

WOLTERS ENGINEERING

ENGINEERING, DRAFTING, CONSULTING

15211 97th Road N
West Palm Beach, FL 33412
Ph/Fx: (561) 225-1982

PRODUCT EVALUATION

PRODUCT: ABRAMS AAP-100 (RAINSCREEN) WALL CLADDING SYSTEM

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

To all concerned,

The AAP-100 (Rainscreen) Wall Cladding System, manufactured by Abrams Architectural Products, is a Composite Metal Panel System consisting of 4mm Alucobond panels with extruded aluminum framing, 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 K3255.01-550-18.

Technical Documentation:

1. Drawing "AAP-100" 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-100" 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 MCM 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 system is further limited as noted in installation drawing "AAP-100"

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

Thank you,


Scott Wolters
FL PE# 62354



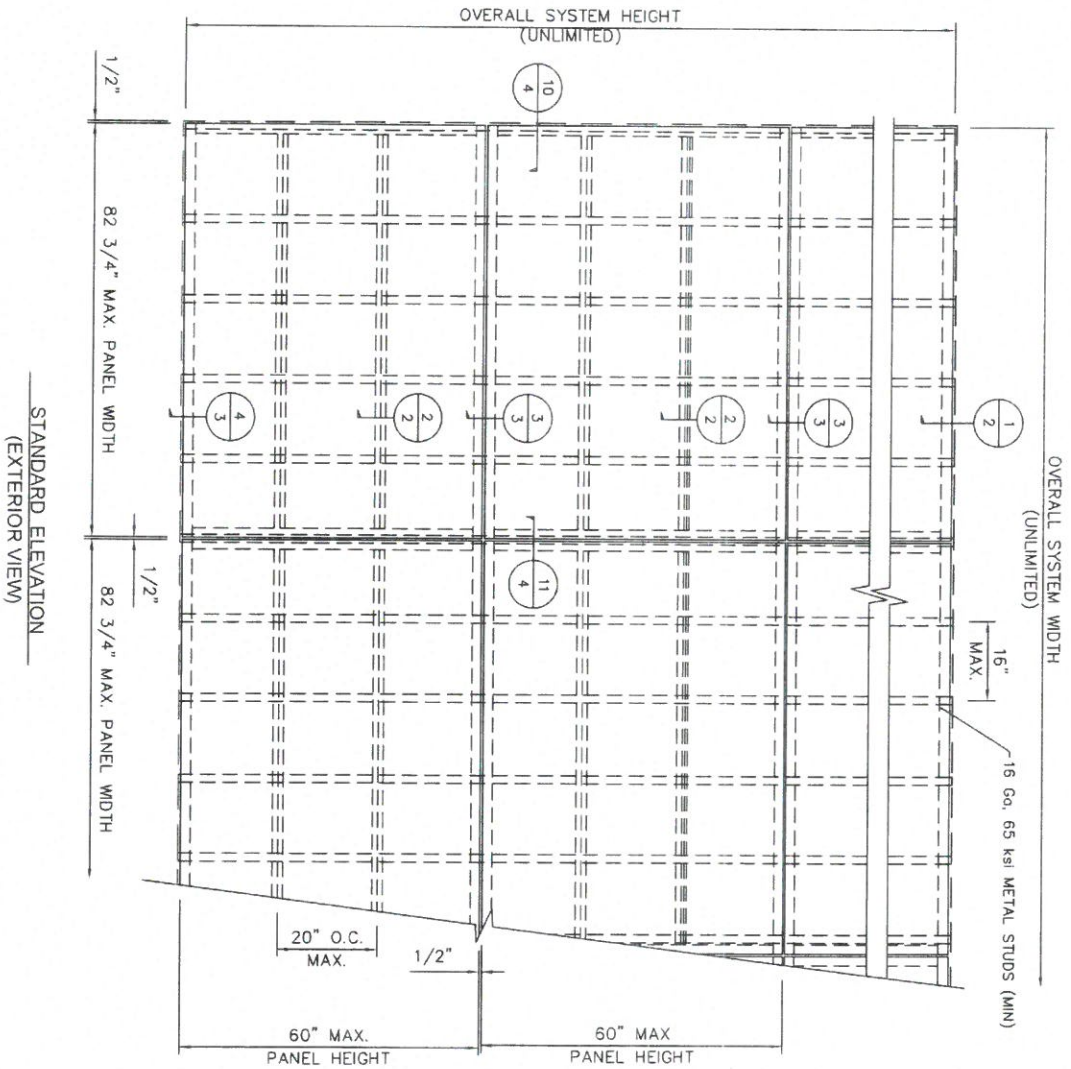
JUN 05 2020

SPECIALIZING IN IMPACT RESISTANT CURTAIN WALLS, STOREFRONTS, & WINDOWS

ABRAMS AAP-100 (RAINSCREEN) 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 PRESSURE LISTED ON THIS SHEET.
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 STEEL STUDS MUST FULLY PENETRATE THE WALL OF THE STUD, WITH 3 ADDITIONAL THREADS BEYOND.
9. ACM PANEL IS ALUCOBOND 4mm ALUMINUM PANEL WITH FR CORE (SEE SHEET 5).
10. ALUMINUM EXTRUSIONS ARE 6063-T5 MIN.



DESIGN PRESSURE
+/- 130 Psf

ABRAMS
ARCHITECTURAL PRODUCTS
7280 DELTA CIRCLE
AUSTELL, GA 30188
Phone: 770-445-8728
Fax: 770-445-8839

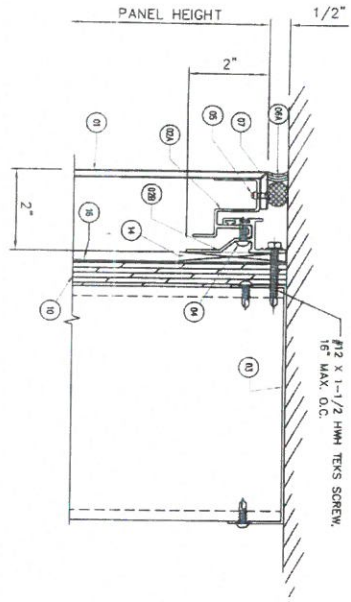
AAP-100
(RAINSCREEN)
WALL CLADDING
SYSTEM

SCOTT WOLTERS
FL PE# 62354
WOLTERS ENGINEERING
(CO# 27194)
15211 97TH ROAD
WEST PALM BEACH, FL 33412
(561) 225-1982

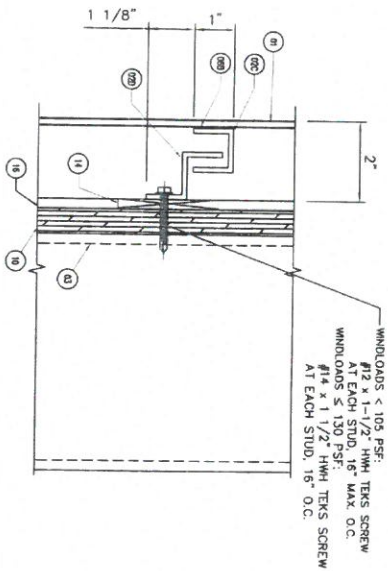


1ST SUBMITTAL	6/4/20
PRINTS ISSUED FOR	REV.# DATE

ALTERNATE DETAILS ON CONCRETE/CMU:

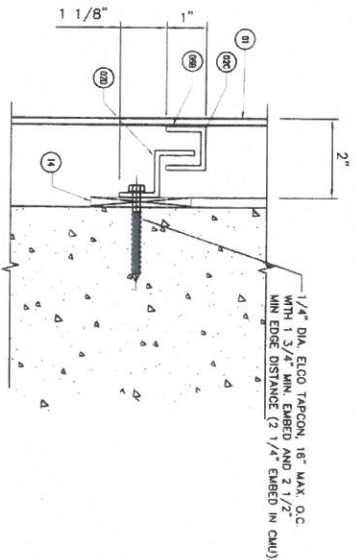
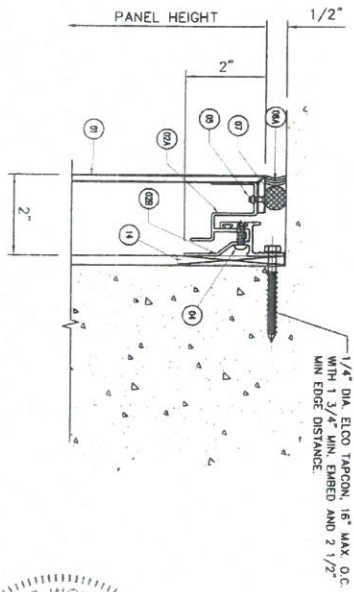


1
2



1
2

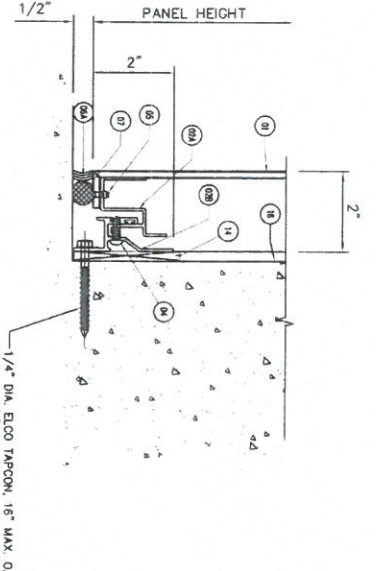
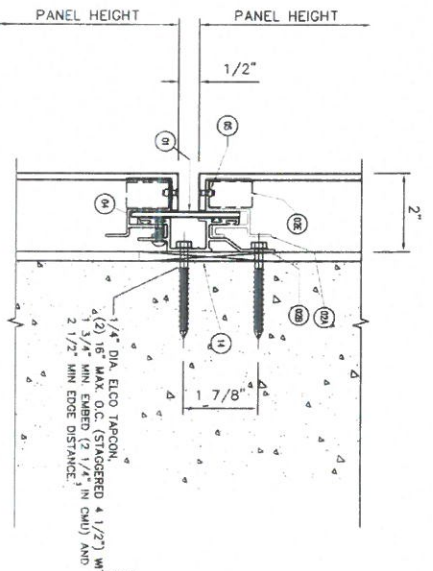
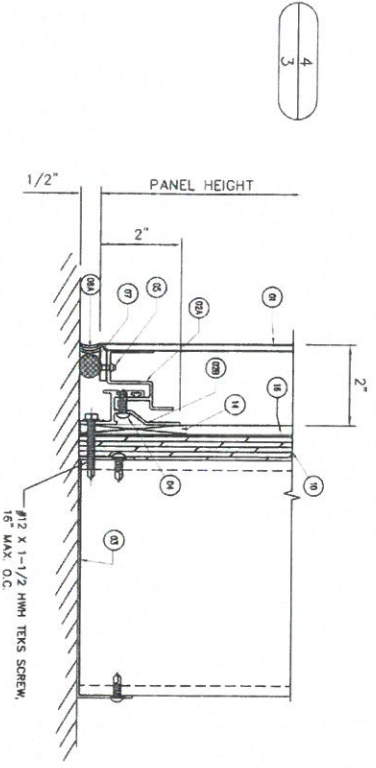
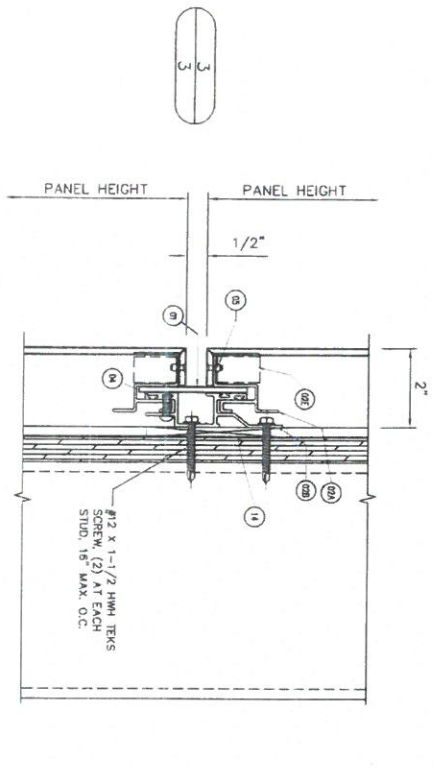
WINDLOADS < 105 PSF:
#12 X 1-1/2" HHW TEK SCREW
MIN. O.C. 18" MAX. O.C.
WINDLOADS > 105 PSF:
#14 X 1-1/2" HHW TEK SCREW
AT EACH STUD, 18" O.C.



1/4" DIA. ELOC TAPCON, 18" MAX. O.C.
MIN. EMBED AND 2 1/2"
MIN. EDGE DISTANCE (2 1/4" EMBED IN CMU).

<p>ABRAMS ARCHITECTURAL PRODUCTS 7280 DELTA CIRCLE AUSTIN, TX 78745 PHONE: 770-745-8128 FAX: 770-745-8839</p>	<p>AAP-100 (RAINSCREEN) WALL CLADDING SYSTEM</p>	<p>SCOTT WOLTERS FL PE# 62354</p> <p>WOLTERS ENGINEERING (CO.# 27194) 15211 97TH ROAD N WEST PALM BEACH, FL 33412 (561) 225-1982</p>		1ST SUBMITTAL	6/4/20
				PRINTS ISSUED FOR	REV.# DATE

ALTERNATE DETAILS ON CONCRETE/CMU:



ABRAMS
ARCHITECTURAL PRODUCTS

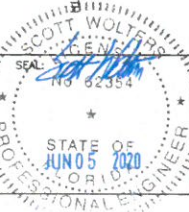
7260 DELTA CIRCLE
AUSTELL, GA 30108
Phone: 770-745-8328
Fax: 770-745-8839

DWG: AAP-100
SHEET: 3/5

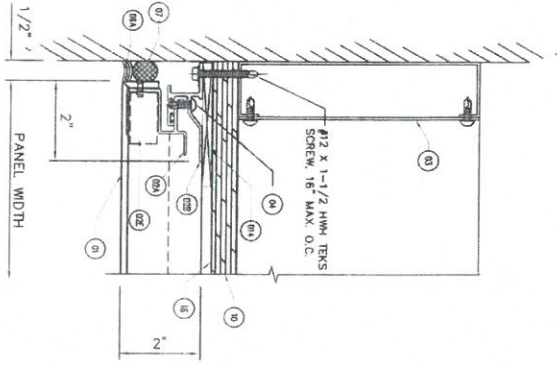
AAP-100
(RAINSCREEN)
WALL CLADDING
SYSTEM

SCOTT WOLTERS
FL PE# 62354

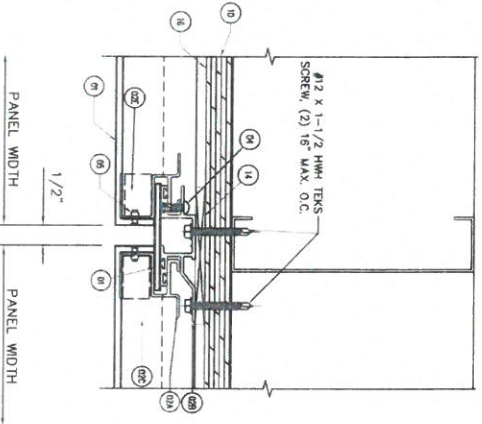
WOLTERS ENGINEERING
(CO.# 27194)
15211 97TH ROAD N
WEST PALM BEACH, FL 33411
(561) 225-1982



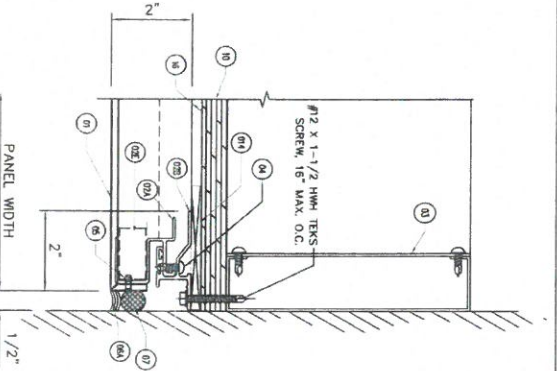
REV.#	DATE
1ST SUBMITTAL	6/4/20
PRINTS ISSUED FOR	



10
4

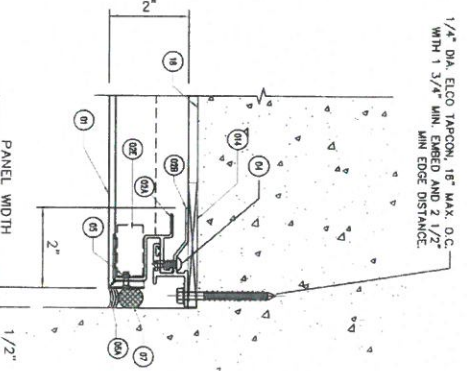
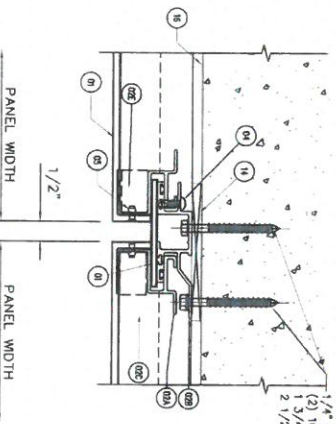
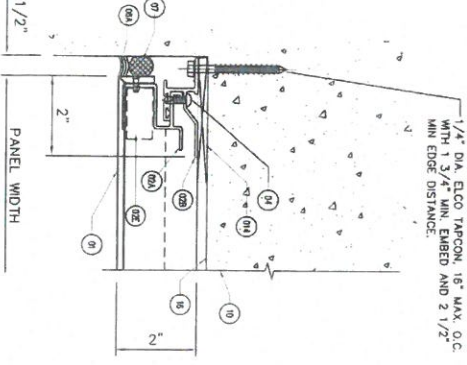


11
4



12
4

ALTERNATE DETAILS ON CONCRETE/CMU:



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



SCOTT WOLTERS
FL PE# 62354

WOLTERS ENGINEERING
(CO.# 27194)
15211 57TH ROAD N
WEST PALM BEACH, FL 33412
(561) 225-1982

AAP-100
(RAINSCREEN)
WALL CLADDING
SYSTEM

ABRAMS

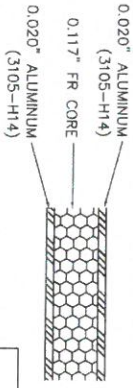
ARCHITECTURAL PRODUCTS

1730 DELTA CIRCLE
AUSTELL, GA 30168
Phone: 770-745-8728
Fax: 770-745-8836

DWG: AAP-100
SHEET: 4/5

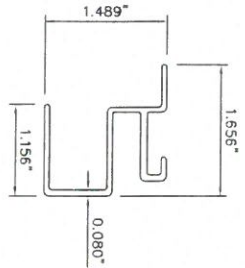
BILL OF MATERIALS		
MARK	DESCRIPTION	NOTES
1	ALUCOBOND 4MM ACM PANEL	
2A	ALUMINUM PANEL PERIMETER EXTRUSION	6063-T5 (MIN)
2B	ALUMINUM PANEL ANCHOR EXTRUSION	6063-T5 (MIN)
2C	ALUMINUM STIFFENER EXTRUSION	6063-T5 (MIN)
2D	ALUMINUM Z-ANCHOR EXTRUSION	6063-T5 (MIN)
2E	ALUMINUM CORNER ANGLE	6063-T5 (MIN)
3	METAL STUD SYSTEM (16 ga 65 ksi MIN)	
4	#8x3/4" PH GALV TEKS SCREW	
5	3/16" CLOSED END BLIND ALUM POP RIVET	
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	

ALUCOBOND 4 MM ACM PANEL MAKE-UP:

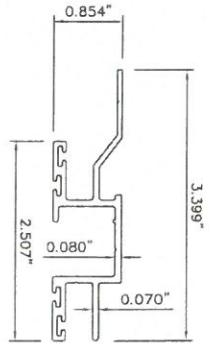


01

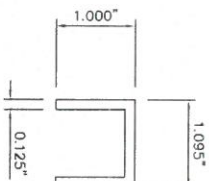
ALUCOBOND 4MM PANEL PROPERTIES		
DESCRIPTION	TEST	RESULTS
SPECIFIC GRAVITY		1.9
WEIGHT		1.56 psf
TENSILE STRENGTH	ASTM E8	7750 psf
ELONGATION	ASTM E8	14.2%
FLAME SPREAD INDEX	ASTM E84	<25
SMOKE DEVELOPED INDEX	ASTM E84	<100
SELF IGNITION TEMP	ASTM D1929	783°F
FLASH IGNITION TEMP	ASTM D1929	784°F



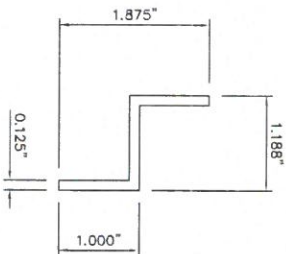
2A



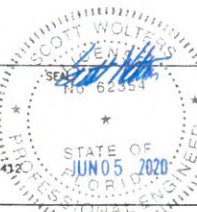
2B



2C



2D



SCOTT WALTERS
FL PE# 62354
WALTERS ENGINEERING
(COMM 27194)
15211 97TH ROAD N
WEST PALM BEACH, FL 33412
(561) 225-1982

AAP-100
(RAINSCREEN)
WALL CLADDING
SYSTEM

ABRAMS
ARCHITECTURAL PRODUCTS

7280 DELTA CIRCLE
AUSTELL, GA 30088
Phone: 770-745-8728
Fax: 770-745-8839

DWG: AAP-100
SHEET: 5/5

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