SERIES FG-5100 FLUSH GLAZED ALUMINUM WINDOW WALL SYSTEM FOR USE IN HURRICANE ZONES REQUIRING LARGE & SMALL MISSILE IMPACT PROTECTION. (LAMINATED OR INSULATED WET & INSULATED DRY GLAZED)

GENERAL NOTES:

1. SERIES FG-5100 FLUSH GLAZED ALUMINUM WINDOW WALL SYSTEM LARGE & SMALL MISSILE IMPACT SHOWN ON THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE 2018 EDITION OF THE INTERNATIONAL BUILDING CODE, (I.B.C).

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 7-16 STANDARD, AND SHALL NOT EXCEED THE DESIGN PRESSURE RATING INDICATED ON NOTE 2.

IN ORDER TO VERIFY THE ABOVE CONDITION, ULTIMATE DESIGN WIND LOADS DETERMINED PER ASCE 7-16 SHALL BE FIRST REDUCED TO A.S.D. DESIGN WIND LOADS BY MULTIPLYING THEM BY 0.6 IN ORDER TO COMPARE THESE W/MAX. (A.S.D.) DESIGN PRESSURE RATINGS INDICATED ON THIS SHEET.

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. 2018.

THIS PRODUCT'S ADEQUACY FOR IMPACT AND CYCLIC RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH SECTION 1609.2 OF THE ABOVE MENTIONED CODE AS PER FLORIDA BUILDING CODE HIGH VELOCITY HURRICANE ZONE PROTOCOLS TAS-201, TAS-202, TAS-203, PER CERTIFIED TESTING LABORATORIES REPORT #CTLA-1177W, ARCHITECTURAL TESTING REPORT #86107.02-401-18 & 88725.02-401-18 AND AS PER SUBMITTED STRUCTURAL CALCULATIONS, PERFORMED AS PER SECTION 1604 OF THE ABOVE MENTIONED BUILDING CODE.

- 2. MAXIMUM DESIGN PRESSURE RATING FOR THIS WINDOW WALL SYSTEM SHALL BE AS SHOWN ON SHEETS 6, 7, 8, 9, 10, 11, 12, 13 AND 14.
- 3. THIS PRODUCT WILL NOT REQUIRE A HURRICANE PROTECTION DEVICE.
- 4. THIS PRODUCT IS APPROVED FOR AIR/WATER INFILTRATION (15 psf).
- 5. SERIES FG-5100 FLUSH GLAZED ALUMINUM WINDOW WALL SYSTEM LARGE & SMALL MISSILE IMPACT SHALL COMPLY WITH SECTION 2406 OF THE INTERNATIONAL BUILDING CODE.
- 6. PROVIDE 1 3/8" MAX. LOAD BEARING SHIM (TYP.), WHEN ALLOWED BY THIS DRAWING.
- 7. WOOD BUCKS BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE BUILDING STRUCTURE. WOOD BUCKS MUST BE SOUTHERN PINE, G = 0.55.
- 8. REMAINING COMPONENTS FOR THIS WINDOW WALL SYSTEM SHALL BE AS INDICATED ON BILL OF MATERIALS, SHEET 3 OF THIS DRAWING.
- 9. ALL ALUMINUM EXTRUSIONS IN CONTACT WITH DISSIMILAR MATERIAL SHALL COMPLY WITH SECTION III-6 OF THE ALUMINUM DESIGN MANUAL 2015 EDITION.
- 10. ALL SCREWS AND BOLTS INSTALLED AT SEAWARD AREAS TO BE STAINLESS STEEL 304 OR 316 AISI SERIES AND MEET ASTM A167, OR HOT DIPPED GALVANIZED (AFTER FABRICATION) CARBON STEEL AS PER ASTM A123 OR ASTM A153, OR HOT DIPPED GALVANIZED OR GALVANNEALED (PRIOR TO FABRICATION) AND MEET ASTM A653 WITH 50 ksi YIELD STRENGTH AND 90 hsi TENSILE STRENGTH.

ALL SCREWS AND BOLTS INSTALLED AT INLAND AREAS TO BE STAINLESS STEEL 304 OR 316 AISI SERIES AND MEET ASTM A167, OR HOT SIPPED GALVANIZED (AFTER FABRICATION) CARBON STEEL AS PER ASTM A123 OR ASTM A153. OR HOT DIPPED GALVANIZED OR GALVANNEALED (PRIOR TO FABRICATION) AND MEET ASTM A653; HOT DIP GALVANIZED OR ELECTRO GALVANIZED PER ASTM A641, MECHANICALLY DEPÓSITED ZINC COATING PER ASTM B695 OR ELECTRO DEPOSITED ZINC COATINGS PER ASTM BL33.

- 11. SHOP DRAWINGS PREPARED BASED ON THIS T.D.I REPORT 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 THIS DRAWING AS EXISTING BY OTHERS, POURED CONCRETE, GROUT FILLED CONCRETE BLOCK AND WOOD MUST WITHSTAND THE LOADS IMPOSED BY THIS PRODUCT.
- 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.
- (e) ORIGINAL P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.
- 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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- 1: GENERAL NOTES, INDEX AND INSTRUCTIONS.
- SHEET 2: COMPONENTS.
- 3: BILL OF MATERIALS. SHEET
- SHEET 4: ISOMETRIC ELEVATION FOR FG-5100 FLUSH GLAZED ALUMINUM WINDOW WALL SYSTEM.
- 5: TYPICAL GLAZING DETAILS & GLASS SCHEDULE.
- 6: MAXIMUM DESIGN PRESSURE RATING SCHEDULE FOR A GIVEN GLASS TYPE AND GLASS PANEL DIMENSIONS.
- 7: MAXIMUM DESIGN PRESSURE RATING FOR STANDARD, HEAVY & CORNER MULLION W/ LAMINATED GLASS.
- SHEET 8: MAXIMUM DESIGN PRESSURE RATING FOR STANDARD, HEAVY & CORNER MULLION W/ INSULATED GLASS.
- SHEET 9: MAXIMUM DESIGN PRESSURE RATING FOR REINFORCED JAMB MULLION W/ LAMINATED OR INSULATED GLASS (WET GLASS).
- SHEET 10: MAXIMUM DESIGN PRESSURE RATING FOR HORIZONTAL W/ LAMINATED OR INSULATED GLASS.
- SHEET 11: MAXIMUM DESIGN PRESSURE RATING FOR MULLION CONNECTIONS.
- SHEET 12: MAXIMUM DESIGN PRESSURE RATING FOR MULLION CONNECTIONS (CONTINUED).
- SHEET 13: MAXIMUM DESIGN PRESSURE RATING FOR JAMBS FASTENED W/ 3/8" FASTENERS.
- SHEET 14: MAXIMUM DESIGN PRESSURE RATING FOR JAMBS FASTENED W/ 1/2" FASTENERS.
- SHEET 15: HEAD CONNECTION DETAILS.
- SHEET 16: SILL CONNECTION DETAILS.
- SHEET 17: HORIZONTAL SECTIONS AT STANDARD, HEAVY & CORNER MULLION W/ LAMINATED GLASS.
- SHEET 18: HORIZONTAL SECTIONS AT STANDARD, HEAVY & CORNER MULLION W/ INSULATED GLASS (WET & DRY GLAZED).
- SHEET 19: HORIZONTAL CONNECTIONS DETAIL AT JAMB.
- SHEET 20: CORNER DETAIL AT JAMB.

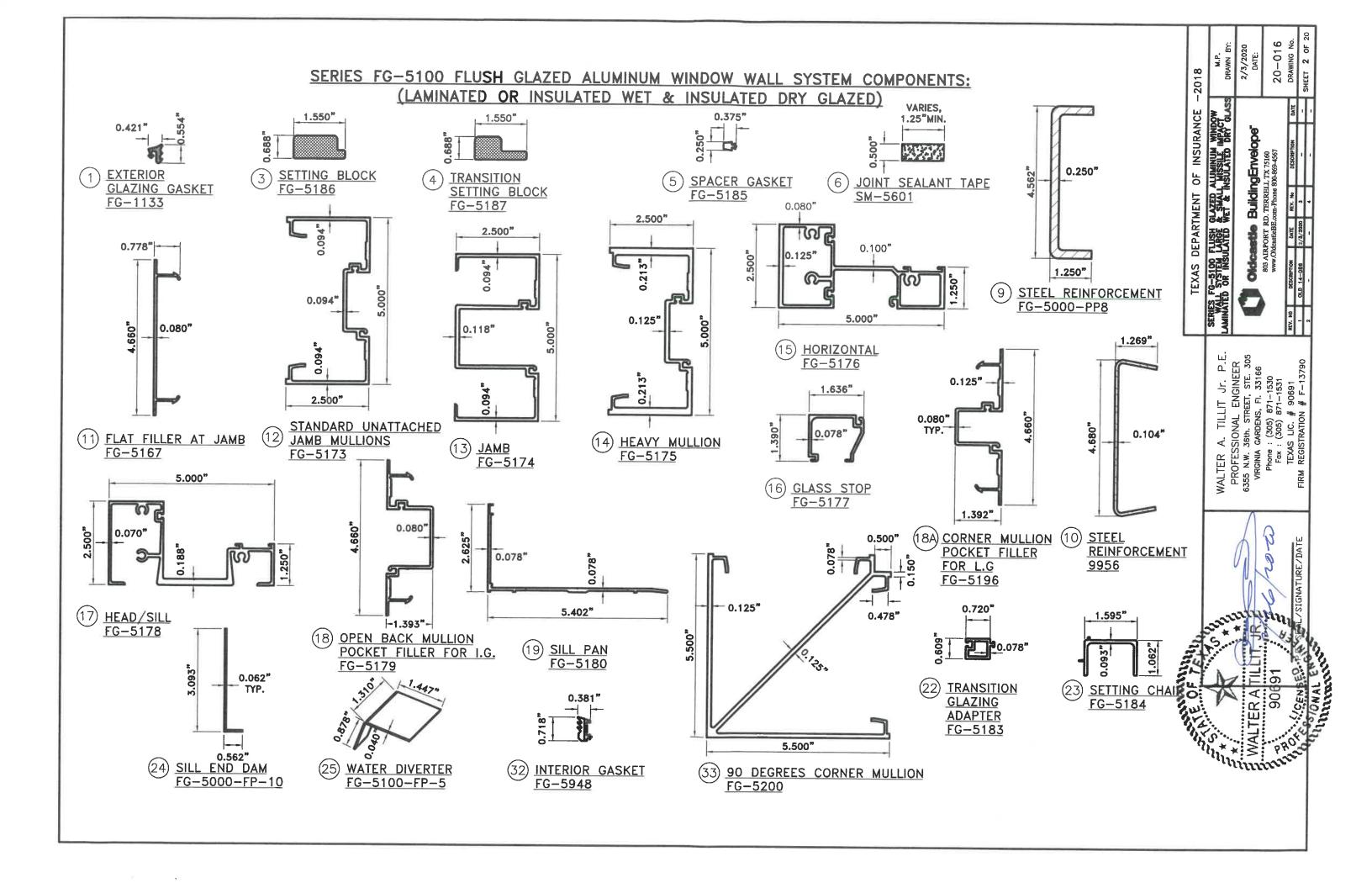
INSTRUCTIONS:

- STEP 1: DETERMINE DESIGN WIND LOAD REQUIREMENTS BASED ON WIND VELOCITY, BUILDING HEIGHT, WIND ZONE, USING APPLICABLE ASCE 7 STANDARDS.
- STEP 2: GO TO SCHEDULE ON SHEET 6, TO DETERMINE MAXIMUM DESIGN PRESSURE RATING (psf) OF DESIRED GLASS SIZE BASED ON GLASS PANEL DIMENSIONS.
- STEP 3: DETERMINE MAXIMUM MULLION SPAN "L"(FT) FOR A GIVEN MULLION EFFECTIVE SPACING "b", ON SCHEDULE ON SHEETS 7 & 8, AND SELECT ANCHOR OPTION W/ DESIGN PRESSURE RATING EQUAL OR GREATER THAN DESIGN LOAD SPECIFIED IN STEP 1 USING SCHEDULES ON SHEETS 11 AND 12.
- STEP 4: USE SCHEDULES ON SHEETS 13 AND 14, TO SELECT JAMB ANCHOR OPTION W/ ANCHORAGE OR SHEET 9, FOR W/O ANCHORAGE WITH DESIGN PRESSURE RATING EQUAL OR GREATER THE DESIGN LOAD SPECIFIED IN STEP 1.
- STEP 5: USE SCHEDULE ON SHEET 10, TO VERIFY MAXIMUM DESIGN PRESSURE RATING OF HORIZONTALS (IF USED), TO BE EQUAL OR GREATER THAN DESIGN LOAD SPECIFIED IN STEP
- STEP 6: THE LOWEST VALUE OF DESIGN PRESSURE RATING RESULTING FROM STEPS 2, 3, 4 AND 5 SHALL APPLY TO THE ENTIRE SYSTEM.

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

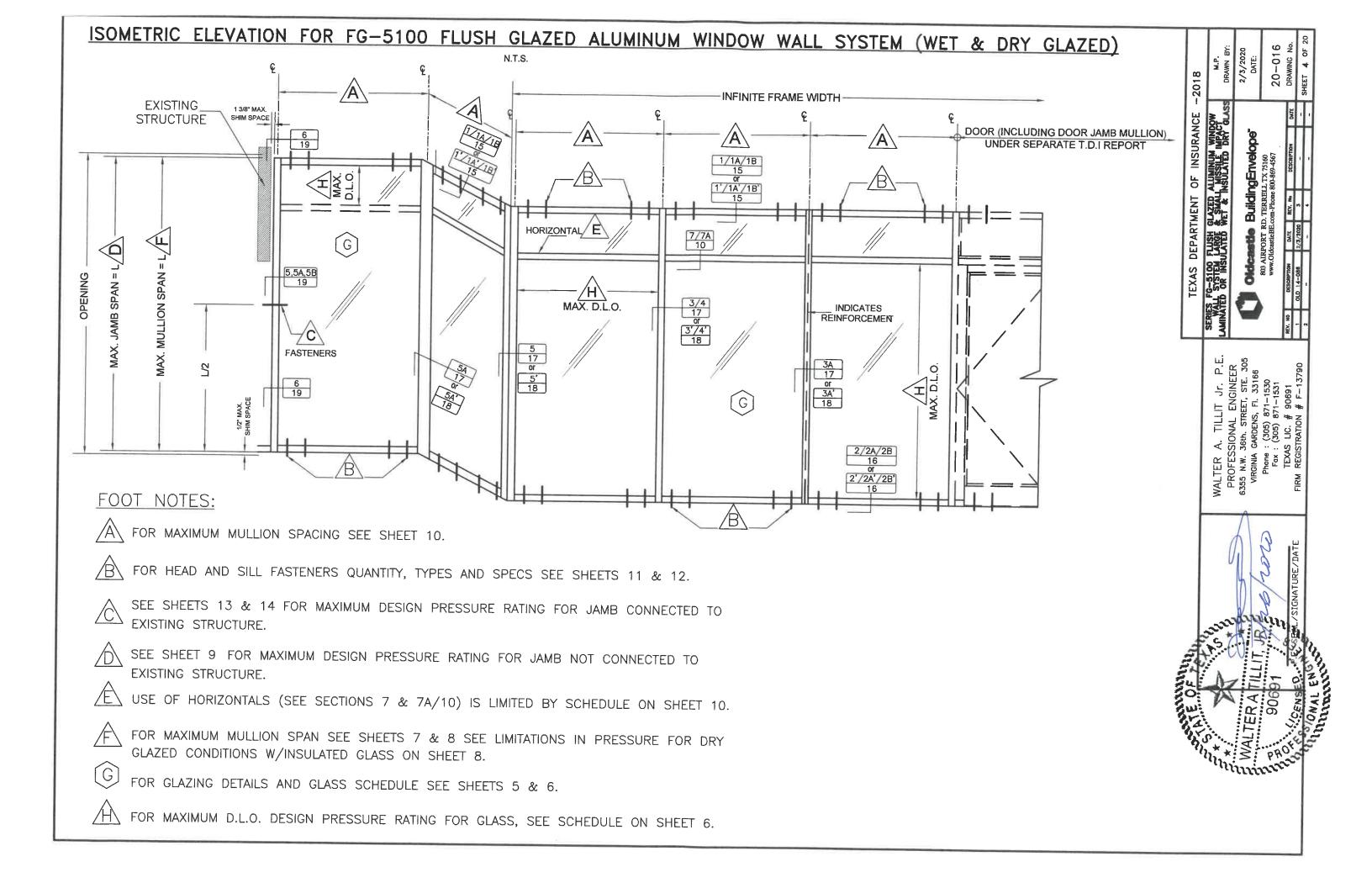
20-01 2018 INSURANCE DEPARTMENT SYSTEM LARGE OR INSULATED TER A. TILLIT Jr. P.E. ROFESSIONAL ENGINEER 5 N.W. 36th. STREET, STE. 305 ARGINIA GARDENS, FI. 33166
Phone: (305) 871–1530
Fox: (305) 871–1531
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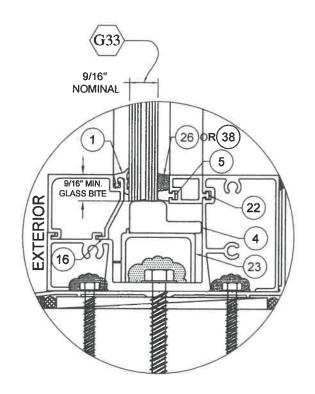


BILL OF MATERIALS

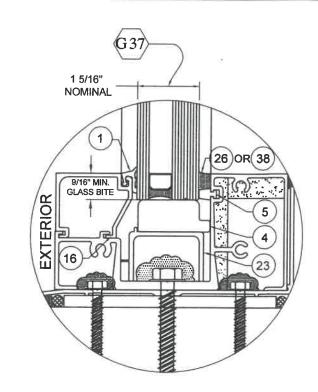
| 1104 | ART NUMBER | DESCRIPTION | DIMENSIONS | MATERIAL | MANUFACTURER | NOTES |
|--------|-------------|---|---------------------------------------|-------------------|-------------------|--|
| _ | | EXTERIOR GLAZING GASKET | 0.421" X .554" | 70 DUROMETER EPDM | TRELLEBORG OR EPG | FOR 1 5/16" OR 5/8" GLAZING FOR WET & DRY GLAZED |
| _ | | SETTING BLOCK | 1.550" X .688" | SILICONE | | AT SILL & HORIZONTAL |
| 4. F | FG-5187 | TRANSITION SETTING BLOCK | 1.550" X .688" | EPDM | VARIES | AT SILL & HORIZONTAL |
| 5. F | FG-5185 | SPACER GASKET | 0.375 X .250 | SILICONE | VARIES | |
| 6. | SM-5601 | JOINT SEALANT TAPE | .125" X .50" VARIES | BUTYL | SCHNEE-MOREHEAD | |
| 7. F | FS-8 | SPLINE ASSEMBLY SCREW | #14 X 1 HHSTS | STEEL | VARIES | ZINC COATED PER ASTM B-633 |
| 8. F | FS-38 | ATTACH STEEL REINFORCEMENT | 1/4-20 X ½" HH TYPE F | STEEL | VARIES | 1" FROM EACH END, ZINC COATED PER ASTM B-633 |
| 9. F | FG-5000-PP8 | STEEL REINFORCEMENT FOR FG-5173 STANDARD MULLION | 1.250" X 4.562" X .250" | A36 STEEL | VARIES | FULL MULLION LENGTH |
| 10. 9 | 9956 | STEEL REINFORCEMENT FOR FG-5173 UNATTACHED JAMB MULLION | 1.269" X 4.680" X .104" GA. | A36 STEEL | VARIES | ALT. WALL JAMB, FULL MULLION LENGTH |
| 11. F | G-5167 | FLAT FILLER @ JAMB | .778" X 4.660" X .080" | | OLDCASTLE BE | USE @ ALT. WALL JAMB |
| 12. F | G-5173 | STANDARD /UNATTACHED JAMB MULLIONS | 2.50" X 5.00" X .094" | 6063-T6 ALUMINUM | OLDCASTLE BE | O ALL WALL DANIE |
| 13. F | G-5174 | 14140 | | 6063-T6 ALUMINUM | | ATTACHED TO EXISTING WALL |
| 14. F | G-5175 | DENAC MUNICIPAL | | | OLDCASTLE BE | MINORED TO EXISTING WALL |
| 5. F | G-5176 | | 2.50" X 5.00" X .125" X .080" X .100" | | OLDCASTLE BE | |
| 16. F | G-5177 | GLASS STOP | | 6063-T6 ALUMINUM | OLDCASTLE BE | |
| 17. F | G-5178 | HEAD/SILL | | | OLDCASTLE BE | |
| 8. F | G-5179 | OPEN DAGICANULION DOCUMENTO TO THE TOTAL TO THE TOTAL | | | | FOR CORNER OR STANDARD MULLION |
| BA. F | G-5196 | | | | | WET GLAZED, CORNER MULLION |
| 9. F | G-5180 | 201 544 | | | OLDCASTLE BE | WEI GEAZED, CORNER MOLLION |
| 22. F | G-5183 | TRANSITION GLAZING ADAPTER FOR L.G. | | | OLDCASTLE BE | |
| 23. F | G-5184 | SETTING CHAIR | | | | CUT 4" LONG, AT SILL |
| 24. FG | -5000-FP-10 | SILL END DAM | | 6063-T5 ALUMINUM | | 5.00" LONG |
| 25. FO | G-5100-FP-5 | WATER DIVERTER | .878" X 1.447" X .040" | RIGID PVC | | CUT 1.562 LONG & LOCATE @ EACH END |
| 26. # | 995 | STRUCTURAL SILICONE | | | | WET GLAZED |
| 9. F | ASTENER | FOR ATTACHING SILL PAN TO CONCRETE SUBSTRATE | | STAINLESS STEEL | | |
| 80. F | ASTENER | | | STEEL | | |
| 31. F | ASTENER I | FOR ATTACHING SILL PAN FLASHING TO STL SUBSTRATE | ¾6" X 1" DRILL FLEX #5 | STEEL | | 9 |
| 2. F | G-5948 | | | | | 1" MIN. EMBEDMENT NON—STRUCTURAL DRY GLAZED GASKET |
| 3. F | G-5200 | O DEGREES CORNER MULLION | | | OLDCASTLE BE | ON SOLED WHOLE |
| 8. S | PECTREM 2 | | | | TREMCO | |
| 39. F | S-54 | PHILLIPS FLAT HEAD MACHINE SCREW U.C. | | | | ZINC COATED, PER ASTM B-633. |
| 10. # | 795 F | PERIMETER SELEANT | | | DOW CORNING | CITO GOVILLO, I'LIN ASTIM B-000. |



TYPICAL GLAZING DETAILS

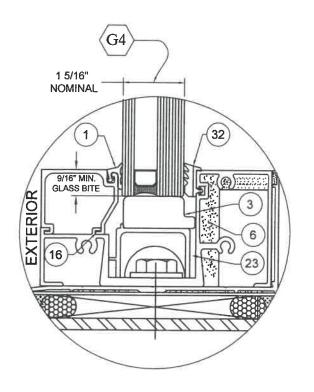


LAMINATED GLASS WET GLAZED



INSULATED LAMINATED GLASS
WET GLAZED

| | GLASS SCHEDULE WET GLAZED | | | | | | | |
|----------------|--|----------------------|----------------------------|--|--|--|--|--|
| GLASS LABEL | GLASS COMPOSITION | MANUFACTURER NAME | MAXIMUM D.L.O. | | | | | |
| (G33) | 9/16" LAMINATED GLASS: 1/4" H.S. GLASS OUTBOARD .075" VANCEVA/STORMGLASS COMPOSITE INTERLAYER 1/4" H.S. GLASS INBOARD | OLDCASTLE | SEE SCHEDULE ON SHEET 6 | | | | | |
| (G37) | 1 5/16" OVERALL THICKNESS INSULATED LAMINATED GLASS, CONSISTING OF 1/4" TEMPERED GLASS OUTBOARD 1/2" AIR SPACE 1/4" H.S. GLASS .075" VANCEVA/STORMGLASS COMPOSITE INTERLAYER 1/4" H.S. GLASS INBOARD | OLDCASTLE | SEE SCHEDULE ON SHEET 6 | | | | | |



INSULATED LAMINATED GLASS

DRY GLAZED*

| | GLASS SCHEDULE DRY GLAZED | | | | | | | |
|----------------|---|-----------------------------|----------------------------|--|--|--|--|--|
| GLASS LABEL | GLASS COMPOSITION | MANUFACTURER NAME | MAXIMUM D.L.O. | | | | | |
| G4 | 1 5/16" OVERALL THICKNESS INSULATED LAMINATED GLASS, CONSISTING OF 1/4" HS GLASS OB 1/2" SPACER AND 1/4" HS OVER 0.090 SENTRYGLASPLUS INTERLAYER OVER 1/4" HS GLASS | KURARAY AMERICA, Inc. | SEE SCHEDULE ON SHEET 6 | | | | | |

* LIMITED TO +70 -70 psf. FOR MAXIMUM DESIGN PRESSURE RATING. SERIES FG-5100 FLUSH GLZED ALUMINUW WINDOW

LAMINATED OR INSULATED WET & INSULATED DRY GLASS

SOS AIRPORT RD. TERRELL TY 75160

WWW.OldcastlebE.com-Phone 800-869-4567

REV. NO DESCRIPTION DATE REV. NO DESCRIPTION DATE REV. NO 1 04L0 14-086 2/3/2020 3 - SHEET

PROFESSIONAL ENGINEER
6355 N.W. 36th. STREET, STE. 305
VIRGINIA GARDENS, FI. 33166
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MAXIMUM DESIGN PRESSURE RATING (psf) SCHEDULE FOR A GIVEN GLASS TYPE AND GLASS PANEL DIMENSIONS "a" (in) x "b" (in) (SEE LEGEND)

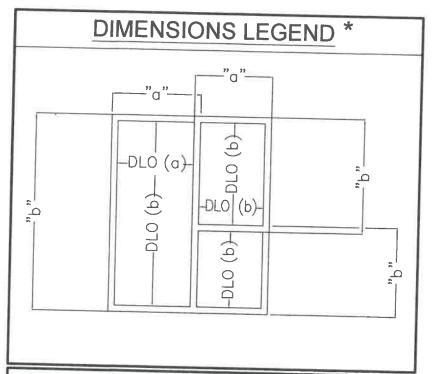
| LAMINATED GLASS TYPE (G33): WET GLAZED | | | | | | | |
|--|-------------------|-----------|--|--|--|--|--|
| DIMENSION "a" | DIMERIO | | | | | | |
| 24" | FROM 24" TO 120" | +70,-80 | | | | | |
| 30" | FROM 30" TO 120" | +70,-80 | | | | | |
| 36" | FROM 36" TO 120" | +70,-80 | | | | | |
| 42" | FROM 42" TO 120" | +70,-80 | | | | | |
| 48" | FROM 48" TO 108" | +70,-80 | | | | | |
| 48" | 62.5" TO 114" | +70,-78.5 | | | | | |
| 48" | 62.5" TO 120" | +70,-75.7 | | | | | |
| 48" | 62.5" TO 120" | +70,-73.7 | | | | | |
| 54" | FROM 54" TO 96" | +70,-80 | | | | | |
| 54" | 62.5" TO 102" | +70,-78.3 | | | | | |
| 54" | 62.5" TO 108" | +70,-73.7 | | | | | |
| 54" | 62.5" TO 112" | +70,-71.2 | | | | | |
| 62.5" | FROM 62.5" TO 90" | +70,-80 | | | | | |

| INSULATED GLASS TYPE 637: WET GLAZED | | | | | | | |
|--------------------------------------|--------------------|--|--|--|--|--|--|
| DIMENSION "a" | DIMENSION "b" | MAXIMUM DESIGN PRESSURE RATING(psf) | | | | | |
| 24" | FROM 24" TO 101" | +90,-90 | | | | | |
| 30" | FROM 30" TO 101" | +90,-90 | | | | | |
| 36" | FROM 36" TO 101" | +90,-90 | | | | | |
| 42" | FROM 42" TO 101" | +90,-90 | | | | | |
| 48" | FROM 48" TO 101" | +90,-90 | | | | | |
| 54" | FROM 54" TO 101" | +90,-90 | | | | | |
| 62.5" | FROM 62.5" TO 101" | +90,-90 | | | | | |

| INSULA DRY GLAZ | INSULATED GLASS TYPE G4: DRY GLAZED | | | | | | | |
|--------------------|-------------------------------------|--|--|--|--|--|--|--|
| DIMENSION "a" | DIMENSION "b" | MAXIMUM DESIGN PRESSURE RATING(psf) | | | | | | |
| 24" | FROM 24" TO 101" | +70,-70 | | | | | | |
| 30" | FROM 30" TO 101" | +70,-70 | | | | | | |
| 36" | FROM 36" TO 101" | +70,-70 | | | | | | |
| 42" | FROM 42" TO 101" | +70,-70 | | | | | | |
| 48" | FROM 48" TO 101" | +70,-70 | | | | | | |
| 54" | FROM 54" TO 101" | +70,-70 | | | | | | |
| 62.5" | FROM 62.5" TO 101" | +70,-70 | | | | | | |

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

| | MAXIMUM DAY LIGHT OPENING | | | |
|------------------------------------|--|--|--|--|
| SIDE | (D.L.O.) Formula at Vertical & Horizontal Mullions | (D.L.O.) Formula at Jamb, Head & Sill Frames | | |
| MAX. D.L.O. (a) (SHORT SIDE) | "a"-5.00" | "a"-5.00" | | |
| MAX. D.L.O. (b) (LONG SIDE) | "b"-5.00" | "b"-5.00" | | |

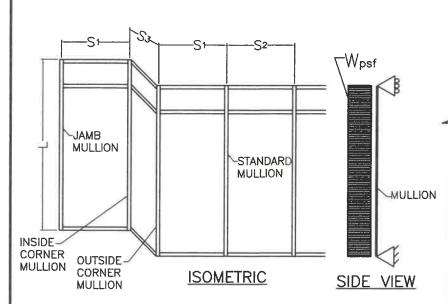


* SIDE "a" IS ALWAYS EQUAL OR SHORTER THAN "b" "a" ,"b" MAY BE ORIENTED IN ANY DIRECTION.

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STANDARD, HEAVY & CORNER MULLION W/ LAMINATED GLASS



L = MULLION SPAN

EFFECTIVE SPACING $b = S_1 + S_2$ (SEE SCHEDULE,) (FOR STANDARD MULLION)

EFFECTIVE SPACING $b = S_1 + S_3$ (SEE SCHEDULE) (FOR CORNER MULLION)

CASE DEFINITIONS

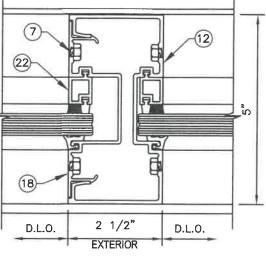
CASE 1: UNREINFORCED STANDARD MULLION A.

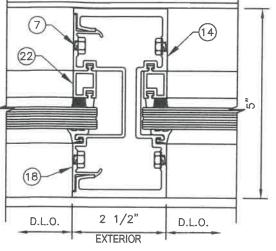
CASE 2 : UNREINFORCED HEAVY MULLION B.

CASE 3: REINFORCED STANDARD MULLION C.

CASE 4: OUTSIDE/INSIDE CORNER MULLION D.

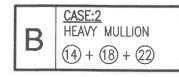
MAXIMUM DESIGN PRESSURE RATING FOR STANDARD & CORNER MULLION WILL AUTOMATICALLY QUALIFY DESIGN PRESSURE RATINGS FOR JAMBS W/ ANCHORAGE FOR ANY GIVEN MULLION SPACING. FOR MAX. JAMB SPAN W/O ANCHORAGE SEE SCHEDULE ON SHEET 9. JAMB ANCHORAGE (WHEN USED) SHALL BE PERFORMED AT MID HEIGHT OF JAMBS.

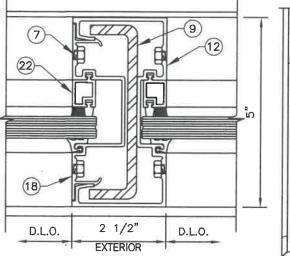


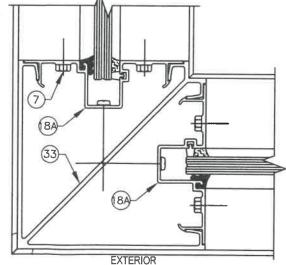


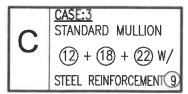


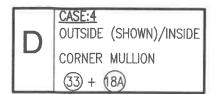
CASE:1











MAXIMUM DESIGN PRESSURE RATING FOR STANDARD, HEAVY & CORNER MULLIONS * MAXIMUM MULLION SPAN "L"(FT) SCHEDULE FOR A GIVEN **DESIGN PRESSURE RATING** AND A GIVEN MULLION EFFECTIVE SPACING "b"

| MAXIMUM | EFFECTIVE | CASE 1 | CASE 2 | CASE 3 | CASE 4 |
|---------------------|--------------------|--------------|----------------------|----------------------|---------------|
| DESIGN | SPACING | UNREINFORCED | UNREINFORCED | REINFORCED | OUTSIDE/INSID |
| PRESSURE RAITING | "b" | STANDARD | HEAVY | STANDARD | CORNER |
| TOTAL DATE | | MULLION A | MULLION B | MULLION C | MULLION D |
| (paf) | (Ft-In) | "L" (FT-in | "L" (FT-in | "L" (FT-in | "L" (FT-i |
| | 3' - 6" | 7' - 5" | 10' - 0" | 10' - 0" | 10' - 0" |
| 60.0 | 4' - 0" | 7' - 5" | 10' - 0" | 10' - 0" | 10' - 0" |
| | 4' - 6" | 7' - 5" | 10' - 0" | 10' - 0" | 10' - 0" |
| | 5' - 0" | 7' - 5" | 9' - 8" | 10' - 0" | 10' - 0" |
| | 3' - 6" | 7' - 5" | 10' - 0" | 10' - 0" | 10' - 0" |
| 65.0 | 4' - 0" | 7' - 5" | 10' - 0" | 10' - 0" | 10' - 0" |
| | 4' - 6" | 7' - 5" | 9' - 9" | 10' - 0" | 10' - 0" |
| | 5' - 0" 3' - 6" | 7' - 5" | 9' - 4" | 10' - 0" | 9' - 11" |
| | 4' - 0" | - | 10' - 0" 9' - 11" | 10' - 0" | 10' - 0" |
| 70.0 | 4' - 6" | | | 10' - 0" | 10' - 0" |
| | 5' - 0" | _ | 9' - 6" 9' - 0" | 10' - 0" | 10' - 0" |
| | 3' - 6" | | 10' - 0" | 10' - 0" 10' - 0" | 9' - 9" |
| | 4' - 0" | | 9' - 8" | 10' - 0" | 10' - 0" |
| 75.0 | 4' - 6" | _ | 9' - 2" | 10' - 0" | 9' - 10" |
| | 5' - 0" | - | 8' - 8" | 10' - 0" | 9' - 6" |
| | 3' - 6" | _ | 9' - 11" | 10' - 0" | 10' - 0" |
| | 4' - 0" | - | 9' - 5" | 10' - 0" | 10' - 0" |
| 80.0 | 4' - 6" | - | 8' - 11" | 10' - 0" | 9' - 7" |
| | 5' - 0" | | 8' - 5" | 10' ~ 0" | 9' - 3" |
| | 3' - 6" | | | 10' - 0" | |
| 85.0 | 4' - 0" | - | - | 10' - 0" | ~ |
| 05.0 | 4' - 6" | - | - 1 | 10' - 0" | - |
| | 5' - 0" | | - | 10' - 0" | - |
| | 3' - 6" | - | - | 10' - 0" | - |
| 90.0 | 4' - 0" | - | - | 10' - 0" | - |
| | 4' - 6" | - | - | 10' - 0" | - |
| | 5' - 0" | | - | 10' - 0" | - |

BuildingEnvelope RD. TERRELL TX 75160 8.com-Phone 800-869-4567 DEPARTMENT

INSURANCE

P

20-016



JAMB MULLION STANDARD MULLION MULLION CORNER MULLION ISOMETRIC SIDE VIEW

L = MULLION SPAN

EFFECTIVE SPACING $b = \frac{S_1 + S_2}{2}$ (SEE SCHEDULE,) (FOR STANDARD MULLION)

EFFECTIVE SPACING $b = \frac{S_1 + S_3}{2}$ (SEE SCHEDULE) (FOR CORNER MULLION)

CASE DEFINITIONS

CASE 1 : UNREINFORCED STANDARD MULLION A'.

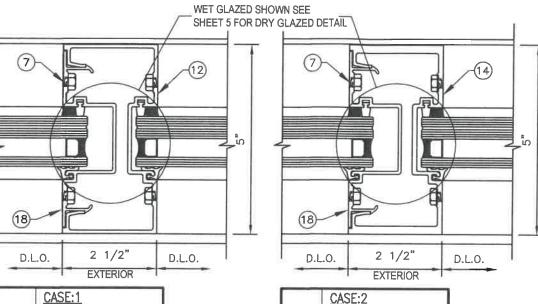
CASE 2 : UNREINFORCED HEAVY MULLION B'.

CASE 3 : REINFORCED STANDARD MULLION C'.

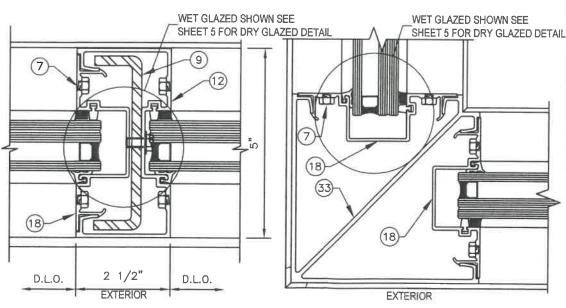
CASE 4 : OUTSIDE/INSIDE CORNER MULLION D'.

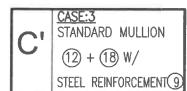
- * MAXIMUM DESIGN PRESSURE RATING FOR STANDARD & CORNER MULLION WILL AUTOMATICALLY QUALIFY DESIGN PRESSURE RATINGS FOR JAMBS W/ ANCHORAGE FOR ANY GIVEN MULLION SPACING. FOR MAX. JAMB SPAN W/O ANCHORAGE SEE SCHEDULE ON SHEET 9. JAMB ANCHORAGE (WHEN USED) SHALL BE PERFORMED AT MID HEIGHT OF JAMBS.
- ** MAXIMUM DESIGN PRESSURE RATING FOR DRY GLAZED MULLION INSTALLATIONS IS +70, -70 psf.

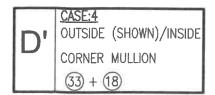
STANDARD, HEAVY & CORNER MULLION W/ INSULATED GLASS











MAXIMUM DESIGN PRESSURE RATING FOR STANDARD, HEAVY & CORNER MULLIONS * MAXIMUM MULLION SPAN "L"(FT) SCHEDULE FOR A GIVEN DESIGN PRESSURE RATING AND A GIVEN MULLION EFFECTIVE SPACING "b"

| MAXIM | IUM | EFFECTIVE | CASE 1 | CASE 2 | CASE 3 | CASE 4 |
|-------|-----|--------------------|------------------------|---------------------------|---------------------------|---------------------------|
| DES | | SPACING | UNREINFORCED | UNREINFORCED | REINFORCED | OUTSIDE/INSIDE |
| RAIT | | "Ъ" | STANDARD | HEAVY | STANDARD | CORNER |
| (psi | n | (Ft-in) | MULLION A' "L" (FT-in) | MULLION B' "L" (FT-in) | MULLION C' "L" (FT-in) | MULLION D' "L" (FT-in) |
| | | 3' - 6" 4' - 0" | 7' - 5" | 10' - 0" | 10' - 0" | 10' - 0" |
| 60.0 |) | 4'-6" | 7' - 5" 7' - 5" | 10' - 0" 10' - 0" | 10' - 0" 10' - 0" | 10' - 0" |
| 1 | - 1 | 5' - 0" | 7' - 5" | 9' - 8" | 10' - 0" | 10' - 0" 10' - 0" |
| | | 3' - 6" | 7' - 5" | 10' - 0" | 10' - 0" | 10' - 0" |
| 65.0 | 、 I | 4' - 0" | 7' - 5" | 10' - 0" | 10' - 0" | 10' - 0'' |
| 05.0 | 1 | 4' - 6" | 7' - 5" | 9' - 9" | 10' - 0" | 10' - 0" |
| | | 5' - 0" | 7' - 5" | 9' - 4" | 10' - 0" | 9' - 11" |
| | | 3' - 6" | - | 10' - 0" | 10' - 0" | 10' - 0" |
| 70.0 |)** | 4' - 0" | - | 9' - 11" | 10' - 0" | 10' - 0" |
| 1 | - 1 | 4' - 6" | _ | 9' - 6" 9' - 0" | 10' - 0" | 10' - 0" |
| _ | - | 5' - 0" | | 10' - 0" | 10' - 0" | 9' - 9" 10' - 0" |
| 1 | | 4' - 0" | - | 9' - 8" | 10' - 0" | 10' - 0" |
| 75.0 |) | 4' - 6" | - | 9' - 2" | 10' - 0" | 9' - 10" |
| | | 5' - 0" | ~ | 8' - 8" | 10' - 0" | 9' - 6" |
| | | 3' - 6" | | 9' - 11" | 10' - 0" | 10' - 0" |
| 1 | | 4' - 0" | - | 9' - 5" | 10' - 0" | 10' - 0" |
| 80.0 |) | 4' - 6" | - 1 | 8' - 11" | 10' - 0" | 9' - 7" |
| | _ | 5' - 0" | - | 8' - 5" | 10' - 0" | 9' - 3" |
| | | 3' - 6" | - | - | 10' 0" | - |
| 85.0 | ı İ | 4' - 0" | | | 10' - 0" | - 1 |
| **** | | 4' - 6" | - 1 | - 1 | 10' - 0" 10' - 0" | |
| _ | - | 5' - 0" 3' - 6" | | | 10 - 0" | |
| ı | | 4' - 0" | - | | 10' - 0" | - |
| 90.0 | | 4' - 6" | - | - | 10' - 0" | - 1 |
| | | 5'-0" | - | - | 10' - 0" | - |

SERIES FG-5100 FLUSH GLAZED ALUMINUM WINDOW

SERIES FG-5100 FLUSH GLAZED ALUMINUM WINDOW

LAMINATED OR INSULATED WET & INSULATED DRY GLA

STATEM LANGE & SMALL MISSIE INFOCT GLA

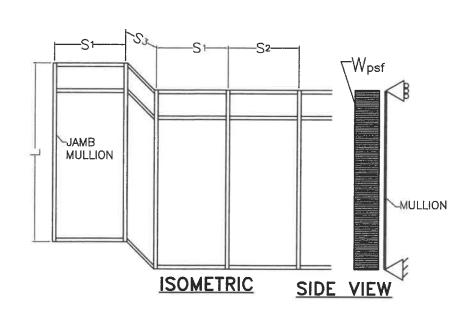
SUS ARRPORT RD. TERRELL TX 75160

www.OldossideBic.com-Phone 800-869-4567

WALTER A. TILLIT Jr. P.
PROFESSIONAL ENGINEER
6355 n.w. 36th. STREET, STE. 3
VIRGINIA GARDENS, FI. 33166



REINFORCED JAMB MULLION W/ LAMINATED OR INSULATED GLASS (WET GLAZED) *



L = MULLION SPAN

EFFECTIVE SPACING $b = \frac{S_1}{2}$ (SEE SCHEDULE)

CASE DEFINITIONS

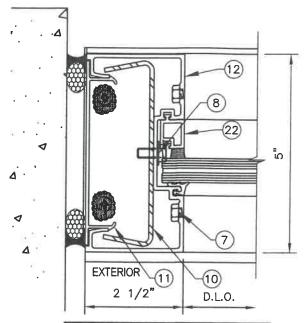
CASE 1 : REINFORCED JAMB MULLION FOR LAMINATED GLASS E.

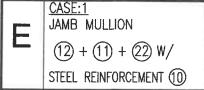
CASE 2 : REINFORCED JAMB MULLION FOR INSULATED GLASS F'.

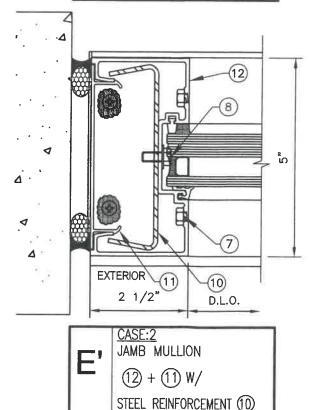
* SEE SHEETS 13 & 14 FOR SPECS FOR JAMB ATTACHED TO EXISTING WALL W/WET OR DRY GLAZED WITH LAMINATED OR INSULATED GLASS.

-JAMBS ATTACHED TO EXISTING WALL HOLDING INSULATED GLASS MAY BE WET OR DRY GLAZED.

-JAMBS ATTACHED TO EXISTING WALL HOLDING LAMINATED GLASS MUST ALWAYS BE WET GLAZED.







MAXIMUM DESIGN PRESSURE RATING FOR REINFORCED JAMB MULLION UNATTACHED MAXIMUM JAMB MULLION SPAN "L"(FT) SCHEDULE FOR A GIVEN DESIGN PRESSURE RATING AND A GIVEN JAMB MULLION EFFECTIVE SPACING "b"

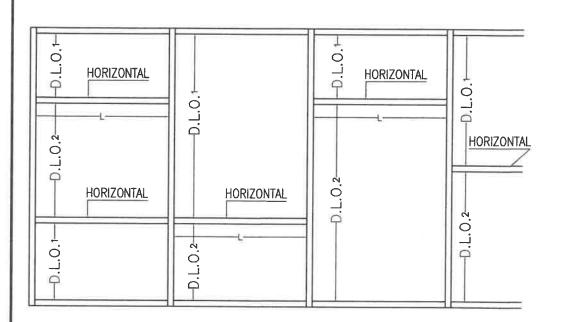
| MAXIMUM | EFFECTIVE | CASE 1 | CASE 2 |
|---------------------|--------------------|------------|------------|
| DESIGN | SPACING | REINFORCED | REINFORCED |
| PRESSURE RAITING | "b" | JAMB | JAMB |
| KAI IING | _ | MULLION E | MULLION E' |
| (psf) | (Ft-in) | "L" (FT-in | "L" (FT-ir |
| | 1' - 9" | 10' - 0" | 10' - 0" |
| | 2' - 0" | 10' - 0" | 10' - 0" |
| 60.0 | 2' - 3" | 10' - 0" | 10' - 0" |
| | 2' - 6" 1' - 9" | 10' - 0" | 10' - 0" |
| | | 10' - 0" | 10' - 0" |
| 65.0 | 2' - 0" | 10' - 0" | 10' - 0" |
| 05.0 | 2' - 3" | 10' - 0" | 10' - 0" |
| | 2' - 6" | 10' - 0" | 10' - 0" |
| | 1' - 9" | 10' - 0" | 10' - 0" |
| 70.0 | 2' - 0" | 10' - 0" | 10' - 0" |
| 70.0 | 2' - 3" | 10' - 0" | 10' - 0" |
| | 2' - 6" 1' - 9" | 10' - 0" | 10' - 0" |
| | | 10' - 0" | 10' - 0" |
| 75.0 | 2' - 0" | 10' - 0" | 10' - 0" |
| | 2' - 3" | 10' - 0" | 10' - 0" |
| | 2' - 6" | 10' - 0" | 10' - 0" |
| | | 10' - 0" | 10' - 0" |
| 80.0 | 2' - 0" | 10' - 0" | 10' - 0" |
| 00.0 | 2' - 3" | 10' - 0" | 10' - 0" |
| | 2' - 6" 1' - 9" | 10' - 0" | 10' - 0" |
| | | 10' - 0" | 10' - 0" |
| 85.0 | 2' - 0" | 10' - 0" | 10' - 0'' |
| | 2' - 3" | 10' - 0" | 10' - 0" |
| | 2' - 6" | 10' - 0" | 10' - 0" |
| | 1' - 9" | 10' - 0" | 10' - 0" |
| 90.0 | 2' - 0" | 10' - 0" | 10' - 0" |
| 30.0 | 2' - 3" | 10' - 0" | 10' - 0" |
| | 2' 6" | 10' - 0" | 10' - 0" |

| INSURANCE - | SILE IMPACT ATED DRY GLASS | Nelope | ESCRIPTION DATE |
|-------------------------------|---|--|---------------------|
| TEXAS DEPARTMENT OF INSURANCE | FG-5100 FLUSH GLAZED ALUN SYSTEM LARGE & SHALL MIS D OR INSULATED WET & INSUI | Oldcastle BuildingErvelope 803 AIRPORT RD. TERRELL TX 75160 www.OldcastleBe.com-Phone 800-869-4567 | DATE REV. No |
| TEXAS DE | SERIES FG-5100 FL Wall System LA Aminated or Insula | Oldcan 803 AIRP www.Oldc | REV. NO DESCRIPTION |
| | Jr. P.E. | ineek STE. 305 33166 530 531 | 161 |

PROFESSIONAL ENGII 6355 N.W. 36th. STREET, S VIRGINIA GARDENS, FI. 3 Phone : (305) 871–15 Fax : (305) 871–15.



HORIZONTAL W/ LAMINATED OR INSULATED GLASS



WINDOW WALL ELEVATION W/ HORIZONTALS

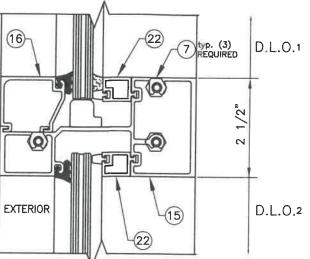
"L" = MAXIMUM SPAN FOR HORIZONTAL

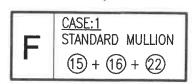
"D.L.O." = EFFECTIVE DAY LIGHT OPENING = $\frac{D.L.O.1 + D.L.O.2}{2}$

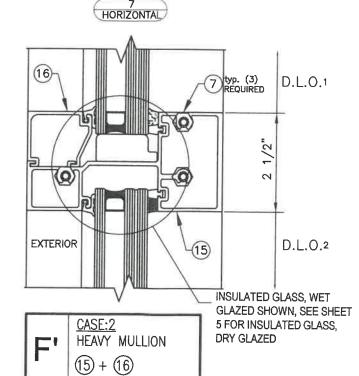
CASE DEFINITIONS

CASE 1 : UNREINFORCED HORIZONTAL FOR LAMINATED GLASS F.

CASE 2 : UNREINFORCED HORIZONTAL FOR INSULATED GLASS F'.







7A HORIZONTAL

MAXIMUM DESIGN PRESSURE RATING FOR HORIZONTAL MAXIMUM SPAN "L"(FT) SCHEDULE FOR A GIVEN DESIGN PRESSURE RATING AND A GIVEN EFFECTIVE SPACING "b"

| MAXIMUM DESIGN PRESSURE RAITING (psf) | EFFECTIVE DAY LIGHT OPENING "DLO"(FT-in) | CASE 1 MAXIMUM UNREINFORCED HORIZONTAL F "L" (FT-in) | CASE 2 MAXIMUM UNREINFORCED HORIZONTAL F* |
|---|---|--|--|
| 90.0 | 2' - 0" 2' - 6" 3' - 0" 3' - 6" 4' - 0" 4' - 6" 5' - 0" | 5' - 0" 5' - 0" 5' - 0" 5' - 0" 5' - 0" 5' - 0" | 5' - 0" 5' - 0" 5' - 0" 5' - 0" 5' - 0" 5' - 0" |

| TEXAS DEPARTMENT OF INSURANC | 100 FLUSH GLAZED ALUMINUM WING TEM LARGE & SMALL MISSILE IMPAC INSULATED WET & INSULATED DRY | Oldcastle BuildingErvelope 803 AIRPORT RD. TERRELL TX 75160 www.OldcastleBE.com-Phone 800-869-4567 | PTION DATE REV. No DESCRIPTION | 2/3/2020 3 | |
|------------------------------|--|--|--------------------------------|----------------|---|
| TEXAS DEP | SERIES FG-5100 FLUSH WALL SYSTEM LARGE AMINATED OR INSULATED | Olderst 803 AIRPOI www.Oldeast | DESCRIPTION D | OLD 14-086 2/3 | - |
| | SERIES F LAMINATED | 9 | REV. NO | | 2 |

-2018

WALTER A. TILLIT Jr. F
PROFESSIONAL ENGINEE
6355 N.W. 36th. STREET, STE.
VIRGINIA GARDENS, FI. 33161
Phone : (305) 871-1530

WALTER TILLT BY UND 90891 SEC. SIGNATURE / DATE

MAXIMUM DESIGN PRESSURE RATING FOR MULLION CONNECTIONS



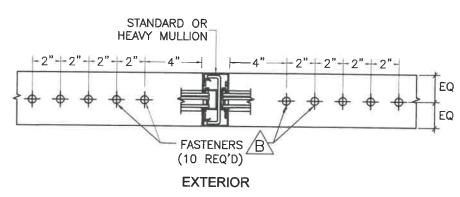
| MAXIMUM | | EFFECTIVE | MAXIM | UM DE | SIGN PF | RESSURE | RATIN | G (psf) |
|----------|--|-----------------------------------|-----------|-------------------------------|-----------|--|---|---|
| SPAN | EFFECTIVE SPACING FOR MULLION | SPACING FOR JAMB MULLION | (Mir | RED CON 1. fc = SUBSTRA | 3ksl) | 1/4" Min. THK ASTM A-38 STEEL SUBSTRATE | DOUBLE BUCK 3" Min. THK. (6=0.55) WOOD BUBBTRATE | DOUBLE BUCK 3" Min. THK. (G=0.55) WOOD SUBSTRATE |
| _"L" | "L "/= L · \ | | FAS | TENERS 1 | TYPES | FASTENERS | FASTENERS | FASTENERS |
| (Ft-in) | b"(Ft-in) | "b"(Ft-in) | Α | В | С | D | Ε | E' |
| | 3' - 6" | 41 08 | 4 Anchors | 4 Anchors | 4 Anchors | 4 Bolts | 10 Lag screws | |
| | | 1' - 9" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| 6' - 2" | 4' - 0" | 2' - 0" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| - 1 | 4' - 6" | 2' - 3" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| | 5' - 0" | 2' - 6" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| I | 3' - 6" | 1' - 9" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| 6' - 6" | 4' - 0" | 2' - 0" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| | 4' - 6" | 2' - 3" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| | 5' - 0" | 2' - 6" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| | 3' - 6" | 1' - 9" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| 7' - 0" | 4' - 0" | 2' - 0" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| | 4' - 6" | 2' - 3" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| | 5' - 0" | 2' - 6" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| | 3' - 6" | 1' - 9" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| 71 611 | 4' - 0" | 2' - 0" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| 7' - 6" | 4' - 6" | 2' - 3" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| | 5' - 0" | 2' - 6" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| | 3' - 6" | 1' - 9" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| 8' - 0" | 4' - 0" | 2' - 0" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| 0-0 | 4' - 6" | 2' - 3" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| | 5' - 0" | 2' - 6" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| | 3' - 6" | 1' - 9" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| | 4' - 0" | 2' - 0" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| 8' - 6" | 4' - 6" | 2' - 3" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| | 5' - 0" | 2' - 6" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| | 3' - 6" | 1' - 9" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| 01 011 | 4' - 0" | 2' - 0" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| 9' - 0" | 4' - 6" | 2' - 3" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| - 1 | 5' - 0" | 2' - 6" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| | 3' - 6" | 1'-9" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| 9' - 6" | 4' - 0" | 2' - 0" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| 9-0 | 4' - 6" | 2' - 3" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| | 5' - 0" | 2' - 6" | 90.0 | 90.0 | 90.0 | 90.0 | 89.5 | 90.0 |
| | 3' - 6" | 1' - 9" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| | 4' - 0" | 2' - 0" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| 10' - 0" | 4' - 6" | 2' - 3" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| | 5' - 0" | 2' - 6" | 90.0 | 90.0 | 87.5 | 90.0 | 90.0 85.0 | 90.0 90.0 |

STANDARD OR HEAVY MULLION 4 1/2" 4" 4" 4 1/2" EQ FASTENERS B (4 REQ'D)

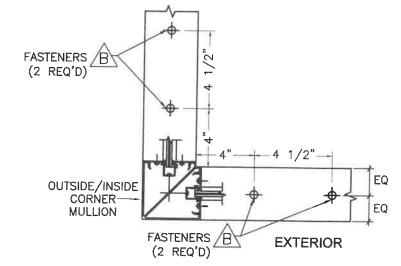
EXTERIOR ICRETE & STEEL CONNECTION D

MULLION CONNECTIONS

(AT STANDARD OR HEAVY MULLION)



SCHEMATIC WOOD CONNECTION DETAIL (AT STANDARD OR HEAVY MULLION)



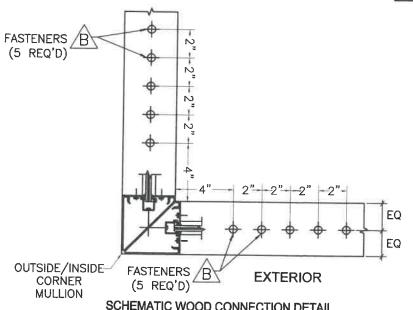
-2018

INSURANCE

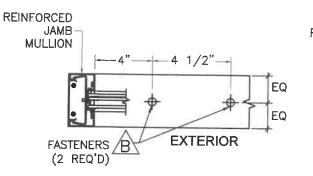
ES FG-5100 FLUSH WALL SYSTEM LARGE ATED OR INSULATED

TEXAS

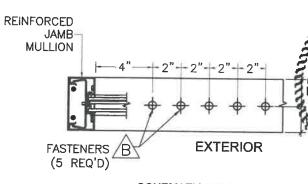
SCHEMATIC CONCRETE & STEEL CONNECTION DETAIL (AT OUTSIDE/INSIDE CORNER MULLION)



SCHEMATIC WOOD CONNECTION DETAIL
(AT OUTSIDE/INSIDE CORNER MULLION)



SCHEMATIC CONCRETE & STEEL
CONNECTION DETAIL
(AT JAMB MULLION)



SCHEMATIC WOOD CONNECTION DETAIL (AT JAMB MULLION)

B

FASTENERS TYPES AND SUBSTRATES REQUIREMENTS W/ 4 1/2" MIN. E.D., BEYOND ANY FINISH MATERIAL

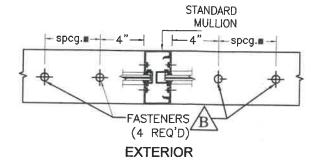
- A 3/8"Ø HILTI KWIK BOLT TZ ANCHOR W/ 2" Min. EMBEDMENT INTO 6" Min. THICK POURED CONCRETE (Min. fc = 3 ksi).
- B 3/8"Ø POWER FASTENERS TAPPER ANCHOR W/ 1 3/4" Min. EMBEDMENT INTO POURED CONCRETE (Min. fc = 3 ksi)
- C 3/8"Ø HILTI HUS-H SCREW ANCHOR W/ 2" Min. EMBEDMENT INTO POURED CONCRETE (Min. fc = 3 ksi)
- D 3/8"Ø TYPE "F" BOLT OR 3/8"Ø -16 ELCO CONSTRUCTION PRODUCTS DRILL FLEX SCREW TO 1/4" Min. THK. ASTM A-36 STEEL.
- E 3/8"Ø LAG SCREWS TO DOUBLE 2 x WOOD BUCK (G=0.55) W/ 3" Min. PENETRATION INTO WOOD.
- E' 1/2"Ø LAG SCREWS TO DOUBLE 2 x WOOD BUCK (G=0.55) W/ 3" Min. PENETRATION INTO WOOD.

MAXIMUM DESIGN PRESSURE RATING FOR MULLION CONNECTIONS

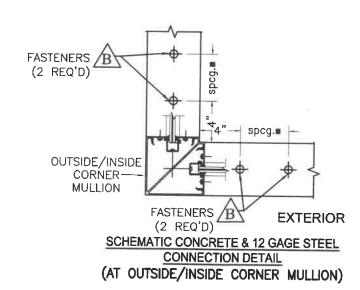


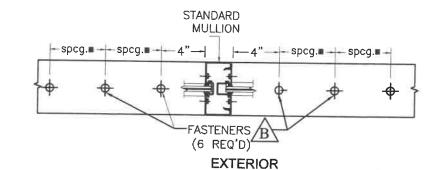
| MAXIMUM | EFFECTIVE | EFFECTIVE | MAXIN | NUM DE | SIGN F | PRESSU | IRE RA | TING (psf | | |
|-----------------------------------|--|-----------------------------------|-----------|----------------------------|-----------|--------------------|-----------------------------|---|--|--|
| MULLION SPAN "L" (Ft-in) | SPACING FOR MULLION b"(Ft-in) | SPACING FOR JAMB MULLION | (Min | ED CON . fc = UBSTRA | 3ksl) | CONCRET | FILLED TE BLOCK TRATE | 12 GAGE (0.108 Min. THK) Fy=33 ksi STEEL SUBSTRATE | | |
| | b (Ft-III) | "b"(Ft-in) | F | G | H | G, | H' | | | |
| | 3' - 6" | 1' - 9" | 4 Anchors | 4 Anchors | 4 Anchors | 6 Anchors | 6 Anchors | 4 Bolts | | |
| | 4' - 0" | 2' - 0" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | | |
| 6' - 2" | 4' - 6" | 2' - 3" | | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | | |
| | 5' - 0" | | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | | |
| | 3' - 6" | 2' - 6" 1' - 9" | 90.0 | 90.0 | 90.0 | 87.6 | 90.0 | 90.0 | | |
| | 4' - 0" | 2' - 0" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | | |
| 6' - 6" | 4'-6" | 2' - 3" | 90.0 | | 90.0 | 90.0 | 90.0 | 90.0 | | |
| | 5' - 0" | 2'-6" | | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | | |
| | 3' - 6" | 1' - 9" | 90.0 | 90.0 | 90.0 | 83.1 90.0 | 90.0 | 90.0 | | |
| | 4' - 0" | 2' - 0" | 90.0 | 90.0 | 90.0 | C. 100 (100 Comp.) | 90.0 | 90.0 | | |
| 7' - 0" | 4' - 6" | 2' - 3" | 90.0 | 90.0 | | 90.0 | 90.0 | 90.0 | | |
| | 5' - 0" | 2'-6" | 90.0 | 90.0 | 90.0 | 85.7 | 90.0 | 90.0 | | |
| | 3' - 6" | 1' - 9" | 90.0 | 90.0 | 90.0 | 77.1 90.0 | 90.0 | 90.0 | | |
| | 4' - 0" | 2' - 0" | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | | |
| 7' - 6" | 4' - 6" | 2' - 3" | 90.0 | 90.0 | 90.0 | | 90.0 | 90.0 | | |
| | 5' - 0" | 2'-6" | 1 | 90.0 | | 80.0 | 90.0 | 90.0 | | |
| | 3'-6" | 1'-9" | 90.0 | 90.0 | 90.0 | 72.0 90.0 | 90.0 | 90.0 | | |
| | 4' - 0" | 2' - 0" | 90.0 | 90.0 | 90.0 | 84.4 | 90.0 | 90.0 | | |
| 8' - 0" | 4' - 6" | 2' - 3" | 90.0 | 90.0 | 90.0 | 75.0 | 90.0 | 90.0 | | |
| | 5' - 0" | 2' - 6" | 90.0 | 90.0 | 90.0 | | | 90.0 | | |
| | 3' - 6" | 1' - 9" | 90.0 | 90.0 | 90.0 | 67.5 90.0 | 90.0 | 90.0 | | |
| | 4' - 0" | 2' - 0" | 90.0 | 90.0 | 90.0 | 79.4 | 90.0 | 90.0 | | |
| 8' - 6" | 4' - 6" | 2' - 3" | 90.0 | 90.0 | 90.0 | 70.6 | 90.0 | 90.0 | | |
| | 5' - 0" | 2' - 6" | 90.0 | 85.2 | 90.0 | 63.5 | 90.0 | | | |
| | 3' - 6" | 1' - 9" | 90.0 | 90.0 | 90.0 | 85.7 | 90.0 | 90.0 | | |
| 01 6" | 4' - 0" | 2' - 0" | 90.0 | 90.0 | 90.0 | 75.0 | 90.0 | 90.0 | | |
| 9' - 0" | 4' - 6" | 2' - 3" | 90.0 | 89.4 | 90.0 | 66.7 | 90.0 | 90.0 | | |
| | 5' - 0" | 2' - 6" | 90.0 | 80.4 | 90.0 | 60.0 | 90.0 | 90.0 | | |
| | 3' - 6" | 1' - 9" | 90.0 | 90.0 | 90.0 | 81.2 | 90.0 | 90.0 | | |
| 9' - 6" | 4' - 0" | 2' - 0" | 90.0 | 90.0 | 90.0 | 71.1 | 90.0 | 90.0 | | |
| 9-0 | 4' - 6" | 2' - 3" | 90.0 | 84.7 | 90.0 | 63.2 | 90.0 | 90.0 | | |
| | 5' - 0" | 2' - 6" | 90.0 | 76.2 | 90.0 | 56.8 | 90.0 | 90.0 | | |
| | 3' - 6" | 1' - 9" | 90.0 | 90.0 | 90.0 | 77.1 | 90.0 | 90.0 | | |
| 401 011 | 4' - 0" | 2' - 0" | 90.0 | 90.0 | 90.0 | 67.5 | 90.0 | 90.0 | | |
| 10' - 0" | 4' - 6" | 2' - 3" | 90.0 | 80.4 | 90.0 | 60.0 | 90.0 | 90.0 | | |
| | 5' - 0" | 2' - 6" | 85.7 | 72.4 | 87.5 | 54.0 | 90.0 | 90.0 | | |

MULLION CONNECTIONS (CONTINUED)

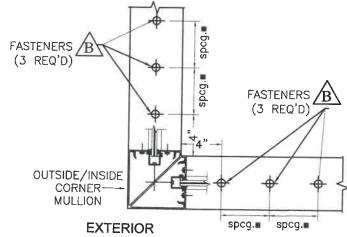


SCHEMATIC CONCRETE & 12 GAGE STEEL CONNECTION DETAIL (AT STANDARD MULLION)





SCHEMATIC GROUT-FILLED CONCRETE BLOCK **CONNECTION DETAIL** (AT STANDARD MULLION)



SCHEMATIC GROUT-FILLED CONCRETE BLOCK **CONNECTION DETAIL** (AT OUTSIDE/INSIDE CORNER MULLION)



FASTENERS TYPES AND SUBSTRATES REQUIREMENTS W/ 2 3/4" MIN. E.D., BEYOND ANY FINISH MATERIAL

- F 3/8"Ø HILTI KWIK BOLT TZ ANCHOR W/ 2" Min. EMBEDMENT INTO 6" Min. THICK POURED CONCRETE (Min. fc = 3 ksi).
- G 3/8"Ø POWER FASTENERS TAPPER ANCHOR W/ 1 3/4" Min. EMBEDMENT INTO POURED CONCRETE (Min. fc = 3 ksi).
- H 3/8"Ø HILTI HUS-H SCREW ANCHOR W/ 2" Min. EMBEDMENT INTO POURED CONCRETE (Min. fc = 3 ksi).
- G' 3/8"Ø POWER FASTENERS TAPPER ANCHOR W/ 1 3/4" Min. EMBEDMENT INTO GROUT FILLED CONCRETE BLOCK.
- H' 3/8"Ø HILTI HUS-H SCREW ANCHOR W/ 2 3/4" Min. EMBEDMENT INTO GROUT FILLED CONCRETE BLOCK.
- I 3/8"Ø TYPE "F" BOLT OR 3/8"Ø -13 SAE GRADE 5 GALVANIZED STEEL HHB THRU BOLT W/ NUT & LOCK WASHER & 2" MIN. EDGE DISTANCE TO 12 GAGE (0.108" MIN THK.) Fy=33 ksi STEEL.

■ MIN. SPACING (spcg.) REQUIRED FOR DIFFERENT SUBSTRATES

-POURED CONCRETE: -GROUT FILLED C.B.: -STEEL:

4 1/2" MIN. O.C. 8" MIN. O.C.

4 1/2" MIN. O.C.

BuildingEnvelope

-2018

INSURANCE

Р

MAXIMUM DESIGN PRESSURE RATING SHEDULE FOR JAMBS FASTENED W/ 3/8"ø FASTENERS*



| AXIMUM ULLION | EFFECTIVE SPACING | | OPTION #1: (2) FASTENERS CONNECTION | | | | | | | OPTION #2: (3) FASTENERS CONNECTION | | | | | | | | OPTION 43: (4) FASTENERS CONNECTION | | | | | | | OPTION #4: (5) FASTENERS CONNECTION | | | | | | | | |
|------------------|-----------------------|---|-------------------------------------|------|------|------|------|------|------|-------------------------------------|------------------------|------|------|------|--------------|--------------|--------------|-------------------------------------|------|--------------|------|----------|------|------|-------------------------------------|--------------|------|------|------|------|------|------|-----|
| SPAN | FOR JAMB | POURED CONCRETE GROUT FILLED C. BLOCK STEEL | | | | | | | WOOD | POUR | OURED CONCRETE GROUT F | | | | C. BLOC | STEEL | WOOD | - | _ | | | FILLED (| | | | | | | | | | | |
| "L" Ft—in) | MULLION "b"(Ft-in) | J | к | L | М | N | 0 | P | Q | J | к | L | М | N | 0 | P | Q | J | к | L | М | ·N | 0 | P | Q | J | К | L | м | N | 0 | Р | , |
| | 1' - 9" | 90.0 | 90.0 | 85.3 | 83.4 | 90.0 | 85.3 | 90.0 | 59.9 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 89.9 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | | 00.0 | | 200 | | | | | 1 |
| - 2" | 2' - 0" | 90.0 | 90.0 | 74.6 | 73.0 | 90.0 | 74.6 | 90.0 | 52.4 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 78.6 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| _ | 2' - 3" | 82.3 | 90.0 | 66.3 | 64.9 | 82.3 | 66.3 | 90.0 | 46.6 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 69.9 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 8 |
| | 2' - 6" | 74.1 | 83.9 | 59.7 | 58.4 | 74.1 | 59.7 | 83.9 | 41.9 | 90.0 | 90.0 | 89.6 | 87.6 | 90.0 | 89.6 | 90.0 | 62.9 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 1 | | | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 1 : |
| | 1' - 9" | 90.0 | 90.0 | 80.9 | 79.1 | 90.0 | 80.9 | 90.0 | 56.6 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 85.3 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 15 |
| - 6" | 2' - 0" | 87.9 | 90.0 | 70.8 | 69.2 | 87.9 | 70.8 | 90.0 | 49.7 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 74.6 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 1 ' |
| -0 | 2' - 3" | 78.1 | 88.4 | 62.9 | 61.5 | 78.1 | 62.9 | 88.4 | 44.2 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 66.3 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | | | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 9 |
| | 2' - 6" | 70.3 | 79.6 | 56.6 | 55.4 | 70.3 | 56.6 | 79.6 | 39.8 | 90.0 | 90.0 | 85.0 | 83.1 | 90.0 | 85.0 | 90.0 | 59.7 | 90.0 | 90.0 | 90.0 | 90.0 | | 90.0 | 90.0 | 88.4 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 9 |
| | 1' - 9" | 90.0 | 90.0 | 75.1 | 73.5 | 90.0 | 75.1 | 90.0 | 52.8 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 79.2 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 79.6 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 9 |
| - O" | 2' - 0" | 81.6 | 90.0 | 65.7 | 64.3 | 81.6 | 65.7 | 90.0 | 46.2 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 69.3 | 90.0 | 90.0 | 90.0 | 90.0 | 1 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 9 |
| - 0 | 2' - 3" | 72.5 | 82.1 | 58.4 | 57.1 | 72.5 | 58.4 | 82.1 | 41.1 | 90.0 | 90.0 | 87.7 | 85.7 | 90.0 | 87.7 | 90.0 | 61.6 | 90.0 | 90.0 | 90.0 | | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 9 |
| | 2' - 6" | 65.3 | 73.9 | 52.6 | 51.4 | 65.3 | 52.6 | 73.9 | 36.9 | 90.0 | 90.0 | 78.9 | 77.1 | 90.0 | 78.9 | 90.0 | 55.4 | 90.0 | 90.0 | | 90.0 | 90.0 | 90.0 | 90.0 | 82.1 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 9 |
| | 1' - 9" | 87.0 | 90.0 | 70.1 | 68.6 | 87.0 | 70.1 | 90.0 | 49.3 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 73.9 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 73.9 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 9 |
| - 6" | 2' - 0" | 76.2 | 86.2 | 61.4 | 60.0 | 76.2 | 61.4 | 86.2 | 43.1 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 64.7 | 90.0 | 90.0 | | | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 9 |
| -0 | 2' - 3" | 67.7 | 76.6 | 54.5 | 53.3 | 67.7 | 54.5 | 76.6 | 38.3 | 90.0 | 90.0 | 81.8 | 80.0 | 90.0 | 81.8 | 90.0 | 57.5 | 90.0 | | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 86.2 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 9 |
| | 2' - 6" | 60.9 | 69.0 | 49.1 | 48.0 | 60.9 | 49.1 | 69.0 | 34.5 | 90.0 | 90.0 | 73.6 | 72.0 | 90.0 | 73.6 | 90.0 | 51.7 | | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 76.6 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 9 |
| | 1' - 9" | 81.6 | 90.0 | 65.7 | 64.3 | 81.6 | 65.7 | 90.0 | 46.2 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 69.3 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 69.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 8 |
| - 0" | 2' - 0" | 71.4 | 80.8 | 57.5 | 56.3 | 71.4 | 57.5 | 80.8 | 40.4 | 90.0 | 90.0 | 86.3 | 84.4 | 90.0 | 86.3 | 90.0 | 60.6 | 90.0 | 90.0 | 90.0 | | | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 9 |
| - 0 | 2' - 3" | 63.5 | 71.8 | 51.1 | 50.0 | 63.5 | 51.1 | 71.8 | 35.9 | 90.0 | 90.0 | 76.7 | 75.0 | 90.0 | 76.7 | 90.0 | 53.9 | 90.0 | 90.0 | L . | 90.0 | 90.0 | 90.0 | 90.0 | 80.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 9 |
| | 2' - 6" | 57.1 | 64.7 | 46.0 | 45.0 | 57.1 | 46.0 | 64.7 | 32.3 | 85.7 | 90.0 | 69.0 | 67.5 | 85.7 | 69.0 | 90.0 | | | | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 71.8 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 8 |
| | 1' - 9" | 76.8 | 86.9 | 61.9 | 60.5 | 76.8 | 61.9 | 86.9 | 43.5 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 48.5 65.2 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 64.7 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 8 |
| ' - 6" | 2' - 0" | 67.2 | 76.1 | 54.1 | 52.9 | 67.2 | 54.1 | 76.1 | 38.0 | 90.0 | 90.0 | 81.2 | 79.4 | 90.0 | 81.2 | 90.0 | 57.1 | 90.0 | 90.0 | 90.0 | | 90.0 | 90.0 | 90.0 | 86.9 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 9 |
| -0 | 2' - 3" | 59.7 | 67.6 | 48.1 | 47.1 | 59.7 | 48.1 | 67.6 | 33.8 | 89.6 | 90.0 | 72.2 | 70.6 | 89.6 | 72.2 | 90.0 | 50.7 | 90.0 | 90.0 | | 90.0 | 90.0 | 90.0 | 90.0 | 76.1 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 9 |
| | 2' - 6" | 53.8 | 60.9 | 43.3 | 42.4 | 53.8 | 43.3 | 60.9 | 30.4 | 80.6 | 90.0 | 65.0 | 63.5 | 80.6 | 65.0 | 90.0 | 45.6 | 90.0 | | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 67.6 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 84 |
| | 1' - 9" | 72.5 | 82.1 | 58.4 | 57.1 | 72.5 | 58.4 | 82.1 | 41.1 | 90.0 | 90.0 | 87.7 | 85.7 | 90.0 | 87.7 | 90.0 | 61.6 | 90.0 | 90.0 | 86.6 90.0 | 90.0 | 90.0 | 86.6 | 90.0 | 60.9 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 76 |
| - 0" | 2' - 0" | 63.5 | 71.8 | 51.1 | 50.0 | 63.5 | 51.1 | 71.8 | 35.9 | 90.0 | 90.0 | 76.6 | 75.0 | 90.0 | 76.6 | 90.0 | 53.9 | 90.0 | 90.0 | 90.0 | | 90.0 | 90.0 | 90.0 | 82.1 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90 |
| -0 | 2' - 3" | 56.4 | 63.9 | 45.5 | 44.4 | 56.4 | 45.5 | 63.9 | 31.9 | 84.6 | 90.0 | 68.2 | 66.7 | 84.6 | 68.2 | 90.0 | 47.9 | | | | 90.0 | 90.0 | 90.0 | 90.0 | 71.8 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 89 |
| | 2' - 6" | 50.8 | 57.5 | 40.9 | 40.0 | 50.8 | 40.9 | 57.5 | 28.7 | 76.2 | 86.2 | 61.4 | 60.0 | 76.2 | 61.4 | 86.2 | | 90.0 | 90.0 | 90.0 | 88.9 | 90.0 | 90.0 | 90.0 | 63.9 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 79 |
| | 1' - 9" | 68.7 | 77.8 | 55.4 | 54.1 | 68.7 | 55.4 | 77.8 | 38.9 | 90.0 | 90.0 | 83.0 | 81.2 | 90.0 | 83.0 | 90.0 | 43.1 58.3 | 90.0 | 90.0 | 81.8 90.0 | 80.0 | 90.0 | 81.8 | 90.0 | 57.5 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 71 |
| - 6" | 2' - 0" | 60.1 | 68.1 | 48.4 | 47.4 | 60.1 | 48.4 | 68.1 | 34.0 | 90.0 | 90.0 | 72.7 | 71.1 | 90.0 | 72.7 | 90.0 | | | | | 90.0 | 90.0 | 90.0 | 90.0 | 77.8 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90 |
| -0 | 2' - 3" | 53.4 | 60.5 | 43.1 | 42.1 | 53.4 | 43.1 | 60.5 | 30.2 | 80.2 | 90.0 | 64.6 | 63.2 | 80.2 | 64.6 | | 51.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 68.1 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 8 |
| | 2' - 6" | 48.1 | 54.4 | 38.8 | 37.9 | 48.1 | 38.8 | 54.4 | 27.2 | 72.1 | 81.7 | 58.1 | 56.8 | 72.1 | 100 | 90.0 | 45.4 | 90.0 | 90.0 | 86.1 | 84.2 | 90.0 | 86.1 | 90.0 | 60.5 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 75 |
| | 1' - 9" | 65.3 | 73.9 | 52.6 | 51.4 | 65.3 | 52.6 | 73.9 | 36.9 | 90.0 | 90.0 | 78.9 | 77.1 | 90.0 | 58.1 78.9 | 81.7 90.0 | 40.8 55.4 | 90.0 | 90.0 | 77.5 | 75.8 | 90.0 | 77.5 | 90.0 | 54.4 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 68 |
|)' - 0" | 2' - 0" | 57.1 | 64.7 | 46.0 | 45.0 | 57.1 | 46.0 | 64.7 | 32.3 | 85.7 | 90.0 | 69.0 | 67.5 | 85.7 | 69.0 | 90.0 | | | | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 73.9 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90 |
| , -0 | 2' - 3" | 50.8 | 57.5 | 40.9 | 40.0 | 50.8 | 40.9 | 57.5 | 28.7 | 76.2 | 86.2 | 61.4 | 60.0 | 76.2 | | | 48.5 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 64.7 | | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 80 |
| | 2' - 6" | 45.7 | 51.7 | 36.8 | 36.0 | 45.7 | 36.8 | 51.7 | 25.9 | 68.5 | 77.6 | 55.2 | 54.0 | | 61.4 | 86.2 | 43.1 | 90.0 | 90.0 | 81.8 | 80.0 | 90.0 | 81.8 | 90.0 | 57.5 | | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 71 |
| | | | 3 | 30.0 | 30.0 | 10.1 | 30.0 | 31.7 | 20.0 | 00.0 | 11.0 | JJ.Z | 34.0 | 68.5 | 55.2 | 77.6 | 38.8 | 90.0 | 90.0 | 73.6 | 72.0 | 90.0 | 73.6 | 90.0 | 51.7 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 64 |

* SEE SHEETS 13 & 14 FOR SPECS FOR JAMBS ATTACHED TO EXISTING WALL W/WET OR DRY GLAZED WITH LAMINATED OR INSULATED GLASS. JAMBS ATTACHED TO EXISTING WALL HOLDING INSULATED GLASS MAY BE WET OR DRY GLAZED.

JAMBS ATTACHED TO EXISTING WALL HOLDING LAMINATED GLASS MUST ALWAYS BE WET GLAZED.

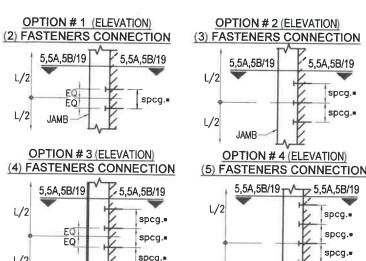


FASTENERS TYPES AND SUBSTRATES REQUIREMENTS W/ 2 3/4" MIN. E.D., BEYOND ANY FINISH MATERIAL

- J 3/8"Ø HILTI KWIK BOLT 3 ANCHOR W/ 2" Min. EMBEDMENT INTO 6" Min. THICK POURED CONCRETE (Min. fc = 3 ksi).
- K 3/8"Ø POWER FASTENERS TAPPER ANCHOR W/ 1 3/4" Min. EMBEDMENT INTO POURED CONCRETE (Min. fc = 3 ksi).
- L 3/8"Ø HILTI HUS-H SCREW ANCHOR W/ 2" Min. EMBEDMENT INTO POURED CONCRETE (Min. fc = 3 ksi).
- M 3/8"Ø POWER FASTENERS TAPPER ANCHOR W/ 1 3/4" Min. EMBEDMENT INTO GROUT FILLED CONCRETE BLOCK.
- N 3/8"Ø HILTI KWIK BOLT 3 ANCHOR W/ 2 1/2" Min. EMBEDMENT INTO GROUT FILLED CONCRETE BLOCK.
- O 3/8"Ø HILTI HUS-H SCREW ANCHOR W/ 2 3/4" Min. EMBEDMENT INTO GROUT FILLED CONCRETE BLOCK.
- P 3/8"Ø TYPE "F" BOLT OR 3/8"Ø -16 ELCO CONSTRUCTION PRODUCTS DRILL FLEX SCREW & 1 3/4" MIN. EDGE DISTANCE TO 1/4" Min. THK. ASTM A-36 OR 12 GAGE (0.108" MIN. THK.) Fy=33 ksi STEEL.
- Q 3/8"Ø LAG SCREWS TO DOUBLE 2 x WOOD BUCK (G=0.55) W/ 3" Min. PENETRATION INTO WOOD & 2" MIN. EDGE DISTANCE, BEYOND ANY FINISH MATERIAL.

■ MIN. SPACING (spcg.) REQUIRED FOR DIFFERENT SUBSTRATES

-POURED CONCRETE: 4 1/2" MIN. O.C. 8" MIN. O.C. 8" MIN. O.C. 4 1/2" MIN. O.C. 4 1/2" MIN. O.C. 2" MIN. O.C. 2" MIN. O.C.



OF DEPARTMENT RIES FG-5100 FLUSH WALL SYSTEM LARGE NATED OR INSULATED **TEXAS**

MAXIMUM DESIGN PRESSURE RATING SHEDULE FOR JAMBS FASTENED W/ 1/2"ø FASTENERS*



SEE SHEET 9 FOR DEFINITION OF "b"

| MAXIMUM MULLION | EFFECTIVE SPACING | ОРТК | N #1: | (2) FA | याज्याज्यस | CONN | CTION | OPTIO | PTION 42: (3) FASTENERS CONNECTION OPTION 43: (4) FASTENERS CONNEC | | | | | | | | | ECTION | TION OPTION 44 : (5) FASTENERS CONNECTION | | | | | | | |
|--------------------|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--|--------------|--------------|--------------|--------------|------|------|--------------|------------|--------|---|---|----------------------|------|------|------|--------------|--|
| SPAN | FOR JAMB | POURED (| CONCRETE | ROUT FILL | D C. BLOC | STEEL | WOOD | POURED | OURED CONCRETE ROUT FILLED C. BLOCK STEEL WOOD POURED CONCRETE | | | | | | | ROUT FILL | ED C. BLOC | STEEL | WOOD | POURED CONCRETEROUT FILLED C, BLOCK STEEL WOO | | | | | | |
| "L" (Ft—in) | MULLION "b"(Ft-in) | R | s | Т | υ | ٧ | w | R | s | Т | U | ٧ | W | R | S | Т | U | ٧ | W | R | s | Т | U | ٧ | W | |
| | 1' - 9" | 90.0 | 90.0 | 57.5 | 88.0 | 90.0 | 54.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| 6' - 2" | 2' - 0" | 90.0 | 90.0 | 50.3 | 77.0 | 90.0 | 47.3 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| | 2' - 3" | 90.0 | 87.9 | 44.7 | 68.5 | 90.0 | 42.0 | 90.0 | 90.0 | 89.4 | 90.0 | 90.0 | 84.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| | 2' - 6" | 84.4 | 79.1 | 40.2 | 61.6 | 90.0 | 37.8 | 90.0 | 90.0 | 80.4 | 90.0 | 90.0 | 75.6 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| | 1' - 9" | 90.0 | 90.0 | 54.5 | 83.5 | 90.0 | 51.3 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| 6' - 6" | 2' - 0" | 90.0 | 90.0 | 47.7 | 73.1 | 90.0 | 44.9 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 89.7 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| | 2' - 3" | 89.4 | 83.4 | 42.4 | 65.0 | 90.0 | 39.9 | 90.0 | 90.0 | 84.8 | 90.0 | 90.0 | 79.7 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| | 2' - 6" 1' - 9" | 80.5 90.0 | 75.0 90.0 | 38.2 50.6 | 58.5 77.6 | 90.0 | 35.9 47.6 | 90.0 | 90.0 | 76.3 | 90.0 | 90.0 | 71.8 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| | 2' - 0" | | 87.1 | 44.3 | 67.9 | | | | | 90.0 | 90.0 | | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| 7' - 0" | 2' - 3" | 90.0 83.0 | 77.4 | 39.4 | 60.3 | 90.0 90.0 | 41.6 37.0 | 90.0 | 90.0 | 88.6 78.7 | 90.0 90.0 | 90.0 90.0 | 83.3 74.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| | 2'-6" | 74.7 | 69.7 | 35.4 | 54.3 | 84.6 | 33.3 | 90.0 | | | 90.0 | | 66.6 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| | 1' - 9" | 90.0 | 90.0 | 47.2 | 72.4 | 90.0 | 44.4 | 90.0 | 90.0 | 70.9 | 90.0 | 90.0 | 88.9 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 9 0.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| | 2' - 0" | 87.2 | 81.3 | 41.3 | 63.3 | 90.0 | 38.9 | 90.0 | 90.0 | 82.7 | 90.0 | 90.0 | 77.7 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 90.0 | |
| 7' - 6" | 2' - 3" | 77.5 | 72.2 | 36.7 | 56.3 | 87.7 | 34.6 | 90.0 | 90.0 | 73.5 | 90.0 | 90.0 | 69.1 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| | 2' - 6" | 69.7 | 65.0 | 33.1 | 50.7 | 79.0 | 31.1 | 90.0 | 90.0 | 66.1 | 90.0 | 90.0 | 62.2 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| | 1' - 9" | 90.0 | 87.1 | 44.3 | 67.9 | 90.0 | 41.6 | 90.0 | 90.0 | 88.6 | 90.0 | 90.0 | 83.3 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| 8' - 0" | 2' - 0" | 81.7 | 76.2 | 38.8 | 59.4 | 90.0 | 36.4 | 90.0 | 90.0 | 77.5 | 90.0 | 90.0 | 72.9 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| 0-0 | 2' - 3" | 72.7 | 67.7 | 34.4 | 52.8 | 82.2 | 32.4 | 90.0 | 90.0 | 68.9 | 90.0 | 90.0 | 64.8 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| | 2' - 6" | 65.4 | 61.0 | 31.0 | 47.5 | 74.0 | 29.2 | 90.0 | 90.0 | 62.0 | 90.0 | 90.0 | 58.3 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 87.5 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| | 1' - 9" | 87.9 | 82.0 | 41.7 | 63.9 | 90.0 | 39.2 | 90.0 | 90.0 | 83.4 | 90.0 | 90.0 | 78.4 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| 8' - 6" | 2' - 0" | 76.9 | 71.7 | 36.5 | 55.9 | 87.1 | 34.3 | 90.0 | 90.0 | 72.9 | 90.0 | 90.0 | 68.6 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| | 2' - 3" | 68.4 | 63.7 | 32.4 | 49.7 | 77.4 | 30.5 | 90.0 | 90.0 | 64.8 | 90.0 | 90.0 | 61.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| | 2' - 6" | 61.5 | 57.4 | 29.2 | 44.7 | 69.7 | 27.4 | 90.0 | 90.0 | 58.4 | 89.4 | 90.0 | 54.9 | 90.0 | 90.0 | 87.5 | 90.0 | 90.0 | 82.3 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| | 1' - 9" | 83.0 | 77.4 | 39.4 | 60.3 | 90.0 | 37.0 | 90.0 | 90.0 | 78.7 | 90.0 | 90.0 | 74.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| 9' - 0" | 2' - 0" | 72.7 | 67.7 | 34.4 | 52.8 | 82.2 | 32.4 | 90.0 | 90.0 | 68.9 | 90.0 | 90.0 | 64.8 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| 1 | 2' - 3" | 64.6 | 60.2 | 30.6 | 46.9 | 73.1 | 28.8 | 90.0 | 90.0 | 61.2 | 90.0 | 90.0 | 57.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 86.4 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| | 2' - 6" 1' - 9" | 58.1 78.7 | 54.2 73.3 | 27.6 37.3 | 42.2 57.1 | 65.8 89.1 | 25.9 35.1 | 90.0 | 90.0 | 55.1 74.6 | 90.0 | 90.0 | 51.8 70.1 | 90.0 | 90.0 | 82.7 | 90.0 | 90.0 | 77.7 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| | 2' - 0" | 68.8 | 64.2 | 32.6 | 50.0 | 77.9 | 30.7 | | | | | | | 90.0 | | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| 9' - 6" | 2' - 3" | 61.2 | 57.0 | 29.0 | 44.4 | 69.3 | 27.3 | 90.0 90.0 | 90.0 90.0 | 65.3 | 90.0 88.9 | 90.0 | 61.4 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| | 2' - 6" | 55.1 | 51.3 | 26.1 | 40.0 | 62.3 | 24.6 | 90.0 | 90.0 | 58.0 | | | 54.6 | 90.0 | 90.0 | 87.0 | 90.0 | 90.0 | 81.8 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| | 1' - 9" | 74.2 | 69.7 | 35.4 | 54.3 | 84.6 | 33.3 | 90.0 | 90.0 | 52.2 70.9 | 80.0 90.0 | 90.0 | 49.1 66.6 | 90.0 | 90.0 | 78.3 90.0 | 90.0 | 90.0 | 73.7 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 90.0 | |
| | 2' - 0" | 65.4 | 61.0 | 31.0 | 47.5 | 74.0 | 29.2 | 90.0 | 90.0 | 62.0 | 90.0 | 90.0 | 58.3 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 87.5 | 90.0 | 90.0 | | | | | |
| 10' - 0" | 2' - 3" | 58.1 | 54.2 | 27.6 | 42.2 | 65.8 | 25.9 | 90.0 | 90.0 | 55.1 | 84.4 | 90.0 | 51.8 | 90.0 | 90.0 | 82.7 | 90.0 | 90.0 | 77.7 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | |
| | 2' - 6" | 52.3 | 48.8 | 24.8 | 38.0 | 59.2 | 23.3 | 90.0 | 90.0 | 49.6 | 76.0 | 90.0 | 46.6 | 90.0 | 90.0 | 74.4 | 90.0 | 90.0 | 70.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 90.0 | |

* SEE SHEETS 13 & 14 FOR SPECS FOR JAMBS ATTACHED TO EXISTING WALL W/WET OR DRY GLAZED WITH LAMINATED OR INSULATED GLASS. JAMBS ATTACHED TO EXISTING WALL HOLDING INSULATED GLASS MAY BE WET OR DRY GLAZED. JAMBS ATTACHED TO EXISTING WALL HOLDING LAMINATED GLASS MUST ALWAYS BE WET GLAZED.



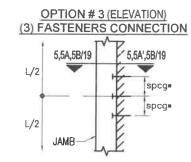
FASTENERS TYPES AND SUBSTRATES REQUIREMENTS W/ 2 3/4" MIN. E.D., BEYOND ANY FINISH MATERIAL

- R 1/2"Ø HILTI KWIK BOLT 3 ANCHOR W/ 2" Min. EMBEDMENT INTO 6" Min. THICK POURED CONCRETE (Min. fc = 3 ksi).
- \$ 1/2"Ø HILTI HUS-H SCREW ANCHOR W/ 3" Min. EMBEDMENT INTO POURED CONCRETE (Min. fc = 3 ksi).
- T 1/2"Ø HILTI KWIK BOLT 3 ANCHOR W/ 2 1/2" Min. EMBEDMENT INTO GROUT FILLED CONCRETE BLOCK.
- U 1/2"Ø HILTI HUS-H SCREW ANCHOR W/ 3" Min. EMBEDMENT INTO GROUT FILLED CONCRETE BLOCK.
- V 1/2"Ø TYPE "F" BOLT & 2" MIN. EDGE DISTANCE TO 1/4" Min. THK. ASTM A-36 OR 12 GAGE (0.108" MIN. THK.) Fy=33 ksi STEEL.
- W 1/2"Ø LAG SCREWS TO DOUBLE 2 x WOOD BUCK (G=0.55) W/ 3" Min. PENETRATION INTO WOOD & 2" MIN. EDGE DISTANCE, BEYOND ANY FINISH MATERIAL.

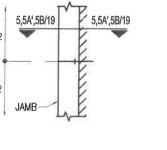
■ MIN. SPACING (spcg.) REQUIRED FOR **DIFFERENT SUBSTRATES**

-POURED CONCRETE: -GROUT FILLED C.B.: -STEEL: -WOOD:

4 1/2" MIN. O.C. 8" MIN. O.C. 4 1/2" MIN. O.C. 2" MIN. O.C.

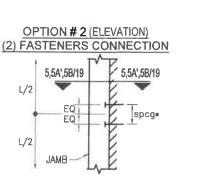


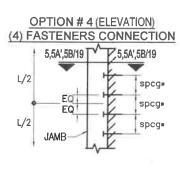
OPTION # 1 (ELEVATION) (1) FASTENER CONNECTION 5.5A'.5B/19



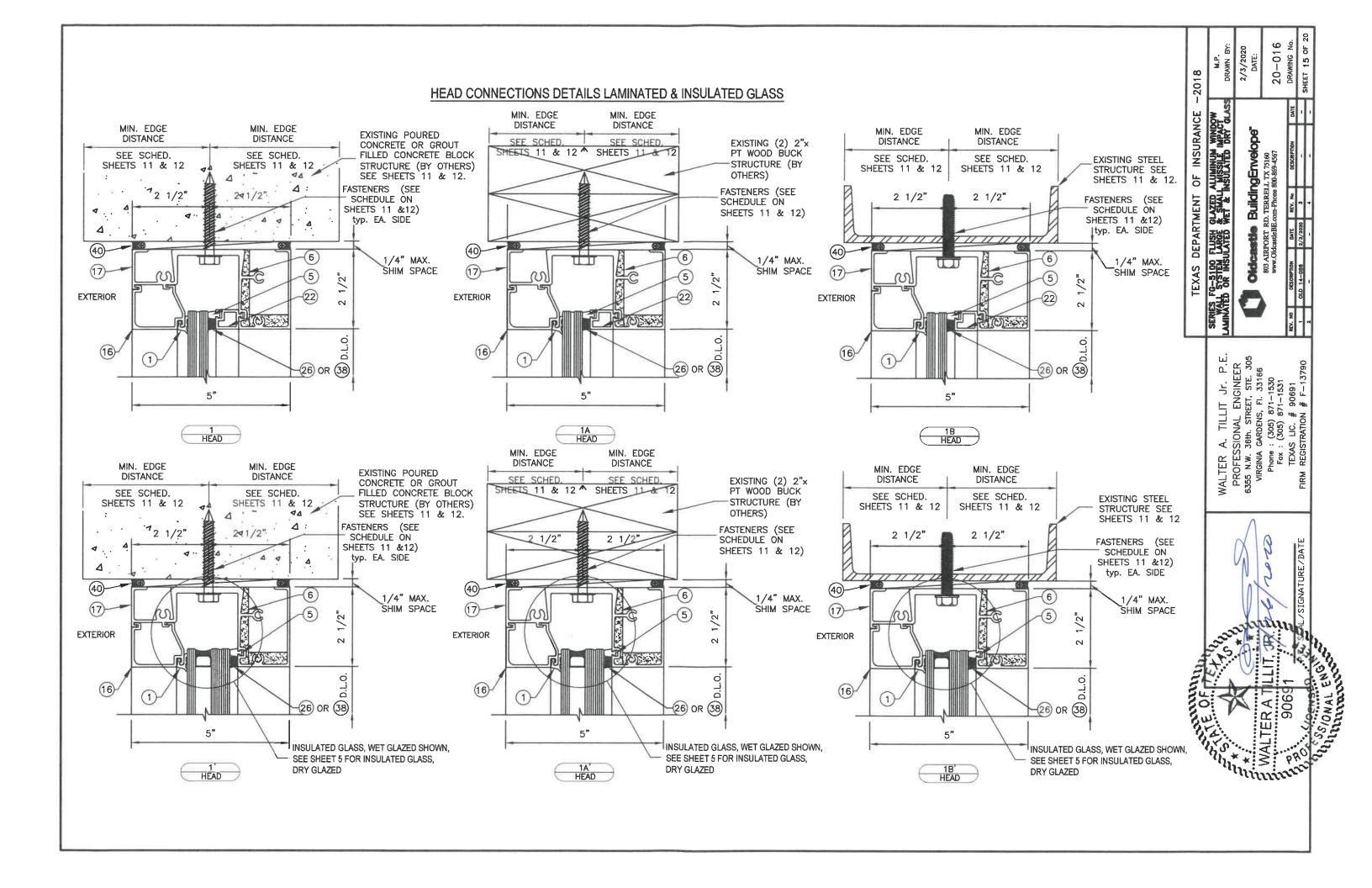
DEPARTMENT

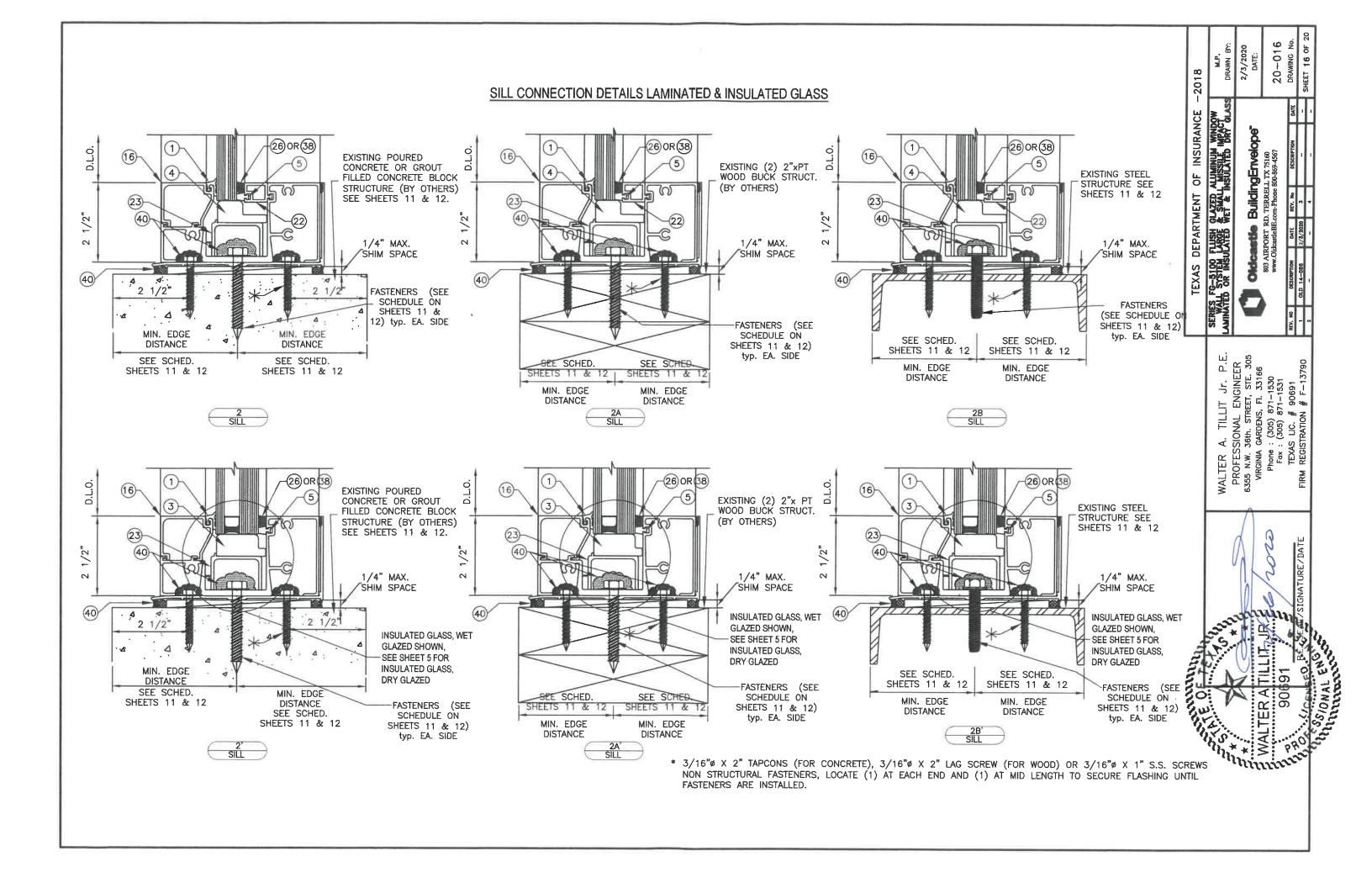
SYSTEM LARGE OR INSUITATED



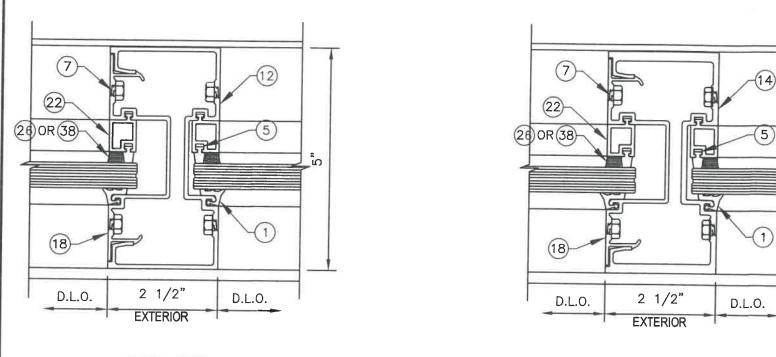


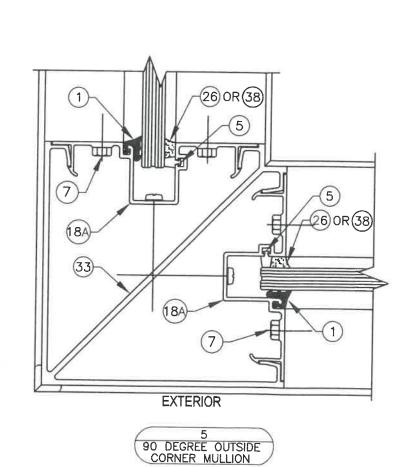




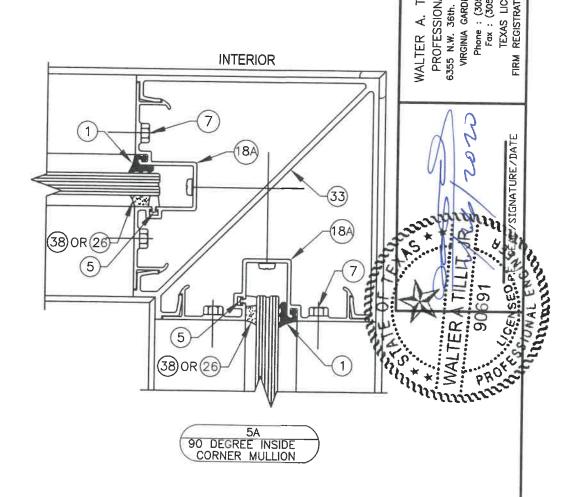


SECTIONS AT STANDARD, HEAVY & CORNER MULLION W/ LAMINATED GLASS (WET GLAZED)





4 MULLION PLAN



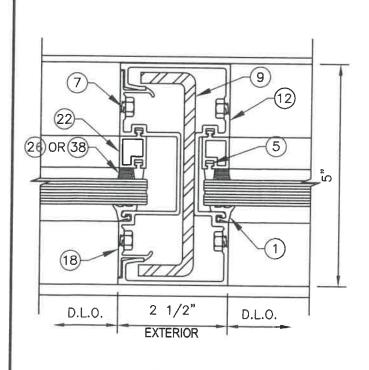
20-016 DRAWING No. SHEET 17 OF 20

-2018

TEXAS DEPARTMENT OF INSURANCE

SERIES FG-5100 FLUSH GLAZED ALUMINUM WINDOW WALL SYSTEM LARGE & SMALL MISSILE IMPACT AMINATED OR INSULATED WET & INSULATED DRY GL

BuildingEnvelope



MULLION PLAN



20-016 SECTIONS AT STANDARD, HEAVY & CORNER MULLION W/ INSULATED GLASS (WET & DRY GLAZED) -2018 WET GLAZED SHOWN SEE SHEET 5 FOR DRY GLAZED TEXAS DEPARTMENT OF INSURANCE SERIES FG-5100 FLUSH GLAZED ALUMINUM WINDO WALL STSTEM LARGE & SMALL MISSIE IMPACT MINATED OR INSULATED WET & INSULATED DRY G BuildingErvelope RD. TERRELL TX 75160 E.com-Phone 800-869-4567 26 OR (38) 26) OR (38) 2 1/2" 2 1/2" D.L.O. D.L.O. D.L.O. D.L.O. **EXTERIOR** EXTERIOR MULLION PLAN 4' MULLION PLAN WALTER A. TILLIT PROFESSIONAL EI 6355 N.W. 36th. STREE VIRGINIA GARDENS, F Phone : (305) 871 Fax : (305) 871 TEXAS LIC. # 9 WET GLAZED SHOWN SEE **INTERIOR** SHEET 5 FOR DRY GLAZED WET GLAZED SHOWN SEE SHEET 5 FOR DRY GLAZED (38) 26 OR (38) (18) (33) (18)-2 1/2" D.L.O. D.L.O. WET GLAZED SHOWN SEE EXTERIOR SHEET 5 FOR DRY GLAZED **EXTERIOR** 5A' 90 DEGREE INSIDE CORNER MULLION MULLION PLAN 5' 90 DEGREE OUTSIDE CORNER MULLION

20-016 HORIZONTAL CONNECTIONS DETAILS AT JAMB 1 3/8" MAX. TO POURED CONCRETE OR GROUT FILLED CONCRETE BLOCK STRUCTURE SHIM SPACE TO STEEL STRUCTURE INSURANCE EXISTING POURED *** 1 3/8" MAX. CONCRETE OR (BEYOND, AT SHIM SPACE (3) TYP. TOP & BOTTOM SCHEDULE 13 & 14 (BEYOND, AT GROUT FILLED EXISTING STEEL CONCRETE BLOCK SILL ONLY) STRUCTURE (3) TYP. TOP & BOTTOM STRUCTURE SILL ONLY) (BY OTHERS) P (SEE SHT'S 13 & 14) E.D. SEE SHEETS 1 (26) E.D. SEE SHEETS 1 DEPARTMENT OR OR (38) N O (38) FASTENER (SEE (G) SYSTEM LARGE OR INSULATED FASTENER (SEE SCHEDULE ON G SCHEDULE ON SHT'S 13 & 14) SHT'S 13 & 14) SEE SCHEDULE SEE SCHEDULE ON SHEET 5 ON SHEET 5 INSULATED GLASS, SCHEDULE 13 & 14 INSULATED GLASS. WET GLAZED SHOWN, WET GLAZED SEE SHEET 5 FOR 1/4" MIN. & 5/16" MAX. SHOWN, SEE SHEET ក្តុខ INSULATED GLASS, 1/4" MIN. & 5/16" MAX. :-DEPTH JOINT E.D. SEE SHEETS **5 FOR INSULATED** DRY GLAZED, OR W/ 1/8" MIN. DEPTH DEPTH JOINT GLASS, DRY GLAZED, LAMINATED GLASS. AT MIDWIDTH OF JOINT W/ 1/8" MIN. DEPTH AT MIDWIDTH OF JOINT OR LAMINATED W/ SEALANT WET GLAZED MAX. D.L.O. ON SHEET 6 ۵. **EXTERIOR** ĕS W/ SEALANT GLASS, WET GLAZED EXTERIOR ₹ŏ MAX. D.L.O. ON SHEET 6 HEAD OR SILL-HEAD OR SILL WALTER A. TILLIT PROFESSIONAL E 6355 N.W. 36th. STREE VIRGINIA GARDENS, F 5A * NOTE: INDICATED MAXIMUM AND MINIMUM VALUES FOR SPECIFIED JAMB W/ANCHORAGE 3/8" MIN. & 1 3/8" MAX. * * 3/8" MIN. & 1 3/8" MAX. JAMB W/ANCHORAGE SEALANT VERTICAL JOINT WIDTH AT JAMBS CONNECTED & NOT PLAN WIDE JOINT W/ SEALANT WIDE JOINT W/ SEALANT PLAN CONNECTED TO WALL (FREE STANDING) HAVE BEEN DETERMINED ONLY TAKING INTO CONSIDERATION THE ACTUAL MOVEMENT OF TO EXISTING STRUCTURE GLASS WALL AT JAMBS DUE TO THERMAL, WIND AND ITS OWN 1 3/8" MAX. TO WOOD STRUCTURE CONSTRUCTION TOLERANCE, AND NOT PERFORMANCE FACTORS SHIM SPACE FROM THE SURROUNDING STRUCTURE. (BEYOND, AT (3) TYP. TOP & BOTTOM SILL ONLY) E.D. SEE SCHEDUL SHEETS 13 & 14 (26) OR EXISTING (2) 2"xPI_ WOOD BUCK STRUCT. OR (40) (38) .(8 ÄN S SEE SCHEDULE 4 ON SHEET 5 FASTENER (SEE INSULATED GLASS, SCHEDULE ON WET GLAZED SHT'S 13 & 14) SHOWN, SEE SHEET 1/4" MIN. & 5/16" MAX 5 FOR INSULATED DEPTH JOINT GLASS, DRY GLAZED. INSULATED GLASS, W/ 1/8" MIN. DEPTH OR LAMINATED WET GLAZED AT MIDWIDTH OF JOINT GLASS, WET GLAZED **EXTERIOR** SHOWN, SEE SHEET W/ SEALANT (10)**5 FOR LAMINATED** MAX. D.L.O. ON SHEET 6 **EXTERIOR** 2 1/2" D.L.O. GLASS, WET GLAZED HEAD OR SILL * 3/8" MIN. & 1 3/8" MAX WIDE JOINT W/ SEALANT 5B JAMB W/ANCHORAGE JAMB MULLION W/ PLAN NO ANCHORADE PLAN

