

PRODUCT APPROVAL FOR SERIES FG-2000 STOREFRONT HIGH A.S.D. DESIGN PRESSURE W/ NON IMPACT MONOLITHIC TEMPERED GLASS

GENERAL NOTES:

- SERIES FG-2000 STOREFRONT HIGH DESIGN PRESSURE W/ NON IMPACT MONOLITHIC TEMPERED GLASS, SHOWN ON THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE W/ 2010 EDITION OF THE FLORIDA BUILDING CODE. THIS PRODUCT MAY BE INSTALLED WITHIN HIGH & NON HIGH VELOCITY HURRICANE ZONES W/ LIMITATIONS AS PER NOTE 3 BELOW.
- DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTIONS 1620 (FOR HIGH VELOCITY HURRICANE ZONES) & 1609 (FOR NON HIGH VELOCITY HURRICANE ZONES) OF THE ABOVE MENTIONED CODE. FOR A BASIC WIND SPEED AS REQUIRED BY THE JURISDICTION WHERE THIS PRODUCT WILL BE INSTALLED FOR A DIRECTIONALITY FACTOR $K_d=0.85$ USING ASCE 7-10 FOR INSTALLATIONS UNDER 2010 FBC AND SHALL NOT EXCEED THE MAXIMUM (A.S.D.) DESIGN PRESSURE RATINGS INDICATED ON NOTE 2.
- IN ORDER TO VERIFY THE ABOVE CONDITION, ULTIMATE DESIGN WIND LOADS DETERMINED PER ASCE 7-10 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 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 NDS 2005 OR AVAILABLE TEST DATA FROM MANUFACTURER. THIS PRODUCT'S Adequacy FOR WIND RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH SECTIONS 1625 (EXCEPT 1623.4) & 1714.5.3 OF THE ABOVE MENTIONED CODE AS PER PROTOCOL TKS-2022 AND ASTM E330 PER ARCHITECTURAL TESTING, INC. LABORATORY REPORT # 69493.01-80-44 AND AS PER STRUCTURAL CALCULATIONS, PERFORMED AS PER SECTIONS 1604 & 1612 OF THE FLORIDA BUILDING CODE.
- MAXIMUM A.S.D. DESIGN PRESSURE RATING FOR THIS PRODUCT SHALL BE AS SHOWN ON SHEETS 3, 5, 6 & 7.
- THIS PRODUCT WILL REQUIRE AN APPROVED HURRICANE PROTECTION DEVICE IN ORDER TO RATE IT AS IMPACT RESISTANT. IF PRODUCT IS NOT PROTECTED WITH AN APPROVED HURRICANE PROTECTIVE DEVICE, THEN IT SHALL BE INSTALLED OUT OF THE HIGH VELOCITY HURRICANE ZONE AND OUT OF ANY WIND-BOARNE DEBRIS REGIONS AS DEFINED ON SECTION 1609.2 OF THE FLORIDA BUILDING CODE.
- THIS PRODUCT IS APPROVED FOR 12.11 psf AIR/WATER PENETRATION.
- TEMPERED GLASS TO COMPLY WITH SECTIONS 2411.1.3 OF THE FLORIDA BUILDING CODE
- PRODUCT SHALL COMPLY WITH SECTIONS 2406.1, 2411.4.1 AND 2411.4.2 OF THE FLORIDA BUILDING CODE
- PROVIDE 3/8" MAX LOAD BEARING SHIM SPACE (TYP.) WHEN ALLOWED BY THIS DRAWING.
- WOOD BUCKS BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE BUILDING STRUCTURE. WOOD BUCKS MUST BE SOUTHERN PINE WITH $G = 0.55$.
- REMAINING COMPONENTS FOR THIS PRODUCT SHALL BE AS INDICATED ON BILL OF MATERIALS SHEET 3 OF THIS DRAWING.
- ALL ALUMINUM EXTRUSIONS IN CONTACT WITH STEEL, CONCRETE AND WOOD SHALL COMPLY WITH SECTIONS 2003.8.4.2, 2003.8.4.4, 2003.8.5 AND 2003.8.6 OF THE FLORIDA BUILDING CODE, RESPECTIVELY
- 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.
- STRUCTURAL SUBSTRATES NOTED ON THIS DRAWING AS EXISTING STEEL, BY OTHERS POURED CONCRETE, HOLLOW BLOCK AND WOOD MUST WITHSTAND THE LOADS IMPOSED BY THIS PRODUCT.
- (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 FLORIDA REGISTERED 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.

- PRODUCT MANUFACTURER'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION AT PRODUCT IN ACCORDANCE WITH SECTION 1713.5 OF THE FLORIDA BUILDING CODE. ONE LABEL SHALL BE PLACED FOR EVERY OPENING.

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- SHEET 1 GENERAL NOTES INDEX AND INSTRUCTIONS.
- SHEET 2 COMPONENTS FOR SERIES FG-2000 STOREFRONT
- SHEET 3 BILL OF MATERIALS TYPICAL GLAZING DETAIL & MAXIMUM A.S.D. DESIGN PRESSURE RATING SCHEDULE FOR A GIVEN GLASS PANEL DIMENSIONS
- SHEET 4 ELEVATION FOR SERIES FG-2000 STOREFRONT
- SHEET 5 MAXIMUM A.S.D. DESIGN PRESSURE RATING FOR MULLIONS.
- SHEET 6 SILL OR HEAD CONNECTIONS DETAILS (PLAN VIEWS) AND MAXIMUM A.S.D. DESIGN PRESSURE RATING SCHEDULE FOR MULLIONS W/ HEAD/SILL CONNECTIONS.
- SHEET 7 MAXIMUM A.S.D. DESIGN PRESSURE RATING FOR HORIZONTAL.
- SHEET 8 HEAD HORIZONTAL & SILL CONNECTION DETAILS (SIDE VIEW).
- SHEET 9 SECTIONS AT JAMBS AND AT MULLIONS
- SHEET 10 MAXIMUM A.S.D. DESIGN PRESSURE RATING & MAXIMUM FASTENERS SPACING SCHEDULE FOR JAMB CONNECTION AND CORNER DETAIL.

INSTRUCTIONS:

- STEP 1** DETERMINE A.S.D. DESIGN WIND LOAD REQUIREMENTS BASED ON WIND VELOCITY BUILDING HEIGHT WIND ZONE, USING APPLICABLE ASCE 7 STANDARDS.
- STEP 2** GO TO SCHEDULE ON SHEET 3 TO DETERMINE MAXIMUM A.S.D. DESIGN PRESSURE RATING (psf) CAPACITY OF DESIRED GLASS SIZE BASED ON GLASS PANEL DIMENSIONS.
- STEP 3** DETERMINE MAXIMUM MULLION SPAN L_e (FT) FOR A GIVEN MULLION EFFECTIVE SPACING S_e ON SCHEDULE ON SHEET 5, AND SELECT ANCHOR OPTION W/ A.S.D. DESIGN PRESSURE RATING EQUAL OR GREATER THAN A.S.D. DESIGN WIND LOAD SPECIFIED IN STEP 1 USING SCHEDULE ON SHEET 6.
- STEP 4** DETERMINE MAXIMUM ANCHOR SPACING AT JAMB FOR A GIVEN MAXIMUM A.S.D. DESIGN PRESSURE RATING AND MAXIMUM MULLION SPACING ON SHEET 10
- STEP 5** USE SCHEDULE ON SHEET 7 TO VERIFY MAXIMUM A.S.D. DESIGN PRESSURE RATING OF HORIZONTALS (IF USED) FOR A GIVEN HORIZONTAL EFFECTIVE "D.L.O."
- STEP 6** THE LONGEST VALUE OF A.S.D. DESIGN PRESSURE RATING RESULTING FROM STEPS 2, 3 AND 5 SHALL APPLY TO THE ENTIRE SYSTEM.

FLORIDA BUILDING CODE (High & Non High Velocity Hurricane Zone)

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TILTECO INC.
TILIT TESTING & ENGINEERING COMPANY
6355 N.W. 30th St., Ste. 200, Virginia Gardens, FL 33166
Phone: (305) 486-1131 Fax: (305) 486-1131
E-Mail: tilteco@ttilteco.com
EID-0008718
WALTER A. TILLIT JR. P.E.
FLORIDA Lic. # 44167

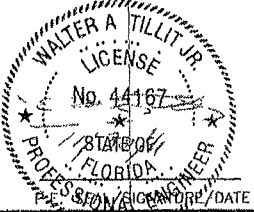
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SHEET 1 OF 10



COMPONENTS FOR SERIES FG-2000 STOREFRONT

SCALE 3/8" = 1"

- 1 GLAZING GASKET
FG-1133
- 2 SETTING BLOCK
FG-1136
- 3 SILL FILLER
FG-2182
- 4 JAMB
FG-2100
- 5 MULLION
FG-2101
- 6 MULLION FILLER
FG-2102

- 7 HEAD & JAMB
FG-2103
- 8 HORIZONTAL
FG-2104
- 9 SILL
FG-2105
- 10 GLASS STOP
FG-2166
- 11 HEAD & JAMB FILLER
FG-2122

- 12 SUB SILL
FG-2169
- 13 MULLION
FG-2228
- 14 STEEL REINFORCEMENT
RS-1
- 15 STEEL REINFORCEMENT
RS-9
- 16 STEEL REINFORCEMENT
RS-10
- 21 END DAM
FG-2000-FP-4

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TILTECO INC.
TILIT TESTING & ENGINEERING COMPANY
8355 N.W. 36th St., Suite 305, Vero Beach, FL 32908
Phone: (888) 711-1331 Fax: (888) 711-1331
e-mail: tilteco@tillit.com
FB-0006719
WALTER A. TILIT & P.E.
FLORIDA Lic. # 44167

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SHEET 2 OF 10

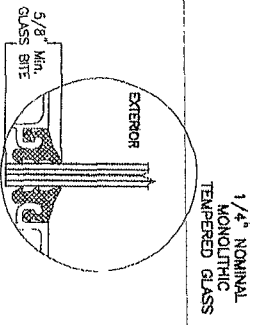
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LICENSE
No. 44167
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
SIGNATURE/DATE

BILL OF MATERIALS

ITEM No.	PART NUMBER	DESCRIPTION	DIMENSIONS	MATERIAL	MANUFACTURER	NOTES
1	FG-1133	GLAZING GASKET	.325" x .495"	EPDM	EPG	
2	FG-1136	SETTING BLOCK	.375" x .594"	EPDM	EPG	
3	FG-2182	SILL FILLER	4.00" x 4.00" x .078"	6063-T6 ALUMINUM	VARIES	LOCATED CENTER WITH ANCHOR'S LOCATION
4	FG-2100	JAMB	4.50" x 1.750" x .078"	6063-T6 ALUMINUM	OBE	
5	FG-2101	MULLION	4.50" x 1.750" x .094"	6063-T6 ALUMINUM	OBE	
6	FG-2102	MULLION FILER	4.00" x 6.41" x .078"	6063-T6 ALUMINUM	OBE	
7	FG-2103	HEAD & JAMB	4.50" x 1.75" x .078"	6063-T6 ALUMINUM	OBE	
8	FG-2104	HORIZONTAL	4.515" x 1.753" x .094"	6063-T6 ALUMINUM	OBE	
9	FG-2105	SILL	4.480" x 1.753" x .078"	6063-T6 ALUMINUM	OBE	
10	FG-2166	GLASS STOP	1.937" x 1.234" x .078"	6063-T6 ALUMINUM	OBE	
11	FG-2122	HEAD & JAMB FILLER	4.00" x .354" x .078" x 4" LONG	6063-T6 ALUMINUM	OBE	LOCATED CENTER WITH ANCHOR'S LOCATION
12	FG-2169	SUB SILL	4.390" x 2.125" x .078"	6063-T6 ALUMINUM	OBE	
13	FG-2228	MULLION	4.50" x 1.75" x .231"	6063-T6 ALUMINUM	OBE	
14	RS-1	STEEL REINFORCEMENT	4.188" x 1.249" x .152"	A-36 STEEL	VARIES	ZINC PLATED
15	RS-9	STEEL REINFORCEMENT	3.903" x 1.092" x .250"	A-36 STEEL	VARIES	ZINC PLATED
16	RS-10	STEEL REINFORCEMENT	3.904" x 1.250" x .188"	SILICONE	DOWN CORNING	LOCATED AT EACH INTERIOR FRAME CORNER
17	795	PERMETER SEALANT & VAPOR JOINTS		STEEL	VARIES	
18	RS-8	SPRUE ASSEMBLY SCREW	#14 x 1" HHSS	PVC	OBE	LOCATED AT EACH END OF & SEALED W/
19	FG-1000-FP-1	WATER DIVERTER SET IN SEALANT	1.187" x .750" x 1.343"	POLYISOBUTYLENE	SCIENCE-MODIFIED	LOCATED AT EACH END OF HORIZONTAL BETWEEN JOINTS
20	SM-5801	ISOCYANATE TYPE	1.25" x .500" VARIES	6063-T6 ALUMINUM	OBE	FABRICATED LENGTH = 4.25"
21	FG-2000-FP-4	END DAM	.825" x 2.125" x .062"	STEEL, ZINC COATED	VARIES	START @ 8" o.c. FROM ENDS, BALANCE @ 12" o.c.
22	RS-22	SCREW FOR STEEL REINFORCEMENT	#12 x 1/2" PHILLIPS FLAT HEAD	POLYETHYLENE	VARIES	
23		CLOSED CELL BACKER ROD	.500"			

MAXIMUM A.S.D. DESIGN PRESSURE RATING (psf) SCHEDULE
FOR A GIVEN GLASS PANEL DIMENSIONS "a" (in) x "b" (in) (SEE LEGEND)

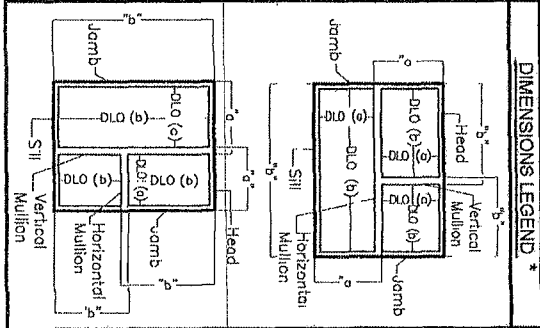
TYPICAL GLAZING DETAIL



GLASS TYPE			MAXIMUM A.S.D. DESIGN PRESSURE RATING (psf)
MAXIMUM DIMENSION "a" *	MAXIMUM DIMENSION "b" *		
18"	from 18" to 312"		±60.0
24"	from 24" to 234"		±60.0
30"	from 30" to 186"		±60.0
36"	from 36" to 156"		±60.0
42"	from 42" to 132"		±60.0
48"	from 48" to 114"		±60.0
54"	from 54" to 90"		±60.0
60"	from 54" to 102"		±58.6
60"	from 60" to 84"		±60.0
60"	from 60" to 90"		±58.2
66"	from 66" to 78"		±60.0
66"	from 66" to 84"		±58.1
72"	from 72" to 78"		±60.0

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

SIDE	MAXIMUM DAY LIGHT OPENING
MAX D.L.O. (SHORT SIDE)	(D.L.O.) Formula at Vertical & Horizontal Mullions
MAX D.L.O. (LONG SIDE)	(D.L.O.) Formula at Jamb, Head & Sill Frames
MAX D.L.O. (LONG SIDE)	"a" - 3.50"
MAX D.L.O. (LONG SIDE)	"b" - 3.50"



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TILTECO INC.
TILLIT TESTING & ENGINEERING COMPANY
1355 N.W. 25th St., Ste. 202, Virginia Gardens, FL 33168
Phone: (305) 897-1131
e-mail: tilteco@aol.com
EB-0006719
WALTER A. TILLIT, P.E.
FLORIDA Lic. # 44167

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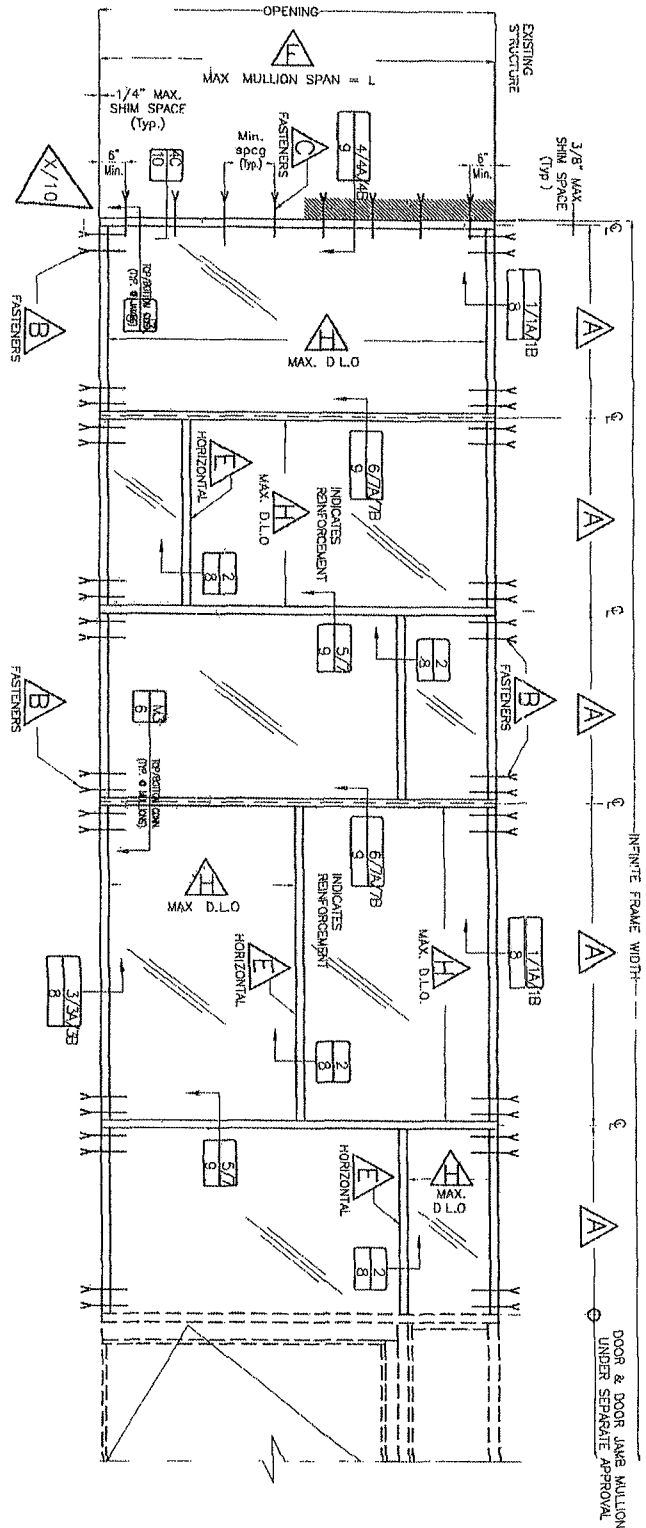
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DATE: 11/30/11
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REV. No.	DESCRIPTION	DATE	REV. No.	DESCRIPTION	DATE
1	OLD 10-093	11/30/11	2		

SHEET 3 OF 10

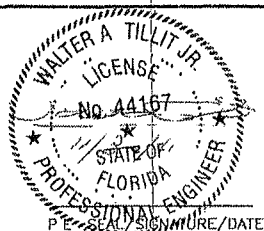
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LICENSE
No 44167
STATE OF FLORIDA
PROFESSIONAL ENGINEER
P.E. SIGNATURE DATE

ELEVATION FOR SERIES FG-2000 STOREFRONT HIGH DESIGN PRESSURE



FOOT NOTES:

- A** FOR MAXIMUM MULLION SPACING ON CENTERS SEE SHEET 5
- B** FOR MULLIONS HEAD AND SILL FASTENERS QUANTITY, TYPES AND SPECS SEE SHEET 6
- C** FOR JAMB FASTENERS SPACING, TYPES AND SPECS. SEE SHEET 10
- E** USE OF HORIZONTAL (SEE SECTION 2/8) LIMITED BY SCHEDULE ON SHEET 7
- F** FOR MAXIMUM MULLION SPAN SEE SHEET 5
- H** FOR GLAZING DETAILS AND GLASS SCHEDULE SEE SHEET 3
- A** FOR MAXIMUM D.L.O. SEE SCHEDULE ON SHEET 3



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TILTECO Inc
TILLIT TESTING & ENGINEERING COMPANY
6555 N.W. 38th St., Suite 200, Fort Lauderdale, FL 33318
Phone: (305) 971-1530 Fax: (305) 971-1531
e-mail: tilteco@aol.com
ED-0006719
WALTER A. TILLIT JR. P.E.
FLORIDA Lic. # 44167

**SERIES FG-2000 STOREFRONT
HIGH DESIGN PRESSURE**
W/ NON-IMPACT MONOCLYTIC TINTED GLASS



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REV. NO.	DESCRIPTION	DATE	BY	CHK
1	OLD 10-023	11/20/11	J	

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DATE

11-19B
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SHEET 4 OF 10

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

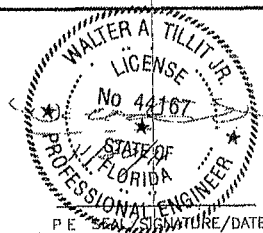
MAXIMUM ASD DESIGN PRESSURE RATING (psf)	EFFECTIVE SPACING "b" (ft-in)	MAXIMUM MULLION SPAN "L" (FT)				
		CASE 1 M-1	CASE 2 M-2	CASE 3 M-3	CASE 4 M-4	CASE 5 M-5
± 400	3'-0"	8'-0"	8'-0"	8'-0"	10'-0"	10'-0"
	3'-6"	8'-0"	8'-0"	8'-0"	10'-0"	10'-0"
	4'-0"	8'-0"	8'-0"	8'-0"	10'-0"	10'-0"
	4'-6"	7'-1"	8'-0"	8'-0"	10'-0"	10'-0"
	5'-0"	6'-5"	8'-0"	8'-0"	10'-0"	10'-0"
	5'-6"	5'-10"	8'-0"	8'-0"	9'-8"	9'-8"
	6'-0"	4'-10"	7'-4"	7'-4"	8'-0"	8'-0"
	6'-6"	4'-10"	6'-7"	6'-7"	8'-0"	8'-0"
	7'-0"	8'-0"	8'-0"	8'-0"	10'-0"	10'-0"
	7'-6"	8'-0"	8'-0"	8'-0"	10'-0"	10'-0"
	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"	10'-0"
	8'-6"	7'-1"	8'-0"	8'-0"	10'-0"	10'-0"
	9'-0"	6'-4"	8'-0"	8'-0"	10'-0"	10'-0"
	9'-6"	5'-8"	7'-10"	7'-10"	9'-6"	9'-6"
	10'-0"	5'-2"	7'-1"	7'-1"	8'-7"	8'-7"
± 450	3'-0"	8'-0"	8'-0"	8'-0"	10'-0"	10'-0"
	3'-6"	8'-0"	8'-0"	8'-0"	10'-0"	10'-0"
	4'-0"	7'-1"	8'-0"	8'-0"	10'-0"	10'-0"
	4'-6"	6'-4"	8'-0"	8'-0"	10'-0"	10'-0"
	5'-0"	5'-8"	7'-10"	7'-10"	9'-6"	9'-6"
	5'-6"	5'-2"	7'-1"	7'-1"	8'-7"	8'-7"
	6'-0"	4'-10"	6'-7"	6'-7"	8'-0"	8'-0"
	6'-6"	4'-10"	6'-7"	6'-7"	8'-0"	8'-0"
	7'-0"	8'-0"	8'-0"	8'-0"	10'-0"	10'-0"
	7'-6"	8'-0"	8'-0"	8'-0"	10'-0"	10'-0"
	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"	10'-0"
	8'-6"	7'-1"	8'-0"	8'-0"	10'-0"	10'-0"
	9'-0"	6'-4"	8'-0"	8'-0"	10'-0"	10'-0"
	9'-6"	5'-8"	7'-10"	7'-10"	9'-6"	9'-6"
	10'-0"	5'-2"	7'-1"	7'-1"	8'-7"	8'-7"
± 500	3'-0"	8'-0"	8'-0"	8'-0"	10'-0"	10'-0"
	3'-6"	8'-0"	8'-0"	8'-0"	10'-0"	10'-0"
	4'-0"	7'-1"	8'-0"	8'-0"	10'-0"	10'-0"
	4'-6"	6'-4"	8'-0"	8'-0"	10'-0"	10'-0"
	5'-0"	5'-8"	7'-10"	7'-10"	9'-6"	9'-6"
	5'-6"	5'-2"	7'-1"	7'-1"	8'-7"	8'-7"
	6'-0"	4'-10"	6'-7"	6'-7"	8'-0"	8'-0"
	6'-6"	4'-10"	6'-7"	6'-7"	8'-0"	8'-0"
	7'-0"	8'-0"	8'-0"	8'-0"	10'-0"	10'-0"
	7'-6"	8'-0"	8'-0"	8'-0"	10'-0"	10'-0"
	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"	10'-0"
	8'-6"	7'-1"	8'-0"	8'-0"	10'-0"	10'-0"
	9'-0"	6'-4"	8'-0"	8'-0"	10'-0"	10'-0"
	9'-6"	5'-8"	7'-10"	7'-10"	9'-6"	9'-6"
	10'-0"	5'-2"	7'-1"	7'-1"	8'-7"	8'-7"
± 550	3'-0"	8'-0"	8'-0"	8'-0"	10'-0"	10'-0"
	3'-6"	8'-0"	8'-0"	8'-0"	10'-0"	10'-0"
	4'-0"	7'-1"	8'-0"	8'-0"	10'-0"	10'-0"
	4'-6"	6'-4"	8'-0"	8'-0"	10'-0"	10'-0"
	5'-0"	5'-8"	7'-10"	7'-10"	9'-6"	9'-6"
	5'-6"	5'-2"	7'-1"	7'-1"	8'-7"	8'-7"
	6'-0"	4'-10"	6'-7"	6'-7"	8'-0"	8'-0"
	6'-6"	4'-10"	6'-7"	6'-7"	8'-0"	8'-0"
	7'-0"	8'-0"	8'-0"	8'-0"	10'-0"	10'-0"
	7'-6"	8'-0"	8'-0"	8'-0"	10'-0"	10'-0"
	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"	10'-0"
	8'-6"	7'-1"	8'-0"	8'-0"	10'-0"	10'-0"
	9'-0"	6'-4"	8'-0"	8'-0"	10'-0"	10'-0"
	9'-6"	5'-8"	7'-10"	7'-10"	9'-6"	9'-6"
	10'-0"	5'-2"	7'-1"	7'-1"	8'-7"	8'-7"
± 600	3'-0"	8'-0"	8'-0"	8'-0"	10'-0"	10'-0"
	3'-6"	8'-0"	8'-0"	8'-0"	10'-0"	10'-0"
	4'-0"	7'-1"	8'-0"	8'-0"	10'-0"	10'-0"
	4'-6"	6'-4"	8'-0"	8'-0"	10'-0"	10'-0"
	5'-0"	5'-8"	7'-10"	7'-10"	9'-6"	9'-6"
	5'-6"	5'-2"	7'-1"	7'-1"	8'-7"	8'-7"
	6'-0"	4'-10"	6'-7"	6'-7"	8'-0"	8'-0"
	6'-6"	4'-10"	6'-7"	6'-7"	8'-0"	8'-0"
	7'-0"	8'-0"	8'-0"	8'-0"	10'-0"	10'-0"
	7'-6"	8'-0"	8'-0"	8'-0"	10'-0"	10'-0"
	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"	10'-0"
	8'-6"	7'-1"	8'-0"	8'-0"	10'-0"	10'-0"
	9'-0"	6'-4"	8'-0"	8'-0"	10'-0"	10'-0"
	9'-6"	5'-8"	7'-10"	7'-10"	9'-6"	9'-6"
	10'-0"	5'-2"	7'-1"	7'-1"	8'-7"	8'-7"

CASE DEFINITIONS

CASE 1 . UNREINFORCED STANDARD MULLION M-1 (SEE DET 5/9)	CASE 3 . UNREINFORCED STANDARD MULLION M-3 (SEE DET 7/9)
CASE 2 : REINFORCED STANDARD MULLION M-2 (SEE DET 6/9)	CASE 4 . REINFORCED STANDARD MULLION M-4 (SEE DET 7A/9)
CASE 5 . REINFORCED STANDARD MULLION M-5 (SEE DET 7B/9)	

STOREFRONT ELEVATION W/ MULLION
 SIDE VIEW
 "L" = MAXIMUM MULLION SPAN
 EFFECTIVE SPACING "b" = $\frac{S_1 + S_2}{2}$, S₁, S₂ = MULLION SPACING (o.c.)

* MAXIMUM ASD DESIGN PRESSURE RATING FOR MULLION WILL AUTOMATICALLY QUALIFY ASD DESIGN PRESSURE RATINGS FOR JAMBS WITH ANCHORAGE FOR ANY GIVEN MULLION SPACING



FLORIDA BUILDING CODE (High & Non High Velocity Hurricane Zone)

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TILTECO INC
 TILLIT TESTING & ENGINEERING COMPANY
 6325 NW 30th St., Suite 205, Virginia Beach, VA 23466
 Phone: (800) 771-1530 Fax: (757) 637-1531
 e-mail: tilteco@tillit.com
 CR-0007719
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 FLORIDA Lic # 44167

SERIES FG-2000 STOREFRONT
HIGH DESIGN PRESSURE
 W/ NON-IMPACT MONOLITHIC TEMPERED GLASS



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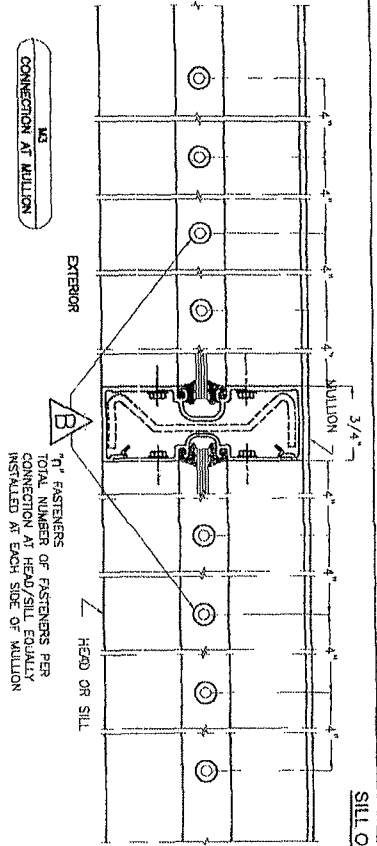
REV.	DATE	DESCRIPTION	BY	CHK.
1	01/10/03	01/29/11	3	4

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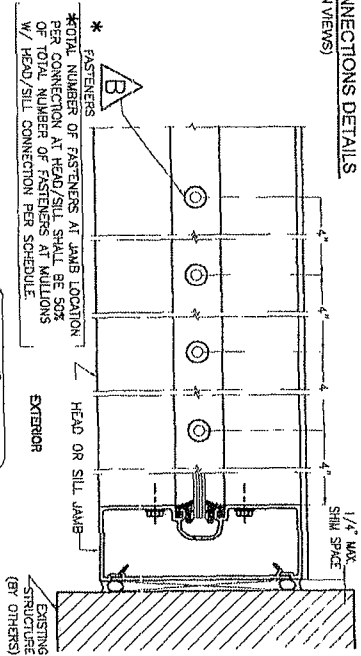
SHEET 5 OF 10



MAXIMUM A.S.D. DESIGN PRESSURE RATING SCHEDULE FOR MULLIONS W/ HEAD/SILL CONNECTIONS. *

MAXIMUM MULLION SPACING	EFFECTIVE SPACING	MAXIMUM A.S.D. DESIGN PRESSURE RATING (psf)											
		POURED CONCRETE SUBSTRATE				WOOD SUBSTRATE 1 1/2" MIN. THK.				STEEL SUBSTRATE 1/8" MIN. THK.			
		FASTENER TYPE	A (1/4")	B (1/4")	C (1/4")	FASTENER TYPE	B (1/4")	C (1/4")	D (1/4")	FASTENER TYPE	B (1/4")	C (1/4")	D (1/4")
3'-0"	3'-0"	A (1/4")	600	600	600	B (1/4")	584	584	584	C (1/4")	600	600	600
3'-6"	3'-6"	A (1/4")	600	600	600	B (1/4")	584	584	584	C (1/4")	600	600	600
4'-0"	4'-0"	A (1/4")	600	600	600	B (1/4")	584	584	584	C (1/4")	600	600	600
4'-6"	4'-6"	A (1/4")	600	600	600	B (1/4")	584	584	584	C (1/4")	600	600	600
5'-0"	5'-0"	A (1/4")	600	600	600	B (1/4")	584	584	584	C (1/4")	600	600	600
5'-6"	5'-6"	A (1/4")	600	600	600	B (1/4")	584	584	584	C (1/4")	600	600	600
6'-0"	6'-0"	A (1/4")	600	600	600	B (1/4")	584	584	584	C (1/4")	600	600	600
6'-6"	6'-6"	A (1/4")	600	600	600	B (1/4")	584	584	584	C (1/4")	600	600	600
7'-0"	7'-0"	A (1/4")	600	600	600	B (1/4")	584	584	584	C (1/4")	600	600	600
7'-6"	7'-6"	A (1/4")	600	600	600	B (1/4")	584	584	584	C (1/4")	600	600	600
8'-0"	8'-0"	A (1/4")	600	600	600	B (1/4")	584	584	584	C (1/4")	600	600	600
8'-6"	8'-6"	A (1/4")	600	600	600	B (1/4")	584	584	584	C (1/4")	600	600	600
9'-0"	9'-0"	A (1/4")	600	600	600	B (1/4")	584	584	584	C (1/4")	600	600	600
9'-6"	9'-6"	A (1/4")	600	600	600	B (1/4")	584	584	584	C (1/4")	600	600	600
10'-0"	10'-0"	A (1/4")	600	600	600	B (1/4")	584	584	584	C (1/4")	600	600	600
10'-6"	10'-6"	A (1/4")	600	600	600	B (1/4")	584	584	584	C (1/4")	600	600	600

- A. FASTENERS TYPES (SPACED AT 4" O.C.)**
- A-1/4" E.L.C.O. FASTENING SYSTEM, LLC. ULTRACON ANCHOR W/ 1 1/2" MIN. PENETRATION INTO 2X WOOD BUCK (G=25) (Min. To = 2.730) OR W/ 1 1/4" MIN. EMBEDMENT INTO HOLLOW BLOCK (Min. To = 1.924) & 1" MIN. EDGE DISTANCE BEYOND ANY FINISH MATERIAL.
 - B-1/4" E.L.C.O. FASTENING SYSTEM, LLC. ULTRACON ANCHOR W/ 1 1/2" MIN. PENETRATION INTO 2X WOOD BUCK (G=25) & 1" MIN. EDGE DISTANCE BEYOND ANY FINISH MATERIAL.
 - B'-5/16" E.L.C.O. FASTENING SYSTEM, LLC. ULTRACON ANCHOR W/ 1 1/2" MIN. PENETRATION INTO 2X WOOD BUCK (G=25) & 1" MIN. EDGE DISTANCE BEYOND ANY FINISH MATERIAL.
 - C-1/4" 20 SLOTTED INDENTED HEX WASHER HEAD THREAD CUTTING SCREW TYPE "F" ZINC COATED W/ MIN. To = 77 KSI, To = 100 KSI TO 1/8" MIN. THK. ASTM A-36 STEEL & 1" MIN. EDGE DISTANCE.



FLORIDA BUILDING CODE (High & Non High Velocity Hurricane Zone)

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TILLIT TESTING & ENGINEERING COMPANY

3335 N.W. 36th St., Ft. Lauderdale, FL 33309

Phone: (305) 971-1530 Fax: (305) 971-1531

e-mail: tilteco@tillit.com

ED-0008719

WALTER A. TILLIT JR. P.E.

FLORIDA LIC. # 44167

SERIES FG-2000 STOREFRONT

HIGH DESIGN PRESSURE

W/ NON-IMPACT MONOLITHIC-TEMPERED GLASS

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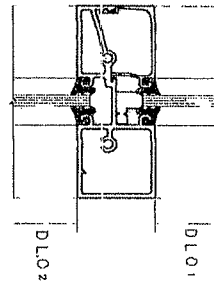
www.OldcastleBE.com - Phone: 800-880-4587

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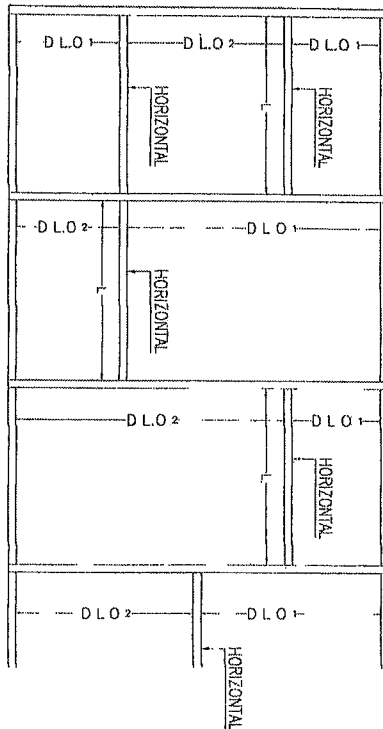
11-198

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SHEET 6 OF 10



SECTION AT HORIZONTAL



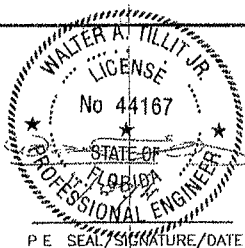
STOREFRONT ELEVATION W/ HORIZONTAL

"L" = MAXIMUM HORIZONTAL SPAN

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

MAXIMUM S.D. DESIGN PRESSURE RATING FOR HORIZONTAL
MAXIMUM HORIZONTAL SPAN "L" (FT) SCHEDULE
FOR A GIVEN S.D. DESIGN PRESSURE RATING (psf) AND
A GIVEN HORIZONTAL EFFECTIVE DAY LIGHT OPENING "D.L.O." (ft)

MAXIMUM S.D. DESIGN PRESSURE RATING (psf)	EFFECTIVE DAY LIGHT OPENING "D.L.O." (ft)	MAXIMUM HORIZONTAL SPAN "L" (ft)
± 400 OR LESS	2'-0"	6'-6"
	2'-6"	6'-6"
	3'-0"	6'-6"
	3'-6"	6'-6"
	4'-0"	6'-6"
± 450	4'-6"	6'-6"
	5'-0"	6'-6"
	5'-6"	6'-6"
	6'-0"	6'-6"
	6'-6"	6'-6"
± 500	7'-0"	6'-6"
	7'-6"	6'-6"
	8'-0"	6'-6"
	8'-6"	6'-6"
	9'-0"	6'-6"
± 550	9'-6"	6'-6"
	10'-0"	6'-6"
	10'-6"	6'-6"
	11'-0"	6'-6"
	11'-6"	6'-6"
± 600	12'-0"	6'-6"
	12'-6"	6'-6"
	13'-0"	6'-6"
	13'-6"	6'-6"
	14'-0"	6'-6"



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TILLET TESTING & ENGINEERING COMPANY
4305 N.W. 24th St., Ste. 205, Miramar, Florida, FL 33186
Phone: (305) 971-1530 Fax: (305) 971-1031
e-mail: tilteco@tilteco.com
EP-0008719
WALTER A. TILLET JR., P.E.
FLORIDA LIC. # 44167

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HIGH DESIGN PRESSURE
W/ NON-IMPACT MONOLITHIC-TEMPERED GLASS
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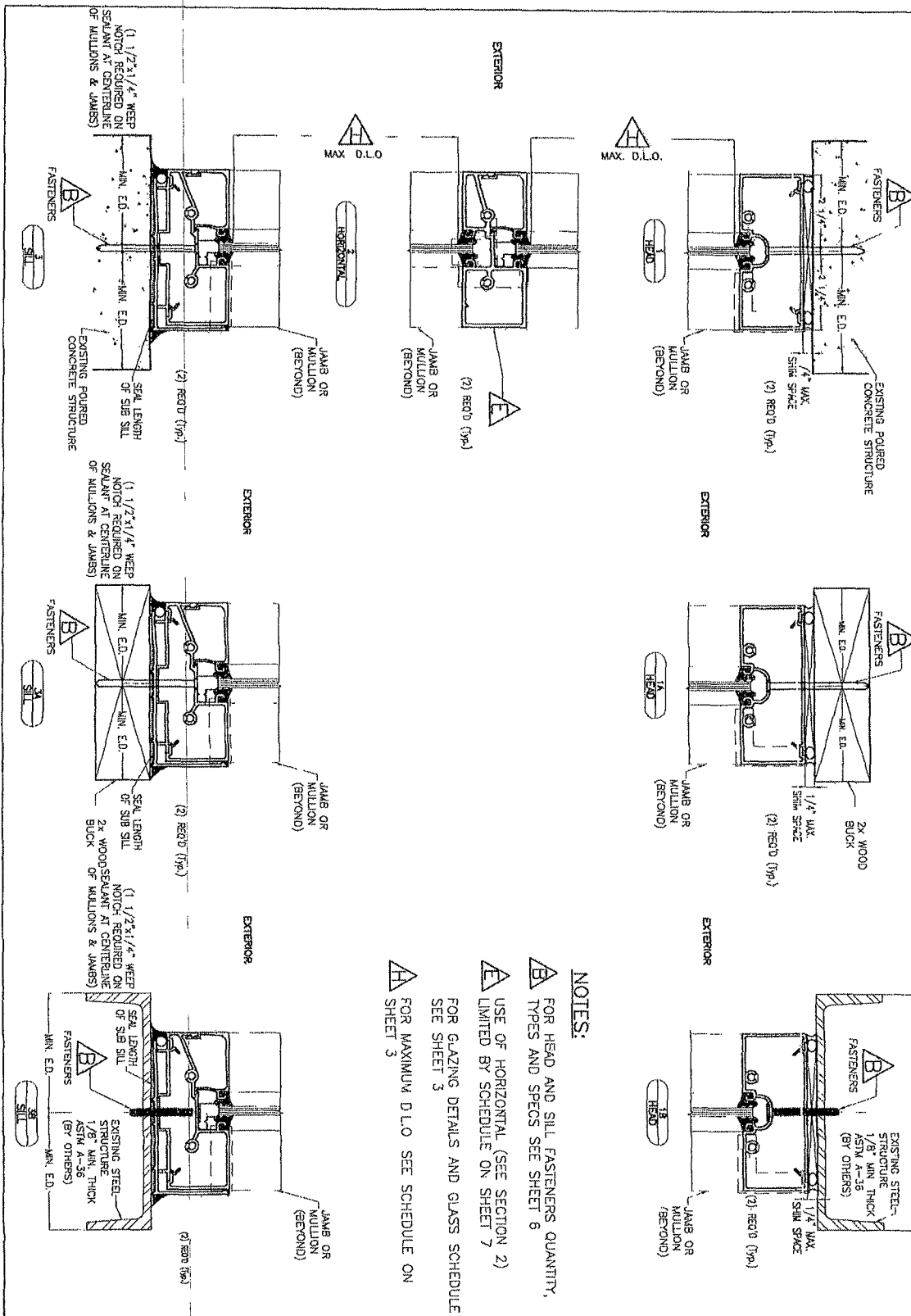
11/30/11
DATE

11-198
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SHEET 7 OF 10

HEAD, HORIZONTAL & SILL CONNECTION DETAILS

(SIDE VIEW) SCALE 3/8" = 1



NOTES:

- B** FOR HEAD AND SILL FASTENERS QUANTITY, TYPES AND SPECS SEE SHEET 6
- E** USE OF HORIZONTAL (SEE SECTION 2) LIMITED BY SCHEDULE ON SHEET 7
- FOR GLAZING DETAILS AND GLASS SCHEDULE SEE SHEET 3
- A** FOR MAXIMUM D.L.O. SEE SCHEDULE ON SHEET 3

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TILTECO INC.

TILLIT TESTING & ENGINEERING COMPANY

8355 N.W. 28th St., Suite 305, Virginia Gardens, FL 33156
Phone: (888) 711-1538 Fax: (888) 711-1537
e-mail: tilliteco@aol.com
ED-0008719

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FLORIDA Lic. # 44167

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1	02-10-023	
2	11/2/10	

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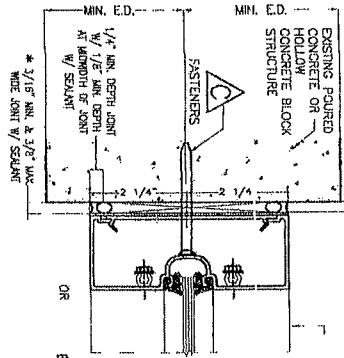
SHEET 8 OF 10

WALTER A. TILLIT JR.
LICENSE
No 44167
PROFESSIONAL ENGINEER
STATE OF FLORIDA
P.E. SIGNATURE/DATE

SECTIONS AT JAMBS

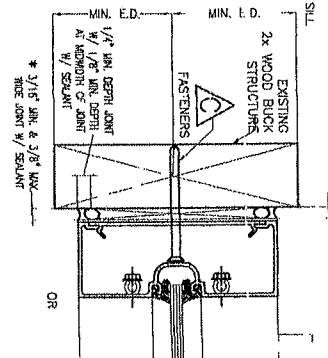
TO POLISHED CONCRETE OR HOLLOW CONCRETE BLOCK STRUCTURE

3/8" MAX.
SHUL SPACE



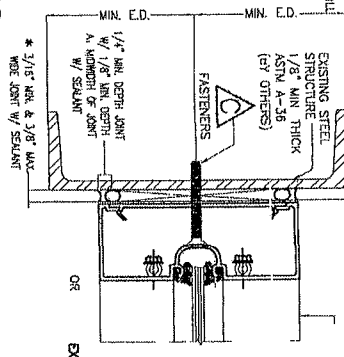
TO WOOD STRUCTURE

3/8" MAX.
SHUL SPACE



TO STEEL STRUCTURE

3/8" MAX.
SHUL SPACE



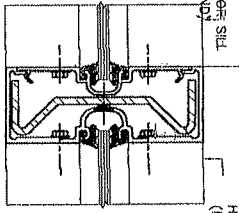
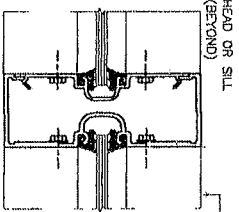
HEAD OR SILL
(BEYOND)

NOTES:

- TOP JAMB FASTENERS SPACING, TYPES AND SPECS SEE SHEET 10 FOR GLAZING DETAILS AND SCHEDULE 3.
- FOR MAXIMUM D.L.O. SEE SCHEDULE ON SHEET 3.

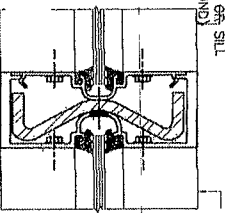
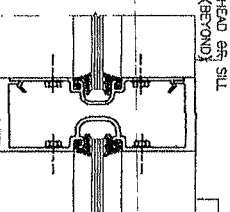
SECTIONS AT MULLIONS

SCALE 3/8" = 1"



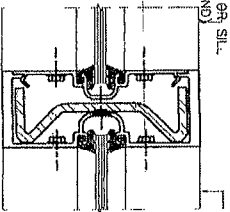
MULLION M-1

MULLION M-2



MULLION M-3

MULLION M-4



MULLION M-5

NOTE: INDICATED MAXIMUM AND MINIMUM VALUES FOR SPECIFIED SEALANT VERTICAL JOINT WIDTH AT JAMBS CONNECTED TO WALL 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.

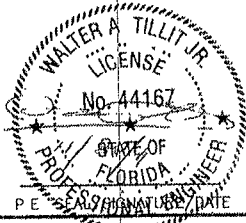
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Phone: (305) 671-1550 Fax: (305) 671-1551
e-mail: tillico@tillico.com
ED-0008719
WALTER A. TILLIT JR. P.E.
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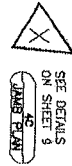
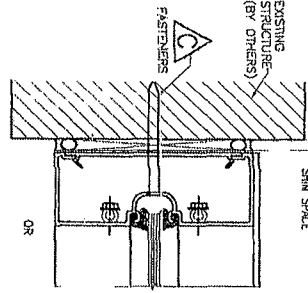
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11-198 DRAWING No	
SHEET 0 OF 10	



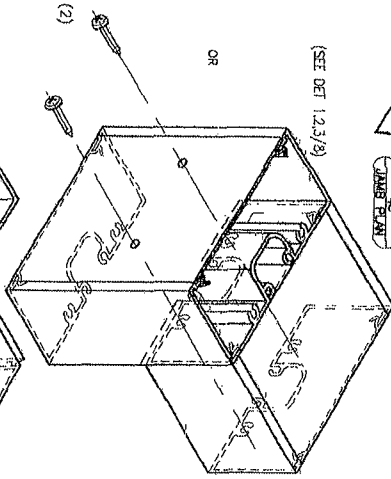
CORNER DETAIL AT JAMB

(PLAN VIEW) SCALE 3/8" = 1"

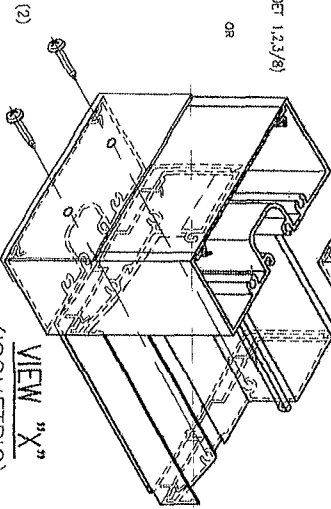
3/8" MAX.
SPIN SPACE



(SEE DET 1.2.3/8)



(SEE DET 1.2.3/8)



VIEW "X"
(ISOMETRIC)

MAXIMUM ASD DESIGN PRESSURE RATING & CORRESPONDING MAXIMUM FASTENERS SPACING SCHEDULE FOR JAMB CONNECTION

MAXIMUM ASD DESIGN PRESSURE RATING (psf)	MILLION SPACING	JAMB FASTENERS' SPACING "spc" (in o.c.)			
		POURED CONCRETE OR HOLLOW CONCRETE BLOCK SUBSTRATES	WOOD 1 1/2" MIN. THK SUBSTRATE	STEEL 1/8" MIN. THK. SUBSTRATE	
		FASTENERS TYPE FASTENERS TYPE FASTENERS TYPE FASTENERS TYPE			
35.0	3 - 0 4 - 0 5 - 0 6 - 0 8 - 0	A (1/4") 12 12 12 12 12	B (1/4") 12 12 12 12 12	C (1/4") 12 12 12 12 12	
40.0	3 - 0 4 - 0 5 - 0 6 - 0 8 - 0	A (1/4") 12 12 12 12 12	B (1/4") 12 12 12 12 12	C (1/4") 12 12 12 12 12	
45.0	3 - 0 4 - 0 5 - 0 6 - 0 8 - 0	A (1/4") 12 12 12 12 12	B (1/4") 12 12 12 12 12	C (1/4") 12 12 12 12 12	
50.0	3 - 0 4 - 0 5 - 0 6 - 0 8 - 0	A (1/4") 12 12 12 12 12	B (1/4") 12 12 12 12 12	C (1/4") 12 12 12 12 12	
55.0	3 - 0 4 - 0 5 - 0 6 - 0 8 - 0	A (1/4") 12 12 12 12 12	B (1/4") 12 12 12 12 12	C (1/4") 12 12 12 12 12	
60.0	3 - 0 4 - 0 5 - 0 6 - 0 8 - 0	A (1/4") 12 12 12 12 12	B (1/4") 12 12 12 12 12	C (1/4") 12 12 12 12 12	



FASTENERS TYPES (SEE SPACING SCHEDULE)

- A - 1/4" ELO FASTENING SYSTEM, L.L.C. ULTRACON ANCHOR
W/ 1 3/4" MIN. EMBEDMENT INTO POURED CONCRETE
(MIN. TO = 2750 ksi) OR W/ 1 1/4" MIN. EMBEDMENT INTO
HOLLOW BLOCK (MIN. TO = 1824 ksi) & 1" MIN. EDGE
DISTANCE BEYOND ANY FINISH MATERIAL.
- B - 1/4" ELO FASTENING SYSTEM, L.L.C. ULTRACON ANCHOR
W/ 1 1/2" MIN. PENETRATION INTO 2" WOOD BUCK (G=0.55)
& 2" MIN. EDGE DISTANCE BEYOND ANY FINISH MATERIAL.
- B' - 5/16" ELO FASTENING SYSTEM, L.L.C. ULTRACON ANCHOR
W/ 1 1/2" MIN. PENETRATION INTO 2" WOOD BUCK (G=0.55)
& 2" MIN. EDGE DISTANCE BEYOND ANY FINISH MATERIAL.
- C - 1/4" SLOTTED IDENTIFIED HEX WASHER HEAD THREAD-
CUTTING SCREW TYPE "T" ZINC COATED W/ MIN. Fy = 77 ksi, Fu = 100
ksi TO 1/8" MIN. THK. ASTM A36 STEEL & 1" MIN. EDGE DISTANCE.

FLORIDA BUILDING CODE (High & Non High Velocity Hurricane Zone)

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TILTECO INC.
TILIT TESTING & ENGINEERING COMPANY
2550 N.W. 36th St., Suite 100, Fort Lauderdale, FL 33309
Phone: (954) 971-1530 Fax: (954) 971-1531
e-mail: tilteco@tilteco.com
WALTER A. TILIT, Jr. P.E.
FLORIDA Lic. # 44167

SERIES FG-2000 STOREFRONT
HIGH DESIGN PRESSURE
W/ NON-IMPACT MONOLITHIC TEMPERED GLASS



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LICENSE
No 44167
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
P.E. SIGNATURE/DATE

PRODUCT APPROVAL FOR SERIES FG-3000 STOREFRONT HIGH A.S.D. DESIGN PRESSURE W/ NON IMPACT INSULATED MONOLITHIC TEMPERED GLASS

1. SERIES FG-3000 STOREFRONT HIGH DESIGN PRESSURE W/ NON IMPACT INSULATED MONOLITHIC TEMPERED GLASS, SHOWN ON THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE 2010 EDITION OF THE FLORIDA BUILDING CODE. THIS PRODUCT MAY BE INSTALLED WITHIN HIGH & NON HIGH VELOCITY HURRICANE ZONES WITH LIMITATIONS AS PER NOTE 3 BELOW
- DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTIONS 1609 (FOR HIGH VELOCITY HURRICANE ZONES) & 1609 (FOR NON HIGH VELOCITY HURRICANE ZONES) OF THE ABOVE MENTIONED CODE FOR A BASIC WIND SPEED AS REQUIRED BY THE JURISDICTION WHERE THIS PRODUCT WILL BE INSTALLED FOR A DIRECTIONALITY FACTOR $K_d=0.85$ USING ASCE 7-10 FOR INSTALLATIONS UNDER 2010 FBC AND SHALL NOT EXCEED THE MAXIMUM (A.S.D.) DESIGN PRESSURE RATINGS INDICATED ON NOTE 2
- IN ORDER TO VERIFY THE ABOVE CONDITION, ULTIMATE DESIGN WIND LOADS DETERMINED PER ASCE 7-10 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 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 NDS, 2005 OR AVAILABLE TEST DATA FROM MANUFACTURER.
- THIS PRODUCT'S ADEQUACY FOR WIND RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH SECTIONS 1625 (EXCEPT 1625.4) & 1714.5.3 OF THE ABOVE MENTIONED CODE AS PER PROTOCOL TAS-202 AND ASTM E330 PER ARCHITECTURAL TESTING INC. LABORATORY REPORT # 99495-01-801-44 AND AS PER STRUCTURAL CALCULATIONS, PERFORMED AS PER SECTIONS 1604 & 1612 OF THE FLORIDA BUILDING CODE.
- MAXIMUM A.S.D. DESIGN PRESSURE RATING FOR THIS PRODUCT SHALL BE AS SHOWN ON SHEETS 3, 5, 6 & 7
- THIS PRODUCT WILL REQUIRE AN APPROVED HURRICANE PROTECTION DEVICE IN ORDER TO RATE IT AS IMPACT RESISTANT. IF PRODUCT IS NOT PROTECTED WITH AN APPROVED HURRICANE PROTECTIVE DEVICE, THEN IT SHALL BE INSTALLED OUT OF THE HIGH VELOCITY HURRICANE ZONE AND OUT OF ANY WIND-BORNE DEBRIS REGIONS, AS DEFINED ON SECTION 1609.2 OF THE FLORIDA BUILDING CODE
- THIS PRODUCT IS APPROVED FOR 11.07 psf AIR/WATER PENETRATION.
- TEMPERED GLASS TO COMPLY WITH SECTIONS 2411.3 OF THE FLORIDA BUILDING CODE
- PRODUCT SHALL COMPLY WITH SECTIONS 2406.1 2411.4.1 AND 241.4.2 OF THE FLORIDA BUILDING CODE.
- PROVIDE 3/8" MAX LOAD BEARING SHIM SPACE (TYP) WHEN ALLOWED BY THIS DRAWING
- WOOD BLOCKS BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE BUILDING STRUCTURE
- WOOD BLOCKS MUST BE SOUTHERN PINE, WITH $G = 0.55$
- REMAINING COMPONENTS FOR THIS PRODUCT SHALL BE AS INDICATED ON BILL OF MATERIALS, SHEET 3 OF THIS DRAWING.
- ALL ALUMINUM EXTRUSIONS IN CONTACT WITH STEEL, CONCRETE AND WOOD SHALL COMPLY WITH SECTIONS 2003.8.4.2, 2003.8.4.4, 2003.8.5 AND 2003.8.6 OF THE FLORIDA BUILDING CODE, RESPECTIVELY
- 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.
- STRUCTURAL SUBSTRATES NOTED ON THIS DRAWING AS EXISTING STEEL BY OTHERS POURED CONCRETE HOLLOW BLOCK AND WOOD MUST WITHSTAND THE LOADS IMPOSED BY THIS PRODUCT
- (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 FLORIDA REGISTERED 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

1.3. PRODUCT MANUFACTURER'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION AT PRODUCT IN ACCORDANCE WITH SECTION 1715.5 OF THE FLORIDA BUILDING CODE. ONE LABEL SHALL BE PLACED FOR EVERY OPENING

INDEX:

- SHEET 1 GENERAL NOTES INDEX AND INSTRUCTIONS.
- SHEET 2 COMPONENTS FOR SERIES FG-3000 STOREFRONT
- SHEET 3 BILL OF MATERIALS TYPICAL GLAZING DETAIL & MAXIMUM A.S.D. DESIGN PRESSURE RATING SCHEDULE FOR A GIVEN GLASS PANEL DIMENSIONS
- SHEET 4 ELEVATION FOR SERIES FG-3000 STOREFRONT
- SHEET 5 MAXIMUM A.S.D. DESIGN PRESSURE RATING FOR MULLIONS
- SHEET 6 SILL OR HEAD CONNECTIONS DETAILS (PLAN VIEW) AND MAXIMUM DESIGN PRESSURE RATING SCHEDULE FOR MULLIONS W/ HEAD/SILL CONNECTIONS
- SHEET 7 MAXIMUM A.S.D. DESIGN PRESSURE RATING FOR HORIZONTAL
- SHEET 8 HEAD HORIZONTAL & SILL CONNECTION DETAILS (SIDE VIEW)
- SHEET 9 SECTIONS AT JAMBS AND AT MULLIONS
- SHEET 10 MAXIMUM A.S.D. DESIGN PRESSURE RATING & MAXIMUM FASTENERS SPACING SCHEDULE FOR JAMB CONNECTION AND CORNER DETAIL

INSTRUCTIONS:

- STEP 1. DETERMINE A.S.D. DESIGN WIND LOAD REQUIREMENTS BASED ON WIND VELOCITY BUILDING HEIGHT WIND ZONE, USING APPLICABLE ASCE 7 STANDARDS.
- STEP 2. GO TO SCHEDULE ON SHEET 3 TO DETERMINE MAXIMUM A.S.D. DESIGN PRESSURE RATING (and) CAPACITY 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 SHEET 5 AND SELECT ANCHOR OPTION W/ A.S.D. DESIGN PRESSURE RATING EQUAL OR GREATER THAN A.S.D. DESIGN WIND LOAD SPECIFIED IN STEP 1 USING SCHEDULE ON SHEET 6.
- STEP 4. DETERMINE MAXIMUM ANCHOR SPACING AT JAMB FOR A GIVEN MAXIMUM A.S.D. DESIGN PRESSURE RATING AND MAXIMUM MULLION SPACING, ON SHEET 10.
- STEP 5. USE SCHEDULE ON SHEET 7 TO VERIFY MAXIMUM A.S.D. DESIGN PRESSURE RATING OF HORIZONTALS (IF USED) FOR A GIVEN HORIZONTAL EFFECTIVE D.L.O.
- STEP 6. THE LONGEST VALUE OF A.S.D. DESIGN PRESSURE RATING RESULTING FROM STEPS 2, 3 AND 5 SHALL APPLY TO THE ENTIRE SYSTEM

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TILLIT TESTING & ENGINEERING COMPANY
8355 N.W. 54th St., Ste. 305, Virginia Gardens, FL 33166
Phone: (305) 871-1530 Fax: (305) 871-1531
e-mail: tillit@tillitco.com

WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

SERIES FG-3000 STOREFRONT
HIGH DESIGN PRESSURE
W/ NON IMPACT INSULATED MONOLITHIC TEMPERED GLASS



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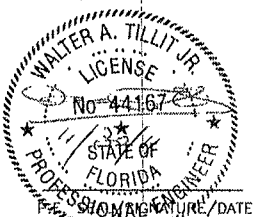
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11/30/11
DATE

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DRAWING No

SHEET 1 OF 10

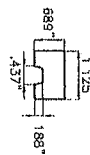


COMPONENTS FOR SERIES FG-3000 STOREFRONT

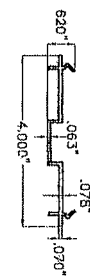
SCALE 3/8" = 1"



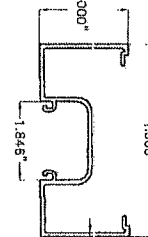
GLAZING GASKET
FG-1133



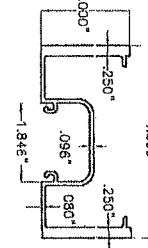
SETTING BLOCK
FG-3146



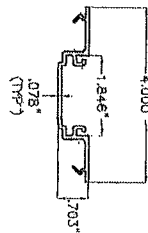
SILL FILLER
FG-2182



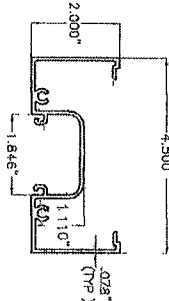
MULLION & HEAD
FG-3100



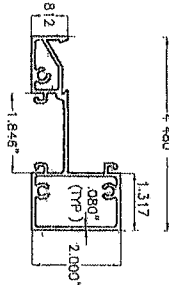
MULLION
FG-3101



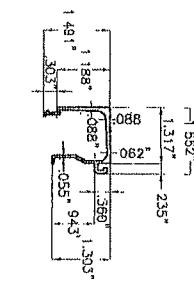
MULLION FILLER
FG-3102



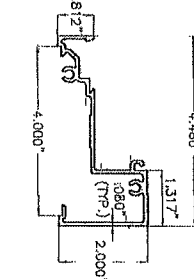
MULLION HEAD & JAMB
FG-3103



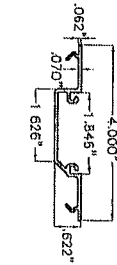
HORIZONTAL
FG-3142



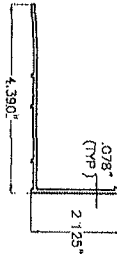
GLASS STOP
FG-3210



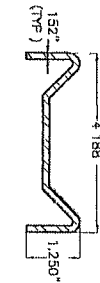
SILL
FG-3161



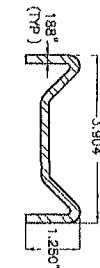
FILLER
FG-3164



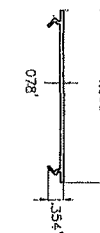
SUB SILL
FG-2169



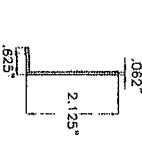
STEEL REINFORCEMENT
RS-1



STEEL REINFORCEMENT
RS-10



HEAD & JAMB FILLER
FG-2122



END DAM
FG-2000-FP-4

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5335 N.W. 26th St., Ste. 203, Vero Beach, FL 33416
Phone: (305) 771-1133 Fax: (305) 771-1531
e-mail: tiliteco@tiliteco.com
EB-0006719
WALTER A. TILIT, Jr. P.E.
FLORIDA LIC. # 44167

SERIES FG-3000 STOREFRONT
HIGH DESIGN PRESSURE
W/ NON-IMPACT INSULATED MONOLITHIC-TEMPERED GLASS



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11/30/11
DATE
11-199
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SHEET 2 OF 10

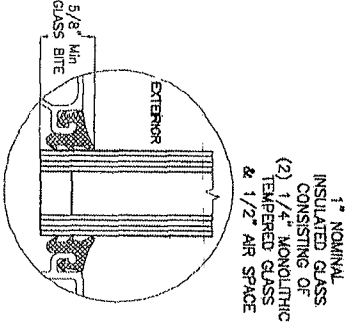


BILL OF MATERIALS

ITEM No.	PART NUMBER	DESCRIPTION	DIMENSIONS	MATERIAL	MANUFACTURER	NOTES
1.	FG-1133	GLAZING GASKET	5/32" x .495"	EPDM	EPG	
2.	FG-3146	SETTING BLOCK	1.057" x .699"	6063-T6 ALUMINUM	VARIES	LOCATED CENTER WITH ANCHOR'S LOCATION
3.	FG-2000-FP-3	SILL FILLER	4.00" x 4.00" x .078"	6063-T6 ALUMINUM	OBE	
4.	FG-3100	MULLION & JAMB	4.50" x 2.012" x .094"	6063-T6 ALUMINUM	OBE	
5.	FG-3101	MULLION	4.50" x 2.00" x .250"	6063-T6 ALUMINUM	OBE	
6.	FG-3102	MULLION FILLER	4.50" x 7.11" x .078"	6063-T6 ALUMINUM	OBE	
7.	FG-3103	MULLION, HEAD & JAMB	4.50" x 1.75" x .078"	6063-T6 ALUMINUM	OBE	
8.	FG-3142	HORIZONTAL	4.480" x 2.00" x .080"	6063-T6 ALUMINUM	OBE	
9.	FG-3210	GLASS STOP	1.552" x 1.491" x VARIES	6063-T6 ALUMINUM	OBE	
10.	FG-3161	SILL	4.480" x 2.00" x .080"	6063-T6 ALUMINUM	OBE	
11.	FG-3164	SUB SILL	4.390" x 2.125" x .078"	6063-T6 ALUMINUM	EPG	
12.	FG-2169	STEEL REINFORCEMENT	4.188" x 1.248" x .152"	A-36 STEEL	VARIES	ZINC PLATED
13.	RS-1	STEEL REINFORCEMENT	3.904" x 1.250" x .188"	A-36 STEEL	VARIES	ZINC PLATED
14.	RS-10	PERIMETER SEALANT & VENT JOINTS	#14 x 1" HHSS	STEEL	VARIES	LOCATED CENTER WITH ANCHOR'S LOCATION
15.	795	SPRUE ASSEMBLY SCREW	4.00" x 4.00" x .078" x 4" LONG	PVC	OBE	LOCATED AT EACH END OF & SEALED W/
16.	FS-8	HEAD & JAMB FILLER	1.187" x 750" x 1.343"	ISOORL	SCHE MOOREHEAD	LOCATED AT EACH END OF HORIZONTAL BETWEEN JOINTS
17.	FG-2122	WATER DIVERTER SET IN SEALANT	1.25" x .50" VARIES	6063-T6 ALUMINUM	OBE	FABRICATED LENGTH = 4.25"
18.	FG-1000-FP-1	JOINT SEALANT TAPE	.625" x 2.125" x .062"	STEEL, ZINC COATED	VARIES	START @ 6" o.c. FROM ENDS, BALANCE @ 12 o.c.
19.	SM-5601	END DAM	#12 x 1/2" PHILLIPS FLAT HEAD	POLYETHYLENE	VARIES	
20.	FG-2000-FP4	SCREW FOR STEEL-REINFORCEMENT	.500"			
21.	FS-22	CLOSED OIL BACKER ROD				
22.						

MAXIMUM ASD DESIGN PRESSURE RATING (psf) SCHEDULE
FOR A GIVEN GLASS PANEL DIMENSIONS "a" (in) x "b" (in) (SEE LEGEND)

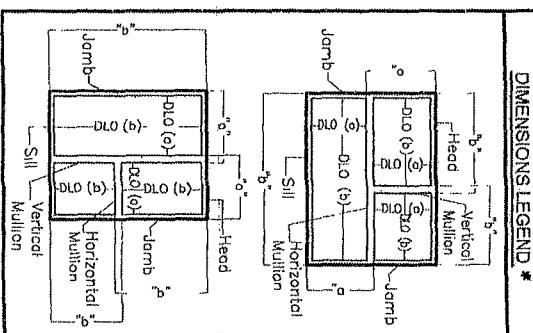
TYPICAL GLAZING DETAIL



GLASS TYPE		
MAXIMUM DIMENSION "a"	MAXIMUM DIMENSION "b"	MAXIMUM ASD DESIGN PRESSURE RATING (psf)
18"	from 18" to 312"	±60.0
24"	from 24" to 234"	±60.0
30"	from 30" to 186"	±60.0
36"	from 36" to 156"	±60.0
42"	from 42" to 132"	±60.0
48"	from 48" to 114"	±60.0
54"	from 54" to 96"	±59.9
60"	from 60" to 84"	±58.6
66"	from 66" to 78"	±58.2
72"	from 72" to 78"	±58.1

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

SIDE	MAXIMUM DAY LIGHT OPENING (D.L.O.) Formula at Vertical & Horizontal Mullion	D.L.O. Formula at Jamb, Head & Sill Frame
MAX. D.L.O. (SHORT SIDES)	"a" - 4.00"	"a" - 4.00"
MAX. D.L.O. (LONG SIDES)	"b" - 4.00"	"b" - 4.00"



FLORIDA BUILDING CODE (High & Non High Velocity Hurricane Zone)

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TILTECO INC.

TILIT TESTING & ENGINEERING COMPANY

8305 NW 26th St., Ste. 205, Virginia Gardens, FL 33180

Phone: 1 (800) 711-1155 Fax: 1 (305) 711-1531

e-mail: tilteco@tilteco.com

EB 0008710

WALTER A. TILIT JR. P.E.

FLORIDA LIC. # 44187

SERIES FG-3000 STOREFRONT HIGH DESIGN PRESSURE

W/ NON IMPACT INSULATED MONOLITHIC TEMPERED GLASS

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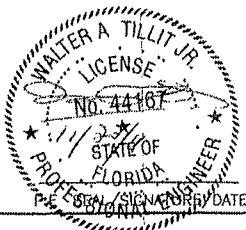
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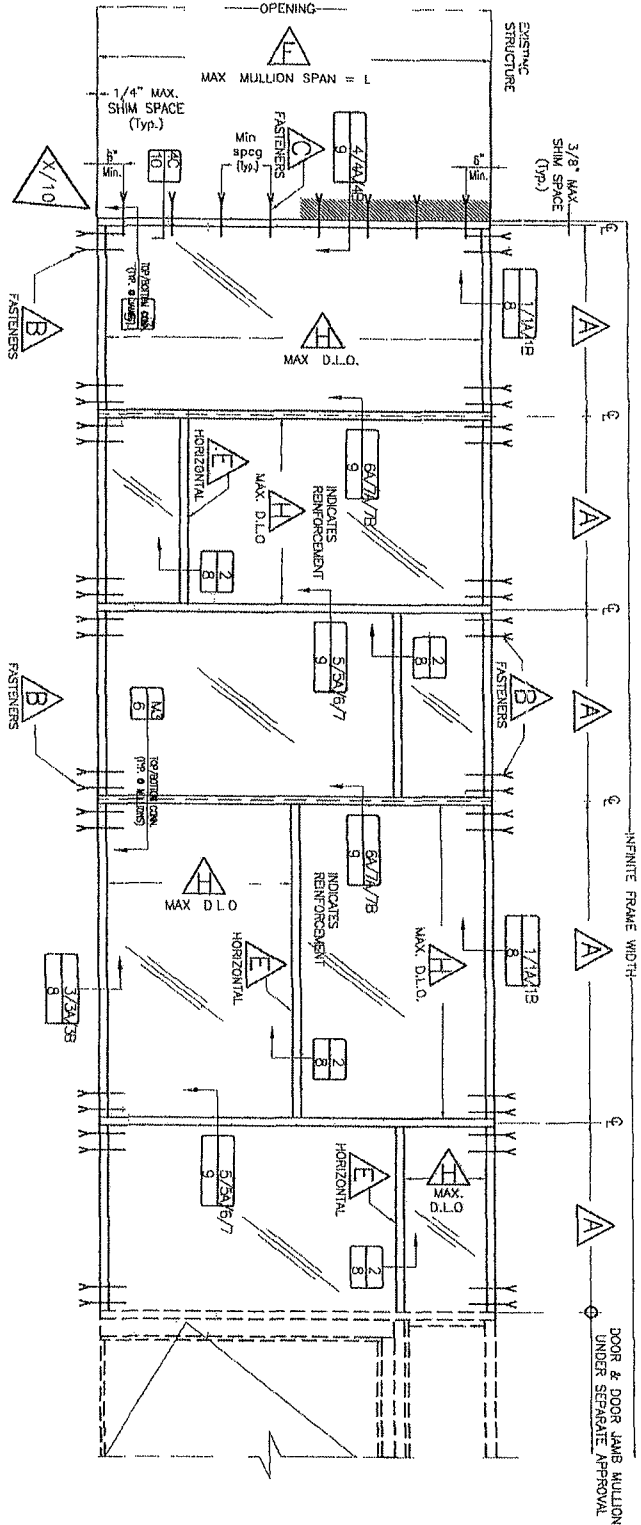
11/30/11 DATE

11 199 DRAWING No

SHEET 3 OF 10

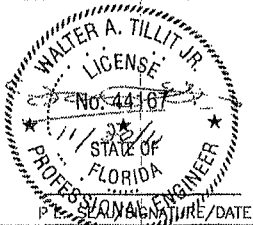


ELEVATION FOR SERIES FG-3000 STOREFRONT HIGH DESIGN PRESSURE



FOOT NOTES:

- A** FOR MAXIMUM MULLION SPACING ON CENTERS SEE SHEET 5
- B** FOR MULLIONS HEAD AND SILL FASTENERS QUANTITY TYPES AND SPECS SEE SHEET 6
- C** FOR JAMB FASTENERS SPACING TYPES AND SPECS SEE SHEET 10
- E** USE OF HORIZONTAL (SEE SECTION 2/8) LIMITED BY SCHEDULE ON SHEET 7
- F** FOR MAXIMUM MULLION SPAN SEE SHEET 5
- FOR GLAZING DETAILS AND GLASS SCHEDULE SEE SHEET 3
- H** FOR MAXIMUM D.L.O. SEE SCHEDULE ON SHEET 3



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TILTECO INC.
TILLIT TESTING & ENGINEERING COMPANY
8355 BLVD, 3RD FL, SUITE 200, VERO BEACH, FL 33565
Phone: (888) 711-1530 Fax: (888) 711-1531
e-mail: tillitco@aol.com
EB-0000710
WALTER A. TILLIT JR. P.E.
FLORIDA Lic. # 44167

**SERIES FG-3000 STOREFRONT
HIGH DESIGN PRESSURE**
1/2" NON-IMPACT INSULATED MONOLITHIC-TEMPERED GLASS



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1	D.L.O. 10-025	11/30/11	2		

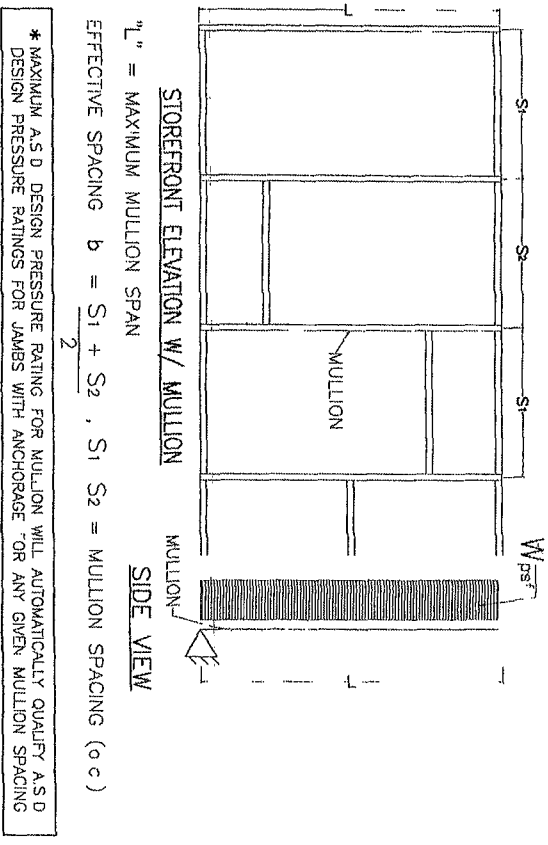
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11/30/11
DATE
11-199
DRAWING No
SHEET 4 OF 10

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

MAXIMUM ASD DESIGN PRESSURE RATING (psf)	EFFECTIVE SPACING "b" (in)	MAXIMUM MULLION SPAN "L" (ft)					
		CASE 1 M-1	CASE 2 M-2	CASE 3 M-3	CASE 4 M-4	CASE 5 M-5	CASE 6 M-6
± 40.0	3'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"
	3'-6"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"
	4'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"
	4'-6"	7'-1"	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"
	5'-0"	6'-5"	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"
	5'-6"	5'-10"	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"
± 45.0	3'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"
	3'-6"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"
	4'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"
	4'-6"	7'-1"	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"
	5'-0"	6'-5"	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"
	5'-6"	5'-10"	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"
± 50.0	3'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"
	3'-6"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"
	4'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"
	4'-6"	7'-1"	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"
	5'-0"	6'-5"	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"
	5'-6"	5'-10"	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"
± 55.0	3'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"
	3'-6"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"
	4'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"
	4'-6"	7'-1"	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"
	5'-0"	6'-5"	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"
	5'-6"	5'-10"	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"
± 60.0	3'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"
	3'-6"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"
	4'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"
	4'-6"	7'-1"	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"
	5'-0"	6'-5"	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"
	5'-6"	5'-10"	8'-0"	8'-0"	8'-0"	8'-0"	10'-0"

CASE DEFINITIONS

- CASE 1: UNREINFORCED STANDARD MULLION M-1 (SEE DET 5/9)
- CASE 2: REINFORCED STANDARD MULLION M-2 (SEE DET 5A/9)
- CASE 3: UNREINFORCED STANDARD MULLION M-3 (SEE DET 6/9)
- CASE 4: REINFORCED STANDARD MULLION M-4 (SEE DET 6A/9)
- CASE 5: UNREINFORCED STANDARD MULLION M-5 (SEE DET 7/9)
- CASE 6: REINFORCED STANDARD MULLION M-6 (SEE DET 7A/9)



* MAXIMUM ASD DESIGN PRESSURE RATING FOR MULLION WILL AUTOMATICALLY QUALIFY ASD DESIGN PRESSURE RATINGS FOR JAMBS WITH ANCHORAGE FOR ANY GIVEN MULLION SPACING

FLORIDA BUILDING CODE (High & Non High Velocity Hurricane Zone)

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TILTECO INC

TILLIT TESTING & ENGINEERING COMPANY
 6350 S.W. 38th St., Suite 300, Virginia Beach, VA 23146
 Phone 1 (305) 971-1530 Fax (305) 971-1531
 e-mail: tilt@tilteco.com
 EB-0006710
 WALTER A. TILLIT JR. P.E.
 FLORIDA Lic. # 44167

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HIGH DESIGN PRESSURE
 W/ NON-IMPACT-INSULATED-MONOLITHIC-TEMPERED-GLASS

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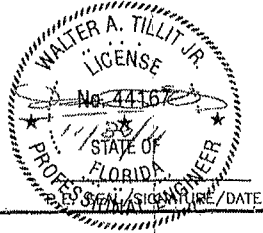
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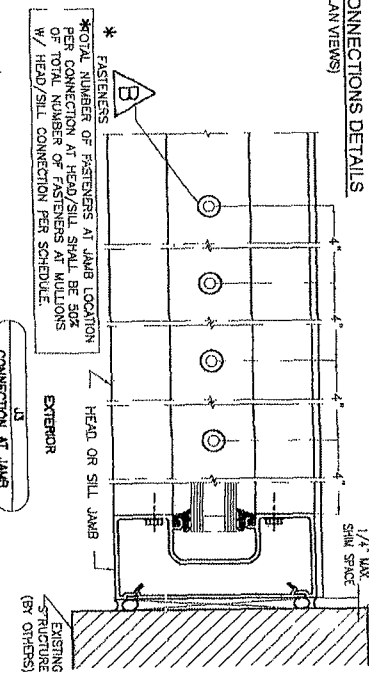
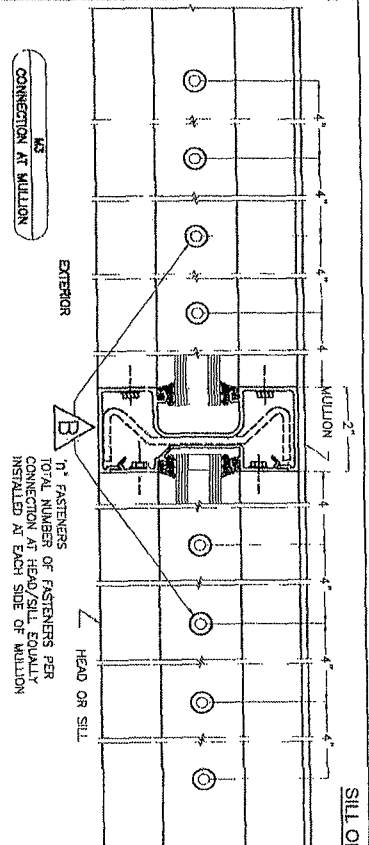
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L.O./A.O.

11/30/11
DATE

11-199
DRAWING No

SHEET 5 OF 10





MAXIMUM A.S.D. DESIGN PRESSURE RATING SCHEDULE FOR MULLIONS W/ HEAD/SILL CONNECTIONS *

MAXIMUM MULLION SPACING	EFFECTIVE SPACING	MAXIMUM A.S.D. DESIGN PRESSURE RATING (psf)											
		FOIRED CONCRETE SUBSTRATE				WOOD SUBSTRATE 1 1/2" MIN. THK.				STEEL SUBSTRATE 1/8" MIN. THK.			
		FASTENER TYPE A (1/4")		FASTENER TYPE B (1/4")		FASTENER TYPE B' (3/16")		FASTENER TYPE C (1/4")		FASTENER TYPE C' (1/4")		FASTENER TYPE C' (1/4")	
3'-0"	3'-0"	n=4	n=6	n=4	n=6	n=4	n=6	n=4	n=6	n=4	n=6	n=4	n=6
3'-6"	3'-6"	600	600	39.4	39.1	600	600	600	600	600	600	600	600
4'-0"	4'-0"	600	600	33.8	33.7	600	600	600	600	600	600	600	600
4'-6"	4'-6"	600	600	29.5	29.5	600	600	600	600	600	600	600	600
5'-0"	5'-0"	600	600	26.3	26.3	600	600	600	600	600	600	600	600
5'-6"	5'-6"	600	600	23.6	23.6	600	600	600	600	600	600	600	600
6'-0"	6'-0"	600	600	21.5	21.5	600	600	600	600	600	600	600	600
6'-6"	6'-6"	600	600	19.7	19.7	600	600	600	600	600	600	600	600
7'-0"	7'-0"	600	600	17.7	17.7	600	600	600	600	600	600	600	600
7'-6"	7'-6"	600	600	16.0	16.0	600	600	600	600	600	600	600	600
8'-0"	8'-0"	600	600	14.6	14.6	600	600	600	600	600	600	600	600
8'-6"	8'-6"	600	600	13.3	13.3	600	600	600	600	600	600	600	600
9'-0"	9'-0"	600	600	12.1	12.1	600	600	600	600	600	600	600	600
9'-6"	9'-6"	600	600	11.0	11.0	600	600	600	600	600	600	600	600
10'-0"	10'-0"	600	600	10.0	10.0	600	600	600	600	600	600	600	600
10'-6"	10'-6"	600	600	9.1	9.1	600	600	600	600	600	600	600	600
11'-0"	11'-0"	600	600	8.3	8.3	600	600	600	600	600	600	600	600
11'-6"	11'-6"	600	600	7.6	7.6	600	600	600	600	600	600	600	600
12'-0"	12'-0"	600	600	7.0	7.0	600	600	600	600	600	600	600	600
12'-6"	12'-6"	600	600	6.5	6.5	600	600	600	600	600	600	600	600
13'-0"	13'-0"	600	600	6.0	6.0	600	600	600	600	600	600	600	600
13'-6"	13'-6"	600	600	5.6	5.6	600	600	600	600	600	600	600	600
14'-0"	14'-0"	600	600	5.2	5.2	600	600	600	600	600	600	600	600
14'-6"	14'-6"	600	600	4.9	4.9	600	600	600	600	600	600	600	600
15'-0"	15'-0"	600	600	4.6	4.6	600	600	600	600	600	600	600	600
15'-6"	15'-6"	600	600	4.3	4.3	600	600	600	600	600	600	600	600
16'-0"	16'-0"	600	600	4.1	4.1	600	600	600	600	600	600	600	600
16'-6"	16'-6"	600	600	3.9	3.9	600	600	600	600	600	600	600	600
17'-0"	17'-0"	600	600	3.7	3.7	600	600	600	600	600	600	600	600
17'-6"	17'-6"	600	600	3.5	3.5	600	600	600	600	600	600	600	600
18'-0"	18'-0"	600	600	3.3	3.3	600	600	600	600	600	600	600	600
18'-6"	18'-6"	600	600	3.2	3.2	600	600	600	600	600	600	600	600
19'-0"	19'-0"	600	600	3.0	3.0	600	600	600	600	600	600	600	600
19'-6"	19'-6"	600	600	2.9	2.9	600	600	600	600	600	600	600	600
20'-0"	20'-0"	600	600	2.8	2.8	600	600	600	600	600	600	600	600
20'-6"	20'-6"	600	600	2.7	2.7	600	600	600	600	600	600	600	600
21'-0"	21'-0"	600	600	2.6	2.6	600	600	600	600	600	600	600	600
21'-6"	21'-6"	600	600	2.5	2.5	600	600	600	600	600	600	600	600
22'-0"	22'-0"	600	600	2.4	2.4	600	600	600	600	600	600	600	600
22'-6"	22'-6"	600	600	2.3	2.3	600	600	600	600	600	600	600	600
23'-0"	23'-0"	600	600	2.2	2.2	600	600	600	600	600	600	600	600
23'-6"	23'-6"	600	600	2.1	2.1	600	600	600	600	600	600	600	600
24'-0"	24'-0"	600	600	2.0	2.0	600	600	600	600	600	600	600	600
24'-6"	24'-6"	600	600	1.9	1.9	600	600	600	600	600	600	600	600
25'-0"	25'-0"	600	600	1.8	1.8	600	600	600	600	600	600	600	600
25'-6"	25'-6"	600	600	1.7	1.7	600	600	600	600	600	600	600	600
26'-0"	26'-0"	600	600	1.6	1.6	600	600	600	600	600	600	600	600
26'-6"	26'-6"	600	600	1.5	1.5	600	600	600	600	600	600	600	600
27'-0"	27'-0"	600	600	1.4	1.4	600	600	600	600	600	600	600	600
27'-6"	27'-6"	600	600	1.3	1.3	600	600	600	600	600	600	600	600
28'-0"	28'-0"	600	600	1.2	1.2	600	600	600	600	600	600	600	600
28'-6"	28'-6"	600	600	1.1	1.1	600	600	600	600	600	600	600	600
29'-0"	29'-0"	600	600	1.0	1.0	600	600	600	600	600	600	600	600
29'-6"	29'-6"	600	600	0.9	0.9	600	600	600	600	600	600	600	600
30'-0"	30'-0"	600	600	0.8	0.8	600	600	600	600	600	600	600	600
30'-6"	30'-6"	600	600	0.7	0.7	600	600	600	600	600	600	600	600
31'-0"	31'-0"	600	600	0.6	0.6	600	600	600	600	600	600	600	600
31'-6"	31'-6"	600	600	0.5	0.5	600	600	600	600	600	600	600	600
32'-0"	32'-0"	600	600	0.4	0.4	600	600	600	600	600	600	600	600
32'-6"	32'-6"	600	600	0.3	0.3	600	600	600	600	600	600	600	600
33'-0"	33'-0"	600	600	0.2	0.2	600	600	600	600	600	600	600	600
33'-6"	33'-6"	600	600	0.1	0.1	600	600	600	600	600	600	600	600

- A - 1/4" ELCO FASTENING SYSTEM, LLC. UL TRACON ANCHOR**
W/ 3/4" MIN. EMBEDMENT INTO POURED CONCRETE
(Min. f_c = 2,750 psi) OR W/ 1 1/4" MIN. EMBEDMENT INTO
HOLLOW BLOCK (Min. f_m = 1,524 psi) & 1" MIN. EDGE
DISTANCE BEYOND ANY FINISH MATERIAL
- B - 1/4" ELCO FASTENING SYSTEM, LLC. UL TRACON ANCHOR**
W/ 1 1/2" MIN. PENETRATION INTO 2x WOOD BULK (G-0-55)
& 2" MIN. EDGE DISTANCE BEYOND ANY FINISH MATERIAL
- B' - 5/16" ELCO FASTENING SYSTEM, LLC. UL TRACON ANCHOR**
W/ 1 1/2" MIN. PENETRATION INTO 2x WOOD BULK (G-0-55)
& 1 5/8" MIN. EDGE DISTANCE BEYOND ANY FINISH MATERIAL
- C - 1/4" ELCO FASTENING SYSTEM, LLC. UL TRACON ANCHOR**
CUTTING SCREW TYPE "T" ZINC COATED, W/ MIN. F_y = 77 ksi, F_u = 100
ksi TO 1/8" MIN. THK. ASTM A-36 STEEL & 1" MIN. EDGE DISTANCE.

FLORIDA BUILDING CODE (High & Non High Velocity Hurricane Zone)

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TILLIT TESTING & ENGINEERING COMPANY
3155 N.W. 36th St., Suite 200, Miramar, Florida 33181
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e-mail: tillit@tillitco.com
EO-0006719
WALTER A. TILLIT JR. P.E.
FLORIDA Lic # 44167

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HIGH DESIGN PRESSURE
W/ NON-IMPACT INSULATED MONOLITHIC TEMPERED GLASS

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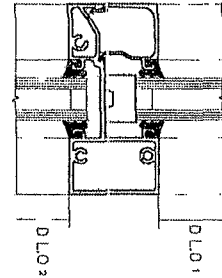
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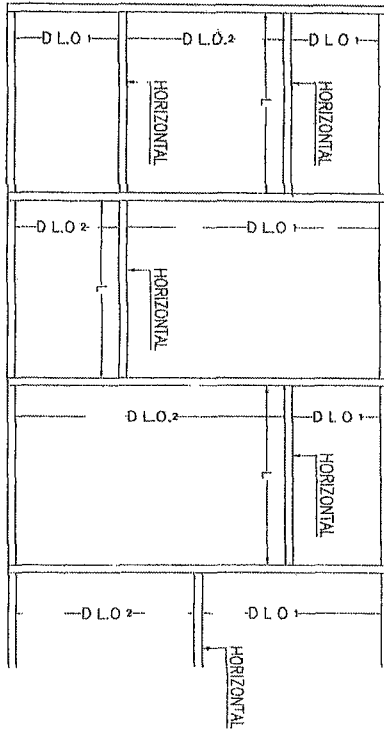
11/30/11 DATE

11-199 DRAWING No

SHEET 8 OF 10



SECTION AT HORIZONTAL



STOREFRONT ELEVATION W/ HORIZONTAL

"L" = MAXIMUM HORIZONTAL SPAN

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

MAXIMUM A.S.D. DESIGN PRESSURE RATING FOR HORIZONTAL
MAXIMUM HORIZONTAL SPAN "L" (FT) SCHEDULE
FOR A GIVEN A.S.D. DESIGN PRESSURE RATING (psf) AND
A GIVEN HORIZONTAL EFFECTIVE DAY LIGHT OPENING "D.L.O." (ft)

MAXIMUM A.S.D. DESIGN PRESSURE RATING (psf)	EFFECTIVE DAY LIGHT OPENING "D.L.O." (Ft)	MAXIMUM HORIZONTAL SPAN "L" (Ft)
± 40.0 OR LESS	2' - 0"	6' - 6"
	3' - 0"	6' - 6"
	3' - 6"	6' - 6"
	4' - 0"	6' - 6"
	4' - 6"	6' - 6"
± 45.0	2' - 0"	6' - 6"
	3' - 0"	6' - 6"
	3' - 6"	6' - 6"
	4' - 0"	6' - 6"
	4' - 6"	6' - 6"
± 50.0	2' - 0"	5' - 0"
	3' - 0"	5' - 0"
	3' - 6"	5' - 0"
	4' - 0"	5' - 0"
	4' - 6"	5' - 0"
± 55.0	2' - 0"	4' - 0"
	3' - 0"	4' - 0"
	3' - 6"	4' - 0"
	4' - 0"	4' - 0"
	4' - 6"	4' - 0"
± 60.0	2' - 0"	4' - 0"
	3' - 0"	4' - 0"
	3' - 6"	4' - 0"
	4' - 0"	4' - 0"
	4' - 6"	4' - 0"

FLORIDA BUILDING CODE (High & Non High Velocity Hurricane Zone)

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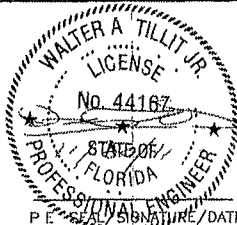
TILTECO INC.
TILLIT TESTING & ENGINEERING COMPANY
6305 N.W. 38th St., Ste. 300, VERO BEACH, FL 33464
Phone: (305) 771-1530 Fax: (305) 771-1531
e-mail: tillit@tillitpool.com
ED-0008719
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SHEET 7 OF 10



(SIDE VIEW) SCALE 3/8" = 1"

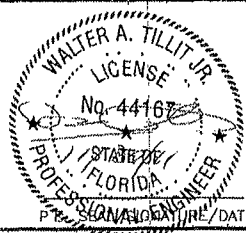


 FOR HEAD AND SILL FASTENERS QUANTITY,
TYPES AND SPECS SEE SHEET -6

USE OF HORIZONTAL (SEE SECTION 2)
LIMITED BY SCHEDULE ON SHEET 7

FOR GLAZING DETAILS AND GLASS SCHEDULES
SEE SHEET 3

FOR MAXIMUM D.L.O SEE SCHEDULE ON
SHEET 3



FLORIDA BUILDING CODE (High & Non High Velocity Hurricane Zone)

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e-mail: tilteco@aol.com
EB-D0068719
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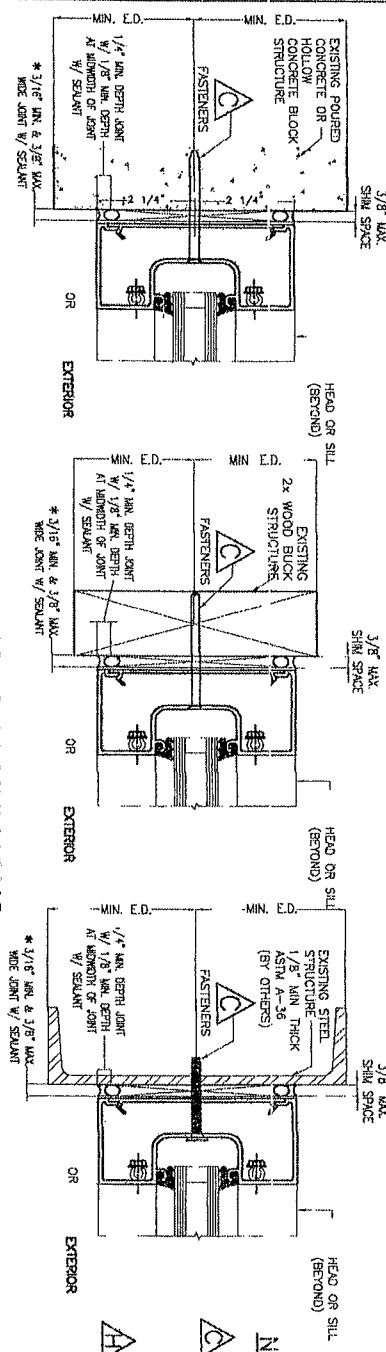
SHEET 8 OF 1

SECTIONS AT JAMBS

TO POURED CONCRETE OR HOLLOW CONCRETE BLOCK STRUCTURE

TO WOOD STRUCTURE

TO STEEL STRUCTURE

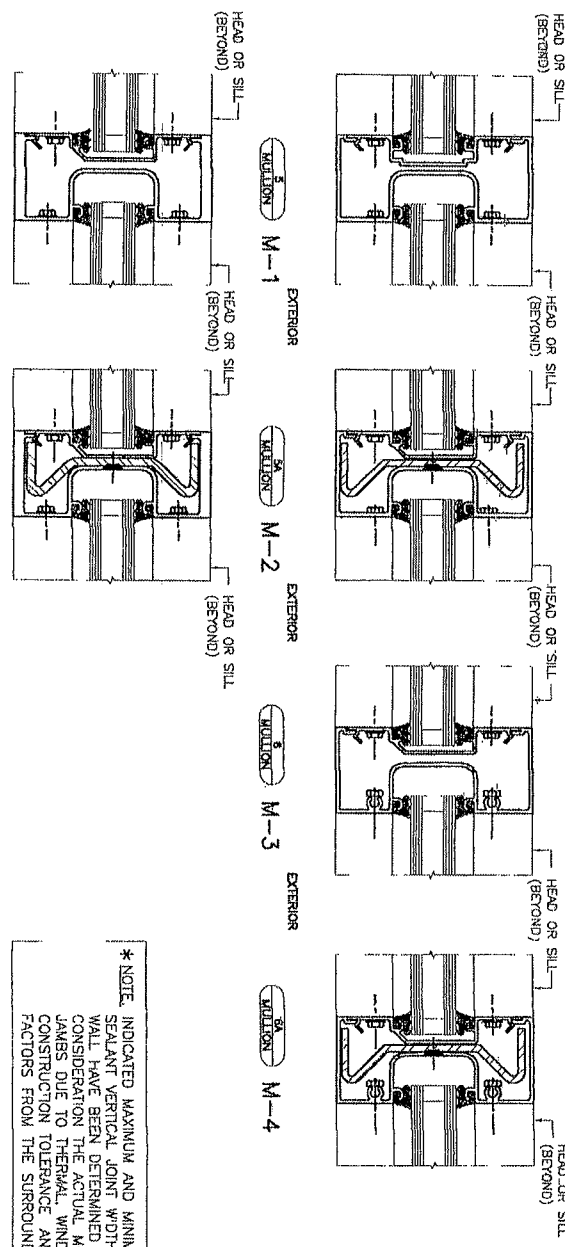


NOTES.

- FOR JAMB FASTENERS SPACING, TYPES AND SPECS SEE SHEET 10
- FOR GLAZING DETAILS AND SCHEDULE SEE SHEET 3
- FOR MAXIMUM D.L.O. SEE SCHEDULE ON SHEET 3

SECTIONS AT MULLIONS

SCALE 3/8\"/>

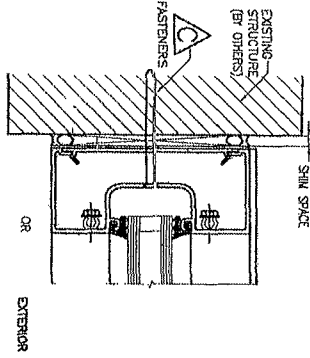


* NOTE. INDICATED MAXIMUM AND MINIMUM VALUES FOR SPECIFIED SEALANT VERTICAL JOINT WIDTH AT JAMBS CONNECTED TO WALL HAVE BEEN DETERMINED ONLY TAKING INTO CONSIDERATION THE ACTUAL MOVEMENT OF GLASS WALL AT JAMBS DUE TO THERMAL WIND AND ITS OWN CONSTRUCTION TOLERANCE AND NOT PERFORMANCE FACTORS FROM THE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

	FLORIDA BUILDING CODE (High & Non High Velocity Hurricane Zone)		SERIES FG-3000 STOREFRONT HIGH DESIGN PRESSURE W/ NON-IMPACT INSULATED MONOLITHIC TEMPERED GLASS		DRAWN BY: L.G./A.G.											
					11/30/11 DATE											
WALTER A. TILLIT JR. P.E. FLORIDA LIC. # 44167		<table border="1"> <thead> <tr> <th>REV.</th> <th>DESCRIPTION</th> <th>DATE</th> <th>REV.</th> <th>DESCRIPTION</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>OLD 10-025</td> <td>01/29/11</td> <td>2</td> <td></td> <td></td> </tr> </tbody> </table>		REV.	DESCRIPTION	DATE	REV.	DESCRIPTION	DATE	1	OLD 10-025	01/29/11	2			11-199 DRAWING No
REV.	DESCRIPTION	DATE	REV.	DESCRIPTION	DATE											
1	OLD 10-025	01/29/11	2													
				SHEET 9 OF 10												

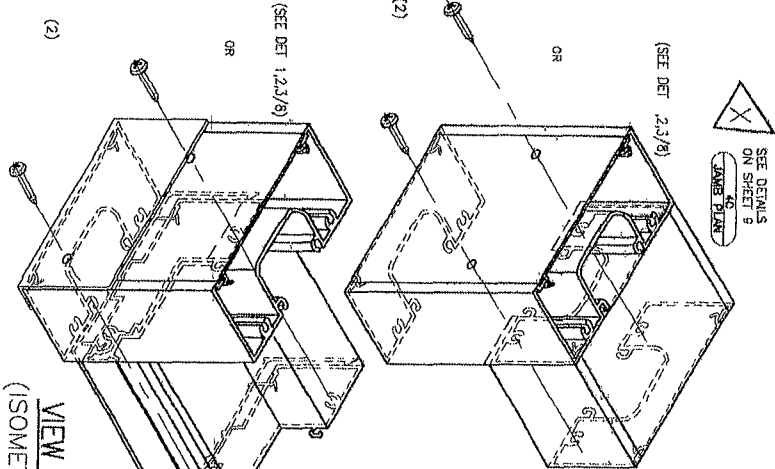
CORNER DETAIL AT JAMB

(PLAN VIEW) SCALE 3/8" = 1"
3/8" MAX
MIN. SPACE



MAXIMUM A S D DESIGN PRESSURE RATING & CORRESPONDING MAXIMUM FASTENERS SPACING SCHEDULE FOR JAMB CONNECTION

MAXIMUM A.S.D. DESIGN PRESSURE RATING (psf)	MULTIPLY SPACING	JAMB FASTENERS SPACING "Spac" (in o.c.)			
		POURED CONCRETE OR HOLLOW CONCRETE BLOCK SUBSTRATES	WOOD 1 1/2" MIN. THK. SUBSTRATE	STEEL 1/8" MIN. THK. SUBSTRATE	
		A (1/4" ø)	B (1/4" ø)	B' (5/16" ø)	C (1/4" ø)
35.0	3 - 0"	12	12	12	12
	4 - 0"	12	12	12	12
	5 - 0"	12	12	12	12
	6 - 0"	12	12	12	12
	8 - 0"	12	12	12	12
	10 - 0"	12	12	12	12
40.0	3 - 0"	12	12	12	12
	4 - 0"	12	12	12	12
	5 - 0"	12	12	12	12
	6 - 0"	12	12	12	12
	8 - 0"	12	10 1/2	12	12
	10 - 0"	12	10 1/2	12	12
45.0	3 - 0"	12	12	12	12
	4 - 0"	12	12	12	12
	5 - 0"	12	12	12	12
	6 - 0"	12	12	12	12
	8 - 0"	12	10 1/2	12	12
	10 - 0"	12	10 1/2	12	12
50.0	3 - 0"	12	12	12	12
	4 - 0"	12	12	12	12
	5 - 0"	12	12	12	12
	6 - 0"	12	12	12	12
	8 - 0"	12	8 1/2	12	12
	10 - 0"	12	10	12	12
55.0	3 - 0"	12	12	12	12
	4 - 0"	12	12	12	12
	5 - 0"	12	12	12	12
	6 - 0"	12	12	12	12
	8 - 0"	12	11	12	12
	10 - 0"	12	12	12	12
60.0	3 - 0"	12	12	12	12
	4 - 0"	12	12	12	12
	5 - 0"	12	12	12	12
	6 - 0"	12	12	12	12
	8 - 0"	12	11 1/2	12	12
	10 - 0"	12	12	12	12



VIEW "X"
(ISOMETRIC)

FASTENERS TYPES (SEE SPACING SCHEDULE)

- A 1/4" ø ELCO FASTENING SYSTEM, L.L.C. ULTRACON ANCHOR
W/ 1 3/4" MIN. EMBEDMENT INTO POURED CONCRETE
MIN. 5" x 2 3/4" (6") OR W/ 1 1/2" MIN. EMBEDMENT INTO
HOLLOW BLOCK (MIN. 7" x 1 1/2" (6") & 1" MIN. EDGE
DISTANCE BEYOND ANY FINISH MATERIAL
- B 1/4" ø ELCO FASTENING SYSTEM, L.L.C. ULTRACON ANCHOR
W/ 1 1/2" MIN. EMBEDMENT INTO 2" x WOOD BLOCK (6" x 6")
& 2" MIN. EDGE DISTANCE BEYOND ANY FINISH MATERIAL
- B' 5/16" ø ELCO FASTENING SYSTEM, L.L.C. ULTRACON ANCHOR
W/ 1 1/2" MIN. EMBEDMENT INTO 2" x WOOD BLOCK (6" x 6")
& 1 5/8" MIN. EDGE DISTANCE BEYOND ANY FINISH MATERIAL
- C 1/4" ø-20 SLOTTED INDENTED HEX WASHER HEAD THREAD
CUTTING SCREW TYPE "T" ZINC COATED, W/ MIN. P.Y. = 77ksi, P.U. = 108
ksi TO 1/8" MIN. THK. ASTM A-36 STEEL & 1" MIN. EDGE DISTANCE.

FLORIDA BUILDING CODE (High & Non High Velocity Hurricane Zone)

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TILTECO inc

TILLIT TESTING & ENGINEERING COMPANY
8355 N.W. 28th St., 2nd Fl., Fort Lauderdale, FL 33316
Phone: (954) 711-1330 Fax: (954) 711-1331
e-mail: Tiltco@aol.com
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1	OLD 10-025	11/30/11	2		

DRAWN BY:
L.O./A.O.

11/30/11
DATE

11-199
DRAWING No.

SHEET 10 OF 10

WALTER A. TILLIT JR.
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No. 44167
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
ELECTRICAL ENGINEERING
DATE