	2'-9"	92.0	92.0
	3'-0"	92.0	92.0
	3'-3"	92.0	92.0
	3'-6"	92.0	92.0
	3'-9"	92.0	92.0
	4'-1 1/2"	92.0	92.0
15'-0"	2'-6"	92.0	92.0
	2'-9"	92.0	92.0
	3'-0"	92.0	92.0
	3'-3"	92.0	92.0
	3'-6"	92.0	92.0
	3'-9"	92.0	92.0
	4'-1 1/2"	92.0	92.0
16'-0"	2'-6"	92.0	92.0
	2'-9"	92.0	92.0
	3'-0"	92.0	92.0
	3'-3"	92.0	92.0
	3'-6"	92.0	92.0
	3'-9"	92.0	92.0
	4'-1 1/2"	92.0	92.0
18'-0"	2'-6"	92.0	92.0
	2'-9"	92.0	92.0
	3'-0"	92.0	92.0
	3'-3"	92.0	92.0
	3'-6"	92.0	92.0
	3'-9"	92.0	92.0
	4'-1 1/2"	92.0	92.0
19'-0"	2'-6"	92.0	92.0
	2'-9"	92.0	92.0
	3'-0"	92.0	92.0
	3'-3"	92.0	92.0
	3'-6"	92.0	92.0
	3'-9"	92.0	92.0
	4'-1 1/2"	92.0	92.0
20'-0"	2'-6"	92.0	92.0
	2'-9"	92.0	92.0
	3'-0"	92.0	92.0
	3'-3"	92.0	92.0
	3'-6"	92.0	92.0
	3'-9"	92.0	92.0
	4'-1 1/2"	92.0	92.0



SCHEMATIC "F" ANCHOR/SLEEVE CONNECTION DETAIL FOR FASTENERS D & G *

* SEE CONNECTION DETAILS ON SHEETS 18 & 25 FOR FASTENERS QUANTITY & LOCATIONS AT MULLION.



SCHEMATIC "U" ANCHOR W/ SLEEVE CONNECTION DETAIL FOR FASTENER F*

* SEE CONNECTION DETAILS ON SHEETS 25, 28 & 29 FOR FASTENERS QUANTITY & LOCATIONS AT MULLION.

FOOT NOTE (B): FASTENERS TYPES REQUIREMENTS

D - 1/2"Ø-13 TYPE "F" GRADE 5 BOLT TO 1/4" MIN. THK. ASTM A-36 STEEL W/ 1" Min. EDGE DISTANCE.

F - 1/2" Ø POWER FASTENERS WEDGE BOLT, W/ 4" MIN. EMBEDMENT INTO 6" MIN. THICK POURED CONCRETE (f'c=3 ksi) BEYOND ANY FINISH MATERIAL W/ 5 1/2" MIN. EDGE DISTANCE.

G - 3/4" Ø POWER FASTENERS WEDGE BOLT, W/ 5 1/2" MIN. EMBEDMENT INTO 6 1/2" MIN. THICK POURED CONCRETE (f'c=3 ksi) BEYOND ANY FINISH MATERIAL W/ 7 1/2" MIN. EDGE DISTANCE.

SINGLE SPAN HEAD & SILL CONNECTION W/ "U" ANCHOR AT JAMB MULLION			
MAX. MULLION SPAN	EFFECTIVE SPACING	MAX. DESIGN PRESSURE RATING	
		POURED CONCRETE MIN. (fc=3ksi) SUBSTRATE	
"L"(ft-in)	"b"(ft-in)	FASTENER F	
10'-0" OR LESS	2'-6"	92.0	
	2'-9"	92.0	
	3'-0"	92.0	
	3'-3"	92.0	
	3'-6"	92.0	
	3'-9"	92.0	
12'-0"	2'-6"	92.0	
	2'-9"	92.0	
	3'-0"	92.0	
	3'-3"	92.0	
	3'-6"	92.0	
	3'-9"	92.0	
14'-0"	2'-6"	92.0	
	2'-9"	92.0	
	3'-0"	92.0	
	3'-3"	92.0	
	3'-6"	92.0	
	3'-9"	92.0	
15'-0"	2'-6"	92.0	
	2'-9"	92.0	
	3'-0"	92.0	
	3'-3"	92.0	
	3'-6"	92.0	
	3'-9"	92.0	
16'-0"	2'-6"	92.0	
	2'-9"	92.0	
	3'-0"	92.0	
	3'-3"	92.0	
	3'-6"	92.0	
	3'-9"	92.0	
18'-0"	2'-6"	92.0	
	2'-9"	92.0	
	3'-0"	92.0	
	3'-3"	92.0	
	3'-6"	92.0	
	3'-9"	92.0	
19'-0"	2'-6"	92.0	
	2'-9"	92.0	
	3'-0"	92.0	
	3'-3"	92.0	
	3'-6"	92.0	
	3'-9"	92.0	
20'-0"	2'-6"	92.0	
	2'-9"	92.0	
	3'-0"	92.0	
	3'-3"	92.0	
	3'-6"	92.0	
	3'-9"	92.0	

SINGLE SPAN HEAD & SILL CONNECTION W/ "U" ANCHOR AT DOOR JAMB MULLION OR JAMB MULLION W/O SIDELITE			
MAX. MULLION SPAN	EFFECTIVE SPACING	MAX. DESIGN PRESSURE RATING	
		POURED CONCRETE MIN. (fc=3ksi) SUBSTRATE	
"L"(ft-in)	"b"(ft-in)	FASTENER F	
10'-0" OR LESS	5'-0"	80.0	
	5'-6"	80.0	
	6'-0"	80.0	
	6'-6"	80.0	
	7'-0"	80.0	
	7'-6"	80.0	
12'-0"	5'-0"	80.0	
	5'-6"	80.0	
	6'-0"	80.0	
	6'-6"	80.0	
	7'-0"	80.0	
	7'-6"	80.0	
14'-0"	5'-0"	80.0	
	5'-6"	80.0	
	6'-0"	80.0	
	6'-6"	80.0	
	7'-0"	80.0	
	7'-6"	80.0	
15'-0"	5'-0"	80.0	
	5'-6"	80.0	
	6'-0"	80.0	
	6'-6"	80.0	
	7'-0"	80.0	
	7'-6"	80.0	
16'-0"	5'-0"	80.0	
	5'-6"	80.0	
	6'-0"	80.0	
	6'-6"	80.0	
	7'-0"	80.0	
	7'-6"	80.0	
18'-0"	5'-0"	80.0	
	5'-6"	80.0	
	6'-0"	80.0	
	6'-6"	80.0	
	7'-0"	80.0	
	7'-6"	80.0	
19'-0"	5'-0"	80.0	
	5'-6"	80.0	
	6'-0"	80.0	
	6'-6"	80.0	
	7'-0"	80.0	
	7'-6"	80.0	
20'-0"	5'-0"	80.0	
	5'-6"	80.0	
	6'-0"	80.0	
	6'-6"	80.0	
	7'-0"	80.0	
	7'-6"	80.0	

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FIRM REGISTRATION # F-13790

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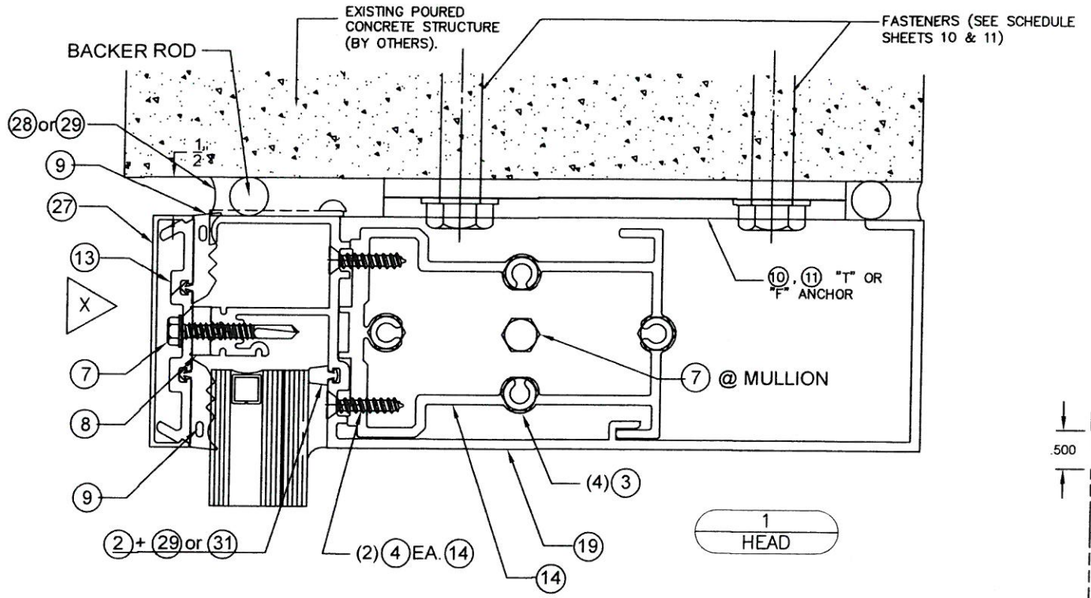
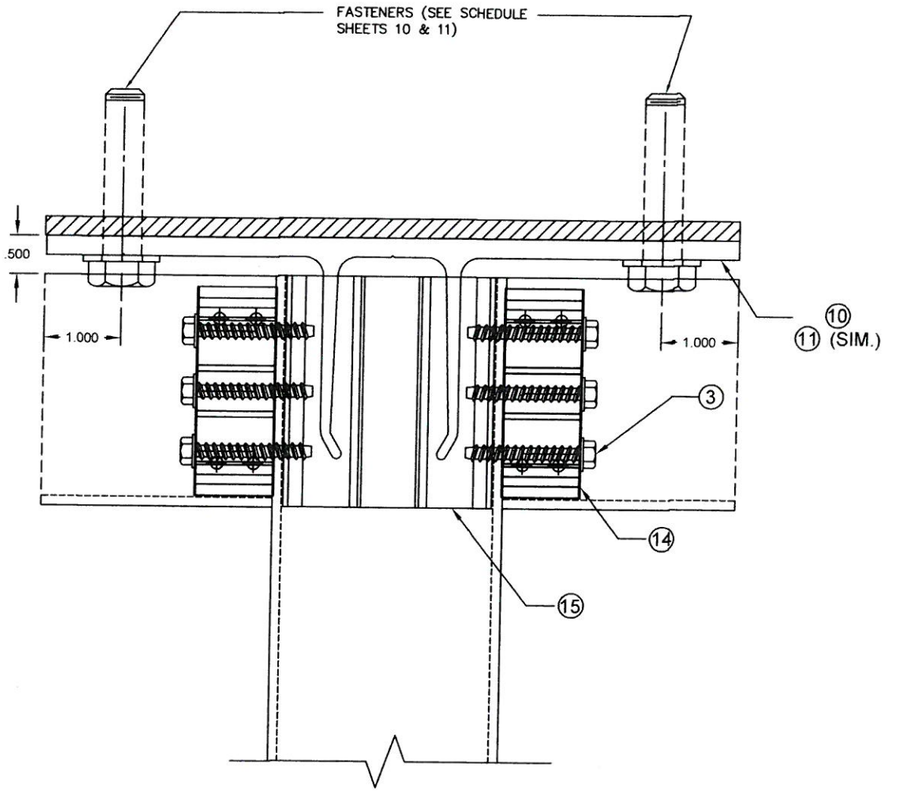
HEAD CONNECTION DETAILS (SIDE VIEWS) WET GLAZED



1
HEAD



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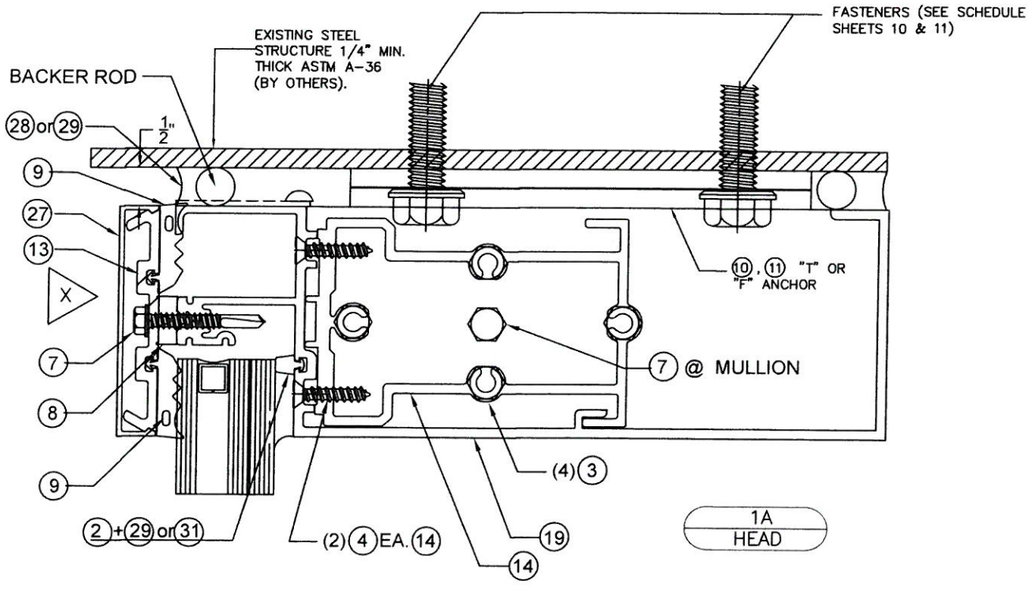

1A
HEAD

TEXAS DEPARTMENT OF INSURANCE – 2006

RELIANCE STORMMAX HIGH PERFORMANCE CURTAIN WALL SYSTEM LARGE MISSILE IMPACT INSULATED GLASS

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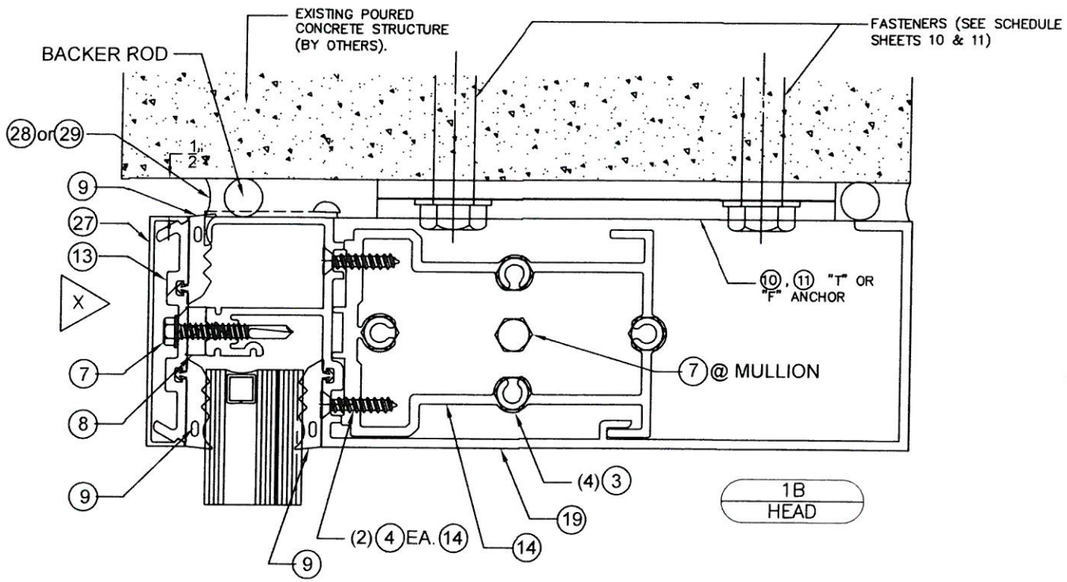
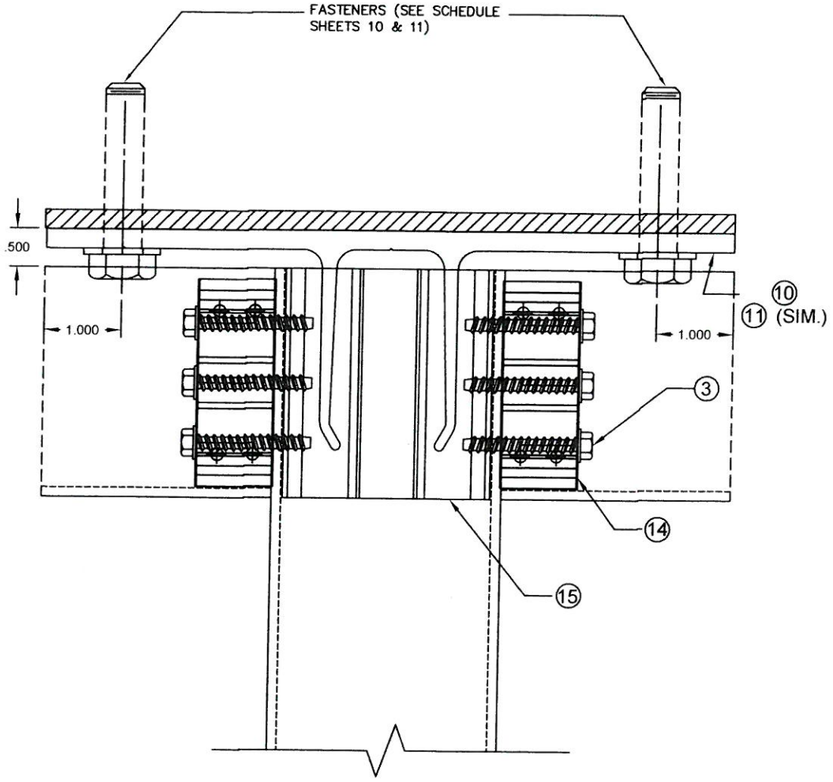
HEAD CONNECTION DETAILS (SIDE VIEWS) DRY GLAZED



1B
HEAD



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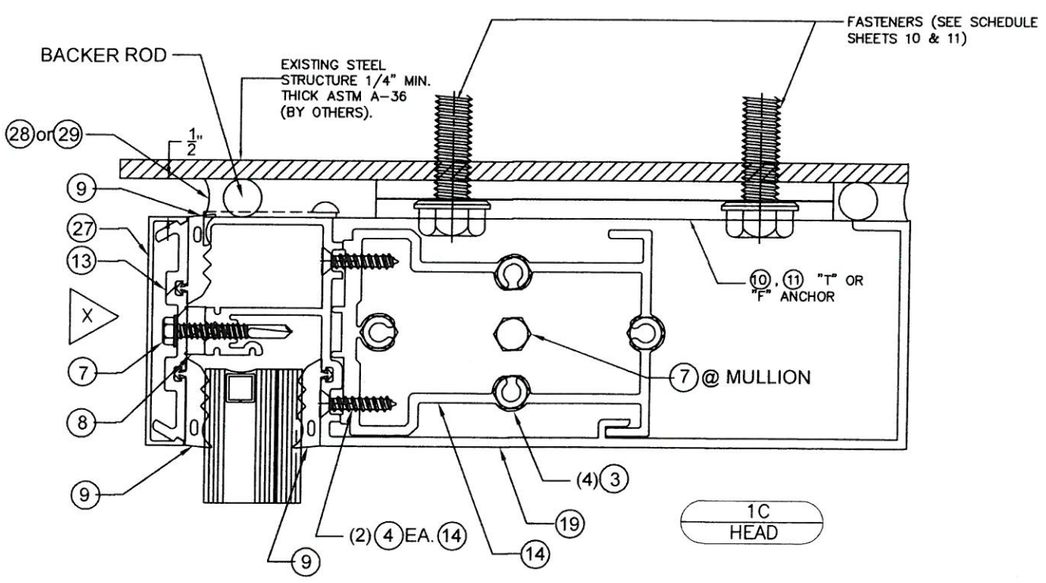

1C
HEAD

TEXAS DEPARTMENT OF INSURANCE – 2006

RELIANCE STORMMAX HIGH PERFORMANCE CURTAIN WALL SYSTEM LARGE MISSILE IMPACT INSULATED GLASS

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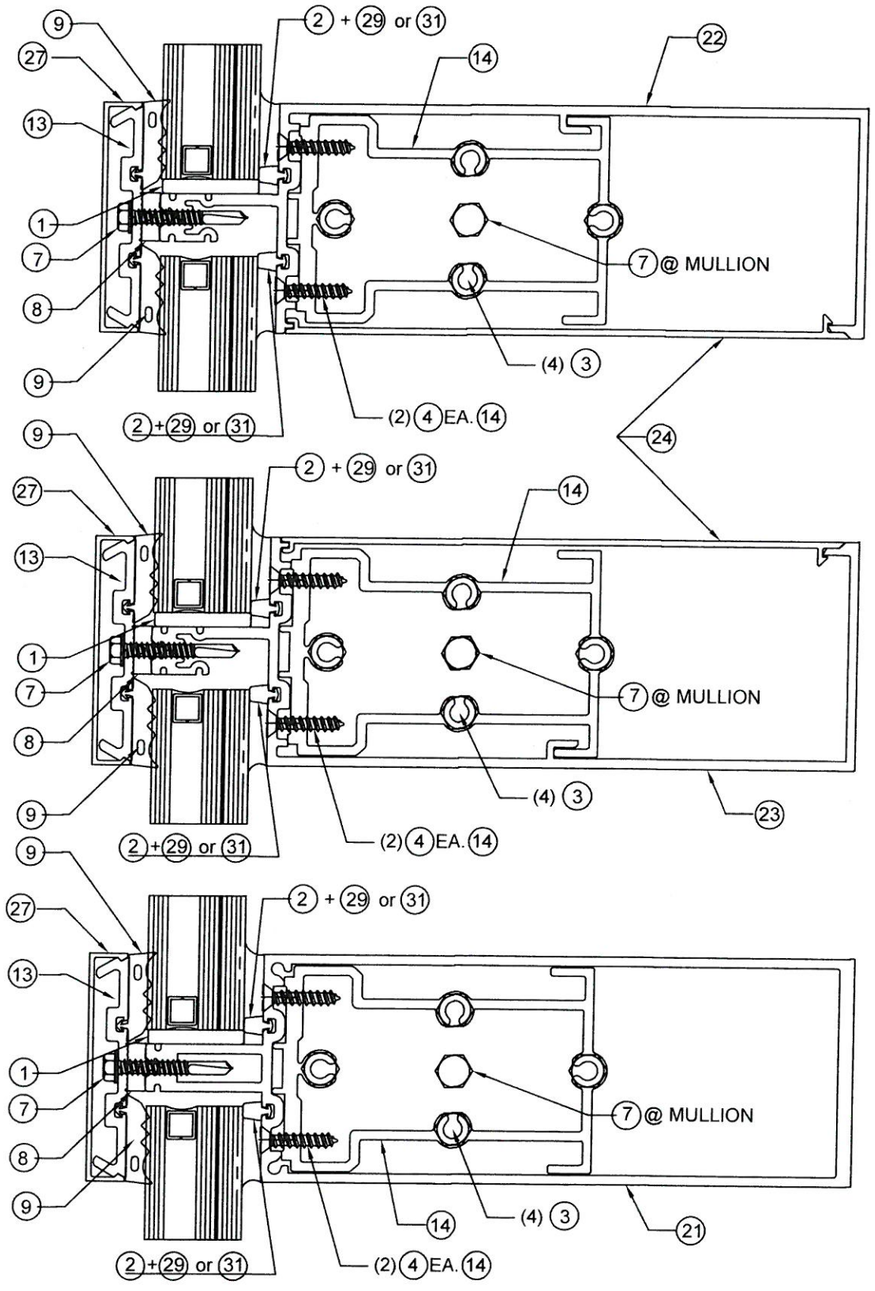
HORIZONTAL CONNECTION DETAILS (SIDE VIEWS) WET GLAZED



2
HORIZONTAL

2A
HORIZONTAL

2B
HORIZONTAL

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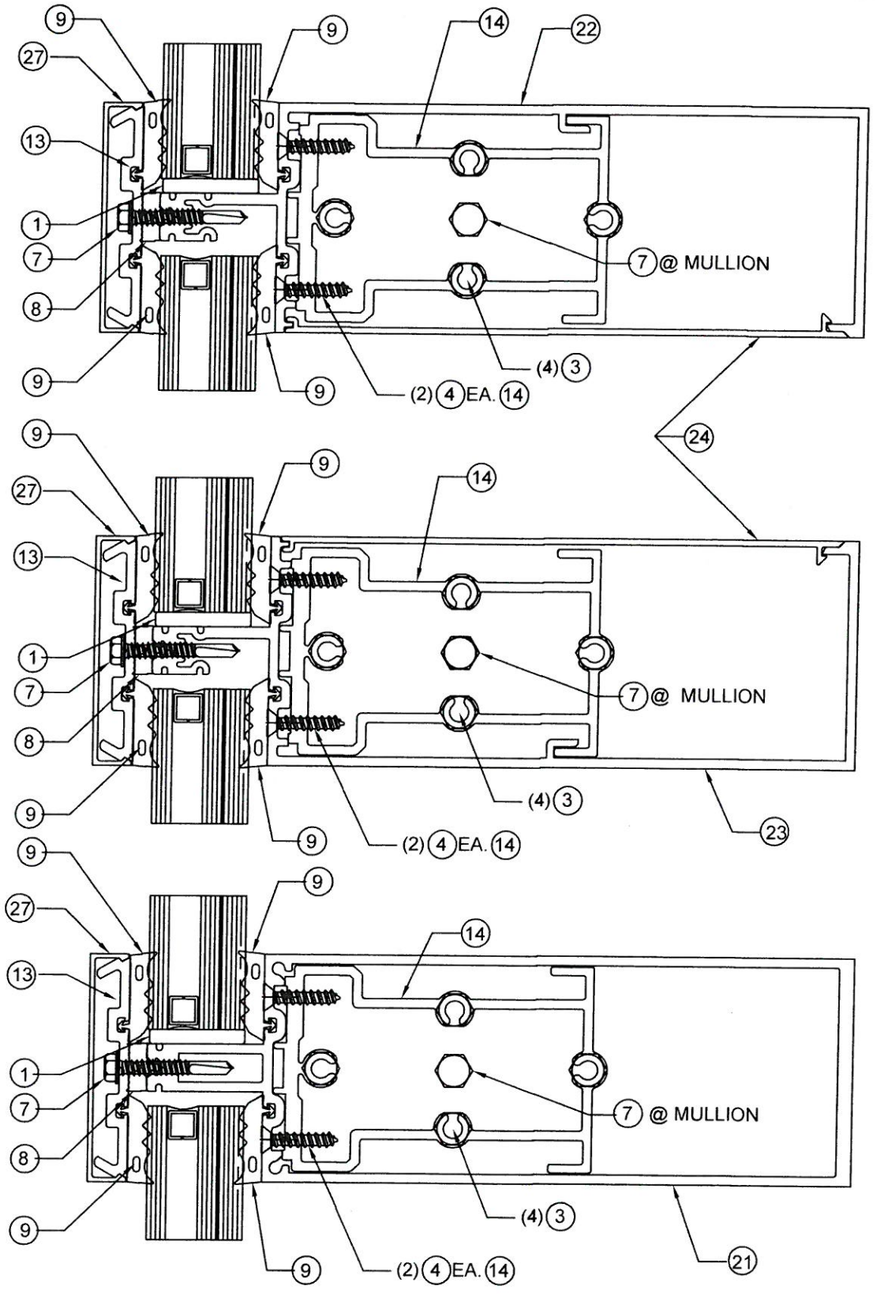
P.E. SEAL/SIGNATURE/DATE

HORIZONTAL CONNECTION DETAILS (SIDE VIEWS) DRY GLAZED



2C
HORIZONTAL

2D
HORIZONTAL

2E
HORIZONTAL

TEXAS DEPARTMENT OF INSURANCE - 2006

RELIANCE STORMMAX HIGH
PERFORMANCE CURTAIN WALL SYSTEM
LARGE MISSILE IMPACT INSULATED GLASS

DRAWN BY: F.R.L
DATE 10/16/14

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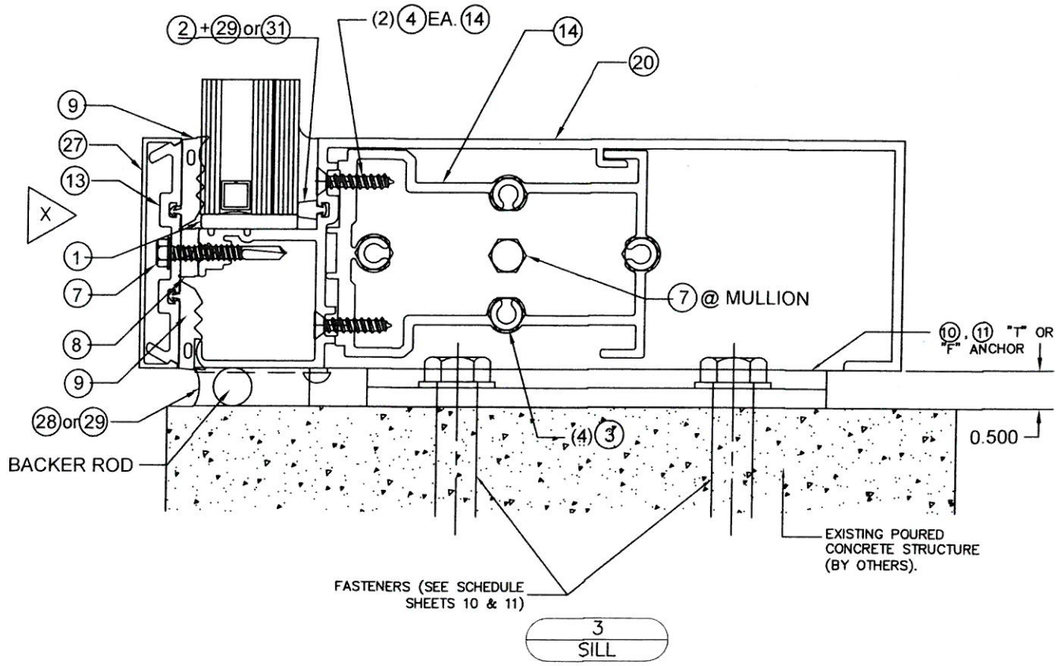
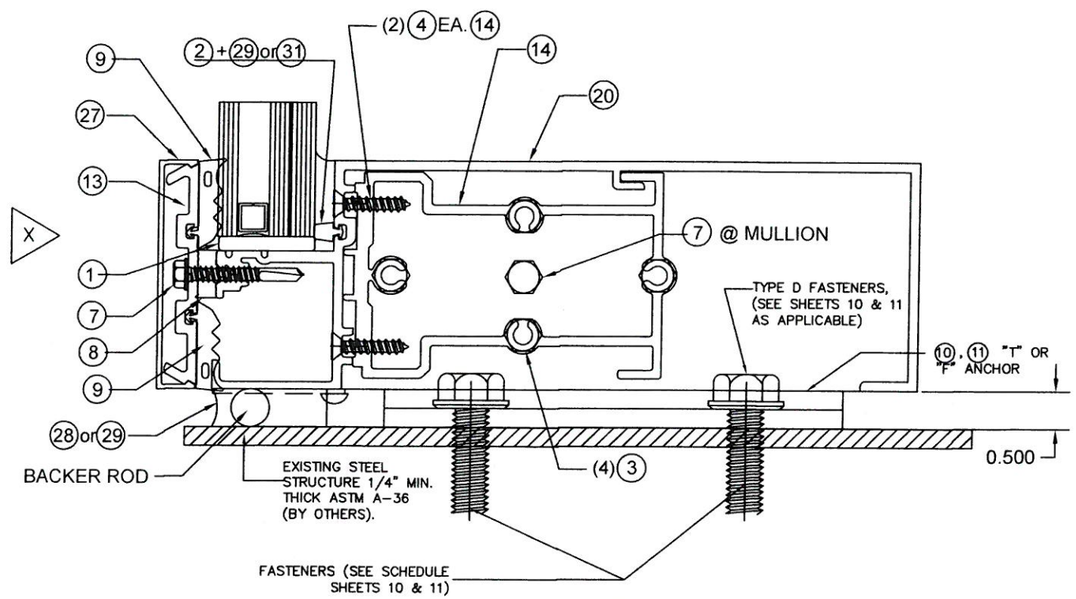
VIRGINA GARDENS, FL 33166
PHONE(305) 871-1530 FAX (305) 871-1531
TEXAS LIC. # 90691
FIRM REGISTRATION # F-13790

P.E. SEAL/SIGNATURE/DATE

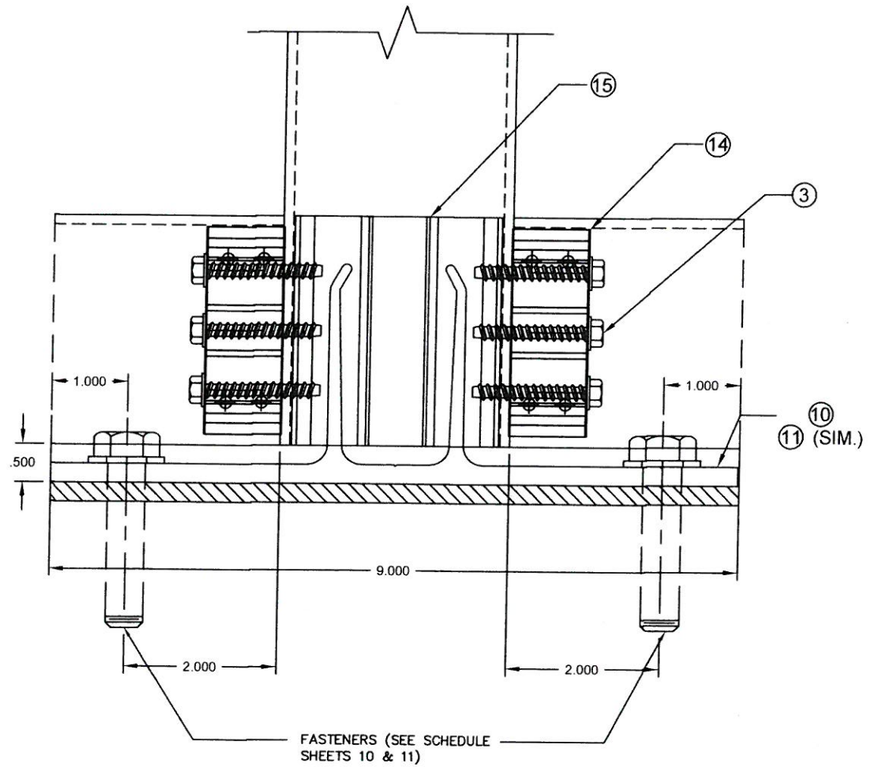
SILL CONNECTION DETAILS (SIDE VIEWS) WET GLAZED



3
SILL



3A
SILL



VIEW "X"

TEXAS DEPARTMENT OF INSURANCE – 2006

RELIANCE STORMMAX HIGH PERFORMANCE CURTAIN WALL SYSTEM LARGE MISSILE IMPACT INSULATED GLASS

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TEXAS LIC. # 90691
FIRM REGISTRATION # F-13790

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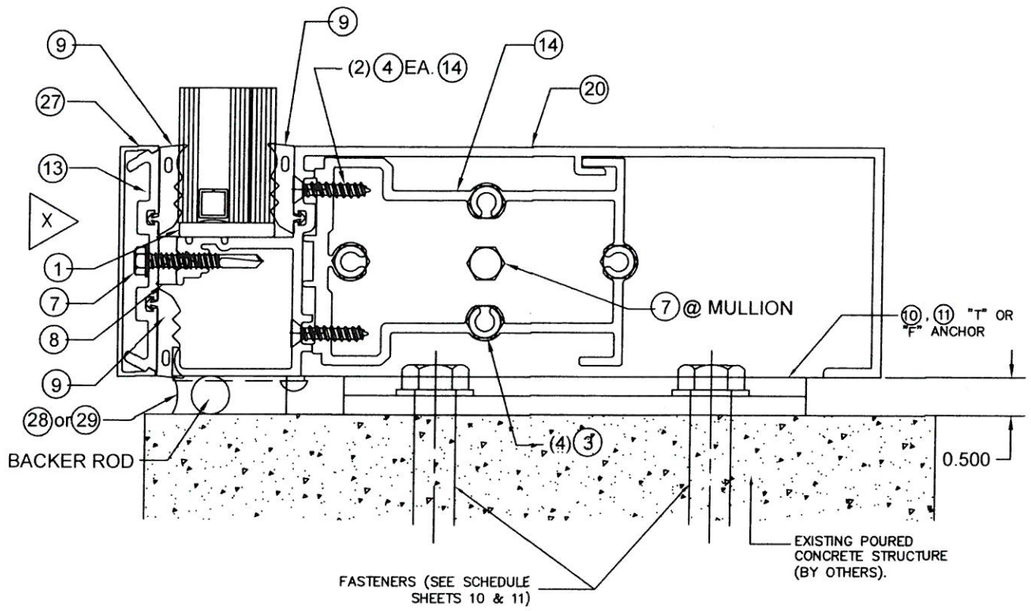
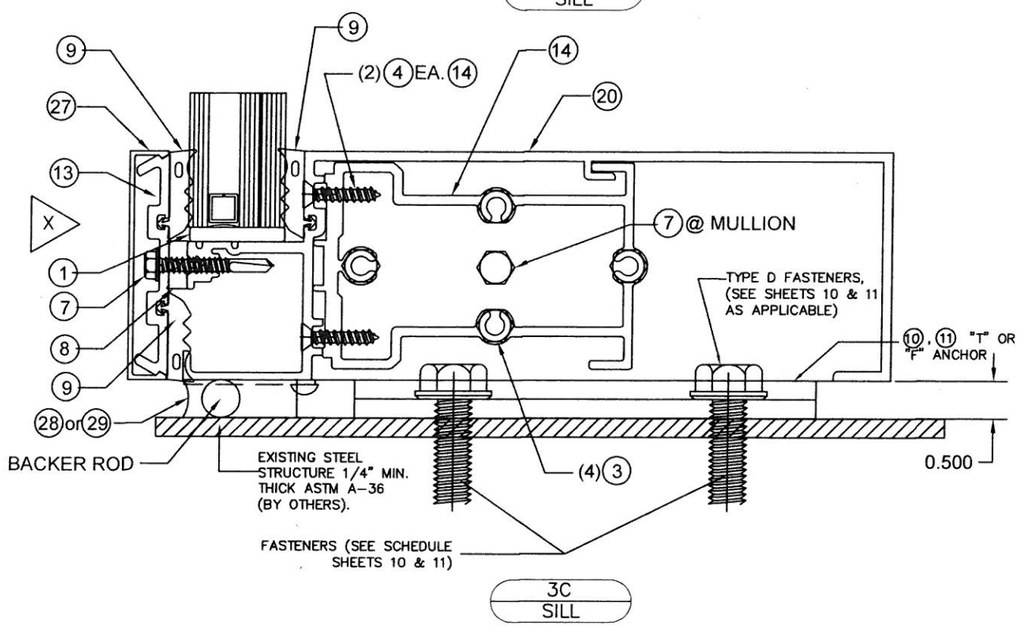
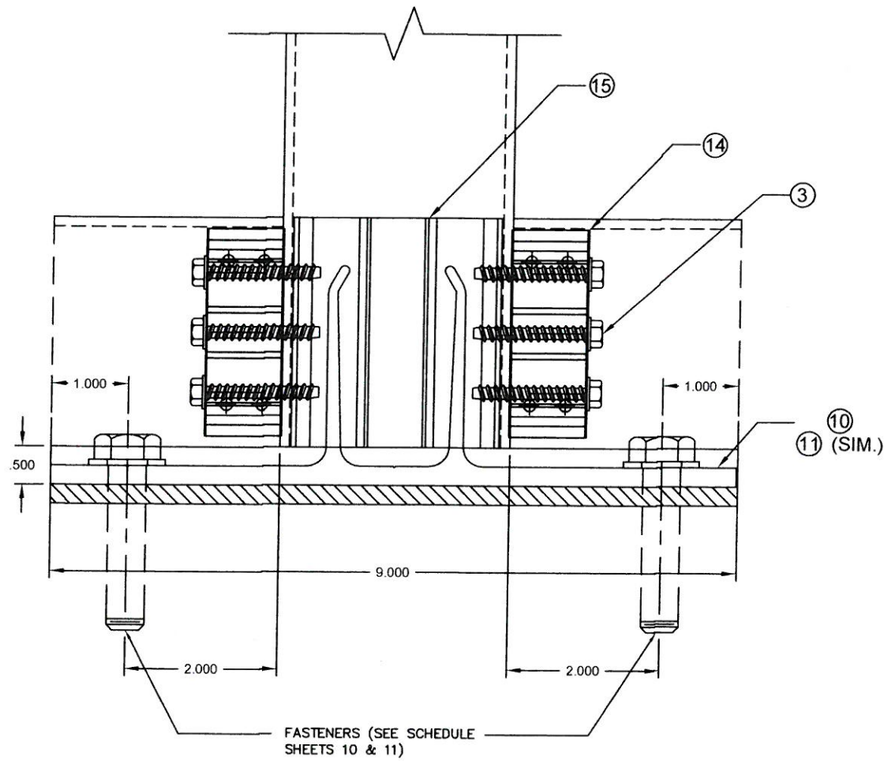
SILL CONNECTION DETAILS (SIDE VIEWS) DRY GLAZED



3B
SILL



3C
SILL



VIEW "X"

TEXAS DEPARTMENT OF INSURANCE – 2006

RELIANCE STORMMAX HIGH PERFORMANCE CURTAIN WALL SYSTEM LARGE MISSILE IMPACT INSULATED GLASS

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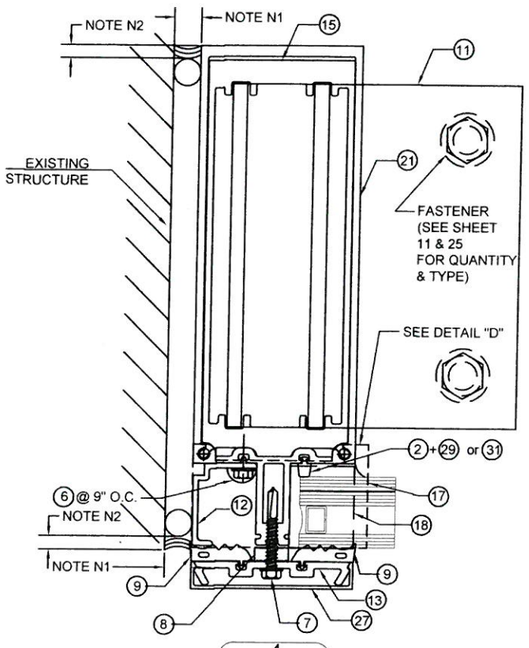
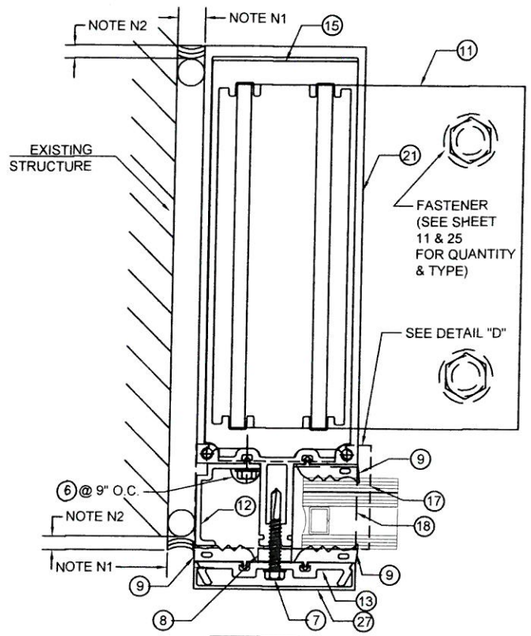
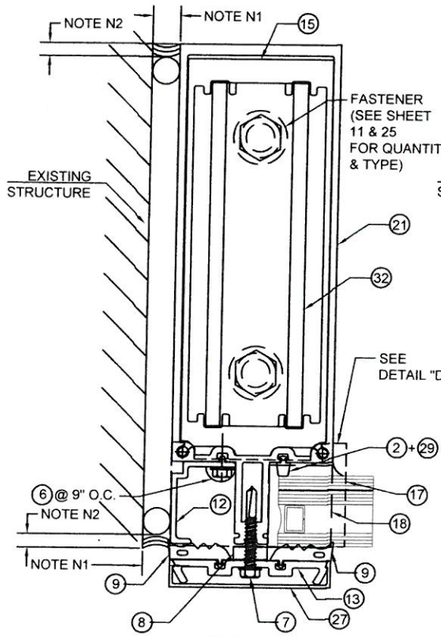
SILL & HEAD CONNECTION DETAILS FOR JAMB & STANDARD MULLIONS WET AND DRY GLAZED



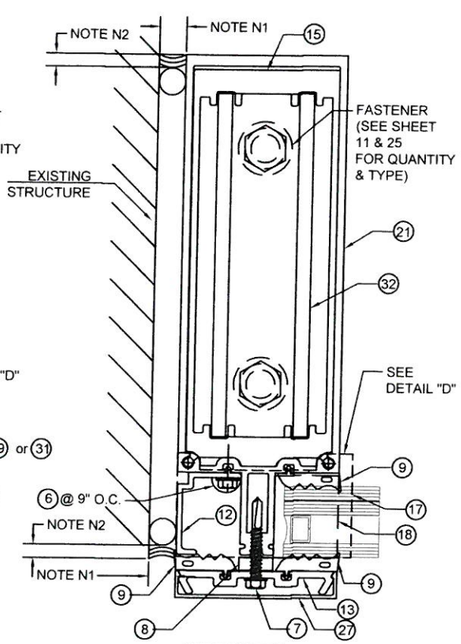
4
JAMB MULLION



4A
JAMB MULLION



4B
JAMB MULLION



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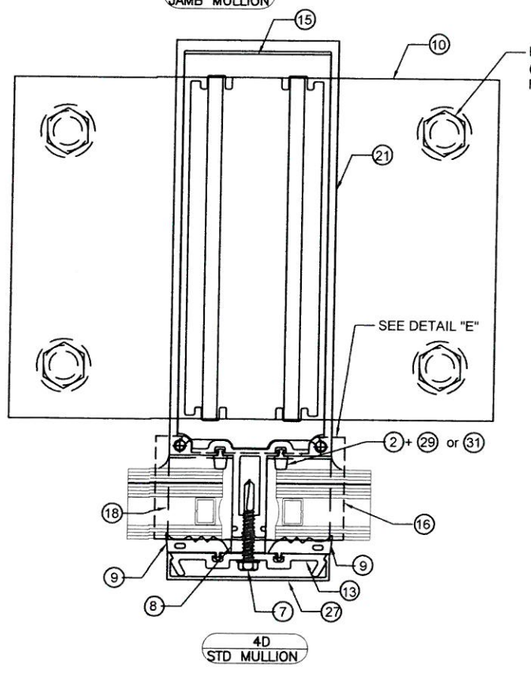
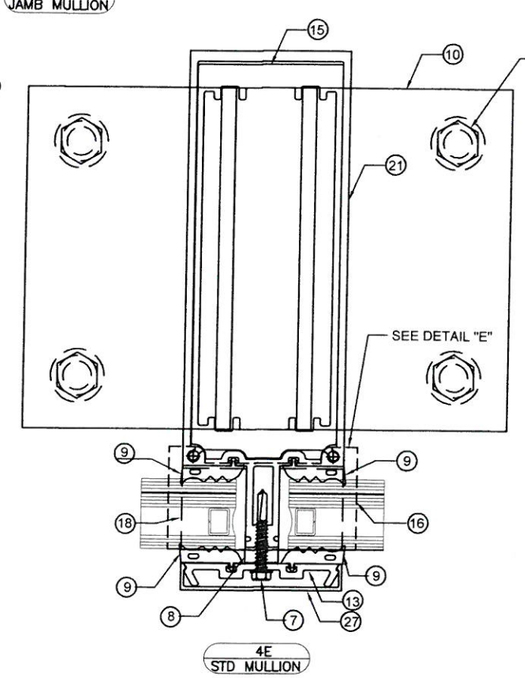
JAMB MULLION



4D
STD MULLION



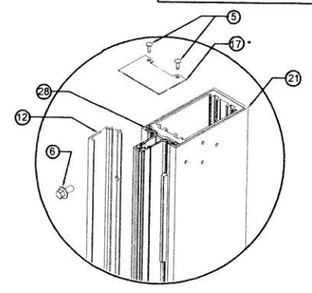
4E
STD MULLION

SEALANT JOINT NOTES

N1 : 1/2" MIN. & 1 3/4" MAX. WIDE JOINT W/ SEALANT (28) OR (30)

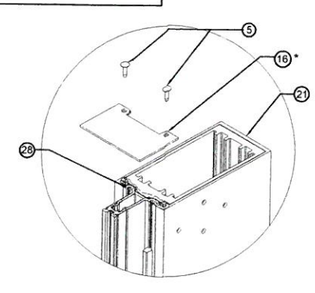
N2 : 1/4" MIN. & 3/8" MAX. DEPTH JOINT W/ 1/4" DEPTH AT MIDWIDTH OF JOINT W/ SEALANT (28) OR (30)

✳ NOTE:
TO ASSURE PROPER PERIMETER SEAL AT HEAD AND SILL INSTALL (16) OR (17) AS APPLICABLE.



JAMB END CAP INSTALLATION

DETAIL "D"



MULLION END CAP INSTALLATION

DETAIL "E"

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RELIANCE STORMMAX HIGH PERFORMANCE CURTAIN WALL SYSTEM LARGE MISSILE IMPACT INSULATED GLASS

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PHONE(305) 871-1531 FAX (305) 871-1530
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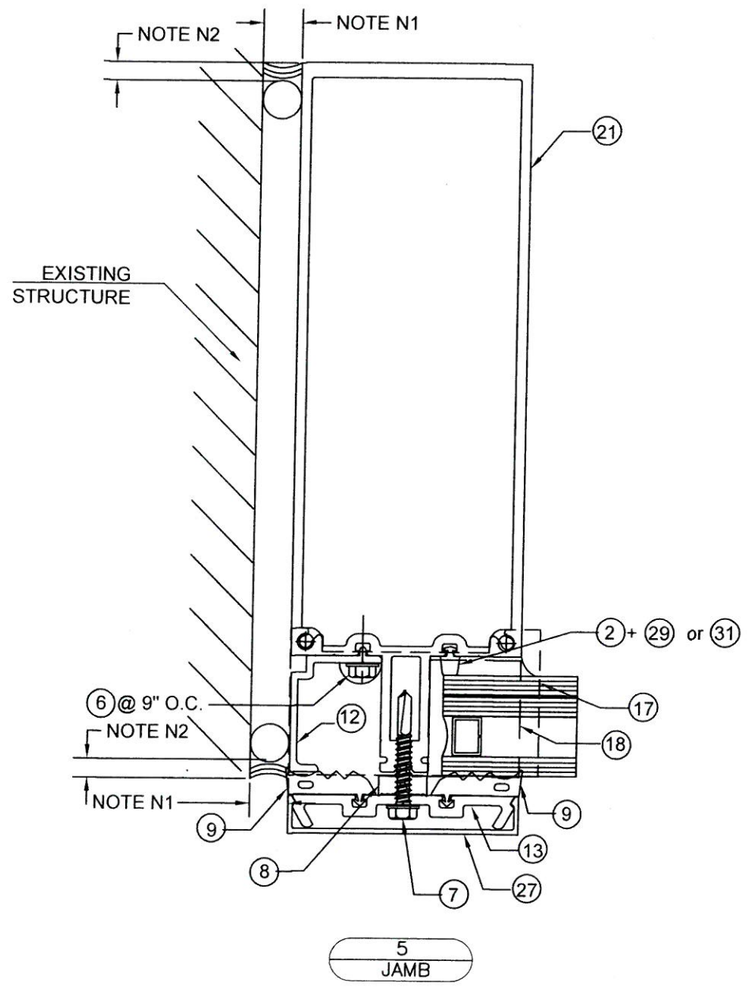
FIRM REGISTRATION # F-13790

P.E. SEAL/SIGNATURE/DATE

HORIZONTAL SECTION AT UNREINFORCED JAMB MULLION ONLY ALLOWED AT WET GLAZED (PLAN)



5
JAMB

SEALANT JOINT NOTES

N1 : 1/2" MIN. & 1 3/4" MAX. WIDE JOINT W/ SEALANT (28) OR (30)

N2 : 1/4" MIN. & 3/8" MAX. DEPTH JOINT W/ 1/4" DEPTH AT MIDWIDTH OF JOINT W/ SEALANT (28) OR (30)

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RELIANCE STORMMAX HIGH PERFORMANCE CURTAIN WALL SYSTEM LARGE MISSILE IMPACT INSULATED GLASS

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FIRM REGISTRATION # F–13790

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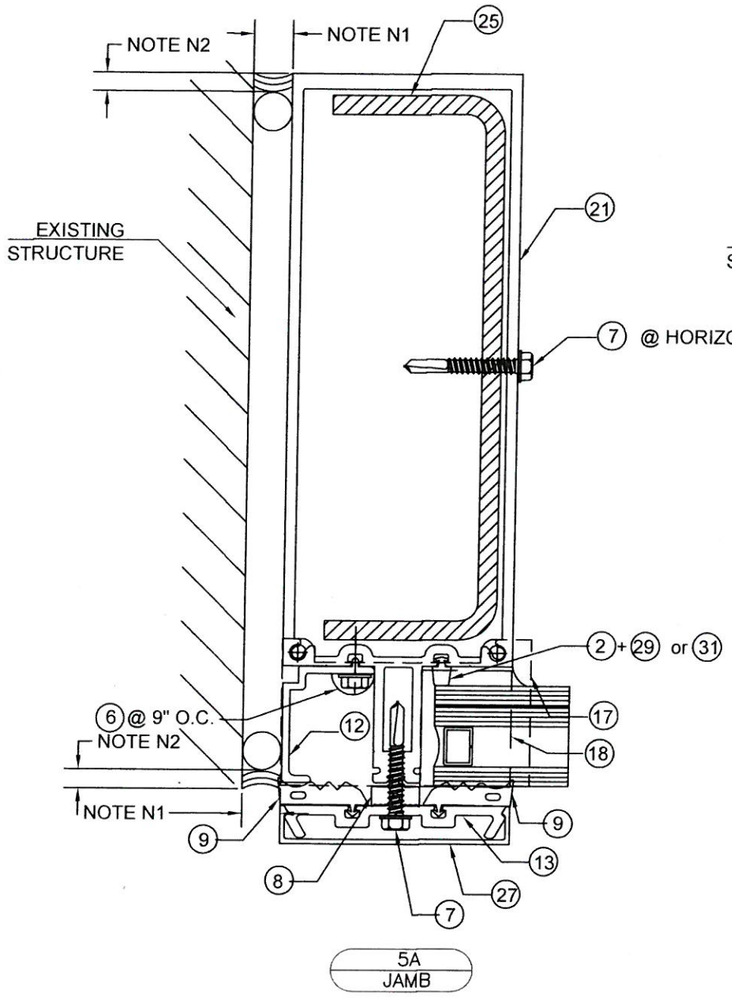
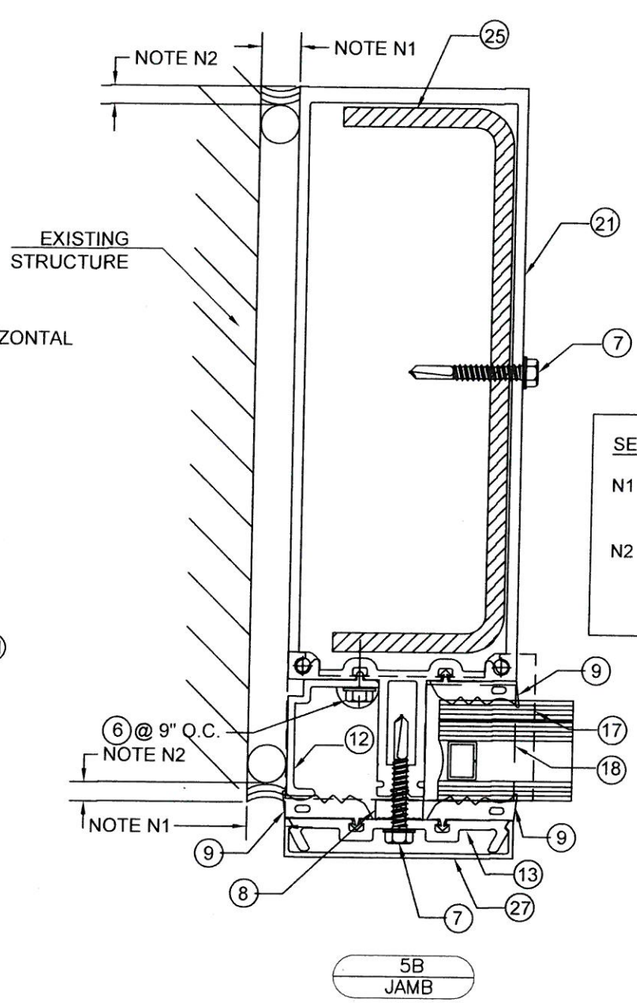
HORIZONTAL SECTION AT REINFORCED JAMB MULLION
WET AND DRY GLAZED (PLAN)



5A
JAMB



5B
JAMB

SEALANT JOINT NOTES

N1 : 1/2" MIN. & 1 3/4" MAX. WIDE JOINT W/ SEALANT (28) OR (30)

N2 : 1/4" MIN. & 3/8" MAX. DEPTH JOINT W/ 1/4" DEPTH AT MIDWIDTH OF JOINT W/ SEALANT (28) OR (30)

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RELIANCE STORMMAX HIGH PERFORMANCE CURTAIN WALL SYSTEM LARGE MISSILE IMPACT INSULATED GLASS

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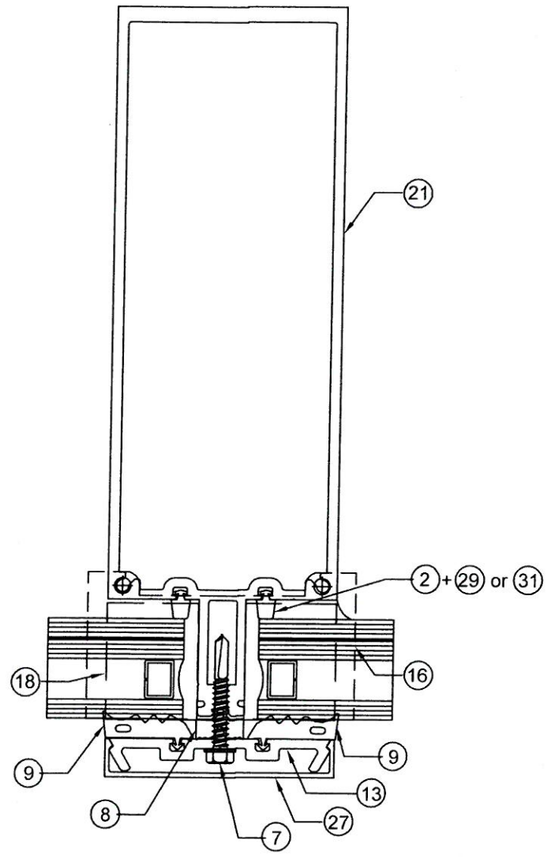
HORIZONTAL SECTION AT UNREINFORCED STANDARD MULLION ONLY ALLOWED AT WET GLAZED (PLAN)



6
MULLION

TEXAS DEPARTMENT OF INSURANCE – 2006

RELIANCE STORMMAX HIGH PERFORMANCE CURTAIN WALL SYSTEM LARGE MISSILE IMPACT INSULATED GLASS

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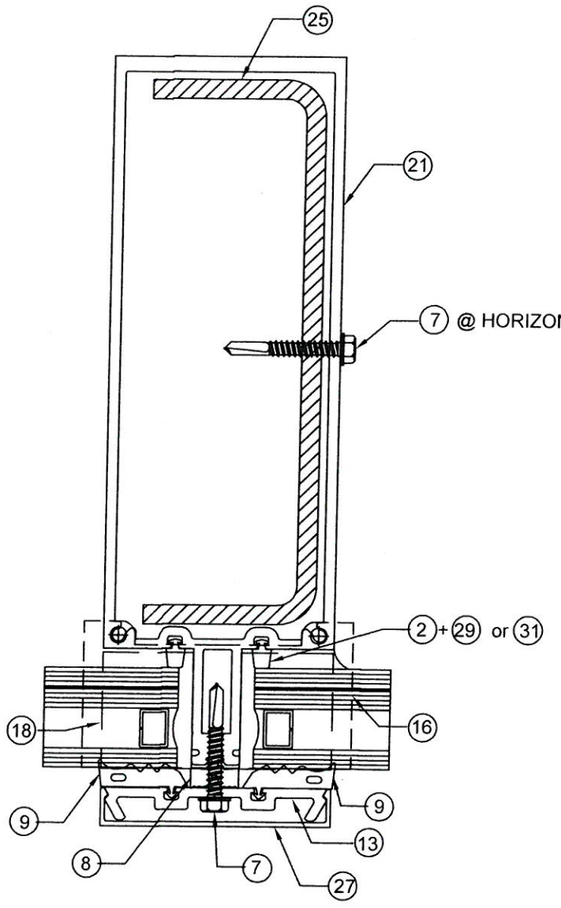
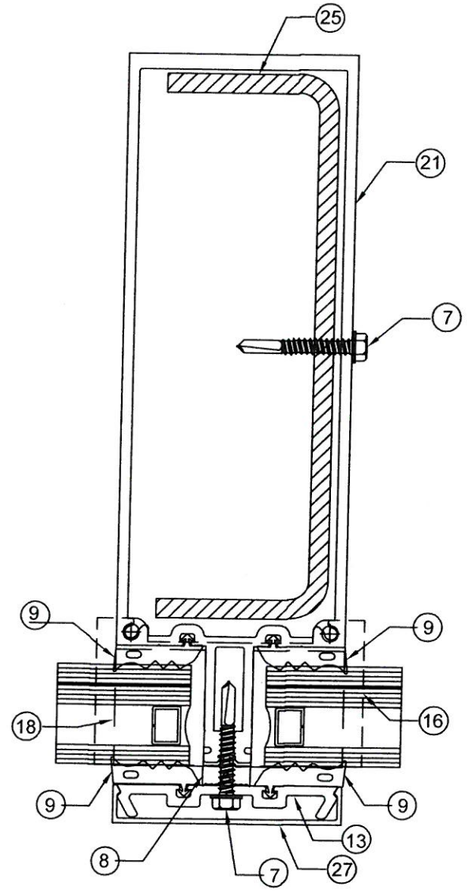
HORIZONTAL SECTION AT REINFORCED STANDARD MULLION
WET AND DRY GLAZED (PLAN)



6A
MULLION



6B
MULLION

TEXAS DEPARTMENT OF INSURANCE – 2006

RELIANCE STORMMAX HIGH
PERFORMANCE CURTAIN WALL SYSTEM
LARGE MISSILE IMPACT INSULATED GLASS

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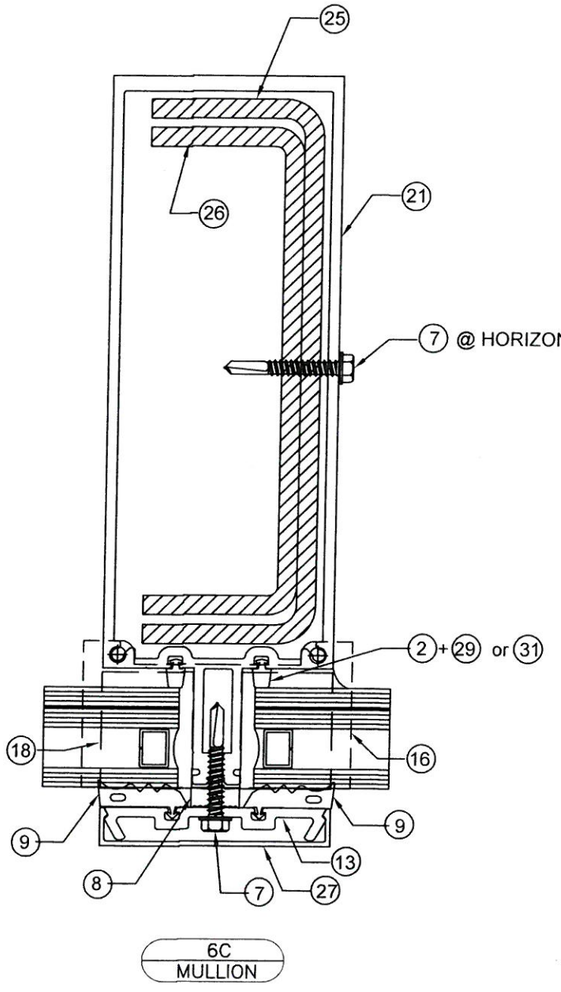
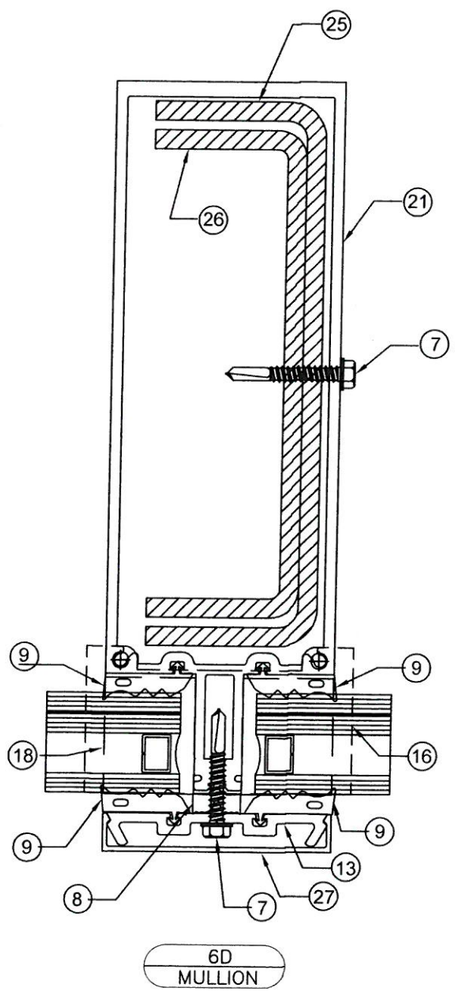
HORIZONTAL SECTION AT DOUBLELLY REINFORCED STANDARD MULLION WET AND DRY GLAZED (PLAN)



6C
MULLION



6D
MULLION

TEXAS DEPARTMENT OF INSURANCE – 2006

RELIANCE STORMMAX HIGH PERFORMANCE CURTAIN WALL SYSTEM LARGE MISSILE IMPACT INSULATED GLASS

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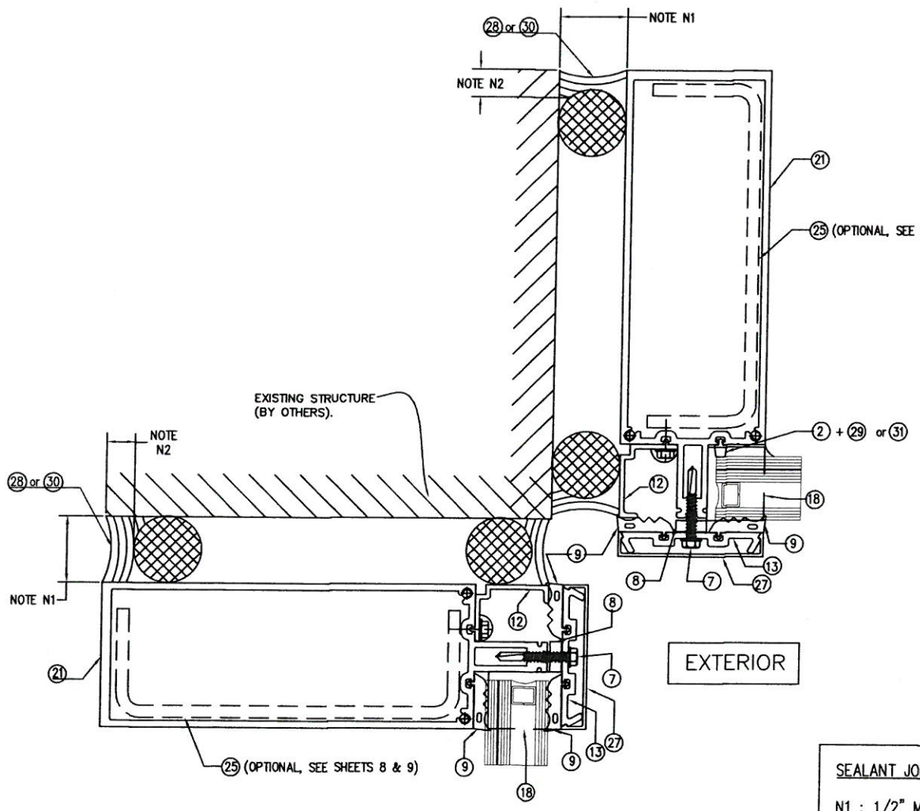
HORIZONTAL SECTION AT INSIDE OR OUTSIDE CORNER JAMB MULLIONS WET AND DRY GLAZED (PLAN)



7A
JAMB MULLION AT INSIDE CORNER

7B
JAMB MULLION AT OUTSIDE CORNER

SEALANT JOINT NOTES

N1 : 1/2" MIN. & 1 3/4" MAX. WIDE JOINT W/ SEALANT (28) OR (30)

N2 : 1/4" MIN. & 3/8" MAX. DEPTH JOINT W/ 1/4" DEPTH AT MIDWIDTH OF JOINT W/ SEALANT (28) OR (30)

TEXAS DEPARTMENT OF INSURANCE - 2006

RELIANCE STORMMAX HIGH PERFORMANCE CURTAIN WALL SYSTEM LARGE MISSILE IMPACT INSULATED GLASS

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DATE: 10/16/14
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PHONE(305) 871-1530 FAX (305) 871-1531
TEXAS LIC. # 90691
FIRM REGISTRATION # F-13790

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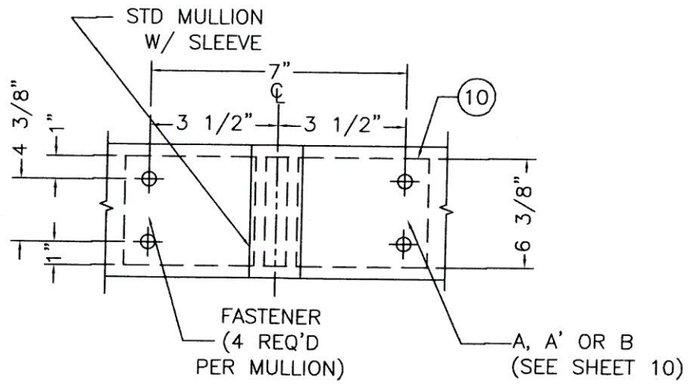
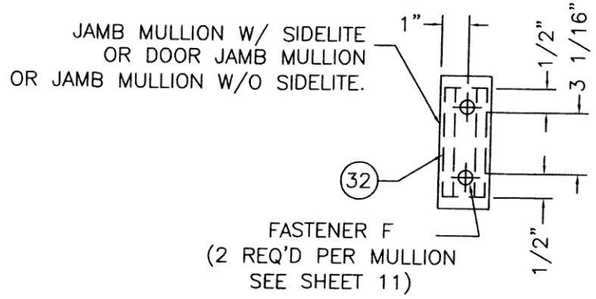
APPLICABILITY OF REQUIRED ANCHORS & FASTENERS FOR MULLION TYPE & SUBSTRATE (SCHEMATIC)



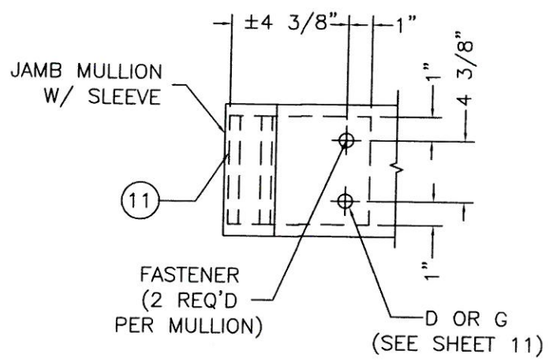
CONCRETE & STEEL

INSTALLATIONS W/ "T" ANCHOR (10)
N.T.S.



CONCRETE

INSTALLATION OF DOOR JAMB MULLION,
OR JAMB MULLION AT DOOR
W/ SIDELITE OR W/O SIDELITE
W/ "U" ANCHOR (32)
N.T.S.



CONCRETE & STEEL

INSTALLATIONS W/ "F" ANCHOR (11)
N.T.S.

TEXAS DEPARTMENT OF INSURANCE - 2006

RELIANCE STORMMAX HIGH
PERFORMANCE CURTAIN WALL SYSTEM
LARGE MISSILE IMPACT INSULATED GLASS

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DATE 10/16/14
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DRAWING No
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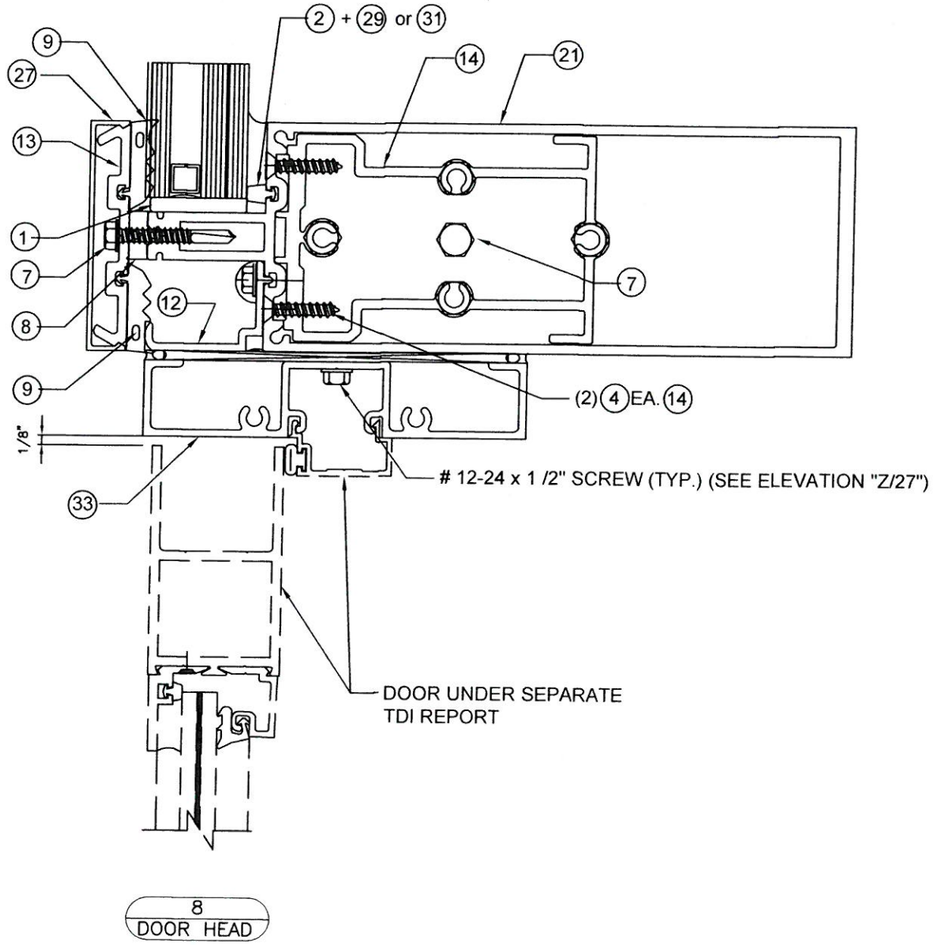
PHONE(305) 871-1530 FAX (305) 871-1531
TEXAS LIC. # 90691
FIRM REGISTRATION # F-13790

P.E. SEAL/SIGNATURE/DATE

10/15/14

DOOR HEADER CONNECTION TO CURTAIN WALL HORIZONTALS



8
DOOR HEAD

TEXAS DEPARTMENT OF INSURANCE – 2006

RELIANCE STORMMAX HIGH
PERFORMANCE CURTAIN WALL SYSTEM
LARGE MISSILE IMPACT INSULATED GLASS

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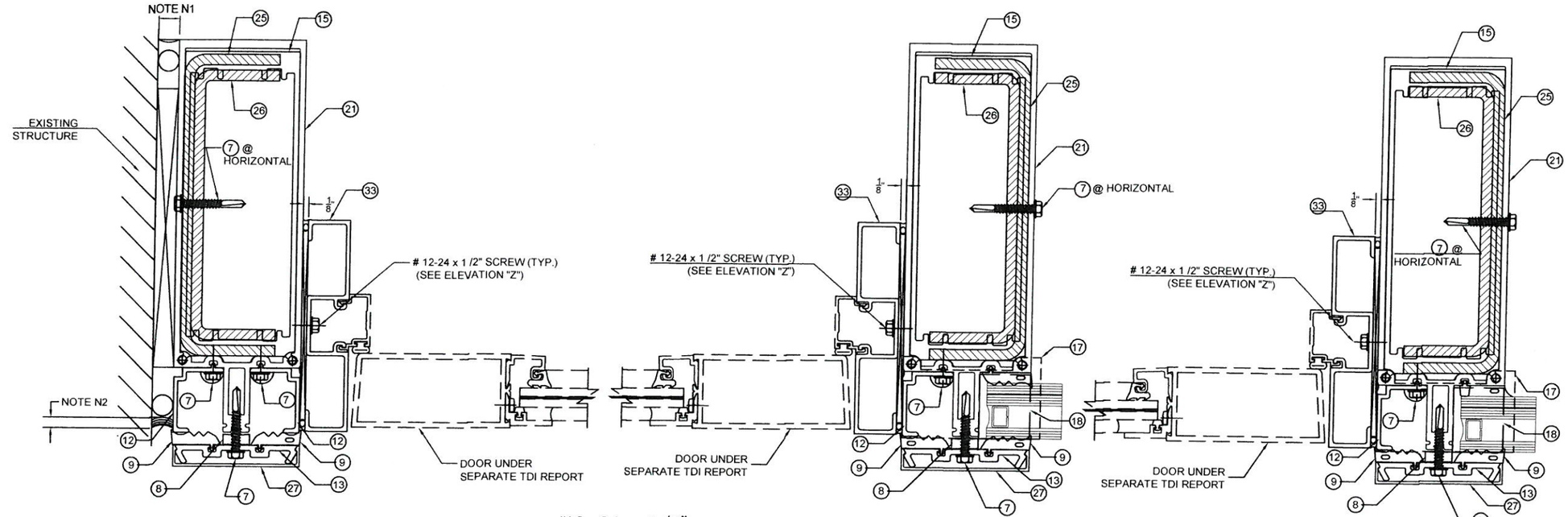
VIRGINA GARDENS, FL 33166
PHONE(305) 871-1530 FAX (305) 871-1531
TEXAS LIC. # 90691
FIRM REGISTRATION # F-13790

STATE OF TEXAS WALTER A. TILLIT JR. 90691 LICENSED PROFESSIONAL ENGINEER

10/15/14

P.E. SEAL/SIGNATURE/DATE

DOOR JAMBS CONNECTION TO CURTAIN WALL WET & DRY GLAZED



ANCHORING DETAIL AT JAMB MULLION W/ NO SIDELITE AT EXISTING STRUCTURE

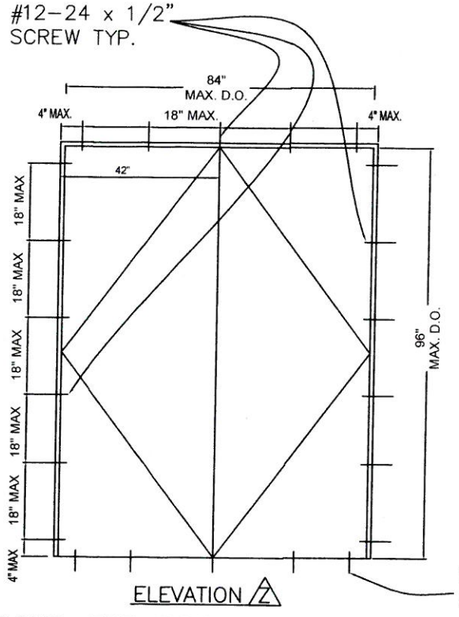
11

JAMB MULLION W/ NON SIDELITE CONDITION

SEALANT JOINT NOTES *

N1 : 1/2" MIN. & 1 3/4" MAX. WIDE JOINT W/ SEALANT (28) OR (30)

N2 : 1/4" MIN. & 3/8" MAX. DEPTH JOINT W/ 1/4" DEPTH AT MIDWIDTH OF JOINT W/ SEALANT (28) OR (30)



ANCHORING DETAILS AT DOOR JAMB MULLION WITH SIDELITE AT CURTAIN WALL

12

DOOR JAMB MULLION AT CURTAIN WALL WET AND DRY GLAZED

* INDICATED MAXIMUM AND MINIMUM VALUES FOR SPECIFIED SEALANT VERTICAL JOINT WIDTH AT JAMBS PER NOTES N1 & N2 HAVE BEEN DETERMINED ONLY TAKING INTO CONSIDERATION THE ACTUAL MOVEMENT OF GLASS WALL AT JAMBS DUE TO THERMAL, WIND AND ITS OWN CONSTRUCTION TOLERANCE, AND NOT PERFORMANCE FACTORS FROM THE SURROUNDING STRUCTURE.

LOCATIONS FOR DOOR FRAME ATTACHMENTS
ABOVE DIMENSIONS ARE MAXIMUM SIZES TESTED

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RELIANCE STORMMAX HIGH PERFORMANCE CURTAIN WALL SYSTEM LARGE MISSILE IMPACT INSULATED GLASS

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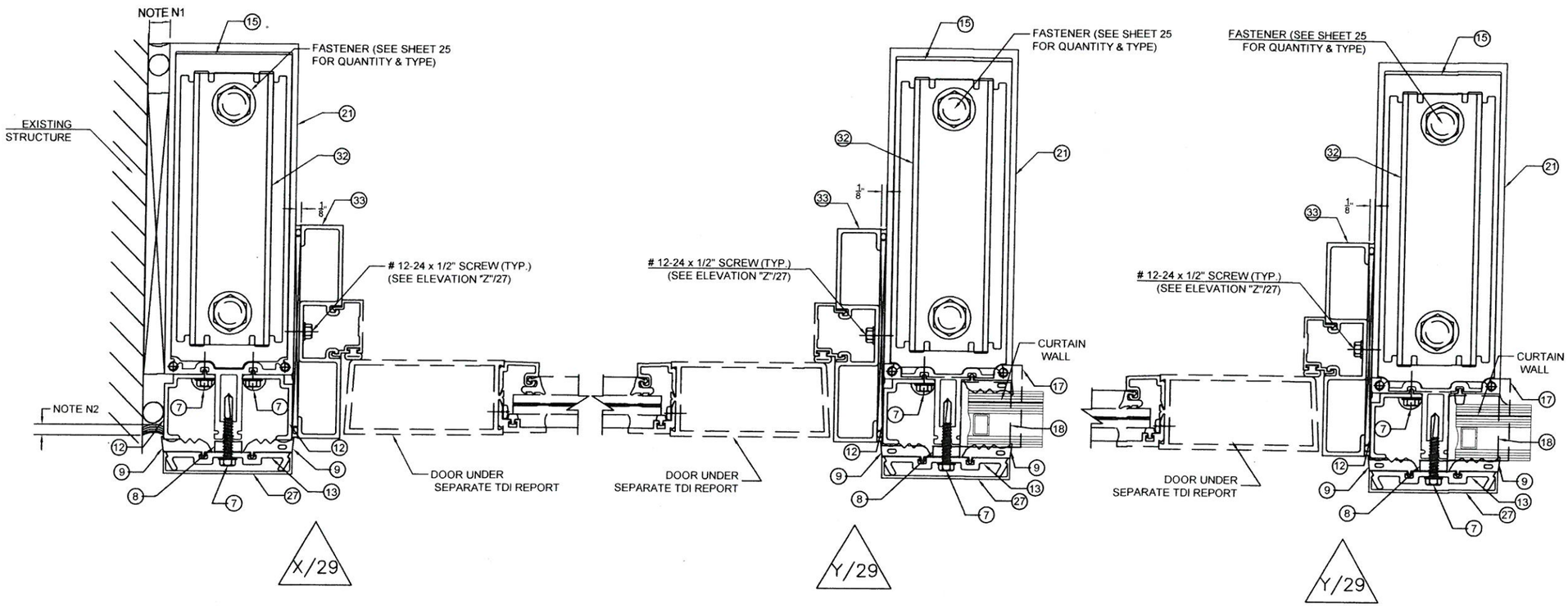
SILL CONNECTION FOR JAMB MULLION W/ NO SIDELITE & FOR DOOR JAMB MULLION FOR DOORS INSTALLED AT EXISTING STRUCTURE OR ADJACENT TO CURTAIN WALL WET & DRY GLAZED



ANCHORING DETAIL AT JAMB MULLION W/ NO SIDELITE AT EXISTING STRUCTURE

13
JAMB MULLION W/ NON SIDELITE CONDITION

SEALANT JOINT NOTES

N1 : 1/2" MIN. & 1 3/4" MAX. WIDE JOINT W/ SEALANT (28) OR (30)

N2 : 1/4" MIN. & 3/8" MAX. DEPTH JOINT W/ 1/4" DEPTH AT MIDWIDTH OF JOINT W/ SEALANT (28) OR (30)

ANCHORING DETAILS AT DOOR JAMB MULLION WITH SIDELITE AT CURTAIN WALL

14
DOOR JAMB MULLION AT CURTAIN WALL WET AND DRY GLAZED

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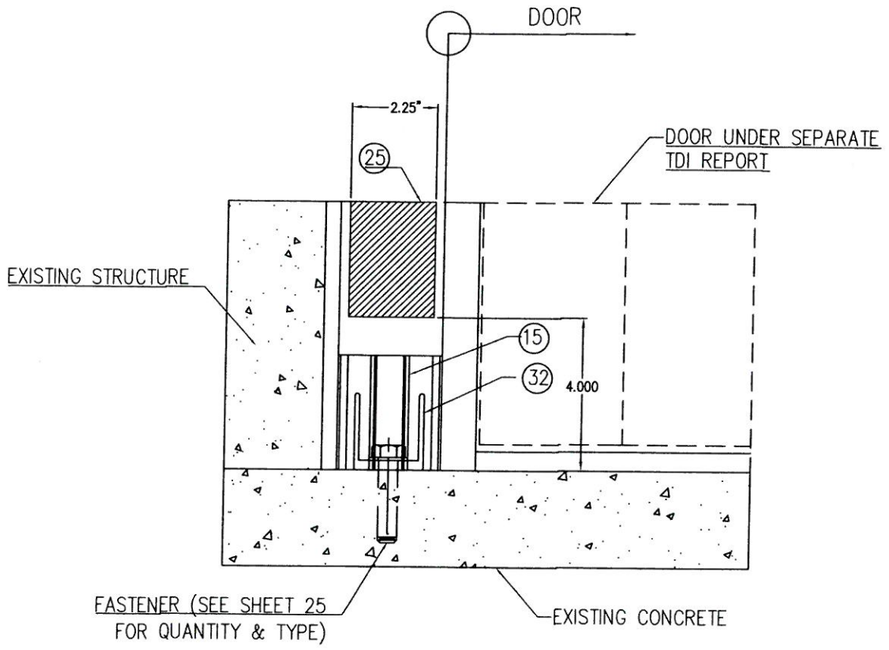
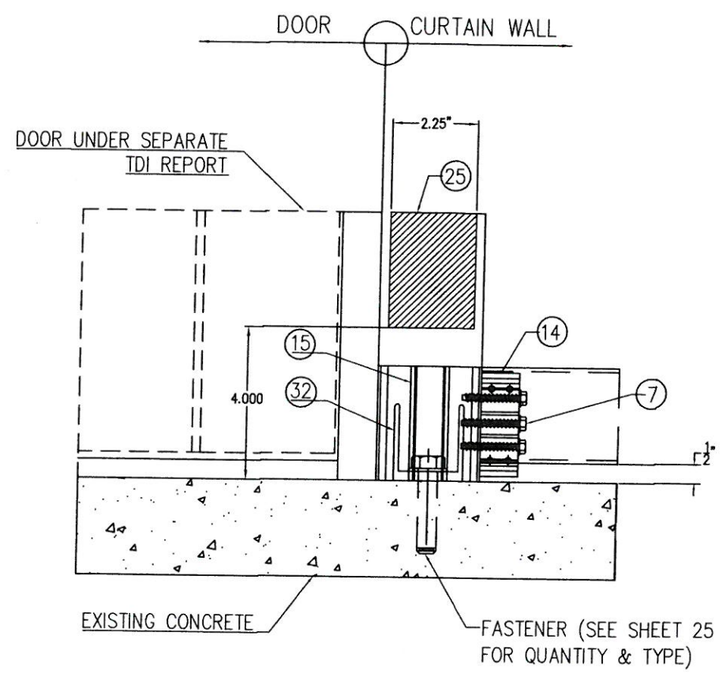
SILL CONNECTION FOR JAMB MULLION W/ NO SIDELITE & DOOR JAMB MULLION FOR DOORS INSTALLED AT EXISTING STRUCTURE OR ADJACENT TO CURTAIN WALL, WET & DRY GLAZED



ANCHORING DETAIL AT JAMB MULLION W/ NO SIDELITE CONDITION

ELEVATION X-X



ANCHORING DETAIL AT DOOR JAMB MULLION WITH SIDELITE CONDITION

ELEVATION Y-Y

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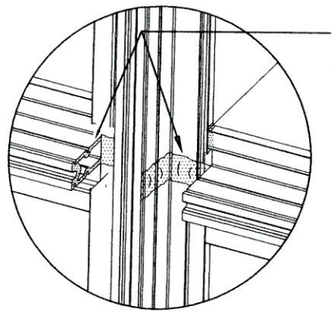
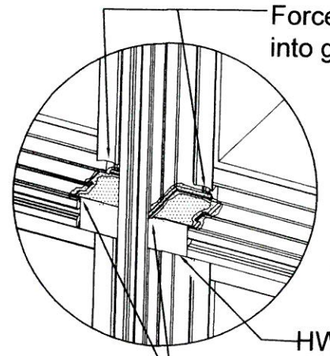
ZONE PLUG INSTALLATION

STEP 1



Seal along tongue of horizontal & across face and tongue of mullion before installing HW-355 zone plugs.

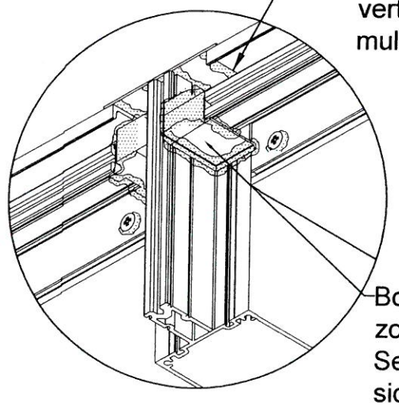
STEP 2



Force sealant into gasket race

HW-355 zone plug

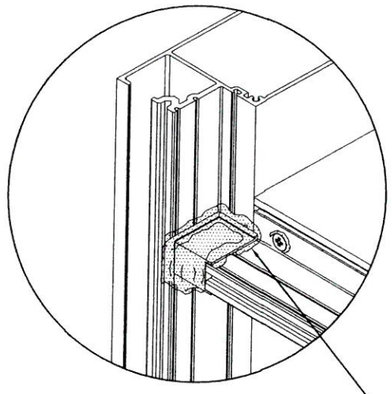
Tool sealant along top of zone plug to form a water tight seal.



Seal between head, vertical mullion and mullion cap

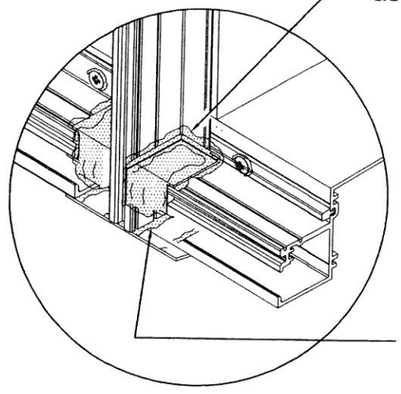
Bottom side of zone plug shown. Seal top side similar.

ZONE PLUG AT HEAD



Seal jamb & sill zone plugs same as shown at left

ZONE PLUG AT JAMB



Seal jamb & sill zone plugs same as shown at left

Seal between sill, vertical & mullion cap

ZONE PLUG AT SILL

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PRESSURE PLATE AND FACE CAP INSTALLATION

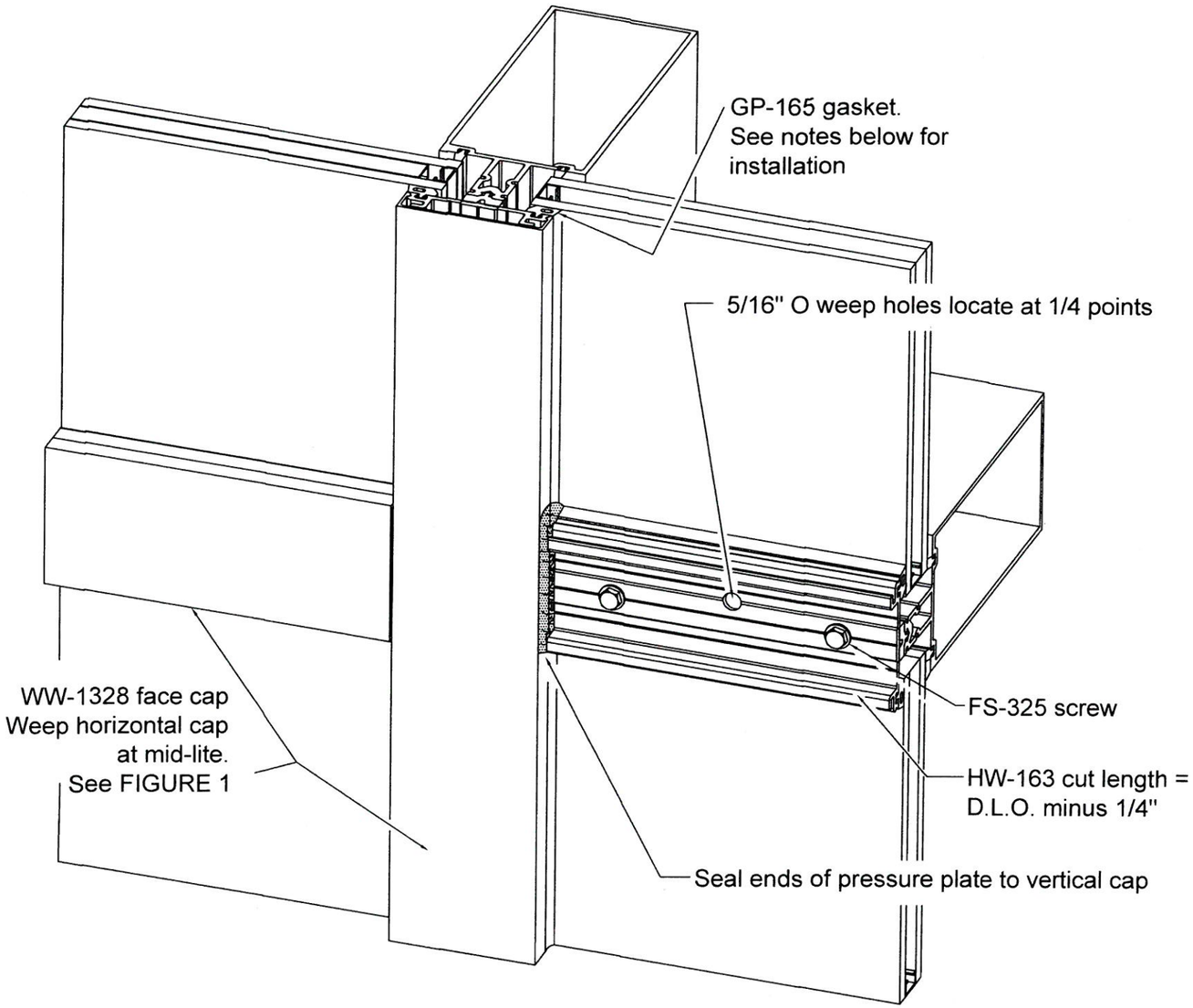
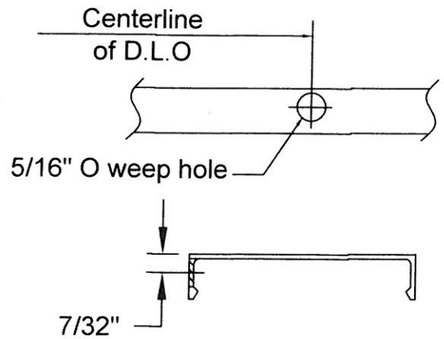


FIGURE 1
Glazing Instructions
Horizontal Face Cap Fabrication



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