REVISION HISTORY

RAWING NUMBER: FPA-400-SSG-IMP

INAL REVIEW:

10/26/2020

LUCAS A. TURNER, P.E.

FL PE # 58201

TURNER ENGINEERING &

CONSULTING, INC.

(COA # 29779)

2428 OLD NÄTCHEZ TRC TRL

CAMDEN, TN 38320

SCALE: N.T.S. REVISION:

SHEET NAME

ELEVATION

1 OF 14

GENERAL NOTES

4'-21/4"

 $\binom{1}{5}$

4'-0"

GLASS

1. THIS CURTAIN WALL SYSTEM HAS BEEN TESTED TO ASTM E283, ASTM E330, ASTM E331, ASTM E1886/1996, AAMA 501.1/501.4/501.5, AND TAS 201/202/203, AND MEETS THE REQUIREMENTS OF THE FLORIDA BUILDING CODE (FBC), CURRENT EDITION, INCLUDING THE HIGH VELOCITY HURRICANE ZONE. 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 HAVE NOT BEEN EXCEEDED.

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 E, 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 SPEEDS FOR THE PROJECT LOCATION.

6. THE ALLOWABLE DESIGN PRESSURE RATINGS IN THIS DRAWING ARE AS LIMITED BY ASTM E-1300 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 TO PREVENT CORROSION OR GALVANIC REACTIONS.

8. SEALING AND FLASHING STRATEGIES FOR OVERALL WATER INFILTRATION RESISTANCE OF THE INSTALLED PRODUCT ARE NOT WITHIN THE SCOPE OF THIS APPROVAL AND SHALL BE THE RESPONSIBILITY OF OTHERS.

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 D. 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 D, SHEET 2. CONCRETE SUBSTRATES SHALL NOT BE CRACKED.

TABLE OF CONTENTS:

SHTS CONTENT

NOTES, TWIN-SPAN ELEVATION

1'-11¹/₄" GLASS

 $\frac{3}{3}$

(116).

SPLICE

ဥ

ANCHOR

임

MAX.

SINGLE-SPAN ELEV., GLAZING, ANCHORS SECTION DETAILS

SPLICE JOINT

9-10 ANCHOR DETAILS ASSEMBLY DETAILS 11-12

13 PART DRAWINGS 14

PART DWGS, BILL OF MATERIALS

TWIN-SPAN ELEVATION SEE DP CHART, TABLE A

 $\begin{pmatrix} 1 \\ 9 \end{pmatrix} \begin{pmatrix} 4 \\ 9 \end{pmatrix}$

 $\binom{2}{5}$

4'-03/4"

MAX.

3'-101/4"

 $\binom{2}{8}$

 $8'-0\frac{3}{4}$ " GLASS

7'-11½" DLO

TUBELITE MONUMENTAL

SEE SEPARATE APPROVAL

7'-93/4" DOOR FRAME OPENING

16'-6" OA CW FRAME

MEDIUM STILE DOORS,

 $\frac{1}{3}$

4'-1"

MAX.

GLASS

3'-10½" MAX. DLO

 $\sqrt{\frac{1}{8}}$

 $\frac{3}{5}$

4'-03/4"

MAX.

 $\left(\frac{1}{4}\right)$

(117)

3'-101/4"

MAX. DLO

 $\left(\frac{3}{4}\right)$

 $\left(\frac{3}{4}\right)$

 $\binom{5}{3}$

 $\frac{4}{3}$

(116)

4'-21/4"

MAX.

3'-⁸¹/₁₆"\ MAX. DLO

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MAX.

10,-0"

10'-0" MAX. GLASS

(117)

MAX. MAX.

(4 9

10,-0

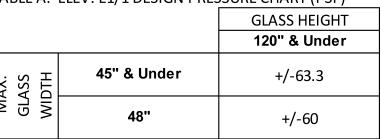
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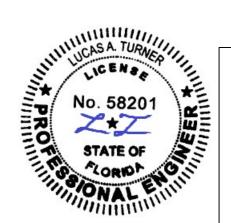
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 $\frac{1}{5}$

TABLE A. ELEV. E1/1 DESIGN PRESSURE CHART (PSF)

(115)

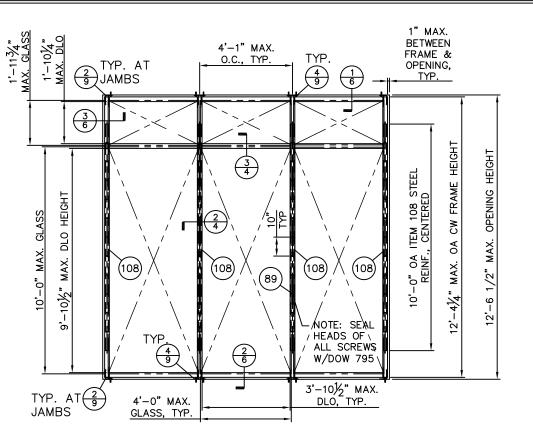




SINGLE-SPAN ELEVATION 2 SEE DP CHART, TABLE B

TABLE B. ELEV. E2/2 DESIGN PRESSURE CHART (PSF)

		FRAME HEIGHT 112" & Under
DTH	30" & Under	+/-90
SS WII	36"	+/-75.8
MAX. GLASS WIDTH	42"	+/-65.2
Μ	48"	+/-57.1



SINGLE-SPAN ELEVATION 2 SEE DP CHART, TABLE C

TABLE C. ELEV. E3/2 DESIGN PRESSURE CHART (PSF)

	•	
		FRAME HEIGHT
		148-1/4" & Under
ртн	32" & Under	+72/-80
MAX. GLASS WIDTH	36"	+72/-78
	42"	+/-68.5
	48"	+/-60

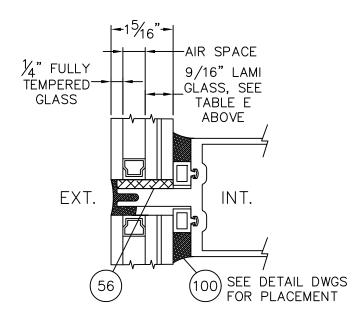
TABLE D. QUALIFIED ANCHOR INFORMATION

ID	SUBSTRATE	ANCHOR	MIN.	MIN. EDGE
			EMBEDMENT	DISTANCE
А	SOLID UNCRACKED CONCRETE (3000 PSI MIN)	3/8" HILTI KWIK BOLT 3 CARBON OR STAINLESS STEEL, MAY BE USED ALL LOCATIONS, REQUIRED AT DET. 1/9 FOR CONCRETE INSTALL	2 1/2"	3"
В	SOLID UNCRACKED CONCRETE (3000 PSI MIN)	1/2" ITW RED HEAD LDT CARBON OR STAINLESS STEEL, MAY BE USED ALL LOCATIONS EXCEPT DET. 1/9	3 1/2"	3"
С	SOUTHERN PINE WOOD (G=0.55 MIN)	3/8" GRADE 5 LAG SCREW, MAY BE USED ALL LOCATIONS EXCEPT DET. 1/9	2 1/2"	1 1/2"
D	SOUTHERN PINE WOOD (G=0.55 MIN)	1/2" GRADE 5 LAG SCREW, MAY BE USED ALL LOCATIONS, REQUIRED AT DET. 1/9 FOR WOOD INSTALL	3"	2"
Е	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"

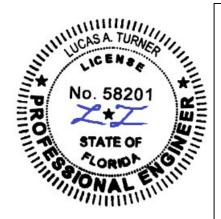
NOTE: ANCHORS THROUGH METAL SHALL BE OF SUFFICIENT LENGTH TO PROVIDE THREAD ENGAGEMENT THROUGH THE FULL METAL THICKNESS

TABLE E. QUALIFED GLAZING TYPES

TYPE	DESCRIPTION
1 DUPONT SENTRY GLAS	1 5/16" THK. INSULATED GLASS LARGE MISSILE I.G. LAMI CONSISTING OF: -1/4" CLEAR, TEMPERED -1/2" AIRSPACE -1/4" CLEAR, HEAT STRENGTHENED -0.090" DUPONT SENTRY GLAS -1/4" CLEAR, HEAT STRENGTHENED
2 EASTMAN SAFLEX CP (FORMERLY SOLUTIA VS-02)	1 5/16" THK. INSULATED GLASS LARGE MISSILE I.G. LAMI CONSISTING OF: -1/4" CLEAR, TEMPERED -1/2" AIRSPACE -1/4" CLEAR, HEAT STRENGTHENED -0.075 EASTMAN SAFLEX CP -1/4" CLEAR, HEAT STRENGTHENED
JUPONT 0.060 PVB	1 5/16" THK. INSULATED GLASS SMALL MISSILE I.G. LAMI CONSISTING OF: -1/4" CLEAR, TEMPERED -1/2" AIRSPACE -1/4" CLEAR, HEAT STRENGTHENED -0.060" DUPONT BUTACITE PVB -1/4" CLEAR, HEAT STRENGTHENED



GLAZING DETAIL



10/26/2020 LUCAS A. TURNER, P.E. FL PE # 58201 TURNER ENGINEERING & CONSULTING, INC. (COA # 29779) 2428 OLD NÄTCHEZ TRC TRL CAMDEN, TN 38320

TUBELITE CW 400 SSG IMPACT CURTAIN WALL SYSTEM

DESCRIPTION	ORIGINAL RELEASE	ANCHOR REVISIONS	FBC CODE UPDATE						
MEV DAIE DRAWN	LI	ΓL	LT						
DAIE	5 7 14	2 24 15	10 26 20						
ZEV	0	Α	В						
ΑT	Ε:			r	15	Λ	7	1/	1

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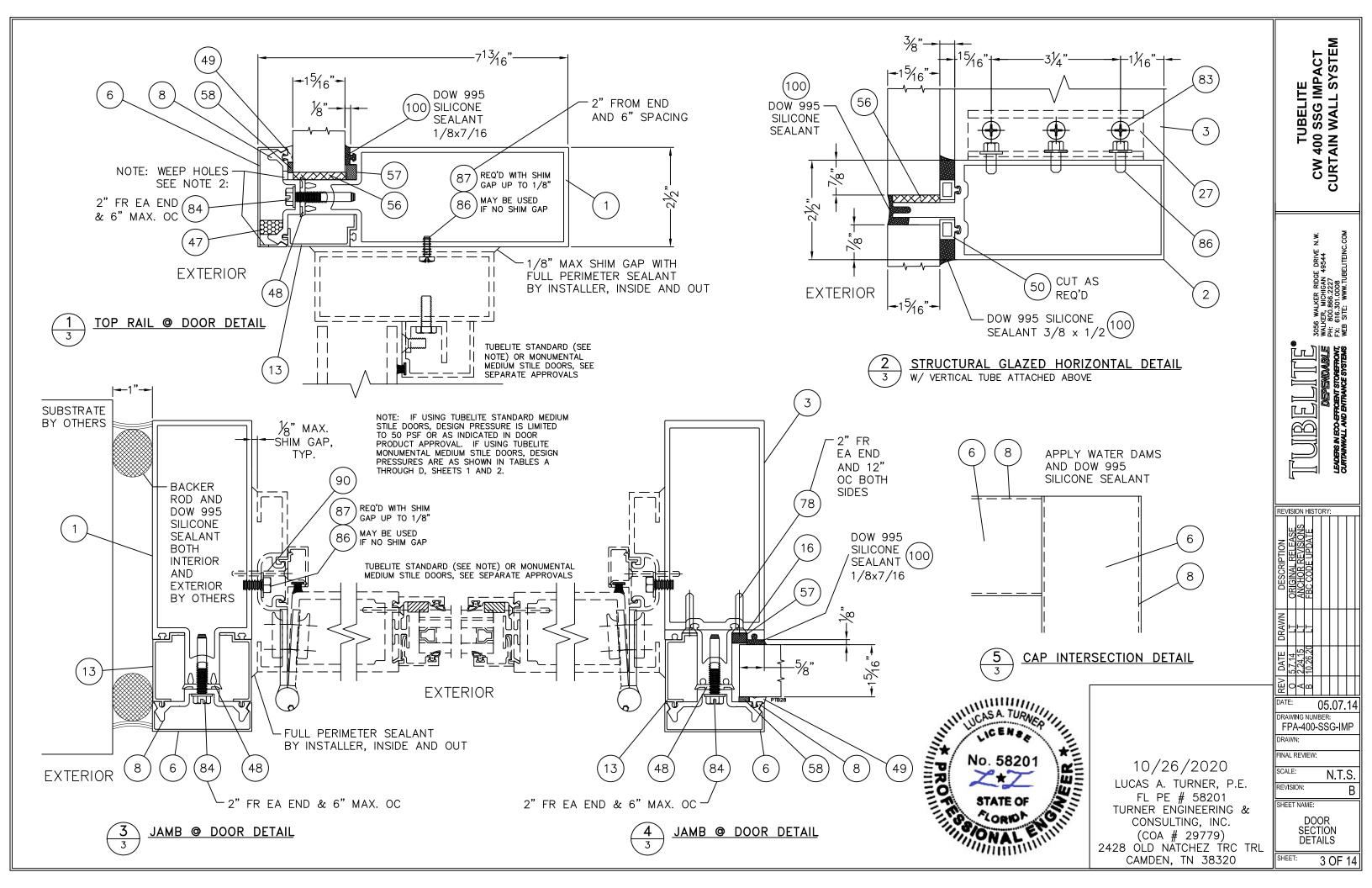
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ELEVATIONS, ANCHORAGE, GLAZING

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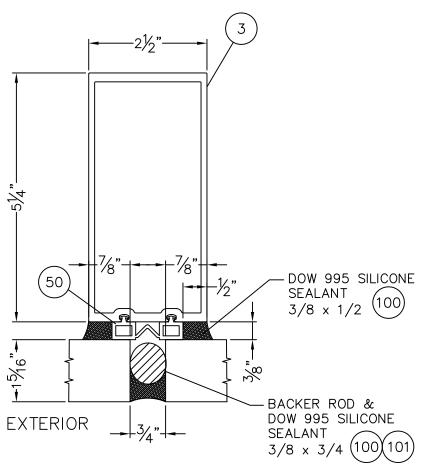
(COA # 29779) 2428 OLD NATCHEZ TRC TRL

CAMDEN, TN 38320

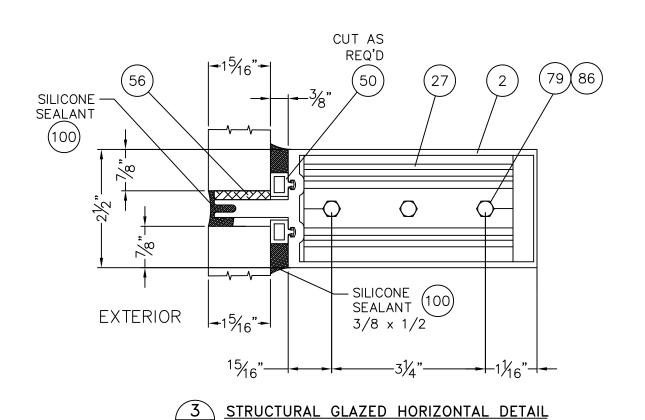
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INTERMEDIATE SECTION DETAILS

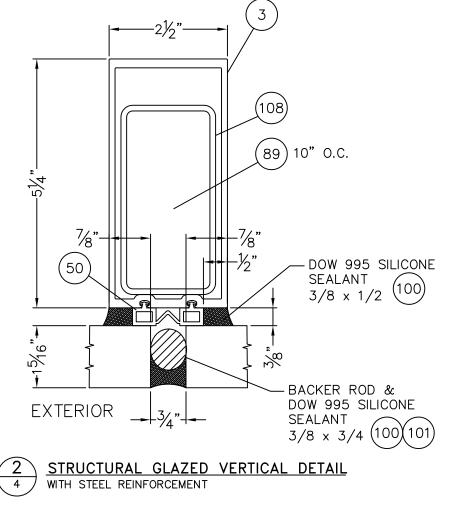
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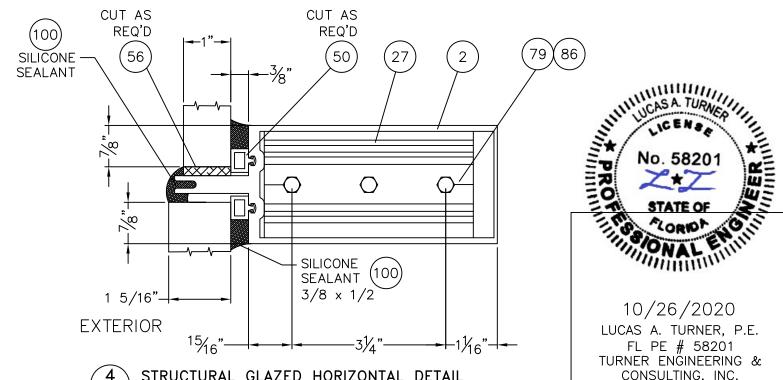


STRUCTURAL GLAZED VERTICAL DETAIL

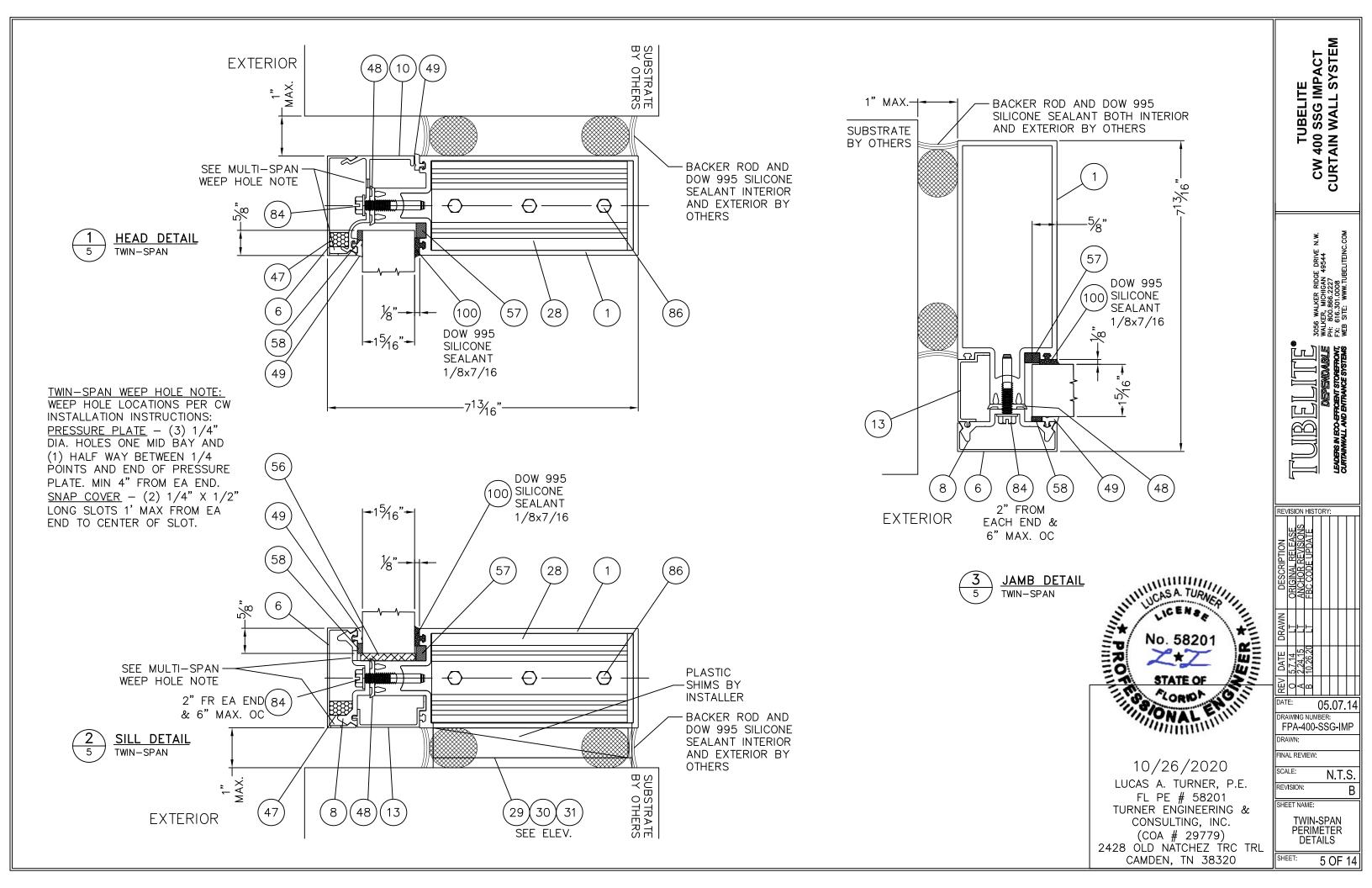


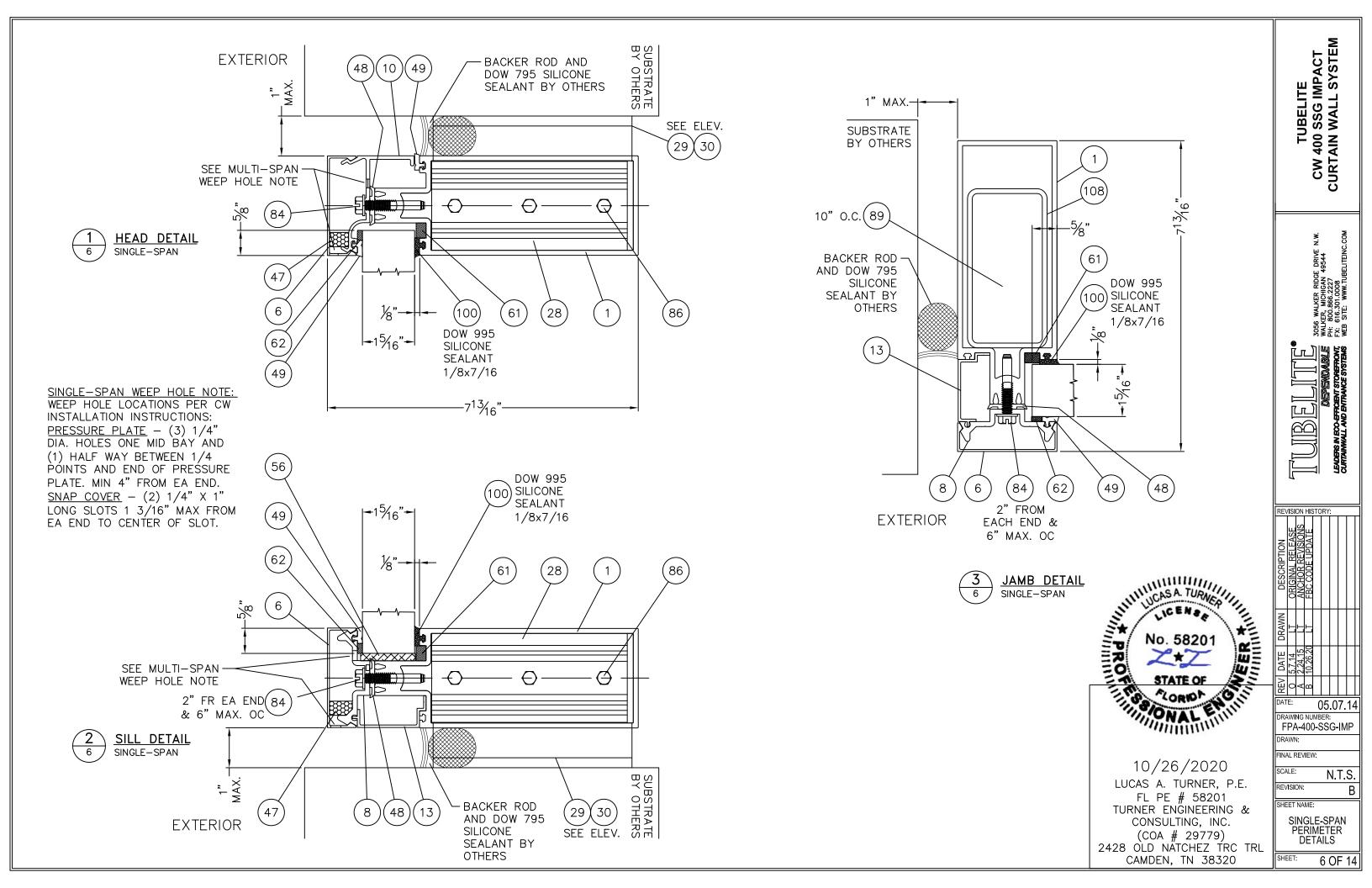
1 5/16" OVER 1 5/16" GLASS

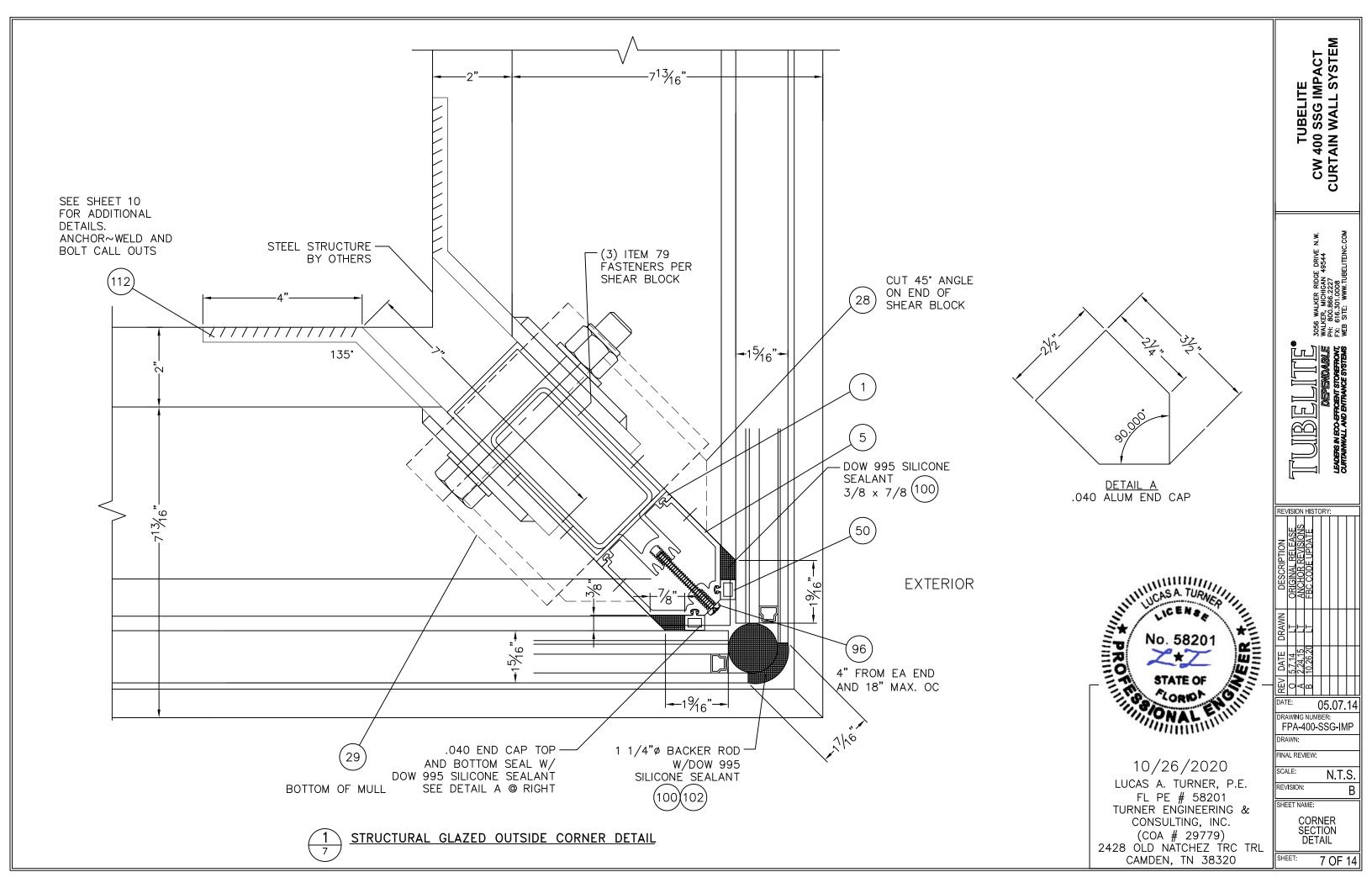


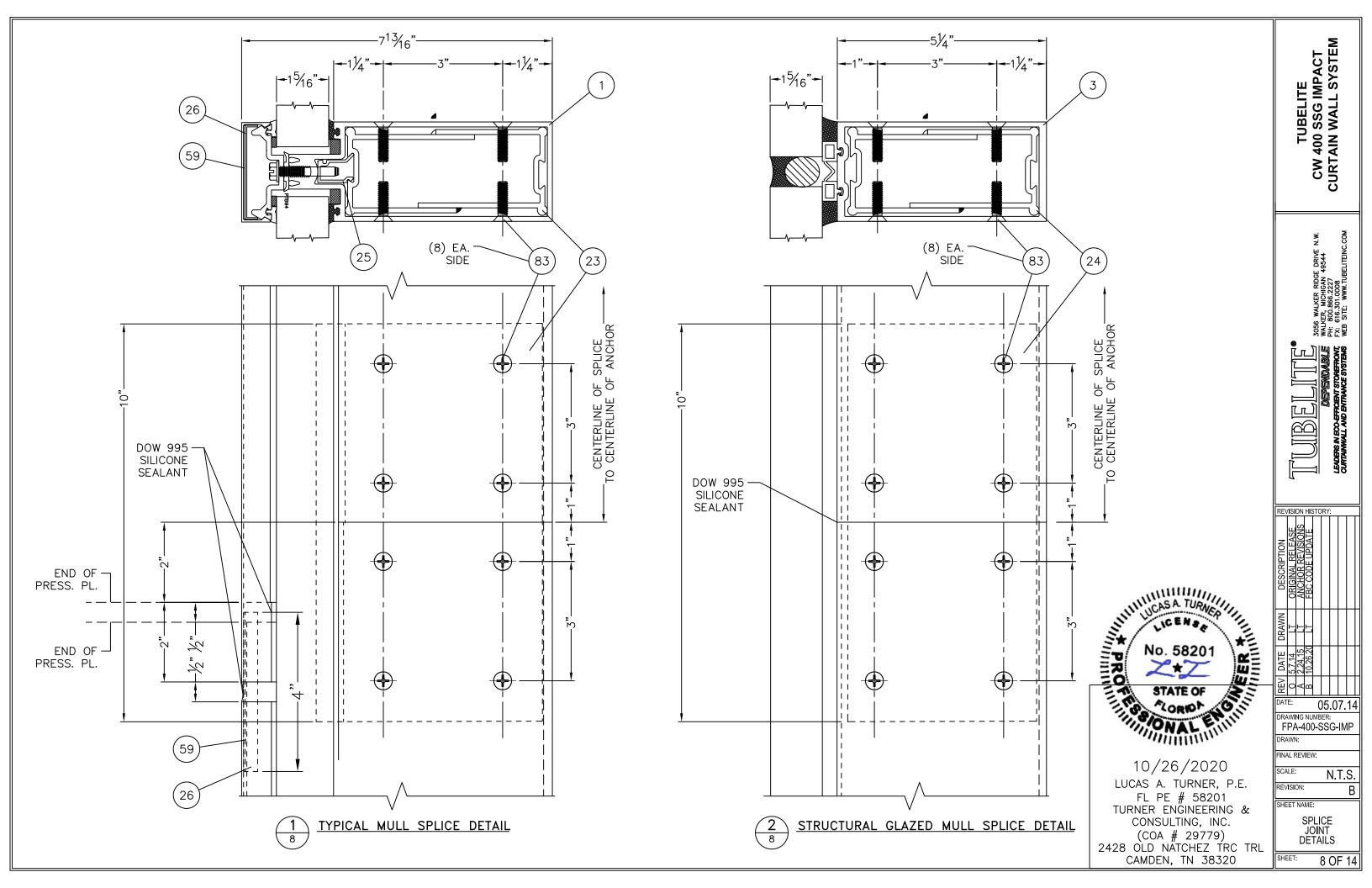


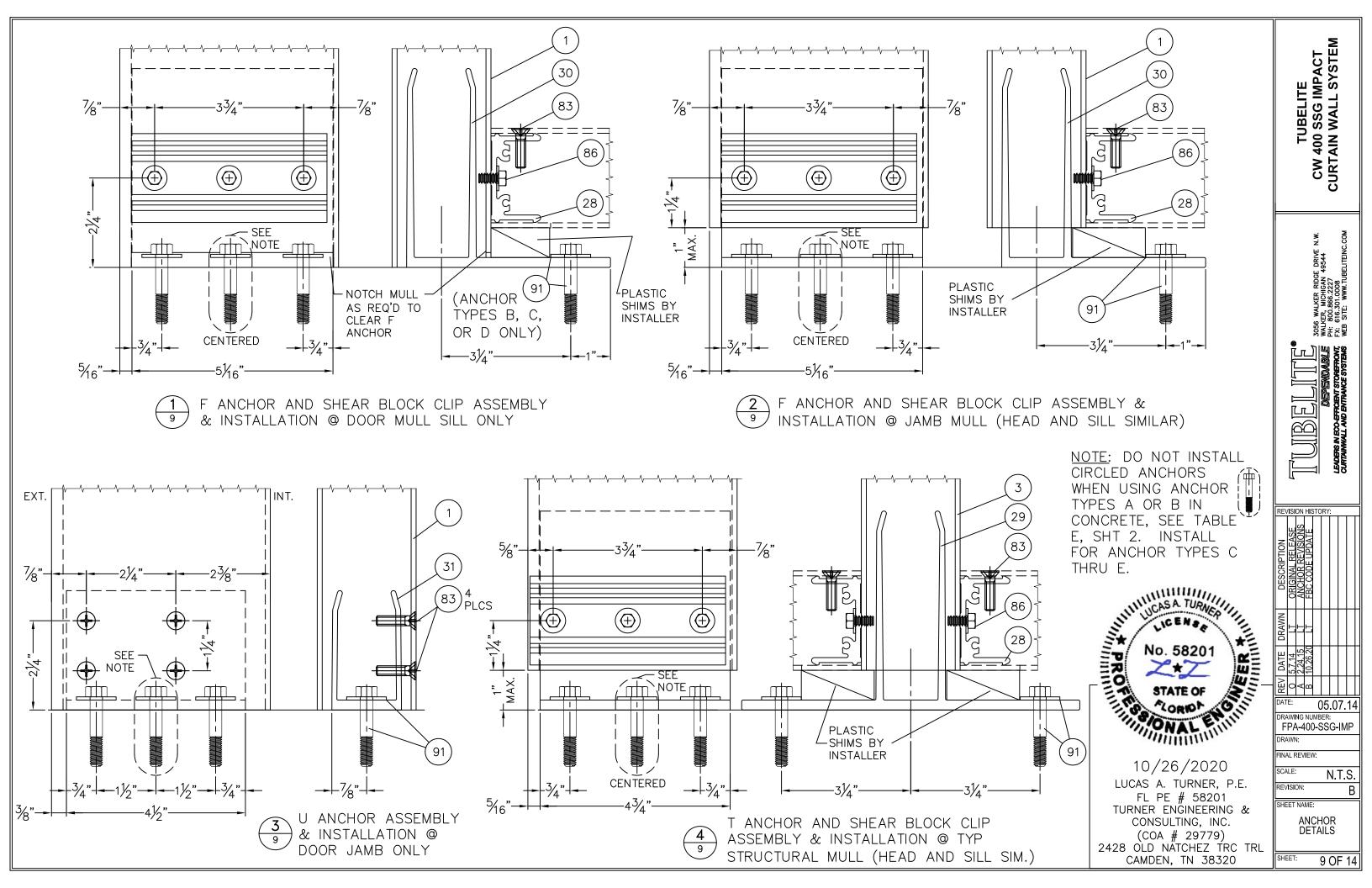
STRUCTURAL GLAZED HORIZONTAL DETAIL (SEE SEPARATE APPROVAL) OVER 1 5/16" GLASS

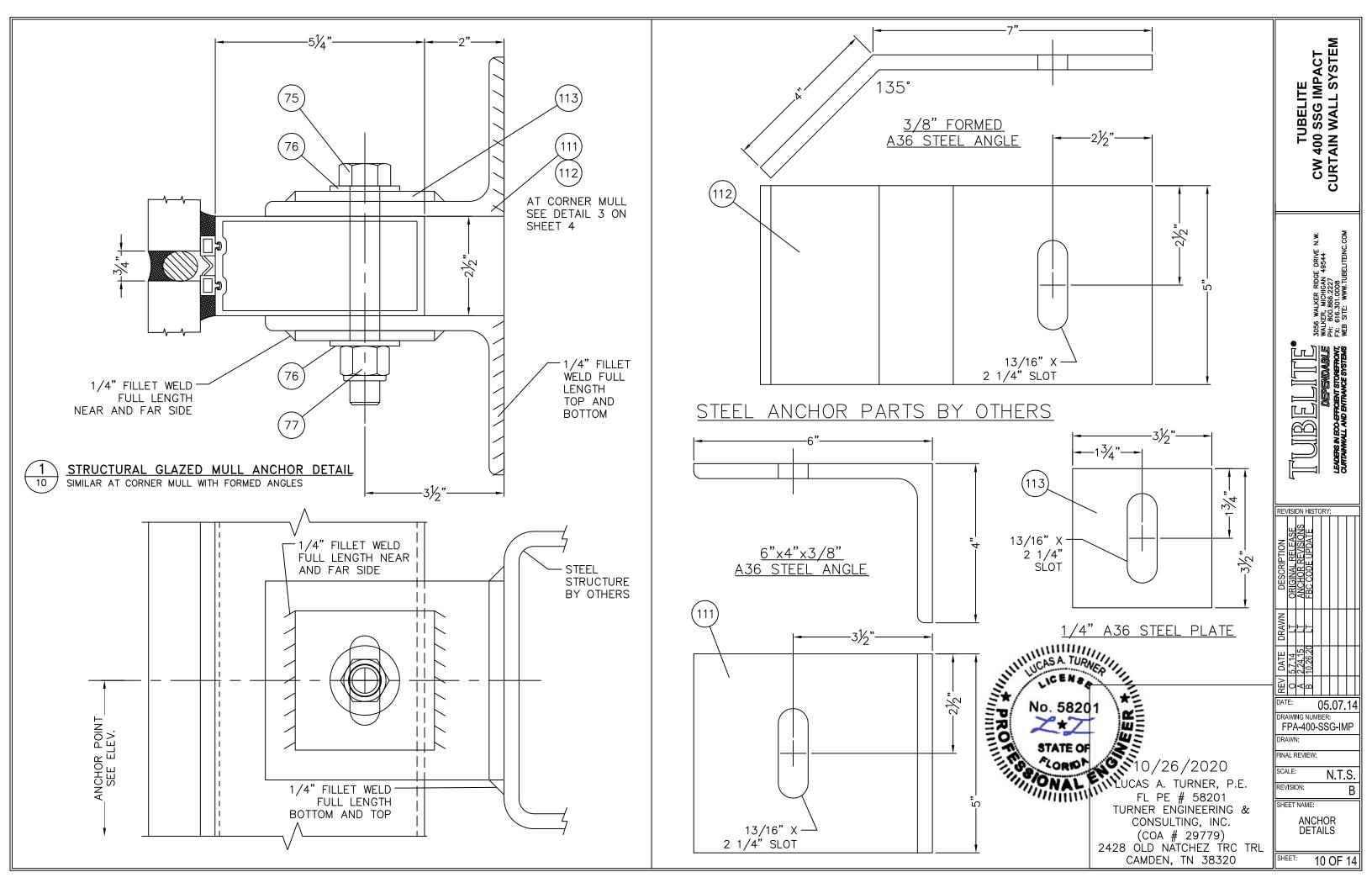


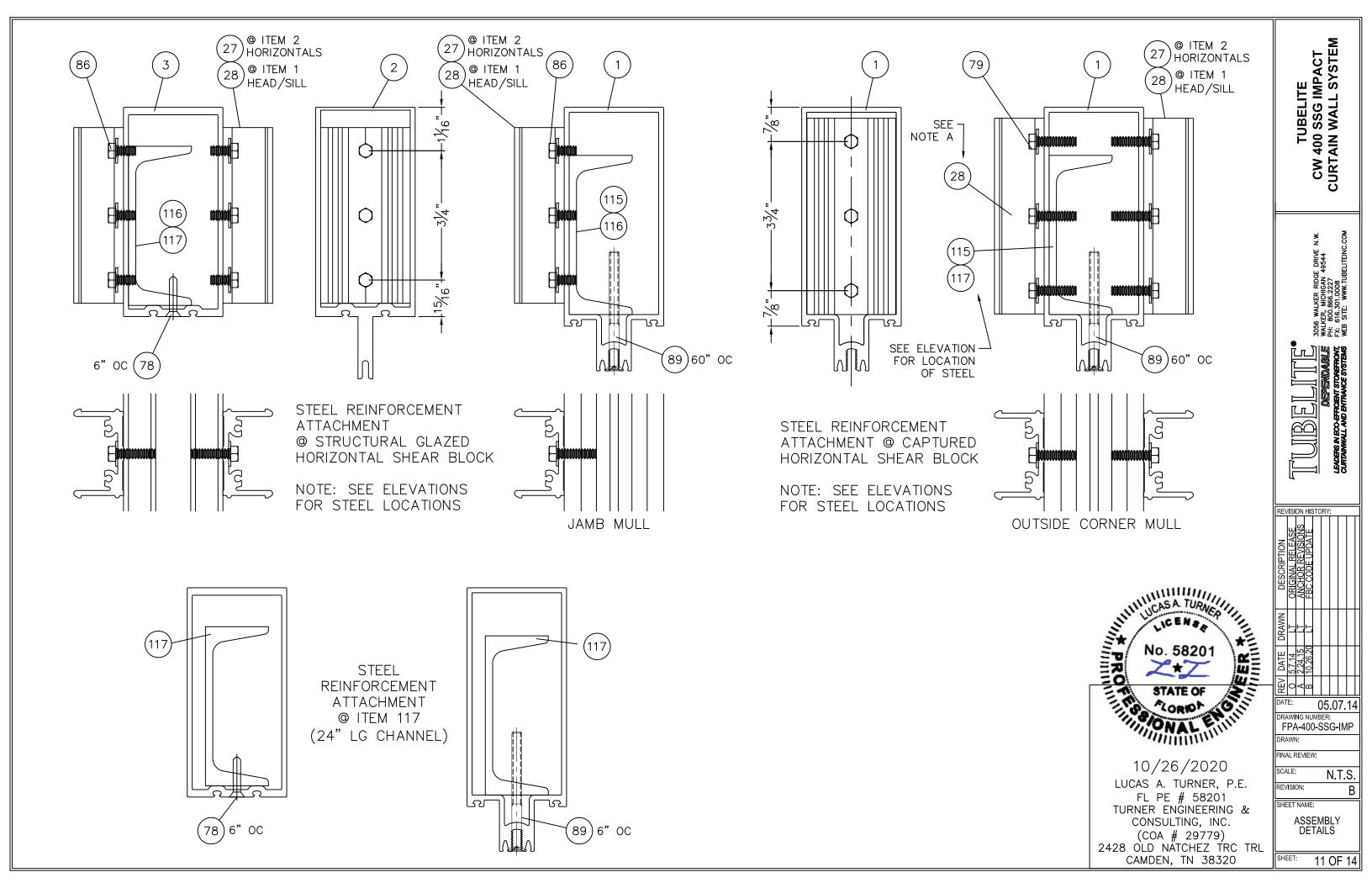
















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FINAL REVIEW:

No. 58201

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10/26/2020

LUCAS A. TURNER, P.E.

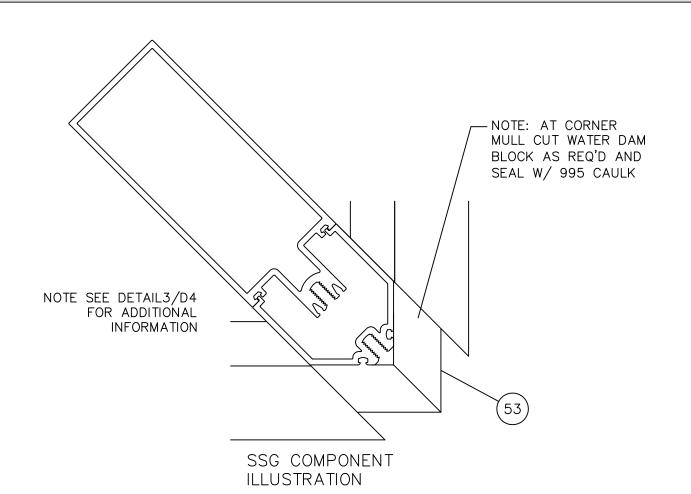
FL PE # 58201 TURNER ENGINEERING & CONSULTING, INC.

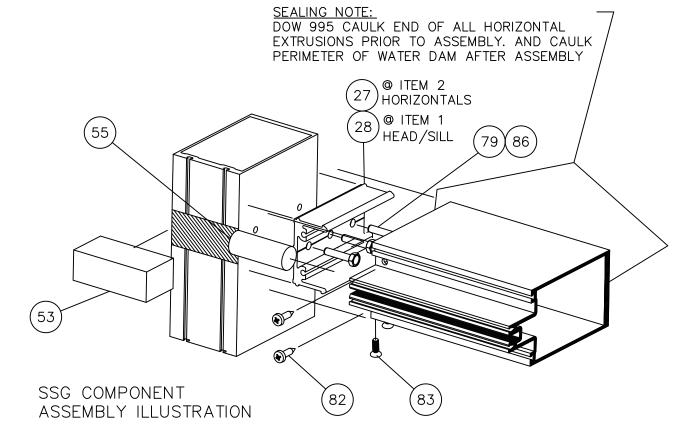
(COA # 29779) 2428 OLD NATCHEZ TRC TRL CAMDEN, TN 38320

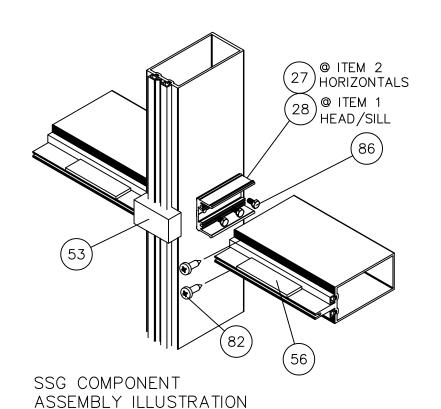
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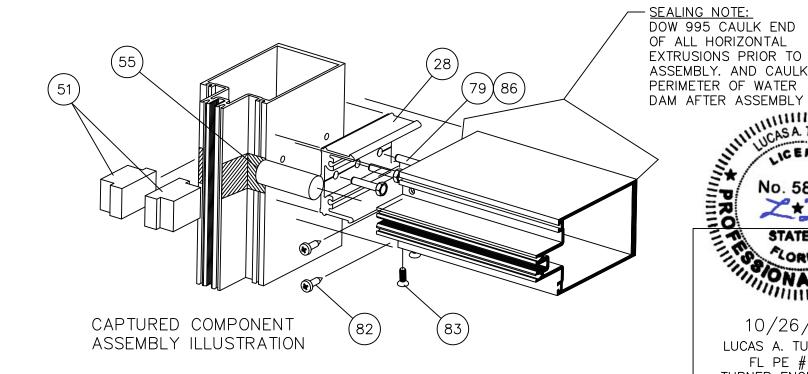
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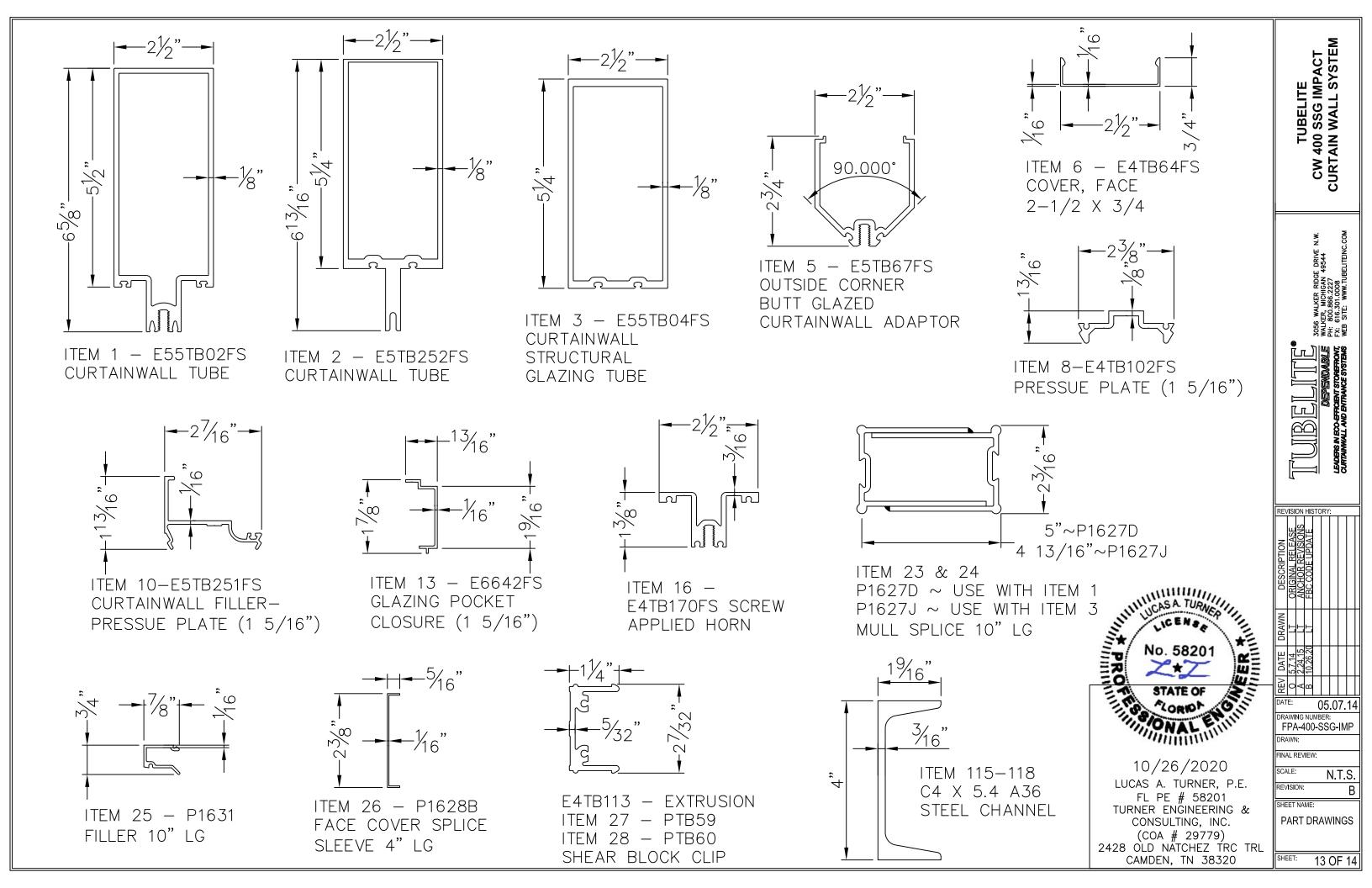
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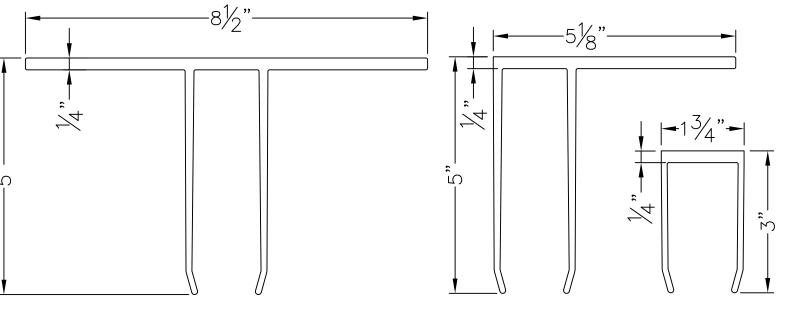


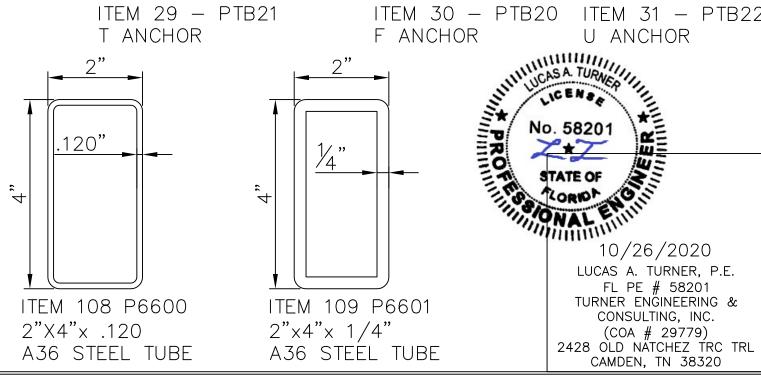




ITEM	PART NUMBER	DESCRIPTION	MATERIAL
1	E55TB02FS	EXTRUSION, TUBE, NON-THERMAL	ALUMINUM - 6063-T6
2	E5TB252FS	EXTRUSION, TUBE SSG HORIZONTAL	ALUMINUM - 6063-T5
3	E55TB04FS	EXTRUSION, TUBE, STRUCTURAL GLAZING	ALUMINUM - 6063-T6
5	E5TB67FS	EXTRUSION, OUTSIDE BUTT GLAZED CORNER	ALUMINUM - 6063-T5
6	E4TB64FS	EXTRUSION, COVER, FACE, 2-1/2 X 3	ALUMINUM - 6063-T5
8	M4TB102FS	EXTRUSION, PRESSURE PLATE OFFSET (1 5/16")	ALUMINUM - 6063-T5
10	METD251EC	ENTRUCION FILLER PRESCUES PLATE (4.5.46")	ALUMINUM - 6063-T5
10	M5TB251FS	EXTRUSION, FILLER-PRESSURE PLATE (1 5/16")	ALUMINUM - 8083-13
13	E6642FS	EXTRUSION, GLAZING POCKET FILLER (1 5/16")	ALUMINUM - 6063-T5
16	E4TB170FS	EXTRUSION, SCREW APPLIED HORN	ALUMINUM - 6063-T5
23	P1627D	MULL SPLICE FOR ITEM 1	ALUMINUM - 6063-T5
24	P1627J	MULL SPLICE FOR ITEM 3	ALUMINUM - 6063-T5
25	P1631	MULL SPLICE FILLER FOR ITEM 1	ALUMINUM - 6063-T5
26	P1628B	FACE COVER SPLICE SLEEVE	ALUMINUM - 6063-T5
27	PTB59F	SHEAR BLOCK	ALUMINUM - 6063-T5
28	PTB60F	SHEAR BLOCK	ALUMINUM - 6063-T5
29	PTB21A/B	ANCHOR, 'T' CUT & PRE-DRILLED. LG P/N A=4.761", B=5.053"	ALUMINUM - 6063-T6
30	PTB20A/B	ANCHOR, 'F' CUT & PRE-DRILLED. LG P/N A=4.761", B=5.053"	ALUMINUM - 6063-T6
31	PTB22	ANCHOR, 'U' CUT & PRE-DRILLED	ALUMINUM - 6063-T6
47	PTB42	WEEP BAFFLE	P-PART - FOAM
48	PTB94	GASKET, THERMAL BARRIER, EPG (PRESSURE PLATE)	P-PART - RUBBER
49	PTB28	GLAZING, FIXED, & THICK (CW)	P-PART - RUBBER
50	PTB75	GASKET, STRUCTURAL GLAZING	P-PART - RUBBER
51	PTB93	WATER DAM SINGLE POCKET	P-PART - RUBBER
53	PTB76A	WATER DAM 1"	P-PART - RUBBER
55	P1094	ROD, ETHAFOAM ¾" DIA X 2" LONG	P-PART - FOAM
	P6550	BLOCK, SETTING, 3/16" x 1 5/16" x 4" LG	
56	-		P-PART - SILICONE
57	P6551	GLAZING TAPE 1/4 x 3/8 (THERMALBOND V2100 OR V2200)	P-PART - FOAM
58	P6552	GLAZING TAPE 1/8 x 1/4 (THERMALBOND V2100 OR V2200) TWO FACE TAPE	P-PART - FOAM
59	BY OTHERS	TWO FACE TAFE	P-PART - FOAM
61	TREMCO SGT 922	GLAZING TAPE 1/4 x 3/8	P-PART - FOAM
62	TREMCO SGT 922	GLAZING TAPE 1/8 x 1/4	P-PART - FOAM
75	BY OTHERS	BOLT, 3/4-10 X 5 1/4 HEX HEAD CLASS 2A	P-PART - FASTENER
76	BY OTHERS	3/4 FLAT WASHER	P-PART - FASTENER
77	BY OTHERS	3/4-10 HEX HEAD NYLOCK NUT	P-PART - FASTENER
78	S207	SCREW, 10-24 X 1 1/4 FLAT HEAD PHIL	P-PART - FASTENER
79	S328	SCREW, 1/4-20 X 1 HEX HEAD TYPE D (shear block)	P-PART - FASTENER
82	S270	SCREW, 10-24 X 3 PAN HEAD PHIL, SS (shear block)	D DART FACTENES
		· · · · · · · · · · · · · · · · · · ·	P-PART - FASTENER
83	S6505	SCREW, 1/4-20 X 3/4 FLAT HEAD CLASS 2A (shear blk & mull splice)	P-PART - FASTENER
84 85	S359	SCREW, 1/4-20 1-1/2 HEX HD TYPE F (pres plate)	P-PART - FASTENER
85	S191	SCREW, 10-24 X ½ TRUSS HEAD PHIL (horiz mull & dr stop)	P-PART - FASTENER
86	S139	SCREW, 1/4-20 X ½ HEX HEAD TYPE B (shear blk)	P-PART - FASTENER
87	S369	SCREW, 1/4-20 3/4 HEX HD TYPE CA (pres plate & subframe w/ shim)	P-PART - FASTENER
88	S131	SCREW, 8-32 5/16 FLAT HEAD PHIL (lock face plate)	P-PART - FASTENER
89	S155	SCREW, 1/4-20 X 3" FLAT HEAD PHIL (reinforcing steel)	P-PART - FASTENER
91	BY OTHERS	INSTALLATION ANCHORS AND WASHERS, SEE TABLE D, SHEET 2	

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	BY OTHERS	1 1/4 Ø BACKER ROD- STRUCTURAL GLAZING	
108	Booo	TUBE, 2"x4"x11 GA (.120) WALL (120" LG)	A36 STEEL
109	P6600 P6601	TUBE, 2"x4"x1/4" 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





A36 STEEL TUBE

TUBELITE CW 400 SSG IMPACT CURTAIN WALL SYSTEM





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FINAL REVIEW: SCALE: N.T.S.

REVISION:

BOM, PART DWGS

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