

ARCHITECTURAL ULTRA HIGH PERFORMANCE CONCRETE CLADDING PANELS

1. THIS SYSTEM HAS BEEN DESIGNED AND TESTED TO MEET ALL OF THE REQUIREMENTS OF THE 6TH EDITION (2017) FLORIDA BUILDING CODE, FOR USE OUTSIDE OF THE HVHZ.
2. THIS SYSTEM HAS NOT BEEN TESTED FOR IMPACT RESISTANCE. IN WINDBORNE DEBRIS REGIONS, IT MAY ONLY BE INSTALLED OVER IMPACT RESISTANT SUBSTRATES MEETING THE REQUIREMENTS OF FCB SECTION 1626.
3. SURROUNDING CONDITIONS SHOWN HEREIN ARE GENERIC, BASED ON TESTED CONDITIONS. OTHER DETAILS AND SUPPORT CONDITIONS MAY BE USED, PROVIDED THEY MEET FBC REQUIREMENTS FOR COMPARATIVE ANALYSIS, AS APPROVED BY A FLORIDA LICENSED PROFESSIONAL ENGINEER.
4. THIS SYSTEM HAS BEEN DESIGNED AND TESTED AS A WALL CLADDING SYSTEM ONLY. IT IS NOT APPROVED FOR USE AS PART OF THE MAIN WIND FORCE RESISTING SYSTEM.
5. THE DESIGN OF THE SUBSTRATE IS THE RESPONSIBILITY OF THE ENGINEER OF RECORD OR OTHER SPECIALTY ENGINEER, AND IS NOT A PART OF THIS APPROVAL. THE SUBSTRATE MUST SAFELY TRANSMIT THE LOADS APPLIED TO THIS SYSTEM TO THE BUILDING STRUCTURE.
6. FIRE RATINGS OR FIRE RESISTANCE IS NOT A PART OF THIS REVIEW.
7. ALL ANCHORS SECURING THE SYSTEM TO PRESSURE TREATED WOOD SHALL BE CAPABLE OF RESISTING CORROSION CAUSED BY THE CHEMICALS IN THE WOOD.
8. MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL BE PROTECTED PER FBC REQUIREMENTS.
9. NO INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS PRODUCT. $C_d=1.6$ WAS USED FOR WOOD SCREWS ONLY.
10. FASTENERS INSTALLED IN METAL STUDS SHALL BE OF SUFFICIENT LENGTH TO FULLY PENETRATE THE METAL WITH THREE ADDITIONAL THREADS BEYOND.
11. THE PANELS SHOWN ARE FIBER-REINFORCED ULTRA HIGH PERFORMANCE CONCRETE, MANUFACTURED FROM PORTLAND CEMENT, SILICA FUME, FINE SANDS, ALKALI-RESISTANT GLASS REINFORCING FIBERS, TWO LAYERS OF ALKALI-RESISTANT GLASS MESH, AND ADDITIVES. THEY COMPLY WITH ASTM C1189 AS TYPE A GRADE IV FIBER-CEMENT SHEETS.



TAKTL®

230 BRADDOCK AVENUE
KEYSTONE COMMONS PORTAL 9
TURTLE CREEK, PA 15145

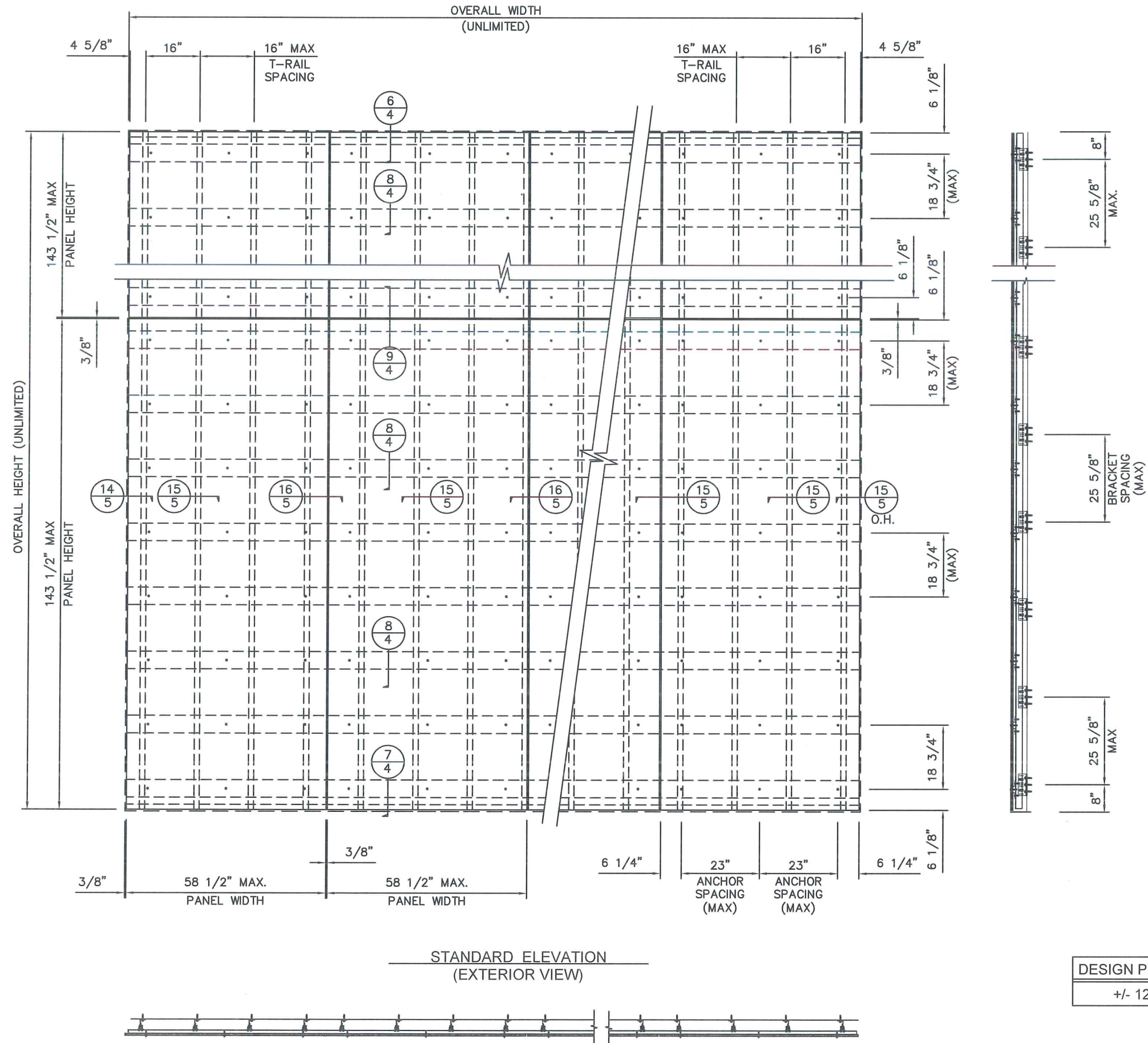
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WWW.TAKTL-LLC.COM

DWG:	A/UHCP-NI
SHEET:	1/8

SCOTT WALTERS
PROFESSIONAL ENGINEER
STATE OF FLORIDA
APR 10 2020
NO. 62354

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1ST SUBMITTAL	—	4/8/20
PRINTS ISSUED FOR	REV.#	DATE

EXPOSED FASTENER OPTION:



DESIGN PRESSURE

+/- 120 Psf

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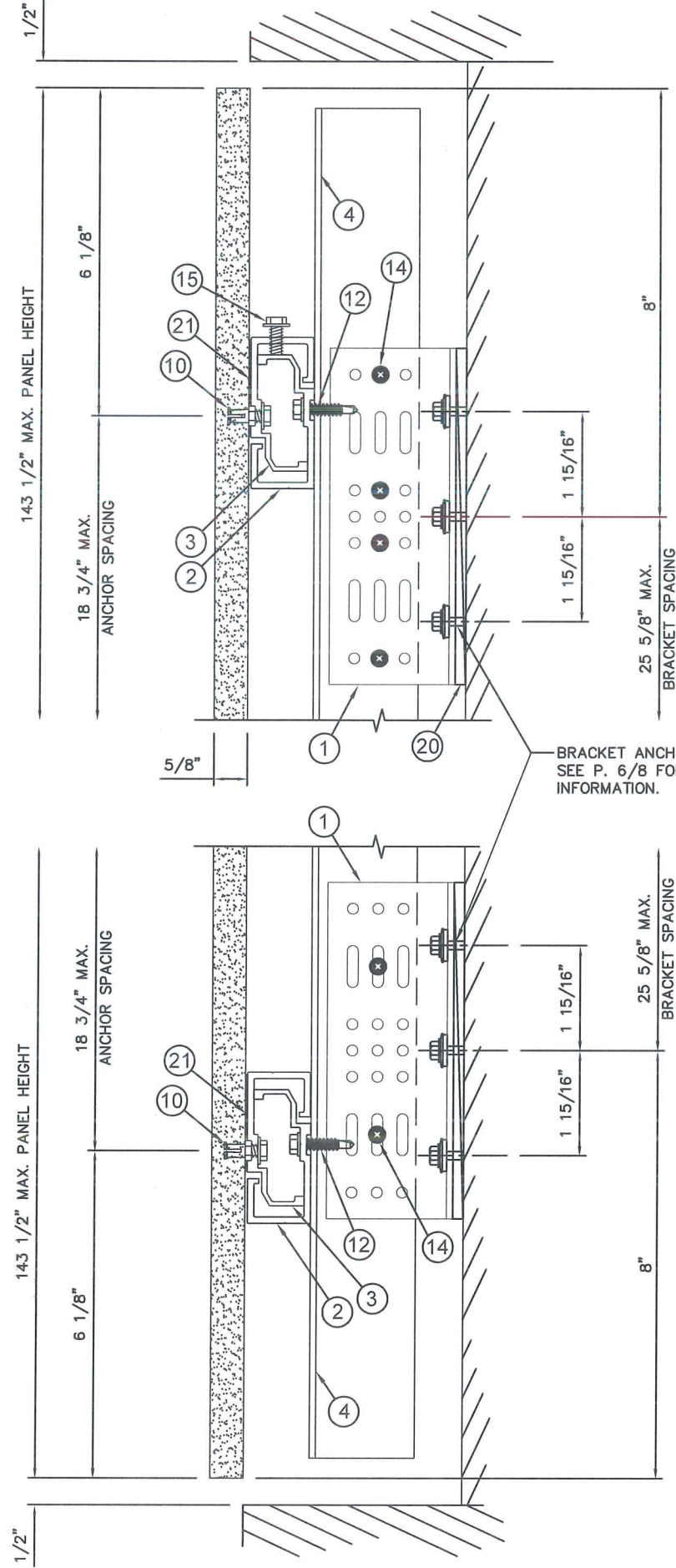
WOLTERS ENGINEERING
(COA# 27194)
15211 97TH ROAD N
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(561) 225-1982



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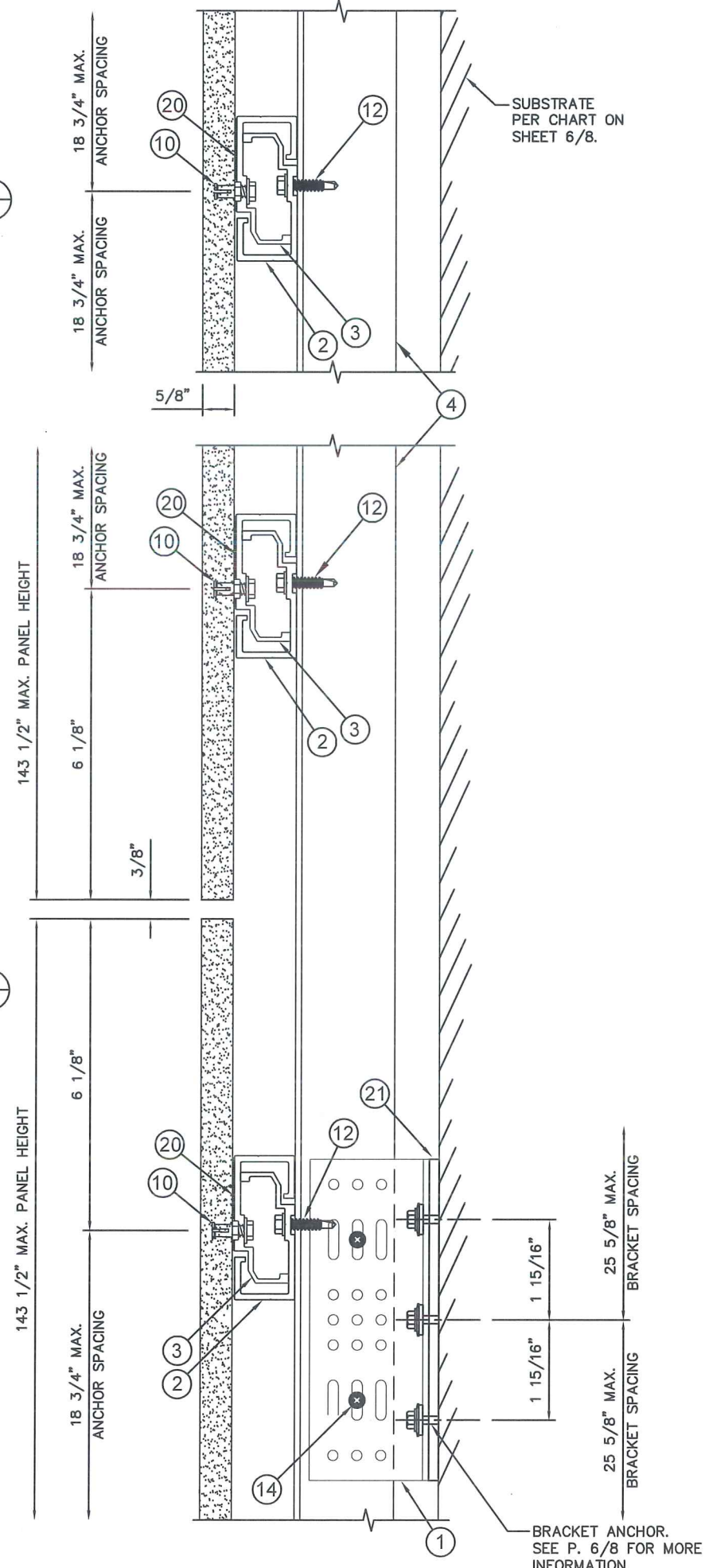
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BRACKET ANCHORS.
SEE P. 6/8 FOR MORE
INFORMATION.

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BRACKET ANCHOR.
SEE P. 6/8 FOR MORE
INFORMATION.

SUBSTRATE
PER CHART ON
SHEET 6/8.



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DWG: A/UHCP-NI
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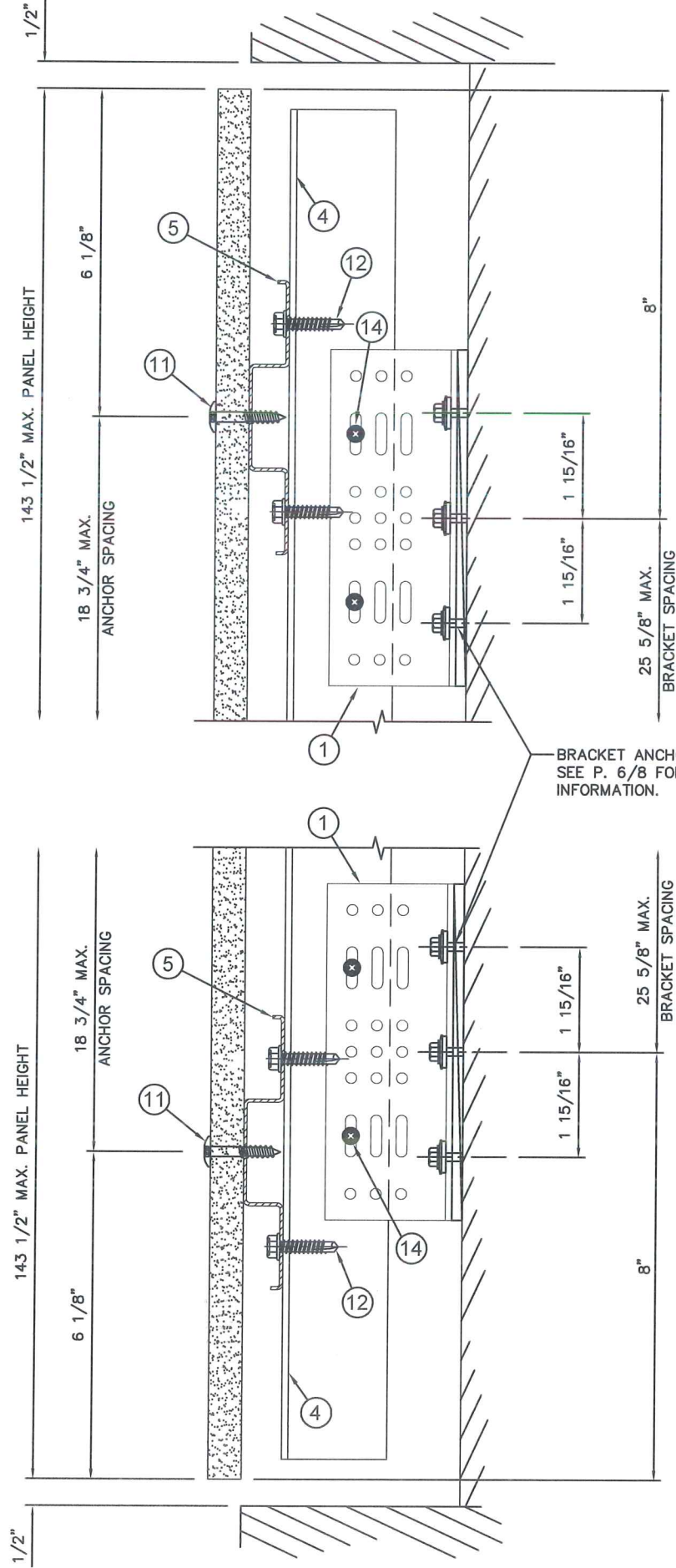
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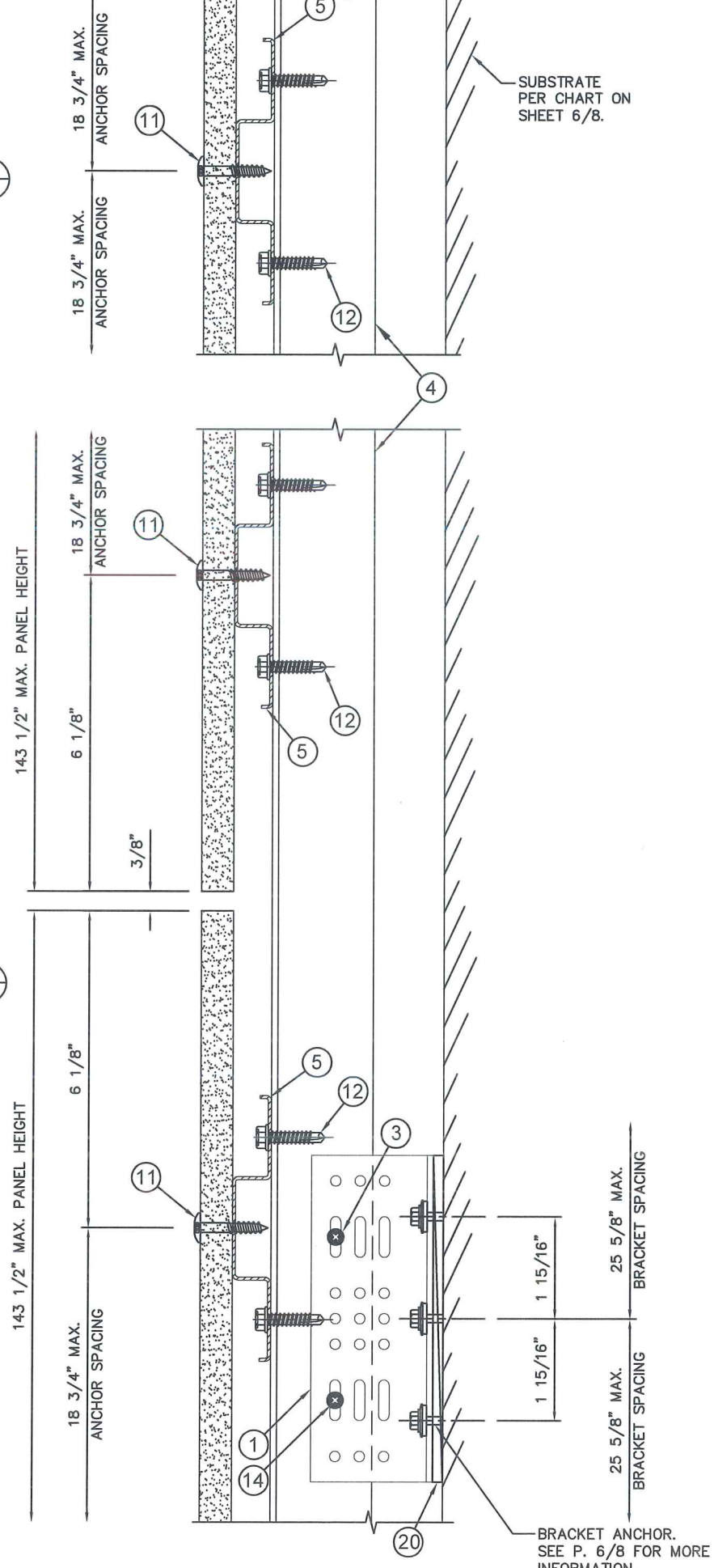
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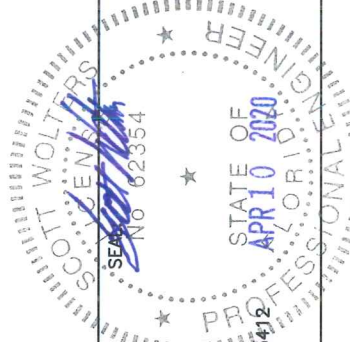


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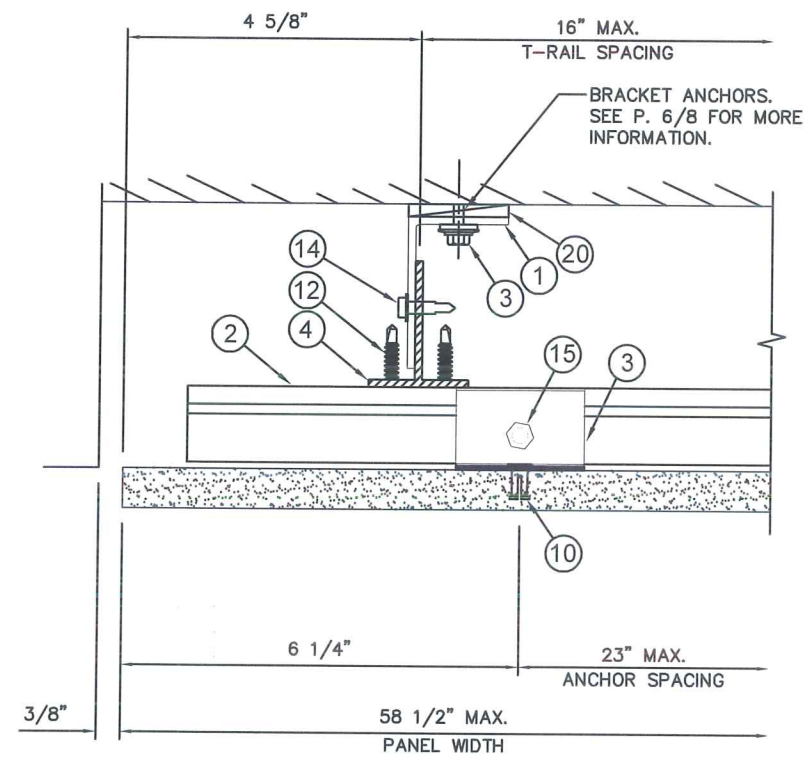
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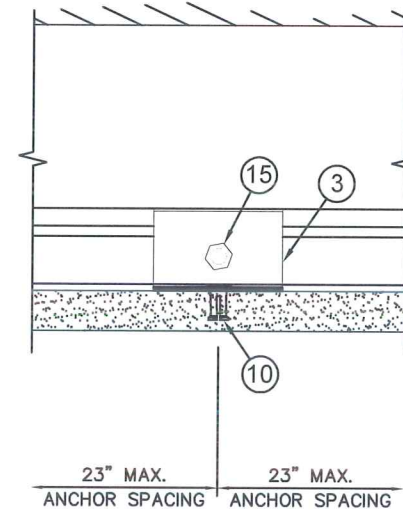
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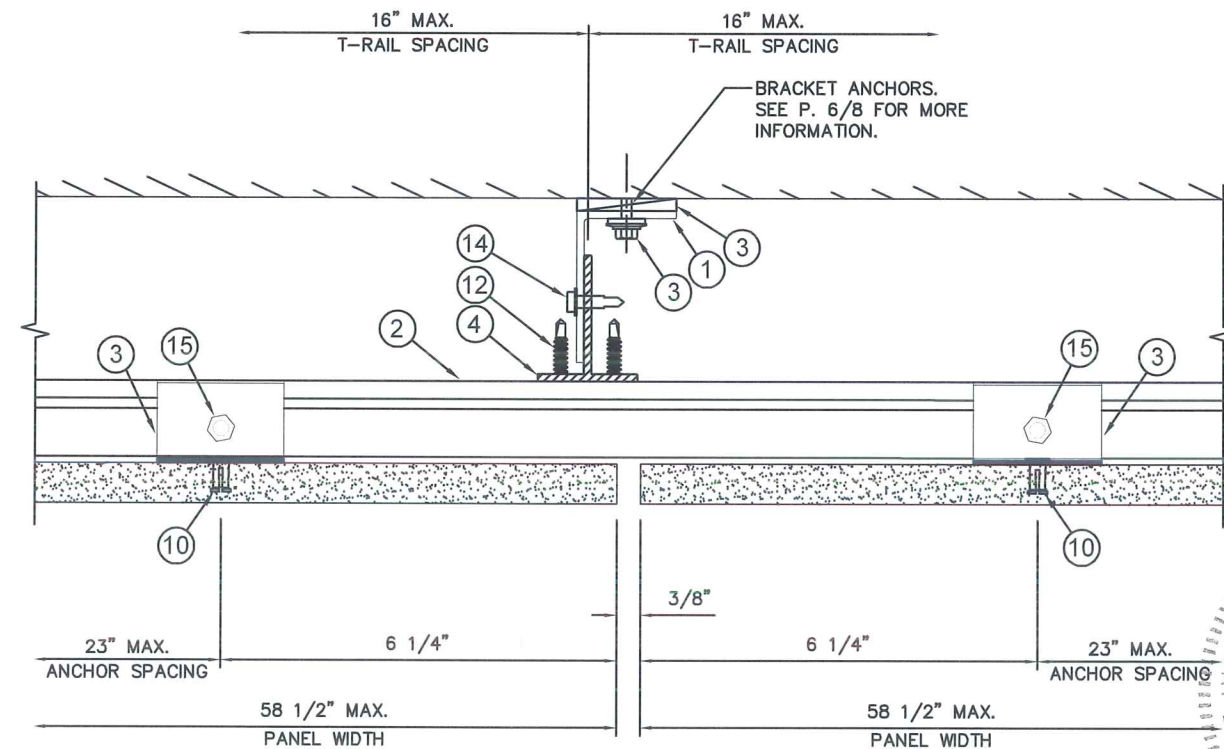
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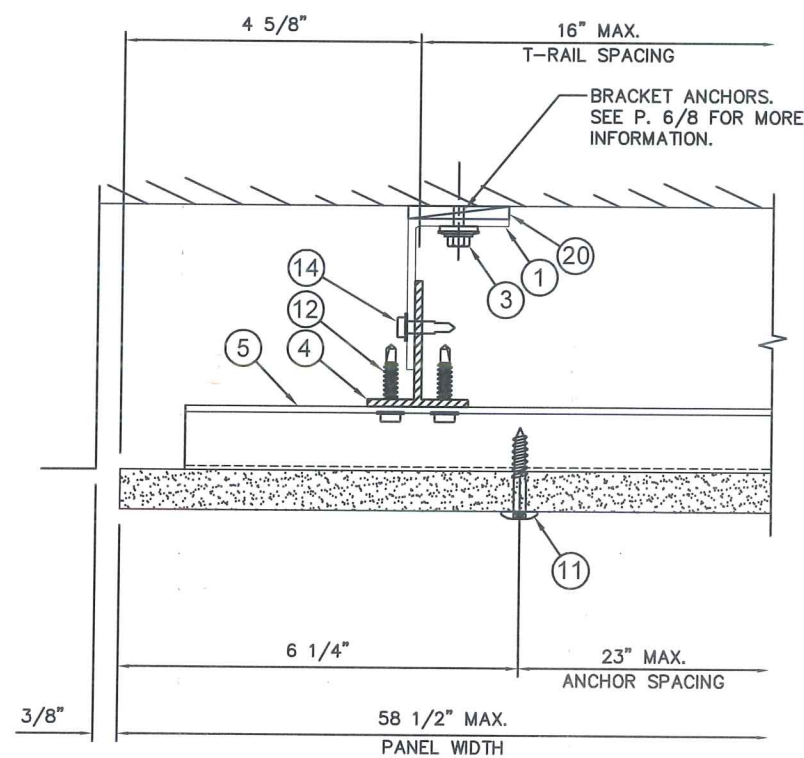
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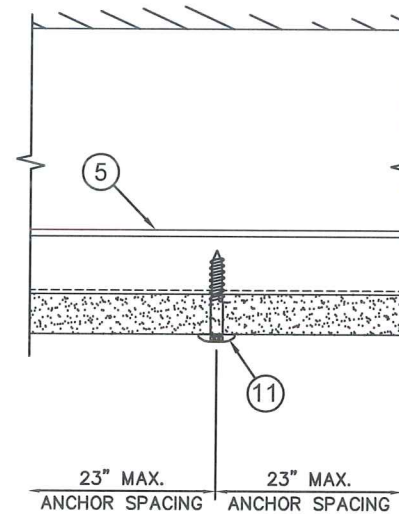
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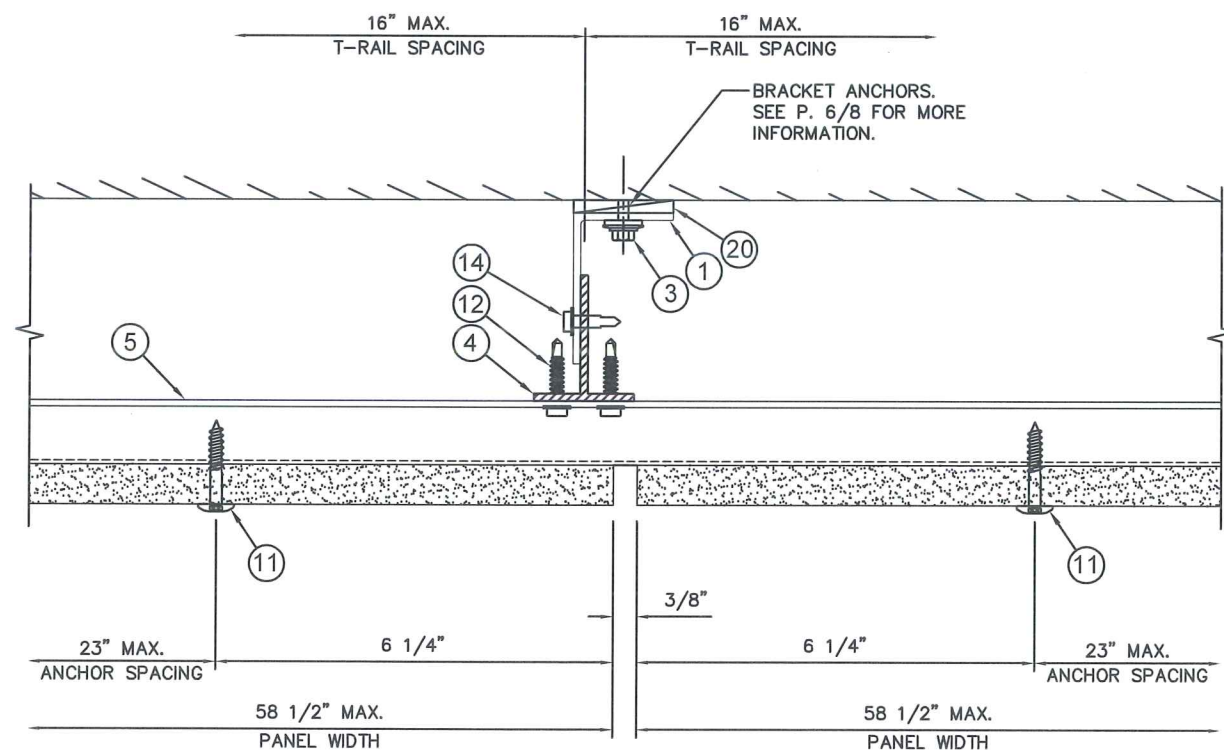
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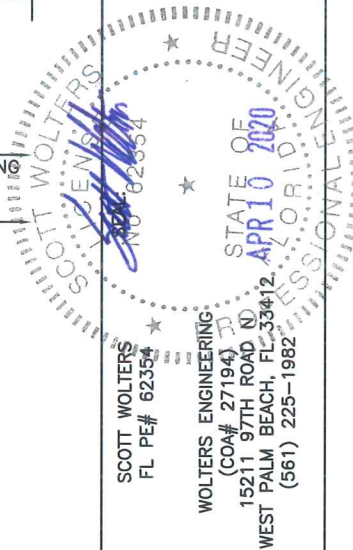
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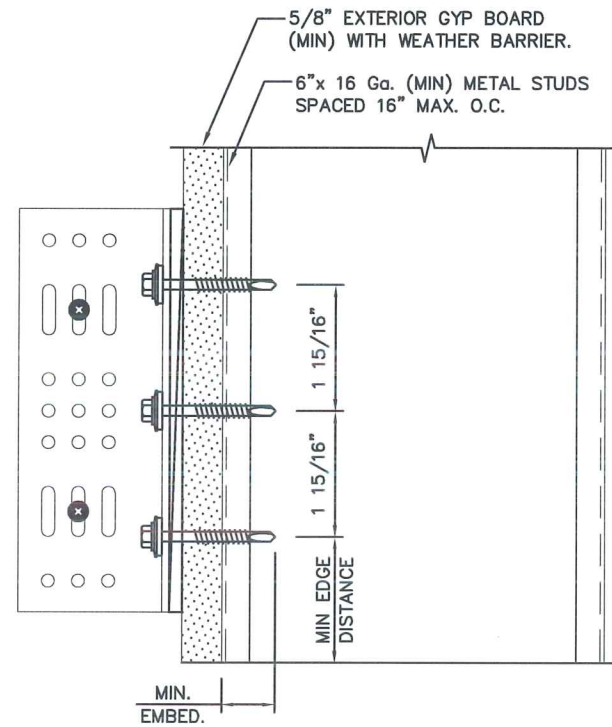
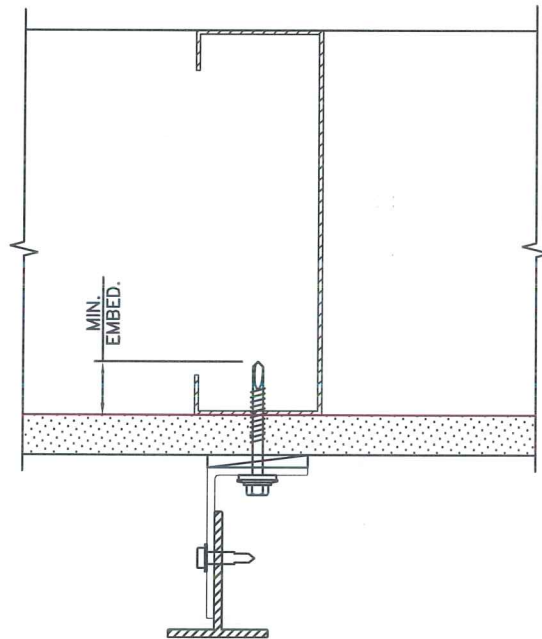
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SHEET: 5/8

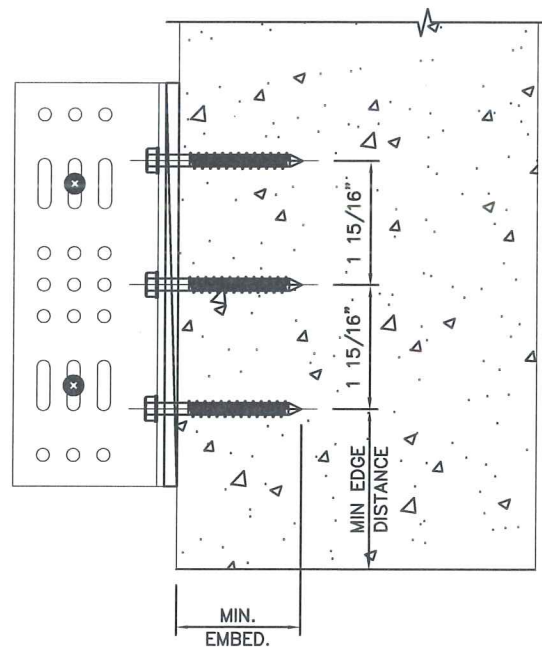
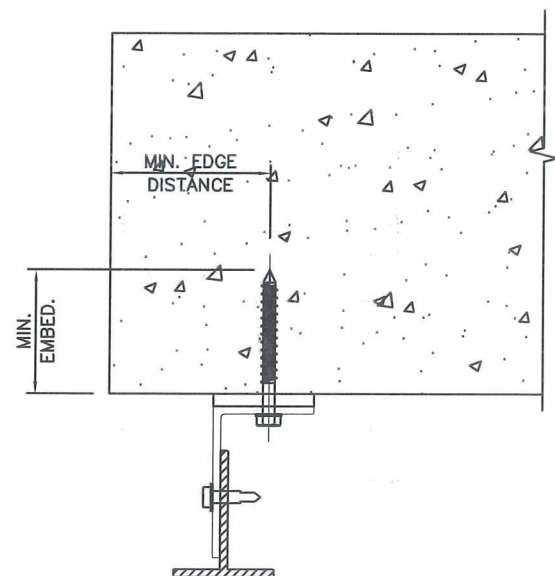
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BRACKET ANCHOR DETAILS

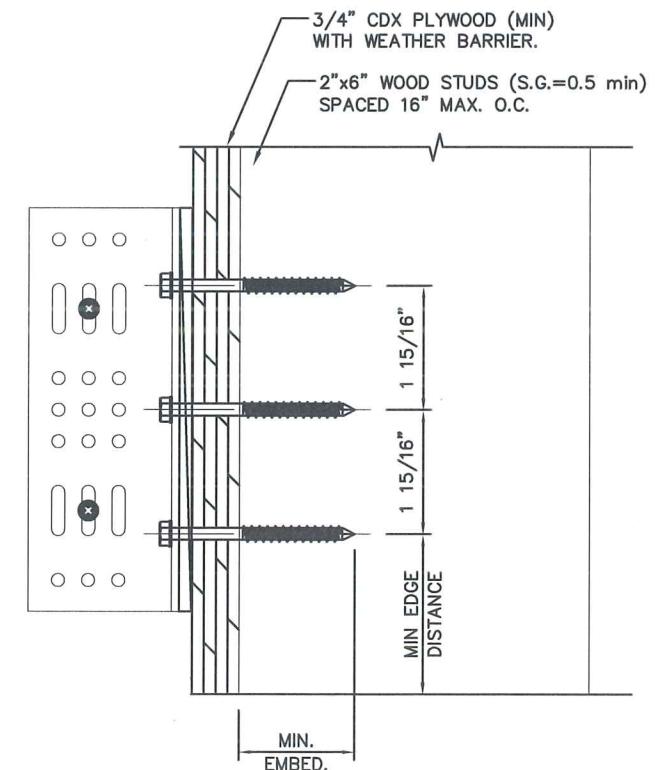
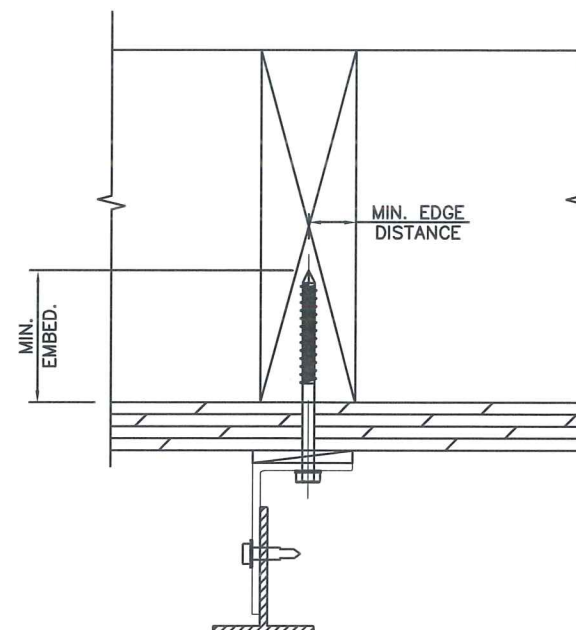
METAL STUD SUBSTRATE:



CONCRETE/CMU SUBSTRATE:



WOOD STUD SUBSTRATE:



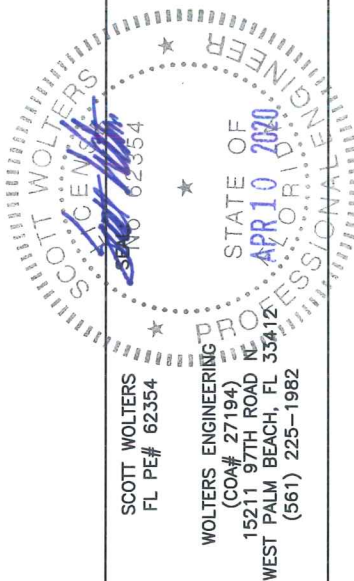
BRACKET ANCHOR TABLE			
SUBSTRATE TYPE	ANCHOR TYPE	MINIMUM EMBEDMENT	MINIMUM EDGE DISTANCE
METAL STUDS 6"x16 Ga. (45 ksi min) SPACED 16" MAX O.C.	1/4" DIA. ELCO BI-FLES SS SELF-DRILLING SCREW (3) PER BRACKET	FULL ⁺⁺	1/2"
GROUT FILLED CMU (ASTM C90 MIN)	1/4" DIA. ELCO ULTRACON SS4 (3) PER BRACKET	2"	2 1/2"
2X P.T. WOOD (2x6, S.G.=0.55, MIN) SPACED 16" MAX. O.C.	#14 SS WOOD SCREW (Fu = 75 ksi min) (3) PER BRACKET	1 1/2"	1"
POURED CONCRETE (6" THICK, 3000 psi MIN)	1/4" DIA. ELCO ULTRACON SS4 (3) PER BRACKET	1 3/4"	2 1/2"

⁺⁺ FULLY PENETRATES METAL WITH 3 THREADS BEYOND

BRACKET ANCHOR NOTES:

1. THE DESIGN OF THE SUBSTRATE IS THE RESPONSIBILITY OF THE ENGINEER OF RECORD OR OTHER SPECIALTY ENGINEER, AND IS NOT A PART OF THIS APPROVAL. THE SUBSTRATE MUST SAFELY TRANSMIT THE LOADS APPLIED TO THIS SYSTEM TO THE BUILDING STRUCTURE.
2. EMBEDMENTS LISTED ABOVE ARE BEYOND WALL DRESSING OR STUCCO.
3. MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL BE PROTECTED PER FBC REQUIREMENTS.
4. NO INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS PRODUCT. $C_d=1.6$ WAS USED FOR WOOD SCREWS ONLY.
5. FASTENERS INSTALLED IN METAL STUDS SHALL BE OF SUFFICIENT LENGTH TO FULLY PENETRATE THE METAL WITH THREE ADDITIONAL THREADS BEYOND.

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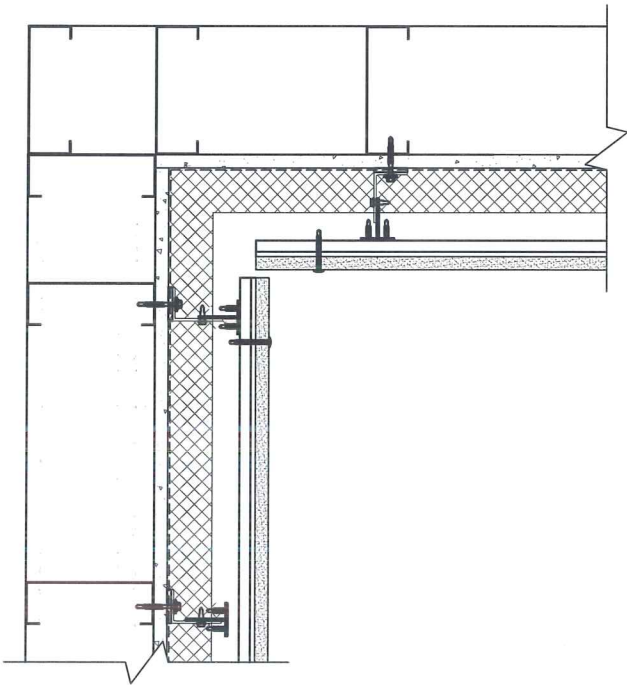
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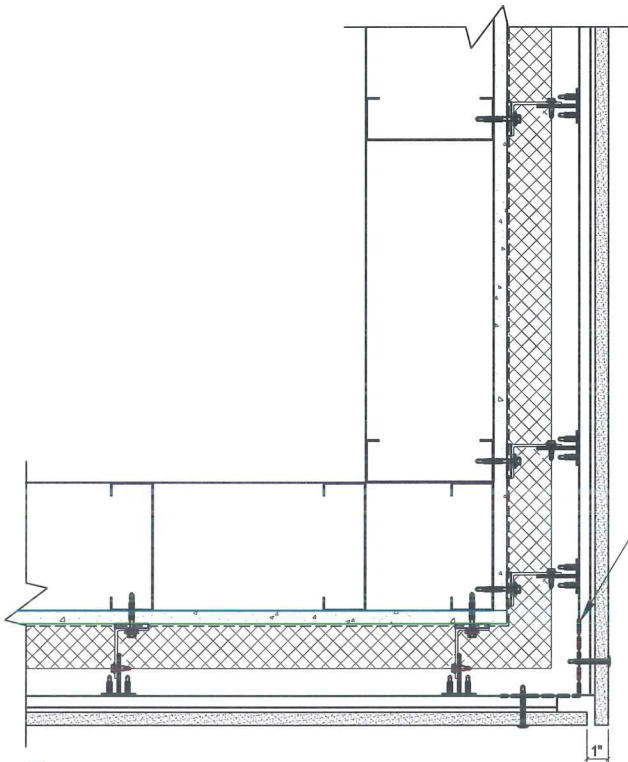
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DWG:	A/UHCP-NI
SHEET:	6/8

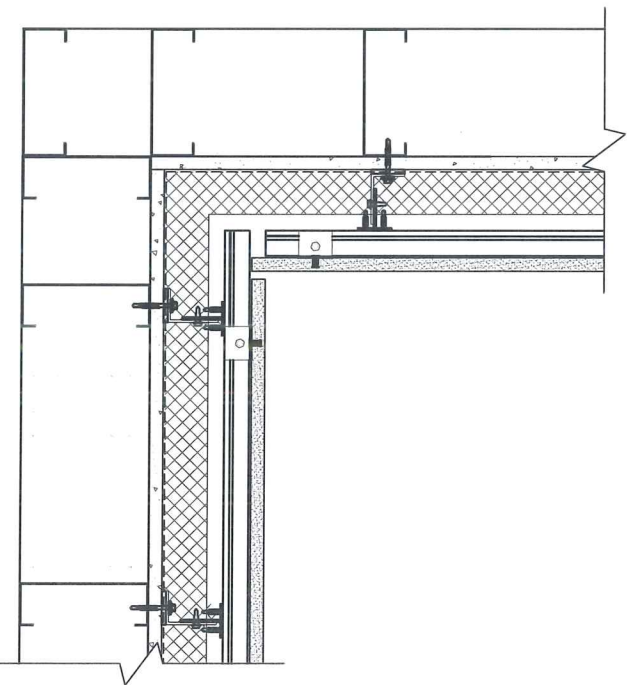
OPTIONAL CORNER & WINDOW DETAILS



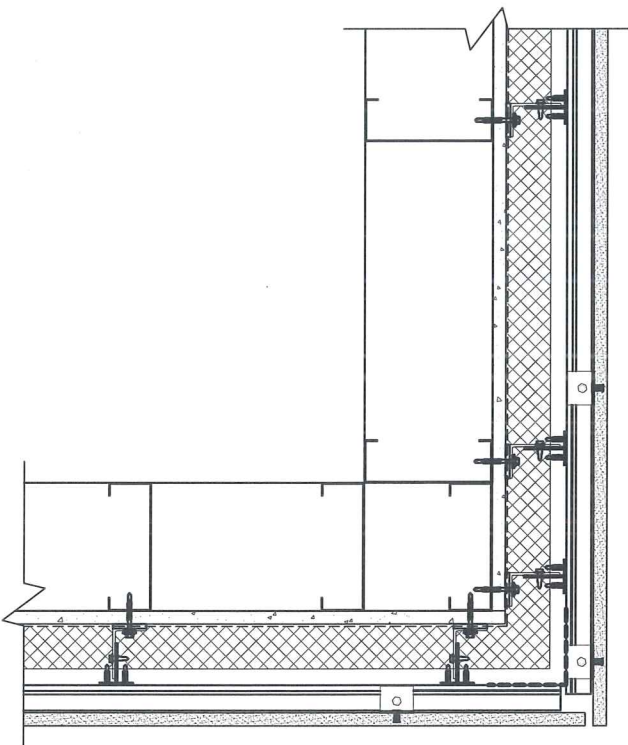
- TYP. INSIDE CORNER (VISIBLE FASTENED)
SCALE: N/A REF:



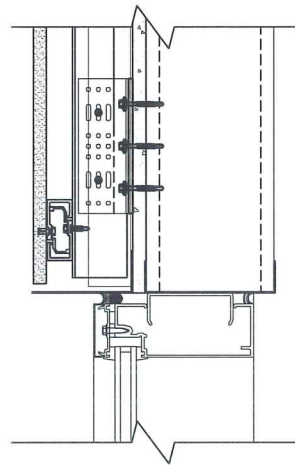
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SCALE: N/A REF:



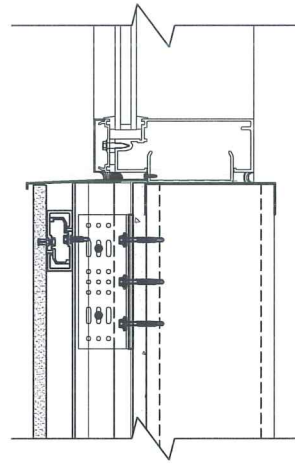
- TYP. INSIDE CORNER (CONCEALED FASTENED)
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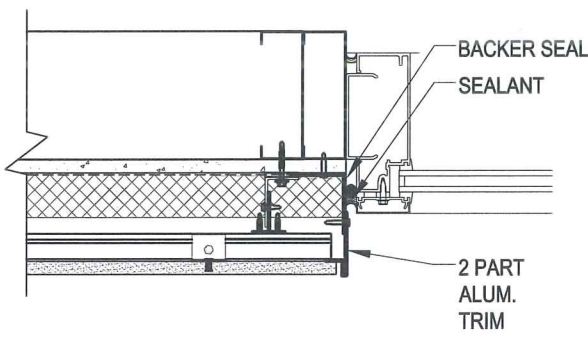
- TYP. OUTSIDE (CONCEALED FASTENED)
SCALE: N/A REF:



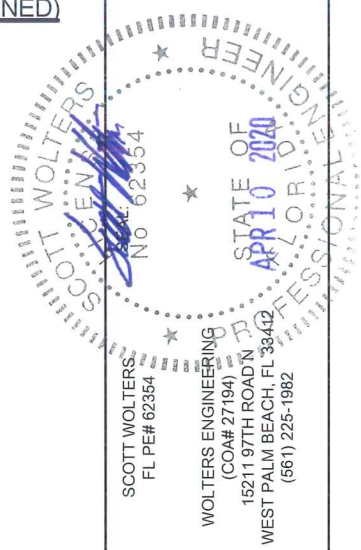
- TYP. WINDOW HEAD (CONCEALED FASTENED)
SCALE: N/A REF:



- TYP. WINDOW SILL (CONCEALED FASTENED)
SCALE: N/A REF:



- TYP. WINDOW JAMB (CONCEALED FASTENED)
SCALE: N/A REF:



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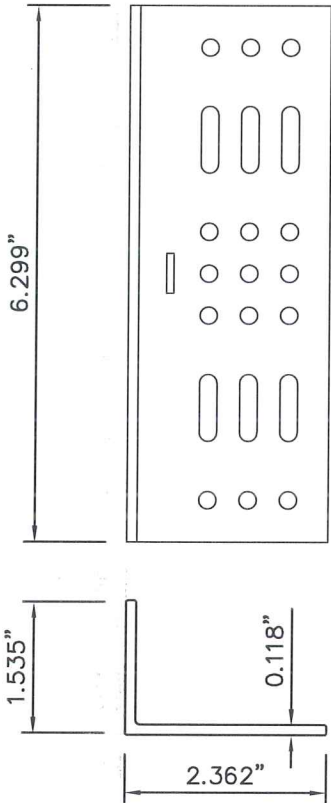
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SHEET: 7/8

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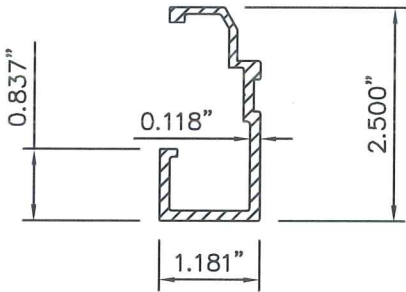
TAKTL A/UHPC SERIES CONCRETE PANEL SYSTEM

ARCHITECTURAL ULTRA HIGH PERFORMANCE CONCRETE CLADDING PANELS

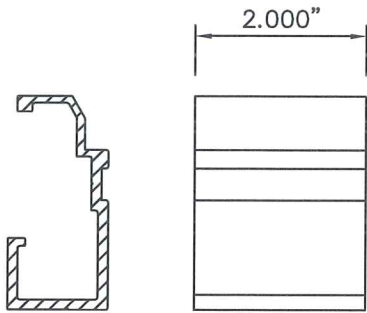
BILL OF MATERIALS				
PART#	DESCRIPTION	MANUFACTURER	MATERIAL	NOTES
1	40/60/3 WALL BRACKET	RAINSCREEN MAT'S	ALUM 6063-T66	
2	TAKTL C-SHAPED CHANNEL RAIL	TAKTL	ALUM 6005A-T5	
3	TAKTL 2" C-CLIP	TAKTL	ALUM 6005A-T5	CUT FROM PART #2
4	T40/50/3 T-RAIL	RAINSCREEN MAT'S	ALUM 6063-T66	
5	1" HAT CHANNEL	RAINSCREEN MAT'S	ALUM 6063-T6	
10	10mm UNDERCUT ANCHOR W/BOLT	KEIL	STAINLESS STL	
11	1/4" x 1 1/2" SS SELF-DRILLING SCREW	ITW BUILDEX	STAINLESS STL	
12	#10 x 1" SS SELF-DRILLING SCREW	ITW BUILDEX	STAINLESS STL	
14	#10 x 1" SS SELF-DRILLING SCREW	ITW BUILDEX	STAINLESS STL	(2) PER BRACKET AT WL BRACKETS, (4) AT DL BRACKETS
15	1/4" x 3/4" SS HH BOLT		STAINLESS STL	REQ'D AT TOP ROW OF BRACKETS ON PANEL ONLY
20	THERMAL ISOLATER		RIGID PLASTIC	SNAP FITS ONTO WALL BRACKET
21	FOAM SPACER		FOAM	ADHERED TO BACK OF C-CLIP



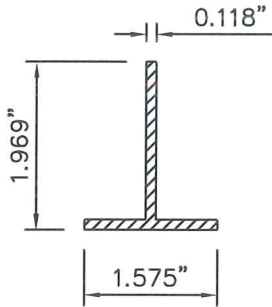
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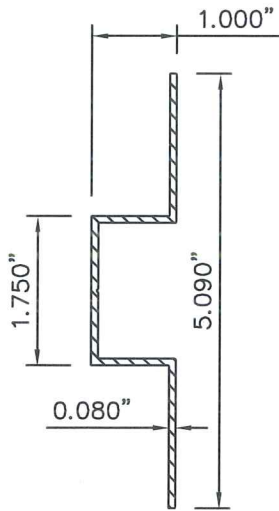
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SCOTT WOLTERS
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