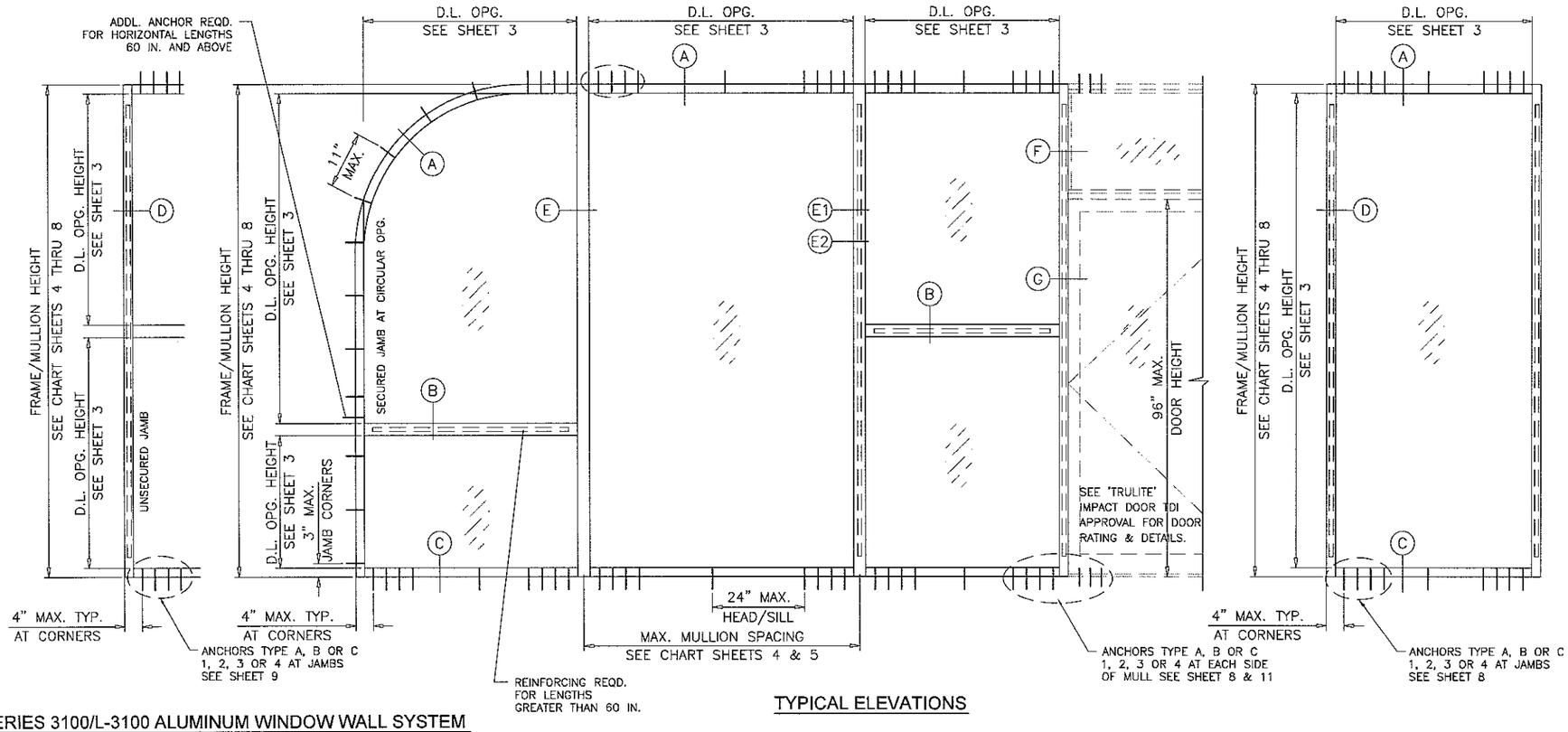

TYPICAL ELEVATIONS

SERIES 3100/L-3100 ALUMINUM WINDOW WALL SYSTEM

- WINDOW WALL SYSTEM IS RATED FOR LARGE & SMALL MISSILE IMPACT. SHUTTERS ARE NOT REQUIRED.
- THIS SYSTEM MAY BE USED IN CONJUNCTION WITH TEXAS DEPARTMENT OF INSURANCE APPROVED ENTRANCE DOORS.
- CODE REQUIREMENTS FOR SAFEGUARDS MUST BE OBSERVED.

- THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2006 INTERNATIONAL BUILDING CODE AND 2006 INTERNATIONAL RESIDENTIAL CODE.
- WOOD BUCKS BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE.
- ANCHORS SHALL BE AS LISTED, SPACED AS SHOWN ON DETAILS, ANCHORS EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.
- ANCHORING OR LOADING CONDITIONS NOT SHOWN IN THESE DETAILS ARE NOT PART OF THIS APPROVAL.
- A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.
- MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 2006 INTERNATIONAL BUILDING CODE AND 2006 INTERNATIONAL RESIDENTIAL CODE SECTION AS APPLICABLE.

INSTRUCTIONS:

USE CHARTS AS FOLLOWS.

STEP 1: DETERMINE DESIGN WIND LOAD REQUIREMENTS BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE USING APPLICABLE ASCE 7 STANDARD.

STEP 2: SEE CHARTS ON SHEET 3 FOR DESIGN LOAD CAPACITY OF DESIRED GLASS SIZE BASED ON APPLICABLE WIND DURATION.

STEP 3: CHECK MULLION AND JAMB CAPACITY FOR A GIVEN SPACING AND HEIGHT USING CHARTS ON SHEET 4 THRU 7. THE CAPACITY SHOULD EXCEED THE DESIGN LOAD.

STEP 4: USING CHART ON SHEETS 8 & 11 SELECT ANCHOR OPTION WITH DESIGN RATING MORE THAN DESIGN LOAD SPECIFIED IN STEP 1 ABOVE.

STEP 5: THE LOWEST VALUE RESULTING FROM STEPS 2, 3 AND 4 SHALL APPLY TO ENTIRE SYSTEM.

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http://www.trulite.com
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DEERFIELD BEACH, FL 33441
p. 800-432-8132 | f. 954-724-2083

PRODUCT:

Resistor
3100
STOREFRONT WALL
(LARGE MISSILE IMPACT)

Resistor PRODUCT SERIES

REVN	DATE/REMARKS
REV. 1	7/15/15 PER TDI COMMENTS

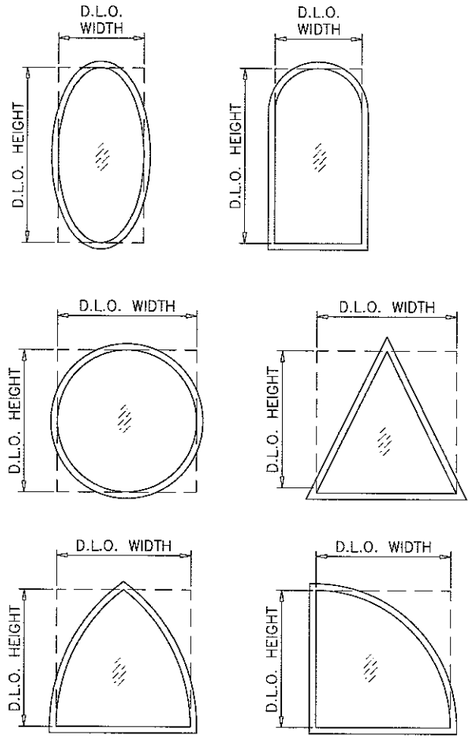
ENGINEER:
MCY ENGINEERING, INC.
GLAZING CONSULTANT
8501 SW 124th Ave, Ste. 205A
MIAMI, FL 33183
P: 305-271-0117 F: 305-573-5063
Email: MCY.Engineering@att.net
www.MCYEngineering.com

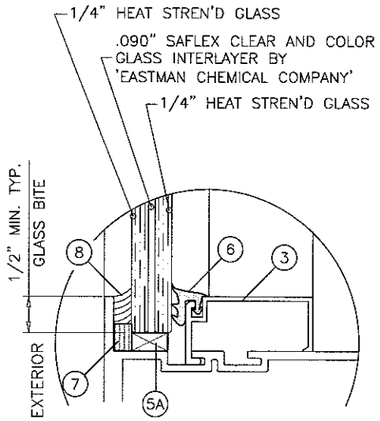
STAMP:

JOO P. PANG, P.E.
TEXAS REGISTRATION
PE #90246
JOO PIN PANG
90246
LICENSED
PROFESSIONAL ENGINEER
07/21/15

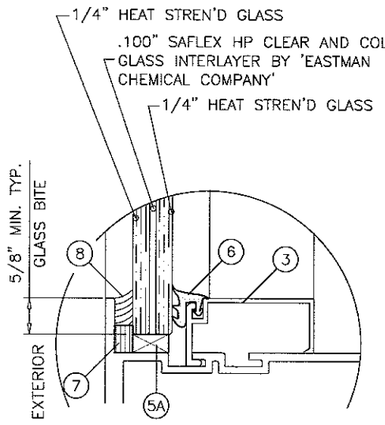
PRODUCT CONTROL APPROVAL:

DRAWN: T.G.	DRAWING No:
DATE: 5-6-14	1 OF 12
DWG: TAD14-02	

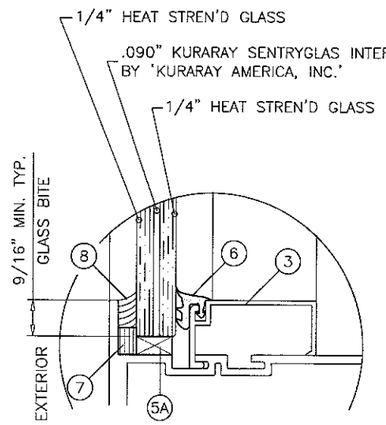




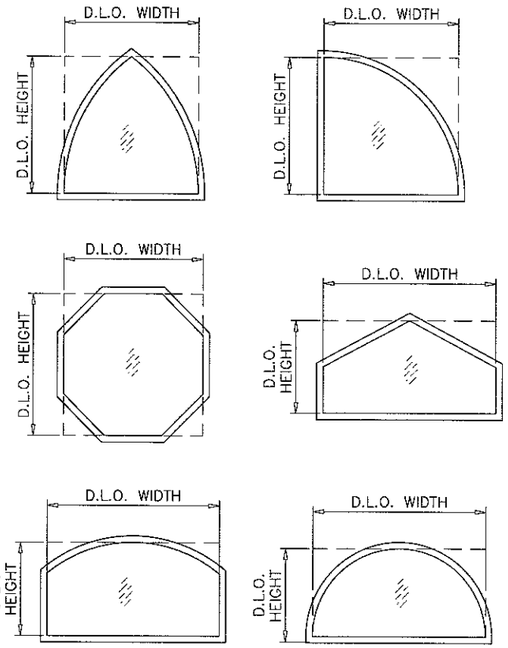
GLASS TYPE 'A'
9/16" NOMINAL OVERALL

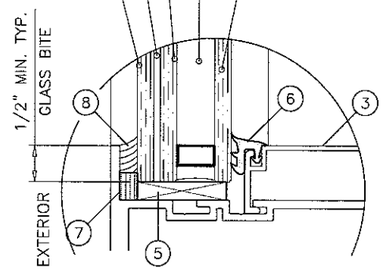


GLASS TYPE 'B'
9/16" NOMINAL OVERALL

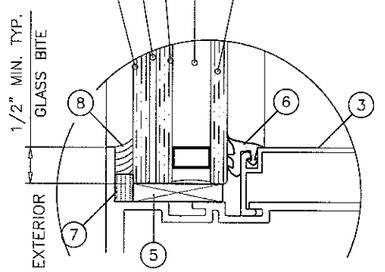


GLASS TYPE 'C'
9/16" NOMINAL OVERALL





GLASS TYPE 'A1'
1-5/16" NOMINAL OVERALL



GLASS TYPE 'B1'
1-5/16" NOMINAL OVERALL

ALLOWABLE LOADS FOR ALTERNATE SHAPES AS SHOWN ABOVE OR SIMILAR CAN BE VERIFIED BY INSCRIBING PICTURE WINDOW SHAPE WITHIN SQUARE OR RECTANGLE AS SHOWN IN DOTTED LINES AND OBTAINING ALLOWABLE LOADS FROM THOSE SHAPES. SINGLE LITES MAY BE INSTALLED VERTICALLY AS SHOWN ABOVE OR HORIZONTALLY.

FOR ALTERNATE SHAPES LIMIT MAX. LOADS TO ±90.0 PSF

SEE SHEET 3 FOR D.L.O. WIDTHS AND HEIGHTS.

USE ANCHOR TYPE 'D' AT 3" FROM FRAME ENDS AND 12" O.C. MAX. SPACING.

GLAZING OPTION

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PRODUCT:

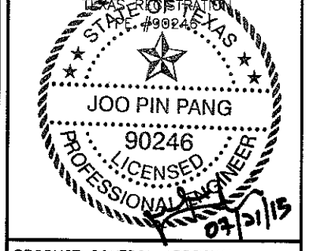
Resistor
3100
STOREFRONT WALL
(LARGE MISSILE IMPACT)

Resistor
PRODUCT SERIES

REVN	DATE/REMARKS
REV. 1	7/15/15 PER TDI COMMENTS

ENGINEER:
MCY ENGINEERING, INC.
GLAZING CONSULTANT
8501 SW 124th Ave, Ste. 205A
MIAMI, FL 33183
P: 305-271-0117 F: 305-573-5063
Email: MCY.Engineering@att.net
www.MCYEngineering.com

STAMP:



PRODUCT CONTROL APPROVAL:

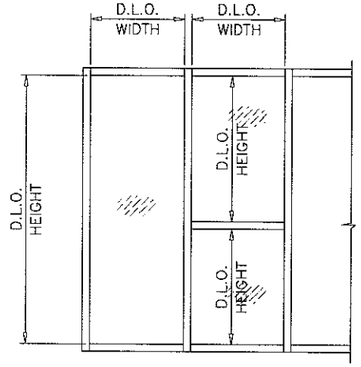
DRAWN: T.G.	DRAWING No:
DATE: 5-6-14	2 OF 12
DWG: TAD14-02	

GLASS LOAD CAPACITY – PSF						
NOMINAL DIMS.		GLASS 'A'	GLASS 'A1'	GLASS 'B'	GLASS 'B1'	GLASS 'C'
D.L.O. WIDTH	D.L.O. HEIGHT	EXT. (+) INT. (–)	EXT. (+) INT. (–)	EXT. (+) INT. (–)	EXT. (+) INT. (–)	EXT. (+) INT. (–)
20"	68"	70.0	80.0	100.0	100.0	100.0
26"		70.0	80.0	100.0	100.0	100.0
32"		70.0	80.0	100.0	100.0	100.0
38"		70.0	80.0	100.0	100.0	100.0
44"		70.0	80.0	100.0	100.0	100.0
50"		70.0	80.0	100.0	100.0	100.0
56"		70.0	80.0	100.0	100.0	100.0
62"		70.0	80.0	100.0	100.0	100.0
68"		70.0	–	100.0	100.0	100.0
72"		70.0	–	100.0	100.0	100.0
20"	74"	70.0	80.0	100.0	100.0	100.0
26"		70.0	80.0	100.0	100.0	100.0
32"		70.0	80.0	100.0	100.0	100.0
38"		70.0	80.0	100.0	100.0	100.0
44"		70.0	80.0	100.0	100.0	100.0
50"		70.0	80.0	100.0	100.0	100.0
56"		70.0	80.0	100.0	100.0	100.0
62"		70.0	–	100.0	100.0	100.0
68"		–	–	100.0	100.0	100.0
72"		–	–	100.0	100.0	100.0
20"	80"	70.0	80.0	100.0	100.0	100.0
26"		70.0	80.0	100.0	100.0	100.0
32"		70.0	80.0	100.0	100.0	100.0
38"		70.0	80.0	100.0	100.0	100.0
44"		70.0	80.0	100.0	100.0	100.0
50"		70.0	80.0	100.0	100.0	100.0
56"		70.0	–	100.0	100.0	100.0
62"		–	–	100.0	100.0	100.0
68"		–	–	100.0	100.0	100.0
72"		–	–	100.0	100.0	100.0
20"	86"	70.0	80.0	100.0	100.0	100.0
26"		70.0	80.0	100.0	100.0	100.0
32"		70.0	80.0	100.0	100.0	100.0
38"		70.0	80.0	100.0	100.0	100.0
44"		70.0	80.0	100.0	100.0	100.0
50"		70.0	–	100.0	100.0	100.0
56"		70.0	–	100.0	100.0	100.0
62"		–	–	100.0	100.0	100.0
68"		–	–	100.0	100.0	100.0
72"		–	–	100.0	100.0	100.0
20"	92"	70.0	80.0	100.0	100.0	100.0
26"		70.0	80.0	100.0	100.0	100.0
32"		70.0	80.0	100.0	100.0	100.0
38"		70.0	80.0	100.0	100.0	100.0
44"		70.0	80.0	100.0	100.0	100.0
50"		70.0	–	100.0	100.0	100.0
56"		–	–	100.0	100.0	100.0
62"		–	–	100.0	100.0	100.0
68"		–	–	100.0	100.0	100.0
72"		–	–	100.0	100.0	–

GLASS LOAD CAPACITY – PSF						
NOMINAL DIMS.		GLASS 'A'	GLASS 'A1'	GLASS 'B'	GLASS 'B1'	GLASS 'C'
D.L.O. WIDTH	D.L.O. HEIGHT	EXT. (+) INT. (–)	EXT. (+) INT. (–)	EXT. (+) INT. (–)	EXT. (+) INT. (–)	EXT. (+) INT. (–)
20"	98"	70.0	80.0	100.0	100.0	100.0
26"		70.0	80.0	100.0	100.0	100.0
32"		70.0	80.0	100.0	100.0	100.0
38"		70.0	80.0	100.0	100.0	100.0
44"		70.0	–	100.0	100.0	100.0
50"		–	–	100.0	100.0	100.0
56"		–	–	100.0	100.0	100.0
62"		–	–	100.0	100.0	100.0
68"		–	–	100.0	100.0	–
20"	104"	70.0	80.0	100.0	100.0	100.0
26"		70.0	80.0	100.0	100.0	100.0
32"		70.0	80.0	100.0	100.0	100.0
38"		70.0	80.0	100.0	100.0	100.0
44"		70.0	–	100.0	100.0	100.0
50"		–	–	100.0	100.0	100.0
56"		–	–	100.0	100.0	100.0
62"		–	–	100.0	100.0	100.0
20"	110"	70.0	80.0	100.0	100.0	100.0
26"		70.0	80.0	100.0	100.0	100.0
32"		70.0	80.0	100.0	100.0	100.0
38"		70.0	80.0	100.0	100.0	100.0
44"		70.0	–	100.0	100.0	100.0
50"		–	–	100.0	100.0	100.0
56"		–	–	100.0	100.0	100.0
62"		–	–	97.5	100.0	–
20"	116"	70.0	80.0	100.0	100.0	100.0
26"		70.0	80.0	100.0	100.0	100.0
32"		70.0	80.0	100.0	100.0	100.0
38"		70.0	–	100.0	100.0	100.0
44"		–	–	100.0	100.0	100.0
50"		–	–	100.0	100.0	100.0
56"		–	–	97.9	100.0	97.9
58–3/4"		–	–	94.6	100.0	–
20"	122"	70.0	80.0	100.0	100.0	100.0
26"		70.0	80.0	100.0	100.0	100.0
32"		70.0	80.0	100.0	100.0	100.0
38"		70.0	–	100.0	100.0	100.0
44"		–	–	100.0	100.0	100.0
50"		–	–	100.0	100.0	100.0
20"	128"	70.0	80.0	100.0	100.0	100.0
26"		70.0	80.0	100.0	100.0	100.0
32"		70.0	80.0	100.0	100.0	100.0
38"		70.0	–	100.0	100.0	100.0
44"		–	–	100.0	100.0	100.0
50"		–	–	100.0	100.0	100.0

GLASS LOAD CAPACITY – PSF						
NOMINAL DIMS.		GLASS 'A'	GLASS 'A1'	GLASS 'B'	GLASS 'B1'	GLASS 'C'
D.L.O. WIDTH	D.L.O. HEIGHT	EXT. (+) INT. (–)	EXT. (+) INT. (–)	EXT. (+) INT. (–)	EXT. (+) INT. (–)	EXT. (+) INT. (–)
20"	134"	70.0	80.0	100.0	100.0	100.0
26"		70.0	80.0	100.0	100.0	100.0
32"		70.0	–	100.0	100.0	100.0
38"		–	–	100.0	100.0	100.0
44"		–	–	100.0	100.0	100.0
50"		–	–	99.8	100.0	–
20"	140"	70.0	80.0	100.0	100.0	100.0
26"		70.0	80.0	100.0	100.0	100.0
32"		70.0	–	100.0	100.0	100.0
38"		–	–	100.0	100.0	100.0
44"		–	–	100.0	100.0	100.0

NOTE:
GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300–09 (3 SEC. GUSTS)



STEP 2: GLASS LOAD TABLES

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PRODUCT:

Resistor
3100
STOREFRONT WALL
(LARGE MISSILE IMPACT)

Resistor
PRODUCT SERIES

REVN	DATE/REMARKS
REV. 1	7/15/15 PER TDI COMMENTS

ENGINEER:
MCY ENGINEERING, INC.
GLAZING CONSULTANT
8501 SW 124th Ave, Ste. 205A
MIAMI, FL 33183
P: 305-271-0117 F: 305-573-5063
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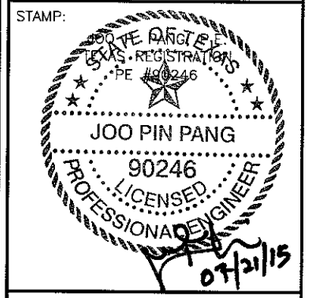


PRODUCT CONTROL APPROVAL:

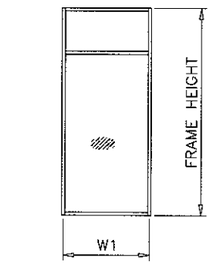
DRAWN: T.G.	DRAWING No:
DATE: 5–6–14	3 OF 12
DWG: TAD14–02	

JAMB/MULLION LOAD CAPACITY – PSF
WITH INTERMEDIATE HORIZONTALS

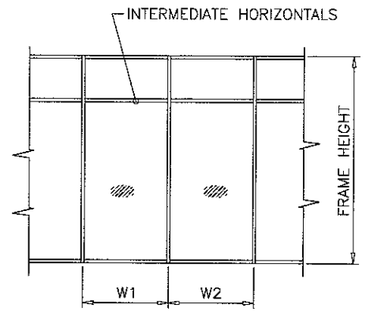
NOMINAL DIMS.		MULL 'M1'	JAMB 'J1' MULL 'M2'	JAMB 'J2' MULL 'M3'
WIDTH (W)	FRAME HEIGHT	EXT. (+) INT. (–)	EXT. (+) INT. (–)	EXT. (+) INT. (–)
24"	78"	80.0	100.0	100.0
30"		80.0	100.0	100.0
36"		80.0	100.0	100.0
42"		80.0	100.0	100.0
48"		80.0	100.0	100.0
54"		80.0	100.0	100.0
60"		80.0	100.0	100.0
66"		–	100.0	100.0
72"		–	100.0	100.0
24"	84"	80.0	100.0	100.0
30"		80.0	100.0	100.0
36"		80.0	100.0	100.0
42"		80.0	100.0	100.0
48"		80.0	100.0	100.0
54"		78.7	100.0	100.0
60"		70.8	100.0	100.0
66"		–	100.0	100.0
72"		–	93.4	93.9
24"	90"	80.0	100.0	100.0
30"		80.0	100.0	100.0
36"		80.0	100.0	100.0
42"		80.0	100.0	100.0
48"		76.4	100.0	100.0
54"		70.0	100.0	100.0
60"		–	96.5	100.0
66"		–	87.8	100.0
72"		–	80.5	100.0
24"	96"	80.0	100.0	100.0
30"		80.0	100.0	100.0
36"		80.0	100.0	100.0
42"		76.1	100.0	100.0
48"		66.6	100.0	100.0
54"		59.2	93.2	100.0
60"		–	83.9	100.0
66"		–	76.3	96.9
72"		–	69.9	88.8
24"	102"	–	100.0	100.0
30"		–	100.0	100.0
36"		–	100.0	100.0
42"		–	100.0	100.0
48"		–	91.9	100.0
54"		–	81.7	100.0
60"		–	73.5	94.4
66"		–	66.9	85.8
72"		–	61.3	78.65

JAMB/MULLION LOAD CAPACITY – PSF
WITH INTERMEDIATE HORIZONTALS

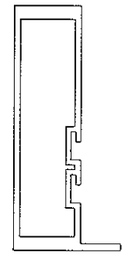
NOMINAL DIMS.		MULL 'M1'	JAMB 'J1' MULL 'M2'	JAMB 'J2' MULL 'M3'
WIDTH (W)	FRAME HEIGHT	EXT. (+) INT. (–)	EXT. (+) INT. (–)	EXT. (+) INT. (–)
24"	108"	–	100.0	100.0
30"		–	100.0	100.0
36"		–	100.0	100.0
42"		–	93.5	100.0
48"		–	81.8	100.0
54"		–	72.7	93.5
60"		–	65.5	84.2
66"		–	59.5	76.5
24"	114"	–	100.0	100.0
30"		–	100.0	100.0
36"		–	94.5	100.0
42"		–	81.0	100.0
48"		–	70.9	94.5
54"		–	63.0	84.0
60"		–	56.7	75.6
24"	120"	–	100.0	100.0
30"		–	97.3	100.0
36"		–	81.1	100.0
42"		–	69.5	97.4
48"		–	60.8	85.2
54"		–	54.0	60.0
60"		–	48.6	60.0
24"	126"	–	–	60.0
30"		–	–	60.0
36"		–	–	60.0
42"		–	–	60.0
48"		–	–	60.0
54"		–	–	60.0
24"	132"	–	–	60.0
30"		–	–	60.0
36"		–	–	60.0
42"		–	–	60.0
48"		–	–	60.0
24"	138"	–	–	60.0
30"		–	–	60.0
36"		–	–	60.0
42"		–	–	60.0
48"		–	–	60.0
24"	144"	–	–	60.0
30"		–	–	60.0
36"		–	–	60.0
42"		–	–	60.0
48"		–	–	59.2



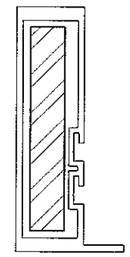
WIDTH (W) = W1 (JAMB)



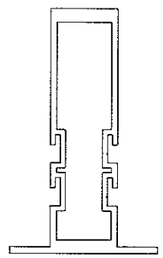
WIDTH (W) = $\frac{W1 + W2}{2}$



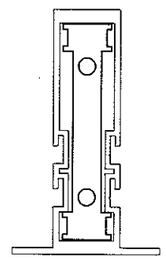
JAMB 'J1'



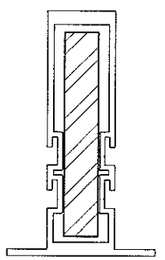
JAMB 'J2'
STEEL REINFORCED



MULLION 'M1'



MULLION 'M2'
ALUMINUM REINFORCED



MULLION 'M3'
STEEL REINFORCED

STEP 3: MULLION LOAD CAPACITIES

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p. 800-432-8132 | f. 954-724-2083

PRODUCT:

Resistor
3100
STOREFRONT WALL
(LARGE MISSILE IMPACT)

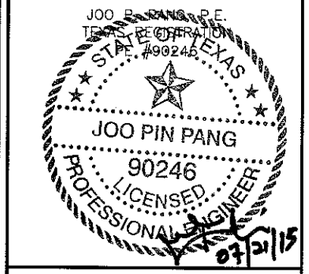
Resistor
PRODUCT SERIES

REVN	DATE/REMARKS
REV. 1	7/15/15 PER TDI COMMENTS

ENGINEER:

MCY ENGINEERING, INC.
GLAZING CONSULTANT
8501 SW 124th Ave, Ste. 205A
MIAMI, FL 33183
P: 305-271-0117 F: 305-573-5063
Email: MCY.Engineering@att.net
www.MCYEngineering.com

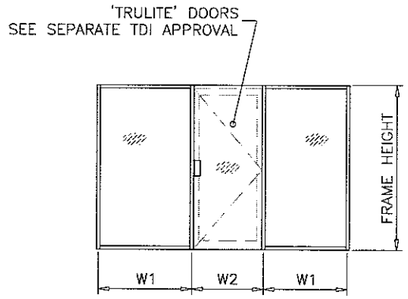
STAMP:



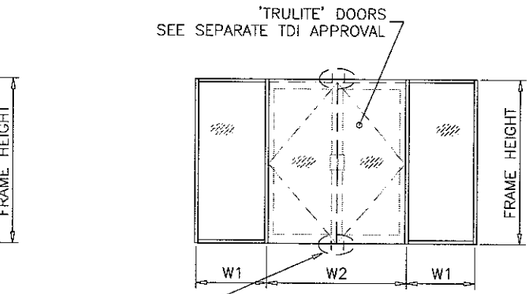
PRODUCT CONTROL APPROVAL:

DRAWN: T.G.	DRAWING No:
DATE: 5-6-14	**4 OF 12**
DWG: TAD14-02	

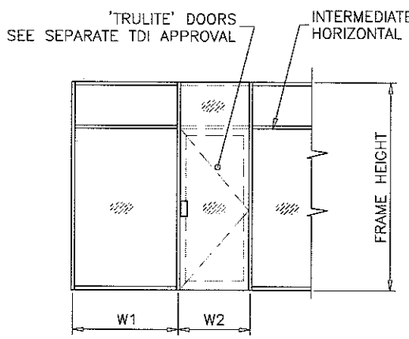
DOOR MULLION LOAD CAPACITY – PSF			
NOMINAL DIMS.		WITHOUT REINFORCING	WITH REINFORCING
WIDTH (W)	FRAME HEIGHT	EXT.(+) / INT.(–)	EXT.(+) / INT.(–)
30"	81–1/4"	87.0	87.0
36"		87.0	87.0
42"		87.0	87.0
48"		87.0	87.0
54"		–	87.0
60"		–	87.0
30"	85–1/4"	87.0	87.0
36"		87.0	87.0
42"		87.0	87.0
48"		81.0	87.0
54"		–	87.0
60"		–	87.0
30"	91–1/4"	87.0	87.0
36"		87.0	87.0
42"		80.4	87.0
48"		–	87.0
54"		–	87.0
60"		–	87.0
30"	97–1/4"	87.0	87.0
36"		81.4	87.0
42"		69.8	87.0
48"		–	87.0
54"		–	87.0
60"		–	79.9
30"	102"	–	87.0
36"		–	87.0
42"		–	87.0
48"		–	87.0
54"		–	79.0
60"		–	71.1
30"	108"	–	87.0
36"		–	87.0
42"		–	87.0
48"		–	78.3
54"		–	69.6
60"		–	62.6
30"	114"	–	87.0
36"		–	87.0
42"		–	77.1
48"		–	67.5
54"		–	60.0
60"		–	54.0
30"	120"	–	87.0
36"		–	77.1
42"		–	66.1
48"		–	57.9
54"		–	51.4
60"		–	46.3



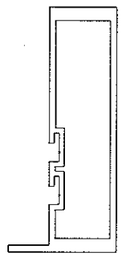
$$\text{WIDTH (W)} = \frac{W1 + W2}{2}$$



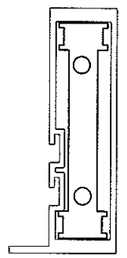
$$\text{WIDTH (W)} = \frac{W1}{2} + \frac{W2}{4}$$



$$\text{WIDTH (W)} = \frac{W1 + W2}{2}$$



DOOR MULLION
W/O REINF.



DOOR MULLION
W/ ALUM. REINF.

STEP 3: MULLION LOAD CAPACITIES

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PRODUCT:

Resistor
3100
STOREFRONT WALL
(LARGE MISSILE IMPACT)

Resistor
PRODUCT SERIES

REVN	DATE/REMARKS
REV. 1	7/15/15 PER TDI COMMENTS

ENGINEER:
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GLAZING CONSULTANT
8501 SW 124th Ave, Ste. 205A
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P: 305-271-0117 F: 305-573-5063
Email: MCY.Engineering@att.net
www.MCYEngineering.com

STAMP:

JOO P. PANG, P.E.
TEXAS REGISTRATION
STATE OF TEXAS
JOO PIN PANG
90246
LICENSED
PROFESSIONAL ENGINEER
07/21/15

PRODUCT CONTROL APPROVAL:

DRAWN: T.C.
DATE: 5-6-14
DWG: TAD14-02

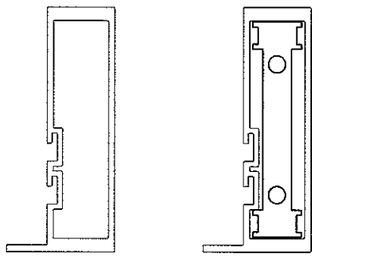
DRAWING No:
5 OF 12

DOOR MULLION LOAD CAPACITY – PSF AT DOUBLE DOOR WITH TRANSOM

NOMINAL DIMS.				WITHOUT REINFORCING	WITH REINFORCING
DTH /1)	WIDTH (W2)	LENGTH (A)	LENGTH (L)	EXT.(+) INT.(−)	EXT.(+) INT.(−)
0"	30"	96"	102"	78.3	87.0
	33"			75.0	87.0
	36"			71.9	87.0
	39"			69.0	87.0
	42"			66.4	87.0
	48"			61.7	87.0
	54"			57.6	87.0
2"	30"			71.0	87.0
	33"			68.3	87.0
	36"			65.7	87.0
	39"			63.3	87.0
	42"			61.1	87.0
	48"			57.1	87.0
	54"			53.6	87.0
0"	30"	96"	108"	62.6	87.0
	33"			60.0	87.0
	36"			57.7	87.0
	39"			55.5	87.0
	42"			53.5	87.0
	48"			49.8	86.2
	54"			46.7	80.8
2"	30"			56.5	87.0
	33"			54.4	87.0
	36"			52.5	87.0
	39"			50.6	87.0
	42"			49.0	84.7
	48"			45.9	79.4
	54"			43.2	74.8
0"	30"	96"	114"	50.9	87.0
	33"			48.9	84.7
	36"			47.1	81.5
	39"			45.4	78.5
	42"			43.8	75.8
	48"			40.9	70.8
	54"			38.4	66.5
2"	30"			45.8	79.3
	33"			44.2	76.5
	36"			42.7	73.8
	39"			41.3	71.4
	42"			39.9	69.1
	48"			37.5	65.0
	54"			35.4	61.3

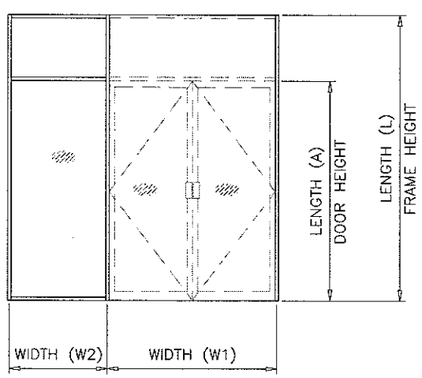
DOOR MULLION LOAD CAPACITY – PSF AT DOUBLE DOOR WITH TRANSOM

NOMINAL DIMS.				WITHOUT REINFORCING	WITH REINFORCING
WIDTH (W1)	WIDTH (W2)	LENGTH (A)	LENGTH (L)	EXT.(+) INT.(−)	EXT.(+) INT.(−)
60"	30"	96"	120"	42.1	72.9
	33"			40.5	70.1
	36"			39.1	67.6
	39"			37.7	65.2
	42"			36.4	63.0
	48"			34.1	59.0
	54"			32.0	55.5
72"	30"			37.8	65.4
	33"			36.5	63.2
	36"			35.3	61.1
	39"			34.2	59.1
	42"			33.1	57.3
	48"			31.2	54.0



DOOR MULLION W/O REINF.

DOOR MULLION W/ ALUM. REINF.



DOOR MULLION LOAD CAPACITY – PSF AT DOUBLE DOOR WITH TRANSOM

NOMINAL DIMS.				WITHOUT REINFORCING	WITH REINFORCING
WIDTH (W1)	WIDTH (W2)	LENGTH (A)	LENGTH (L)	EXT.(+) INT.(−)	EXT.(+) INT.(−)
60"	30"	90"	96"	87.0	87.0
	33"			87.0	87.0
	36"			84.2	87.0
	39"			80.8	87.0
	42"			77.8	87.0
	48"			72.2	87.0
	54"			67.4	87.0
72"	30"			83.4	87.0
	33"			80.1	87.0
	36"			77.0	87.0
	39"			74.2	87.0
	42"			71.6	87.0
	48"			66.9	87.0
	54"			62.7	87.0
60"	30"	90"	102"	73.8	87.0
	33"			70.8	87.0
	36"			68.1	87.0
	39"			65.5	87.0
	42"			63.1	87.0
	48"			58.9	87.0
	54"			55.1	87.0
72"	30"			66.6	87.0
	33"			64.1	87.0
	36"			61.9	87.0
	39"			59.8	87.0
	42"			57.8	87.0
	48"			54.2	87.0
	54"			51.0	86.4
60"	30"	90"	108"	59.4	87.0
	33"			57.1	87.0
	36"			55.0	87.0
	39"			53.0	87.0
	42"			51.2	87.0
	48"			47.8	82.8
	54"			44.9	77.7
72"	30"			53.4	87.0
	33"			51.6	87.0
	36"			49.8	86.2
	39"			48.2	83.4
	42"			46.6	80.7
	48"			43.9	75.9
	54"			41.4	71.6

DOOR MULLION LOAD CAPACITY – PSF AT DOUBLE DOOR WITH TRANSOM

NOMINAL DIMS.				WITHOUT REINFORCING	WIT REINFO
WIDTH (W1)	WIDTH (W2)	LENGTH (A)	LENGTH (L)	EXT.(+) INT.(−)	EXT. INT.(
60"	30"	90"	114"	48.7	84.
	33"			46.9	81.
	36"			45.2	78.
	39"			43.6	75.
	42"			42.2	73.
	48"			39.5	68.
	54"			37.1	64.
72"	30"			43.7	75.
	33"			42.2	73
	36"			40.8	70.
	39"			39.5	68.
	42"			38.3	66.
	48"			36.1	62.
	54"			34.1	59
60"	30"	90"	120"	40.6	70.
	33"			39.1	67.
	36"			37.7	65.
	39"			36.5	63
	42"			35.3	61.
	48"			33.1	57.
	54"			31.1	53.
72"	30"			38.3	62.
	33"			35.1	60.
	36"			34.0	58.
	39"			33.0	57.
	42"			32.0	55.
	48"			30.2	52.

STEP 3: MULLION LOAD CAPACITIES

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PRODUCT:

Resistor
3100
STOREFRONT WALL
(LARGE MISSILE IMPACT)

Resistor
PRODUCT SERIES

REVN	DATE/REMARKS
REV. 1	7/15/15 PER TDI COMMENTS

ENGINEER:
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GLAZING CONSULTANT
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MIAMI, FL 33183
P: 305-271-0117 F: 305-573-5063
Email: MCY.Engineering@att.net
www.MCYEngineering.com

STAMP:

JOO PIN PANG
STATE REGISTRATION
RE. #90246
JOO PIN PANG
90246
LICENSED
PROFESSIONAL ENGINEER
07/21/15

PRODUCT CONTROL APPROVAL:

DRAWN: T.G.	DRAWING No:
DATE: 5-6-14	6 OF 12
DWG: TAD14-02	

DOOR MULLION LOAD CAPACITY – PSF AT DOUBLE DOOR WITH TRANSOM

NOMINAL DIMS.				WITHOUT REINFORCING	WITH REINFORCING
WIDTH (W1)	WIDTH (W2)	LENGTH (A)	LENGTH (L)	EXT.(+) INT.(−)	EXT.(+) INT.(−)
60"	30"	84"	90"	87.0	87.0
	33"			87.0	87.0
	36"			87.0	87.0
	39"			87.0	87.0
	42"			87.0	87.0
	48"			82.7	87.0
	54"			77.3	87.0
72"	30"			87.0	87.0
	33"			87.0	87.0
	36"			87.0	87.0
	39"			84.9	87.0
	42"			81.9	87.0
	48"			76.6	87.0
	54"			71.9	87.0
60"	30"	84"	96"	87.0	87.0
	33"			84.0	87.0
	36"			80.7	87.0
	39"			77.7	87.0
	42"			74.8	87.0
	48"			69.7	87.0
	54"			65.3	87.0
72"	30"			79.0	87.0
	33"			76.1	87.0
	36"			73.4	87.0
	39"			70.9	87.0
	42"			68.5	87.0
	48"			64.2	87.0
	54"			60.4	87.0
60"	30"	84"	102"	70.0	87.0
	33"			67.3	87.0
	36"			64.8	87.0
	39"			62.4	87.0
	42"			60.3	87.0
	48"			56.4	87.0
	54"			53.0	87.0
72"	30"			62.8	87.0
	33"			60.7	87.0
	36"			58.6	87.0
	39"			56.7	87.0
	42"			54.9	87.0
	48"			51.7	87.0
	54"			48.8	83.9

DOOR MULLION LOAD CAPACITY – PSF AT DOUBLE DOOR WITH TRANSOM

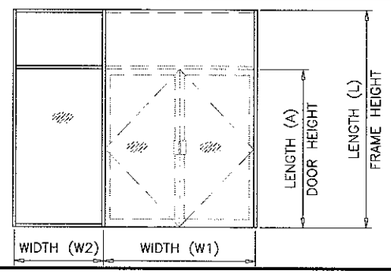
NOMINAL DIMS.				WITHOUT REINFORCING	WITH REINFORCING
WIDTH (W1)	WIDTH (W2)	LENGTH (A)	LENGTH (L)	EXT.(+) INT.(−)	EXT.(+) INT.(−)
60"	30"	84"	108"	56.8	87.0
	33"			54.7	87.0
	36"			52.7	87.0
	39"			50.9	87.0
	42"			49.2	85.1
	48"			46.1	79.8
	54"			43.4	75.1
72"	30"			50.9	87.0
	33"			49.2	85.1
	36"			47.6	82.4
	39"			46.1	79.8
	42"			44.7	77.4
	48"			42.1	72.9
	54"			39.9	69.0
60"	30"	84"	114"	46.9	81.2
	33"			45.2	78.3
	36"			43.7	75.5
	39"			42.2	73.0
	42"			40.8	70.6
	48"			38.3	66.3
	54"			36.1	62.5
72"	30"			42.0	72.6
	33"			40.6	70.3
	36"			39.3	68.0
	39"			38.1	66.0
	42"			37.0	64.0
	48"			34.9	60.4
	54"			33.1	57.2
60"	30"	84"	120"	39.3	68.1
	33"			38.0	65.7
	36"			36.7	63.4
	39"			35.4	61.3
	42"			34.3	59.4
	48"			32.2	55.8
	54"			30.4	52.6
72"	30"			35.1	60.8
	33"			34.0	58.8
	36"			33.0	57.0
	39"			32.0	55.3
	42"			31.0	53.7
	48"			29.3	50.8

DOOR MULLION LOAD CAPACITY – PSF AT DOUBLE DOOR WITH TRANSOM

NOMINAL DIMS.				WITHOUT REINFORCING	WITH REINFORCING
WIDTH (W1)	WIDTH (W2)	LENGTH (A)	LENGTH (L)	EXT.(+) INT.(−)	EXT.(+) INT.(−)
60"	30"	80"	90"	87.0	87.0
	33"			87.0	87.0
	36"			87.0	87.0
	39"			87.0	87.0
	42"			86.6	87.0
	48"			80.7	87.0
	54"			75.5	87.0
72"	30"			87.0	87.0
	33"			87.0	87.0
	36"			85.1	87.0
	39"			82.2	87.0
	42"			79.4	87.0
	48"			74.4	87.0
	54"			70.0	87.0
60"	30"	80"	96"	84.6	87.0
	33"			81.3	87.0
	36"			78.3	87.0
	39"			75.5	87.0
	42"			72.9	87.0
	48"			68.1	87.0
	54"			64.0	87.0
72"	30"			76.1	87.0
	33"			73.4	87.0
	36"			70.9	87.0
	39"			68.6	87.0
	42"			66.4	87.0
	48"			62.5	87.0
	54"			58.9	87.0
60"	30"	80"	102"	67.8	87.0
	33"			65.2	87.0
	36"			62.9	87.0
	39"			60.7	87.0
	42"			58.7	87.0
	48"			55.0	87.0
	54"			51.7	87.0
72"	30"	80"	102"	60.7	87.0
	33"			58.7	87.0
	36"			56.8	87.0
	39"			55.0	87.0
	42"			53.3	87.0
	48"			50.2	87.0
	54"			47.5	82.2

DOOR MULLION LOAD CAPACITY – PSF AT DOUBLE DOOR WITH TRANSOM

NOMINAL DIMS.				WITHOUT REINFORCING	WITH REINFORCING
WIDTH (W1)	WIDTH (W2)	LENGTH (A)	LENGTH (L)	EXT.(+) INT.(−)	EXT.(+) INT.(−)
60"	30"	80"	108"	55.3	87.0
	33"			53.3	87.0
	36"			51.5	87.0
	39"			49.7	86.1
	42"			48.1	83.2
	48"			45.1	78.1
	54"			42.5	73.6
72"	30"			49.5	85.6
	33"			47.9	82.8
	36"			46.4	80.2
	39"			44.9	77.8
	42"			43.6	75.5
	48"			41.2	71.2
	54"			39.0	67.5
60"	30"	80"	114"	45.9	79.5
	33"			44.3	76.7
	36"			42.8	74.1
	39"			41.4	71.6
	42"			40.0	69.3
	48"			37.6	65.1
	54"			35.5	61.4
72"	30"			41.0	71.0
	33"			39.7	68.7
	36"			38.5	66.6
	39"			37.3	64.6
	42"			36.2	62.7
	48"			34.3	59.3
	54"			32.5	56.2
60"	30"	80"	120"	38.7	66.9
	33"			37.3	64.6
	36"			36.1	62.4
	39"			34.9	60.4
	42"			33.8	58.5
	48"			31.8	55.0
	54"			30.0	51.9
72"	30"			34.5	59.7
	33"			33.4	57.8
	36"			32.4	56.0
	39"			31.4	54.4
	42"			30.5	52.9
	48"			28.9	50.0



STEP 3: MULLION LOAD CAPACITIES

Trulite
GLASS & ALUMINUM SOLUTIONS™
http://www.trulite.com
800 FAIRWAY DRIVE, Suite 200
DEERFIELD BEACH, FL 33441
p. 800-432-8132 | f. 954-724-2083

PRODUCT:

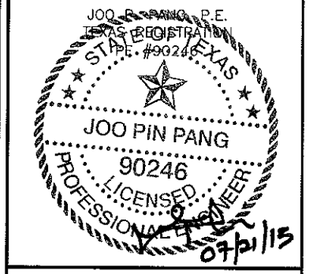
Resistor
3100
STOREFRONT WALL
(LARGE MISSILE IMPACT)

Resistor
PRODUCT SERIES

REVN	DATE/REMARKS
REV. 1	7/15/15 PER TDI COMMENTS

ENGINEER:
MCY ENGINEERING, INC.
GLAZING CONSULTANT
8501 SW 124th Ave, Ste. 205A
MIAMI, FL 33183
P: 305-271-0117 F: 305-573-5063
Email: MCY.Engineering@att.net
www.MCYEngineering.com

STAMP:



PRODUCT CONTROL APPROVAL:

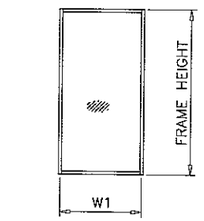
DRAWN: T.G.	DRAWING No:
DATE: 5-6-14	7 OF 12
DWG: TAD14-02	

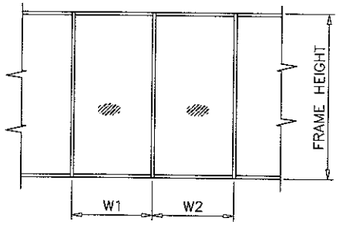
ANCHOR LOAD CAPACITY – PSF
EXT.(+) & INT.(–)

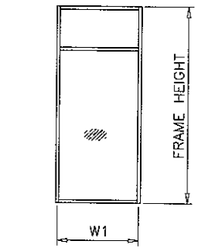
NOMINAL DIMS.		ANCHORS TYPE 'A'			ANCHORS TYPE 'B'		ANCHORS TYPE 'C'	
WIDTH (W)	FRAME HEIGHT	'A2'	'A3'	'A4'	'B2'	'B3'	'C2'	'C3'
24"	78"	100.0	100.0	100.0	100.0	100.0	100.0	100.0
30"		100.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		100.0	100.0	100.0	100.0	100.0	100.0	100.0
42"		88.3	100.0	100.0	100.0	100.0	100.0	100.0
48"		77.2	100.0	100.0	100.0	100.0	100.0	100.0
54"		68.6	100.0	100.0	94.8	100.0	100.0	100.0
60"		61.8	92.7	100.0	85.4	100.0	100.0	100.0
66"		56.2	84.3	100.0	77.6	100.0	100.0	100.0
72"		51.5	77.2	100.0	71.1	100.0	98.3	100.0
24"	84"	100.0	100.0	100.0	100.0	100.0	100.0	100.0
30"		100.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		95.6	100.0	100.0	100.0	100.0	100.0	100.0
42"		82.0	100.0	100.0	100.0	100.0	100.0	100.0
48"		71.7	100.0	100.0	99.1	100.0	100.0	100.0
54"		63.7	95.6	100.0	88.1	100.0	100.0	100.0
60"		57.4	86.1	100.0	79.3	100.0	100.0	100.0
66"		52.2	78.2	100.0	72.1	100.0	99.5	100.0
72"		47.8	71.7	95.6	66.0	99.0	91.2	100.0
24"	90"	100.0	100.0	100.0	100.0	100.0	100.0	100.0
30"		100.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		89.2	100.0	100.0	100.0	100.0	100.0	100.0
42"		76.5	100.0	100.0	100.0	100.0	100.0	100.0
48"		66.9	100.0	100.0	92.5	100.0	100.0	100.0
54"		59.5	89.2	100.0	82.2	100.0	100.0	100.0
60"		53.5	80.3	100.0	74.0	100.0	100.0	100.0
66"		48.7	73.0	97.4	67.2	100.0	92.9	100.0
72"		44.6	66.9	89.2	61.6	92.4	85.2	100.0
24"	96"	100.0	100.0	100.0	100.0	100.0	100.0	100.0
30"		100.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		83.7	100.0	100.0	100.0	100.0	100.0	100.0
42"		71.7	100.0	100.0	99.1	100.0	100.0	100.0
48"		62.8	94.1	100.0	86.7	100.0	100.0	100.0
54"		55.8	83.7	100.0	77.1	100.0	100.0	100.0
60"		50.2	75.3	100.0	69.4	100.0	95.8	100.0
66"		45.6	68.5	91.3	63.0	94.5	87.1	100.0
72"		41.8	62.8	83.7	57.8	86.7	79.8	100.0
24"	102"	100.0	100.0	100.0	100.0	100.0	100.0	100.0
30"		94.5	100.0	100.0	100.0	100.0	100.0	100.0
36"		78.7	100.0	100.0	100.0	100.0	100.0	100.0
42"		67.5	100.0	100.0	93.2	100.0	100.0	100.0
48"		59.1	88.6	100.0	81.6	100.0	100.0	100.0
54"		52.5	78.7	100.0	72.5	100.0	100.0	100.0
60"		47.2	70.9	94.5	65.3	97.9	90.2	100.0
66"		43.0	64.4	85.9	59.3	89.0	82.0	100.0
72"		39.4	59.1	78.7	54.4	81.6	75.1	100.0
24"	108"	100.0	100.0	100.0	100.0	100.0	100.0	100.0
30"		89.2	100.0	100.0	100.0	100.0	100.0	100.0
36"		74.4	100.0	100.0	100.0	100.0	100.0	100.0
42"		63.7	95.6	100.0	88.1	100.0	100.0	100.0
48"		55.8	83.7	100.0	77.1	100.0	100.0	100.0
54"		49.6	77.4	99.2	68.5	100.0	94.6	100.0
60"		44.6	66.9	89.2	61.6	92.4	85.2	100.0
66"		40.6	60.8	81.1	56.0	84.0	77.4	100.0

ANCHOR LOAD CAPACITY – PSF
EXT.(+) & INT.(–)

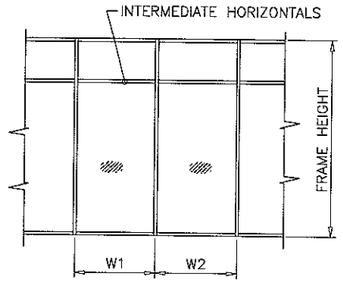
NOMINAL DIMS.		ANCHORS TYPE 'A'			ANCHORS TYPE 'B'		ANCHORS TYPE 'C'	
WIDTH (W)	FRAME HEIGHT	'A2'	'A3'	'A4'	'B2'	'B3'	'C2'	'C3'
24"	114"	100.0	100.0	100.0	100.0	100.0	100.0	100.0
30"		84.5	100.0	100.0	100.0	100.0	100.0	100.0
36"		70.5	100.0	100.0	97.3	100.0	100.0	100.0
42"		60.4	90.6	100.0	83.4	100.0	100.0	100.0
48"		52.8	79.3	100.0	73.0	100.0	100.0	100.0
54"		47.0	70.5	93.9	64.9	97.3	89.6	100.0
60"		42.3	63.4	84.5	58.4	87.6	80.7	100.0
24"	120"	100.0	100.0	100.0	100.0	100.0	100.0	100.0
30"		80.3	100.0	100.0	100.0	100.0	100.0	100.0
36"		66.9	100.0	100.0	92.5	100.0	100.0	100.0
42"		57.4	86.1	100.0	79.3	100.0	100.0	100.0
48"		50.2	75.3	100.0	69.4	100.0	95.8	100.0
54"		44.6	66.9	89.2	61.6	92.4	85.2	100.0
60"		40.2	60.2	80.3	55.5	83.2	76.6	100.0
24"	126"	95.6	100.0	100.0	100.0	100.0	100.0	100.0
30"		76.5	100.0	100.0	100.0	100.0	100.0	100.0
36"		63.7	95.6	100.0	88.1	100.0	100.0	100.0
42"		54.6	82.0	100.0	75.5	100.0	100.0	100.0
48"		47.8	71.7	95.6	66.0	99.0	91.2	100.0
54"		42.5	63.7	85.0	58.7	88.0	81.1	100.0
24"	132"	91.3	100.0	100.0	100.0	100.0	100.0	100.0
30"		73.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		60.8	91.3	100.0	84.1	100.0	100.0	100.0
42"		52.2	78.2	100.0	72.1	100.0	99.5	100.0
48"		45.6	68.5	91.3	63.0	94.5	87.1	100.0
24"	138"	87.3	100.0	100.0	100.0	100.0	100.0	100.0
30"		69.8	100.0	100.0	96.5	100.0	100.0	100.0
36"		58.2	87.3	100.0	80.4	100.0	100.0	100.0
42"		49.9	74.8	99.8	68.9	100.0	95.2	100.0
48"		43.7	65.5	87.3	60.3	90.4	83.3	100.0
24"	144"	83.7	100.0	100.0	100.0	100.0	100.0	100.0
30"		66.9	100.0	100.0	92.5	100.0	100.0	100.0
36"		55.8	83.7	100.0	77.1	100.0	100.0	100.0
42"		47.8	71.7	95.6	66.0	99.0	91.2	100.0
48"		41.8	62.8	83.7	57.8	86.7	79.8	100.0



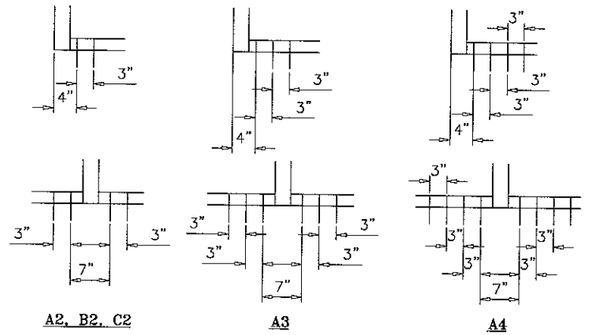




WIDTH (W) = W1 (JAMB)



WIDTH (W) = $\frac{W1 + W2}{2}$



A2, B2, C2 A3 A4

ANCHORS TYPES: SEE SHEET 10 FOR DESCRIPTION

A2 = (2) ANCHORS TYPE 'A' AT EACH SIDE OF MULLION OR JAMB
B2 = (2) ANCHORS TYPE 'B' AT EACH SIDE OF MULLION OR JAMB
C2 = (2) ANCHORS TYPE 'C' AT EACH SIDE OF MULLION OR JAMB

A3 = (3) ANCHORS TYPE 'A' AT EACH SIDE OF MULLION OR JAMB
B3 = (3) ANCHORS TYPE 'B' AT EACH SIDE OF MULLION OR JAMB
C3 = (3) ANCHORS TYPE 'C' AT EACH SIDE OF MULLION OR JAMB

A4 = (4) ANCHORS TYPE 'A' AT EACH SIDE OF MULLION OR JAMB

MAXIMUM SPACING FOR HEAD AND SILL ANCHORS NOT TO EXCEED 24" O.C.

STEP 3: MULLION LOAD CAPACITIES

Trulite
GLASS & ALUMINUM SOLUTIONS™
http://www.trulite.com
800 FAIRWAY DRIVE, Suite 200
DEERFIELD BEACH, FL 33441
p. 800-432-8132 | f. 954-724-2083

PRODUCT:

Resistor
3100
STOREFRONT WALL
(LARGE MISSILE IMPACT)

Resistor
PRODUCT SERIES

REVN	DATE/REMARKS
REV. 1	7/15/15 PER TDI COMMENTS

ENGINEER:
MCY ENGINEERING, INC.
GLAZING CONSULTANT
8501 SW 124th Ave, Ste. 205A
MIAMI, FL 33183
P: 305-271-0117 F: 305-573-5063
Email: MCY.Engineering@att.net
www.MCYEngineering.com

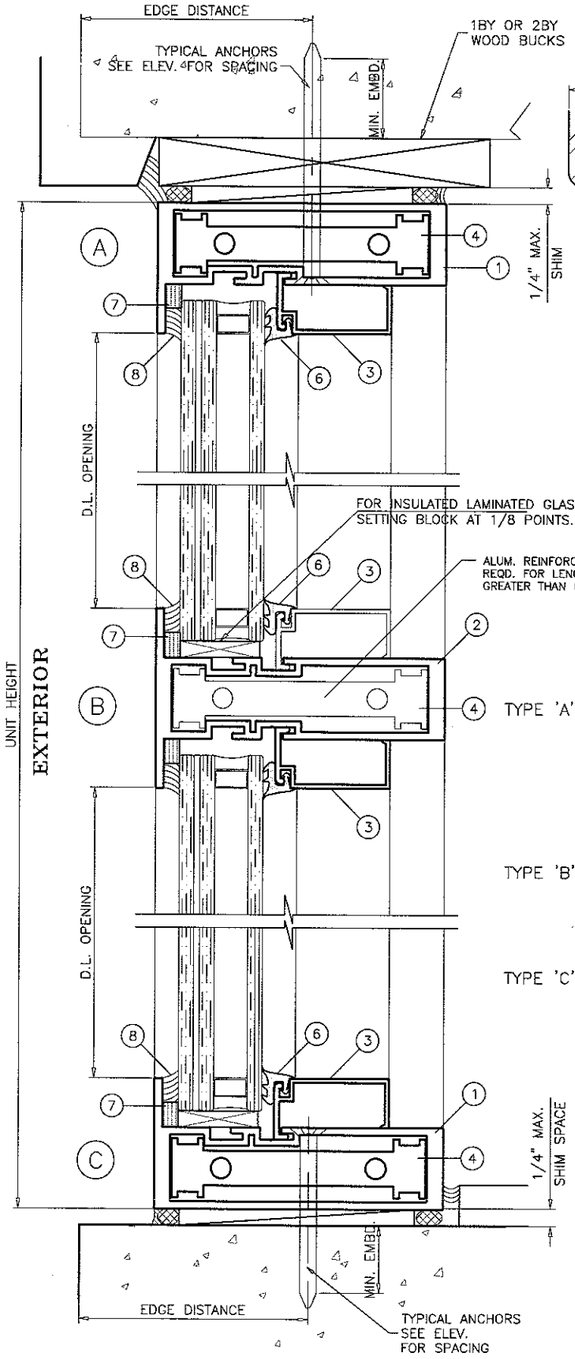
STAMP:

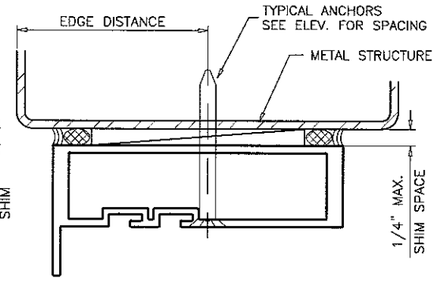
JOO P. PANG, P.E.
TEXAS REGISTRATION
STATE OF TEXAS #90246
JOO PIN PANG
90246
LICENSED
PROFESSIONAL ENGINEER
07/21/15

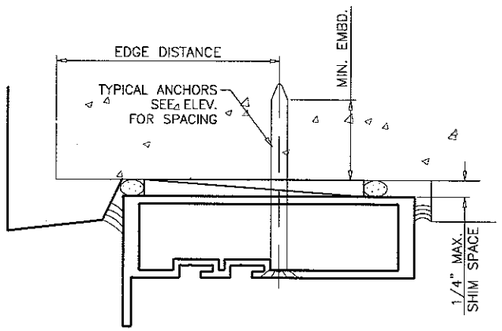
PRODUCT CONTROL APPROVAL:

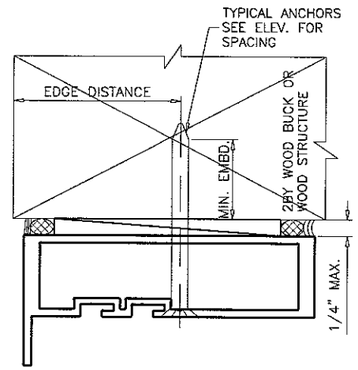
DRAWN: T.G.
DATE: 5-6-14
DWG: TAD14-02

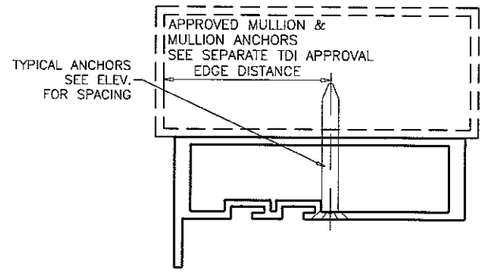
DRAWING No:
8 OF 12











NOTE:
MULLIONS SHOWN IN DASHED LINES ARE NOT PART OF THIS APPROVAL.

WOOD BUCKS AND METAL STRUCTURE NOT BY TRULITE. MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

TYPICAL ANCHORS AT WINDOW WALL SYSTEM: SEE ELEV. FOR SPACING

TYPE 'A'– 1/4" DIA. ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)
1/4" DIA. TAPCON BY 'ITW' (Fu=120 KSI, Fy=92 KSI)
INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
1–3/8" MIN. PENETRATION INTO WOOD

THRU 1BY BUCKS INTO CONC. OR MASONRY
1–1/4" MIN. EMBED INTO CONC. OR MASONRY

TYPE 'B'– 1/4" DIA. ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)
1/4" DIA. TAPCON BY 'ITW' (Fu=120 KSI, Fy=92 KSI)
DIRECTLY INTO CONC. OR MASONRY
1–5/8" MIN. EMBED INTO CONC. OR MASONRY

TYPE 'C'– #14 SMS OR SELF DRILLING SCREWS (GRADE 2 CRS)
INTO MIAMI–DADE COUNTY APPROVED MULLIONS (1/8" THK. MIN.)
INTO METAL STRUCTURES
STEEL : 1/8" THK. MIN. (Fy = 36 KSI MIN.)
ALUMINUM : 1/8" THK. MIN. (6063–T5 MIN.)
(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

TYPICAL EDGE DISTANCE
INTO CONCRETE AND MASONRY = 2–1/2" MIN.
INTO WOOD STRUCTURE = 1" MIN.
INTO METAL STRUCTURE = 3/4" MIN.

TYPICAL ANCHORS AT ALTERNATE WINDOW SHAPES: SEE SHEET 2 FOR SPACING

TYPE 'D'– 5/16" DIA. ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)
INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
1–3/8" MIN. PENETRATION INTO WOOD

THRU 1BY BUCKS INTO CONC. OR MASONRY
1–1/4" MIN. EMBED INTO CONC. OR MASONRY

DIRECTLY INTO CONC. OR MASONRY
1–5/8" MIN. EMBED INTO CONC. OR MASONRY

TYPE 'D'– 5/16" DIA. SMS OR SELF DRILLING SCREWS (GRADE 2 CRS)
INTO MIAMI–DADE COUNTY APPROVED MULLIONS (1/8" THK. MIN.)
INTO METAL STRUCTURES
STEEL : 1/8" THK. MIN. (Fy = 36 KSI MIN.)
ALUMINUM : 1/8" THK. MIN. (6063–T5 MIN.)
(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

TYPICAL EDGE DISTANCE
INTO CONCRETE AND MASONRY = 3–1/8" MIN.
INTO WOOD STRUCTURE = 1" MIN.
INTO METAL STRUCTURE = 3/4" MIN.

CONCRETE AT HEAD, SILL OR JAMBS f'c = 3000 PSI MIN.
C–90 HOLLOW/FILLED BLOCK AT JAMBS f'm = 2000 PSI MIN.

STEP 4: ANCHOR LOAD CAPACITY

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PRODUCT:

Resistor
3100
STOREFRONT WALL
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Resistor
PRODUCT SERIES

REVN	DATE/REMARKS
REV. 1	7/15/15 PER TDI COMMENTS

ENGINEER:
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8501 SW 124th Ave, Ste. 205A
MIAMI, FL 33183
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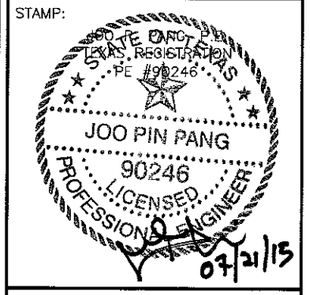
www.MCYEngineering.com

STAMP:



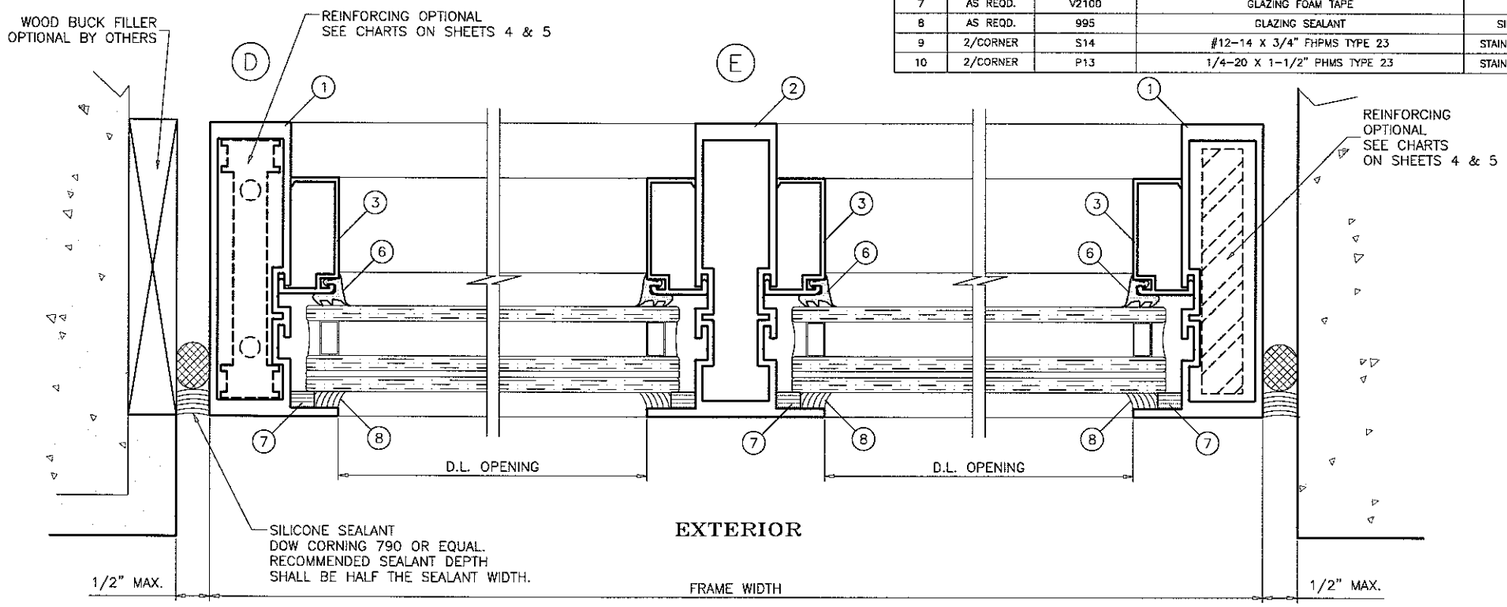
PRODUCT CONTROL APPROVAL:

DRAWN: T.G.	DRAWING No:
DATE: 5–6–14	9 OF 12
DWG: TAD14–02	

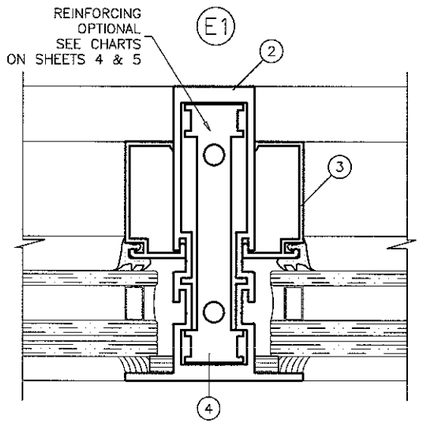
THIS PRODUCT MAY BE INSTALLED INSIDE OR OUTSIDE GLAZED

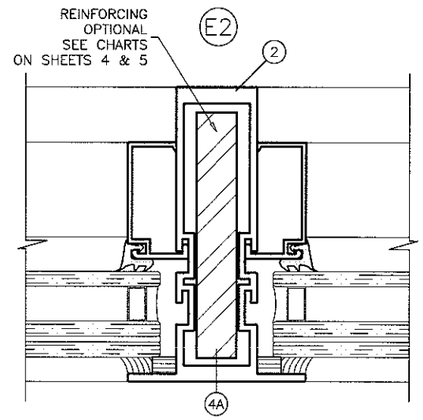
BILL OF MATERIALS

ITEM #	QTY.	PROFILE	DESCRIPTION	MATERIAL	MANUFACTURER/REMARKS
1	AS REQD.	3101	FRAME HEAD/JAMB/JAMB	ALUM. 6063-T6	TRULITE
2	AS REQD.	3102	INTERMEDIATE VERTICAL/HORIZONTAL	ALUM. 6063-T6	TRULITE
3	AS REQD.	3103	GLASS STOP	ALUM. 6063-T5	TRULITE
4	AS REQD.	3104	SHEAR BLOCK/MULLION REINFORCING	ALUM. 6063-T6	TRULITE
4A	AS REQD.	3205STEEL	MULLION REINFORCING	STEEL BAR	5/8" X 3 3/4"
5	2/LITE	H62F	SETTING BLOCK (INSUL. LAM. GLASS) DUROMETER 85 +/-5	EPDM	1-1/4" X 1/4" X 4" LONG
5A	2/LITE	H62D	SETTING BLOCK (9/16" LAM. GLASS) DUROMETER 85 +/-5	EPDM	1/2" X 1/4" X 4" LONG
6	AS REQD.	H63	WEDGE IN GASKET DUROMETER 60 +/-5	EPDM	–
7	AS REQD.	V2100	GLAZING FOAM TAPE	–	NORTON 1/4" X 3/8"
8	AS REQD.	995	GLAZING SEALANT	SILICONE	DOW CORNING
9	2/CORNER	S14	#12-14 X 3/4" FHPMS TYPE 23	STAINLESS STL.	–
10	2/CORNER	P13	1/4-20 X 1-1/2" PHMS TYPE 23	STAINLESS STL.	–



ALTERNATE SEALANTS AT JAMB GAPS CAN BE DESIGNED BY ENGINEER OF RECORD BASED ON MANUFACTURER GUIDE LINES.





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PRODUCT:

Resistor
3100
STOREFRONT WALL
(LARGE MISSILE IMPACT)

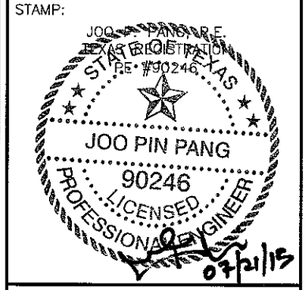
Resistor
PRODUCT SERIES

REVN	DATE/REMARKS
REV. 1	7/15/15 PER TDI COMMENTS

ENGINEER:

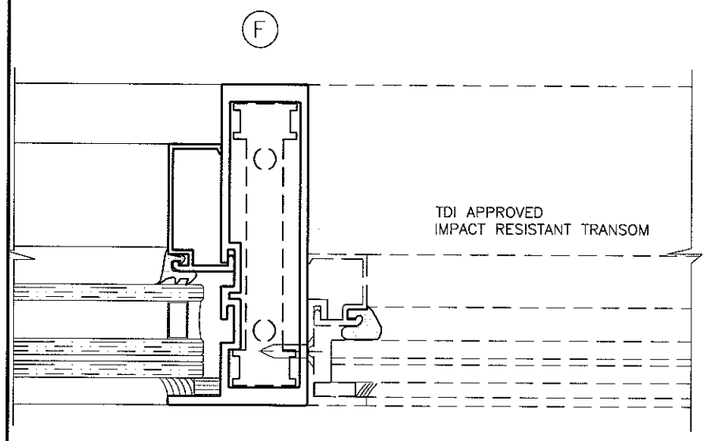
MCY ENGINEERING, INC.
GLAZING CONSULTANT
8501 SW 124th Ave, Ste. 205A
MIAMI, FL 33183
P: 305-271-0117 F: 305-573-5063
Email: MCY.Engineering@att.net
www.MCYEngineering.com

STAMP:

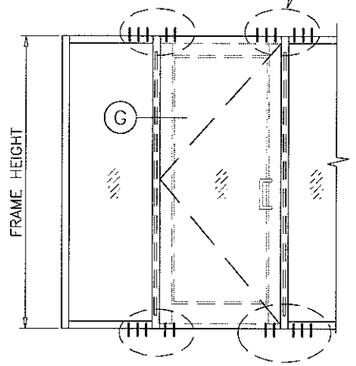


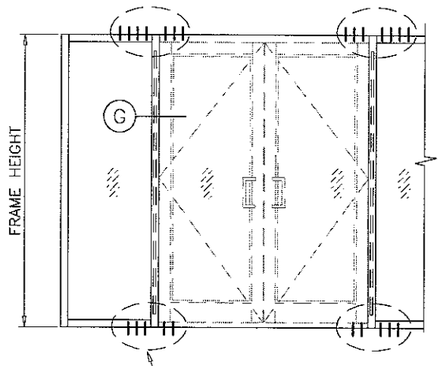
PRODUCT CONTROL APPROVAL:

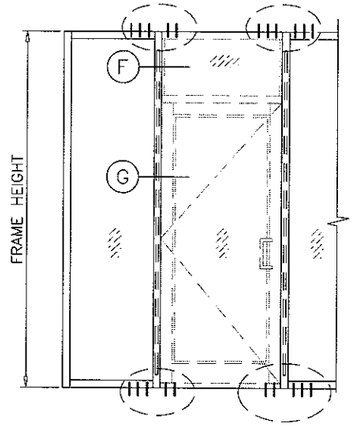
DRAWN: T.G.	DRAWING No:
DATE: 5-6-14	**10 OF 12**
DWG: TAD14-02	



TOTAL NO. OF ANCHORS AT DOOR MULLION HEAD				
ANCHORS TYPE	MULLION W/O REINFORCING		MULLION WITH REINFORCING	
	AT FIX. LITE	AT DOOR	AT FIX. LITE	AT DOOR
A	3	3	4	3
B	2	2	3	2
C	2	2	3	2



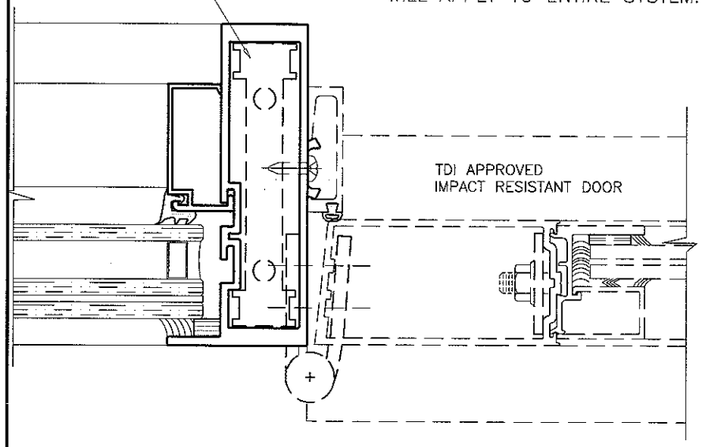




TOTAL NO. OF ANCHORS AT DOOR MULLION SILL				
ANCHORS TYPE	MULLION W/O REINFORCING		MULLION WITH REINFORCING	
	AT FIX. LITE	AT DOOR	AT FIX. LITE	AT DOOR
B	3	2	4	3

CHARTS SHOWN ABOVE APPLY TO ABOVE CASES ONLY.

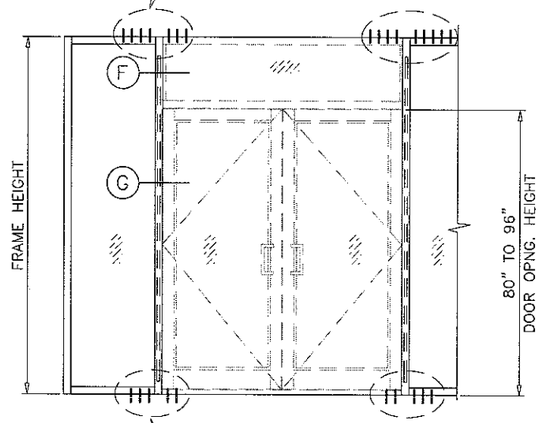
REINFORCING OPTIONAL SEE CHARTS ON SHEETS 6 THRU 8



SEE SEPARATE TDI APPROVAL FOR DESIGN LOAD CAPACITY OF DOORS AND DOOR ANCHORS.

LOWER VALUES FROM DOORS TDI APPROVAL OR WINDOW WALL SYSTEM CAPACITY CHARTS WILL APPLY TO ENTIRE SYSTEM.

TOTAL NO. OF ANCHORS AT DOOR MULLION HEAD				
ANCHORS TYPE	MULLION W/O REINFORCING		MULLION WITH REINFORCING	
	AT FIX. LITE	AT DOOR	AT FIX. LITE	AT DOOR
A	3	3	4	4
B	3	2	3	3
C	2	2	2	2



TOTAL NO. OF ANCHORS AT DOOR MULLION SILL				
ANCHORS TYPE	MULLION W/O REINFORCING		MULLION WITH REINFORCING	
	AT FIX. LITE	AT DOOR	AT FIX. LITE	AT DOOR
B	3	2	4	3

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PRODUCT:

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3100
STOREFRONT WALL
(LARGE MISSILE IMPACT)

Resistor PRODUCT SERIES

REVN	DATE/REMARKS
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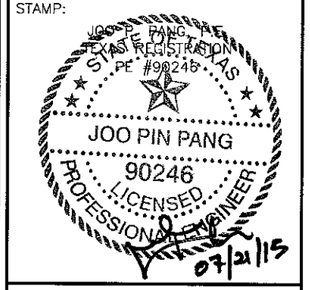
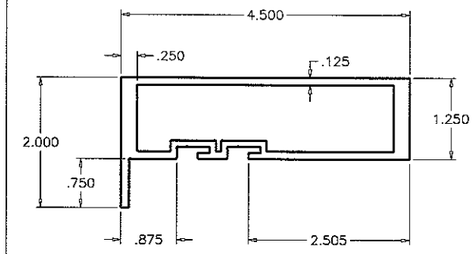
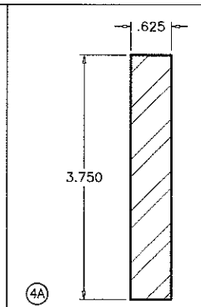


PRODUCT CONTROL APPROVAL:

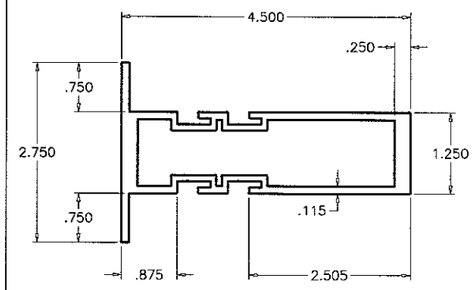
DRAWN: T.G.	DRAWING No:
DATE: 5-6-14	**11 OF 12**
DWG: TAD14-02	



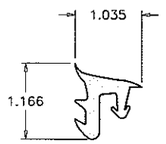
① #3101 – FRAME HEAD/SILL/JAMB



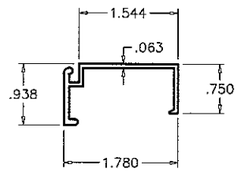
(4A) #3205 STEEL MULLION REINFOR.



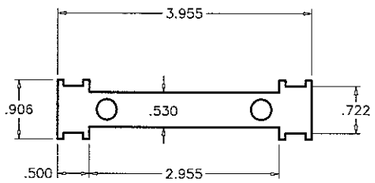
② #3102 – INTERMEDIATE VERTICAL/HORZONTAL



(6) #H63 – GLAZING GASKET



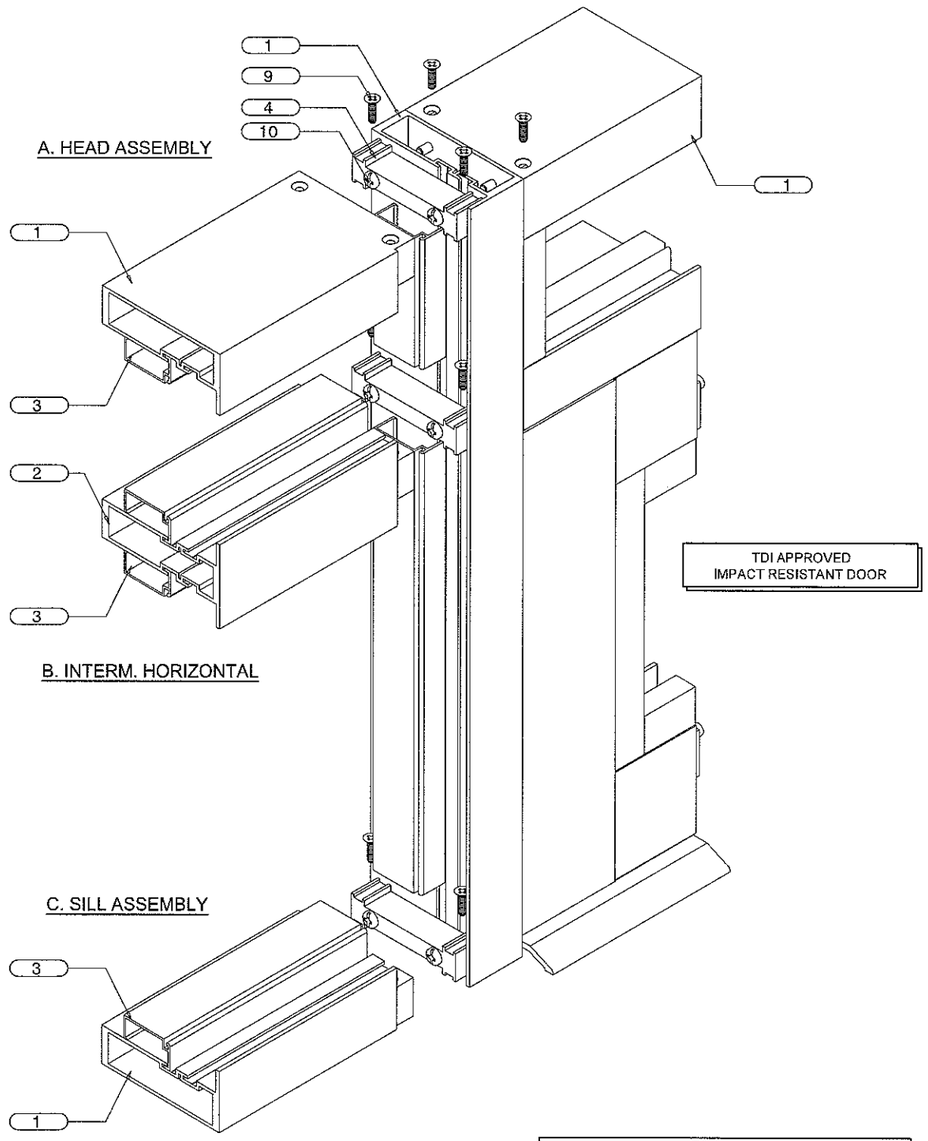
③ #3103 – GLASS STOP



④ #3104 – SHEAR BLOCK / ALUM. MULLION REINFOR.

NOTE:
DETAIL ABOVE SHOWS CONNECTION OF HORIZONTAL FRAME MEMBERS TO VERTICAL FRAMES. JAMB AND MULLION CAN BE WITH OR WITHOUT REINFORCEMENT. SEE SHEETS 4 THRU 8 FOR OPTIONS.

A. HEAD ASSEMBLY



B. INTERM. HORIZONTAL

C. SILL ASSEMBLY

GENERAL NOTE:
1. GLASS NOT SHOWN FOR CLARITY.
2. FRAME AND PANEL CORNERS, INSTALLATION SCREWS AND ALL METAL PARTS CONNECTIONS TO BE SEALED WITH CLEAR COLORED SEALANT.

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Resistor
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DWG: TAD14-02	