DESIGN LOADS BUILDING INFORMATION BUILDING SIZE: (4)11'-9" X 68'-0" FLOOR (LIVE): 50 p.s.f.. FLOOR (DEAD): 10 p.s.f. THIS CONSTRUCTION DESIGN CORRIDOR/FILE AREA: 100 p.s.f. SQUARE FOOTAGE: 3209 MARYLAND SNOW NOTE: CERTIFICATION IS BASED ON THE BUILDING SETBACK: Greater than 10' to common line or property line ROOF (LIVE): 30 p.s.f. THIS BUILDING IS TO NOT BE LOCATED IN THE FOLLOWING OCCUPANCY/USE GROUP: E-Educational ROOF (FLAT ROOF SNOW Pf): 35 p.s.f. COUNTIES. ALLEGHENY & GARRETT DUE TO THE REQUIRED MANUFACTURED DATE OF AUGUST 2010 OCCUPANT LOAD: (124) ROOF (GROUND SNOW Pg): 40 p.s.f. 40LB FLAT-ROOF DESIGN SNOW LOAD (PLEASE ENSURE NOTE TYPE OF CONSTRUCTION: V-B Combustible Unprotected IS ON DATA PLATE) ROOF (DEAD): 10 p.s.f. BUILDING LOCATION: Baltimore City, Maryland MAX. WIND LOAD: 120 m.p.h. @ exposure 'C', I=1.15 FLOOD PLAIN: Building not to be placed in "Flood Hazard Area's" OCCUPANCY CATAGORY III SEISMIC ZONE: SDS = .49 (SEISMIC DESIGN CATAGORY 'C') SD1 = .19SITE CLASS = D BUILDING SPECIFICATIONS (CONT'D): BUILDING SPECIFICATIONS: BUILDING SPECIFICATIONS (CONT'D): MECHANICAL: .045 EPDM RUBBER "BLACK" FRAME/FLOOR: ROOFING: EQUIPMENT: (4) 42,000 BTU (3.5 TON) WALL MOUNTED CENTRAL HVAC UNIT MANSARD: NONE (4) 11'-9" X 68'-0" FRAME: EXHAUST: W/10KW ELECTRIC HEAT STRIPS, COMMERCIAL ROOM VENTILATOR (2) THERMOSTATICALLY CONTROLLED POWER VENTS & THIS DRAWING HAS BEEN PREPARED FOR THE EXPRESS PURPOSE OF OUTLINING AND SPECIFYING THE DESIGN REQUIREMENTS OF OUR SUBSEQUENT PROPOSAL. THIS DRAWING MAY NOT BE REPRODUCED WITHOUT THE EXPRESS WRITTEN CONSENT OF MODULAR GENIUS, INC. M12x10.8 MAIN BEAM W/M10x8 I-BEAM CROSSMEMBERS @ 4'-8" O.C. STEEL: (2) STATIC GRILLES PER BOX (UNITS PROVIDE A TOTAL OF 11,900 CFM OF FRESH AIR, TOTAL REQUIRED (5) 6,000LB AXLES OVERSLUNG AXLES: GUTTER: ALUMINUM J-RAIL ALONG LENGTH BOTH SIDES BY THE 2009 ENERGY CODE IS 7440 CFM) 8:00 X 14.5, 14 PLY RATED TIRES: HITCH: BOLT ON REMOVABLE BALL HITCH SUPPLY: F/G IN CEILING W/12" X 12" ADJUSTABLE DIFFUSERS, 24" X 24" IN CORRIDORS (FIRE DAMPERS W/FUSIBLE LINKS IN CORRIDORS) BARRIER: GW POLY WOVEN UNDERSIDING (8) 3/0 X 4/0 SIZE/QNTY: JOISTS: 2X6 SPF#2 LONGITUDINAL @ 16" OC SPACING F/G IN CEILING W/14" X 14" GRILLES DUCTED BACK TO PLENUM WALL, RETURN: 'WHITE' VINYL DOUBLE HUNG WITH F/G INSECT SCREEN TYPE: INSULATION: R-21 UN-FACED F/G (16" WIDE) 24" X 24" GRILLES IN CORRIDORS (FIRE DAMPERS W/FUSIBLE LINKS IN \triangleleft CLEAR DOUBLE INSULATED LOW 'E' GLASS W/ARGON GLAZING: (1) LAYER 3/4" PREMIUM OSB, 24" O.C SPAN, HELD BACK 11" AT MATE DECKING: CORRIDORS) TION, BLINDS: 1" 'WHITE' HORIZONTAL VINYL MINI LINE FOR ON SITE SEAMING (4) 7-DAY WALL MOUNTED PROGRAMMABLE HEAT/COOL THERM: 1/8" VINYL TILE @51839 FORTRESS WHITE" CLASS B OR BETTER AND **EXTERIOR DOORS:** FLAME SPREAD OF 75 OR LESS FURNISHINGS: (1) 6/0 X 6/8 (1) 3/0 X 6/8 SIZE/QTY: SHELVING (4) 48" X 12" DEEP LAMINATE SHELVES W/COAT RODS IN CLASSROOM 18GA COMMERCIAL STEEL EXTERIOR DOOR W/16GA STEEL FRAME, **EXTERIOR WALLS:** CLOSETS (UP 66" A.F.F) (SCHOOL SYSTEM TO ADJUST HEIGHT FOR ADA EXTERIOR MOUNTED DOUBLE DOOR GASKET AND REMOVABLE CENTER 2X4 #2 SPF OR BETTER @ 16"OC SPACING, 8'-0" HIGH \checkmark MULLION & 5" X 20" VIEW CLEAR VISION PANEL, UP 43" TO BOTTOM 2X4 #2 SPF OR BETTER @ 12" O.C. SPACING, 9'-9" HIGH (CORRIDOR) (8)4'-9" LONG WHITE PAINTED COAT RACK W/15 CHROME COAT HARDWARE: SEE DOOR SCHEDULE, GRADE 2 HARDWARE INTERN SINGLE TOP PLATE & SINGLE BOTTOM PLATE HOOKS ON EACH ADEMY INSULATION: R-15 KRAFT-FACED F/G BATTS COMM **INTERIOR DOORS:** 1/2" VINYL COVERED GYPSUM "LOOMA BEIGE", INT FINISH TO BE CLASS (8) 144" X 48" ALUMINUM FRAMED "WHITE" ENAMELED STEEL DRY FINISH: BOARDS: INT. DOORS: (4) 3/0 X 6/8 SOLID CORE PRE-FINISHED WOODGRAIN W/TIMELY "B" OR BETTER, MINIMUM FLAME SPREAD - 75 OR LESS ERASE BOARD W/MAP RAIL, FLAG HOLDER & MARKER TRAY STEEL FRAME "WESTERN WHITE" (20 MINUTE RATED) (6) 48" X 48" ALUMINUM FRAMED TACK BOARD (6) 48" X 48" ALUMINUM FRAMED TACK BOARD
REQUIRED FIRE EXTINGUISHER TO BE INSTALLED ON SITE BY MODULAR
GENIUS AND BE INSPECTED BY THE LOCAL AUTHORITY RAVING
JURISDICTION (4) 3/0 X 6/8 SOLID CORE PRE-FINISHED WOODGRAIN W/TIMELY INTERIOR WALLS: FIRE EXT: STEEL FRAME "WESTERN WHITE" 2X4 & 2X3 #2 SPF OR BETTER @ 16"OC SPACING, 8'-0" HIGH STUDS: HANDICAPPED TACTILE SIGNS INSTALLED ON SITE AND ARE SUBJECT TO INSPECTION AND APPROVAL BY AUTHORITY HAVING JURISDICTION CRAWL SPACE ACCESS TO RE & MINIMUM OF 100 PLATES: SINGLE TOP PLATE & SINGLE BOTTOM PLATE HARDWARE: SEE DOOR SCHEDULE, GRADE 2 HARDWARE PNO CHILITINI INSULATION: R-13 UN-FACED F/G BATTS SIGNS: 田 ELECTRICAL: FINISH: 1/2" VINYL COVERED GYPSUM "LOOMA BEIGE", CORRIDORS TO HAVE 5/8" OR SERVICE: 120/240V SINGLE PHASE, 3 WIRE TYPE 'X' GYPSUM UNDER VINYL WALL FINISH FOR 1 HOUR FIRE RATING, ACCESS: (4 100A MAIN BREAKER CUTLER HAMMER BR1020B100PK, (2) 150A **PANELS** SITE AND IS SUBJECT TO INSPECTION AND APPROVAL BY AUTHORITY INT FINISH TO BE CLASS "B" OR BETTER, MINIMUM FLAME SPREAD -75THE SECOND STATE OF THE PARTY O AIN BREAKER CUTLER HAMMER BR1630B150PK W/ENT SERVICE HAVING JURISDICTION OR LESS ENTRANCE ROMEX CABLE & PLASTIC BOXES EXCEPT MC CABLE & METAL BOXES IN DESIGN CODES RACEWAY: MARYLAND CORRIDOR (PER NEC) COVE BASE: 4" VINYL COVE BASE, EXCEPT 6" VINYL COVE BASE IN BATHROOM 2009 NFPA 101 LIFE SAFETY CODE W/MD AMENDMENTS 16"X48" SURFACE MOUNTED FOUR TUBE LIGHTS W/T-8 LAMPS & TARKETT DEEP BROWN #76 LIGHTS: 2009 INTERNATIONAL BUILDING CODE W/MD AMENDMENTS WRAP AROUND DIFFUSERS VINYL COVERED WOODGRAIN TRI-MOLD BATTENS CORNERS: rofessional Cyrtification. I certify that INTERNATIONAL PLUMBING CODE FOUR-TUBE GRID MOUNTED FLUORESCENT FIXTURES W/T-8 VINYL COVERED WOODGRAIN BATTENS W/"WHITE" ACOUSTIC SUSPENDED CEILING: these documents were prepared or 2009 INTERNATIONAL MECHANICAL CODE LAMPS IN CORRIDOR CEILING ANGLE IN CORRIDOR 2009 INTERNATIONAL ENERGY CONSERVATION CODE proved by me, and that I am a 2008 NATIONAL ELECTRICAL CODE duly licensed professional engineer (QUANTITY IS DETERMINED BY 1.2 WATTS/SQ. FT) "WHITE" PRE-FINISHED WOOD JAMB & CASING WINDOWS: $\mathbf{\Omega}$ 2008 NATIONAL ELECTRICAL CODE EXT LIGHTS: (3) 13W FLUORESCENT EXTERIOR LIGHT (825 LUMENS) W/BATTERY 2002 MARYLAND ACCESSIBILITY CODE (MARCH 18, Lic. #21530 Exp. Date: 3-16-17 INT DOORS: ENAMEL FINISHED HOLLOW METAL TIMELY FRAME BACKUP EMERGENCY FEATURE @ EVERY EXTERIOR DOOR (PHOTO-CELL CONTROLLED) EXTERIOR FINISH: SHEATHING: HOUSEWRAP 120V/15 AMP DUPLEX "WHITE" PER SHEET 'E1' 2006 INTERNATIONAL BUILDING CODE 7/16" SMART PANEL W/8"OC GROOVES "NAVAJO WHITE" (SHERWIN SIDING: 120V/15 AMP DUPLEX GFI IN BATHROOM "WHITE" 2006 INTERNATIONAL PLUMBING CODE WILLIAMS #SW6126) 120V/15 AMP GFI BETWEEN HVAC UNITS "WHITE" W/IN USE WATERPROOF 2006 INTERNATIONAL MECHANICAL CODE Kevin M. Finn, P.E., Inc. 1X4 PRIMË TRIM @ TOP, BOTTOM, CORNERS & AROUND DOORS AND 2006 INTERNATIONAL ENERGY CONSERVATION CODE OVFR MODULAR GENIUS 1716 Elkhart Rd., Suite 1 WINDOWS "LODGE BROWN" (1) 120V/15 AMP UNDER FLOOR HEAT TAPE RECEPTACLE 2003 ICC/ANSI A117.1 STANDARDS FOR ACCESSIBILITY Goshen, IN 46526 SMART BUILDING 2005 NATIONAL ELECTRICAL CODE (OPTIONAL) (45) 7/16" X 4' X 8' SMART PANEL W/8"OC GROOVES 120V/15 AMP WHITE TOGGLE SWITCH IN CORRIDORS, SEE SHEET 'E1' SWITCHES: MD Lic # 21530 "NAVAJO WHITE" (SHERWIN WILLIAMS #SW6126) 120V/15A CEILING MOUNT OCCUPANCY SENSORS IN CLASSROOMS WITH LEGEND COVER MANUAL OVERRIDE ON WALL EXIT/EMER: WALL/CEILING MOUNTED EXIT/EMERGENCY LIGHTS W/BATTERY BACKUP PAGE DESCRIPTION MATEBEAM: (1) LAYER 1-1/2" X 20", 2.0 LVL WALL/CEILING MOUNTED EMERGENCY LIGHTS W/BATTERY BACKUP **COVER SHEET** MECHANICAL PLAN ROOF TRUSSES @ 16"OC SPACING VOICE/DATA: LOCATIONS W/SINGLE GANG BOXES AND 3/4" FLEXIBLE CONDUIT TO HAS 4/15/16 SECTION PLAN SITE PLAN C1 S1 2X8 #2 SPF OR BETTER ROOF RAFTERS @ 16"OC SPACING (CORRIDOR) RAFTERS: ABOVE CORRIDOR CEILING FOR EQUIPMENT TO BE INSTALLED ON SITE C2 SITE ELECTRIC S2 FIRE DETAILS SHEATHING: 7/16" OSB W/ 1/2" GYPSUM SHEATHING FIRE DETAILS 16-0005 N.T.S. SITE ELECTRIC DETAILS C3 **S**3 1/2" SEASPRAY FINISHED GYPSUM, INT FINISH TO BE CLASS "A" OR FIRE ALARM: LOCATIONS W/SINGLE GANG METAL BOXES AND 3/4" EMT CONDUIT TO CEILING: FLOOR PLAN **BLOCKING DIAGRAM** ABOVE CORRIDOR CEILING FOR EQUIPMENT TO BE INSTALLED ON SITE BETTER, MINIMUM FLAME SPREAD - LESS THEN 25 FI EVATIONS **BLOCKING DETAILS** \$5 A2 4/29/16 8:50AM 2X4 ACOUSTIC SUSPENDED CEILING IN CORRIDOR, INT FINISH TO BE BY OTHERS (NO COVER PLATES SUPPLIED) E1 ELECTRICAL PLAN **S6** STRAPPING DETAILS CLASS "A" OR BETTER, MINIMUM FLAME SPREAD - LESS THEN 25 PPROVED BY: SMOKE DET: 120V/15A INTERCONNECTED CEILING SMOKE DETECTORS UNIT LABELS PANEL SCHEDULES & RISER LB1 INSULATION: R-46 KRAFT FACED F/G & CALCULATIONS

	DOOR/WINDOW SPECIFICATIONS & ROUGH-IN SCHEDULE		
I.D.	DESCRIPTION	ROUGH-IN	QNTY
0	6/0 X 6/8 18GA COMMERCIAL STEEL DOOR W/16GA PAINTED STEEL FRAME, REMOVABLE CENTER MULLION, EXTERIOR MOUNTED DOUBLE DOOR GASKET, (2) 5° X 20° VISION PANEL, UP 43° TO BOTTOM, (6) 4.5°x4.5° NRP BALL BERING HINGES (26D FINISH), (2) DOOR CLOSER TELL 600 SERIES ≱12641-PA-AL, (2) PANIC HARDWARE TELL \$8300-US32D-CTLBB1 KEYED LEVER TRIM, THRESHOLD, DOOR SWEEP WITH DRIP, WEATHER STRIPPING VINYL/ALUMINUM & ALUMINUM DRIP CAP, GRADE 2 HARDWARE		1
2	3/0 x 6/8 18GA COMMERCIAL STEEL DOOR W/16GA PAINTED STEEL FRAME, (1) 5" x 20" VISION PANEL, UP 43" TO BOTTOM, (3) 4.5"x4.5" NRP BALL BERING HINGES (26D FINISH), (1) DOOR CLOSER TELL 600 SERIES #12641-PA-AL, (1) PANIC HARDWARE TELL #8300-US32D-CTLB81 KEYED LEVER TRIM, THRESHOLD, DOOR SWEEP WITH DRIP, WEATHER STRIPPING VINYL/ALUMINUM & ALUMINUM DRIP CAP, GRADE 2 HARDWARE	38" X 81"	1
3	3/0 x 6/8 1-3/4" prem-wood pre-finished solid core woodgrain door w/pre-finished "western white" timely steel frame, 5"x20" vision panel, up 43" to bottom, (3) 4.5" x 4.5" ball bearing hinges (26d finish), classroom function lever set (26d finish), flush mounted door closer & floor mounted door stop (20 minute rated) grade 2 hardware	37-1/2" X 81"	2
4	3/O x 6/8 1-3/4" PREM-WOOD PRE-FINISHED SOLID CORE WOODGRAIN DOOR W/PRE-FINISHED "WESTERN WHITE" TIMELY STEEL FRAME, (3) 4.5" X 4.5" BALL BEARING HINGES (26D FINISH), STOREROOM FUNCTION LEVER SET (26D FINISH), & FLOOR MOUNTED DOOR STOP, GRADE 2 HARDWARE	37-1/2" X 81"	2
A	3/O X 4/O "WHITE" VINYL FRAMED DOUBLE HUNG VERTICAL SLIDER W/DOUBLE INSULATED GLASS LOW "E' & ARGON GAS, "WHITE" PRE-FINISHED WOOD RETURN AND CASING, F/G INSECT SCREENS & "WHITE" 1" VINYL MINI BLINDS (U=.31, SHGC=.32, VT=.56)	36 1/4" X 48 1/2" UP 80" A.F.F. TO TOP	8

- 2 (2) LSTA15 STRAPS W/(5) 10d NAILS EACH SIDE & (3) 2X3 SPF#2 COLUMNS, (2) 3/8" X 3" LAGS (SEE DETAIL SHEET S4) (SIM)
- 3 (3) LSTA15 STRAPS W/(5) 10d NAILS EACH SIDE & (5) 2X3 SPF#2 COLUMNS, (4) 3/8" X 3" LAGS (SEE DETAIL SHEET S4)

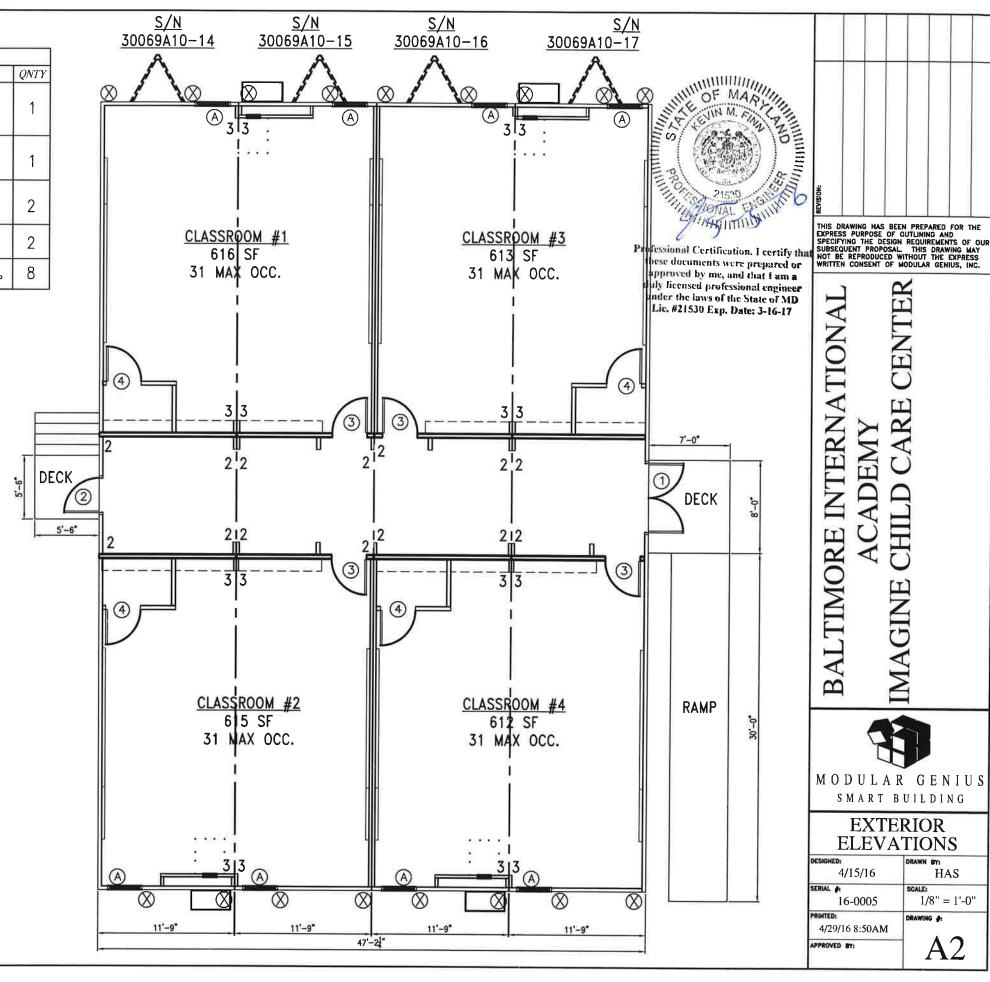
NOTE: WHEN 2 & 3 ARE NEXT TO EACH OTHER ONLY (4)
LAGS ARE REQUIRED FOR BOTH OF THE COLUMNS

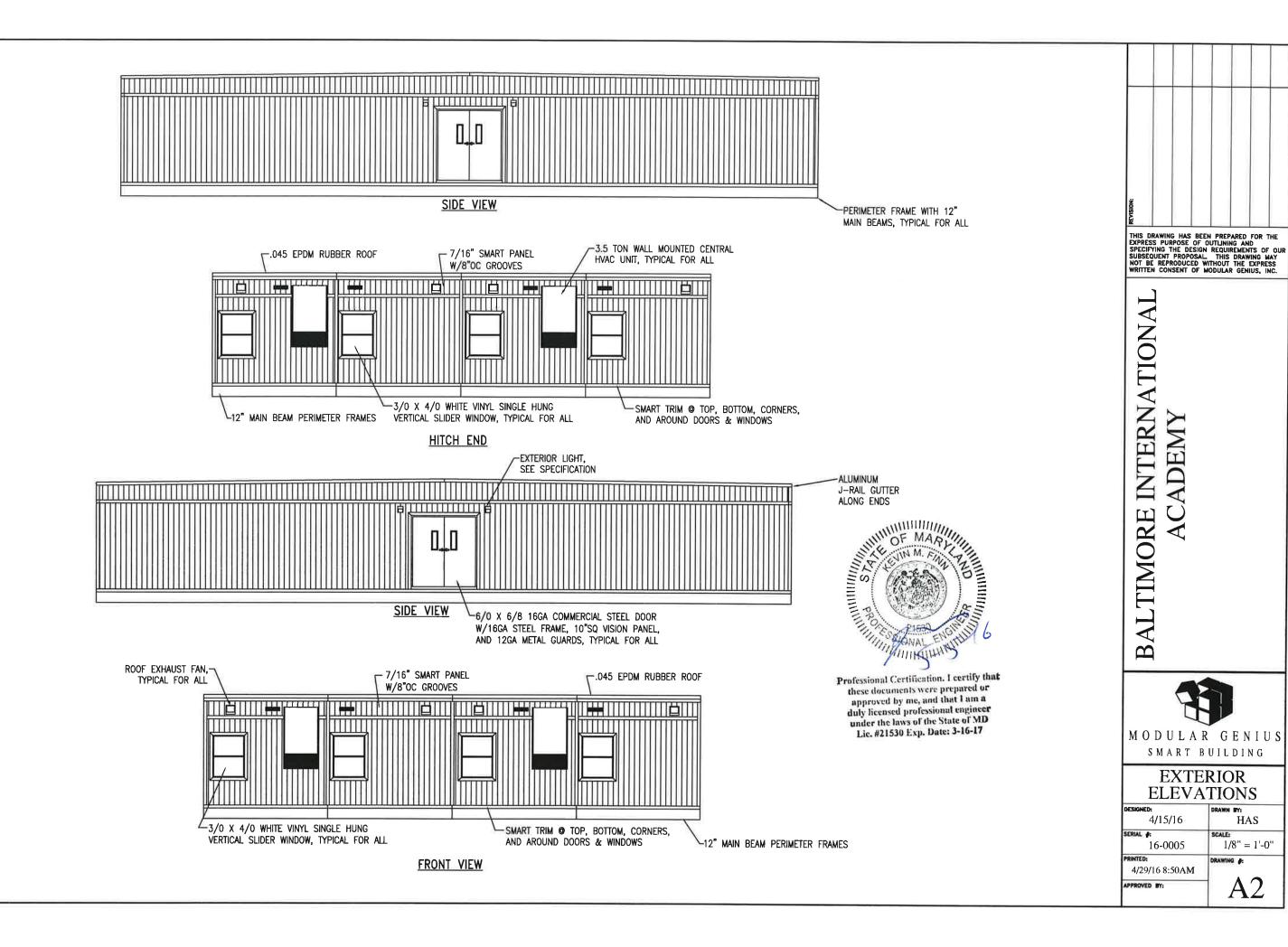
(1) 15" X 20 GA STRAP W/(5) 0.131" NAILS & (1) 3/8" X 3" LAG TO FRAME FROM SHEARWALL STRUT (STUD) TO FLOOR RIM ALL SIDEWALL/ENDWALL OPENINGS TO HAVE (2) 2X6 SPF#2 HEADERS.

WINDOWS TO HAVE (2) JAMBS & (1) JACK STUD DOUBLE DOOR TO HAVE (4) JAMBS & (1) JACK STUD

BUILDING NOTES:

- 1. ATTIC VENTILATION SHALL NOT BE LESS THAN 1/150th OF THE HORIZONTAL AREA TO BE VENTILATED, UNLESS A VAPOR BARRIER IS INSTALLED THEN THE RATE SHALL BE REDUCED TO 1/300th.
- 2. THE BUILDING ÉXTERIOR AND ALL FACILITIES WITHIN THE BUILDING SHALL BE IDENTIFIED WITH THE INTERNATIONAL SYMBOL OF ACCESSIBILITY.
- 3. BUILDER/DEALER SHALL BE RESPONSIBLE FOR ON SITE BARRIER FREE PROVISIONS: STEPS, RAMPS, PARKING SIGNS, ETC. BUILDING APPROACH (WALK OR RAMP) WITH A MINIMUM WIDTH OF 5' AND A GRADIENT OF NOT MORE THAN 1/20 FEET FOR SIDEWALKS AND A MAXIMUM OF 1/12 FOR RAMPS.
- 4. LANDING SHALL BE PROVIDED OUTSIDE OF EACH EXIT DOOR, EACH EXIT DOOR 5 FOOT MINIMUM WIDTH WITH 1/2" MAXIMUM CHANGE N ELEVATION. LANDING TO EXTEND A MINIMUM OF 24" PAST STRIKE EDGE OF THE DOOR. LANDING AND RAMPS BY OTHERS AT SITE.
- ALL LOCKS TO BE UNLOCKABLE FROM THE INTERIOR WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE.
- CORROSION RESISTANT FLASHING AT TOP AND SIDES OF DOORS, WINDOWS AND AT ROOF PENETRATIONS.
- ALL GLAZING WITHIN 24" OF EXTERIOR PASSAGE DOORS AND IN PASSAGE DOORS, OR WITHIN 18" OF FLOOR TO BE "SAFETY GLAZED" AND SO MARKED.





ELECTRICAL:

- 1. ALL RECEPTACLES TO BE GROUNDED TYPE.
- 2. ALL WIRING TO BE PER N.E.C., W/TYPE ROMEX OR MC WHERE EXPOSED ABOVE GRID CEILING COPPER) W/GROUND CONDUCTOR.
- 3. MAIN PANEL TO BE MARKED "SUITABLE FOR USE AS SERVICE EQUIPMENT", AND BE EQUIPPED WITH BREAKER/FUSE TYPE OVER CURRENT PROTECTION.
- 4. PROPER THERMAL OVERLOAD PROTECTION TO BE PROVIDED FOR ALL MOTORS.
- 5. DISCONNECTING MEANS WITHIN SIGHT REQUIRED FOR ALL MOTORS.
- 6. WEATHERPROOF PROTECTION REQUIRED FOR ALL OUTDOOR LIGHTS, RECEPTACLES AND DISCONNECTS.
- 7. PROPER WORKING CLEARANCES TO BE PROVIDED AND MAINTAINED ABOUT ALL ELECTRICAL FOLIPMENT.
- 8. ALL FLUORESCENT FIXTURES REQUIRE THERMAL PROTECTION AND PROPER CLEARANCES FROM INSULATION, ALSO APPLICABLE FOR INCANDESCENT FIXTURES.
- COMBINATION EXHAUST FAN/LIGHT AND ALL RECESSED INCANDESCENT FIXTURES TO BE WITH THERMAL PROTECTION.
- 10. EXIT LIGHTS (IF ELECTRIC) MUST BE FED FROM AN APPROVED EMERGENCY SERVICE CONNECTED AHEAD OF, BUT NOT WITHIN MAIN SERVICE DISCONNECTING MEANS ENCLOSURE, AND INSTALLED AS PER SERVICE REQUIREMENTS, OR BE BATTERY BACKUP TYPE UNITS.
- 11. SERVICE CONDUCTORS LOCATED WITHIN THE PERIMETER OF THE BUILDING SHALL BE INSTALLED IN ACCORDANCE WITH NATIONAL ELECTRIC CODE
- 12. EXTERIOR LIGHTS ARE TO BE PHOTO—CELL CONTROLLED AND BI-LEVEL SWITCHING OF INTERIOR LIGHTS IN ACCORDANCE WITH INTERNATIONAL ENERGY CONSERVATION OR STATE CODES.
- 13. INTERIOR LOCATION OF ELECTRICAL PANEL REQUIRES A DISCONNECT TO BE INSTALLED AT THE POINT OF ENTRANCE NEAREST THE SERVICE CONDUCTORS.

ELECTRICAL LEGEND

(4) 100A SINGLE PHASE BREAKER PANEL W/1-1/2" CONDUIT

0

16"X48" FOUR TUBE SURFACE MOUNTED FLUORESCENT LIGHT W/T-8

0

2X4 FOUR-TUBE GRID MOUNTED FLUORESCENT LIGHT W/T-8 LAMPS & SINGLE BALLASTS \$2GR8-432A-120V

\$

SINGLE POLE TOGGLE SWITCH UP 44" A.F.F. (U.O.N.)

13W FLUORESCENT LIGHT (825 LUMENS) W/BATTERY BACKUP EMERGENCY FEATURE, UP 84" A.F.F., PHOTO-CELL CONTROLLED, #30S-CP-HB-13PL-NPF-120-EM-LP

4 TDGT COMBINATION DUAL HEAD EMERG,/SINGLE FACED EXIT LIGHT W/BATTERY BACKUP, AP70RWHDH

4-4 00

DUAL HEAD WALL MOUNTED EMERGENCY LIGHT W/BATTERY BACKUP

15A. DUPLEX RECEPTACLE, 110V. UP 18" A.F.F. (U.O.N.)

15A. HEAT TAPE RECEPTACLE, 110V.

<u>J</u>

JUNCTION BOX PER PLAN

DATA/COMMUNICATION ROUGH—IN W/SINGLE GANG BOX UP 18" A.F.F. & 3/4" PLASTIC CONDUIT TO ABOVE CORRIODR (EQUIPMENT ON SITE BY OTHERS)

120V SMOKE DETECTOR ALL INTERCONNECTED ON SITE BY MGI ABOVE CORRIDOR CEILING

ABOVE CORRIDOR CEILING
PULL STATION & HOR/STROBE ROUGH-IN

H/S IPI Pull station & hor/strobe rough-in W/single gang box up 44" A.F.F, (1) single gang box up 84" A.F.F. & 3/4" emt conduit to above corridor ceiling (equipment on site by others)

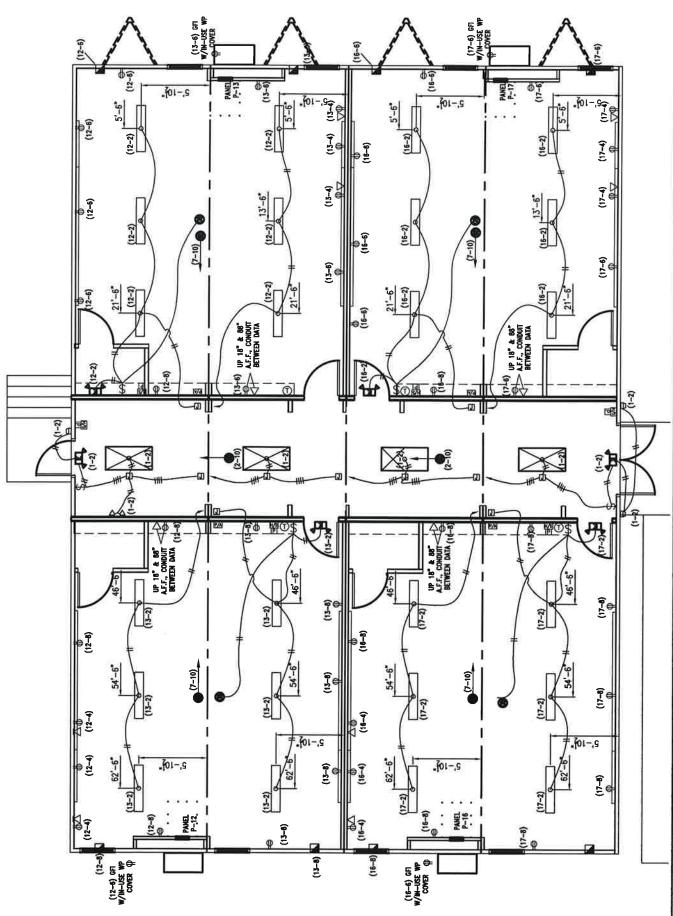
(S)

(16) CEILING MOUNTED OCCUPANCY SENSORS, WITH MANUAL OVERRIDE SWITCH ON WALL

THERMOSTATICALLY CONTROLLED ROOF EXHAUST FAN



Professional Certification, I certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of MD Lic. #21530 Exp. Date: 3-16-17



THIS DRAWING HAS BEEN PREPARED FOR THE EXPRESS PURPOSE OF OUTLINING AND SPECIFYING THE DESIGN REQUIREMENTS OF OUR SUBSEQUENT PROPOSAL THIS DRAWING MAY NOT BE REPRODUCED WITHOUT THE EXPRESS WRITTEN CONSENT OF MODULAR GENIUS, INC.

BALTI

INTERN

ORE

ADEM

MODULAR GENIUS SMART BUILDING

> ELECTRICAL PLAN

4/15/16 HAS

SERIAL #: SCALE: 1/8" = 1'-0"

PRINTED: DRAWING #:

4/29/16 8:50AM

E1

PANE	L PP-	-14			100A. MAIN BREAKER SUB PANEL 120/240V., SINGLE PHASE, 3 WIRE 10,000 AIC., BOT. FEED							
LOCA	TON: E	OCTERIC	OR WAL	L								
			RECESS		1-1/2" SI	ervice ent	RANCE, COPPER BUS, GROUND	BAR				
CIRC.	CIRC. BKR.	WIRE	POLE	CIRCUIT DESIGNATION	A	В	CIRCUIT DESIGNATION	CIRC.	CIRC. BKR.	WIRE	POLE	
1	60A.	6/3	2	3.5 TON HVAC UNIT W/10KW	47 6.5		LIGHTS	2	15A.	14/2	1	
3				ELEC. HEAT		4.5	RECEPTACLES	4	15A.	14/2	1	
5					8.5		RECEPTACLES, ROOF FAN	6	15A	14/2	1	
7						8.5	RECEPTACLES, ROOF FAN	8	15A.	14/2	1	
9								10	I			
					62	60						

PANE	L: PP-	-15			100A. MAIN BREAKER SUB PANEL 120/240V., SINGLE PHASE, 3 WIRE								
LOCA	TION: E	XTERIO	X WAL	L	10,000 AC., BOT. FEED								
HOUN	MING 1	YPE:	RECESS	ED	1-1/2° S	ervice ent	TRANCE, COPPER BUS, GROUND	BAR					
CIRC.	CIRC. BKR.	WIRE	POLE	CIRCUIT DESIGNATION	A	В	CIRCUIT DESIGNATION	CIRC.	CIRC. BKR.	WIRE	POLE		
1		6/3		3.5 TON HVAC UNIT W/10KW	47 6.5		LIGHTS	2		14/2			
3				ELEC. HEAT		47 4.5	RECEPTACLES	4	15A.	14/2	1		
5					8.5		RECEPTACLES, ROOF FAN	6	15A.	14/2	1		
7						8.5	RECEPTACLES, ROOF FAN	8	15A	14/2	1.		
9								10					
			_		62	60							

PANE	L: PP-	-16			100A MAI	N BREAKER	SUB PANEL 120/240V., SINGL	E PHASE	, 3 WH	RE	
LOCAT	TION: E	XTERIC	OR WAL	L	10,000 AIC., BOT. FEED						
			RECESS		1-1/2" S	ervice ent	rance, copper bus, ground				
CIRC.	CIRC. BKR.	WIRE	POLE	CIRCUIT DESIGNATION	A	В	CIRCUIT DESIGNATION	CIRC.	CIRC. BKR.	WIRE	POLE
1		6/3		3.5 TON HVAC UNIT W/10KW	47 6.5		LIGHTS	2	15A.	14/2	1
3				ELEC, HEAT		47 45	RECEPTACLES	4	15A.	14/2	1
5					8.5		RECEPTACLES, ROOF FAN	6	15A.	14/2	1
7						8.5	RECEPTACLES, ROOF FAN	В	15A.	14/2	1
9								10			
					62	60					

PANE	L: PP-	-17			100A. MAII	N BREAKER	SUB PANEL 120/240V., SINGL	E PHASE	, 3 WII	RE		
LOCA	TION: E	XTERK	JR WAL	ı	10,000 AK	10,000 AlC., BOT. FEED						
MOUN	MING 1	YPE: I	RECESS	Ð	1-1/2" S	ervice ent	rance, copper bus, ground	BAR				
CIRC. NO.	CIRC. BKR.	WIRE	POLE	CIRCUIT DESIGNATION	A	В	CIRCUIT DESIGNATION	CIRC.	CIRC. BKR.	WIRE	POLE	
1		6/3		3.5 TON HVAC UNIT W/10KW	47 65		LIGHTS	2		14/2	- 1	
3				ELEC. HEAT		43	RECEPTACLES	4	15A.	14/2	1	
5					8.5		RECEPTACLES, ROOF FAN	6	15A.	14/2	1	
7						_ US	RECEPTACLES, ROOF FAN	8	15A.	14/2	1	
9								10				
				1	62	60			•			

	100 AMP BREAKER PANEL
	MINIMUM COPPER SERVICE FEEDER, 3#3 90°C THHN W/#8 GROUND IN 1 1/2" CONDUIT, PER NEC TABLE

310.16 & 250.122

GROUNDING ELECTRODE SYSTEM TO BE PROVIDED PER NEC SECTIONS 250.50 & 250.52 ON SITE BY OTHERS

ONE LINE DIAGRAM

Ele	ctrical Load Calc	NAMES AND ADDRESS OF THE PARTY	11 2214 2 22 4 20 2			
	Item	QTY	Watts	%	Total	
Non-Continuous loads	Receptacles	14	180	1	2520	Watt
	Smoke Detector	0	0.8	1 :	0	_ Watt
			Sub	Total	2520	Watt
Continuous loads	Interior Lights	6	128	1.25	960	Watt
	Interior Lights	0	64	1.25	0	Watt
	Fan	0	156	1.25	0	Watt
	Exit/Emergency	1	2.8	1.25	3.5	Watt
	Exterior Light	0	13	1.25	٥	Watt
	=		Sub	Total	964	Watt
Other Continuous loads	Water Heater	0	1500	1.25	0	Watt
	Roof fan	2	120	1.25	300	Watts
	HVAC	1	11280	1.25	14100	Watts
			Sub	Total	14400	Watts
Calculated Lighting load		680	3	1	2040	Watts
ighting Circuits required	2040	1	120	=	17.0	Amps
lote: Use Calculated lighting	load because it exce	eds 125 pe	rcent of the	ne actua	lighting	
anel Size	Non-Continuous Ele	ectrical Loa	id		2520	Watts
	Continuous Lighting	Load	2040	1	2040	Watts
	Other Continuous L	oads		12	14400	Watts
			Total	Load_	18960	_ Watts
anel Phase Amos	18960	1	240	=	79.0	Amps

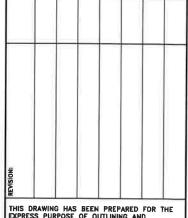
Ele	ctrical Load Calc	ulations	Panel #	15		
	Item	QTY	Watts	%	Total	
Non-Continuous loads	Receptacles	14	180	1	2520	Watts
	Smoke Detector	0	0.8	1 _	0	Watts
			Sub	Total	2520	Watts
Continuous loads	Interior Lights	6	128	1.25	960	Watts
	Interior Lights	0	64	1.25	0	Watts
	Fan	0	156	1.25	0	Watts
	Exit/Emergency	1	2.8	1.25	3.5	Watts
	Exterior Light	0	13	1.25	0	Watts
			Sub	Total	964	Watts
Other Continuous loads	Water Heater	0	1500	1.25	0	Watts
	Roof fan	2	120	1.25	300	Watts
	HVAC	1	11280	1.25	14100	Watts
			Sub	Total	14400	Watts
Calculated Lighting load		680	3	1	2040	Watts
Lighting Circuits required	2040	1	120	=	17.0	Amps
Note: Use Calculated lighting	load because it exce	eds 125 per	rcent of th	e actua	al lighting	
Panel Size	Non-Continuous Ele	ectrical Load	d		2520	Watts
	Continuous Lighting	Load	2040	1	2040	Watts
	Other Continuous L	oads		-	14400	Watts
			Total	Load	18960	Watts
Panel Phase Amps	18960	T	240	=	79.0	Amps

Ele	ctrical Load Calc	ulations	Panel #	16		
	ltem	QTY	Watts	%	Total	
Non-Continuous loads	Rec eptacles	14	180	1	2520	Watts
	Smoke Detector	0	0.8	1 _	0	_ Watts
			Sub	Total	2520	Watts
Continuous loads	Interior Lights	6	128	1, 25	960	Watts
	Interior Lights	0	64	1.25	0	Watts
	Fan	0	156	1.25	0	Watts
	Exit/Emergency	1	2.8	1, 25	3,5	Watts
	Exterior Light	0	13	1.25	0	Watts
			Sub	Total	964	Watts
Other Continuous loads	Water Heater	0	1500	1,25	0	Watts
	Roof fan	2	120	1.25	300	Watts
	HVAC	1	11280	1.25	14100	Watts
			Sub	Total	14400	Watts
Calculated Lighting load		680	3	1	2040	Watts
Lighting Circuits required	2040	1	120	=	17.0	Amps
Note: Use Calculated lighting	load because it exce	eds 125 pe	ercent of th	e actua	lighting	load
Panel Size	Non-Continuous Ele	ctrical Loa	ıd		2520	Watts
	Continuous Lighting	Load	2040	1	2040	Watts
	Other Continuous L	oads			14400	Watts
			Total	Load	18960	Watts
Panel Phase Amps	18960	1	240	=	79.0	Amps

Ele	ctrical Load Calc	ulations	Panel #	17		
	Item	QTY	Watts	%	Total	
Non-Continuous loads	Receptacles	14	180	1	2520	Watts
	Smoke Detector	0	0.8	1 _	0	Watts
			Sub	Total	2520	Watts
Continuous loads	Interior Lights	6	128	1.25	960	Watts
	Interior ⊔ights	0	64	1.25	0	Watts
	Fan	0	153.6	1.25	0	Watts
	Exit/Emergency	1	5	1.25	6.25	Watts
	Exterior Light	0	13	1,25	0	Watts
	-		Sub	Total	966	Watts
Other Continuous loads	Water Heater	0	1500	1, 25	0	Watts
	Roof fan	2	120	1,25	300	Watts
	HVAC	1	11280	1.25	14100	Watts
			Sub	Total	14400	Watts
Calculated Lightimg load		680	3	1	2040	Watts
Lighting Circuits required	2040	1	120	=	17.0	Amps
Note: Use Calculated lighting	load because it exce-	eds 125 per	rcent of th	ie actua	lighting	load
Panel Size	Non-Continuous Ele	ctrical Loa	d		2520	Watts
	Continuous Lighting	Load	2040	1	2040	Watts
	Other Continuous L	oads			14400	Watts
			Total	Load_	18960	Watts
Panel Phase Amps	18960	1	240	2	79.0	Amps



Professional Certification. I certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of MD Lic. #21530 Exp. Date: 3-16-17



THIS DRAWING HAS BEEN PREPARED FOR THE EXPRESS PURPOSE OF OUTLINING AND SPECIFYING THE DESIGN REQUIREMENTS OF OUR SUBSEQUENT PROPOSAL. THIS DRAWING MAY NOT BE REPRODUCED WITHOUT THE EXPRESS WRITTEN CONSENT OF MODULAR GENIUS, INC.

ALTIMORE INTERNATIONAL ACADEMY



PANEL SCHEDULES, RISERS & CALCS

DESIGNED: 4/15/16	DRAWN BY: HAS
16-0005	SCALE: 1/8" = 1'-0"
PRINTED: 4/29/16 8:50AM	DRAWING #:
APPROVED BY:	l El

MECHANICAL LEGEND

 \boxtimes

12" X 12" CEILING MOUNTED ADJUSTABLE SUPPLY DIFFUSER



14" X 14" CEILING MOUNTED RETURN GRILLE



24" X 24" GRID MOUNTED ADJUSTABLE SUPPLY DIFFUSER



24" X 24" GRID MOUNTED RETURN GRILLES



PROGRAMMABLE HEAT/COOL THERMOSTAT MOUNTED UP 48" A.F.F.



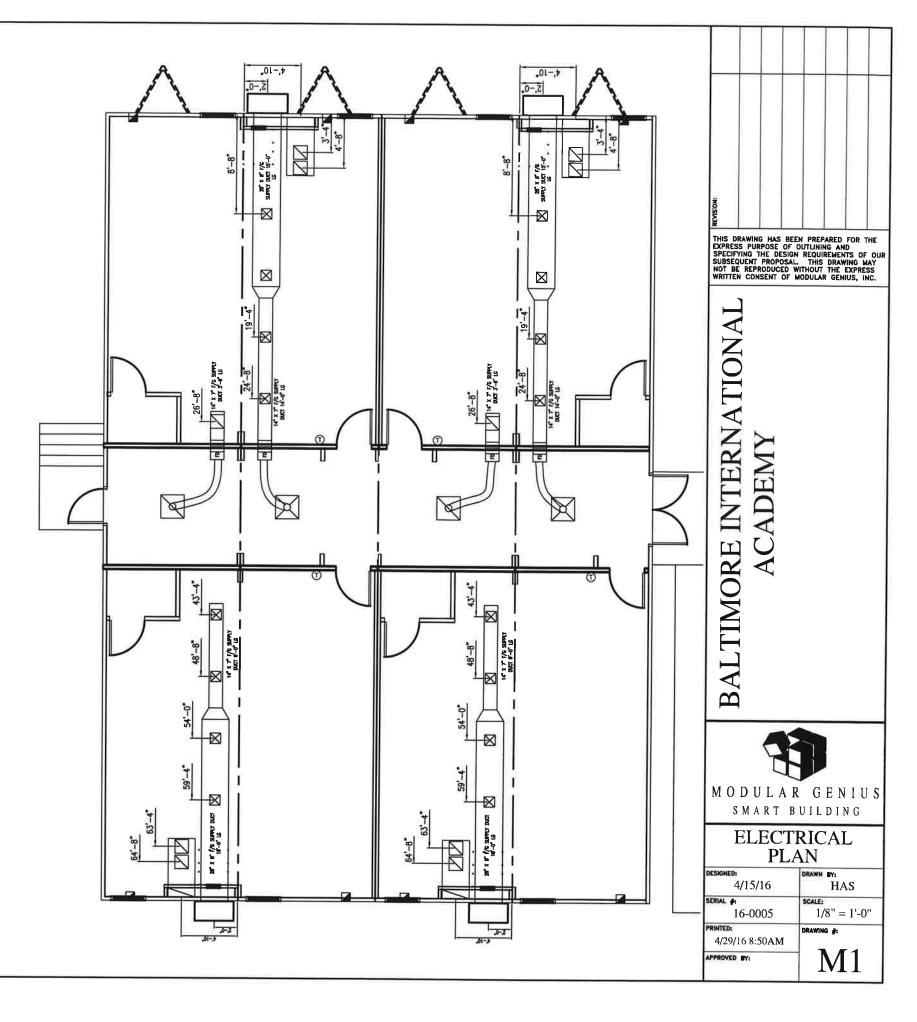
THERMOSTATICALLY CONTROLLED ROOF EXHAUST FAN

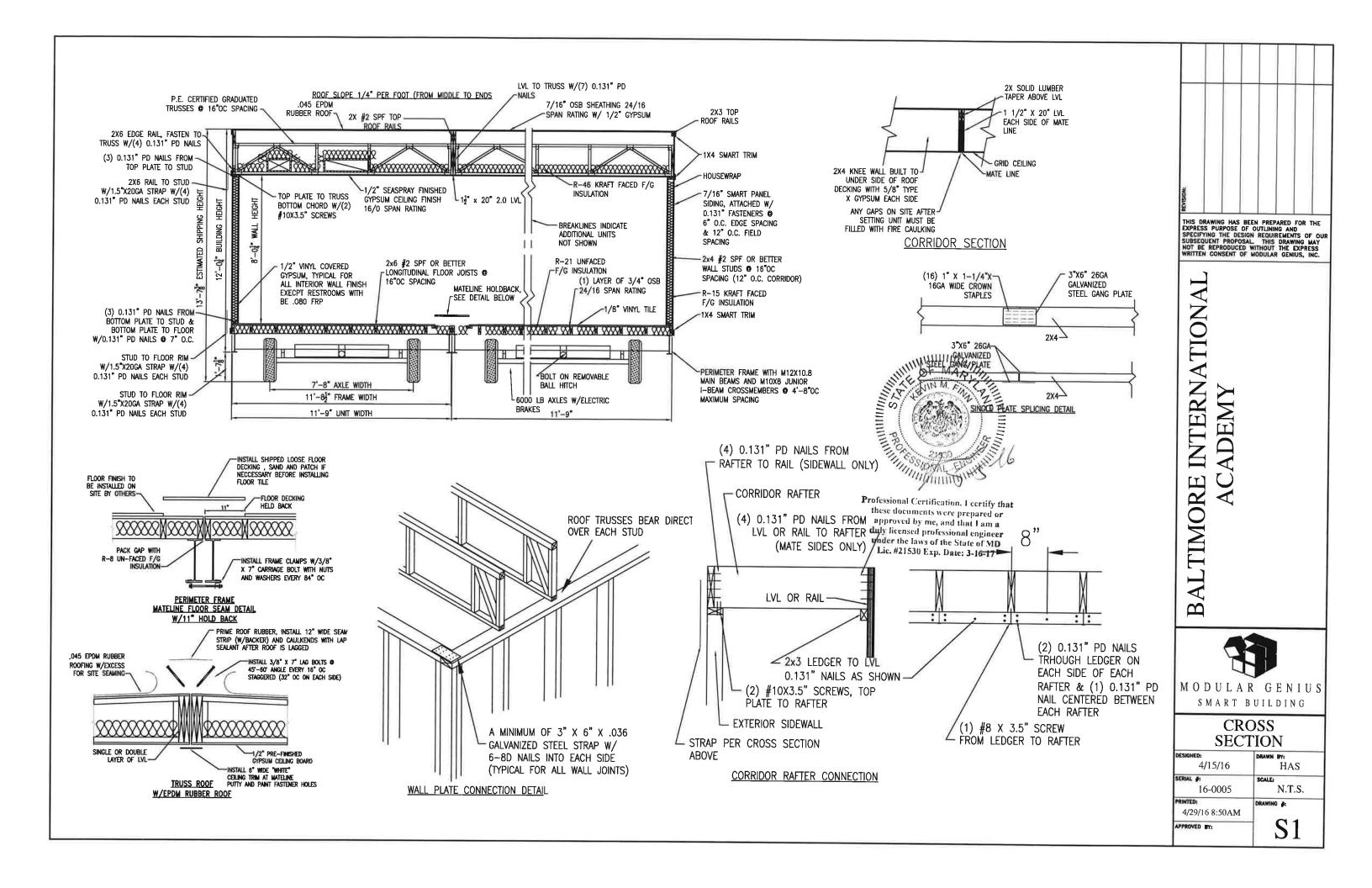
MECHANICAL:

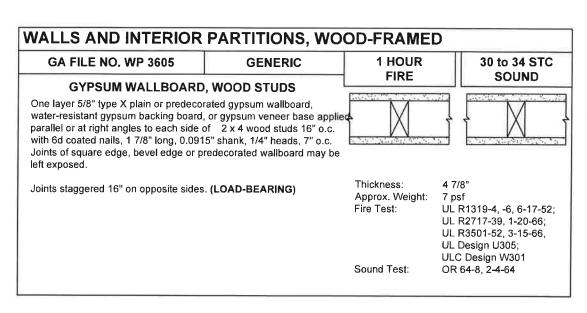
- 1. EXHAUST FANS AND VENTING EQUIPMENT TO BE DUCTED TO EXTERIOR AND TERMINATE AT AN APPROVED VENT CAP.
- 2. "MECHANICAL VENTILATION", USE 75% OF RECIRCULATED AIR VIA HVAC UNIT.
- DUCT EXPOSED TO NON-CONDITIONED SPACES SHALL BE INSULATED TO PROVIDE A THERMAL RESISTANCE.
- 4. FLOOR AND WALL REGISTERS: THE LOWER EDGE SHALL NOT BE LESS THAN 1/2" FROM THE FLOOR IN TOILET ROOMS, LAUNDRY ROOMS OR UTILITY ROOMS.
- 5. METAL CHIMNEYS SHALL EXTEND AT LEAST 3 FT. ABOVE THE HIGHEST POINT WHERE THEY PASS THROUGH THE ROOM AND 2 FT. MINIMUM HIGHER THAN OTHER PORTIONS OF A BUILDING WITHIN 10 FT.
- 6. DUCTS SHALL BE CLASS I, IF NON-METALLIC, AND IF ALUMINUM OR GALVANIZED SHALL BE PER TABLE M-603.3 2006 IMC
- 7. RETURN AIR VIA GRILLES IN WALL, DOORS OR CEILING AS NOTED.

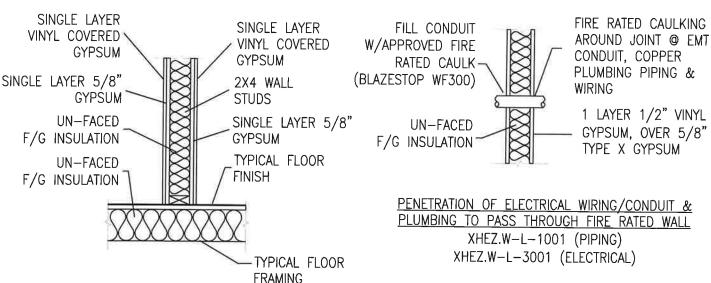


Professional Certification. I certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of MD Lic. #21530 Exp. Date: 3-16-17





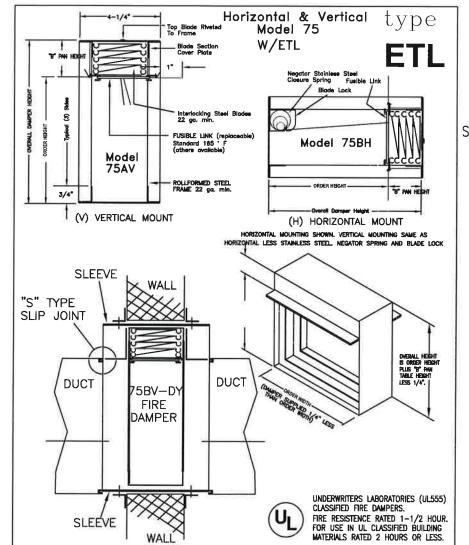


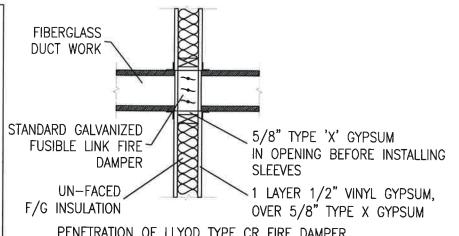


BALTIMORE INTERNATIONAL ACADEMY

THIS DRAWING HAS BEEN PREPARED FOR THE EXPRESS PURPOSE OF OUTLINING AND SPECIFYING THE DESIGN REQUIREMENTS OF OUR SUBSEQUENT PROPOSAL. THIS DRAWING MAY NOT BE REPRODUCED WITHOUT THE EXPRESS WRITTEN CONSENT OF MODULAR GENIUS, INC.





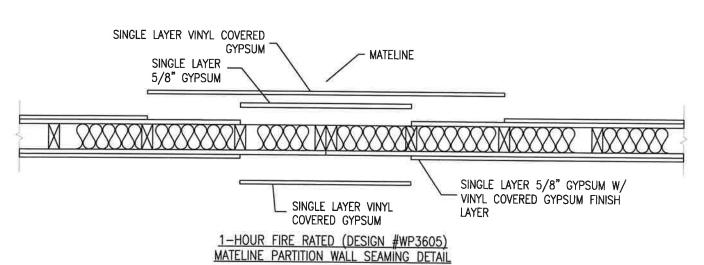


1-HOUR FIRE RATED (DESIGN #U305)

PARTITION WALL DETAIL

PENETRATION OF LLYOD TYPE CR FIRE DAMPER
THROUGH FIRE RATED WALL

(SEE FIRE DAMPERS MANUFACTURERS INSTALLATION INSTRUCTIONS & LISTING FOR PROPER INSTALLATION)



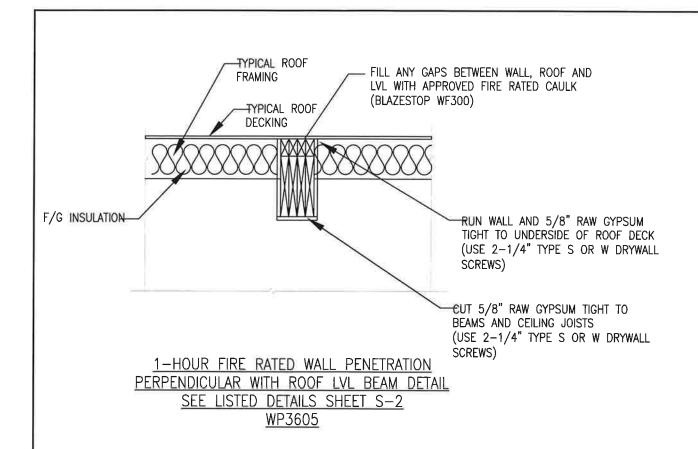


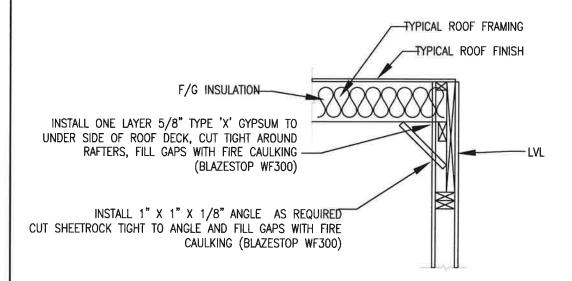
Professional Certification. I certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of MD Lic. #21530 Exp. Date; 3-16-17



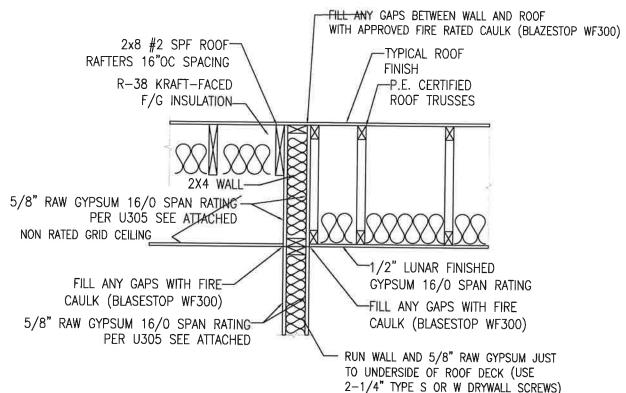
FIRE WALL
DETAILS

DESIGNED: 4/15/16	DRAWN BY: HAS
SERIAL #: 16-0005	SCALE: N.T.S.
PRINTED: 4/29/16 8:50AM	DRAWING #:
APPROVED BY:	1 S2





1-HOUR FIRE RATED MATELINE WALL
AT ROOF DETAIL
SEE LISTED DETAIL SHEET S-2
WP3605



1-HOUR FIRE RATED WALL AT PARALLEL WITH

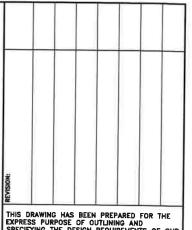
ROOF JOIST DETAIL

SEE LISTED DETAILS SHEET S-2

WP3605



Professional Certification. I certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of MD Lic. #21530 Exp. Date: 3-16-17

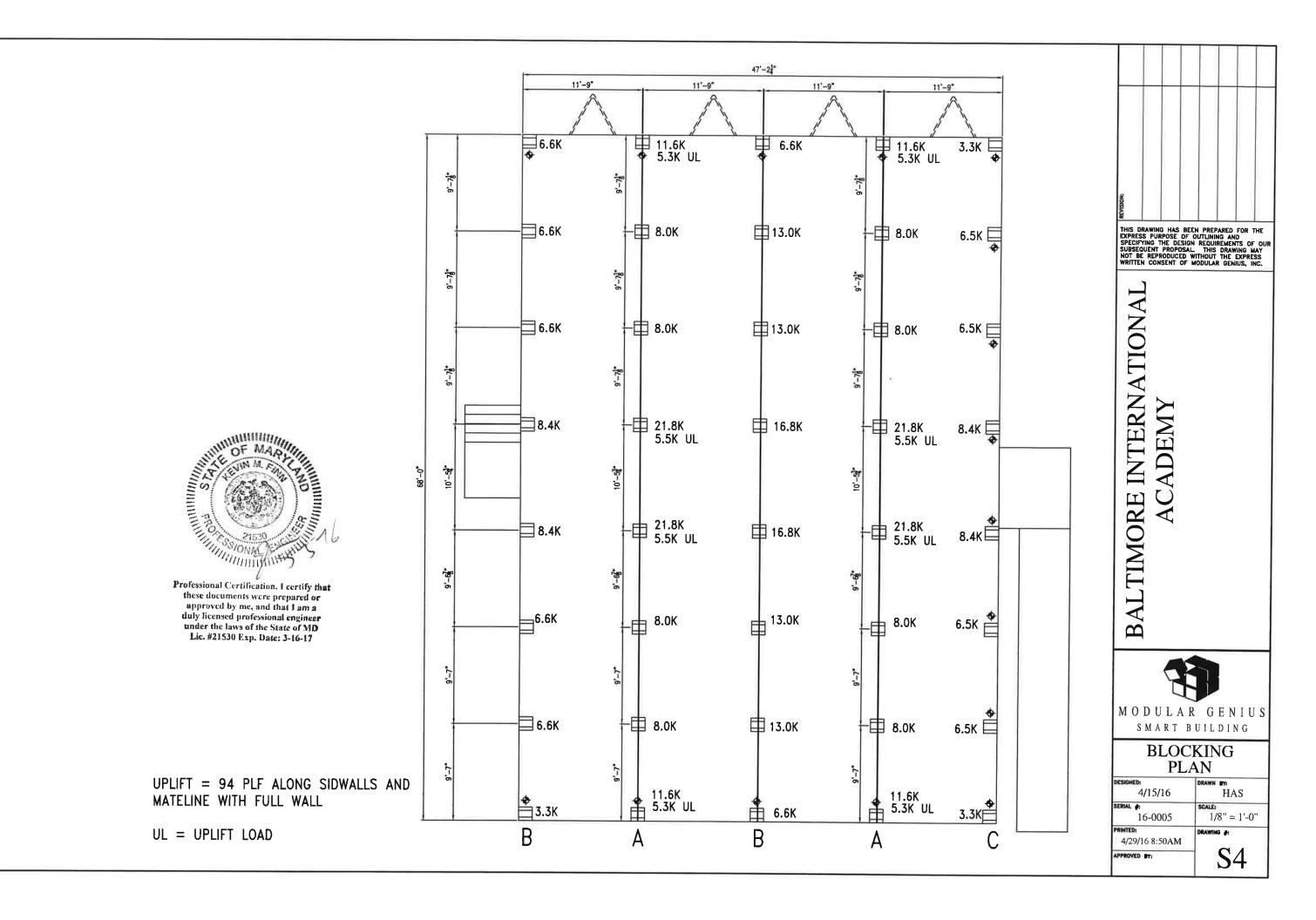


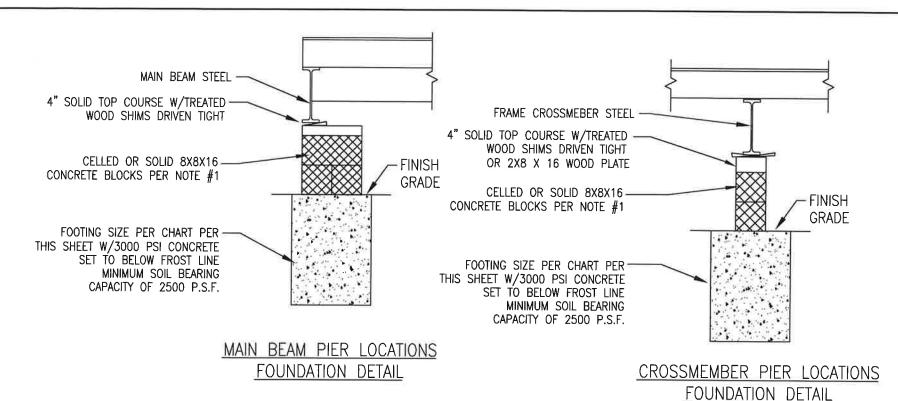
THIS DRAWING HAS BEEN PREPARED FOR THE EXPRESS PURPOSE OF OUTLINING AND SPECIFYING THE DESIGN REQUIREMENTS OF OUR SUBSEQUENT PROPOSAL. THIS DRAWING MAY NOT BE REPRODUCED WITHOUT THE EXPRESS WRITTEN CONSENT OF MODULAR GENIUS, INC.

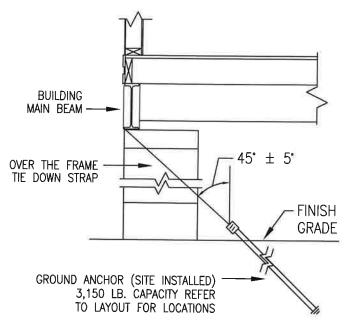
BALTIMORE INTERNATIONAL ACADEMY



DETAILS	
DESIGNED: 4/15/16	DRAWN BY: HAS
serial #: 16-0005	SCALE: N.T.S.
PRINTED: 4/29/16 8:50AM	DRAWING #:
APPROVED BY:	1 S3







TIE DOWN DETAIL

NOTE:

THIS BLOCKING DESIGN BY MOBILE/MODULAR EXPRESS, IS ONLY A SUGGESTED DESIGN. FOUNDATION DETAILS, FOUNDATION SIZES & TIE DOWN LOCATIONS SHALL BE SPECIFIED ACCORDING TO LOCAL JURISDICTION. FINAL DESIGN IS SUGGESTED TO BE APPROVED BY A PROFFESIONAL ENGINEER FAMILAR WITH ALL OF THE SITE CONDITIONS.

FOUNDATION NOTES:

- 1. ALL FOUNDATION CONSTRUCTION, MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL CODES. THE PIER LOCATIONS PROVIDED ON THIS PLAN ARE FOR THE SOLE PURPOSE OF IDENTIFYING THE LOCATION OF THE REQUIRED BLOCKING POINTS FOR THIS BUILDING. FOUNDATION REQUIREMENTS ARE NOT KNOWN DUE TO VARYING SOIL CONDITIONS. FOUNDATION REVIEW AND INSPECTION IS TO BE PERFORMED BY THE LOCAL OFFICIAL HAVING JURISDICTION.
- 2. MINIMUM CONCRETE FOOTING DEPTH OF BELOW FROST LINE AND PER LOCAL CONDITIONS

 3,000 PSI 28 DAYS.
- SINGLE STACK CONCRETE BLOCK FOR PIERS UP TO 32" IN HEIGHT WITH TYPE M OR S MORTAR. DOUBLE STACK CONCRETE BLOCK FOR PIERS BETWEEN 32" & 72" WITH TYPE M OR S MORTAR.
- CORNER PIERS OVER 24" HIGH (THREE BLOCKS) SHALL BE DOUBLE BLOCK CONSTRUCTION WITH TYPE M OR S MORTAR.
- 5. TIE-DOWN STRAPS TO BE 1-1/4" X .035" TYPE-1, FINISH B, GRADE 1 ZINC COATED STEEL STRAPPING CONFORMING WITH ASTM d3953-91. TIE DOWN STRAPS AND CONNECTING HARDWARE SHALL HAVE A MINIMUM WORKING CAPACITY OF 3,150 LBS.
- 6. GROUND ANCHORS SHALL HAVE A 3,150# MINIMUM WORKING CAPACITY AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
- THE MINIMUM NET AREA OF VENTILATION OPENINGS SHALL NOT BE LESS THAN 1SQ. FT IN 150 SQ. FT OF CRAWL-SPACE AREA.



Professional Certification. I certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of MD Lic. #21530 Exp. Date: 3-16-17

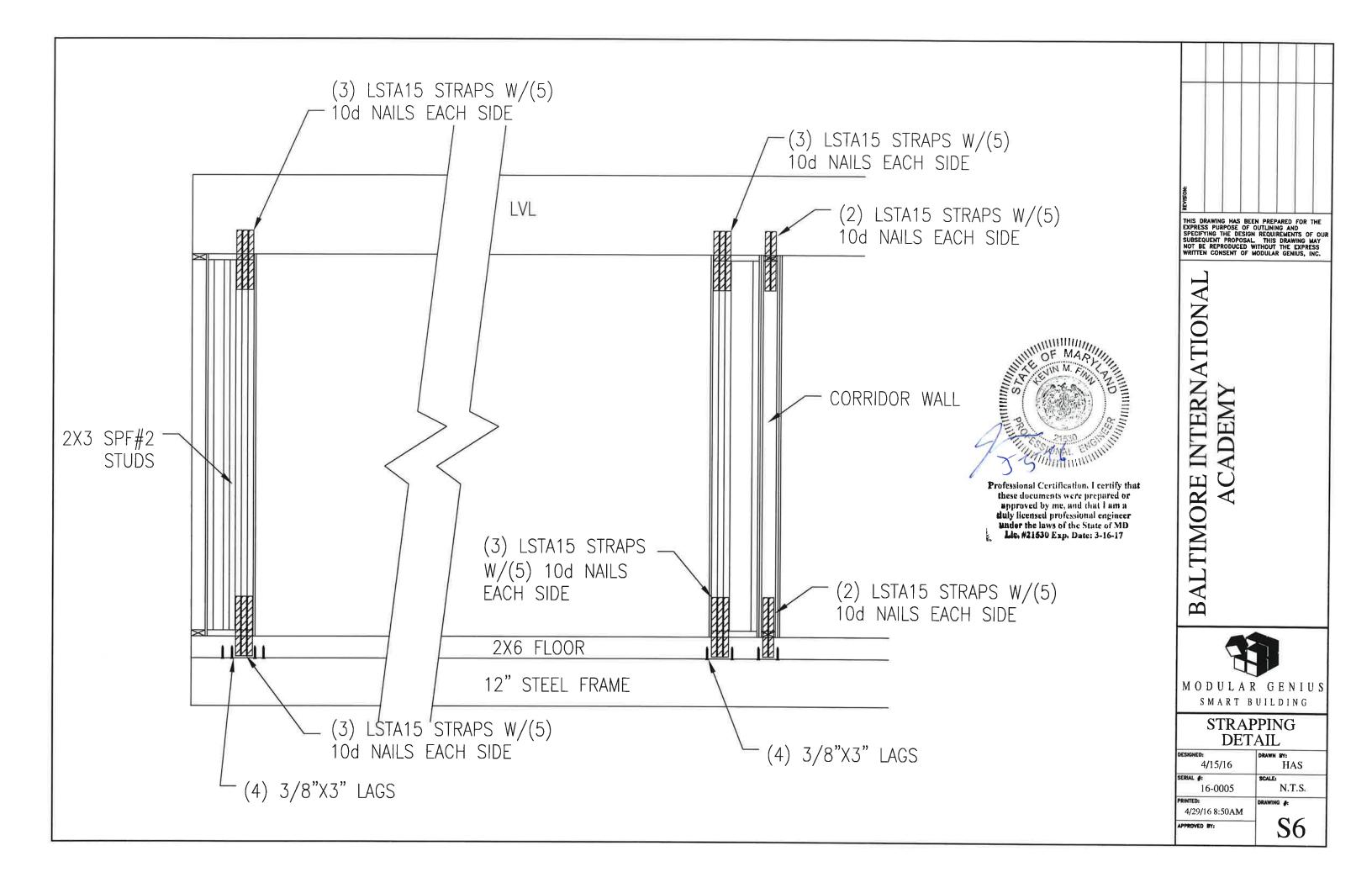
ROUND PIER MAXIMUM LOADS (KIPS)					
MINIMUM PIER	ALLOWABLE SOIL BEARING CAPACITY				
DIMENSIONS (IN)	2000PSF	2500PSF	3000PSF	3500PSF	4000PSF
18	3.5	4.4	5.3	6.2	7.1
20	4.4	5.5	6.5	7.6	8.7
22	5.3	6.6	7.9	9.2	10.6
24	6.3	7.9	9.4	11.0	12.6
26	7.4	9.2	11.1	12.9	14.7
28	8.6	10.7	12.8	15.0	17.1
30	9.8	12.3	14.7	17.2	19.6
32	11.1	14.0	16.8	19.5	22.3
34	12.6	15.8	18.9	22.1	25.2
36	14.1	17.7	21.2	24.7	28.3
38	15.7	19.7	23.6	27.5	31.4
40	17.5	21.8	26.2	30.5	34.9
42	19.2	24.0	28.8	33.6	38.4
44	21.1	26.3	31.6	36.9	42.2
46	23.0	28.8	34.6	40.3	46.1
48	25.1	31.4	37.6	43.9	50.2

-				
EXPRESS SPECIFYIN SUBSEQUI NOT BE	WING HAS PURPOSE O IG THE DES ENT PROPOS REPRODUCEI CONSENT O	OF OUTLINII SIGN REQUI SAL. THIS D WITHOUT	NG AND REMENTS (DRAWING THE EXPE	DF OUR
SALTIMORE INTERNATIONAL	ACADEMY			

 $\mathbf{\Omega}$



DETAILS	
DESIGNED: 4/15/16	DRAWN BY: HAS
serial #: 16-0005	SCALE: N.T.S.
PRINTED: 4/29/16 8:50AM	DRAWING #:
APPROVED BY:	S5

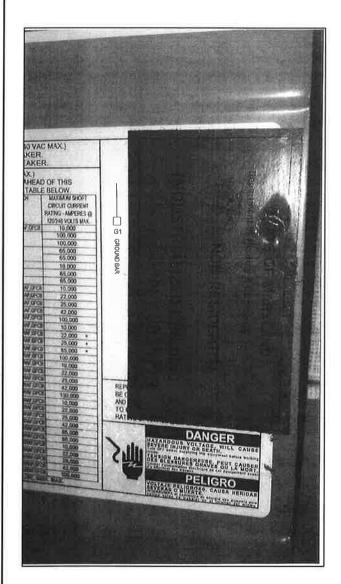


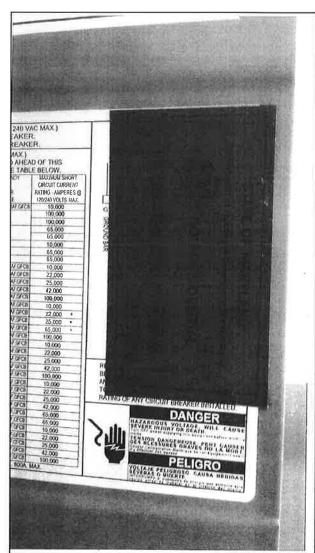
 $\frac{S/N}{MD} = \frac{30069A10-14}{NR-0035779}$

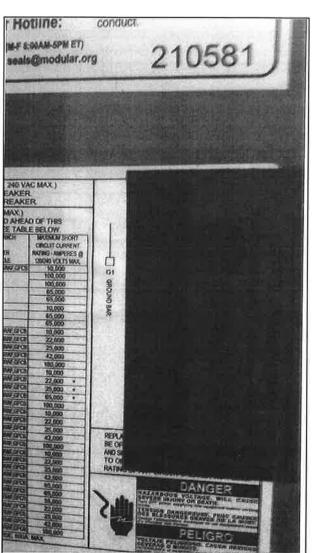
 $\frac{S/N}{MD} = \frac{30069A10-15}{NR-0035780}$

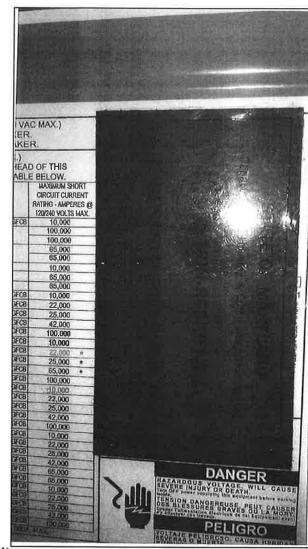
 $\frac{S/N}{MD} = \frac{30069A10-16}{NR-0035781}$

 $\frac{S/N}{MD} = \frac{30069A10-17}{NR-0035782}$











Professional Certification, I certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of MD Lic. #21530 Exp. Date: 3-16-17 THIS DRAWING HAS BEEN PREPARED FOR THE EXPRESS PURPOSE OF OUTLINING AND

THIS DRAWING HAS BEEN PREPARED FOR THE EXPRESS PURPOSE OF OUTLINING AND SPECIFYING THE DESIGN REQUIREMENTS OF OUR SUBSEQUENT PROPOSAL. THIS DRAWING MAY NOT BE REPRODUCED WITHOUT THE EXPRESS WRITTEN CONSENT OF MODULAR GENIUS, INC.

BALTIMORE INTERNATIONAL ACADEMY



LABELS	
DESIGNED: 4/15/16	DRAWN BY: HAS
SERIAL #: 16-0005	SCALE: N.T.S.
PRINTED: 4/29/16 8:50AM	DRAWING #:
APPROVED BY:	∃LB1