

NOTE: APPLY DOW 795 TO ENDS OF HORIZONTAL EXTRUSIONS BEFORE ASSEMBLY HEAD, SILL AND INTERMEDIATE

GENERAL NOTES:

1. THIS PRODUCT HAS BEEN TESTED TO ASTM E 283, ASTM E 330, ASTM E 331, AND AAMA 501.1, AND MEETS THE REQUIREMENTS OF THE FLORIDA BUILDING CODE, CURRENT EDITION, FOR USE OUTSIDE THE HIGH VELOCITY HURRICANE ZONE.
2. THIS PRODUCT IS NON-IMPACT RESISTANT AND REQUIRES THE USE OF SHUTTERS IN WINDBORNE DEBRIS REGIONS.
3. THIS PRODUCT MAY BE INSTALLED IN INFINITE WIDTHS PROVIDED THE MAXIMUM VERTICAL ON-CENTER AND DLO WIDTHS ARE NOT EXCEEDED.
4. THE DESIGN PRESSURE RATINGS OF THIS PRODUCT AS DETAILED IN TABLES A AND B, SHEET 2, ARE AS LIMITED BY ASTM E-1300 02/04 GLASS TABLES, WATER PERFORMANCE, TESTED PRESSURES, AND COMPARATIVE ANALYSIS.
5. SEALING AND FLASHING STRATEGIES FOR OVERALL WATER PERFORMANCE OF INSTALLED PRODUCTS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED INSTRUCTIONS AND ARE THE RESPONSIBILITY OF OTHERS.
6. THE 4/3 ALLOWABLE STRESS INCREASE HAS NOT BEEN USED IN THE ANCHOR ANALYSIS FOR THIS SYSTEM. THE 1.6 Cd FACTOR WAS USED IN THE ANALYSIS OF WOOD SUBSTRATE ONLY.
7. STRUCTURAL SUITABILITY OF THE OPENING TO RECEIVE LOADS IMPARTED FROM THIS PRODUCT TO BE VERIFIED BY THE DESIGN PROFESSIONAL FOR EACH PROJECT. BUCKING, OPENINGS & BUCKING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED TO TRANSFER WIND LOADS TO THE STRUCTURE.
8. DISSIMILAR MATERIALS THAT COME INTO CONTACT, INCLUDING BUT NOT LIMITED TO FASTENERS IN PRESSURE TREATED WOOD, SHALL BE COATED OR OTHERWISE PROTECTED PER FBC TO PREVENT GALVANIC REACTIONS.
9. INSTALLATIONS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS UNLESS OTHERWISE APPROVED BY A LICENSED DESIGN PROFESSIONAL.
10. FOR INTERNAL JOINERY DETAILS NOT SHOWN IN THESE DRAWINGS, SEE MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS.

TUBELITE
SERIES E/T/TU24650
STOREFRONT SYSTEM

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

3055 WALKER RIDGE DRIVE N.W.
WALKER, MICHIGAN 49544
PH: 800.866.2227
FX: 616.301.0008
WEB SITE: WWW.TUBELITEINC.COM

REVISION HISTORY:

| REV | DATE | DESCRIPTION |
|-----|----------|--------------------|
| 0 | 7.5.16 | ORIGINAL RELEASE |
| A | 11.15.16 | ADDED E.T. OPTIONS |

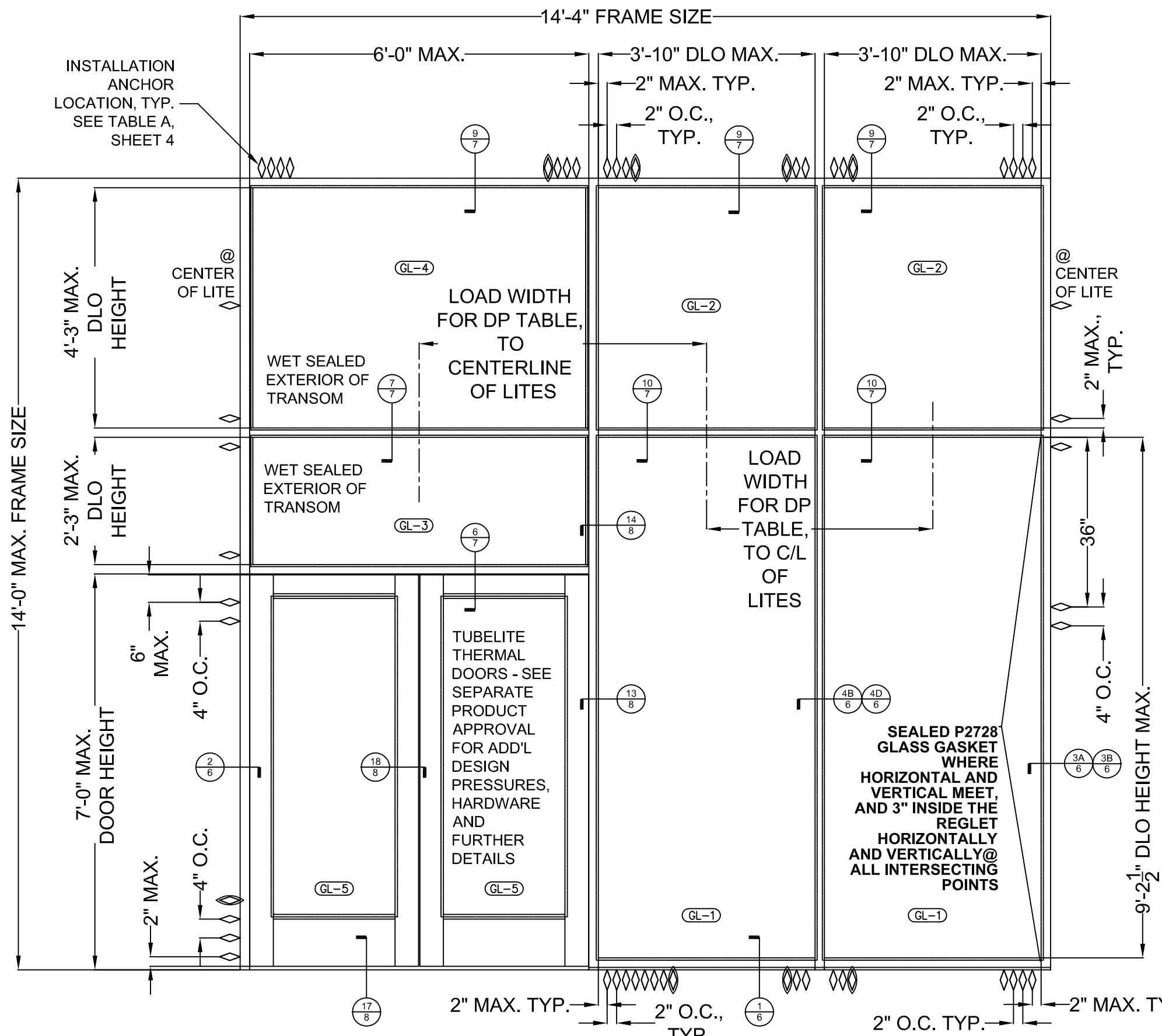
| | |
|-----------------|--------------------|
| DATE: | 11.15.16 |
| DRAWING NUMBER: | FPA-24650 |
| DRAWN: | |
| FINAL REVIEW: | |
| SCALE: | N.T.S. |
| REVISION: | A |
| SHEET NAME: | NOTES, ELEVATION A |
| SHEET: | 1 OF 10 |

GLAZING SIZES:
 GL-1: 71.5" x 27.875"
 GL-2: 44.875" x 27.875"
 GL-3: 44.875" x 111.375"
 GL-4: 26.8125" x 68.0625"
 ALL GLAZING TO BE 1" I.G. CONSISTING OF
 1/4" TEMPERED + 1/2" AIRSPACE + 1/4" TEMPERED

EXTERIOR ELEVATION A
 12' HEIGHT WITH STANDARD INTERMEDIATE VERTICALS
 AND NO REINFORCEMENT IN A624748 DOOR JAMB MULLION
 FOR DESIGN PRESSURES SEE TABLES SHEET 4



11/15/2016
 LUCAS A. TURNER, P.E.
 FL PE # 58201
 TURNER ENGINEERING &
 CONSULTING, INC.
 (COA # 29779)
 1239 JABARA AVE.
 NORTH PORT, FL 34288

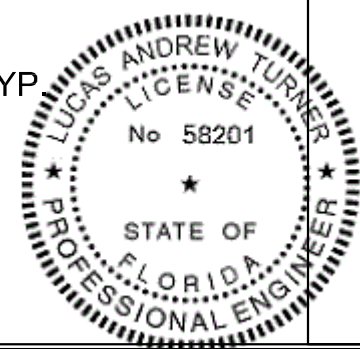


GLAZING SIZES:
 GL-1: 46.875" x 111.375"
 GL-2: 46.875" x 51.875"
 GL-3: 71.5" x 27.875"
 GL-4: 71.5" x 51.875"
 GL-5: 26.8125" x 68.0625"
 ALL GLAZING TO BE 1" I.G.
 CONSISTING OF:
 1/4" TEMPERED +
 1/2" AIRSPACE +
 1/4" TEMPERED

◊ CIRCLED ANCHOR LOCATIONS ARE NOT REQ'D FOR SHIM GAPS UP TO 1/4" MAX. CIRCLED LOCATIONS ARE REQ'D FOR SHIM GAPS OF 3/8"

SEALED P2728 GLASS GASKET WHERE HORIZONTAL AND VERTICAL MEET, AND 3" INSIDE THE REGLET HORIZONTALLY AND VERTICALLY@ ALL INTERSECTING POINTS

EXTERIOR ELEVATION B
 14' HEIGHT WITH HEAVY DUTY INTERMEDIATE VERTICALS AND STEEL REINFORCEMENT IN A625240 DOOR JAMB MULLION FOR DESIGN PRESSURES SEE TABLES SHEET 5



22
 11/15/2016
 LUCAS A. TURNER, P.E.
 FL PE # 58201
 TURNER ENGINEERING & CONSULTING, INC.
 (COA # 29779)
 1239 JABARA AVE.
 NORTH PORT, FL 34288

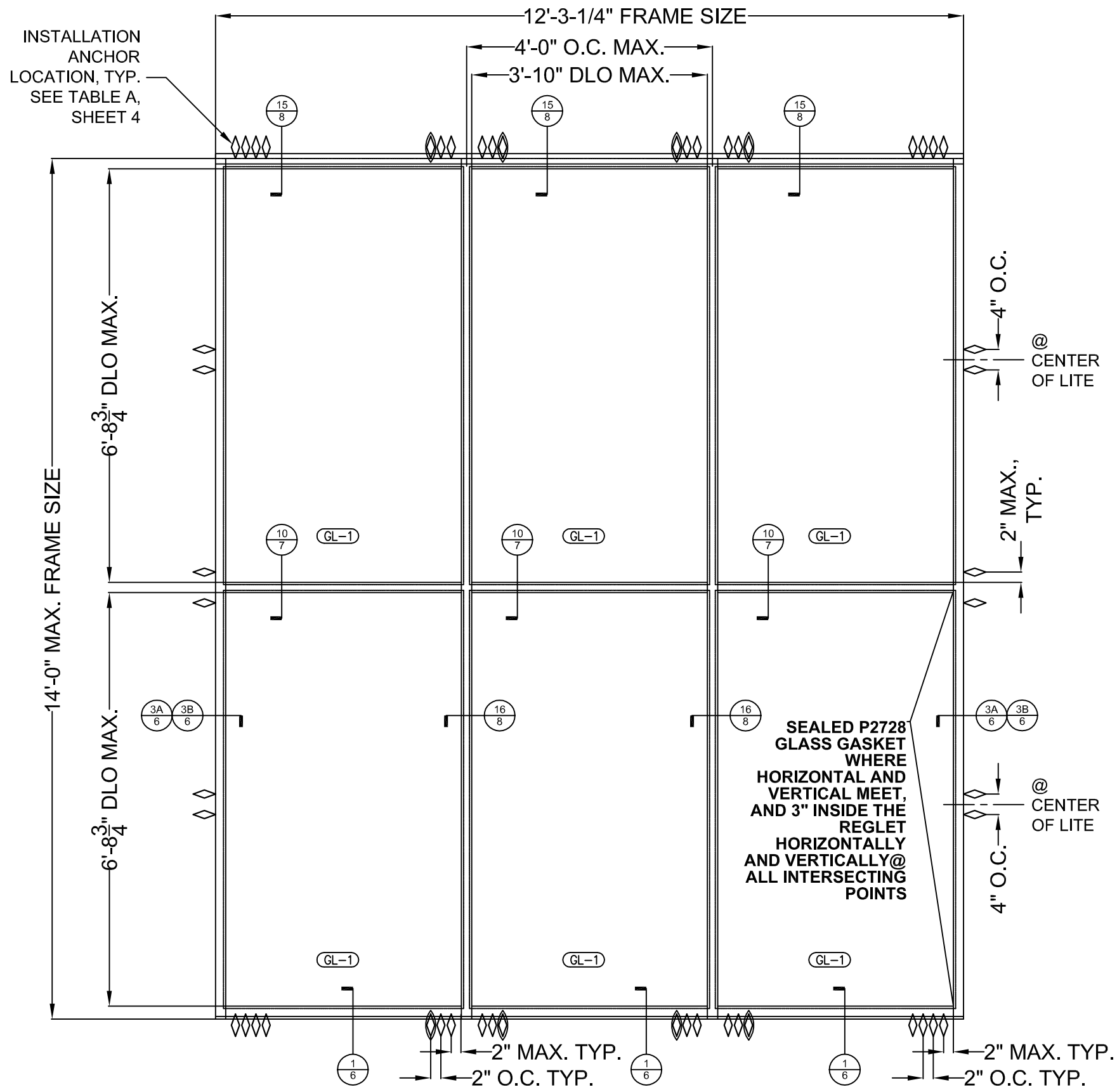
TUBELITE
 SERIES E/T/TU24650
 STOREFRONT SYSTEM

3055 WALKER RIDGE DRIVE N.W.
 WALKER, MICHIGAN 49544
 PH: 800.866.2227
 FX: 616.301.0008
 WEB SITE: WWW.TUBELITEINC.COM

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

| REVISION HISTORY: | |
|-------------------|------------------|
| REV | DESCRIPTION |
| 0 | ORIGINAL RELEASE |
| 1 | ADDED E7 OPTIONS |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |

DATE: 11.15.16
 DRAWING NUMBER: FPA-24650
 DRAWN:
 FINAL REVIEW:
 SCALE: N.T.S.
 REVISION: A
 SHEET NAME: ELEVATION B
 SHEET: 2 OF 10



GLAZING SIZES:
 GL-1: 46.875" x 81.625"
 ALL GLAZING TO BE 1" I.G.
 CONSISTING OF:
 1/4" TEMPERED +
 1/2" AIRSPACE +
 1/4" TEMPERED

◊ CIRCLED ANCHOR LOCATIONS ARE REQUIRED FOR ALL SHIM GAPS FOR FRAME HEIGHTS OVER 162". CIRCLED LOCATIONS ARE NOT REQ'D FOR SHIM GAPS UP TO 1/4" MAX. FOR FRAME HEIGHTS 162" AND UNDER. CIRCLED LOCATIONS ARE REQ'D FOR SHIM GAPS OF 3/8" FOR ALL FRAME HEIGHTS.

EXTERIOR ELEVATION C
 14' HEIGHT WITH EXPANSION MULL INTERMEDIATE VERTICALS
 DESIGN PRESSURE RATING +/-30 PSF ALL SIZES



11/15/2016
 LUCAS A. TURNER, P.E.
 FL PE # 58201
 TURNER ENGINEERING &
 CONSULTING, INC.
 (COA # 29779)
 1239 JABARA AVE.
 NORTH PORT, FL 34288

| | |
|---|---|
| TUBELITE SERIES E/T/TU24650 STOREFRONT SYSTEM | |
| 3055 WALKER RIDGE DRIVE N.W. WALKER, MICHIGAN 49544 PH: 800.866.2227 FX: 616.501.0008 WEB SITE: WWW.TUBELITEINC.COM | |
| TUBELITE DEPENDABLE LEADERS IN ECO-EFFICIENT STOREFRONT, CURTAINWALL, AND ENTRANCE SYSTEMS | |
| REVISION HISTORY: | |
| REV. DATE 0 7.5.16 A 11.15.16 | DESCRIPTION ORIGINAL RELEASE ADDED E.T. OPTIONS |
| DATE: 11.15.16 DRAWING NUMBER: FPA-24650 DRAWN: FINAL REVIEW: SCALE: N.T.S. REVISION: A SHEET NAME: ELEVATION C SHEET: 3 OF 10 | |

TABLE A. QUALIFIED ANCHOR INFORMATION

| ID | SUBSTRATE | ANCHOR | MIN. EMBEDMENT | MIN. EDGE DISTANCE | MIN. SPACING |
|----|---|---|----------------|--------------------|--------------|
| A | CONCRETE (2850 PSI MIN) | 1/4" ELCO COATED CARBON STEEL ULTRACON | 1 3/4" | 2 1/2" | 1 1/2" |
| B | GROUT-FILLED CMU AT JAMB ONLY (ASTM C-90) | 1/4" ELCO COATED CARBON STEEL ULTRACON | 1 3/4" | 2 1/2" | 4" |
| C | CONCRETE (2000 PSI MIN) | 1/4" ITW COATED CARBON STEEL TAPCON | 1 1/2" | 1 1/2" | 1 1/2" |
| D | CONCRETE (3000 PSI MIN) | 1/4" HILTI COATED CARBON STEEL OR STAINLESS STEEL KWIK-CON II | 1" | 2 1/2" | 2" |
| E | GROUT-FILLED CMU AT JAMB ONLY (ASTM C-90) | 1/4" HILTI COATED CARBON STEEL OR STAINLESS STEEL KWIK-CON II | 1" | 2 1/2" | 3" |
| F | 2x MIN. SOUTHERN PINE WOOD (G=0.55 MIN) | #14 GRADE 5 WOOD SCREW | 1 3/8" | 1" | 1" |
| G | 16 GAUGE (0.060") MIN. STEEL STUD 33 KSI YIELD MIN. | #1/4-28 ITW TEKS SELF-DRILLING SCREW | FULL | 1/2" | 1" |
| H | 1/8" ALUM. 6063-T5 MIN. OR 1/8" STEEL 33 KSI MIN. | #14 GRADE 5 SELF-TAPPING / DRILLING SCREW | FULL | 1/2" | 1" |

ANCHORAGE NOTES:
 1. SHIMS BY OTHERS SHALL BE LOAD-BEARING (PLASTIC OR METALLIC) AND CAPABLE OF TRANSFERRING APPLIED LOADS FROM THE PRODUCTS TO THE OPENING SUBSTRATES.
 2. SHIM EACH ANCHOR LOCATION WHERE GAP GREATER THAN 1/16" EXISTS BETWEEN PRODUCT FRAME AND OPENING SUBSTRATE.
 3. SPECIFIED EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL FINISH OR STUCCO.

TUBELITE
 SERIES E/TU24650
 STOREFRONT SYSTEM

ALLOWABLE DESIGN PRESSURES (PSF) FOR ELEVATION A, SHEET 1,
 STANDARD INTERMEDIATE VERTICAL MULLIONS DET. 4A/6 OR 4C/6

| MAXIMUM FRAME HEIGHT (IN.) | MAXIMUM LOAD WIDTH (IN.) | ALLOWABLE DESIGN PRESSURES (+ / - PSF) | MAXIMUM FRAME HEIGHT (IN.) | MAXIMUM LOAD WIDTH (IN.) | ALLOWABLE DESIGN PRESSURES (+ / - PSF) |
|----------------------------|--------------------------|--|----------------------------|--------------------------|--|
| 114 | 27 | 45.0 | 132 | 27 | 45.0 |
| | 30 | 45.0 | | 30 | 45.0 |
| | 33 | 45.0 | | 33 | 43.8 |
| | 36 | 45.0 | | 36 | 40.7 |
| | 39 | 41.7 | | 39 | 38.1 |
| | 42 | 36.0 | | 42 | 35.8 |
| | 45 | 31.3 | | 45 | 31.3 |
| | 46 | 30.0 | | 46 | 30.0 |
| 120 | 27 | 45.0 | 138 | 27 | 45.0 |
| | 30 | 45.0 | | 30 | 45.0 |
| | 33 | 45.0 | | 33 | 41.6 |
| | 36 | 45.0 | | 36 | 38.7 |
| | 39 | 41.7 | | 39 | 36.1 |
| | 42 | 36.0 | | 42 | 34.0 |
| | 45 | 31.3 | | 45 | 31.3 |
| | 46 | 30.0 | | 46 | 30.0 |
| 126 | 27 | 45.0 | 144 | 27 | 45.0 |
| | 30 | 45.0 | | 30 | 43.1 |
| | 33 | 45.0 | | 33 | 39.7 |
| | 36 | 42.9 | | 36 | 36.8 |
| | 39 | 40.2 | | 39 | 34.4 |
| | 42 | 36.0 | | 42 | 32.3 |
| | 45 | 31.3 | | 45 | 30.5 |
| | 46 | 30.0 | | 46 | 30.0 |

ALLOWABLE DESIGN PRESSURES (PSF) FOR ELEVATION A, SHEET 1,
 UNREINFORCED DOOR JAMB MULLIONS DET. 12/7

| MAXIMUM FRAME HEIGHT (IN.) | MAXIMUM LOAD WIDTH (IN.) | ALLOWABLE DESIGN PRESSURES (+ / - PSF) | MAXIMUM FRAME HEIGHT (IN.) | MAXIMUM LOAD WIDTH (IN.) | ALLOWABLE DESIGN PRESSURES (+ / - PSF) |
|----------------------------|--------------------------|--|----------------------------|--------------------------|--|
| 114 | 50 1/2 | 45.0 | 120 | 50 1/2 | 45.0 |
| | 52 | 45.0 | | 52 | 45.0 |
| | 53 1/2 | 45.0 | | 53 1/2 | 41.6 |
| | 55 | 45.0 | | 55 | 38.7 |
| | 56 1/2 | 41.7 | | 56 1/2 | 36.1 |
| | 58 | 36.0 | | 58 | 34.0 |
| | 59 1/2 | 31.3 | | 59 1/2 | 31.3 |
| | 60 | 30.0 | | 60 | 30.0 |
| 132 | 50 1/2 | 45.0 | 138 | 50 1/2 | 45.0 |
| | 52 | 45.0 | | 52 | 45.0 |
| | 53 1/2 | 43.8 | | 53 1/2 | 41.6 |
| | 55 | 40.7 | | 55 | 38.7 |
| | 56 1/2 | 38.1 | | 56 1/2 | 36.1 |
| | 58 | 35.8 | | 58 | 34.0 |
| | 59 1/2 | 31.3 | | 59 1/2 | 31.3 |
| | 60 | 30.0 | | 60 | 30.0 |
| 114 | 50 1/2 | 45.0 | 126 | 50 1/2 | 45.0 |
| | 52 | 45.0 | | 52 | 43.1 |
| | 53 1/2 | 45.0 | | 53 1/2 | 39.7 |
| | 55 | 42.9 | | 55 | 36.8 |
| | 56 1/2 | 40.2 | | 56 1/2 | 34.4 |
| | 58 | 36.0 | | 58 | 32.3 |
| | 59 1/2 | 31.3 | | 59 1/2 | 30.5 |
| | 60 | 30.0 | | 60 | 30.0 |

NOTE: IF BOTH DOOR MULLION(S) AND INTERMEDIATE VERTICAL MULLION(S) ARE PRESENT, DETERMINE THE APPLICABLE PRESSURES FOR BOTH FROM THE CHARTS ABOVE AND THE LOWEST PRESSURE SHALL APPLY TO THE ENTIRE ASSEMBLY.



ZZ
 11/15/2016
 LUCAS A. TURNER, P.E.
 FL PE # 58201
 TURNER ENGINEERING &
 CONSULTING, INC.
 (COA # 29779)
 1239 JABARA AVE.
 NORTH PORT, FL 34288

3055 WALKER RIDGE DRIVE N.W.
 WALKER, MICHIGAN 49544
 PH: 800.866.2227
 FX: 616.301.0008
 WEB SITE: WWW.TUBELITEINC.COM

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

REVISION HISTORY:

| REV | DATE | DESCRIPTION |
|-----|----------|------------------|
| 0 | 7.5.16 | ORIGINAL RELEASE |
| A | 11.15.16 | ADDED E7 OPTIONS |

| | |
|-----------------|--------------------|
| DATE: | 11.15.16 |
| DRAWING NUMBER: | FPA-24650 |
| DRAWN: | |
| FINAL REVIEW: | |
| SCALE: | N.T.S. |
| REVISION: | A |
| SHEET NAME: | ANCHORS, DP CHARTS |
| SHEET: | 4 OF 10 |

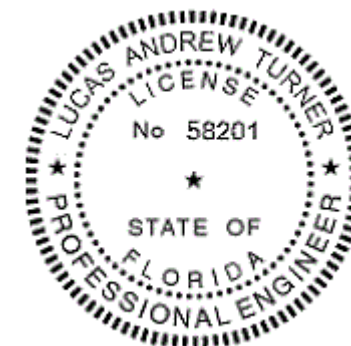
ALLOWABLE DESIGN PRESSURES (PSF) FOR ELEVATION B, SHEET 2,
HEAVY DUTY INTERMEDIATE VERTICAL MULLIONS DET. 4B/6 OR 4D/6

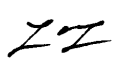
| MAXIMUM FRAME HEIGHT (IN.) | MAXIMUM LOAD WIDTH (IN.) | ALLOWABLE DESIGN PRESSURES (+ / - PSF) | MAXIMUM FRAME HEIGHT (IN.) | MAXIMUM LOAD WIDTH (IN.) | ALLOWABLE DESIGN PRESSURES (+ / - PSF) |
|----------------------------|--------------------------|--|----------------------------|--------------------------|--|
| 138 | 27 | 45.0 | 156 | 27 | 45.0 |
| | 30 | 45.0 | | 30 | 45.0 |
| | 33 | 45.0 | | 33 | 45.0 |
| | 36 | 45.0 | | 36 | 41.7 |
| | 39 | 45.0 | | 39 | 39.0 |
| | 42 | 39.2 | | 42 | 36.6 |
| | 45 | 34.1 | | 45 | 34.1 |
| | 48 | 30.0 | | 48 | 30.0 |
| 144 | 27 | 45.0 | 162 | 27 | 45.0 |
| | 30 | 45.0 | | 30 | 45.0 |
| | 33 | 45.0 | | 33 | 43.2 |
| | 36 | 45.0 | | 36 | 40.0 |
| | 39 | 42.7 | | 39 | 37.3 |
| | 42 | 39.2 | | 42 | 35.0 |
| | 45 | 34.1 | | 45 | 33.0 |
| | 48 | 30.0 | | 48 | 30.0 |
| 150 | 27 | 45.0 | 168 | 27 | 45.0 |
| | 30 | 45.0 | | 30 | 45.0 |
| | 33 | 45.0 | | 33 | 41.5 |
| | 36 | 43.6 | | 36 | 38.4 |
| | 39 | 40.7 | | 39 | 35.8 |
| | 42 | 38.3 | | 42 | 33.6 |
| | 45 | 34.1 | | 45 | 31.7 |
| | 48 | 30.0 | | 48 | 30.0 |

ALLOWABLE DESIGN PRESSURES (PSF) FOR ELEVATION B, SHEET 2,
REINFORCED DOOR JAMB MULLIONS DET. 14/8


| MAXIMUM FRAME HEIGHT (IN.) | MAXIMUM LOAD WIDTH (IN.) | ALLOWABLE DESIGN PRESSURES (+ / - PSF) | MAXIMUM FRAME HEIGHT (IN.) | MAXIMUM LOAD WIDTH (IN.) | ALLOWABLE DESIGN PRESSURES (+ / - PSF) |
|----------------------------|--------------------------|--|----------------------------|--------------------------|--|
| 138 | 50 1/2 | 45.0 | 156 | 50 1/2 | 45.0 |
| | 52 | 45.0 | | 52 | 44.6 |
| | 53 1/2 | 45.0 | | 53 1/2 | 43.5 |
| | 55 | 45.0 | | 55 | 41.7 |
| | 56 1/2 | 45.0 | | 56 1/2 | 39.0 |
| | 58 | 39.2 | | 58 | 36.6 |
| | 59 1/2 | 34.1 | | 59 1/2 | 34.1 |
| | 61 | 30.0 | | 61 | 30.0 |
| 144 | 50 1/2 | 45.0 | 162 | 50 1/2 | 40.8 |
| | 52 | 45.0 | | 52 | 39.7 |
| | 53 1/2 | 45.0 | | 53 1/2 | 38.7 |
| | 55 | 45.0 | | 55 | 37.7 |
| | 56 1/2 | 42.7 | | 56 1/2 | 36.8 |
| | 58 | 39.2 | | 58 | 35.0 |
| | 59 1/2 | 34.1 | | 59 1/2 | 33.0 |
| | 61 | 30.0 | | 61 | 30.0 |
| 150 | 50 1/2 | 45.0 | 168 | 50 1/2 | 36.5 |
| | 52 | 45.0 | | 52 | 35.5 |
| | 53 1/2 | 45.0 | | 53 1/2 | 34.6 |
| | 55 | 43.6 | | 55 | 33.7 |
| | 56 1/2 | 40.7 | | 56 1/2 | 32.9 |
| | 58 | 38.3 | | 58 | 32.1 |
| | 59 1/2 | 34.1 | | 59 1/2 | 31.4 |
| | 61 | 30.0 | | 61 | 30.0 |

NOTE: IF BOTH DOOR MULLION(S) AND INTERMEDIATE VERTICAL MULLION(S) ARE PRESENT, DETERMINE THE APPLICABLE PRESSURES FOR BOTH FROM THE CHARTS ABOVE AND THE LOWEST PRESSURE SHALL APPLY TO THE ENTIRE ASSEMBLY.




 11/15/2016
 LUCAS A. TURNER, P.E.
 FL PE # 58201
 TURNER ENGINEERING &
 CONSULTING, INC.
 (COA # 29779)
 1239 JABARA AVE.
 NORTH PORT, FL 34288

TUBELITE
SERIES E/T/U24650
STOREFRONT SYSTEM


 3055 WALKER RIDGE DRIVE N.W.
 WALKER, MICHIGAN 49544
 PH: 800.866.2227
 FX: 616.301.0008
 WEB SITE: WWW.TUBELITEINC.COM
 DEPENDABLE
 LEADERS IN ECO-EFFICIENT STOREFRONT
 CURTAINWALL AND ENTRANCE SYSTEMS

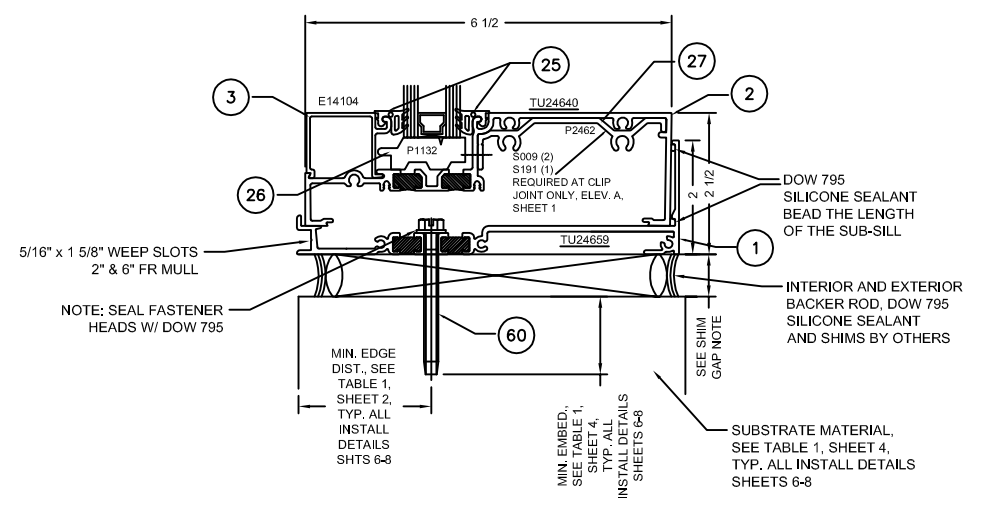
| REV | DATE | DESCRIPTION |
|-----|----------|--------------------|
| 0 | 11.15.16 | ORIGINAL RELEASE |
| A | 11.15.16 | ADDED E.T. OPTIONS |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

DATE: 11.15.16
 DRAWING NUMBER: FPA-24650
 DRAWN:
 FINAL REVIEW:
 SCALE: N.T.S.
 REVISION: A
 SHEET NAME: DP CHARTS
 SHEET: 5 OF 10

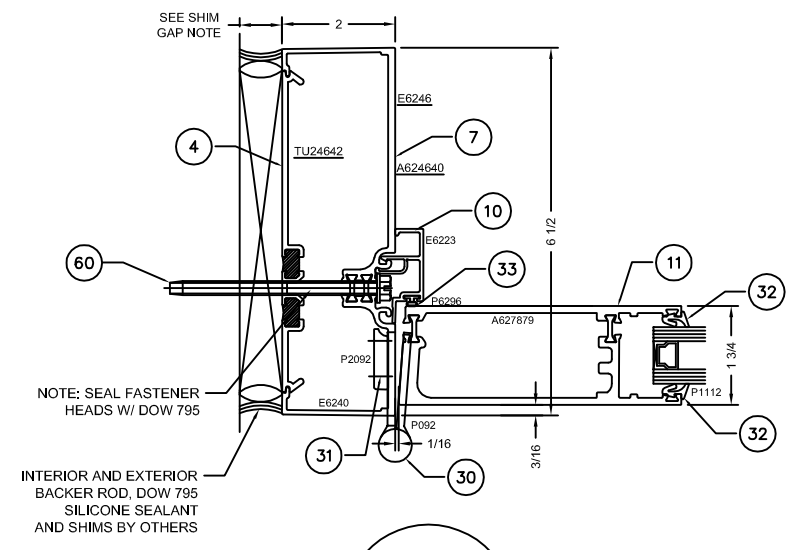
TUBELITE
SERIES E/T/TU24650
STOREFRONT SYSTEM

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

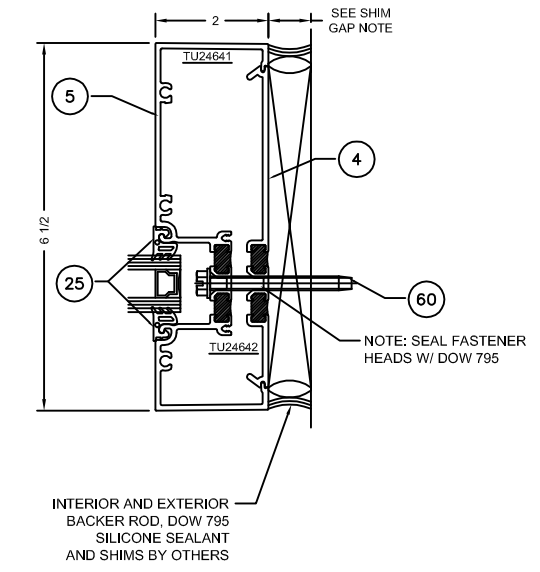
3055 WALKER RIDGE DRIVE N.W.
WALKER, MICHIGAN 49544
PH: 800.866.2227
FX: 616.301.0008
WEB SITE: WWW.TUBELITEINC.COM



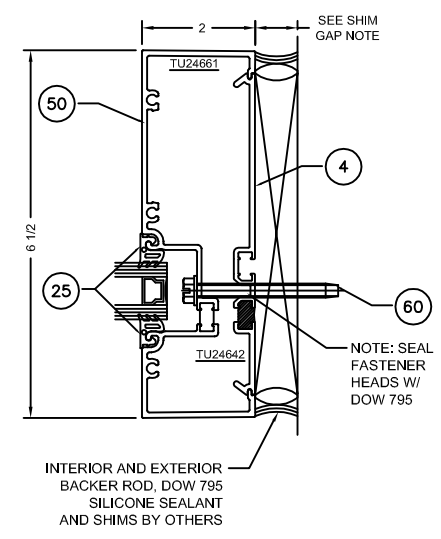
1
6



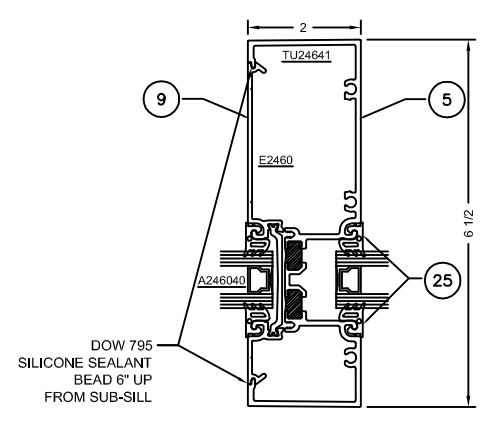
2
6



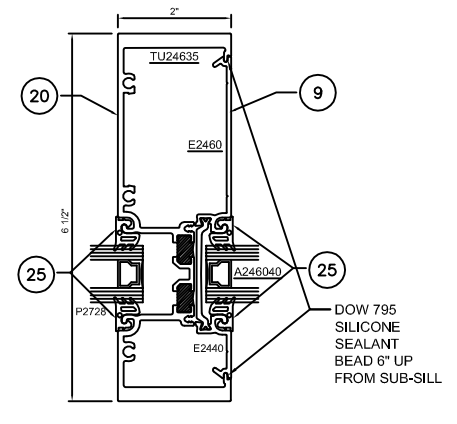
3A
6



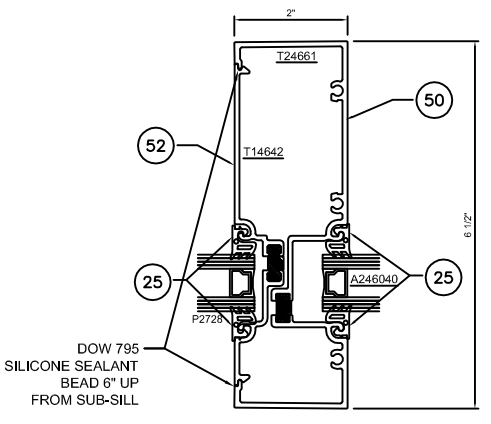
3B
6



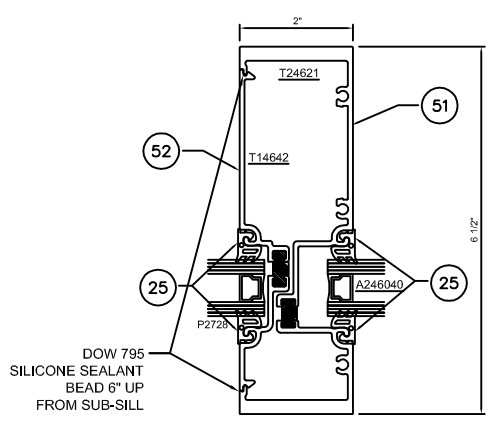
4A
6



4B
6

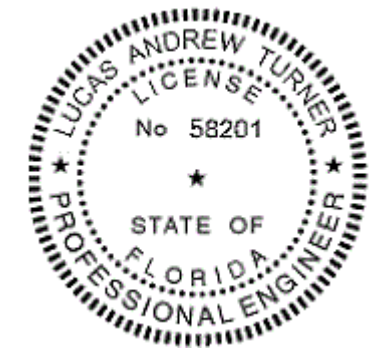


4C
6



4D
6

SHIM GAP NOTE: SHIM GAPS OF UP TO 3/8" ARE ALLOWED IN THIS APPROVAL; ELEVATIONS AND NOTES ON SHEETS 1 THROUGH 3 SPECIFY THE LOCATION AND QUANTITY OF INSTALLATION ANCHORS BASED ON EITHER 1/4" MAX. SHIM GAP OR 3/8" MAX. SHIM GAP.



27
11/15/2016

LUCAS A. TURNER, P.E.
FL PE # 58201
TURNER ENGINEERING &
CONSULTING, INC.
(COA # 29779)
1239 JABARA AVE.
NORTH PORT, FL 34288

| REVISION HISTORY: | |
|-------------------|------------------|
| REV | DESCRIPTION |
| 0 | ORIGINAL RELEASE |
| 1 | ADDED E7 OPTIONS |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |
| 10 | |

DATE: 11.15.16
DRAWING NUMBER: FPA-24650
DRAWN:
FINAL REVIEW:
SCALE: N.T.S.
REVISION: A
SHEET NAME: SECTION VIEWS
SHEET: 6 OF 10

TUBELITE
SERIES E/T/TU24650
STOREFRONT SYSTEM

3055 WALKER RIDGE DRIVE N.W.
WALKER, MICHIGAN 49544
PH: 800.866.2227
FX: 616.301.0008
WEB SITE: WWW.TUBELITEINC.COM

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

REVISION HISTORY:

| REV | DATE | DRAWN | DESCRIPTION |
|-----|----------|-------|------------------|
| 0 | 7.5.16 | LT | ORIGINAL RELEASE |
| 1 | 11.15.16 | LT | ADDED E7 OPTIONS |
| | | | |
| | | | |
| | | | |
| | | | |

DATE: 11.15.16

DRAWING NUMBER: FPA-24650

DRAWN:

FINAL REVIEW:

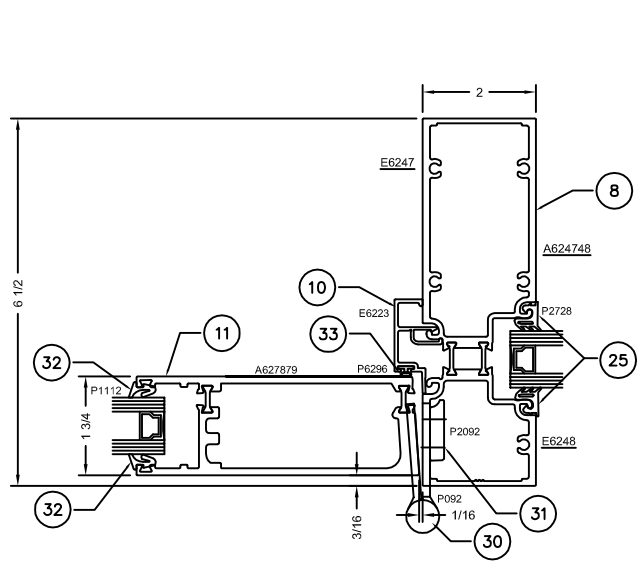
SCALE: N.T.S.

REVISION: A

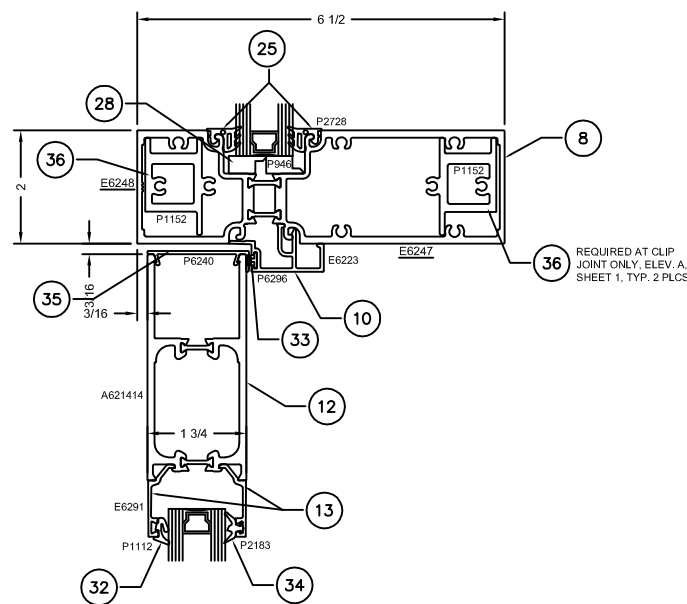
SHEET NAME:

SECTION VIEWS

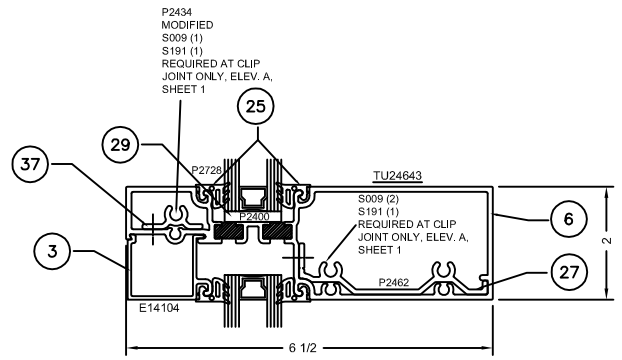
SHEET: 7 OF 10



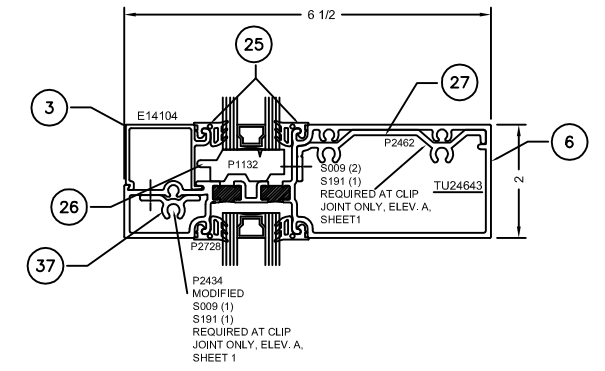
5
7



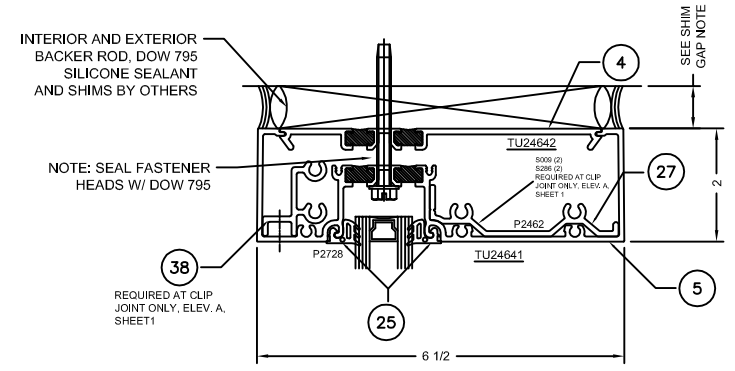
6
7



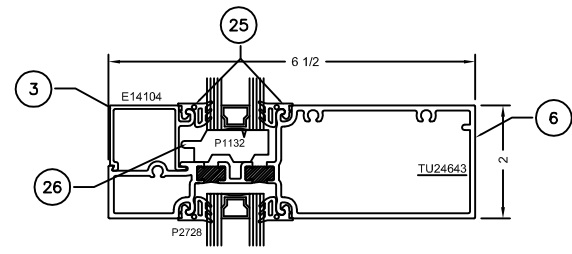
7
7



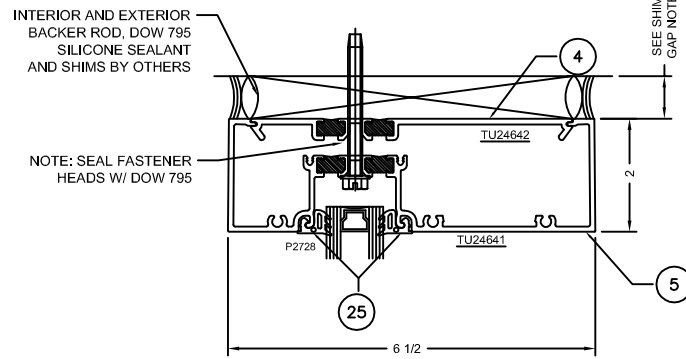
8
7



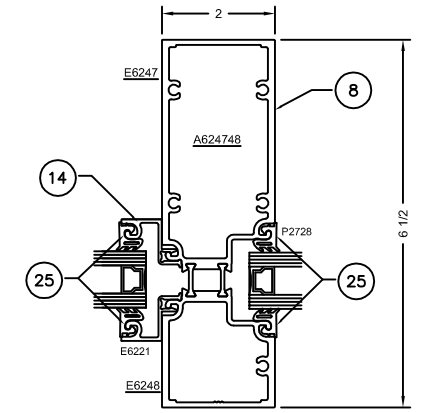
9
7



10
7

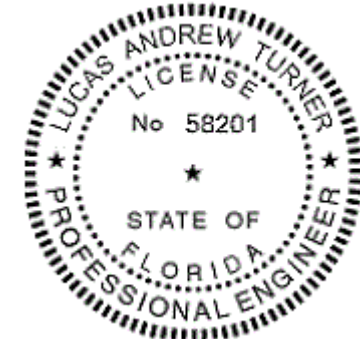


11
7

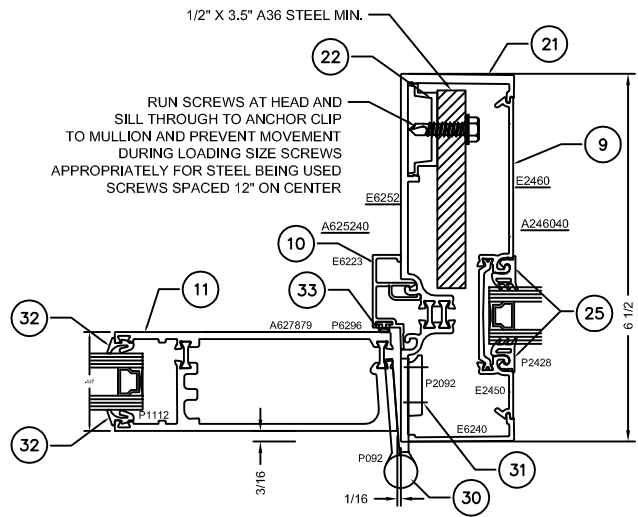


12
7

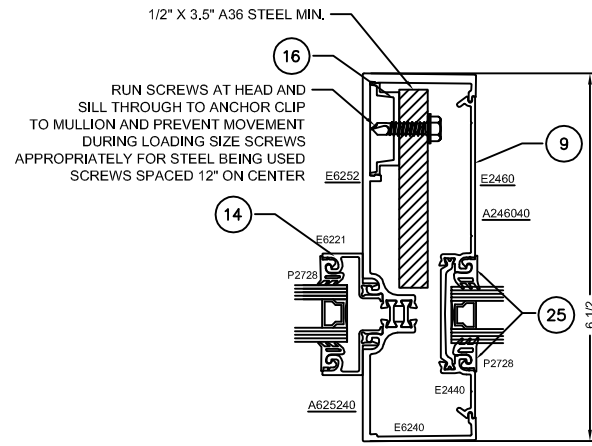
SHIM GAP NOTE: SHIM GAPS OF UP TO 3/8" ARE ALLOWED IN THIS APPROVAL; ELEVATIONS AND NOTES ON SHEETS 1 THROUGH 3 SPECIFY THE LOCATION AND QUANTITY OF INSTALLATION ANCHORS BASED ON EITHER 1/4" MAX. SHIM GAP OR 3/8" MAX. SHIM GAP.



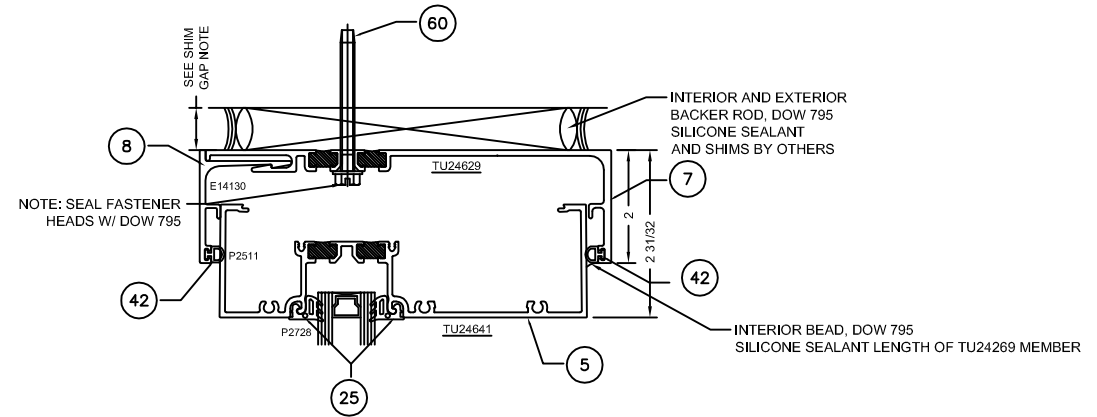
11/15/2016
LUCAS A. TURNER, P.E.
FL PE # 58201
TURNER ENGINEERING &
CONSULTING, INC.
(COA # 29779)
1239 JABARA AVE.
NORTH PORT, FL 34288



13
8

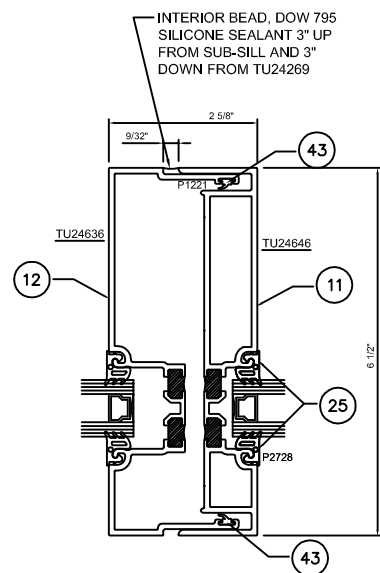


14
8

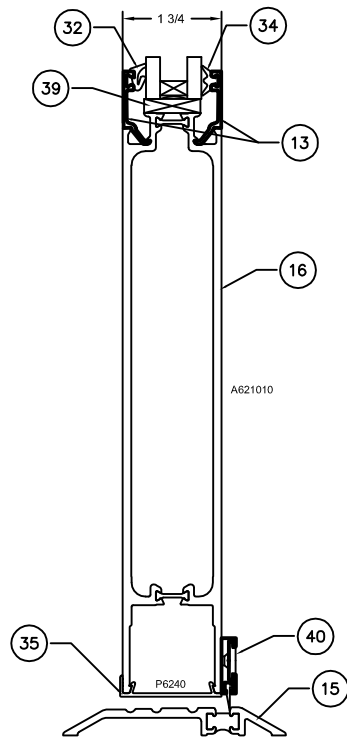


15
8

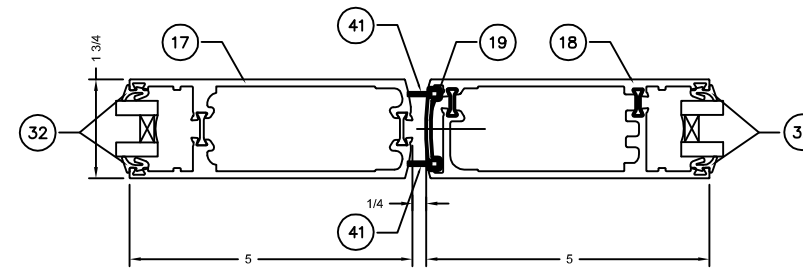
SHIM GAP NOTE: SHIM GAPS OF UP TO 3/8" ARE ALLOWED IN THIS APPROVAL; ELEVATIONS AND NOTES ON SHEETS 1 THROUGH 3 SPECIFY THE LOCATION AND QUANTITY OF INSTALLATION ANCHORS BASED ON EITHER 1/4" MAX. SHIM GAP OR 3/8" MAX. SHIM GAP.



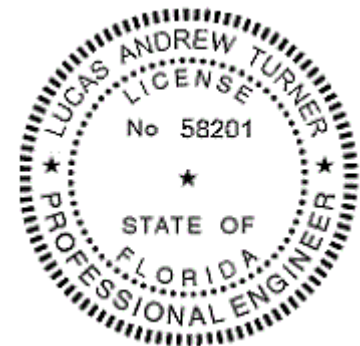
16
8



17
8



18
8



ZZ
11/15/2016
LUCAS A. TURNER, P.E.
FL PE # 58201
TURNER ENGINEERING &
CONSULTING, INC.
(COA # 29779)
1239 JABARA AVE.
NORTH PORT, FL 34288

TUBELITE
SERIES E/T/TU24650
STOREFRONT SYSTEM

3055 WALKER RIDGE DRIVE N.W.
WALKER, MICHIGAN 49544
PH: 800.866.2227
FX: 616.301.0008
WEB SITE: WWW.TUBELITEINC.COM

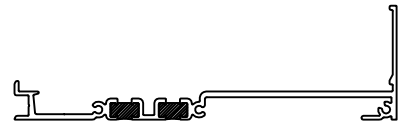
TUBELITE
DEPENDABLE
LEADERS IN ECO-EFFICIENT STOREFRONT,
CURTAINWALL, AND ENTRANCE SYSTEMS

REVISION HISTORY:

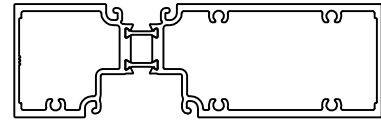
| REV | DATE | DESCRIPTION |
|-----|----------|------------------|
| 0 | 7.5.16 | ORIGINAL RELEASE |
| 1 | 11.15.16 | ADDED E7 OPTIONS |
| A | | |

| | |
|-----------------|-----------|
| DATE: | 11.15.16 |
| DRAWING NUMBER: | FPA-24650 |
| DRAWN: | |
| FINAL REVIEW: | |
| SCALE: | N.T.S. |
| REVISION: | A |

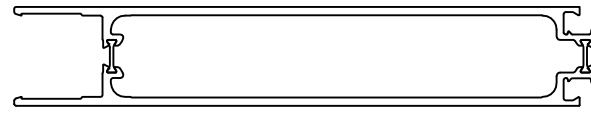
| | |
|-------------|---------------|
| SHEET NAME: | SECTION VIEWS |
| SHEET: | 8 OF 10 |



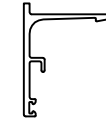
ITEM 1 - TU24659
ULTRA THERMAL SILL FLASHING



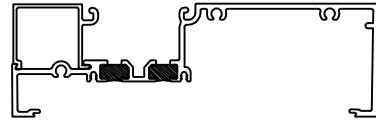
ITEM 8 - A624748
ASSEMBLY
TUBULAR DOOR JAMB/TRANSOM



ITEM 16 - A621010
ASSEMBLY
BOTTOM RAIL



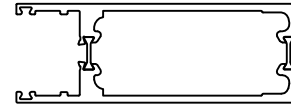
ITEM 46 - E14130
MALE HEAD RECEPTOR



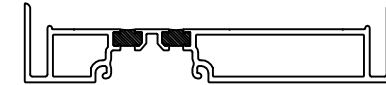
ITEM 2 - TU24650
OPEN BACK SILL



ITEM 9 - A246040
ASSEMBLY
STANDARD CLOSURE POCKET



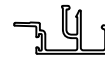
ITEM 17 - A628282
ASSEMBLY
MD RD FACE STILE



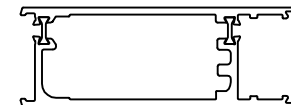
ITEM 47 - TU24646
FEMALE EXPANSION MULLION



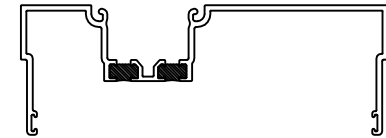
ITEM 3 - E14104
GLAZING STOP



ITEM 10 - E6223
DOOR STOP



ITEM 18 - A628384
ASSEMBLY
MED STILE - LOCK W/ ASTRAGAL



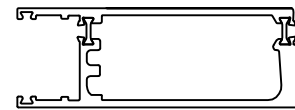
ITEM 48 - TU24636
FEMALE EXPANSION MULLION



ITEM 25 - P2728
GLASS GASKET



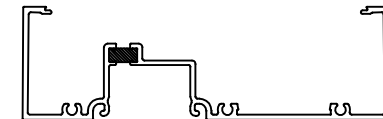
ITEM 4 - TU24642
ULTRA THERMAL CLOSURE PLATE



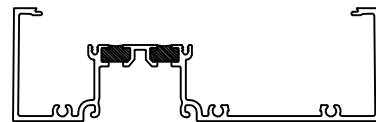
ITEM 11 - A627879
ASSEMBLY
MED STILE - HINGE



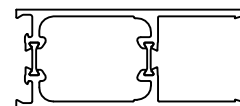
ITEM 19 - E1152
ASTRAGAL



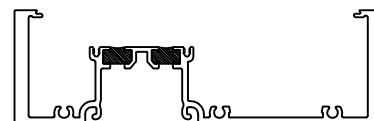
ITEM 50 - T24661
OPEN BACK HEAD/JAMB/VERT



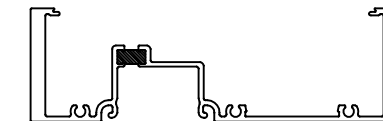
ITEM 5 - TU24641
OPEN BACK HEAD/JAMB/VERT



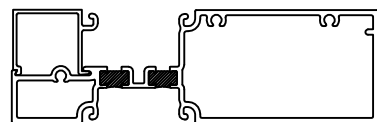
ITEM 12 - A621414
ASSEMBLY
MED STILE - TOP RAIL



ITEM 20 - TU24635
HEAVY WALL VERTICAL



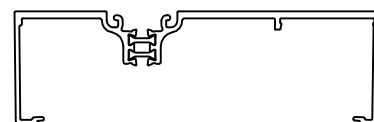
ITEM 51 - T24621
HEAVY WALL VERTICAL



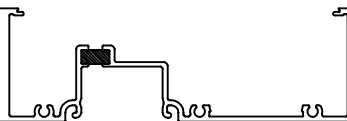
ITEM 6 - TU24643
TUBULAR SILL/HORIZONTAL



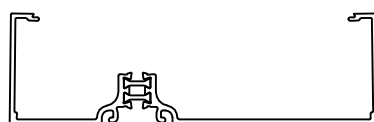
ITEM 13 - E6291
GLASS STOP



ITEM 21 - A625240
ASSEMBLY
HEAVY WALL DOOR JAMB



ITEM 52 - T14642
CLOSURE PLATE



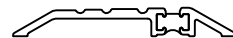
ITEM 7 - A624640
ASSEMBLY
OPEN BACK DOOR JAMB



ITEM 14 - E6221
TRANSOM GLASS ADAPTOR



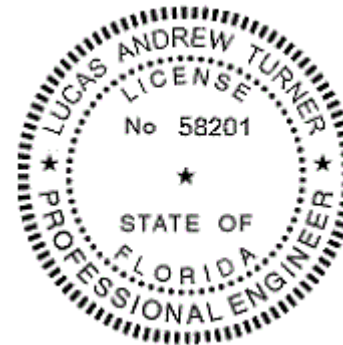
ITEM 22 - E2463
STEEL REINFORCING CLIP



ITEM 15 - T6250
THERMAL THRESHOLD



ITEM 45 - TU24629
FEMALE HEAD RECEPTOR



NOTE: ALL EXTRUSIONS SHOWN WITH DOUBLE POUR/DEBRIDGE ALSO ACCEPTABLE WITH SINGLE POUR/DEBRIDGE OR NON-BROKEN IN SAME EXTRUSION PROFILE. ALL EXTRUSIONS SHOWN WITH SINGLE POUR/DEBRIDGE ALSO ACCEPTABLE AS NON-BROKEN IN SAME EXTRUSION PROFILE.

22
11/15/2016
LUCAS A. TURNER, P.E.
FL PE # 58201
TURNER ENGINEERING &
CONSULTING, INC.
(COA # 29779)
1239 JABARA AVE.
NORTH PORT, FL 34288

TUBELITE
SERIES E/T/TU24650
STOREFRONT SYSTEM

3055 WALKER RIDGE DRIVE N.W.
WALKER, MICHIGAN 49544
PH: 800.866.2227
FX: 616.301.0008
WEB SITE: WWW.TUBELITEINC.COM

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

REVISION HISTORY:

| REV | DATE | DESCRIPTION |
|-----|----------|------------------|
| 0 | 11.15.16 | ORIGINAL RELEASE |
| A | 11.15.16 | ADDED E7 OPTIONS |

DATE: 11.15.16
DRAWING NUMBER: FPA-24650
DRAWN:
FINAL REVIEW:
SCALE: N.T.S.
REVISION: A

SHEET NAME: PART DRAWINGS
SHEET: 9 OF 10

| TU24650 - PARTS LIST | | | | MATERIAL |
|----------------------|-----|-------------|---|------------------|
| ITEM | QTY | PART NUMBER | DESCRIPTION | |
| 1 | - | TU24659 | EXTRUSION ~ ULTRA THERMAL SILL FLASHING | ALUMINUM-6063-T6 |
| 2 | - | TU24640 | EXTRUSION ~ OPEN BACK SILL | ALUMINUM-6063-T6 |
| 3 | - | E14104 | EXTRUSION ~ GLAZING STOP | ALUMINUM-6063-T6 |
| 4 | - | TU24642 | EXTRUSION ~ ULTRA THERMAL CLOSURE PLATE | ALUMINUM-6063-T6 |
| 5 | - | TU24641 | EXTRUSION ~ STANDARD OPEN BACK HEAD/JAMB/VERT | ALUMINUM-6063-T6 |
| 6 | - | TU24643 | EXTRUSION ~ TUBULAR SILL/HORIZONTAL | ALUMINUM-6063-T6 |
| 7 | - | A624640 | EXTRUSION ASSEMBLY ~ OPEN BACK DOOR JAMB | ALUMINUM-6063-T6 |
| 8 | - | A624748 | EXTRUSION ASSEMBLY ~ TUBULAR DOOR JAMB/TRANSOM | ALUMINUM-6063-T6 |
| 9 | - | A246040 | EXTRUSION ASSEMBLY ~ STANDARD CLOSURE POCKET | ALUMINUM-6063-T6 |
| 10 | - | E6223 | EXTRUSION ~ DOOR STOP | ALUMINUM-6063-T6 |
| 11 | - | A627879 | EXTRUSION ASSEMBLY ~ THERMAL DOOR FRAME | ALUMINUM-6063-T6 |
| 12 | - | A621414 | EXTRUSION ASSEMBLY ~ THERMAL DOOR FRAME | ALUMINUM-6063-T6 |
| 13 | - | E6291 | EXTRUSION ~ GLASS STOP DOOR | ALUMINUM-6063-T6 |
| 14 | - | E6221 | EXTRUSION ~ TRANSOM STOP | ALUMINUM-6063-T6 |
| 15 | - | T6250 | THERMAL THRESHOLD | ALUMINUM-6063-T6 |
| 16 | - | A621010 | EXTRUSION ASSEMBLY ~ BOTTOM RAIL 10" | ALUMINUM-6063-T6 |
| 17 | - | A628282 | EXTRUSION ASSEMBLY ~ STILE, MED ~ RD FACE | ALUMINUM-6063-T6 |
| 18 | - | A628384 | EXTRUSION ASSEMBLY ~ STILE, MED ~ LOCK ASTRIGAL | ALUMINUM-6063-T6 |
| 19 | - | E1152 | EXTRUSION ~ ASTRIGAL (DOOR) | ALUMINUM-6063-T6 |
| 20 | - | TU24635 | EXTRUSION ~ HEAVY WALL VERTICAL | ALUMINUM-6063-T6 |
| 21 | - | A625240 | EXTRUSION ASSEMBLY ~ HEAVY WALL DOOR JAMB | ALUMINUM-6063-T6 |
| 22 | - | E2463 | EXTRUSION ~ STEEL REINFORCING CLIP | ALUMINUM-6063-T6 |
| 23 | | | | |
| 24 | | | | |
| 25 | - | P2728 | GASKET, GLASS | P-PART-RUBBER |
| 26 | - | P1132 | SETTING BLOCK 4" LONG | P-PART-RUBBER |
| 27 | - | P2462 | SHEAR CLIP | P-PART |
| 28 | - | P946 | SETTING BLOCK 4" LONG | P-PART-RUBBER |
| 29 | - | P2400 | SETTING BLOCK 4" LONG | P-PART-RUBBER |
| 30 | - | P092 | HINGE | P-PART |
| 31 | - | P2092 | HINGE BACKER | P-PART |
| 32 | - | P1112 | GASKET, GLASS, DOORS | P-PART-RUBBER |
| 33 | - | P6296 | GASKET, DOORS | P-PART-RUBBER |
| 34 | - | P2183 | GASKET, DOORS | P-PART-RUBBER |
| 35 | - | P6240 | WEATHER INHIBITOR | P-PART |
| 36 | - | P1152 | SHEAR CLIP | P-PART |
| 37 | - | P2434 | SHEAR CLIP | P-PART |
| 38 | - | P2433 | SHEAR CLIP | P-PART |
| 39 | - | P1912 | SETTING BLOCK | P-PART-RUBBER |
| 40 | - | P1275 | CONCEALED SCREW WEATHERSTRIP | - |
| 41 | - | P938 | PILE, DOOR STOP, AMESBURY GROUP | - |
| 42 | - | P2511 | GASKET, HEAD RECEPTOR | P-PART-RUBBER |
| 43 | - | P1221 | GASKET, EXPANSION MULLION | P-PART-RUBBER |
| 44 | | | | |
| 45 | - | TU24629 | EXTRUSION ~ HEAD RECEPTOR FEMALE | ALUMINUM-6063-T6 |
| 46 | - | E14130 | EXTRUSION ~ HEAD RECEPTOR MALE | ALUMINUM-6063-T6 |
| 47 | - | T24646 | EXTRUSION ~ EXPANSION MULLION FEMALE | ALUMINUM-6063-T6 |
| 48 | - | T24636 | EXTRUSION ~ EXPANSION MULLION MALE | ALUMINUM-6063-T6 |
| 49 | | | | |
| 50 | - | E/T24661 | EXTRUSION ~ STANDARD OPEN BACK HEAD/JAMB/VERT | ALUMINUM-6063-T6 |
| 51 | - | E/T24621 | EXTRUSION ~ HEAVY WALL VERTICAL | ALUMINUM-6063-T6 |
| 52 | - | E/T14642 | EXTRUSION ~ CLOSURE PLATE | ALUMINUM-6063-T6 |
| 53 | | | | |
| 54 | | | | |
| 55 | | | | |
| 56 | | | | |
| 57 | | | | |
| 58 | | | | |
| 59 | | | | |

| ITEM | QTY | PART NUMBER | DESCRIPTION | MATERIAL |
|------|----------|-------------|---|----------------|
| 60 | - | BY OTHERS | INSTALLATION ANCHORS SEE TABLE 1, SHEET 4 | |
| 61 | - | S009 | SCREW ~ #10 X 1-3/4" PAN HEAD PHIL | |
| 62 | - | S191 | SCREW ~ #10 X 1/2" TRUSS HEAD PHIL | |
| 63 | | | | |
| 64 | | | | |
| 65 | | | | |
| 66 | | | | |
| 67 | | | | |
| 68 | | | | |
| 69 | | | | |
| 70 | | | | |
| 71 | | | | |
| 72 | | | | |
| 73 | | | | |
| 74 | AS REQ'D | BY OTHERS | SILICONE SEALANT DOW 795 | P-PART-SEALANT |
| 75 | AS REQ'D | BY OTHERS | SILICONE SEALANT DOW 995 | P-PART-SEALANT |
| 76 | | | | |
| 77 | | | | |
| 78 | | | | |
| 79 | | | | |
| 80 | | | | |
| 81 | | | | |
| 82 | | | | |
| 83 | | | | |
| 84 | | | | |
| 85 | | | | |
| 86 | | | | |
| 87 | | | | |
| 88 | | | | |
| 89 | | | | |
| 90 | | | | |
| 91 | | | | |
| 92 | | | | |
| 93 | | | | |
| 94 | | | | |
| 95 | | | | |
| 96 | | | | |
| 97 | | | | |
| 98 | | | | |
| 99 | | | | |
| 100 | | | | |
| 101 | | | | |
| 102 | | | | |
| 103 | | | | |

TUBELITE
 SERIES E/T/TU24650
 STOREFRONT SYSTEM

TUBELITE
 3055 WALKER RIDGE DRIVE N.W.
 WALKER, MICHIGAN 49544
 PH: 800.866.2227
 FX: 616.301.0008
 WEB SITE: WWW.TUBELITEINC.COM
DEPENDABLE
LEADERS IN ECO-EFFICIENT STOREFRONT
CURTAINWALL AND ENTRANCE SYSTEMS

| REVISION HISTORY: | |
|-------------------|------------------|
| REV | DESCRIPTION |
| 0 | ORIGINAL RELEASE |
| 1 | ADDED E7 OPTIONS |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

DATE: 11.15.16
 DRAWING NUMBER: FPA-24650
 DRAWN:
 FINAL REVIEW:
 SCALE: N.T.S.
 REVISION: A
 SHEET NAME:
 BILL OF MATERIALS
 SHEET: 10 OF 10



12
 11/15/2016
 LUCAS A. TURNER, P.E.
 FL PE # 58201
 TURNER ENGINEERING &
 CONSULTING, INC.
 (COA # 29779)
 1239 JABARA AVE.
 NORTH PORT, FL 34288