



REVISION HISTORY

DATE: 05.07.14 RAWING NUMBER: FPA-400-CAP-IMP

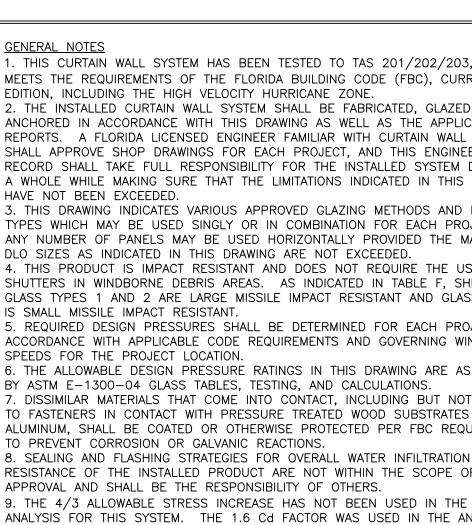
INAL REVIEW:

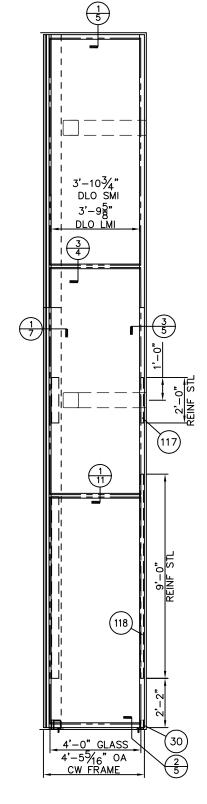
SCALE: N.T.S. REVISION:

**ELEVATIÓN** 

1 OF 14

NORTH PORT, FL 34288





FRAME

S

8 A

-61/4"

30,

 $\left(\frac{4}{9}\right)$ 

30,

1. THIS CURTAIN WALL SYSTEM HAS BEEN TESTED TO TAS 201/202/203, AND MEETS THE REQUIREMENTS OF THE FLORIDA BUILDING CODE (FBC), CURRENT

2. THE INSTALLED CURTAIN WALL SYSTEM SHALL BE FABRICATED, GLAZED, AND ANCHORED IN ACCORDANCE WITH THIS DRAWING AS WELL AS THE APPLICABLE TEST REPORTS. A FLORIDA LICENSED ENGINEER FAMILIAR WITH CURTAIN WALL DESIGN SHALL APPROVE SHOP DRAWINGS FOR EACH PROJECT, AND THIS ENGINEER OF RECORD SHALL TAKE FULL RESPONSIBILITY FOR THE INSTALLED SYSTEM DESIGN AS A WHOLE WHILE MAKING SURE THAT THE LIMITATIONS INDICATED IN THIS DRAWING

3. THIS DRAWING INDICATES VARIOUS APPROVED GLAZING METHODS AND FRAMING TYPES WHICH MAY BE USED SINGLY OR IN COMBINATION FOR EACH PROJECT. ANY NUMBER OF PANELS MAY BE USED HORIZONTALLY PROVIDED THE MAXIMUM DLO SIZES AS INDICATED IN THIS DRAWING ARE NOT EXCEEDED.

4. THIS PRODUCT IS IMPACT RESISTANT AND DOES NOT REQUIRE THE USE OF SHUTTERS IN WINDBORNE DEBRIS AREAS. AS INDICATED IN TABLE F, SHEET 2, GLASS TYPES 1 AND 2 ARE LARGE MISSILE IMPACT RESISTANT AND GLASS TYPE 3 IS SMALL MISSILE IMPACT RESISTANT.

5. REQUIRED DESIGN PRESSURES SHALL BE DETERMINED FOR EACH PROJECT IN ACCORDANCE WITH APPLICABLE CODE REQUIREMENTS AND GOVERNING WIND

6. THE ALLOWABLE DESIGN PRESSURE RATINGS IN THIS DRAWING ARE AS LIMITED BY ASTM E-1300-04 GLASS TABLES, TESTING, AND CALCULATIONS.

7. DISSIMILAR MATERIALS THAT COME INTO CONTACT, INCLUDING BUT NOT LIMITED TO FASTENERS IN CONTACT WITH PRESSURE TREATED WOOD SUBSTRATES OR ALUMINUM, SHALL BE COATED OR OTHERWISE PROTECTED PER FBC REQUIREMENTS

RESISTANCE OF THE INSTALLED PRODUCT ARE NOT WITHIN THE SCOPE OF THIS

9. 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.

10. STRUCTURAL INTEGRITY OF SUBSTRATE MATERIALS TO RECEIVE THE LOADS FROM THIS PRODUCT, TO BE VERIFIED BY OTHERS OR AS APPROVED BY THE AUTHORITY HAVING JURISDICTION.

11. THIS PRODUCT SHALL BE INSTALLED USING ONE OF THE APPROVED FASTENING OR WELDING METHODS INDICATED IN THIS DRAWING, AS APPROPRIATE FOR THE SUBSTRATE TYPE. WELD SIZES AND LOCATIONS FOR INTERMEDIATE ANCHORS SHALL BE AS INDICATED IN THE DETAILS FOR EACH CLIP TYPE, AND FOR U. F. AND T-ANCHORS THE ANCHOR SIZE, EMBEDMENT, EDGE DISTANCE, AND PATTERN WITHIN THE CLIP SHALL BE IN ACCORDANCE WITH TABLE E, SHEET 2, AND APPLICABLE DETAILS.

12. MINIMUM ANCHOR EMBEDMENTS LISTED IN THIS DRAWING SHALL BE BEYOND WALL DRESSING OR STUCCO AND FULLY INTO SUBSTRATE.

13. SUBSTRATES SHALL MEET THE MINIMUM STRENGTH REQUIREMENTS AS SHOWN IN TABLE E, SHEET 2. CONCRETE SUBSTRATES SHALL NOT BE CRACKED.

## TWIN-SPAN ELEVATION WET GLAZED, SEE TABLE A FOR LIMITS OF USE

 $3'-2\frac{3}{4}''$ 

3'-1½' GLASS

SMI.

4' GLASS

3'-01/4'

DLO SMI

/4'-0½"

<u>/ DLO ĹMI</u>

 $\left(\begin{array}{c} 1 \\ 8 \end{array}\right)$ 

NOTE:

SMI = SMALL

MISSILE IMPACT

LMI = LARGE

MISSILE IMPACT

ANCHOR

 $\left(\frac{3}{3}\right)$ 

(116)

ZEINF

5'-11/4"

5'-0"

GLASS LMI

4'-10¾'

DLO SMI

3'-103/4"

DLO LM

 $\left(\begin{array}{c}2\\8\end{array}\right)$ 

 $8'-2\frac{3}{4}$ " GLASS

8'-1½" DLO

TUBELITE MONUMENTAL

SEE SEPARATE APPROVAL

8'-0" DOOR FRAME OPENING

MEDIUM STILE DOORS,

 $\left(\frac{1}{3}\right)$ 

CLASS SMI

4'-0"

5'-11/4'

5'-0"

GLASS LMI

GLASS SMI 4'-0"

DLO SMI

′3'–10¾"

DLO LMI

 $\binom{4}{4}$ 

 $\frac{4}{3}$ 

116)

 $18'-10\frac{9}{16}$ " OA CW FRAME

5'-11/4"

5'-0"

GLASS LMI

′4'–10¾'

DLO SMI

3'-103/4"

DLO LMI

 $\left(\frac{1}{10}\right)$ 

1 GLASS SMI 4'-0"

 $\binom{1}{5}$ 

TABLE A. ELEV. E1/1 INFORMATION					
DESIGN PRESSURE	+70/-70 PSF		DESIGN PRESSURE	+78/-71 PSF	
GLAZING TYPE	1 OR 2		GLAZING TYPE	4	
MISSILE RATING	LARGE MISSILE		MISSILE RATING	SMALL MISSILE	

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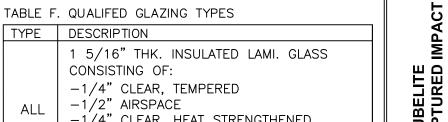
SPLICE JOINT ANCHOR DETAILS 9 - 10

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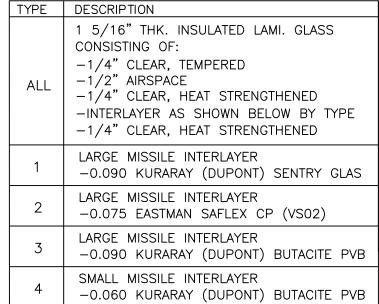
14 PART DWGS, BILL OF MATERIALS

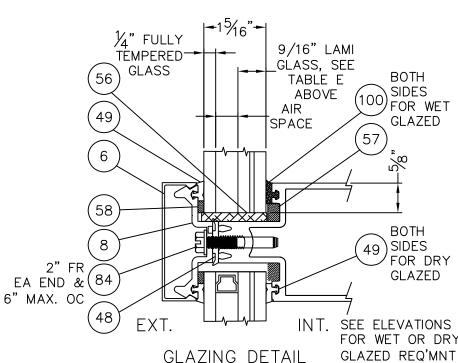
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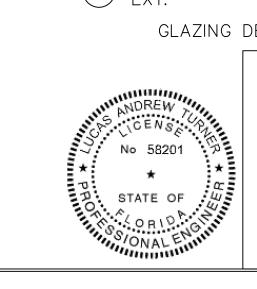
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-1/4" CLEAR, TEMPERED -1/2" AIRSPACE ALL -1/4" CLEAR, HEAT STRENGTHENED -INTERLAYER AS SHOWN BELOW BY TYPE -1/4" CLEAR, HEAT STRENGTHENED LARGE MISSILE INTERLAYER -0.090 KURARAY (DUPONT) SENTRY GLAS LARGE MISSILE INTERLAYER 2 -0.075 EASTMAN SAFLEX CP (VS02) LARGE MISSILE INTERLAYER 3







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TUBELITE CW 400 CAPTURED IMPACT CURTAIN WALL SYSTEM



05.07.14

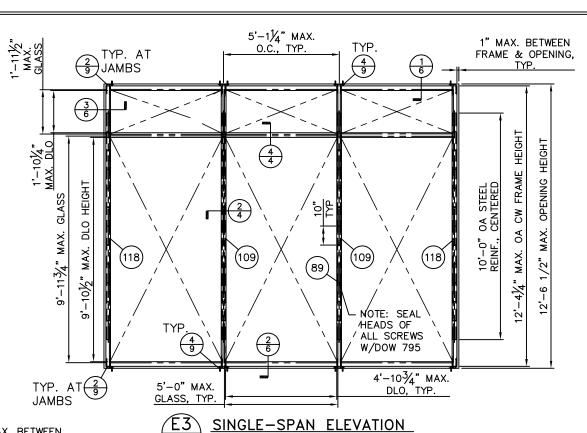
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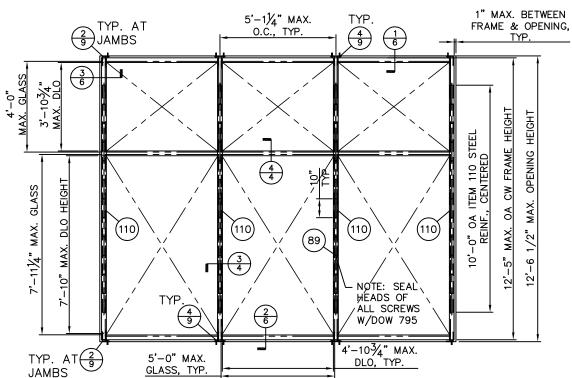
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SCALE: N.T.S. REVISION:

ELEVATIONS, ANCHORAGE, GLAZING

2 OF 14





SINGLE-SPAN ELEVATION

 $4'-1\frac{1}{4}$ " MAX.

O.C., TYP.

 $3'-10\frac{3}{4}$ " DLO TYP.

4'-0" GLASS TYP

**4** 9

 $\binom{1}{6}$ 

 $\binom{2}{6}$ 

WET GLAZED, SEE TABLE B FOR LIMITS OF USE

TYP. AT

JAMBS (2)

TYP. AT

**JAMBS** 

 $\binom{3}{6}$ 

TABLE B. ELEV. E2/2 INFORMATION +/-65 PSF **DESIGN PRESSURE GLAZING TYPE** 3 LARGE MISSILE MISSILE RATING

WET GLAZED, SEE TABLE C FOR LIMITS OF USE

ABLE C. ELEV. E3/2 INFORMATION		
DESIGN PRESSURE	+/-90 PSF	
GLAZING TYPE	1	
MISSILE RATING	LARGE MISSILE	

TABLE D. ELEV. E4/2 INFORMATION			
DESIGN PRESSURE	+/-70 PSF		
GLAZING TYPE	1		
MISSILE RATING	LARGE MISSILE		

SINGLE-SPAN ELEVATION DRY GLAZED, SEE TABLE D FOR LIMITS OF USE

	TABL	LE E. QUALIFIED ANCHOR INFORMATION			
	ID	SUBSTRATE	ANCHOR	MIN.	MIN. EDGE
				EMBEDMENT	DISTANCE
	L L A TSOLID UNGRACKED CONGRETE (3000 PSTMIN)		3/8" HILTI KWIK BOLT 3 CARBON OR STAINLESS STEEL, MAY BE USED ALL	2 1/2"	3"
			LOCATIONS EXCEPT DET. 1/9	2 1/2	
	В	SOLID UNCRACKED CONCRETE (3000 PSI MIN)	1/2" HILTI KWIK BOLT 3 CARBON OR STAINLESS STEEL, MAY BE USED ALL	2 1/4"	4 3/4"
	B OCED CHORACKED CONCRETE (3000 FOR WINA)		LOCATIONS, REQUIRED AT DETAIL 1/9 FOR CONCRETE INSTALL	2 1/4	7 0/7
	С	SOUTHERN PINE WOOD (G=0.55 MIN)	1/2" GRADE 5 LAG SCREW	3"	2"
	D	1/4" ALUM. 6063-T5 MIN. OR 1/4" STEEL 36 KSI MIN.	3/8-16 GRADE 5 SHEET METAL SCREW	SEE NOTE	3/4"

NOTE: ANCHORS THROUGH METAL SHALL BE OF SUFFICIENT LENGTH TO PROVIDE THREAD ENGAGEMENT THROUGH THE FULL METAL THICKNESS

1" MAX.

BETWEEN

FRAME &

OPENING,

TYP.

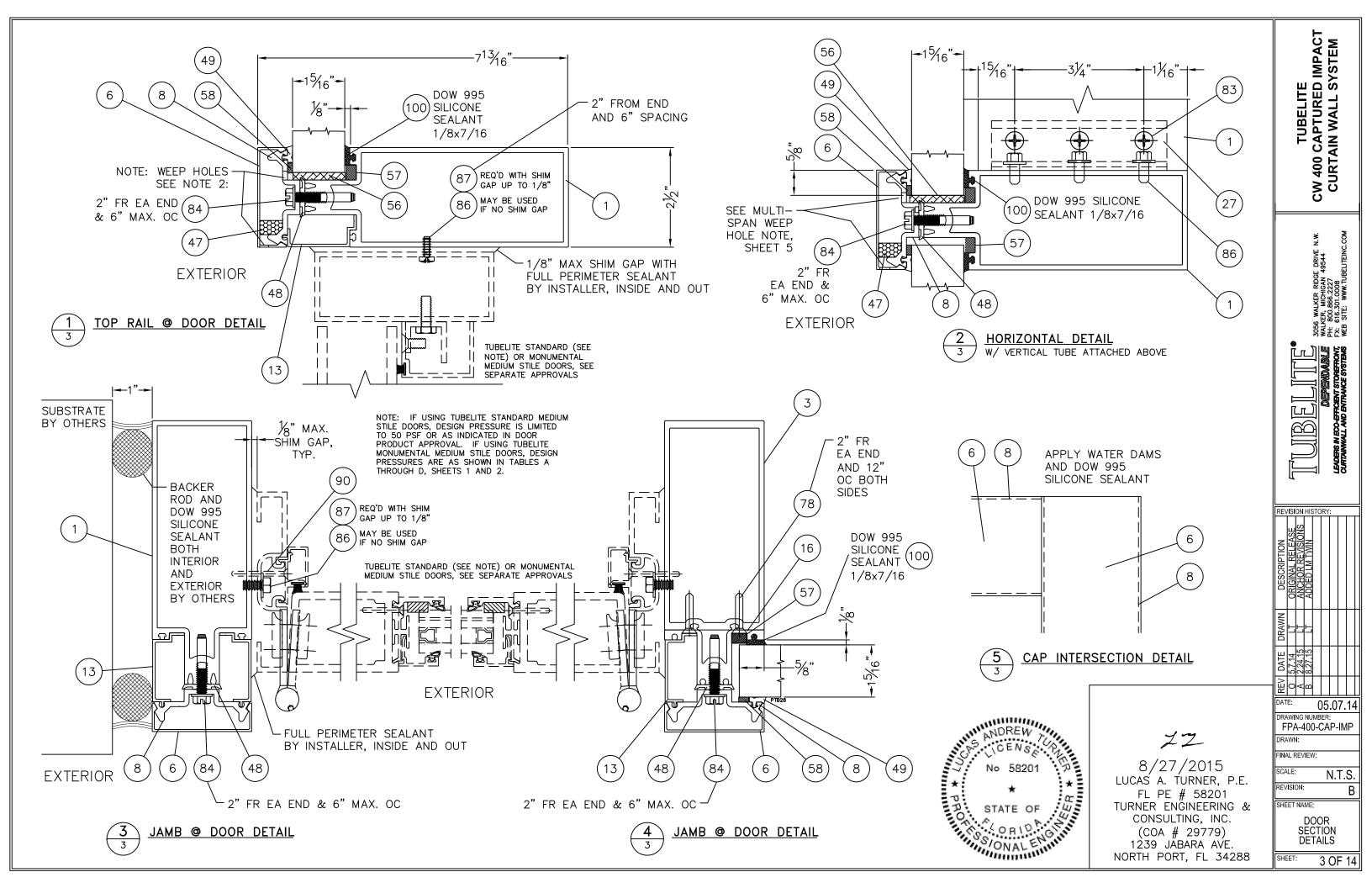
FRAME

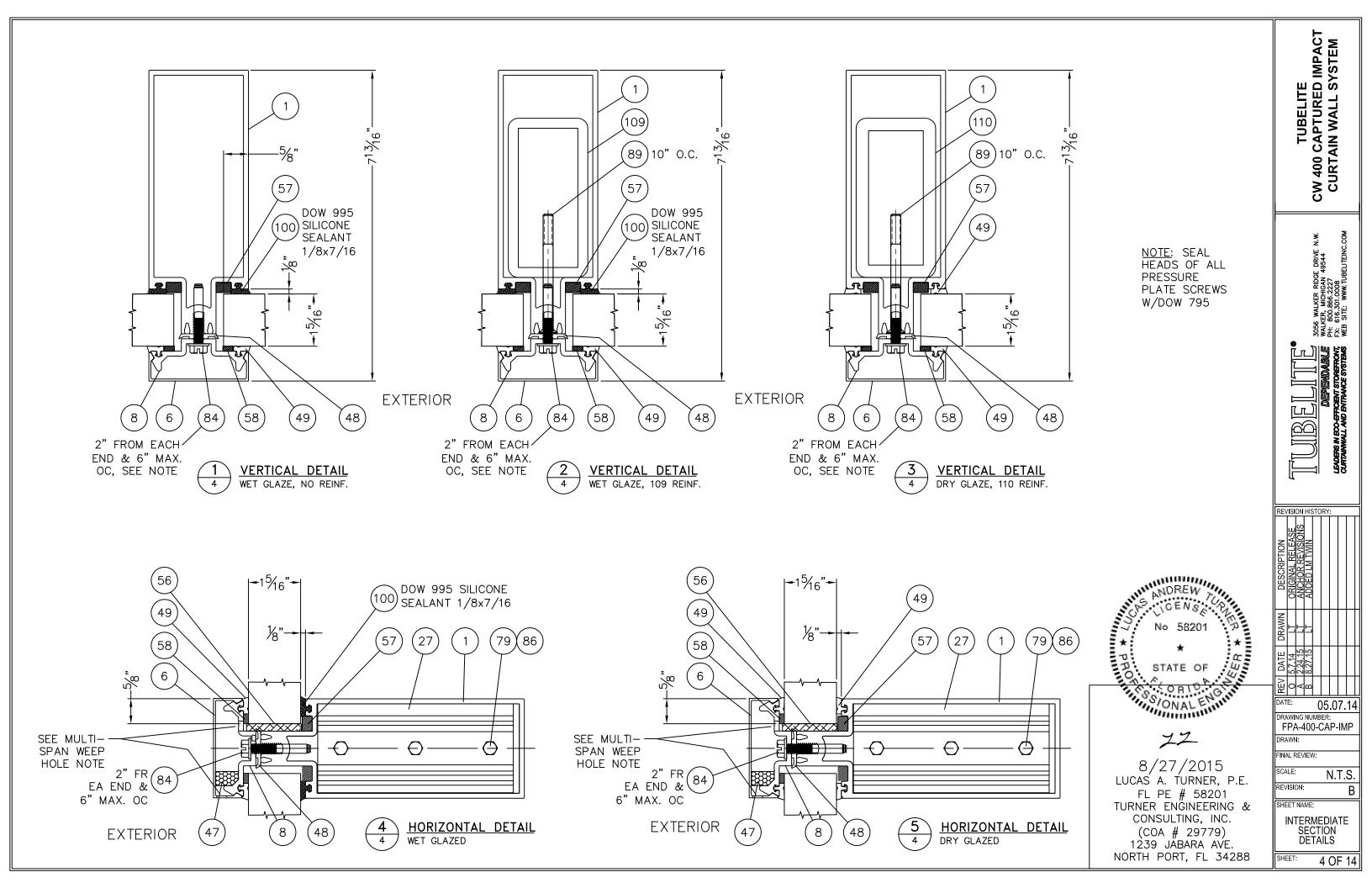
MAX.

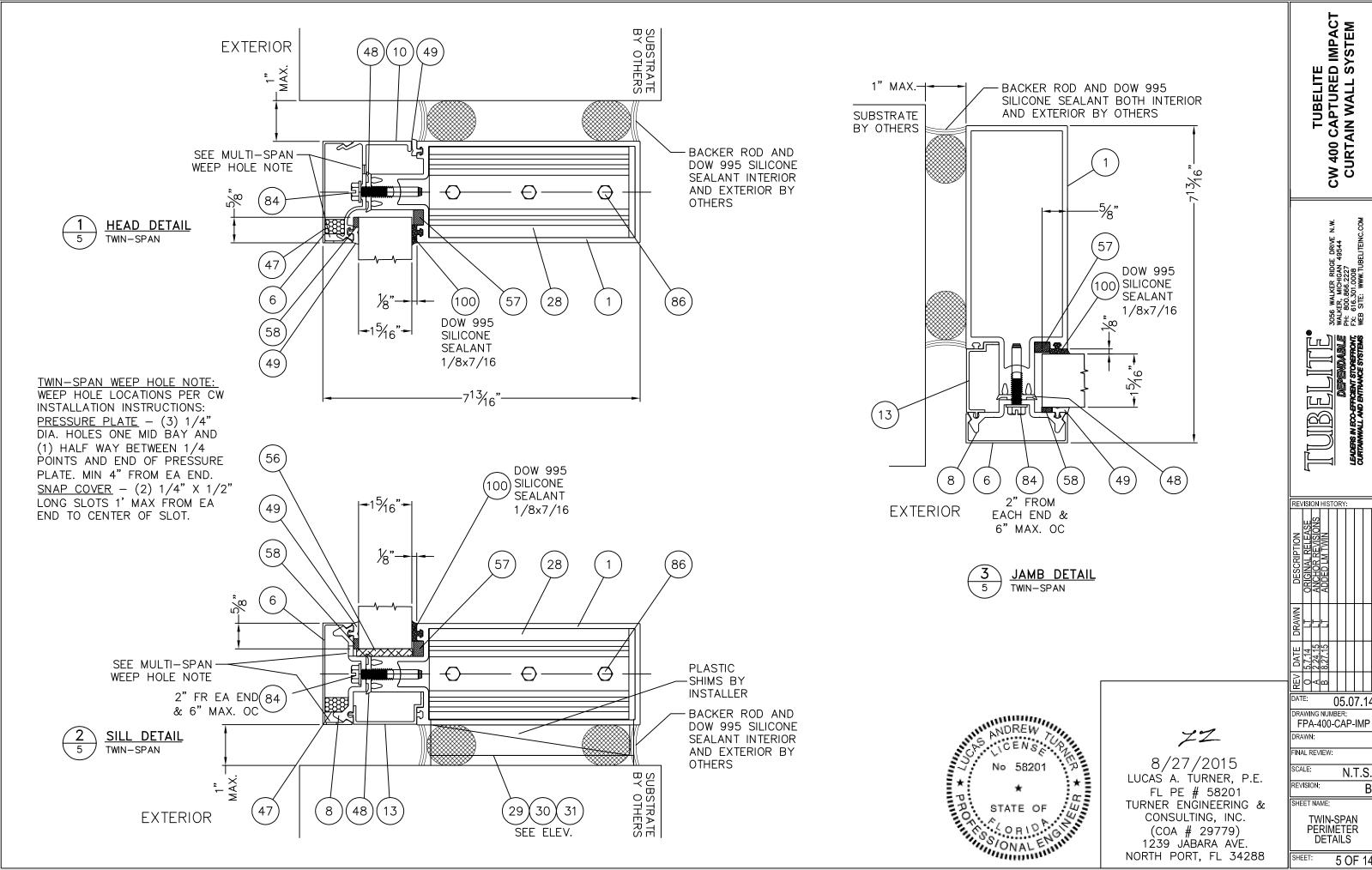
HORIZONTAL

PRESSURE PLATE & CAP RUN THROUGH

TOP & BOTTOM





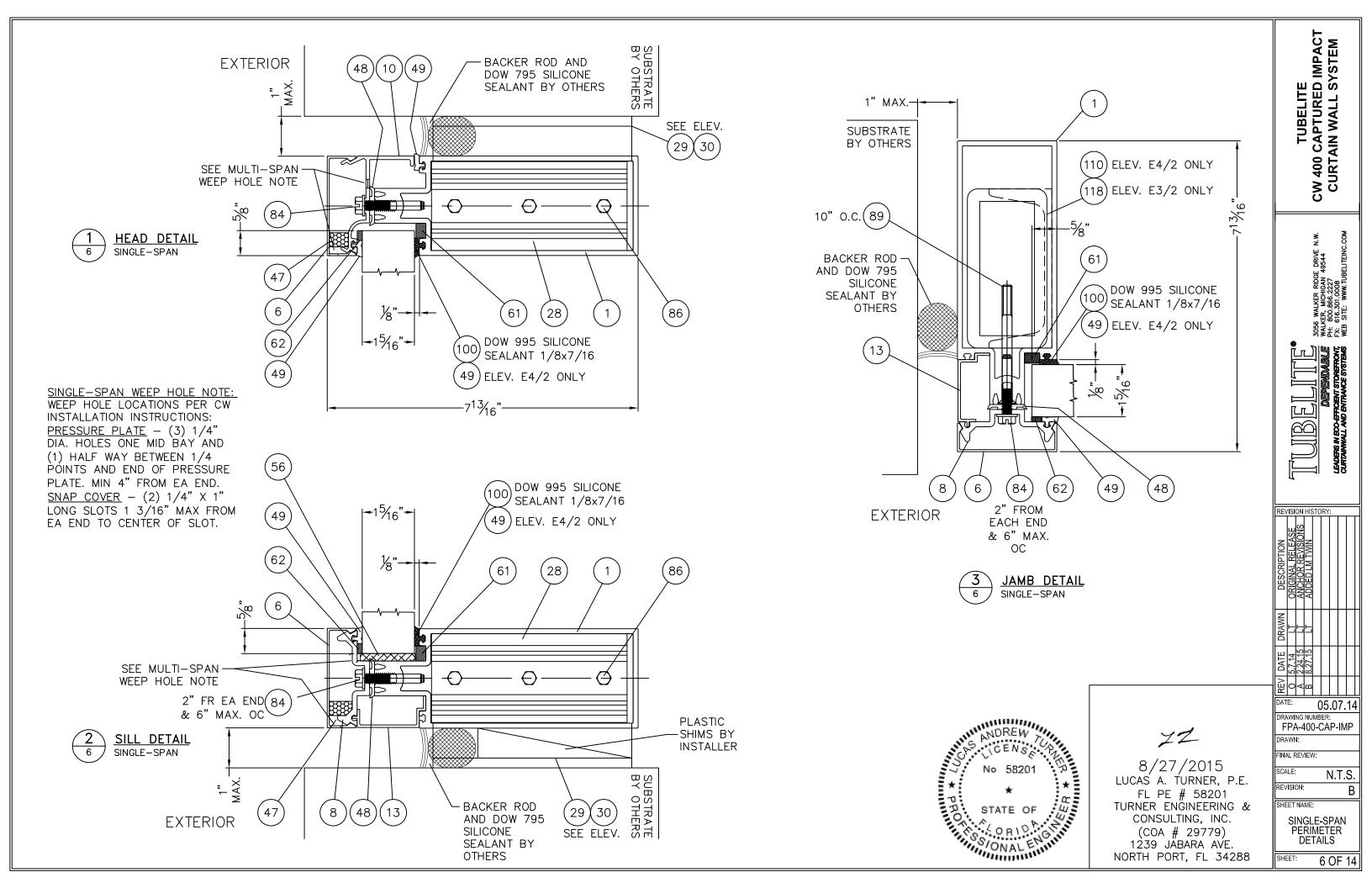


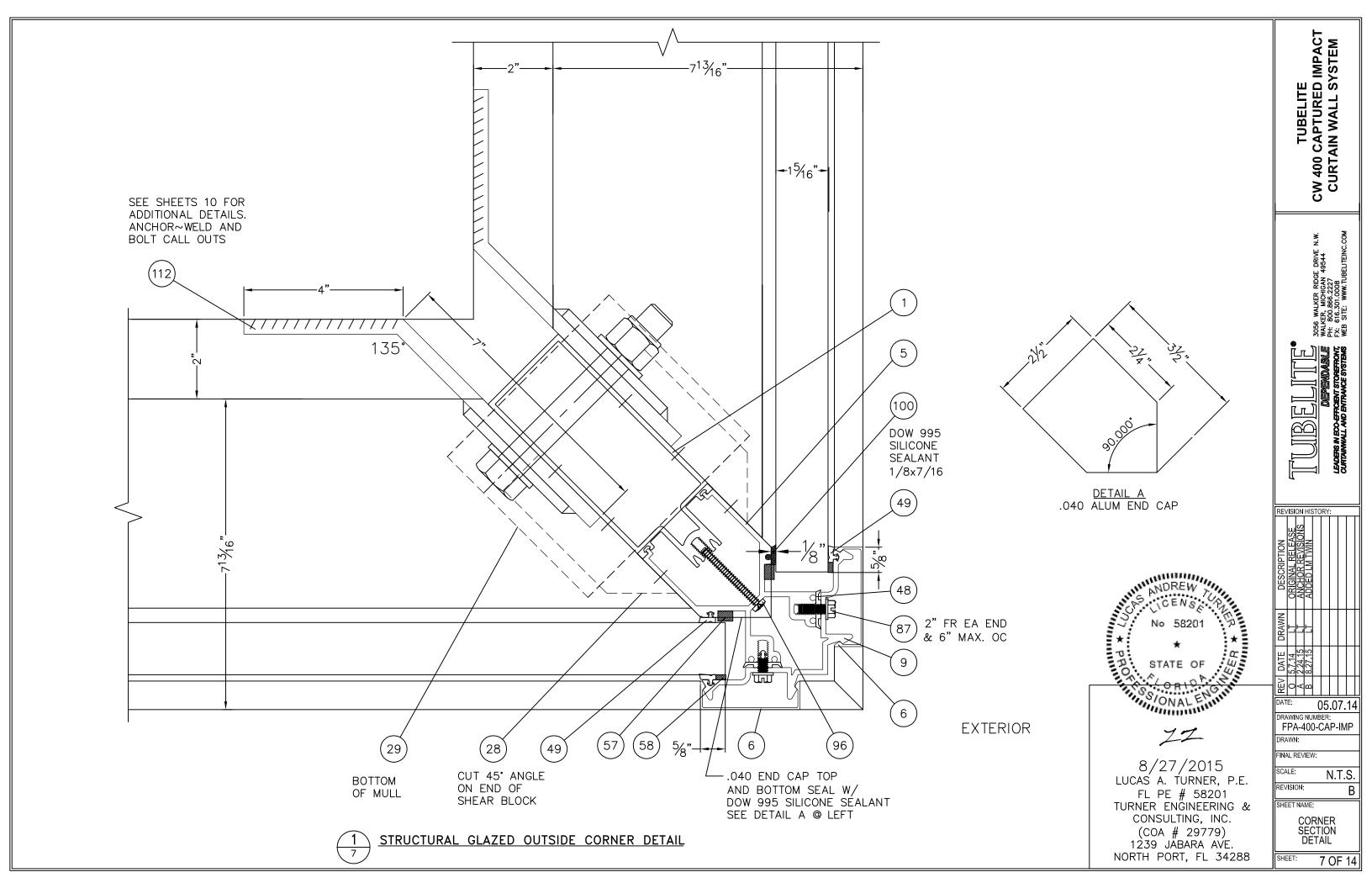


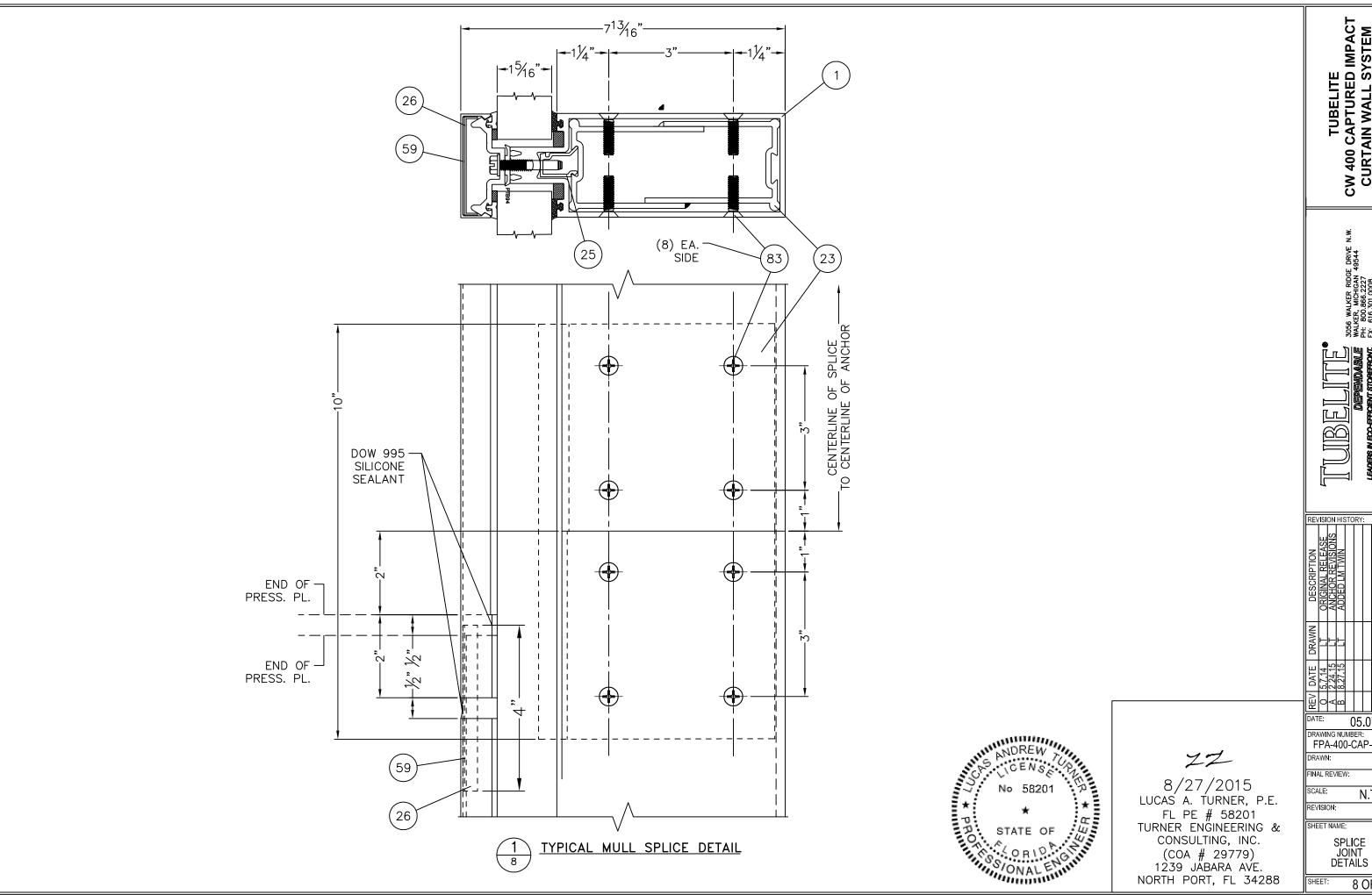
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TWIN-SPAN PERIMETER DETAILS







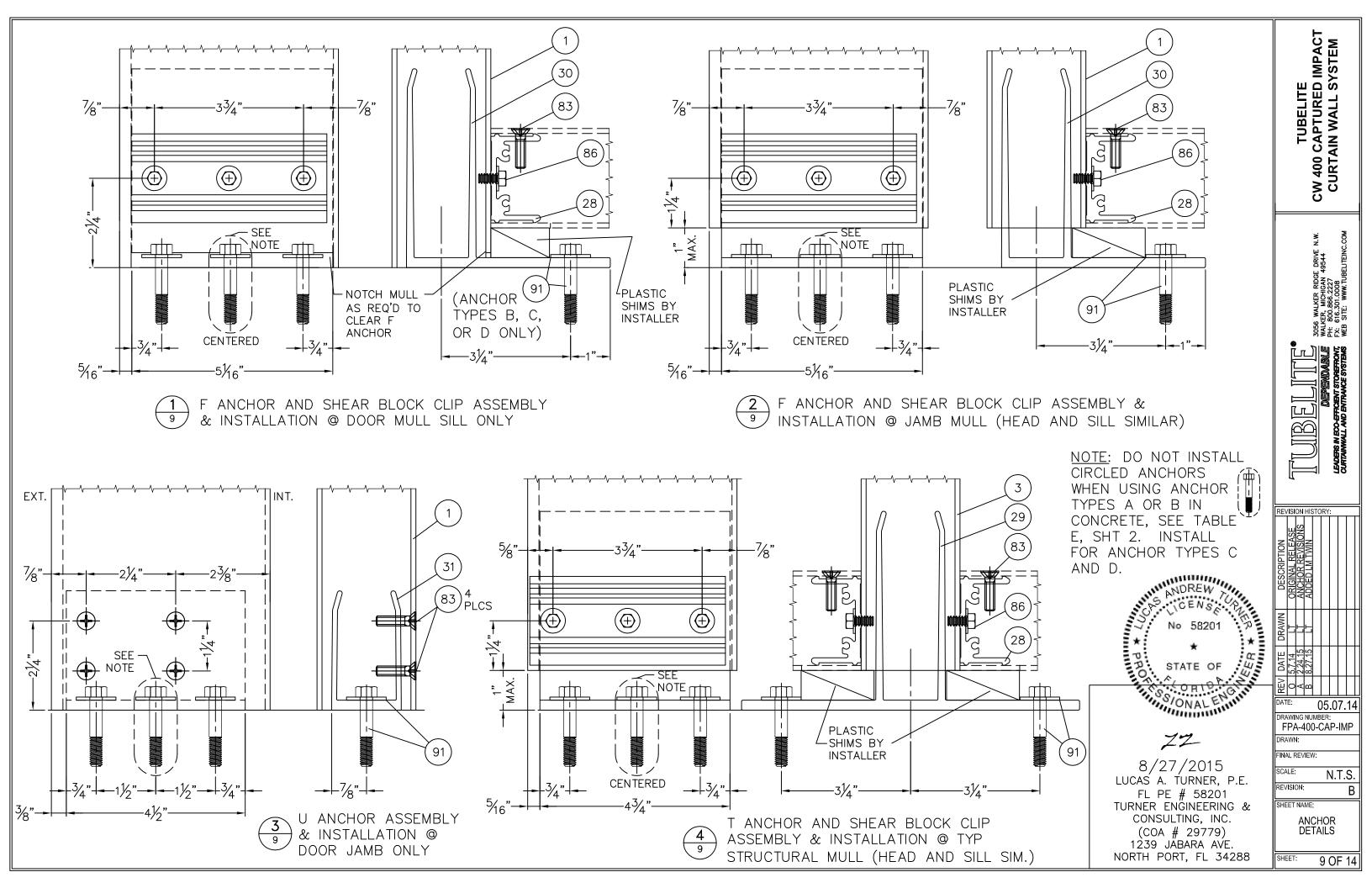
TUBELITE CW 400 CAPTURED IMPACT CURTAIN WALL SYSTEM

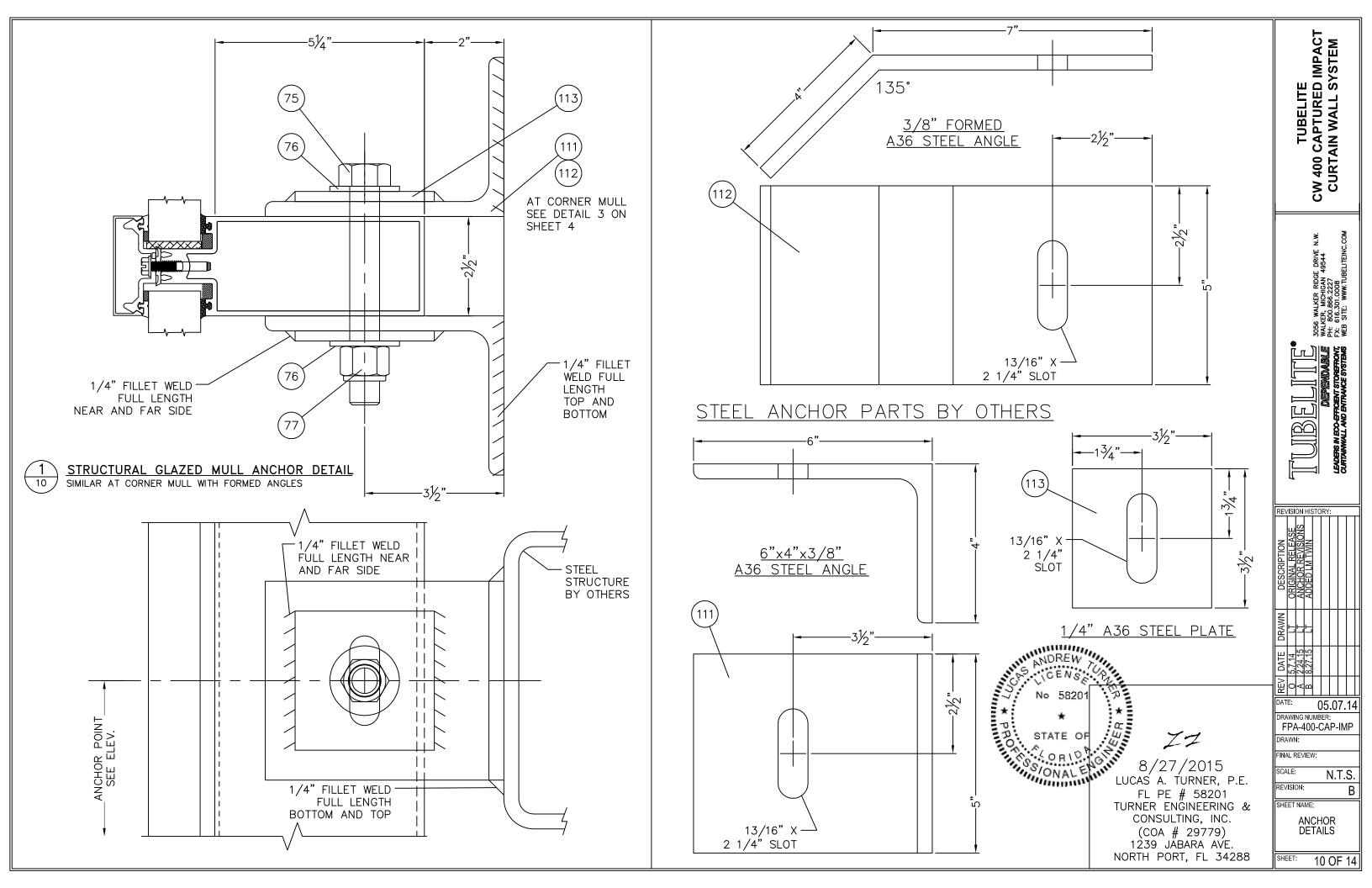


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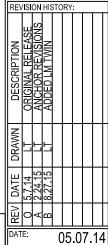
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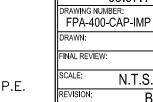








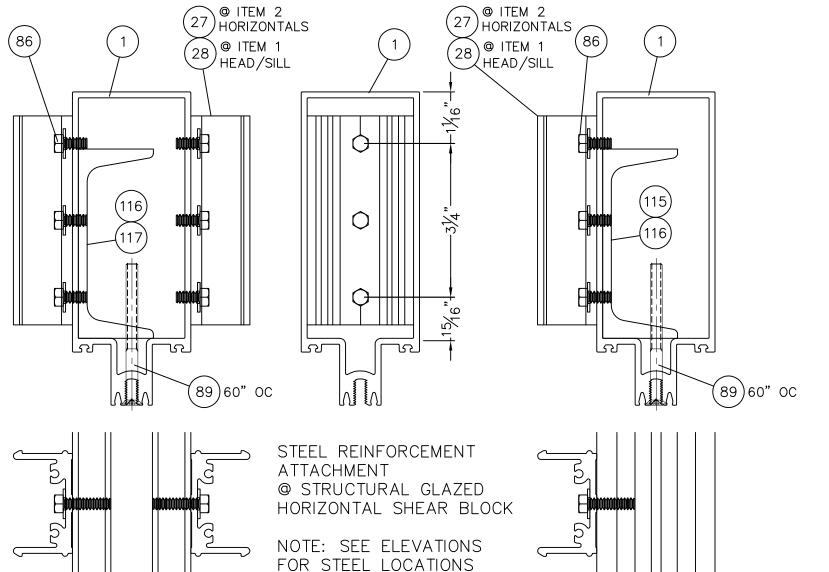




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ASSEMBLY DETAILS

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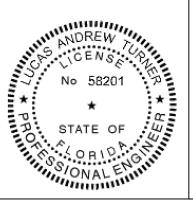


JAMB MULL

@ ITEM 2 HORIZONTALS 27 (79) ) @ ITEM 1 HEAD/SILL (28` **%** SEE NOTE A (28) (117)....8 لحا ഹ SEE ELEVATION — FOR LOCATION OF STEEL (89)60" oc

STEEL REINFORCEMENT ATTACHMENT @ CAPTURED HORIZONTAL SHEAR BLOCK

NOTE: SEE ELEVATIONS FOR STEEL LOCATIONS



77 8/27/2015
LUCAS A. TURNER, P.E.
FL PE # 58201
TURNER ENGINEERING &
CONSULTING, INC.

OUTSIDE CORNER MULL

(COA # 29779) 1239 JABARA AVE.

NORTH PORT, FL 34288





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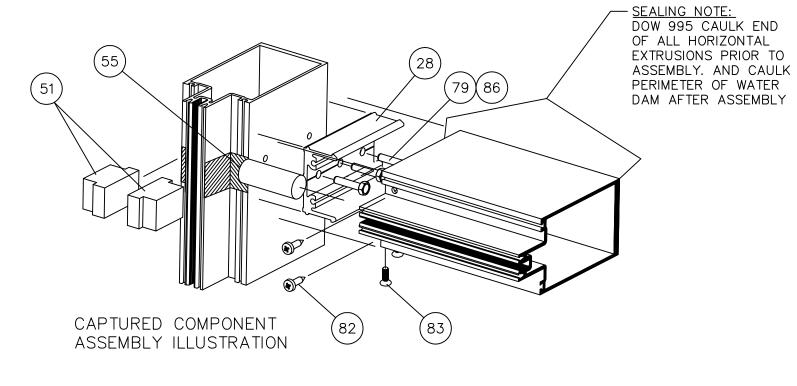
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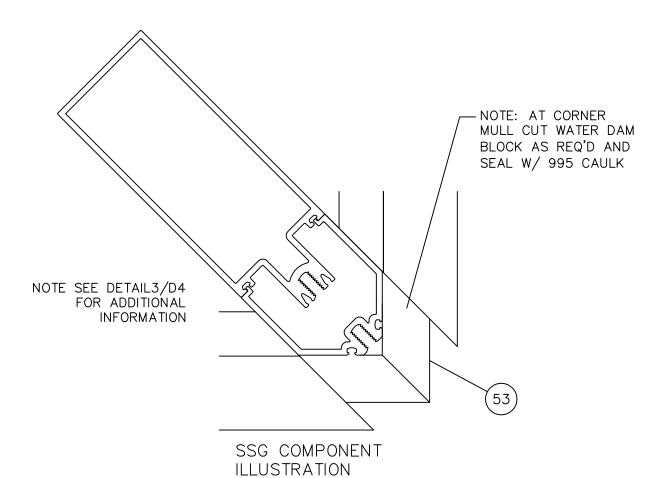
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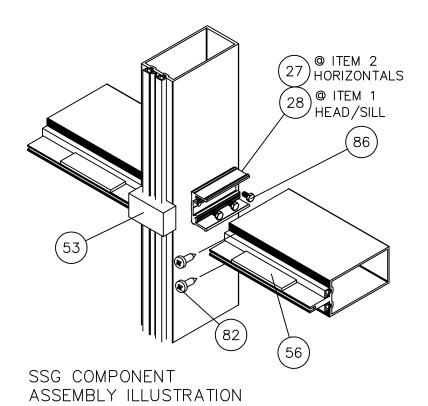
(COA # 29779) 1239 JABARA AVE. NORTH PORT, FL 34288 SCALE: N.T.S.

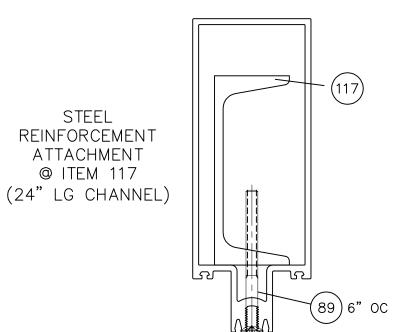
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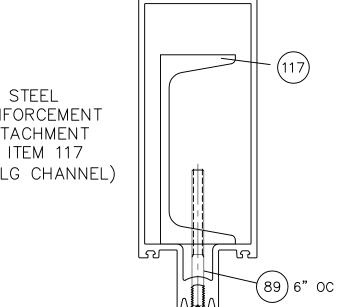
ASSEMBLY DETAILS

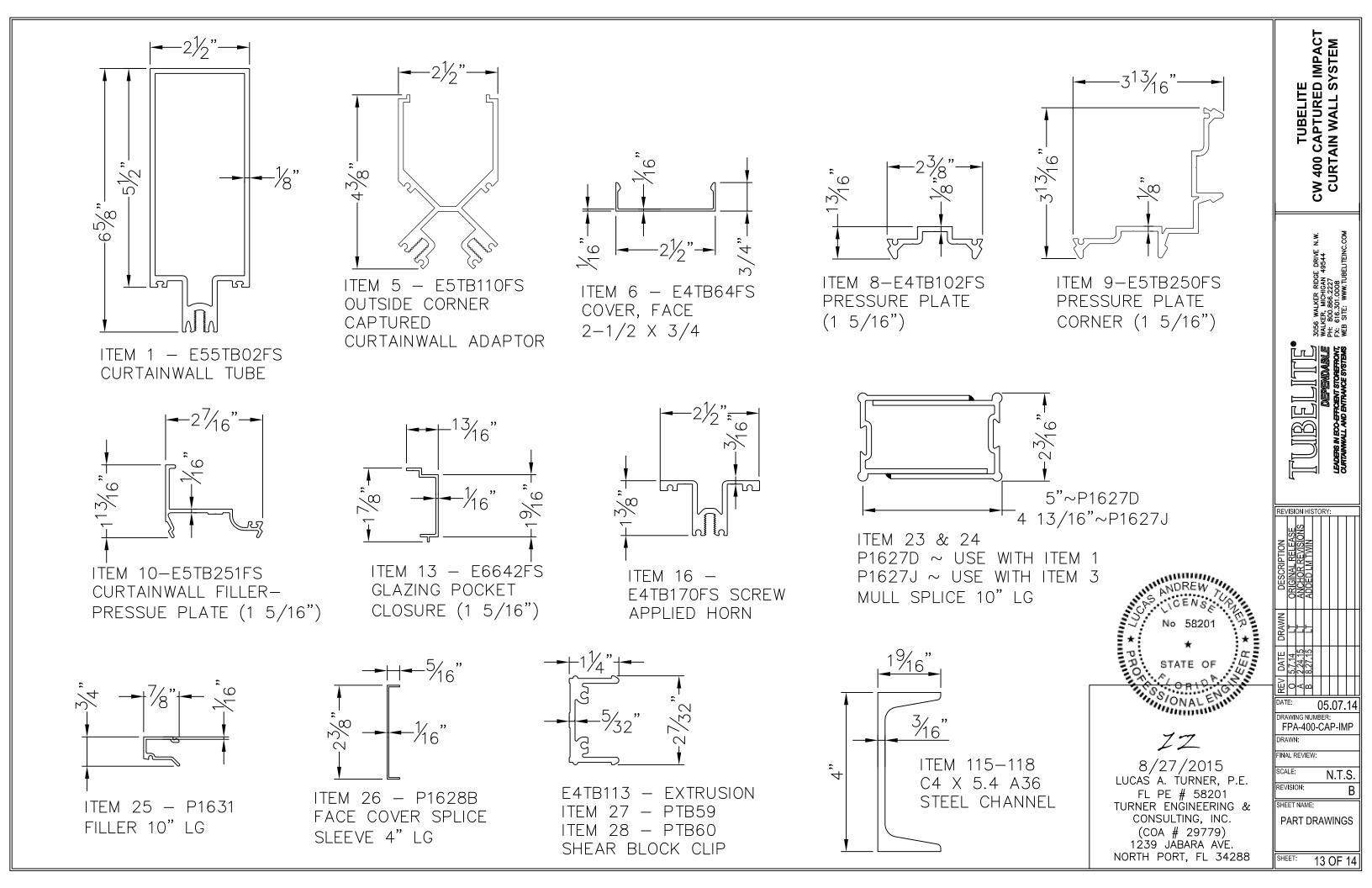






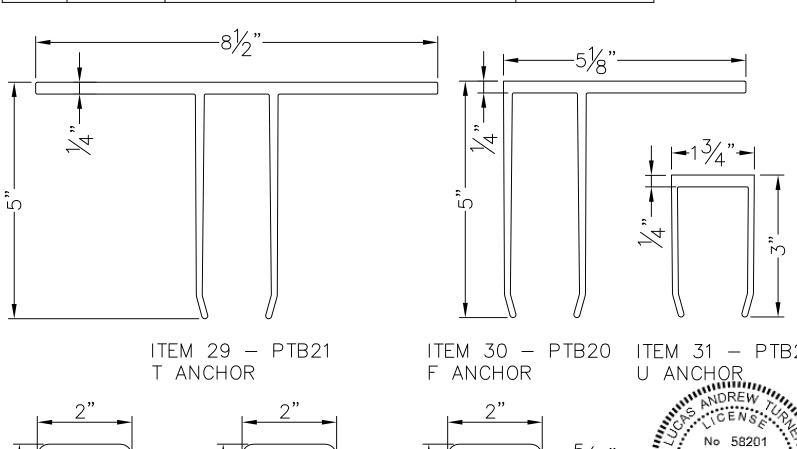


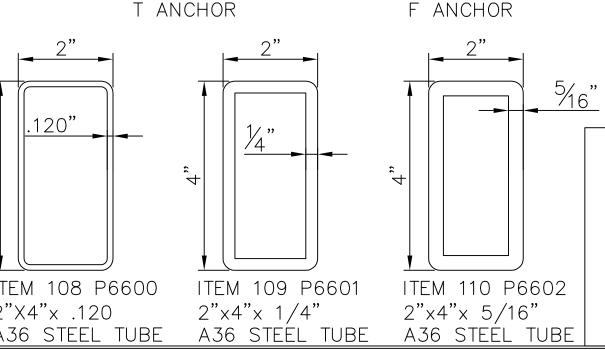




EΜ	PART NUMBER	DESCRIPTION	MATERIAL
	E55TB02FS	EXTRUSION, TUBE, NON-THERMAL	ALUMINUM - 6063-T6
	E5TB110FS	EXTRUSION, OUTSIDE CAPTURED CORNER	ALUMINUM - 6063-T5
	E4TB64FS	EXTRUSION, COVER, FACE, 2-1/2 X 3	ALUMINUM - 6063-T5
		,	
	M4TB102FS	EXTRUSION, PRESSURE PLATE OFFSET (1 5/16")	ALUMINUM - 6063-T5
	E5TB250FS	EXTRUSION, OUTSIDE CORNER PRESS. PL (1 5/16")	
	M5TB251FS	EXTRUSION, FILLER-PRESSURE PLATE (1 5/16")	ALUMINUM - 6063-T5
		EXTROGOR, TREEER TRESSORE FERTE (1 0) 10 )	
	E6642FS	EXTRUSION, GLAZING POCKET FILLER (1 5/16")	ALUMINUM - 6063-T5
		EXTROSION, GENERAL FOREST FIELER (1 5/15 )	
	E4TB170FS	EXTRUSION, SCREW APPLIED HORN	ALUMINUM - 6063-T5
	P1627D	MULL SPLICE FOR ITEM 1	ALUMINUM - 6063-T5
	P1627J	MULL SPLICE FOR ITEM 3	ALUMINUM - 6063-T5
	P1631	MULL SPLICE FILLER FOR ITEM 1	ALUMINUM - 6063-T5
	P1628B	FACE COVER SPLICE SLEEVE	ALUMINUM - 6063-T5
	PTB59F	SHEAR BLOCK	ALUMINUM - 6063-T5
	PTB60F	SHEAR BLOCK	ALUMINUM - 6063-T5
	PTB21A/B	ANCHOR, 'T' CUT & PRE-DRILLED. LG P/N A=4.761", B=5.053"	ALUMINUM - 6063-T6
	PTB20A/B	ANCHOR, 'F' CUT & PRE-DRILLED. LG P/N A=4.761', B=5.053"  ANCHOR, 'F' CUT & PRE-DRILLED. LG P/N A=4.761", B=5.053"	ALUMINUM - 6063-T6
	PTB22	ANCHOR, 'U' CUT & PRE-DRILLED  ANCHOR, 'U' CUT & PRE-DRILLED	ALUMINUM - 6063-T6
	1,1522	ANGION, O COT & THE DINEELD	
	PTB42	WEEP BAFFLE	P-PART - FOAM
	PTB94	GASKET, THERMAL BARRIER, EPG (PRESSURE PLATE)	P-PART - RUBBER
	PTB28	GLAZING, FIXED, A THICK (CW)	P-PART - RUBBER
	PTB75	GASKET, STRUCTURAL GLAZING	P-PART - RUBBER
	PTB93	WATER DAM SINGLE POCKET	P-PART - RUBBER
	1 1030	MATER DAW SHOLE FOORET	I I ANT - NODDEN
<u> </u>	PTB76A	WATER DAM 1"	P-PART - RUBBER
	1 18707	WATER DAW 1	1 TAKT KOBBEK
	P1094	ROD, ETHAFOAM ₹ DIA X 2 LONG	P-PART - FOAM
	P6550	BLOCK, SETTING, 3/16" x 1 5/16" x 4" LG	P-PART - SILICONE
	P6551	GLAZING TAPE 1/4 x 3/8 (THERMALBOND V2100 OR V2200)	P-PART - FOAM
	P6552	GLAZING TAPE 1/8 x 1/4 (THERMALBOND V2100 OR V2200)	P-PART - FOAM
	BY OTHERS	TWO FACE TAPE	P-PART - FOAM
	TREMCO SGT 922	GLAZING TAPE 1/4 x 3/8	P-PART - FOAM
	TREMCO SGT 922	GLAZING TAPE 1/8 x 1/4	P-PART - FOAM
	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	, ,	
	BY OTHERS	BOLT, 3/4-10 X 5 1/4 HEX HEAD CLASS 2A	P-PART - FASTENER
	BY OTHERS	3/4 FLAT WASHER	P-PART - FASTENER
	BY OTHERS	3/4-10 HEX HEAD NYLOCK NUT	P-PART - FASTENER
	S207	SCREW, 10-24 X 1 1/4 FLAT HEAD PHIL	P-PART - FASTENER
	S328	SCREW, 1/4-20 X 1 HEX HEAD TYPE D (shear block)	P-PART - FASTENER
	1	Control of the contro	
	S270	SCREW, 10-24 X 3 PAN HEAD PHIL, SS (shear block)	P-PART - FASTENER
	S6505	SCREW, 1/4-20 X 3/4 FLAT HEAD CLASS 2A (shear blk & mull splice)	P-PART - FASTENER
	S359	SCREW, 1/4-20 1-1/2 HEX HD TYPE F (pres plate)	P-PART - FASTENER P-PART - FASTENER
	S191	SCREW, 10-24 X ½ TRUSS HEAD PHIL (horiz mull & dr stop)	P-PART - FASTENER P-PART - FASTENER
	S139	<del>                                     </del>	
	S369	SCREW, 1/4-20 X ½ HEX HEAD TYPE B (shear blk & subframe no shim)	P-PART - FASTENER
	S131	SCREW, 1/4-20 3/4 HEX HD TYPE CA (pres plate & subframe w/ shim)	P-PART - FASTENER
	S155	SCREW, 8-32 5/16 FLAT HEAD PHIL (lock face plate)	P-PART - FASTENER
	S6509	SCREW, 1/4-20 X 3" FLAT HEAD PHIL (reinforcing steel)	P-PART - FASTENER
		SCREW, 6-32 X 1-1/4 FLAT HEAD CLASS 2A (shear bik & mull splice)	
	BY OTHERS	INSTALLATION ANCHORS AND WASHERS, SEE TABLE E, SHEET 2	
	C211	CODEW 4 /4 00 V 0 4 /4 DAN HEAD DIM 00	D DART SACTOR
	S211	SCREW, 1/4-20 X 2 1/4 PAN HEAD PHIL, SS	P-PART - FASTENER

ITEM	PART NUMBER	DESCRIPTION	MATERIAL
99	BY OTHERS	DOW 795 SILICONE BUILDING SEALANT	
100	BY OTHERS	DOW 995 SILICONE SEALANT BLACK - STRUCTURAL GLAZING	
101	BY OTHERS	3/4 Ø BACKER ROD- STRUCTURAL GLAZING	
102	2 BY OTHERS 1 1/4 Ø BACKER ROD- STRUCTURAL GLAZING		
108	Docoo	TUBE, 2"x4"x11 GA (.120) WALL (120" LG)	A36 STEEL
109	P6600 P6601	TUBE, 2"x4"x1/4" WALL (120" LG)	A36 STEEL
110	P6602	TUBE, 2"x4"x5/16" WALL (120" LG)	A36 STEEL
111	P6603	ANGLE 6"x4"x3/8"	A36 STEEL
112	P6604	FORMED ANGLE 7"x4"x3/8"	A36 STEEL
113	P6605	PLATE 3 1/2"x3 1/2"	A36 STEEL
115	P6606	CHANNEL C4x5.4 (84" LG)	A36 STEEL
116	P6607	CHANNEL C4x5.4 (198" LG)	A36 STEEL
117	P6608	CHANNEL C4x5.4 (24" LG)	A36 STEEL
118	P6609	CHANNEL C4x5.4 (120" LG)	A36 STEEL





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BOM, PART DWGS

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