

WOLTERS ENGINEERING

ENGINEERING, DRAFTING, CONSULTING

15211 97th Road N
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PRODUCT EVALUATION

PRODUCT: ABRAMS AAP-900 (WET SEAL) WALL CLADDING SYSTEM

MANUFACTURER: ABRAMS ARCHITECTURAL PRODUCTS
7260 DELTA CIRCLE
AUSTELL, GA 30166

To all concerned,

The AAP-900 (Wet Seal) Wall Cladding System, manufactured by Abrams Architectural Products, consists of formed 1/8" (3 mm) aluminum plate panels (3003-H14 Alloy) with extruded aluminum stiffeners. The panels are directly fastened to 5/8" CDX plywood over 16 Ga. metal stud framing (min). The system has been tested per TAS 201, 202, and 203 by Intertek B&C, with results shown in test report K3255.06-550-18.

Technical Documentation:

1. Drawing "AAP-900" dated 6/4/20, signed and sealed by Scott Wolters, PE.
2. Test Report listed above by Architectural Testing, Inc. signed and sealed by Vinu Abraham, PE.
3. Supplemental Calculations to support "AAP-900" drawing, signed and sealed by Scott Wolters, PE.

I have reviewed this submittal per the requirements of FAC Product Approval Rule Chapter 61G20-3.005 (4). Based on the limitations listed below and those provided in the documents above, this product meets all the requirements of the 6th Edition (2017) Florida Building Code generally, and chapters 14, 16, and 20 specifically, including the HVHZ provisions.

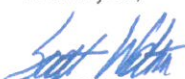
Limitations: This Aluminum Panel System is small missile impact resistant, and approved for use inside and outside of the HVHZ. Elevations in windborne debris regions below 30 ft may only be installed over wall types listed in FBC Section 1626.4.

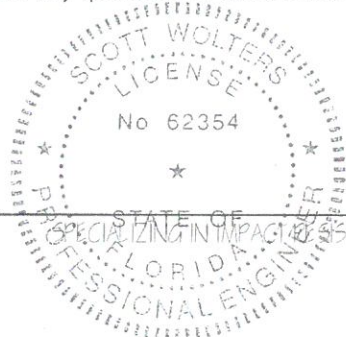
<u>Overall Dimensions:</u>	Maximum Panel Width:	82 3/4"
	Maximum Panel Height:	60"
	Maximum Stiffener Spacing:	20"
	Maximum Design Pressure:	+/- 130 psf

This Aluminum Panel System is further limited as noted in installation drawing "AAP-900"

If you have any questions or need more information concerning this approval please contact me.

Thank you,


Scott Wolters
FL PE# 62354



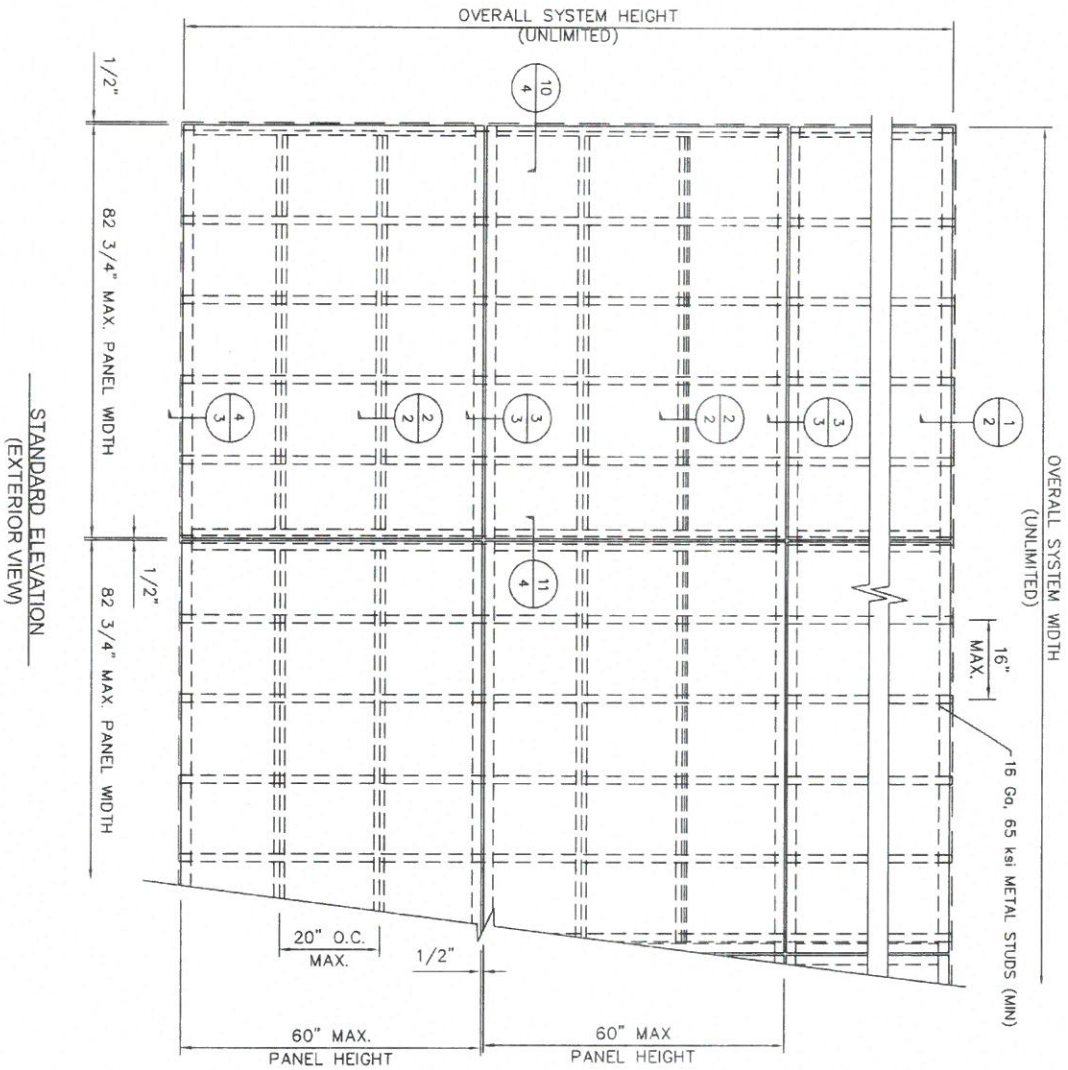
JUN 05 2020

SPECIALIZING IN IMPACT RESISTANT CURTAIN WALLS, STOREFRONTS, & WINDOWS

ABRAMS AAP-900 (WET SEAL) WALL CLADDING SYSTEM:

GENERAL NOTES:

1. THIS SYSTEM HAS BEEN DESIGNED TO MEET ALL OF THE REQUIREMENTS OF THE 2017 FLORIDA BUILDING, INCLUDING THE HVHZ PROVISIONS.
2. THIS SYSTEM HAS BEEN TESTED PER TAS 201, 202, AND 203 FOR SMALL MISSILE IMPACT RESISTANCE IN WINDBORNE DEBRIS REGIONS. ELEVATIONS BELOW 30 FT. MAY ONLY BE INSTALLED OVER WALL TYPES LISTED IN FBC SECTION 1626.4.
3. THE METAL STUD WALL IS NOT A PART OF THIS SYSTEM. THE METAL STUD SYSTEM MUST ADEQUATELY SUPPORT THE LOADS IMPOSED BY THE PANEL SYSTEM AND TRANSFER THEM SAFELY TO THE BUILDING STRUCTURE.
4. DESIGN LOADS MUST BE CALCULATED BY A PROFESSIONAL ENGINEER OR ARCHITECT FOR EACH PROJECT. THE PROJECT PRESSURE CANNOT EXCEED THE DESIGN PRESSURES LISTED ON THIS SHEET OR IN THE FASTENER CHARTS ON SHEETS 2-4.
5. ALL ANCHORS SECURING THE SYSTEM TO PRESSURE TREATED WOOD SHALL BE CAPABLE OF RESISTING CORROSION CAUSED BY THE CHEMICALS IN THE WOOD.
6. MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL BE PROTECTED PER FBC REQUIREMENTS.
7. NO INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS PRODUCT. CD=1.6 WAS USED FOR WOOD SCREWS ONLY.
8. FASTENER EMBEDMENTS LISTED ARE BEYOND WALL DRESSING OR STUCCO. FASTENERS IN METAL STUDS MUST FULLY PENETRATE THE STUD WALL WITH 3 ADDITIONAL THREADS BEYOND.
9. PANEL IS 1/8" (3mm) ALUMINUM PLATE, 3003-H14 ALLOY.
10. ALUMINUM EXTRUSIONS ARE 6063-T5 MIN.



DESIGN PRESSURE
+/- 130 Psf



REV.#	DATE
1ST SUBMITTAL	6/4/20
PRINTS ISSUED FOR	

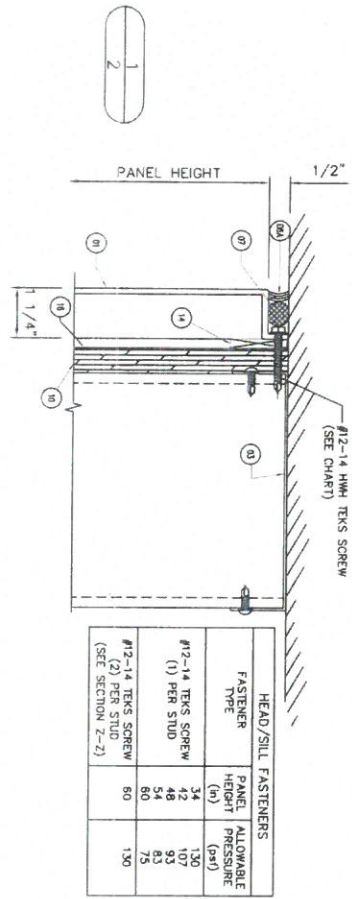
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AAP-900
(WET SEAL)
WALL CLADDING
SYSTEM

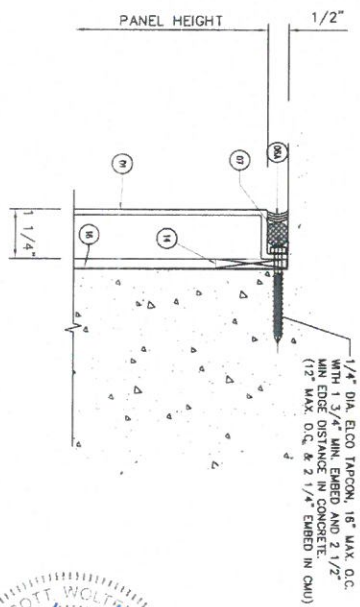
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DWG: AAP-900
SHEET: 1/5

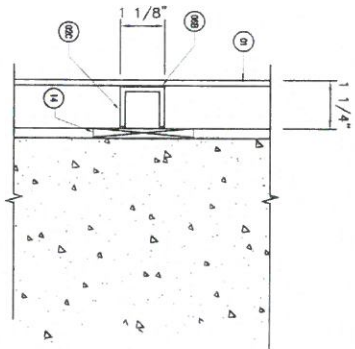
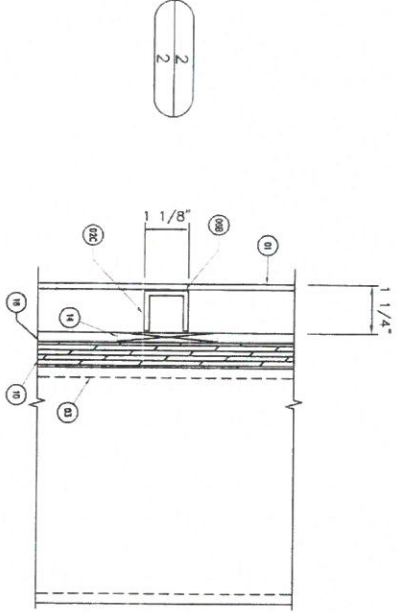
ALTERNATE DETAILS ON CONCRETE/CMU:



HEAD/SILL FASTENERS		
FASTENER TYPE	PANEL HEIGHT (in)	ALLOWABLE PRESSURE (psf)
#12-14 TEK SILEX SCREW (1) PER STUD	24	130
	36	100
	48	93
	54	83
#12-14 TEK SILEX SCREW (2) PER STUD (SEE SECTION 2-2)	60	75
	60	130



1/4" DIA. REBAR, TOPCON, 18" MAX. O.C. WITH 1 1/2" MIN. PERFOR. @ 1/2" MIN. EDGE DISTANCE IN CONCRETE (12" MAX. O.C. & 2 1/4" EMBED IN CMU)



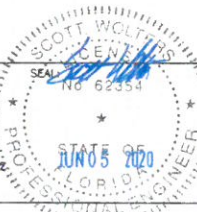
DWG: AAP-900
SHEET: 2/5



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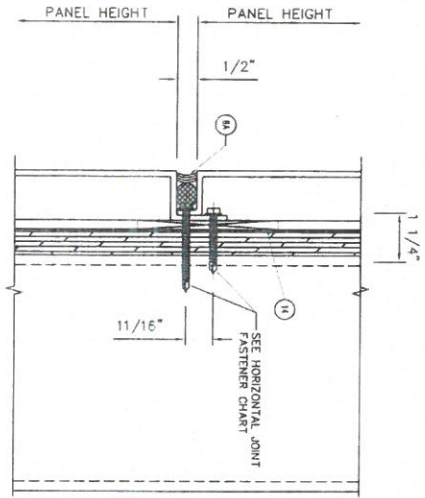
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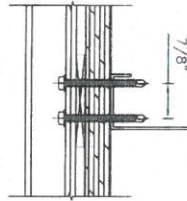


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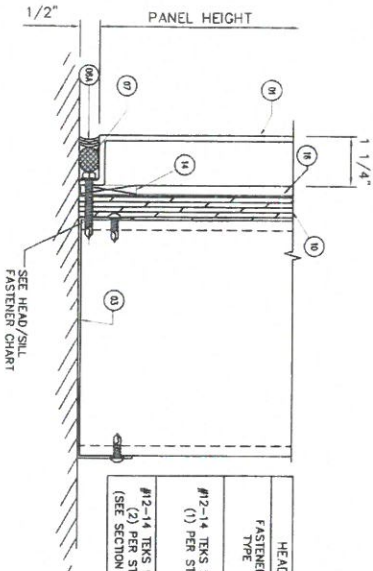
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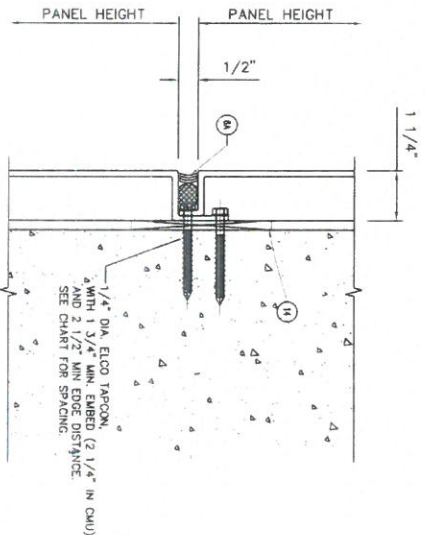
HORIZONTAL JOINT FASTENERS			
FASTER TYPE	AVERAGE PANEL HEIGHT (in)	ALLOWABLE PRESSURE (psf)	
#12-14 TENS SCREW (2) PER STUD (SEE SECTION Z-Z)	34	130	
	42	107	
	48	83	
	60	75	
#12-14 TENS SCREW (4) PER STUD (SEE SECTION Z-Z)	60	130	



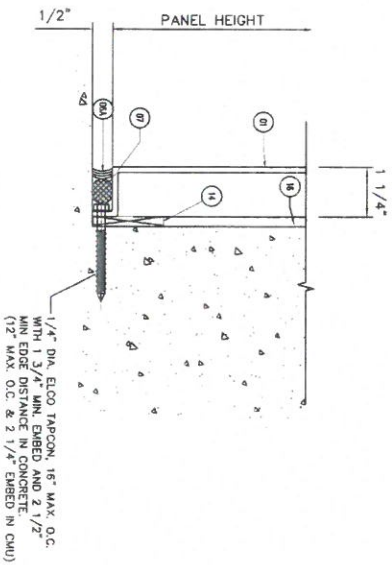
SECTION Z-Z



HEAD/SILL FASTENERS			
FASTER TYPE	PANEL HEIGHT (in)	ALLOWABLE PRESSURE (psf)	
#12-14 TENS SCREW (1) PER STUD	34	130	
	42	107	
	48	83	
	60	75	
#12-14 TENS SCREW (2) PER STUD (SEE SECTION Z-Z)	60	130	



HORIZONTAL JOINT FASTENERS					
AVERAGE PANEL HEIGHT (in)	CONCRETE (3000 psi MIN)		GROUT-FILLED CMU (ASTM C90 MIN)		ALLOWABLE PRESSURE (psf)
	FASTER SPACING (in)	ALLOWABLE PRESSURE (psf)	FASTER SPACING (in)	ALLOWABLE PRESSURE (psf)	
48	10	130	7	130	
	12	118	9	108	
	16	89	12	82	
	18	75	15	72	
54	9	130	6 1/2	130	
	12	120	9	120	
	16	95	12	95	
	18	71	15	71	
60	8	130	6	130	
	12	95	9	87	
	16	71	12	85	
	18	65	15	77	



1/4" DIA. ELOD TAPCON, 16" MAX. O.C. WITH 1 3/4" MIN. EMBED AND 2 1/2" MIN. EDGE DISTANCE IN CONCRETE (12" MAX. O.C. & 2 1/4" EMBED IN CMU)



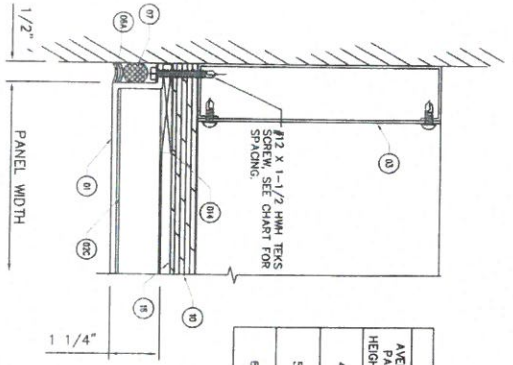
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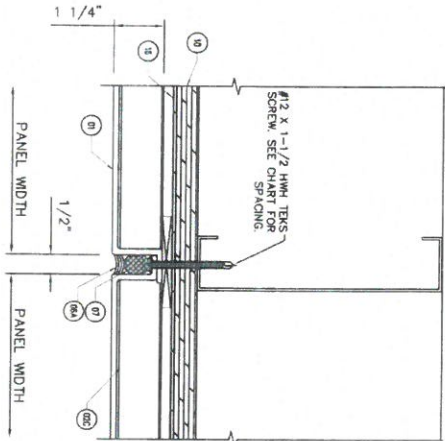


DTG: AAP-900
SHEET: 3/5

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JAMB FASTENERS			
AVERAGE PANEL HEIGHT (h)	FASTENER SPACING (h)	ALLOWABLE PRESSURE (psf)	
48	11	130	
	12	125	
	16	93	
54	10	130	
	12	111	
	16	83	
60	9	130	
	12	100	
	16	75	

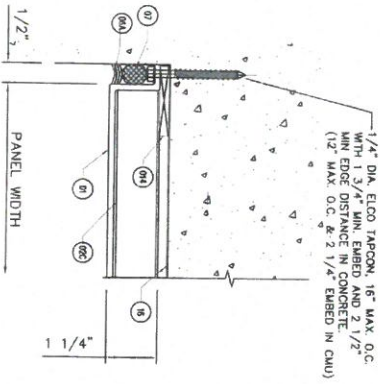


VERTICAL JOINT FASTENERS			
AVERAGE PANEL HEIGHT (h)	FASTENER SPACING (h)	ALLOWABLE PRESSURE (psf)	
48	5 1/2	130	
	6	93	
	8	46	
	16	46	
54	5	130	
	8	83	
	12	55	
	16	41	
60	4	130	
	8	75	
	16	37	

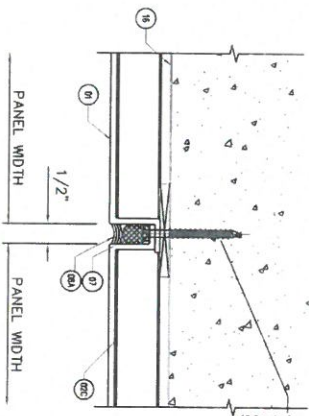
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4

11
4

ALTERNATE DETAILS ON CONCRETE/CMU:

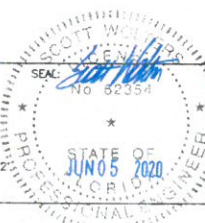


1/4" DIA. ELDG. TAPCON, 16" MAX. O.C. WITH 1 3/4" MIN. EMBED AND 1/2" MIN. EDGE DISTANCE IN CONCRETE (12" MAX. O.C. & 2 1/4" EMBED IN CMU)



1/4" DIA. ELDG. TAPCON, 1 3/4" MIN. EMBED (1/4" IN CMU) AND 2 1/2" MIN. EDGE DISTANCE. SEE CHART FOR SPACING.

AVERAGE PANEL HEIGHT (h)	CONCRETE (3000 psi MIN)		GROUT-FILLET CMU (ASTM C90 MIN)	
	FASTENER SPACING (h)	ALLOWABLE PRESSURE (psf)	FASTENER SPACING (h)	ALLOWABLE PRESSURE (psf)
48	10	130	7	130
	12	118	9	109
	16	89	12	82
54	9	130	6 1/2	130
	12	105	9	92
	16	75	12	72
60	8	130	6	140
	12	95	8	87
	16	71	12	65



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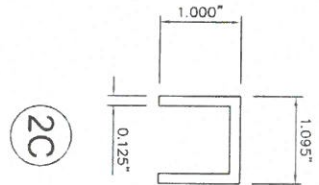
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BILL OF MATERIALS		
MARK	DESCRIPTION	NOTES
1	1/8" (3MM) ALUMINUM PANEL (3003-H14)	
2C	ALUMINUM STIFFENER EXTRUSION	6063-T5 (MIN)
3	METAL STUD SYSTEM (16 ga. 65 ksi MIN)	
5	#8x3/4" PH GALV. TEKS SCREW	
6A	DOW 795 SILICONE	
6B	DOW 1199 SILICONE	
7	BACKER ROD	
10	PLYWOOD SHEATHING (5/8" CDX MIN)	
14	SHIMS - HIGH IMPACT PLASTIC	
16	WATERPROOF MEMBRANE	



2C

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