



**LEADERS IN ECO-EFFICIENT STOREFRONT
CURTAINWALL AND ENTRANCE SYSTEMS**

3056 WALKER RIDGE DRIVE N.W.
WALKER, MICHIGAN 49544
H: 800 866 2227 FX: 616 301 0008

TITLE: *E/T/TU14000 I/O SERIES
STOREFRONT - OUTBOARD
(NON-HVHZ) (NON-IMPACT)*

TYPICAL ELEVATIONS

PREPARED BY:

1900 NE MIAMI COURT, SUITE 2-15

MIAMI, FL 33132

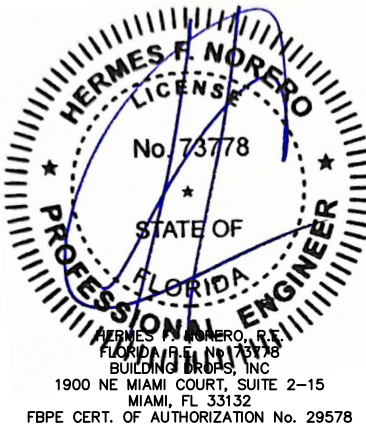
PH: (954) 399-8478
FAX: (954) 744-4738

WEB: www.buildingdrops.com



REMARKS	BY	DATE
TU ADDITION	MS	10/08/24
MULLION ADDITION	DI	12/12/24

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT



FL #: **FL41652**

DATE: 07.25.22

DWG. BY: MS	CHK. BY: HFN
-----------------------	------------------------

SCALE: NTS

DWG. #: TLI021

SECTION

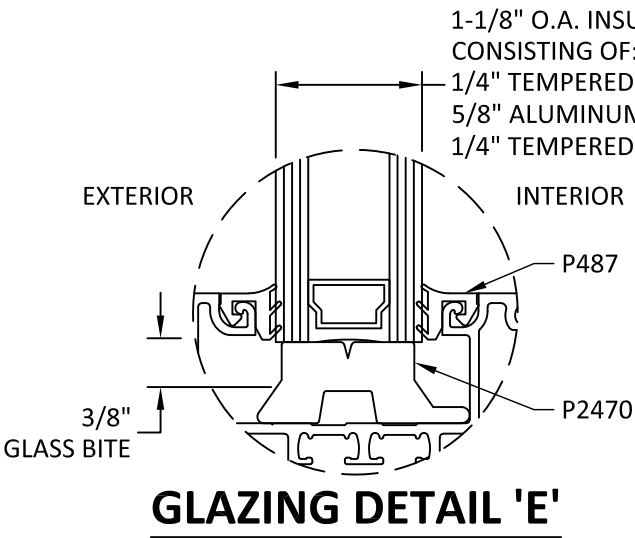
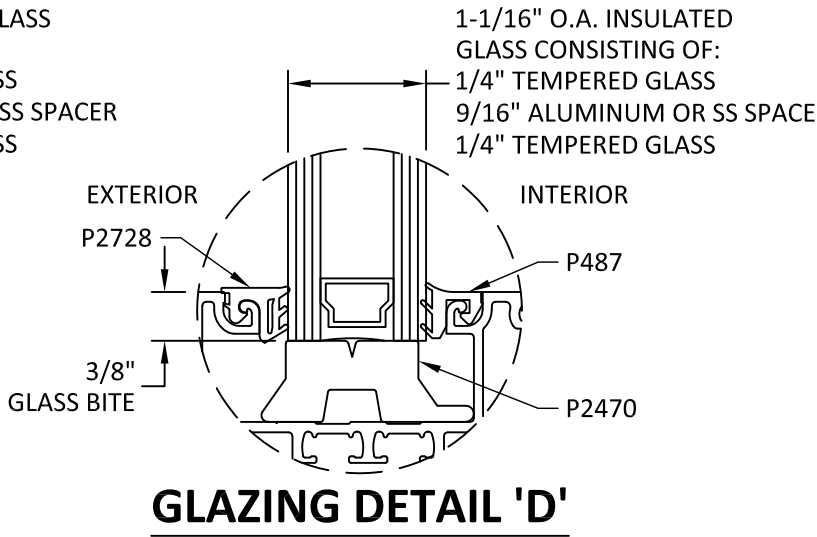
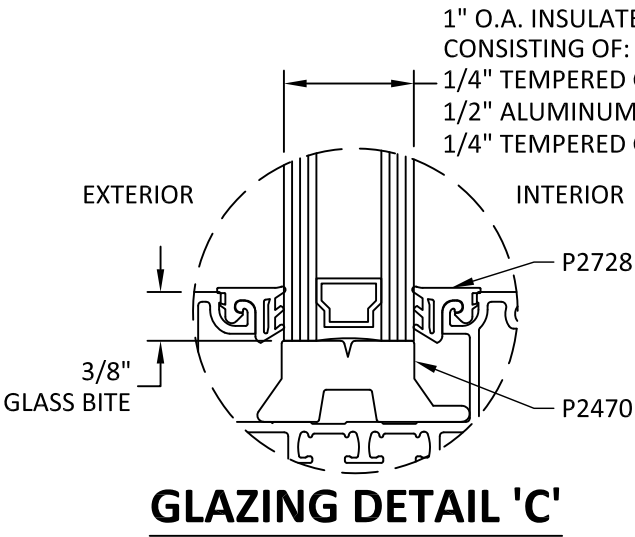
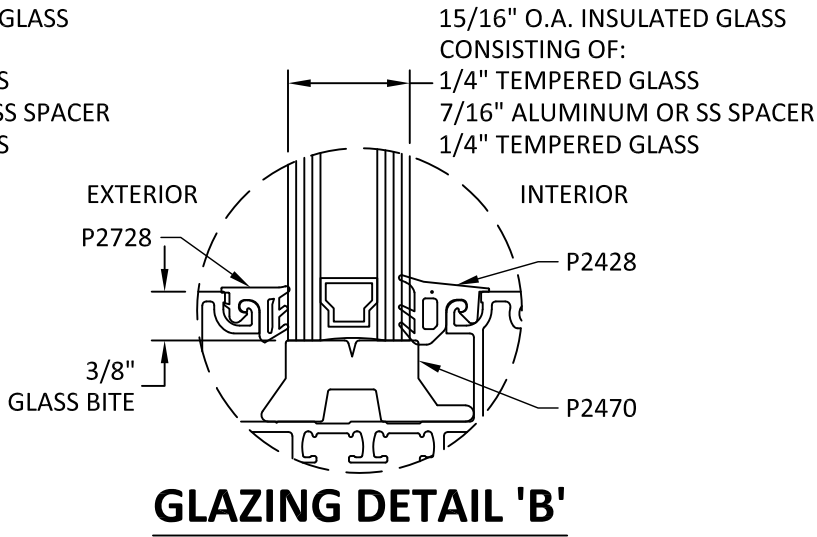
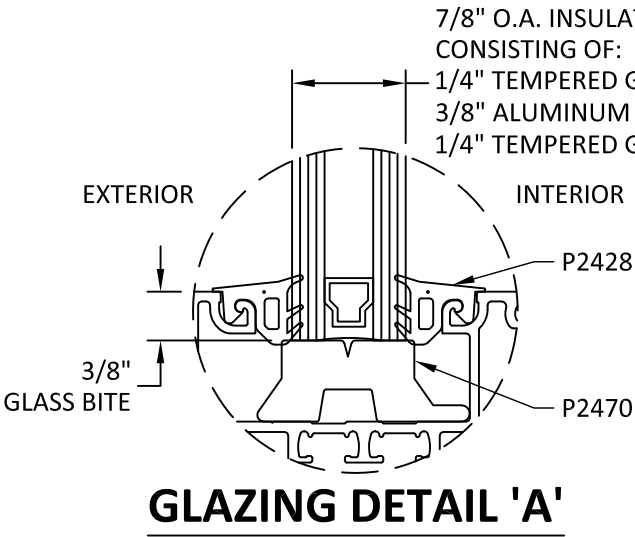
2

GLASS LOAD CAPACITY		
D.L.O. WIDTH (INCH)	D.L.O. HEIGHT (INCH)	DESIGN PRESSURE (+/- PSF)
30	43.5	45.0
33		43.3
36		39.8
39		36.8
42		34.2
45		32.0
48		30.3
51		28.9
54		27.7
57		26.8
60		26.0
63		25.3
66		24.7
69		24.2
72		23.7
75		23.3
78		23.0
81		22.7
84		22.4
87		22.1
90		21.9
93		16.3
30	49.5	45.0
33		43.3
36		39.8
39		36.8
42		34.2
45		32.0
48		30.0
51		28.3
54		26.9
57		25.8
60		24.8
63		24.0
66		23.3
69		22.7
72		22.2
75		21.8
78		21.4
81		21.0
84		15.6
30	55.5	45.0
33		43.3
36		39.8
39		36.8
42		34.2
45		32.0
48		30.0
51		28.3
54		26.7
57		25.3
60		24.2
63		23.3
66		22.5
69		21.8
72		21.2
75		15.6

GLASS LOAD CAPACITY (CONT.)		
D.L.O. WIDTH (INCH)	D.L.O. HEIGHT (INCH)	DESIGN PRESSURE (+/- PSF)
30	61.5	45.0
33		42.4
36		39.8
39		36.8
42		34.2
45		32.0
48		30.0
51		28.3
54		26.7
57		25.3
60		24.1
63		23.0
66	67.5	16.6
27		45.0
30		43.7
33		41.0
36		38.8
39		36.8
42		34.2
45		32.0
48		30.0
51		28.3
54		26.7
57		25.3
60	73.5	18.1
27		45.0
30		42.7
33		39.9
36		37.7
39		35.8
42		34.2
45		32.0
48		30.0
51		28.3
54		26.7
27	79.5	45.0
30		41.9
33		39.1
36		36.8
39		34.8
42		33.2
45		31.9
48		30.0
51		21.3
27	84.0	44.9
30		41.4
33		38.5
36		36.2
39		34.2
42		32.6
45		31.2
48		30.0

GLASS LOAD CAPACITY (CONT.)		
D.L.O. WIDTH (INCH)	D.L.O. HEIGHT (INCH)	DESIGN PRESSURE (+/- PSF)
27	85.5	44.7
30		41.2
33		38.4
36		36.0
39		34.1
42		32.4
45		31.0
48		22.6
27	91.5	44.7
30		41.2
33		38.4
36		36.0
39		34.1
42		32.4
45		31.0
48		22.6
27	97.5	44.2
30		40.7
33		37.8
36		35.4
39		33.4
42		31.7
45		24.1
27	103.5	43.7
30		40.2
33		37.3
36		34.9
39		32.9
42		25.8
27	109.5	43.3
30		39.7
33		36.8
36		34.4
39		27.7
27	115.5	43.0
30		39.4
33		36.4
36		34.0
27	121.5	42.6
30		39.0
33		36.1
36		30.0
27	127.5	42.4
30		38.8
33		35.8
36		38.5
27	133.5	41.9
30		38.3
27	139.5	41.7
27	145.5	41.5
27	151.5	36.8

GLAZING DETAILS AND DESIGN PRESSURE TABLE



- GLAZING NOTES:
- GLASS TYPE & THICKNESS COMPLY WITH ASTM E1300 REQUIREMENTS AS WELL AS APPLICABLE SAFETY GLAZING REQUIREMENTS PER THE FBC. TEMPER AND SAFETY GLAZING REQUIREMENTS SHALL BE REVIEWED ON A SITE SPECIFIC BASIS.
 - SETTING BLOCK DUROMETER HARDNESS OF 70-90 (SHORE A) AS REFERENCED IN FBC CHAPTER 24.
 - SETTING BLOCKS TO BE LOCATED AT 1/4 SPAN LENGTH FOR GLASS WIDER THAN 36" AS PER FBC CHAPTER 24.
 - D.L.O. AND DESIGN PRESSURES MAY NOT EXCEED MAX VALUES IN DESIGN PRESSURE TABLES.

TUBELITE
DEPENDABLE
LEADERS IN ECO-EFFICIENT STOREFRONT,
CURTAINWALL AND ENTRANCE SYSTEMS

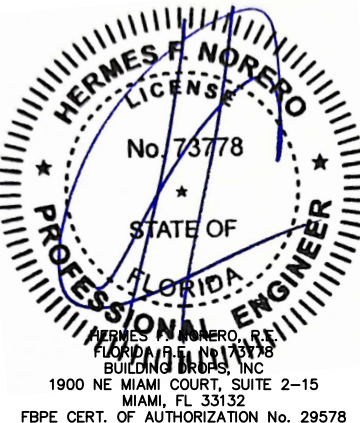
3056 WALKER RIDGE DRIVE N.W.
WALKER, MICHIGAN 49544
PH: 800 866 2227 FX: 616 301 0008

TITLE: E/T/TU14000 I/O SERIES
STOREFRONT - OUTBOARD
(NON-HVHZ) (NON-IMPACT)
GLAZING DETAILS &
DESIGN PRESSURE TABLE

PREPARED BY:
BUILDING DROPS, INC.
1900 NE MIAMI COURT, SUITE 2-15
MIAMI, FL 33132
PH: (954) 399-8478
FAX: (954) 744-4738
WEB: www.buildingdrops.com

REMARKS	BY	DATE
TU ADDITION	MS	10/08/24
MULLION ADDITION	DI	12/12/24

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC
AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC
SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE
FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED
ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC
DOCUMENTS FOR USE WITH THIS DOCUMENT



FL #:		FL41652	
DATE:		07.25.22	
DWG. BY:		CHK. BY:	
MS		HFN	
SCALE:		NTS	
DWG. #:		TLI021	
SECTION			
3			

c:\users\dylanwata\building drops, inc\building drops landing - common\projects\tubelite, inc\fbc-24-1102.1 - fbc submittal - fl16992, fl41652 et. 14000 series storefront, io storefront\dwgs\fl41652\TLI021.dwg 12/16/2024 10:40 AM

NOTE:
NON-THERMALLY BROKEN E14000 I/O PROFILES SHOWN.
THERMALLY BROKEN T/TU14000 I/O PROFILES ARE
QUALIFIED FOR THE SAME DETAILS AND RATINGS.

HORIZONTAL DETAILS

TUBELITE
DEPENDABLE
LEADERS IN ECO-EFFICIENT STOREFRONT,
CURTAINWALL AND ENTRANCE SYSTEMS

3056 WALKER RIDGE DRIVE N.W.
WALKER, MICHIGAN 49544
PH: 800 866 2227 FX: 616 301 0008

TITLE: E/T/TU14000 I/O SERIES
STOREFRONT - OUTBOARD
(NON-HVHZ) (NON-IMPACT)

HORIZONTAL DETAILS

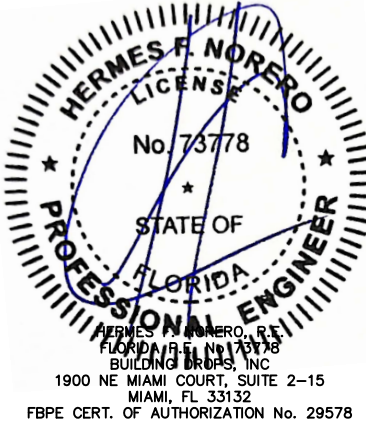
PREPARED BY: BUILDING DROPS, INC.

1900 NE MIAMI COURT, SUITE 2-15
MIAMI, FL 33132
PH: (954) 399-8478
FAX: (954) 744-4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE
TU ADDITION	MS	10/08/24
MULLION ADDITION	DI	12/12/24

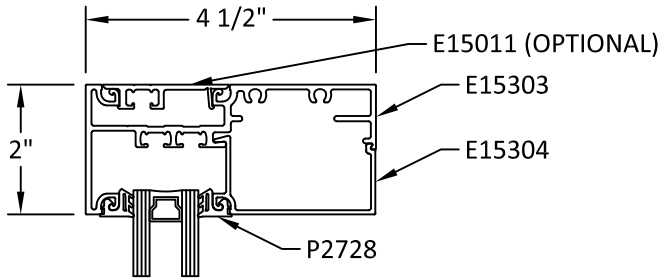
THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC
AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC
SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE
FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED
ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC
DOCUMENTS FOR USE WITH THIS DOCUMENT



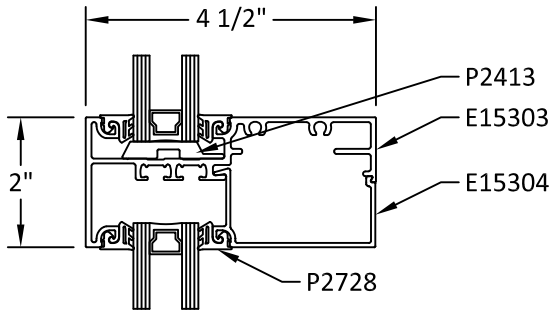
FL #:	FL41652
DATE:	07.25.22
DWG. BY:	MS
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	TLI021

SECTION

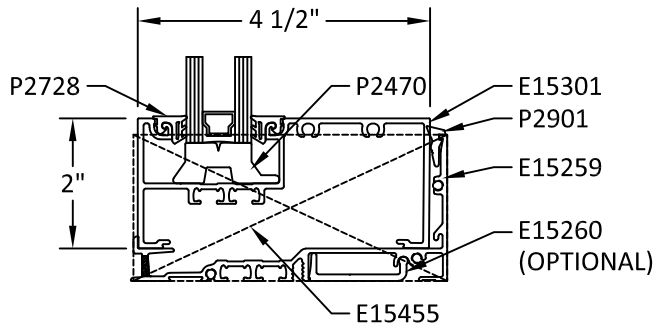
4



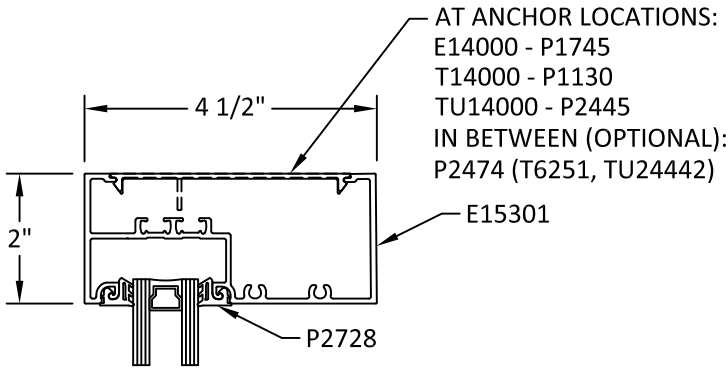
A
4
HEAD
INSIDE GLAZED



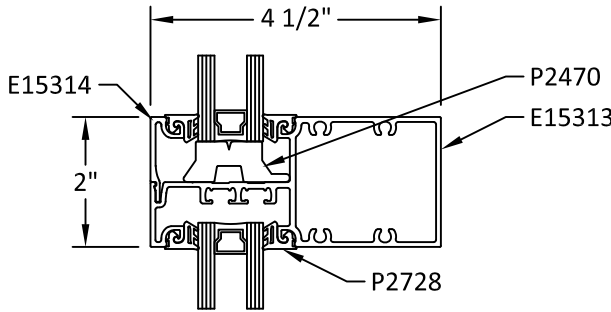
B
4
HORI. MULLION
INSIDE GLAZED



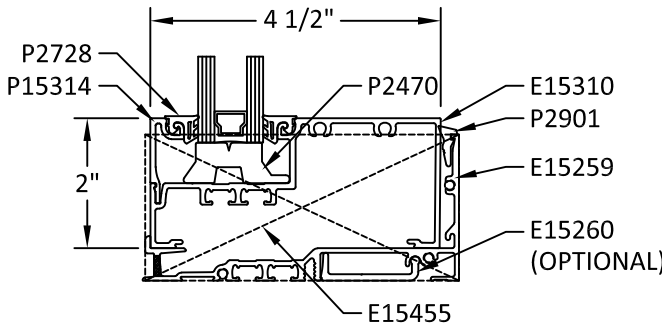
C
4
SILL
INSIDE GLAZED



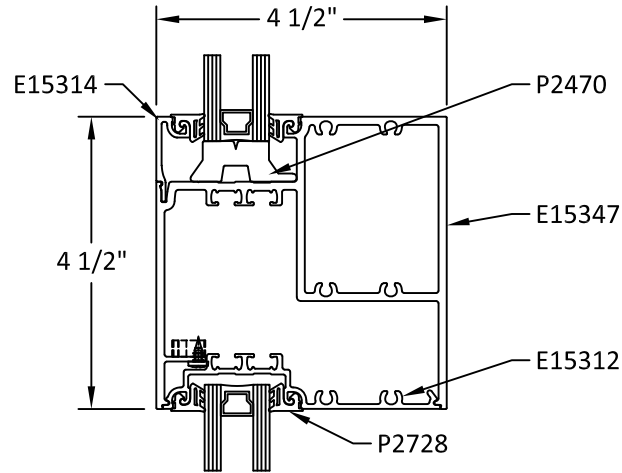
D
4
HEAD
OUTSIDE GLAZED



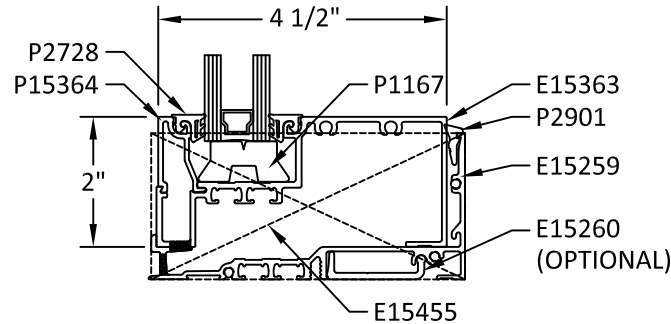
E
4
HORI. MULLION
OUTSIDE GLAZED



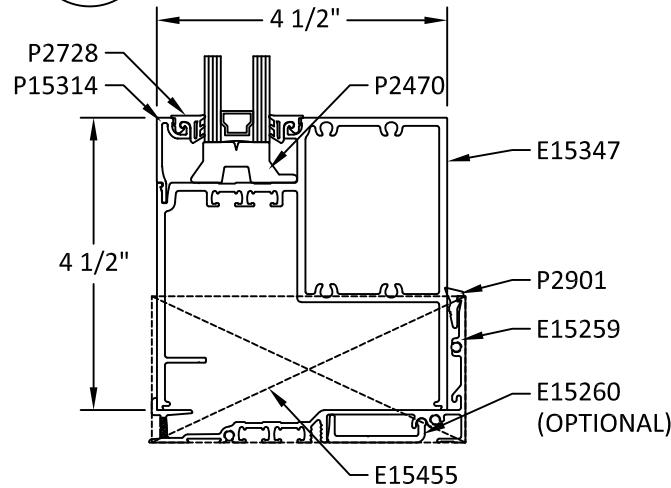
F
4
SILL
OUTSIDE GLAZED



G
4
HORI. MULLION
OUTSIDE GLAZED

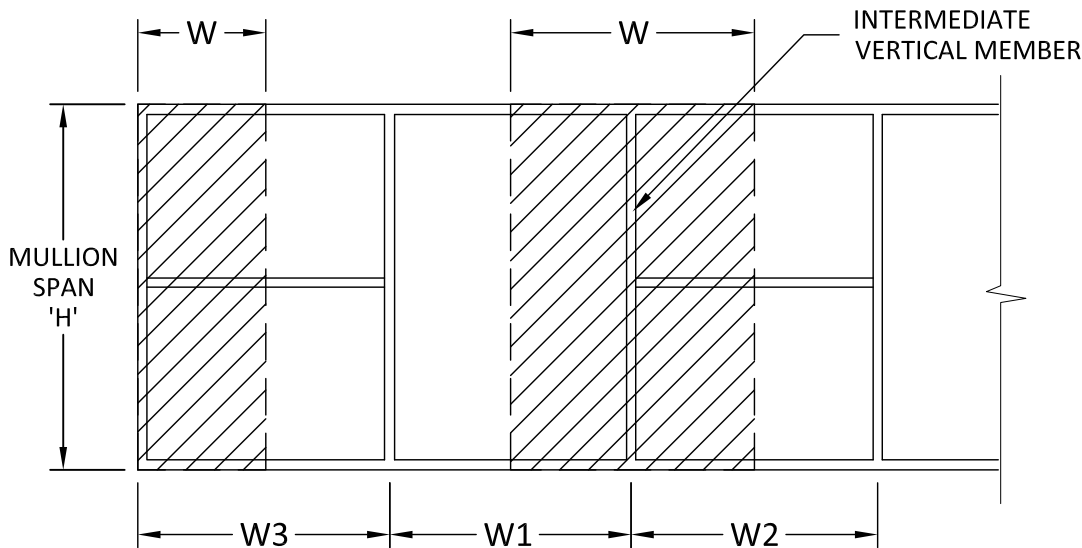


H
4
SILL
OUTSIDE GLAZED



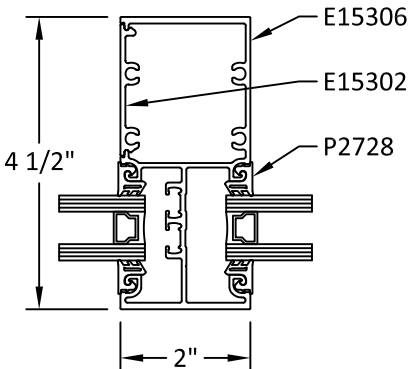
I
4
SILL
OUTSIDE GLAZED

VERTICAL DETAILS AND DESIGN PRESSURE TABLES



NOTE:
NON-THERMALLY BROKEN E14000 I/O PROFILES SHOWN.
THERMALLY BROKEN T/TU14000 I/O PROFILES ARE
QUALIFIED FOR THE SAME DETAILS AND RATINGS.

MULL TRIBUTARY WIDTH (W) = $\frac{W1 + W2}{2}$
JAMB TRIBUTARY WIDTH (W) = $\frac{W3}{2}$



A 5 VERT.MULLION M1

DESIGN PRESSURE TABLE (PSF) - J1, J2, M2, M3 & M4														
MULL SPAN 'H' (INCHES)	TRIBUTARY WIDTH (INCHES)													
	24	27	30	33	36	39	42	45	48	50	54	57	60	62
78	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	42.83	40.58	38.55	37.30
84	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	44.72	42.93	39.75	37.66	35.78	34.62
90	45.00	45.00	45.00	45.00	45.00	45.00	45.00	44.51	41.72	40.06	37.09	35.14	33.38	32.30
96	45.00	45.00	45.00	45.00	45.00	45.00	44.69	41.71	39.10	37.54	34.76	32.93	31.28	30.27
102	45.00	45.00	45.00	45.00	45.00	45.00	42.05	39.24	36.79	35.32	32.70	30.98	-	-
108	45.00	45.00	45.00	45.00	45.00	42.75	39.70	37.05	34.74	33.35	30.88	-	-	-
114	45.00	45.00	45.00	45.00	43.87	40.49	37.60	35.10	32.90	31.59	-	-	-	-
120	45.00	45.00	45.00	45.00	41.67	38.46	35.71	33.33	31.25	30.00	-	-	-	-
126	45.00	45.00	43.17	39.24	35.97	33.20	30.83	28.78	-	-	-	-	-	-
132	45.00	41.69	37.52	34.11	31.27	28.86	26.80	25.02	-	-	-	-	-	-
138	41.03	36.47	32.82	29.84	27.35	25.25	23.44	-	-	-	-	-	-	-
144	36.09	32.08	28.87	26.25	24.06	22.21	-	-	-	-	-	-	-	-
150	31.92	28.37	25.54	23.21	21.28	19.64	-	-	-	-	-	-	-	-
156	28.37	25.21	22.69	20.63	18.91	-	-	-	-	-	-	-	-	-

DESIGN PRESSURE TABLE (PSF) - M1 & M5													
MULL SPAN 'H' (INCHES)	TRIBUTARY WIDTH (INCHES)												
	24	27	30	33	36	39	42	45	48	51	54	57	
78	45.00	45.00	45.00	45.00	45.00	45.00	42.20	39.38	36.92	34.75	32.82	31.09	
84	45.00	45.00	45.00	45.00	45.00	42.20	39.18	36.57	34.29	32.27	30.48	-	
90	45.00	45.00	45.00	45.00	42.67	39.38	36.57	34.13	32.00	30.12	-	-	
96	45.00	45.00	45.00	43.64	40.00	36.92	34.29	32.00	30.00	-	-	-	
102	45.00	44.46	40.02	36.38	33.35	30.78	28.58	26.68	-	-	-	-	
108	42.14	37.46	33.71	30.65	28.09	25.93	24.08	-	-	-	-	-	
114	35.83	31.85	28.66	26.06	23.89	22.05	-	-	-	-	-	-	
120	30.72	27.31	24.58	22.34	20.48	-	-	-	-	-	-	-	
126	26.54	23.59	21.23	19.30	17.69	-	-	-	-	-	-	-	
132	23.08	20.52	18.46	16.79	-	-	-	-	-	-	-	-	
138	20.20	17.95	16.16	14.69	-	-	-	-	-	-	-	-	
144	17.78	15.80	14.22	-	-	-	-	-	-	-	-	-	
150	15.73	13.98	12.58	-	-	-	-	-	-	-	-	-	
156	13.98	12.43	-	-	-	-	-	-	-	-	-	-	

TUBELITE®
DEPENDABLE
LEADERS IN ECO-EFFICIENT STOREFRONT,
CURTAINWALL AND ENTRANCE SYSTEMS

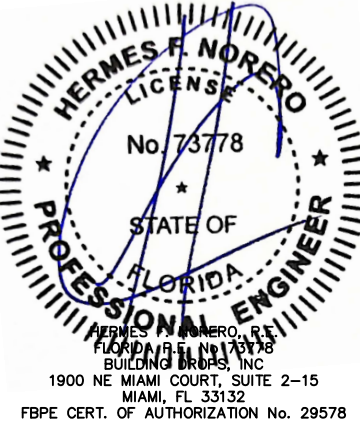
3056 WALKER RIDGE DRIVE N.W.
WALKER, MICHIGAN 49544
PH: 800 866 2227 FX: 616 301 0008

TITLE: E/T/TU14000 I/O SERIES
STOREFRONT - OUTBOARD
(NON-HVHZ) (NON-IMPACT)
VERTICAL DETAILS &
DESIGN PRESSURE TABLES

PREPARED BY: BUILDING DROPS, INC.
1900 NE MIAMI COURT, SUITE 2-15
MIAMI, FL 33132
PH: (954) 399-8478
FAX: (954) 744-4738
WEB: www.buildingdrops.com

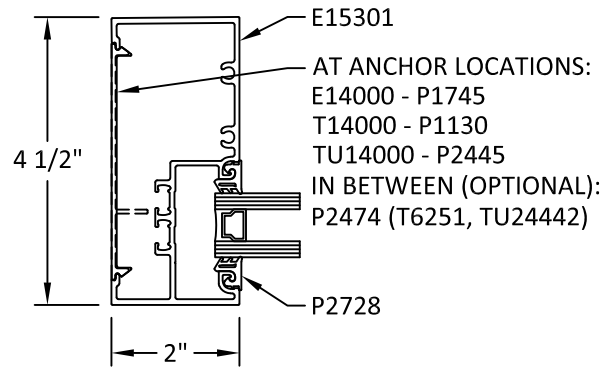
REMARKS	BY	DATE
TU ADDITION	MS	10/08/24
MULLION ADDITION	DI	12/12/24

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC
AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC
SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE
FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED
ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC
DOCUMENTS FOR USE WITH THIS DOCUMENT

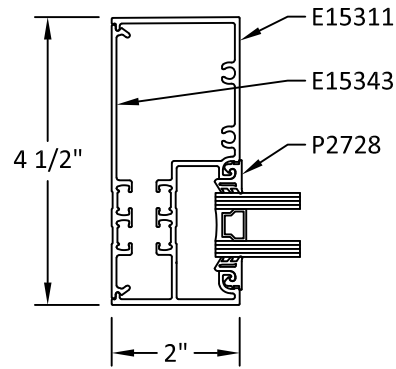


FL #:	FL41652
DATE:	07.25.22
DWG. BY:	MS
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	TLI021
SECTION	5

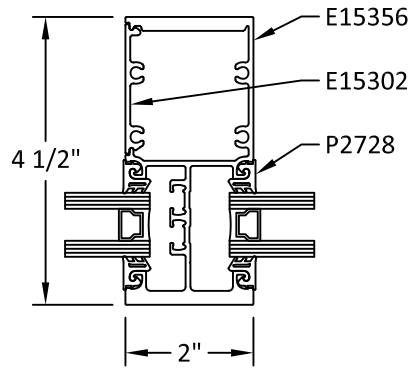
NOTE:
NON-THERMALLY BROKEN E14000 I/O PROFILES SHOWN.
THERMALLY BROKEN T/TU14000 I/O PROFILES ARE
QUALIFIED FOR THE SAME DETAILS AND RATINGS.



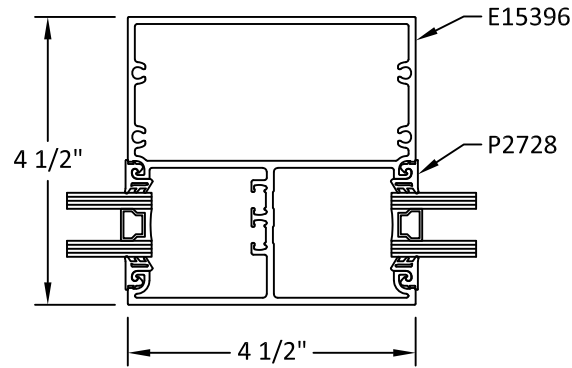
A
5.1 VERTICAL JAMB J1



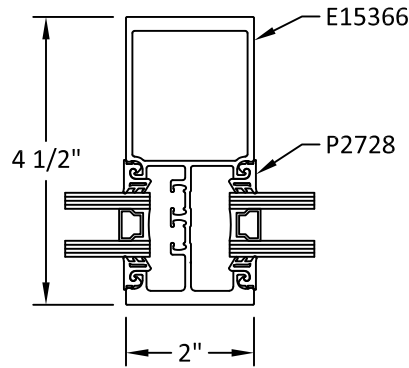
B
5.1 VERTICAL JAMB J2



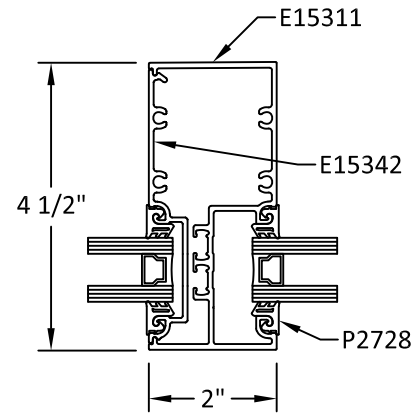
C
5.1 VERT. MULLION M2



D
5.1 VERT. MULLION M3



E
5.1 VERT. MULLION M4



F
5.1 VERT. MULLION M5
E14000 ONLY

TUBELITE®
DEPENDABLE
LEADERS IN ECO-EFFICIENT STOREFRONT,
CURTAINWALL AND ENTRANCE SYSTEMS

3056 WALKER RIDGE DRIVE N.W.
WALKER, MICHIGAN 49544
PH: 800 866 2227 FX: 616 301 0008

TITLE: E/T/TU14000 I/O SERIES
STOREFRONT - OUTBOARD
(NON-HVHZ) (NON-IMPACT)

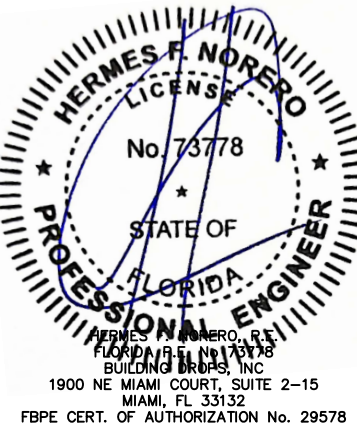
VERTICAL DETAILS

PREPARED BY:
BUILDING DROPS, INC.
1900 NE MIAMI COURT, SUITE 2-15
MIAMI, FL 33132
PH: (954) 399-8478
FAX: (954) 744-4738
WEB: www.buildingdrops.com



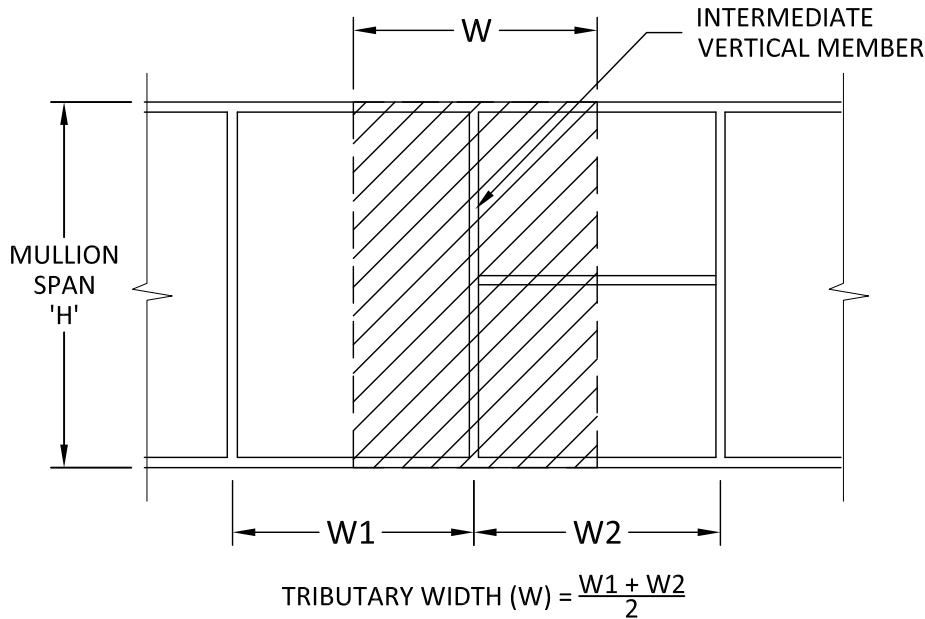
REMARKS	BY	DATE
TU ADDITION	MS	10/08/24
MULLION ADDITION	DI	12/12/24

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC
AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC
SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE
FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED
ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC
DOCUMENTS FOR USE WITH THIS DOCUMENT

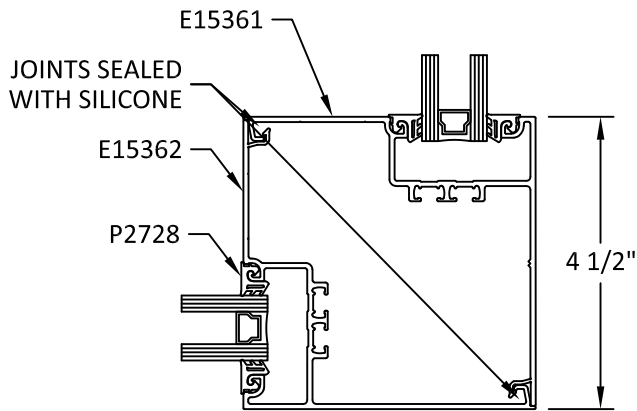


FL #:	FL41652
DATE:	07.25.22
DWG. BY:	MS
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	TLI021
SECTION	5.1

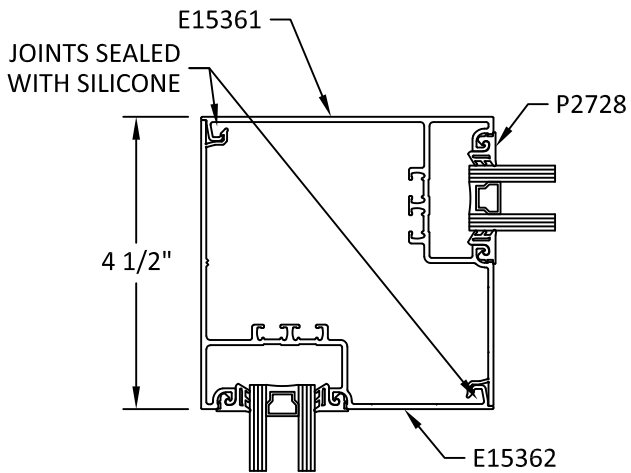
CORNER DETAILS



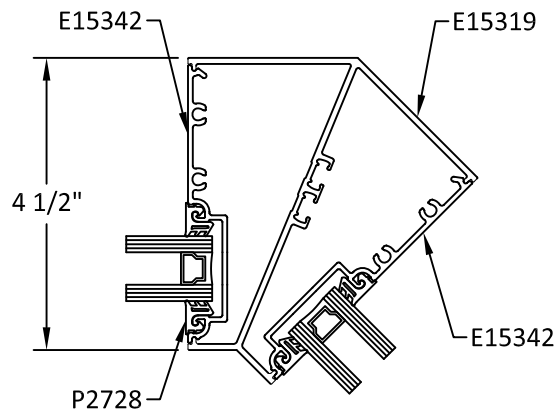
DESIGN PRESSURE TABLE (PSF) - M6, M7, M8 & M9													
MULL SPAN 'H' (INCHES)	TRIBUTARY WIDTH (INCHES)												
	26	29	32	35	38	41	44	47	50	53	56	59	62
78	45.00	45.00	45.00	45.00	45.00	44.28	41.26	38.63	36.31	34.26	32.42	30.77	-
84	45.00	45.00	45.00	45.00	44.35	41.10	38.30	35.85	33.70	31.80	30.09	-	-
90	45.00	45.00	45.00	44.92	41.37	38.35	35.73	33.45	31.44	-	-	-	-
96	45.00	45.00	45.00	42.10	38.77	35.94	33.49	31.35	-	-	-	-	-
102	45.00	45.00	43.32	39.61	36.48	33.81	31.51	-	-	-	-	-	-
108	45.00	45.00	40.90	37.40	34.45	31.93	-	-	-	-	-	-	-
114	45.00	42.75	38.74	35.42	32.62	30.24	-	-	-	-	-	-	-
120	45.00	40.60	36.80	33.64	30.99	-	-	-	-	-	-	-	-
126	39.10	35.05	31.77	29.04	-	-	-	-	-	-	-	-	-
132	33.99	30.47	27.61	25.25	-	-	-	-	-	-	-	-	-
138	29.73	26.65	24.15	-	-	-	-	-	-	-	-	-	-
144	26.15	23.45	21.25	-	-	-	-	-	-	-	-	-	-
150	23.13	20.74	-	-	-	-	-	-	-	-	-	-	-
156	20.55	18.43	-	-	-	-	-	-	-	-	-	-	-



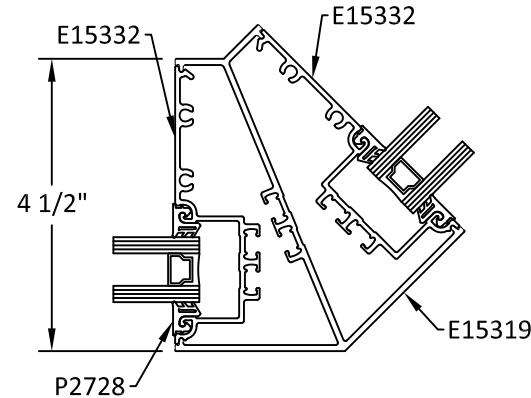
A **CORNER MULLION M6**
90° OUTSIDE CORNER



B **CORNER MULLION M7**
90° INSIDE CORNER



C **CORNER MULLION M8**
135° INSIDE CORNER



D **CORNER MULLION M9**
135° OUTSIDE CORNER

NOTE:
NON-THERMALLY BROKEN E14000 I/O PROFILES SHOWN.
THERMALLY BROKEN T/TU14000 I/O PROFILES ARE
QUALIFIED FOR THE SAME DETAILS AND RATINGS.

TUBELITE
DEPENDABLE
LEADERS IN ECO-EFFICIENT STOREFRONT,
CURTAINWALL AND ENTRANCE SYSTEMS

3056 WALKER RIDGE DRIVE N.W.
WALKER, MICHIGAN 49544
PH: 800 866 2227 FX: 616 301 0008

TITLE: E/T/TU14000 I/O SERIES
STOREFRONT - OUTBOARD
(NON-HVHZ) (NON-IMPACT)

CORNER DETAILS &
DESIGN PRESSURE TABLE

PREPARED BY:

BUILDING DROPS, INC.

1900 NE MIAMI COURT, SUITE 2-15
MIAMI, FL 33132

PH: (954) 399-8478
FAX: (954) 744-4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE
TU ADDITION	MS	10/08/24
MULLION ADDITION	DI	12/12/24

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC
AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC
SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE
FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED
ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC
DOCUMENTS FOR USE WITH THIS DOCUMENT



FL #:
FL41652

DATE: **07.25.22**

DWG. BY: **MS** CHK. BY: **HFN**

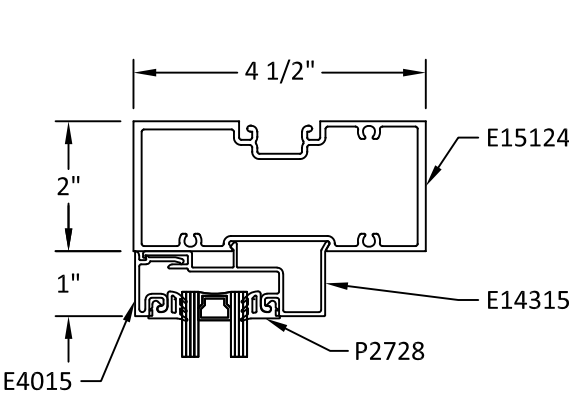
SCALE: **NTS**

DWG. #: **TLI021**

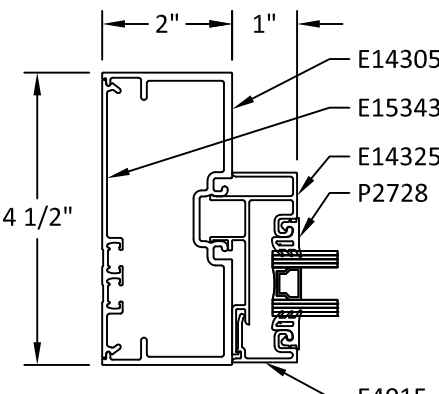
SECTION

6

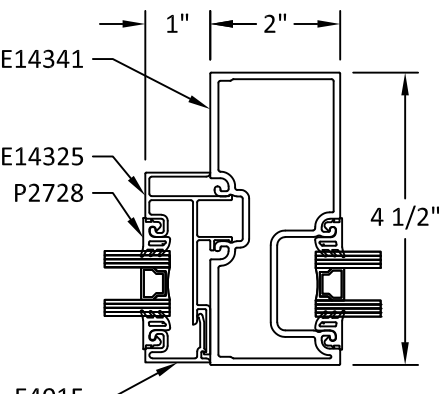
DOOR DETAILS (NON-THERMAL)



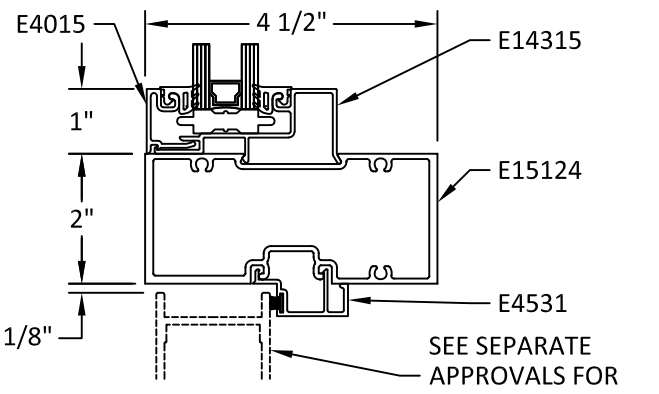
A
7 TRANSOM HEAD
STANDARD



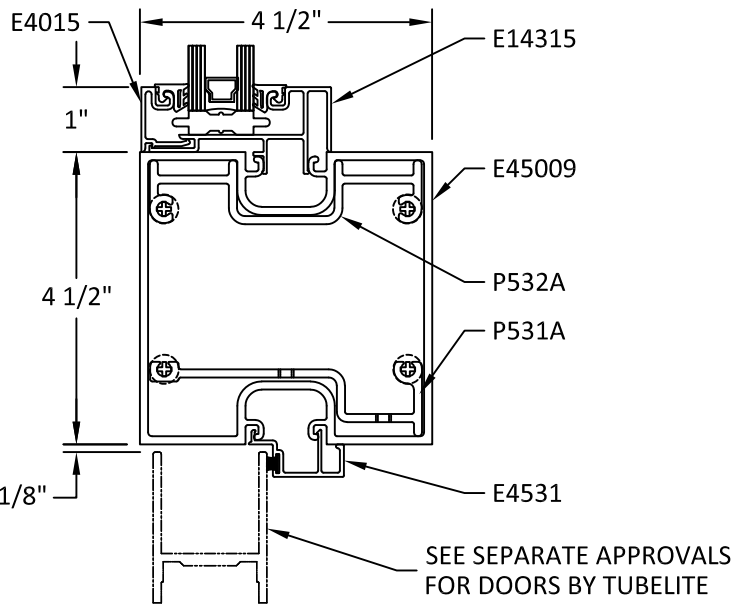
B
7 TRANSOM JAMB
STANDARD



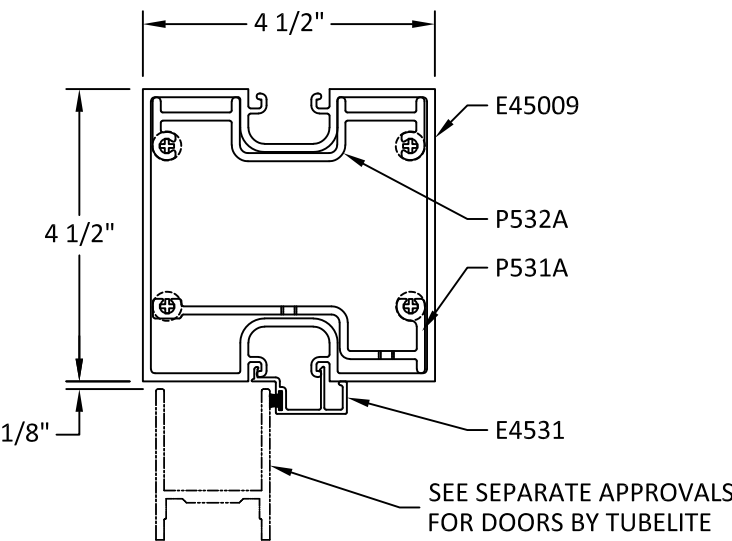
C
7 TRANSOM MULLION
TUBULAR



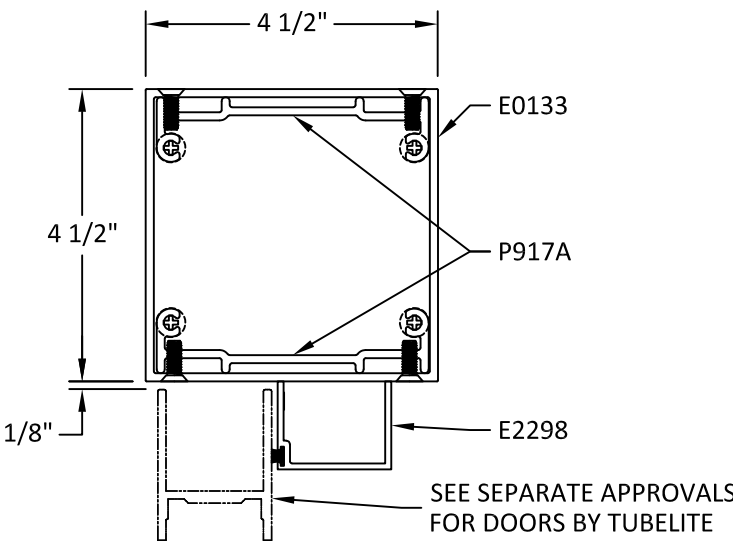
D
7 DOOR TO TRANSOM
STANDARD



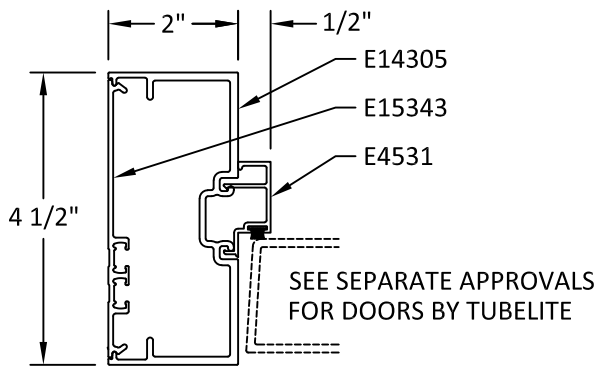
E
7 DOOR HEADER
W/ TRANSOM



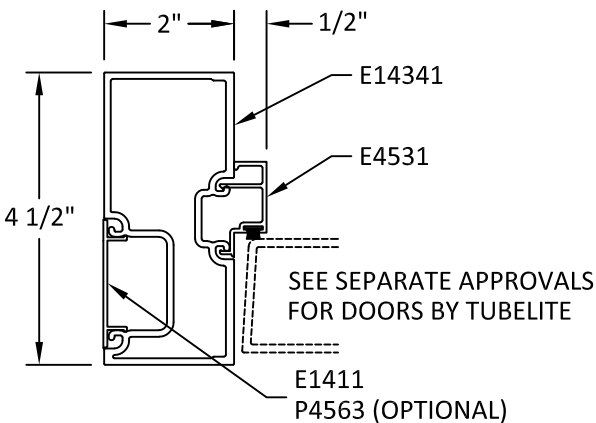
F
7 DOOR HEADER
W/O TRANSOM



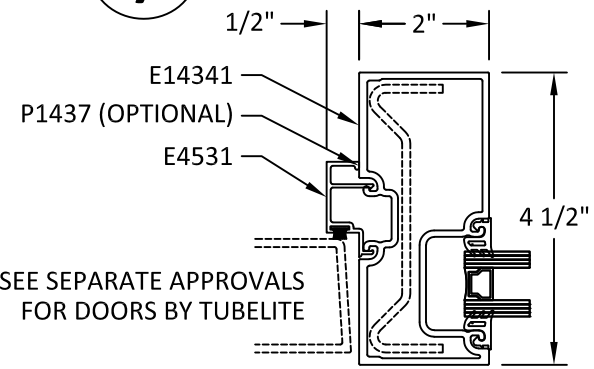
G
7 DOOR HEADER
W/O TRANSOM



H
7 DOOR JAMB
STANDARD



I
7 DOOR JAMB
TUBULAR



J
7 DOOR MULLION
TUBULAR

TUBELITE
DEPENDABLE
LEADERS IN ECO-EFFICIENT STOREFRONT,
CURTAINWALL AND ENTRANCE SYSTEMS

3056 WALKER RIDGE DRIVE N.W.
WALKER, MICHIGAN 49544
PH: 800 866 2227 FX: 616 301 0008

TITLE: E/T/TU14000 I/O SERIES
STOREFRONT - OUTBOARD
(NON-HVHZ) (NON-IMPACT)

DOOR DETAILS (NON-THERMAL)

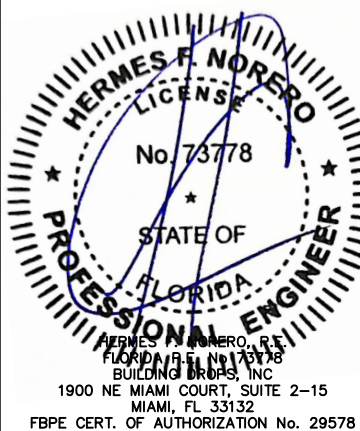
PREPARED BY: BUILDING DROPS, INC.

1900 NE MIAMI COURT, SUITE 2-15
MIAMI, FL 33132
PH: (954) 399-8478
FAX: (954) 744-4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE
TU ADDITION	MS	10/08/24
MULLION ADDITION	DI	12/12/24

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC
AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC
SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE
FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED
ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC
DOCUMENTS FOR USE WITH THIS DOCUMENT

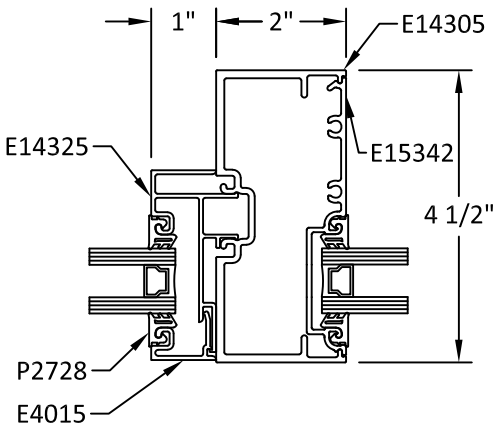


FL #:	FL41652
DATE:	07.25.22
DWG. BY:	MS
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	TLI021

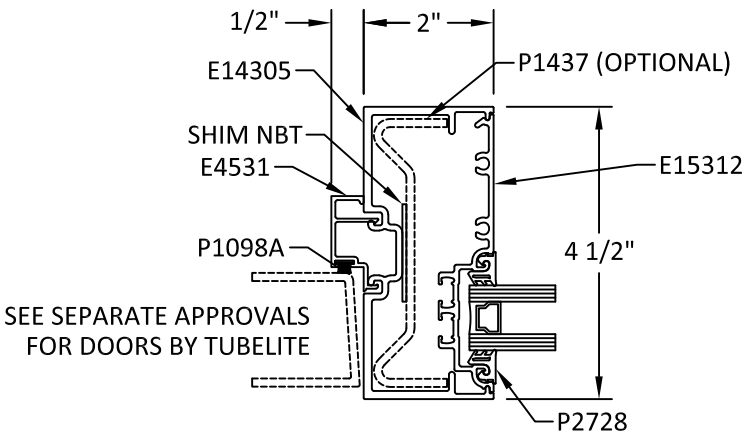
SECTION

7

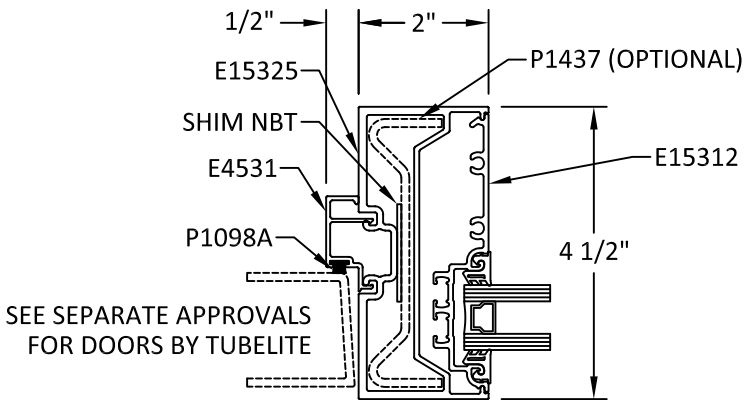
DOOR DETAILS (NON-THERMAL)



A
7.1 **TRANSOM JAMB**
STANDARD



B
7.1 **DOOR JAMB**
STANDARD



C
7.1 **DOOR JAMB**
TUBULAR

TUBELITE®
DEPENDABLE
LEADERS IN ECO-EFFICIENT STOREFRONT,
CURTAINWALL AND ENTRANCE SYSTEMS

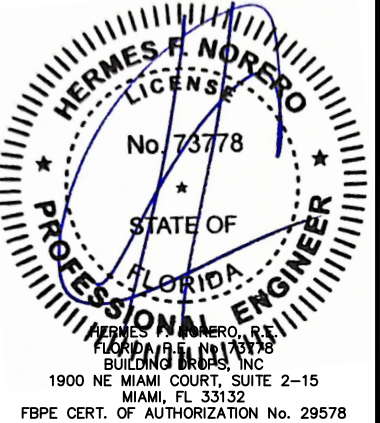
3056 WALKER RIDGE DRIVE N.W.
WALKER, MICHIGAN 49544
PH: 800 866 2227 FX: 616 301 0008

TITLE: **E/T/TU14000 I/O SERIES
STOREFRONT - OUTBOARD
(NON-HVHZ) (NON-IMPACT)**
DOOR DETAILS (NON-THERMAL)

PREPARED BY: **BUILDING DROPS, INC.**
1900 NE MIAMI COURT, SUITE 2-15
MIAMI, FL 33132
PH: (954) 399-8478
FAX: (954) 744-4738
WEB: www.buildingdrops.com

REMARKS	BY	DATE
TU ADDITION	MS	10/08/24
MULLION ADDITION	DI	12/12/24

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC
AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC
SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE
FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED
ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC
DOCUMENTS FOR USE WITH THIS DOCUMENT



FL #:	FL41652
DATE:	07.25.22
DWG. BY:	MS
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	TLI021
SECTION	7.1

DOOR DETAILS (THERMAL)

TUBELITE
DEPENDABLE

LEADERS IN ECO-EFFICIENT STOREFRONT,
CURTAINWALL AND ENTRANCE SYSTEMS

3056 WALKER RIDGE DRIVE N.W.
WALKER, MICHIGAN 49544
PH: 800 866 2227 FX: 616 301 0008

TITLE: E/T/TU14000 I/O SERIES
STOREFRONT - OUTBOARD
(NON-HVHZ) (NON-IMPACT)

DOOR DETAILS (THERMAL)

PREPARED BY:

BUILDING DROPS, INC.

1900 NE MIAMI COURT, SUITE 2-15

MIAMI, FL 33132

PH: (954) 399-8478

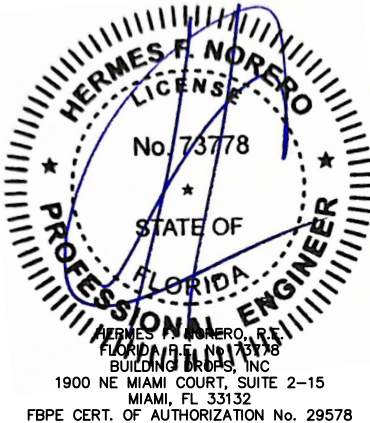
FAX: (954) 744-4738

WEB: www.buildingdrops.com



REMARKS	BY	DATE
TU ADDITION	MS	10/08/24
MULLION ADDITION	DI	12/12/24

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC
AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC
SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE
FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED
ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC
DOCUMENTS FOR USE WITH THIS DOCUMENT



FL #:

FL41652

DATE: 07.25.22

DWG. BY:
MS

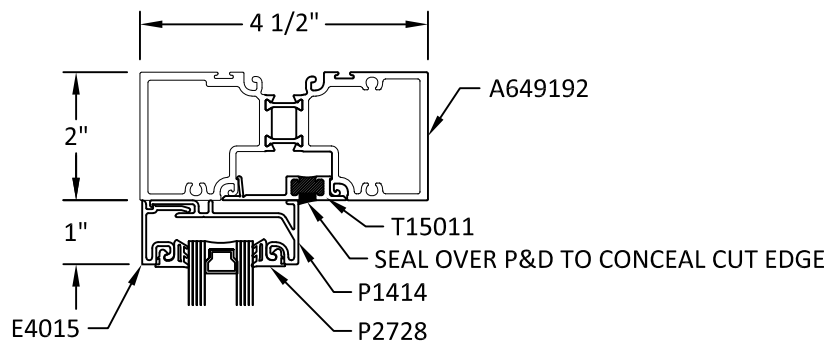
CHK. BY:
HFN

SCALE: **NTS**

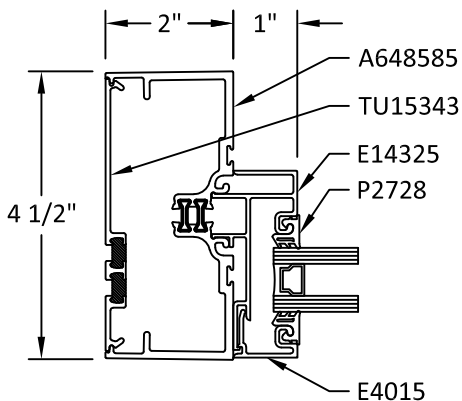
DWG. #: **TLI021**

SECTION

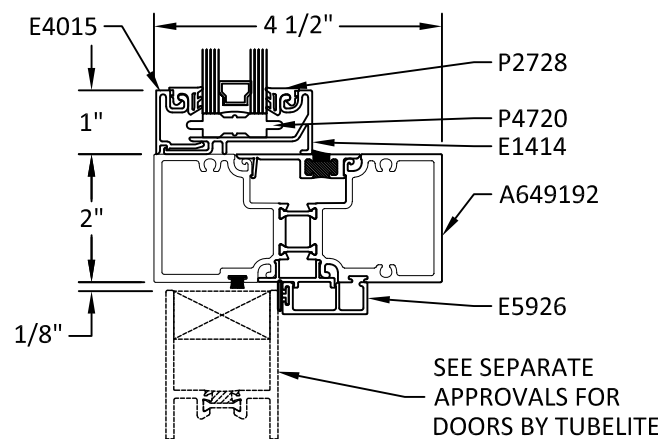
7.2



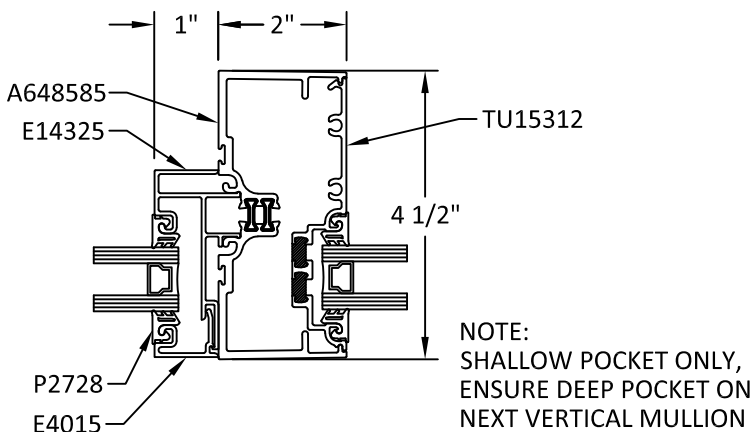
A
7.2
TRANSOM HEAD
STANDARD



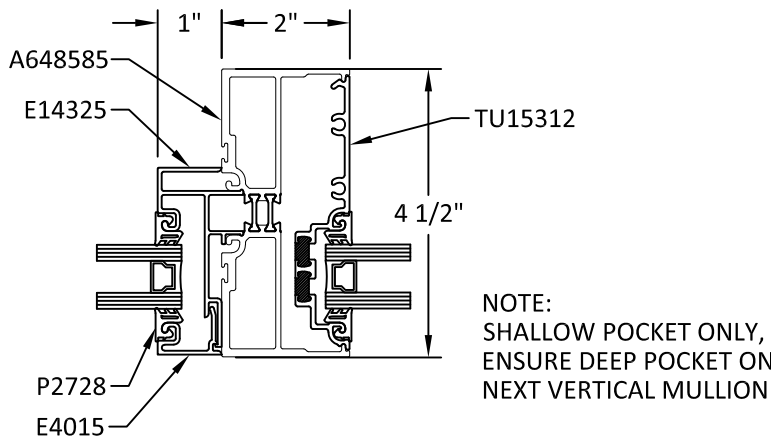
B
7.2
TRANSOM JAMB
STANDARD



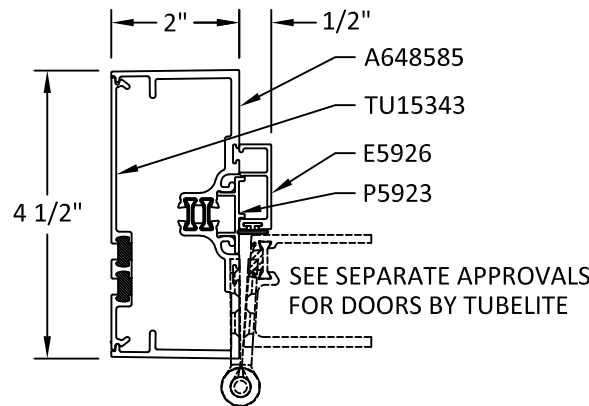
C
7.2
DOOR TO TRANSOM
STANDARD



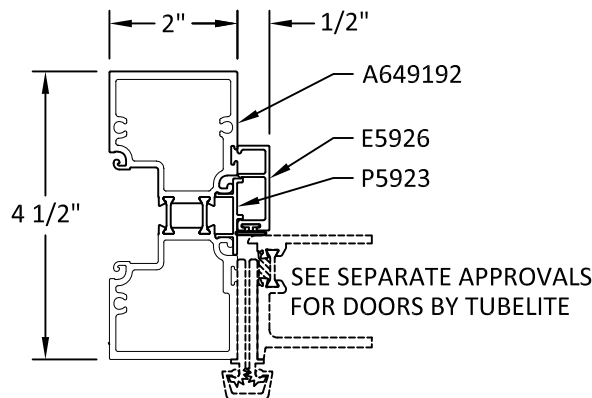
D
7.2
TRANSOM MULLION
STANDARD



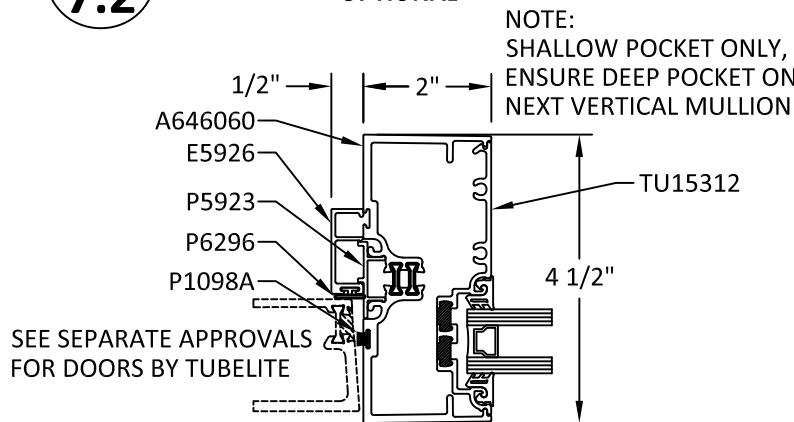
E
7.2
TRANSOM MULLION
OPTIONAL



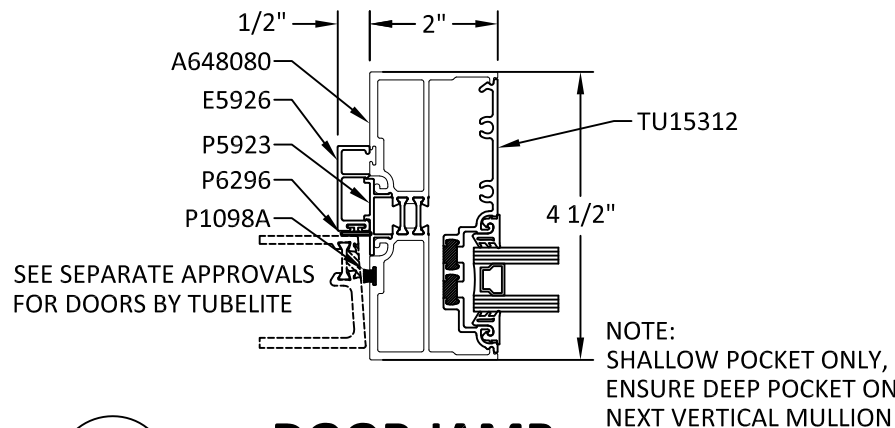
F
7.2
DOOR JAMB
STANDARD



G
7.2
DOOR JAMB
TUBULAR



H
7.2
DOOR JAMB
STANDARD

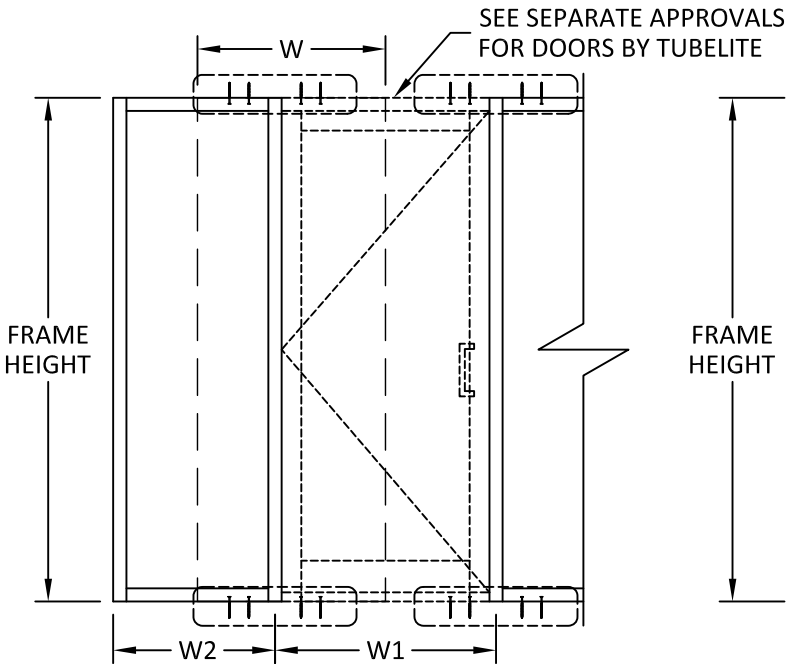


I
7.2
DOOR JAMB
OPTIONAL

DOOR MULLION DESIGN PRESSURE TABLES

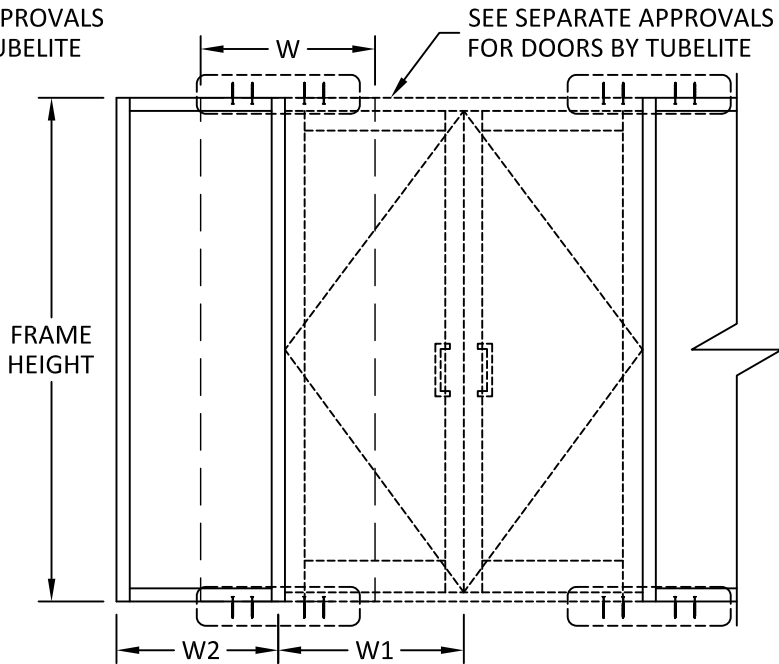
DOOR MULLION LOAD CAPACITY (PSF) W/O STEEL REINFORCEMENT		
NOMINAL DIMS.		DESIGN PRESSURE (PSF)
TRIBUTARY WIDTH W (in.)	FRAME HEIGHT (in.)	EXT. (+) INT. (-)
24	78	45.0
30		45.0
36		45.0
42		45.0
48		45.0
54		45.0
60	84	45.0
24		45.0
30		45.0
36		45.0
42		45.0
48		45.0
54	90	45.0
60		42.6
24		45.0
30		45.0
36		45.0
42		45.0
48	96	45.0
54		41.2
60		37.1
24		45.0
30		45.0
36		45.0
42	102	45.0
48		40.7
54		36.2
60		32.6
24		45.0
30		45.0
36	108	45.0
42		41.2
48		36.1
54		32.1
60		28.9
24		45.0
30	114	45.0
36		42.9
42		36.8
48		32.2
54		28.6
60		25.7
24		45.0
30		45.0
36		38.5
42		33.0
48		28.9
54		25.7
60		23.1

DOOR MULLION LOAD CAPACITY (PSF) W/O STEEL REINFORCEMENT		
NOMINAL DIMS.		DESIGN PRESSURE (PSF)
TRIBUTARY WIDTH W (in.)	FRAME HEIGHT (in.)	EXT. (+) INT. (-)
24	120	45.0
30		41.7
36		34.8
42		29.8
48		26.1
54		23.2
60	126	45.0
24		37.8
30		31.5
36		27.0
42		23.6
48	132	43.1
54		34.5
60		28.7
24		24.6
30		21.5
36	138	43.1
42		38.8
48		31.0
54		25.8
60		22.2
24	144	19.4
30		17.2
36		15.5
42		34.1
48		27.3
54	150	22.7
60		19.5
24		17.1
30		15.2
36		-
42	156	30.2
48		24.1
54		20.1
60		17.2
24		15.1
30		-
36		-
42		26.8
48		21.5
54		17.9
60		15.3



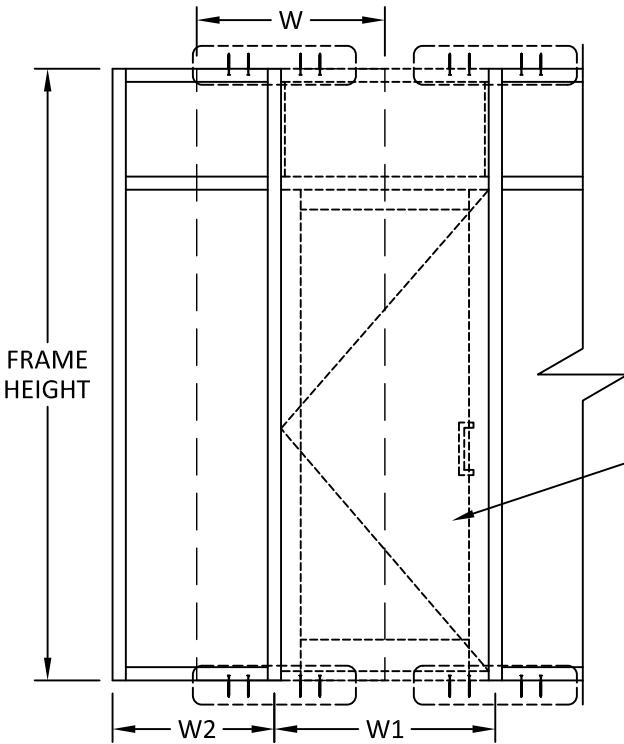
SINGLE DOOR

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



DOUBLE DOOR

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



SINGLE DOOR WITH TRANSOM

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

ANCHOR TYPE	MIN. ANCHOR QUANTITY AT HEAD/SILL
A	7
B	3
C	2

TUBELITE
DEPENDABLE
LEADERS IN ECO-EFFICIENT STOREFRONT,
CURTAINWALL AND ENTRANCE SYSTEMS

3056 WALKER RIDGE DRIVE N.W.
WALKER, MICHIGAN 49544
PH: 800 866 2227 FX: 616 301 0008

TITLE: E/T/TU14000 I/O SERIES
STOREFRONT - OUTBOARD
(NON-HVHZ) (NON-IMPACT)
DOOR MULLION DESIGN
PRESSURE TABLES

PREPARED BY: BUILDING DROPS, INC.
1900 NE MIAMI COURT, SUITE 2-15
MIAMI, FL 33132
PH: (954) 399-8478
FAX: (954) 744-4738
WEB: www.buildingdrops.com

BUILDING DROPS

REMARKS	BY	DATE
TU ADDITION	MS	10/08/24
MULLION ADDITION	DI	12/12/24

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC
AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC
SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE
FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED
ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC
DOCUMENTS FOR USE WITH THIS DOCUMENT

HERMES F. NORERO
LICENSE
No. 73778
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

HERMES F. NORERO, P.E.
FLORIDA LICENSE NO. 73778
BUILDING DROPS, INC.
1900 NE MIAMI COURT, SUITE 2-15
MIAMI, FL 33132
FBPE CERT. OF AUTHORIZATION No. 29578

FL #: FL41652

DATE: 07.25.22

DWG. BY: MS CHK. BY: HFN

SCALE: NTS

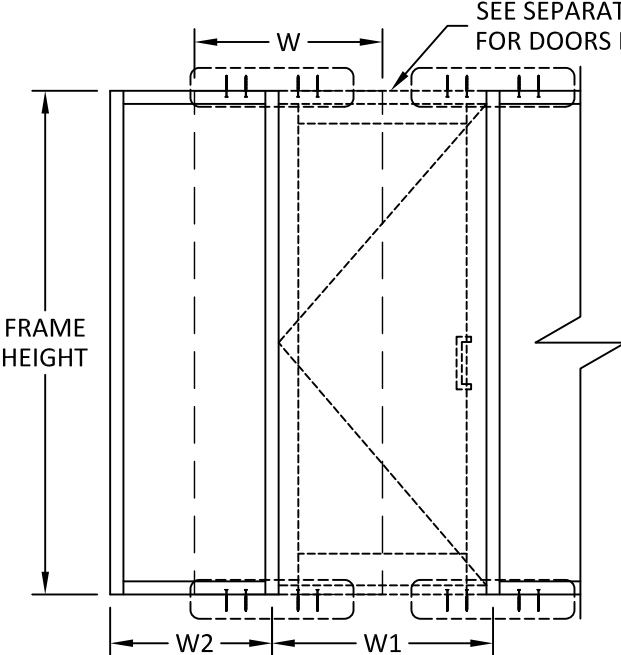
DWG. #: TLI021

SECTION

DOOR MULLION DESIGN PRESSURE TABLES

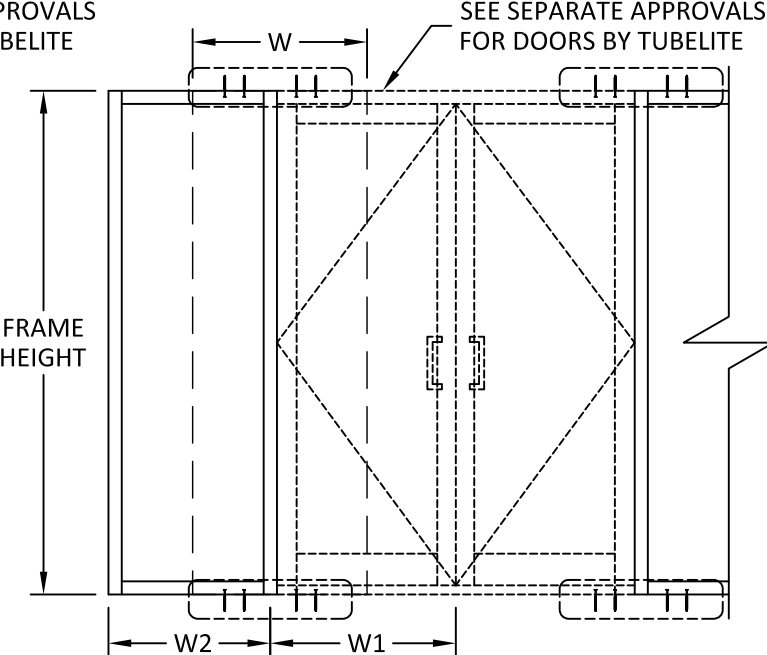
DOOR MULLION LOAD CAPACITY (PSF) W/ STEEL REINFORCEMENT		
NOMINAL DIMS.		DESIGN PRESSURE (PSF)
TRIBUTARY WIDTH W (in.)	FRAME HEIGHT (in.)	EXT. (+) INT. (-)
24	78	45.0
30		45.0
36		45.0
42		45.0
48		45.0
54		45.0
60	84	45.0
24		45.0
30		45.0
36		45.0
42		45.0
48		45.0
54	90	45.0
60		45.0
24		45.0
30		45.0
36		45.0
42		45.0
48	96	45.0
54		45.0
60		45.0
24		45.0
30		45.0
36		45.0
42	102	45.0
48		45.0
54		45.0
60		45.0
24		45.0
30		45.0
36	108	45.0
42		45.0
48		45.0
54		45.0
60		45.0
24	114	45.0
30		45.0
36		45.0
42		45.0
48		45.0
54		45.0
60		45.0

DOOR MULLION LOAD CAPACITY (PSF) W/ STEEL REINFORCEMENT		
NOMINAL DIMS.		DESIGN PRESSURE (PSF)
TRIBUTARY WIDTH W (in.)	FRAME HEIGHT (in.)	EXT. (+) INT. (-)
24	120	45.0
30		45.0
36		45.0
42		45.0
48		45.0
54		45.0
60	126	43.0
24		45.0
30		45.0
36		45.0
42		45.0
48		45.0
54	132	43.4
60		39.0
24		45.0
30		45.0
36		45.0
42	138	45.0
48		44.5
54		39.5
60		35.6
24	144	45.0
30		45.0
36		45.0
42		45.0
48		40.7
54	150	36.2
60		32.5
24		45.0
30		45.0
36		45.0
42	156	42.7
48		37.4
54		33.2
60		29.9
24	162	45.0
30		45.0
36		45.0
42		39.3
48		34.4
54	174	30.6
60		27.5
24	180	45.0
30		45.0
36		41.4
42		35.5
48		31.1
54	186	27.6
60		24.8



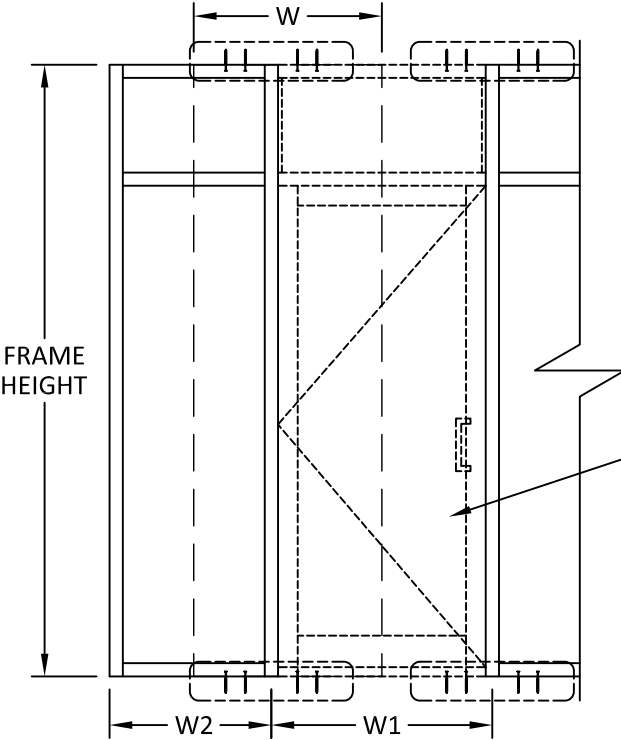
SINGLE DOOR

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



DOUBLE DOOR

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



SINGLE DOOR WITH TRANSOM

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

ANCHOR TYPE	MIN. ANCHOR QUANTITY AT HEAD/SILL
A	10
B	5
C	3

TUBELITE

DEPENDABLE

LEADERS IN ECO-EFFICIENT STOREFRONT,
CURTAINWALL AND ENTRANCE SYSTEMS

3056 WALKER RIDGE DRIVE N.W.
WALKER, MICHIGAN 49544
PH: 800 866 2227 FX: 616 301 0008

TITLE:
E/T/TU14000 I/O SERIES
STOREFRONT - OUTBOARD
(NON-HVHZ) (NON-IMPACT)
DOOR MULLION DESIGN
PRESSURE TABLES

PREPARED BY:
BUILDING DROPS, INC.
1900 NE MIAMI COURT, SUITE 2-15
MIAMI, FL 33132
PH: (954) 399-8478
FAX: (954) 744-4738
WEB: www.buildingdrops.com

REMARKS

BY

DATE

TU ADDITION

MS

10/08/24

MULLION ADDITION

DI

12/12/24

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC
AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC
SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE
FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED
ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC
DOCUMENTS FOR USE WITH THIS DOCUMENT

HERMES F. NORERO

LICENSE

No. 73778

STATE OF

FLORIDA

PROFESSIONAL ENGINEER

HERMES F. NORERO, P.E.
FLORIDA RES. NO. 73778
BUILDING DROPS, INC.
1900 NE MIAMI COURT, SUITE 2-15
MIAMI, FL 33132
FBPE CERT. OF AUTHORIZATION No. 29578

FL #:
FL41652

DATE:
07.25.22

DWG. BY:
MS

CHK. BY:
HFN

SCALE:
NTS

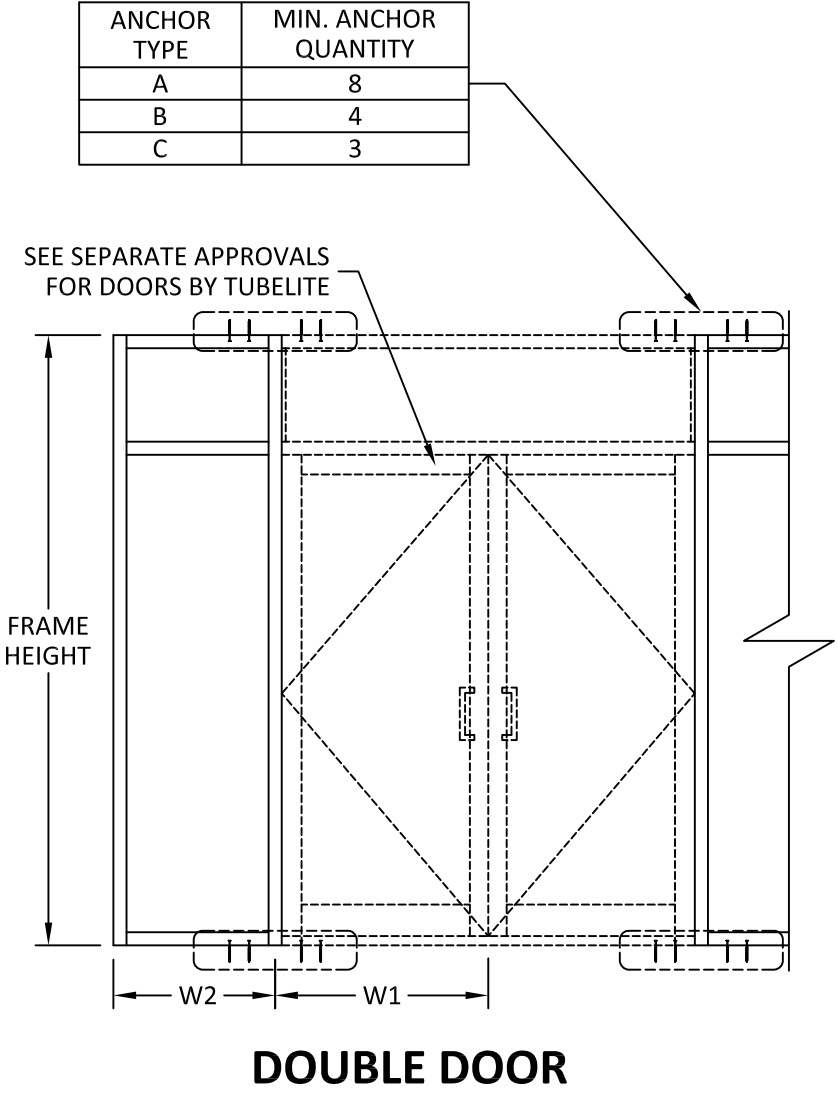
DWG. #:
TLI021

SECTION
8.1

DOOR MULLION DESIGN PRESSURE TABLES

DOOR MULLION LOAD CAPACITY (PSF) W/O STEEL REINFORCEMENT			
NOMINAL DIMS.			DESIGN PRESSURE (PSF)
FRAME HEIGHT (in.)	DOOR WIDTH W1 (in.)	SIDELITE WIDTH W2(in.)	EXT. (+) INT. (-)
78	36	24	45.0
		36	45.0
		48	45.0
		60	45.0
	48	24	45.0
		36	45.0
		48	45.0
		60	45.0
	60	24	45.0
		36	45.0
		48	45.0
		60	45.0
84	36	24	45.0
		36	45.0
		48	45.0
		60	45.0
	48	24	45.0
		36	45.0
		48	45.0
		60	45.0
	60	24	45.0
		36	45.0
		48	45.0
		60	42.6
90	36	24	45.0
		36	45.0
		48	45.0
		60	45.0
	48	24	45.0
		36	45.0
		48	45.0
		60	41.2
	60	24	45.0
		36	45.0
		48	41.2
		60	37.1
96	36	24	45.0
		36	45.0
		48	45.0
		60	40.7
	48	24	45.0
		36	45.0
		48	40.7
		60	36.2
	60	24	45.0
		36	40.7
		48	36.2
		60	32.6

DOOR MULLION LOAD CAPACITY (PSF) W/O STEEL REINFORCEMENT			
NOMINAL DIMS.			DESIGN PRESSURE (PSF)
FRAME HEIGHT (in.)	DOOR WIDTH W1 (in.)	SIDELITE WIDTH W2(in.)	EXT. (+) INT. (-)
102	36	24	45.0
		36	45.0
		48	41.2
		60	36.1
	48	24	45.0
		36	41.2
		48	36.1
		60	32.1
	60	24	41.2
		36	36.1
		48	32.1
		60	28.9
108	36	24	45.0
		36	42.9
		48	36.8
		60	32.2
	48	24	42.9
		36	36.8
		48	32.2
		60	28.6
	60	24	36.8
		36	32.2
		48	28.6
		60	25.7
114	36	24	45.0
		36	38.5
		48	33.0
		60	28.9
	48	24	38.5
		36	33.0
		48	28.9
		60	25.7
	60	24	33.0
		36	28.9
		48	25.7
		60	23.1



TUBELITE®
DEPENDABLE
LEADERS IN ECO-EFFICIENT STOREFRONT,
CURTAINWALL AND ENTRANCE SYSTEMS

3056 WALKER RIDGE DRIVE N.W.
WALKER, MICHIGAN 49544
PH: 800 866 2227 FX: 616 301 0008

TITLE:
E/T/TU14000 I/O SERIES
STOREFRONT - OUTBOARD
(NON-HVHZ) (NON-IMPACT)
DOOR MULLION DESIGN
PRESSURE TABLES

PREPARED BY:
BUILDING DROPS, INC.
1900 NE MIAMI COURT, SUITE 2-15
MIAMI, FL 33132
PH: (954) 399-8478
FAX: (954) 744-4738
WEB: www.buildingdrops.com

REMARKS	BY	DATE
TU ADDITION	MS	10/08/24
MULLION ADDITION	DI	12/12/24

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC
AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC
SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE
FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED
ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC
DOCUMENTS FOR USE WITH THIS DOCUMENT

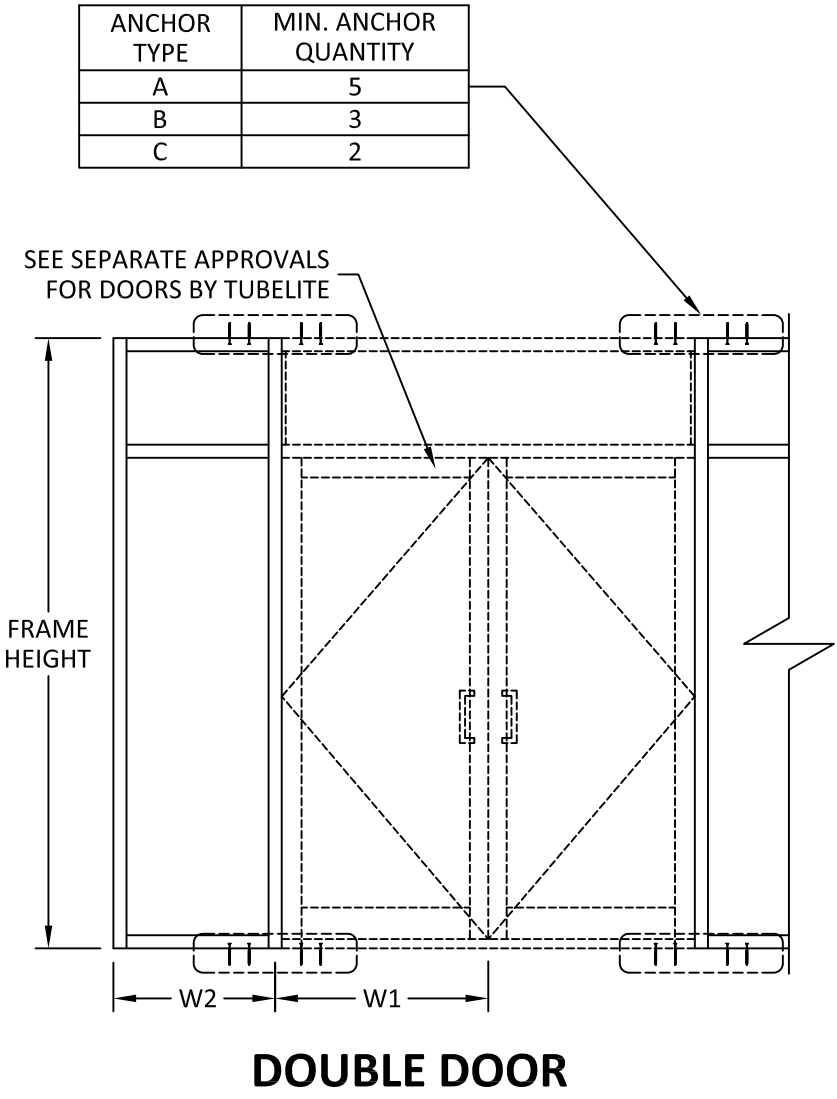
HERMES F. NORERO, P.E.
FLORIDA LICENSE NO. 73778
BUILDING DROPS, INC.
1900 NE MIAMI COURT, SUITE 2-15
MIAMI, FL 33132
FBPE CERT. OF AUTHORIZATION No. 29578

FL #:	FL41652
DATE:	07.25.22
DWG. BY:	CHK. BY:
MS	HFN
SCALE:	NTS
DWG. #:	TLI021
SECTION	9

DOOR MULLION DESIGN PRESSURE TABLES

DOOR MULLION LOAD CAPACITY (PSF) W/O STEEL REINFORCEMENT			
NOMINAL DIMS.			DESIGN PRESSURE (PSF)
FRAME HEIGHT (in.)	DOOR WIDTH W1 (in.)	SIDELITE WIDTH W2(in.)	EXT. (+) INT. (-)
120	36	24	41.7
		36	34.8
		48	29.8
		60	26.1
	48	24	34.8
		36	29.8
		48	26.1
		60	23.2
	60	24	29.8
		36	26.1
		48	23.2
		60	20.9
126	36	24	37.8
		36	31.5
		48	27.0
		60	23.6
	48	24	31.5
		36	27.0
		48	23.6
		60	21.0
	60	24	27.0
		36	23.6
		48	21.0
		60	18.9
132	36	24	34.5
		36	28.7
		48	24.6
		60	21.5
	48	24	28.7
		36	24.6
		48	21.5
		60	19.2
	60	24	24.6
		36	21.5
		48	19.2
		60	17.2
138	36	24	31.0
		36	25.8
		48	22.2
		60	19.4
	48	24	25.8
		36	22.2
		48	19.4
		60	17.2
	60	24	22.2
		36	19.4
		48	17.2
		60	15.5

DOOR MULLION LOAD CAPACITY (PSF) W/O STEEL REINFORCEMENT			
NOMINAL DIMS.			DESIGN PRESSURE (PSF)
FRAME HEIGHT (in.)	DOOR WIDTH W1 (in.)	SIDELITE WIDTH W2(in.)	EXT. (+) INT. (-)
144	36	24	27.3
		36	22.7
		48	19.5
		60	17.1
	48	24	22.7
		36	19.5
		48	17.1
		60	15.2
	60	24	19.5
		36	17.1
		48	15.2
		60	-
150	36	24	24.1
		36	20.1
		48	17.2
		60	15.1
	48	24	20.1
		36	17.2
		48	15.1
		60	-
	60	24	17.2
		36	15.1
		48	-
		60	-
156	36	24	21.5
		36	17.9
		48	15.3
		60	-
	48	24	17.9
		36	15.3
		48	-
		60	-
	60	24	15.3
		36	-
		48	-
		60	-



TUBELITE
DEPENDABLE
LEADERS IN ECO-EFFICIENT STOREFRONT,
CURTAINWALL AND ENTRANCE SYSTEMS

3056 WALKER RIDGE DRIVE N.W.
WALKER, MICHIGAN 49544
PH: 800 866 2227 FX: 616 301 0008

TITLE:
E/T/TU14000 I/O SERIES
STOREFRONT - OUTBOARD
(NON-HVHZ) (NON-IMPACT)
DOOR MULLION DESIGN
PRESSURE TABLES

PREPARED BY:
BUILDING DROPS, INC.
1900 NE MIAMI COURT, SUITE 2-15
MIAMI, FL 33132
PH: (954) 399-8478
FAX: (954) 744-4738
WEB: www.buildingdrops.com

REMARKS	BY	DATE
TU ADDITION	MS	10/08/24
MULLION ADDITION	DI	12/12/24

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC
AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC
SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE
FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED
ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC
DOCUMENTS FOR USE WITH THIS DOCUMENT

HERMES F. NORERO
LICENSE
No. 73778
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

HERMES F. NORERO, P.E.
FLORIDA LICENSE NO. 73778
BUILDING DROPS, INC.
1900 NE MIAMI COURT, SUITE 2-15
MIAMI, FL 33132
FBPE CERT. OF AUTHORIZATION No. 29578

FL #:
FL41652

DATE: **07.25.22**

DWG. BY:
MS

CHK. BY:
HFN

SCALE: **NTS**

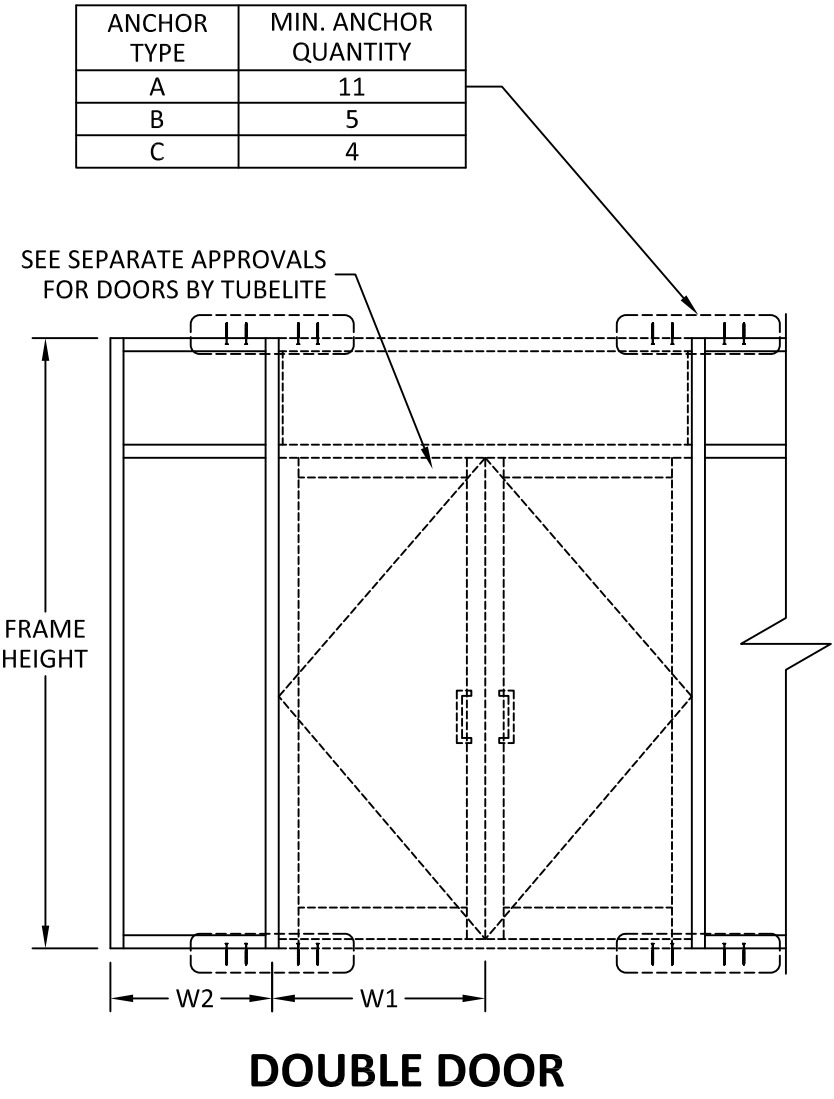
DWG. #: **TLI021**

SECTION
9.1

DOOR MULLION DESIGN PRESSURE TABLES

DOOR MULLION LOAD CAPACITY (PSF) W/ STEEL REINFORCEMENT			
NOMINAL DIMS.			DESIGN PRESSURE (PSF)
FRAME HEIGHT (in.)	DOOR WIDTH W1 (in.)	SIDELITE WIDTH W2(in.)	EXT. (+) INT. (-)
78	36	24	45.0
		36	45.0
		48	45.0
		60	45.0
	48	24	45.0
		36	45.0
		48	45.0
		60	45.0
	60	24	45.0
		36	45.0
		48	45.0
		60	45.0
84	36	24	45.0
		36	45.0
		48	45.0
		60	45.0
	48	24	45.0
		36	45.0
		48	45.0
		60	45.0
	60	24	45.0
		36	45.0
		48	45.0
		60	45.0
90	36	24	45.0
		36	45.0
		48	45.0
		60	45.0
	48	24	45.0
		36	45.0
		48	45.0
		60	45.0
	60	24	45.0
		36	45.0
		48	45.0
		60	45.0
96	36	24	45.0
		36	45.0
		48	45.0
		60	45.0
	48	24	45.0
		36	45.0
		48	45.0
		60	45.0
	60	24	45.0
		36	45.0
		48	45.0
		60	45.0

DOOR MULLION LOAD CAPACITY (PSF) W/ STEEL REINFORCEMENT			
NOMINAL DIMS.			DESIGN PRESSURE (PSF)
FRAME HEIGHT (in.)	DOOR WIDTH W1 (in.)	SIDELITE WIDTH W2(in.)	EXT. (+) INT. (-)
102	36	24	45.0
		36	45.0
		48	45.0
		60	45.0
	48	24	45.0
		36	45.0
		48	45.0
		60	45.0
	60	24	45.0
		36	45.0
		48	45.0
		60	45.0
108	36	24	45.0
		36	45.0
		48	45.0
		60	45.0
	48	24	45.0
		36	45.0
		48	45.0
		60	45.0
	60	24	45.0
		36	45.0
		48	45.0
		60	45.0
114	36	24	45.0
		36	45.0
		48	45.0
		60	45.0
	48	24	45.0
		36	45.0
		48	45.0
		60	45.0
	60	24	45.0
		36	45.0
		48	45.0
		60	45.0



TUBELITE
DEPENDABLE
LEADERS IN ECO-EFFICIENT STOREFRONT,
CURTAINWALL AND ENTRANCE SYSTEMS

3056 WALKER RIDGE DRIVE N.W.
WALKER, MICHIGAN 49544
PH: 800 866 2227 FX: 616 301 0008

TITLE:
E/T/TU14000 I/O SERIES
STOREFRONT - OUTBOARD
(NON-HVHZ) (NON-IMPACT)
DOOR MULLION DESIGN
PRESSURE TABLES

PREPARED BY:
BUILDING DROPS, INC.
1900 NE MIAMI COURT, SUITE 2-15
MIAMI, FL 33132
PH: (954) 399-8478
FAX: (954) 744-4738
WEB: www.buildingdrops.com

REMARKS	BY	DATE
TU ADDITION	MS	10/08/24
MULLION ADDITION	DI	12/12/24

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC
AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC
SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE
FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED
ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC
DOCUMENTS FOR USE WITH THIS DOCUMENT

HERMES F. NORERO, P.E.
FLORIDA LICENSE NO. 73778
BUILDING DROPS, INC.
1900 NE MIAMI COURT, SUITE 2-15
MIAMI, FL 33132
FBPE CERT. OF AUTHORIZATION No. 29578

FL #:
FL41652

DATE: **07.25.22**

DWG. BY:
MS

CHK. BY:
HFN

SCALE: **NTS**

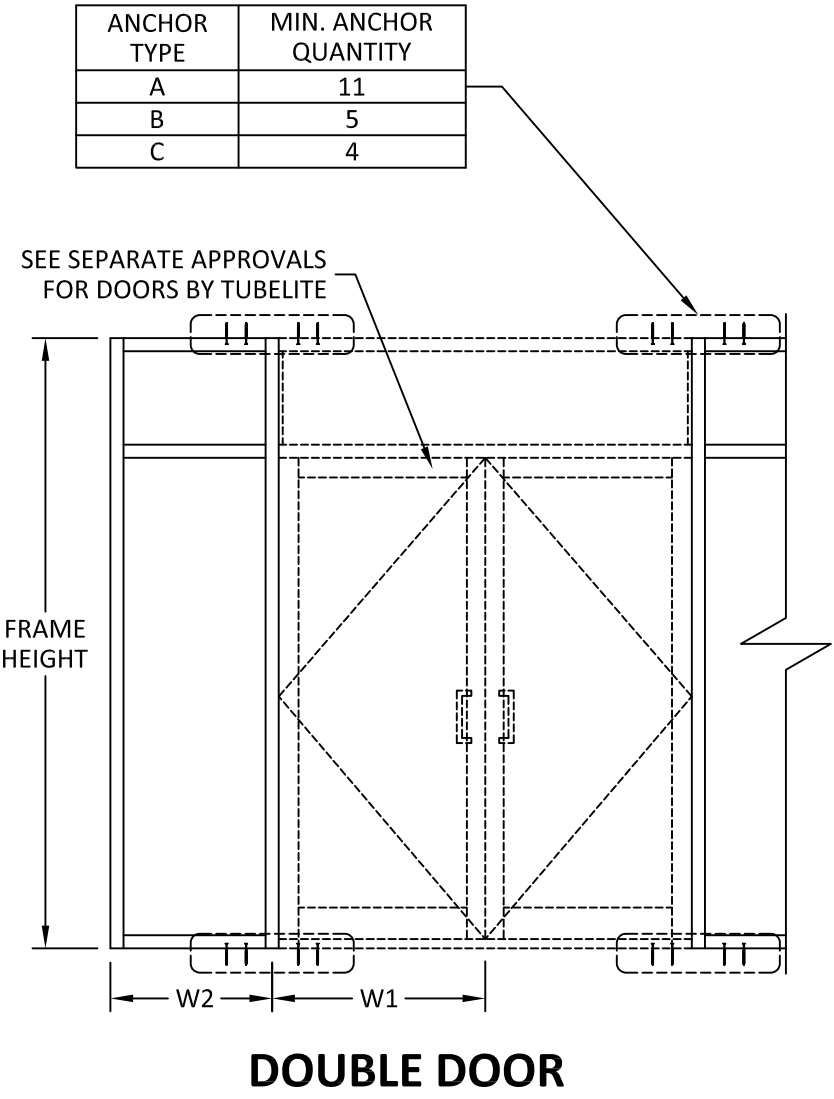
DWG. #: **TLI021**

SECTION
10

DOOR MULLION DESIGN PRESSURE TABLES

DOOR MULLION LOAD CAPACITY (PSF) W/ STEEL REINFORCEMENT			
NOMINAL DIMS.			DESIGN PRESSURE (PSF)
FRAME HEIGHT (in.)	DOOR WIDTH W1 (in.)	SIDELITE WIDTH W2(in.)	EXT. (+) INT. (-)
120	36	24	45.0
		36	45.0
		48	45.0
		60	45.0
	48	24	45.0
		36	45.0
		48	45.0
		60	45.0
	60	24	45.0
		36	45.0
		48	45.0
		60	43.0
126	36	24	45.0
		36	45.0
		48	45.0
		60	45.0
	48	24	45.0
		36	45.0
		48	45.0
		60	43.4
	60	24	45.0
		36	45.0
		48	43.4
		60	39.0
132	36	24	45.0
		36	45.0
		48	45.0
		60	44.5
	48	24	45.0
		36	45.0
		48	44.5
		60	39.5
	60	24	45.0
		36	44.5
		48	39.5
		60	35.6
138	36	24	45.0
		36	45.0
		48	45.0
		60	40.7
	48	24	45.0
		36	45.0
		48	40.7
		60	36.2
	60	24	45.0
		36	40.7
		48	36.2
		60	32.5

DOOR MULLION LOAD CAPACITY (PSF) W/ STEEL REINFORCEMENT			
NOMINAL DIMS.			DESIGN PRESSURE (PSF)
FRAME HEIGHT (in.)	DOOR WIDTH W1 (in.)	SIDELITE WIDTH W2(in.)	EXT. (+) INT. (-)
144	36	24	45.0
		36	45.0
		48	42.7
		60	37.4
	48	24	45.0
		36	42.7
		48	37.4
		60	33.2
	60	24	42.7
		36	37.4
		48	33.2
		60	29.9
150	36	24	45.0
		36	45.0
		48	39.3
		60	34.4
	48	24	45.0
		36	39.3
		48	34.4
		60	30.6
	60	24	39.3
		36	34.4
		48	30.6
		60	27.5
156	36	24	45.0
		36	41.4
		48	35.5
		60	31.1
	48	24	41.4
		36	35.5
		48	31.1
		60	27.6
	60	24	35.5
		36	31.1
		48	27.6
		60	24.8



TUBELITE®
DEPENDABLE
LEADERS IN ECO-EFFICIENT STOREFRONT,
CURTAINWALL AND ENTRANCE SYSTEMS

3056 WALKER RIDGE DRIVE N.W.
WALKER, MICHIGAN 49544
PH: 800 866 2227 FX: 616 301 0008

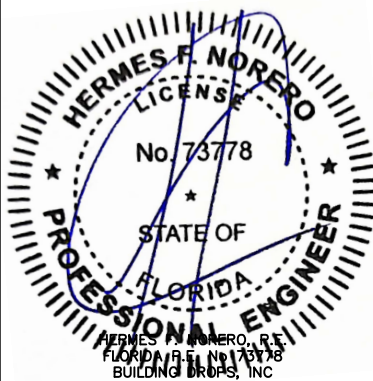
TITLE:
E/T/TU14000 I/O SERIES
STOREFRONT - OUTBOARD
(NON-HVHZ) (NON-IMPACT)
DOOR MULLION DESIGN
PRESSURE TABLES

PREPARED BY:
BUILDING DROPS, INC.
1900 NE MIAMI COURT, SUITE 2-15
MIAMI, FL 33132
PH: (954) 399-8478
FAX: (954) 744-4738
WEB: www.buildingdrops.com

**BUILDING DROPS**

REMARKS	BY	DATE
TU ADDITION	MS	10/08/24
MULLION ADDITION	DI	12/12/24

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC
AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC
SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE
FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED
ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC
DOCUMENTS FOR USE WITH THIS DOCUMENT



HERMES F. NORERO
LICENSE
No. 73778
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

HERMES F. NORERO, P.E.
FLORIDA LICENSE NO. 73778
BUILDING DROPS, INC.
1900 NE MIAMI COURT, SUITE 2-15
MIAMI, FL 33132
FBPE CERT. OF AUTHORIZATION No. 29578

FL #:
FL41652

DATE: **07.25.22**

DWG. BY:
MS

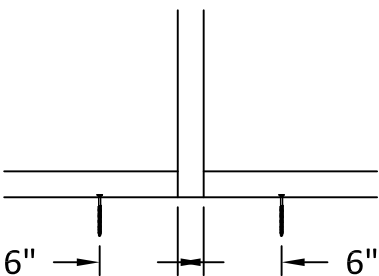
CHK. BY:
HFN

SCALE: **NTS**

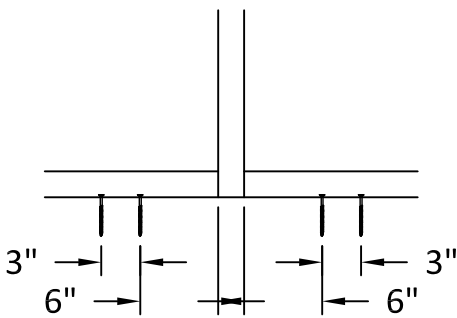
DWG. #: **TLI021**

SECTION
10.1

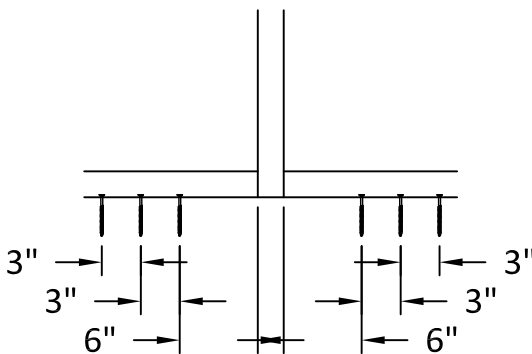
ANCHOR DETAILS AND INSTALLATION NOTES



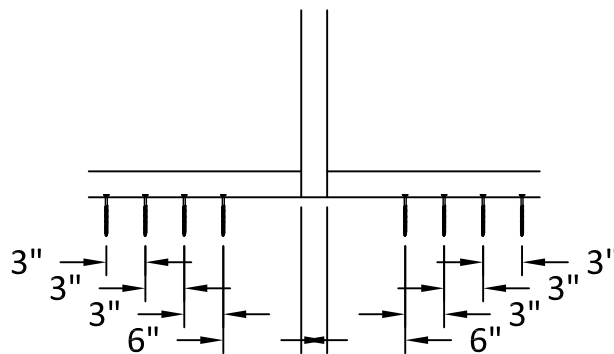
A
11 ANCHOR DETAIL
INTERMEDIATE
B1, C1



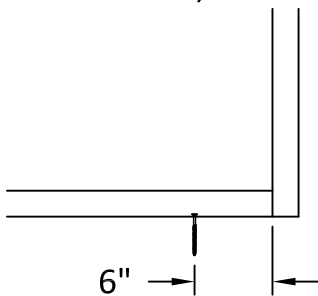
B
11 ANCHOR DETAIL
INTERMEDIATE
A2, B2, C2



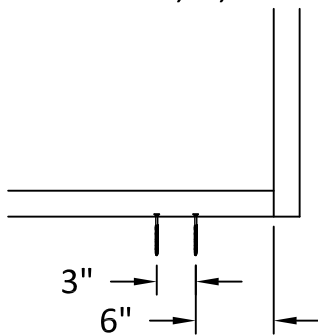
C
11 ANCHOR DETAIL
INTERMEDIATE
A3



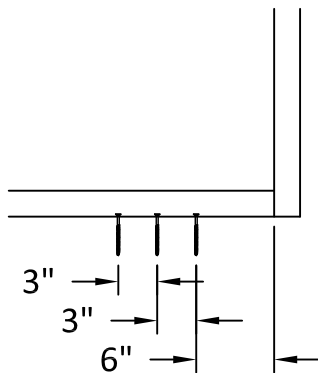
D
11 ANCHOR DETAIL
INTERMEDIATE
A4



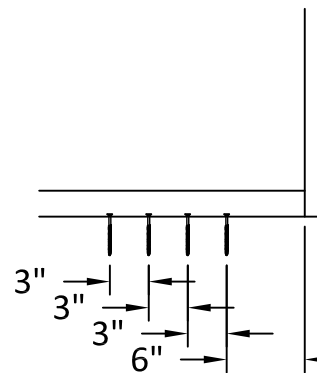
E
11 ANCHOR DETAIL
JAMB
B1, C1



F
11 ANCHOR DETAIL
JAMB
A2, B2, C2



G
11 ANCHOR DETAIL
JAMB
A3



H
11 ANCHOR DETAIL
JAMB
A4

INSTALLATION NOTES:

- ONE (1) INSTALLATION ANCHOR IS REQUIRED AT EACH ANCHOR LOCATION.
- THE NUMBER OF INSTALLATION ANCHORS DEPICTED IS THE MINIMUM NUMBER OF ANCHORS TO BE USED FOR PRODUCT INSTALLATION OF THE MAXIMUM SIZE LISTED.
- INSTALL INDIVIDUAL INSTALLATION ANCHORS WITHIN A TOLERANCE OF $\pm 1/4$ INCH THE DEPICTED LOCATION & SPACING IN THE ANCHOR LAYOUT DETAILS (I.E., WITHOUT CONSIDERATION OF TOLERANCES). TOLERANCES ARE NOT CUMULATIVE FROM ONE INSTALLATION ANCHOR TO THE NEXT.
- SHIM AS REQUIRED AT EACH INSTALLATION ANCHOR WITH LOAD BEARING SHIM(S). MAXIMUM ALLOWABLE SHIM STACK TO BE 1/4 INCH. SHIM WHERE SPACE OF 1/16 INCH OR GREATER OCCURS. SHIM(S) SHALL BE CONSTRUCTED OF HIGH DENSITY PLASTIC OR BETTER.
- FOR MASONRY OR CONCRETE OPENINGS, A 1X WOOD BUCK MAY BE USED (OPTIONAL) AS LONG AS THE MINIMUM EMBEDMENT AND EDGE DISTANCE REQUIREMENTS ARE STILL MET WITHIN THE CORRESPONDING HOST SUBSTRATE. SEE GENERAL NOTE #3 ON SECTION 1 FOR MORE INFORMATION.
- MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDE WALL FINISHES, INCLUDING BUT NOT LIMITED TO STUCCO, FOAM, BRICK VENEER, AND SIDING.
- INSTALLATION ANCHORS AND ASSOCIATED HARDWARE MUST BE MADE OF CORROSION RESISTANT MATERIAL OR HAVE A CORROSION RESISTANT COATING.
- FOR HOLLOW BLOCK AND GROUT FILLED BLOCK, DO NOT INSTALL INSTALLATION ANCHORS INTO MORTAR JOINTS. EDGE DISTANCE IS MEASURED FROM FREE EDGE OF BLOCK OR EDGE OF MORTAR JOINT INTO FACE SHELL OF BLOCK.
- INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED BY THE ANCHOR MANUFACTURER.

ANCHOR TYPE	ANCHOR DESCRIPTION	SUBSTRATE REQUIREMENTS	MIN. EMBEDMENT	MIN. EDGE DISTANCE
A	#14 WOOD SCREW	MIN. S.G. = 0.55 WOOD	1.5"	1"
	1/4" ITW TAPCON (CARBON OR STAINLESS STL.)	CONCRETE, f'c = 3000 PSI MIN. HOLLOW/FILLED BLOCK PER ASTM C-90, f'c = 2000 PSI MIN.	1"	2"
B	1/4" SELF-DRILLING/ TAPPING SCREW (GRADE 5)	STEEL: 18 GA. MIN., Fy=33 KSI MIN. ALUM.: 1/8" MIN., 6063-T5 MIN.	3 THREADS PENETRATION	0.5"
	1/4" DEWALT ULTRA CON+ (CARBON STEEL)	CONCRETE, f'c = 3000 PSI MIN. HOLLOW/FILLED BLOCK PER ASTM C-90, f'c = 2000 PSI MIN.	1.75"	2.5"
C	1/4" HILTI KWIK-CON II+ (CARBON OR STAINLESS STL.)	CONCRETE, f'c = 3000 PSI MIN. HOLLOW/FILLED BLOCK PER ASTM C-90, f'c = 2000 PSI MIN.	1"	2.5"
	1/4" ITW TRUBOLT WEDGE (CARBON OR STAINLESS STL.)	CONCRETE, F'C = 3000 PSI MIN.	1.9375"	3.875"
	3/8" SELF-DRILLING/ TAPPING SCREW (GRADE 5)	STEEL: 18 GA. MIN., Fy=33 KSI MIN. ALUM.: 1/8" MIN., 6063-T5 MIN.	3 THREADS PENETRATION	1"
	3/8" ITW LDT (CARBON OR STAINLESS STL.)	CONCRETE, f'c = 3000 PSI MIN. HOLLOW/FILLED BLOCK PER ASTM C-90	1.5"	2.75"
	3/8" POWERS TAPPER (CARBON STEEL)		1.75"	3"

TUBELITE
DEPENDABLE
LEADERS IN ECO-EFFICIENT STOREFRONT,
CURTAINWALL AND ENTRANCE SYSTEMS

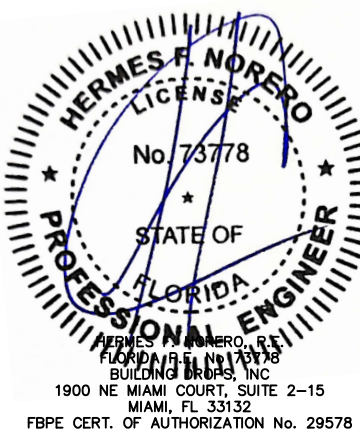
3056 WALKER RIDGE DRIVE N.W.
WALKER, MICHIGAN 49544
PH: 800 866 2227 FX: 616 301 0008

TITLE: E/T/TU14000 I/O SERIES
STOREFRONT - OUTBOARD
(NON-HVHZ) (NON-IMPACT)
ANCHOR DETAILS &
INSTALLATION NOTES

PREPARED BY:
BUILDING DROPS, INC.
1900 NE MIAMI COURT, SUITE 2-15
MIAMI, FL 33132
PH: (954) 399-8478
FAX: (954) 744-4738
WEB: www.buildingdrops.com

REMARKS	BY	DATE
TU ADDITION	MS	10/08/24
MULLION ADDITION	DI	12/12/24

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT



FL #:	FL41652
DATE:	07.25.22
DWG. BY:	MS
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	TLI021
SECTION	11

c:\users\dylanwata\building drops, inc\building drops landing - common\projects\tubelite, inc\fbcc-24-11021-1 - fbc submittal - fl16992, fl41652 et. al 14000 series storefront, to storefront\dwgs\fl41652.tli021.dwg 12/16/2024 10:41 AM

ANCHOR CAPACITY TABLE

ANCHOR LOAD CAPACITY - PSF								
NOMINAL DIMS.		ANCHOR TYPE 'A'			ANCHOR TYPE 'B'		ANCHOR TYPE 'C'	
TRIBUTARY WIDTH 'W' (in.)	FRAME HEIGHT 'H' (in.)	A2	A3	A4	B1	B2	C1	C2
24	78	30.6	45.0	45.0	35.1	45.0	45.0	45.0
30		24.5	36.7	45.0	28.1	45.0	41.4	45.0
36		20.4	30.6	40.8	23.4	45.0	34.5	45.0
42		17.5	26.2	34.9	20.1	40.1	29.6	45.0
48		15.3	22.9	30.6	17.5	35.1	25.9	45.0
54		-	20.4	27.2	15.6	31.2	23.0	45.0
60		-	18.3	24.5	-	28.1	20.7	41.4
62		-	17.8	23.7	-	27.2	20.0	40.1
24	84	28.4	42.6	45.0	32.6	45.0	45.0	45.0
30		22.7	34.1	45.0	26.1	45.0	38.5	45.0
36		18.9	28.4	37.9	21.7	43.4	32.0	45.0
42		16.2	24.3	32.4	18.6	37.2	27.5	45.0
48		-	21.3	28.4	16.3	32.6	24.0	45.0
54		-	18.9	25.2	-	29.0	21.4	42.7
60		-	17.0	22.7	-	26.1	19.2	38.5
62		-	16.5	22.0	-	25.2	18.6	37.2
24	90	26.5	39.7	45.0	30.4	45.0	44.9	45.0
30		21.2	31.8	42.4	24.3	45.0	35.9	45.0
36		17.7	26.5	35.3	20.3	40.6	29.9	45.0
42		15.1	22.7	30.3	17.4	34.8	25.6	45.0
48		-	19.9	26.5	15.2	30.4	22.4	44.9
54		-	17.7	23.6	-	27.0	19.9	39.9
60		-	15.9	21.2	-	24.3	17.9	35.9
62		-	15.4	20.5	-	23.5	17.4	34.7
24	96	24.8	37.3	45.0	28.5	45.0	42.1	45.0
30		19.9	29.8	39.7	22.8	45.0	33.7	45.0
36		16.6	24.8	33.1	19.0	38.0	28.0	45.0
42		-	21.3	28.4	16.3	32.6	24.0	45.0
48		-	18.6	24.8	-	28.5	21.0	42.1
54		-	16.6	22.1	-	25.3	18.7	37.4
60		-	-	19.9	-	22.8	16.8	33.7
62		-	-	19.2	-	22.1	16.3	32.6
24	102	23.4	35.1	45.0	26.8	45.0	39.6	45.0
30		18.7	28.1	37.4	21.5	42.9	31.7	45.0
36		15.6	23.4	31.2	17.9	35.8	26.4	45.0
42		-	20.0	26.7	15.3	30.7	22.6	45.0
48		-	17.5	23.4	-	26.8	19.8	39.6
54		-	15.6	20.8	-	23.9	17.6	35.2
60		-	-	18.7	-	21.5	15.8	31.7
62		-	-	18.1	-	20.8	15.3	30.6

ANCHOR LOAD CAPACITY - PSF								
NOMINAL DIMS.		ANCHOR TYPE 'A'			ANCHOR TYPE 'B'		ANCHOR TYPE 'C'	
TRIBUTARY WIDTH 'W' (in.)	FRAME HEIGHT 'H' (in.)	A2	A3	A4	B1	B2	C1	C2
24	108	22.1	33.1	44.2	25.3	45.0	37.4	45.0
30		17.7	26.5	35.3	20.3	40.6	29.9	45.0
36		-	22.1	29.4	16.9	33.8	24.9	45.0
42		-	18.9	25.2	-	29.0	21.4	42.7
48		-	16.6	22.1	-	25.3	18.7	37.4
54		-	-	19.6	-	22.5	16.6	33.2
60		-	-	17.7	-	20.3	-	29.9
62		-	-	17.1	-	19.6	-	28.9
24	114	20.9	31.4	41.8	24.0	45.0	35.4	45.0
30		16.7	25.1	33.5	19.2	38.4	28.3	45.0
36		-	20.9	27.9	16.0	32.0	23.6	45.0
42		-	17.9	23.9	-	27.4	20.2	40.5
48		-	15.7	20.9	-	24.0	17.7	35.4
54		-	-	18.6	-	21.3	15.7	31.5
60		-	-	16.7	-	19.2	-	28.3
62		-	-	16.2	-	18.6	-	27.4
24	120	19.9	29.8	39.7	22.8	45.0	33.7	45.0
30		15.9	23.8	31.8	18.2	36.5	26.9	45.0
36		-	19.9	26.5	15.2	30.4	22.4	44.9
42		-	17.0	22.7	-	26.1	19.2	38.5
48		-	-	19.9	-	22.8	16.8	33.7
54		-	-	17.7	-	20.3	-	29.9
60		-	-	15.9	-	18.2	-	26.9
62		-	-	15.4	-	17.7	-	26.1
24	126	18.9	28.4	37.9	21.7	43.4	32.0	45.0
30		15.1	22.7	30.3	17.4	34.8	25.6	45.0
36		-	18.9	25.2	-	29.0	21.4	42.7
42		-	16.2	21.6	-	24.8	18.3	36.6
48		-	-	18.9	-	21.7	16.0	32.0
54		-	-	16.8	-	19.3	-	28.5
60		-	-	15.1	-	17.4	-	25.6
62		-	-	-	-	16.8	-	24.8
24	132	18.1	27.1	36.1	20.7	41.5	30.6	45.0
30		-	21.7	28.9	16.6	33.2	24.5	45.0
36		-	18.1	24.1	-	27.6	20.4	40.8
42		-	15.5	20.6	-	23.7	17.5	35.0
48		-	-	18.1	-	20.7	15.3	30.6
54		-	-	16.1	-	18.4	-	27.2
60		-	-	-	-	16.6	-	24.5
62		-	-	-	-	16.1	-	23.7

ANCHOR LOAD CAPACITY - PSF								
NOMINAL DIMS.		ANCHOR TYPE 'A'			ANCHOR TYPE 'B'		ANCHOR TYPE 'C'	
TRIBUTARY WIDTH 'W' (in.)	FRAME HEIGHT 'H' (in.)	A2	A3	A4	B1	B2	C1	C2
24	138	17.3	25.9	34.6	19.8	39.7	29.3	45.0
30		-	20.7	27.6	15.9	31.7	23.4	45.0
36		-	17.3	23.0	-	26.4	19.5	39.0
42		-	-	19.7	-	22.7	16.7	33.4
48		-	-	17.3	-	19.8	-	29.3
54		-	-	15.4	-	17.6	-	26.0
60		-	-	-	-	15.9	-	23.4
62		-	-	-	-	15.4	-	22.7
24	144	16.6	24.8	33.1	19.0	38.0	28.0	45.0
30		-	19.9	26.5	15.2	30.4	22.4	44.9
36		-	16.6	22.1	-	25.3	18.7	37.4
42		-	-	18.9	-	21.7	16.0	32.0
48		-	-	16.6	-	19.0	-	28.0
54		-	-	-	-	16.9	-	24.9
60		-	-	-	-	15.2	-	22.4
62		-	-	-	-	-	-	21.7
24	150	15.9	23.8	31.8	18.2	36.5	26.9	45.0
30		-	19.1	25.4	-	29.2	21.5	43.1
36		-	15.9	21.2	-	24.3	17.9	35.9
42		-	-	18.2	-	20.9	15.4	30.8
48		-	-	15.9	-	18.2	-	26.9
54		-	-	-	-	16.2	-	23.9
60		-	-	-	-	-	-	21.5
62		-	-	-	-	-	-	20.8
24	156	15.3	22.9	30.6	17.5	35.1	25.9	45.0
30		-	18.3	24.5	-	28.1	20.7	41.4
36		-	15.3	20.4	-	23.4	17.3	34.5
42		-	-	17.5	-	20.1	-	29.6
48		-	-	15.3	-	17.5	-	25.9
54		-	-	-	-	15.6	-	23.0
60		-	-	-	-	-	-	20.7
62		-	-	-	-	-	-	20.0

TUBELITE®

DEPENDABLE

LEADERS IN ECO-EFFICIENT STOREFRONT,
CURTAINWALL AND ENTRANCE SYSTEMS

3056 WALKER RIDGE DRIVE N.W.
WALKER, MICHIGAN 49544
PH: 800 866 2227 FX: 616 301 0008

TITLE:
E/T/TU14000 I/O SERIES
STOREFRONT - OUTBOARD
(NON-HVHZ) (NON-IMPACT)

ANCHOR CAPACITY TABLE

PREPARED BY:
BUILDING DROPS, INC.
1900 NE MIAMI COURT, SUITE 2-15
MIAMI, FL 33132
PH: (954) 399-8478
FAX: (954) 744-4738
WEB: www.buildingdrops.com

BD

BUILDING DROPS

REMARKS	BY	DATE
TU ADDITION	MS	10/08/24
MULLION ADDITION	DI	12/12/24

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT

HERMES F. NORERO

LICENSE

No. 73778

STATE OF FLORIDA

PROFESSIONAL ENGINEER

HERMES F. NORERO, P.E.

FLORIDA LICENSE NO. 73778

BUILDING DROPS, INC.

1900 NE MIAMI COURT, SUITE 2-15

MIAMI, FL 33132

FBPE CERT. OF AUTHORIZATION No. 29578

FL #:

FL41652

DATE:

07.25.22

DWG. BY:

MS

CHK. BY:

HFN

SCALE:

NTS

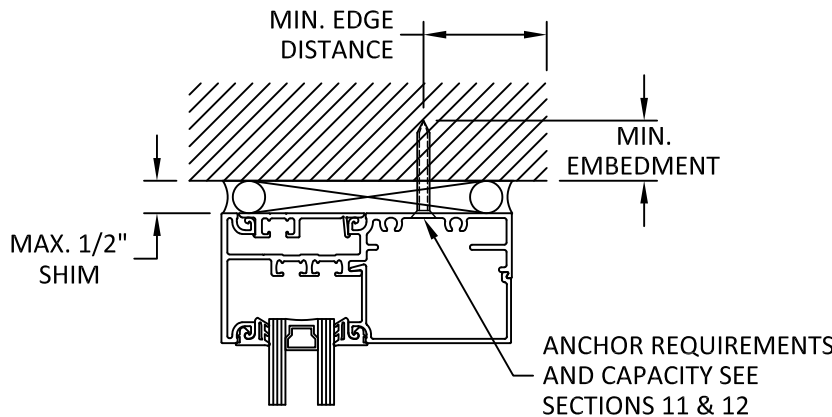
DWG. #:

TLI021

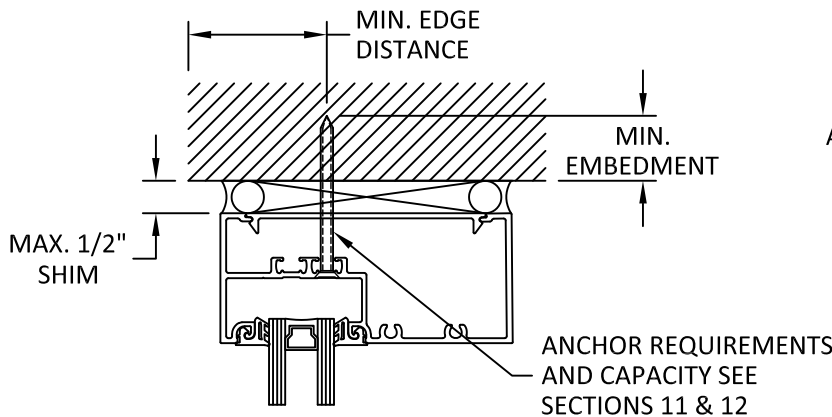
SECTION

12

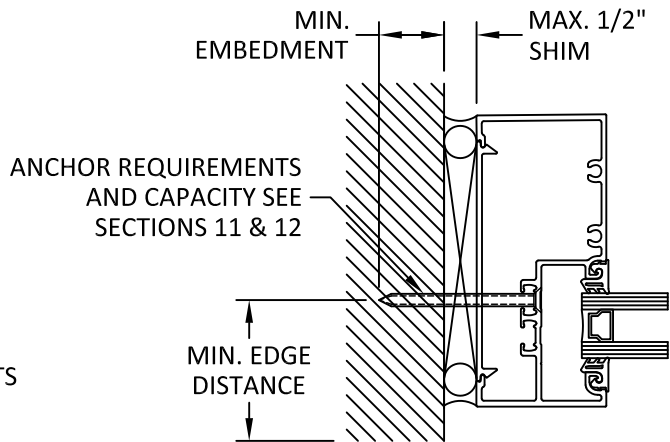
INSTALLATION DETAILS



A 13 INSTALLATION DETAIL
HEAD
INSIDE GLAZING

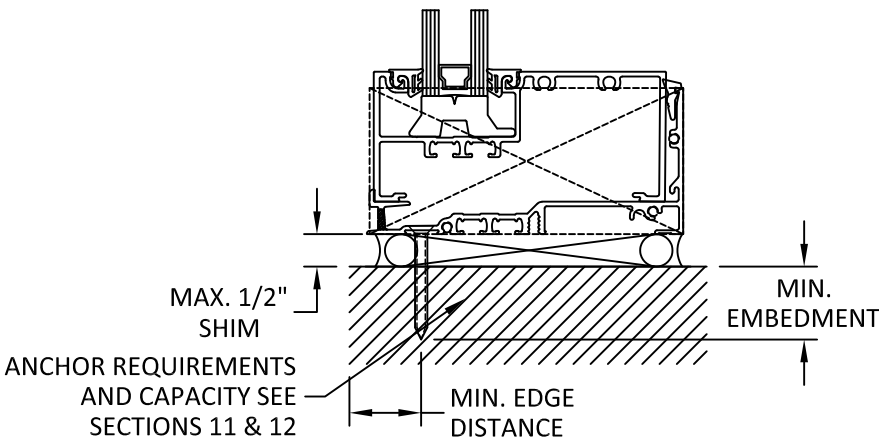


B 13 INSTALLATION DETAIL
HEAD
OUTSIDE GLAZING

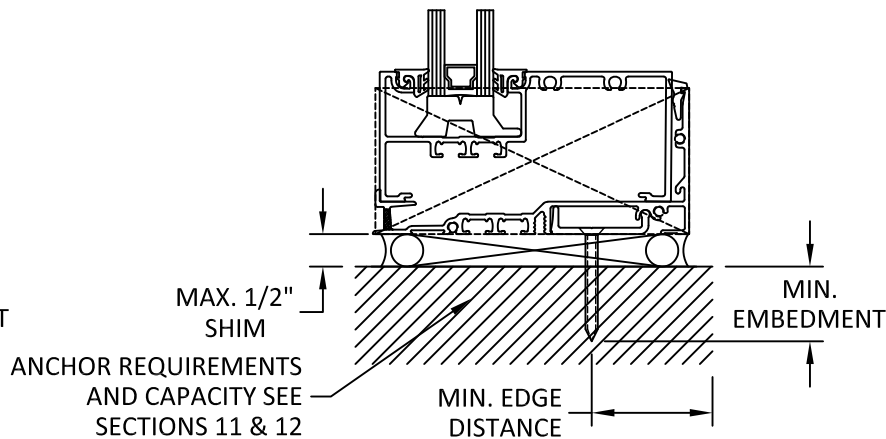


C 13 INSTALLATION DETAIL
JAMB

NOTES:
E14000 SHOWN, T/TU14000 SIMILAR.
STANDARD SHOWN, OTHER OPTIONS SIMILAR.



D 13 INSTALLATION DETAIL
SILL



E 13 INSTALLATION DETAIL
SILL

TUBELITE®
DEPENDABLE
LEADERS IN ECO-EFFICIENT STOREFRONT,
CURTAINWALL AND ENTRANCE SYSTEMS

3056 WALKER RIDGE DRIVE N.W.
WALKER, MICHIGAN 49544
PH: 800 866 2227 FX: 616 301 0008

TITLE: E/T/TU14000 I/O SERIES
STOREFRONT - OUTBOARD
(NON-HVHZ) (NON-IMPACT)

INSTALLATION DETAILS

PREPARED BY:
BUILDING DROPS, INC.
1900 NE MIAMI COURT, SUITE 2-15
MIAMI, FL 33132
PH: (954) 399-8478
FAX: (954) 744-4738
WEB: www.buildingdrops.com

REMARKS	BY	DATE
TU ADDITION	MS	10/08/24
MULLION ADDITION	DI	12/12/24

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC
AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC
SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE
FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED
ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC
DOCUMENTS FOR USE WITH THIS DOCUMENT



FL #:
FL41652

DATE: 07.25.22

DWG. BY: MS
CHK. BY: HFN

SCALE: NTS

DWG. #: TLI021

SECTION

13