1. ACCESS TO BUILDING FOR PERSONS IN WHEELCHAIRS IS DESIGNED BY AND FIELD BUILT BY OTHERS AND SUBJECT TO LOCAL JURISDICTION. THE PRIMARY ENTRANCE AND REQUIRED EXITS MUST BE ACCESSIBLE. ALL BUILDING ELEMENTS AND FACILITIES SHALL BE ACCESSIBLE IN ACCORDANCE WITH THE REFERENCE ACCESSIBILITY STANDARD(S) EXCEPT WHERE SPECIFICALLY EXEMPTED BY THE SCOPING REQUIREMENTS OF THE APPLICABLE CODE.

2. THE INTERNATIONAL SYMBOL OF ACCESSIBILITY SIGN SHALL BE DISPLAYED AT ALL ACCESSIBLE RESTROOM FACILITIES AND AT ACCESSIBLE BUILDING ENTRANCES UNLESS ALL ENTRANCES ARE ACCESSIBLE. INACCESSIBLE ENTRANCES SHALL HAVE DIRECTIONAL SIGNS INDICATING THE ROUTE TO THE NEAREST ACCESSIBLE ENTRANCE. AT LEAST 60% OF ALL PUBLIC ENTRANCES MUST BE ACCESSIBLE.

3. ALL SIGNS REQUIRED TO BE ACCESSIBLE BY THE SCOPING REQUIREMENTS OF THE APPLICABLE CODE SHALL COMPLY WITH THE APPLICABLE PORTIONS OF SECTION 703 OF THE ACCESSIBILITY CODE. ALL SUCH SIGNS ARE DESIGNED BY OTHERS, SITE INSTALLED AND SUBJECT TO THE APPROVAL OF THE JURISDICTION HAVING AUTHORITY.

4. ACCESSIBLE DRINKING FOUNTAINS SHALL HAVE A SPOUT OUTLET HEIGHT NO HIGHER THAN 36 INCHES ABOVE THE FLOOR AND SPOUT SHALL BE LOCATED 15 INCHES MINIMUM FROM THE VERTICAL SUPPOPORT AND 5 INCHES MAXIMUM FROM THE FRONT EDGE OF THE UNIT, INCLUDING BUMPERS. SPOUT SHALL PROVIDE A FLOOV OF WATER 4 INCHES HIGH MINIMUM. AND 65 THE SHOWN OF WATER 4 INCHES HIGH MINIMUM. AND 45 INCHES HIGH MAXIMUM ADDRETURE BY ACCESSIBILITY CODE. DRINKING FOUNTAINS FOR STANDING PERSONS SHALL HAVE A SPOUT OUTLET HEIGHT 38 INCHES MINIMUM AND 43 INCHES MAXIMUM ADDRETURE BY ACCESSIBILITY CODE.

5. WHERE STORAGE FACILITIES SUCH AS CABINETS, SHELVES, CLOSETS, AND DRAWERS ARE PROVIDED AT LEAST ONE OF EACH TYPE PROVIDED SHALL CONTAIN STORAGE SPACE COMPLYING WITH THE FOLLOWING: DOORS, ETC. TO SUCH SPACES SHALL BE ACCESSIBLE (i.e. TOUCH LATCHES, U-SHAPED PULLS); FOR AREAS WITH UNOBSTRUCTED REACH THE SPACE SHALL BE WITHIN 15 INCHES MINIMUM AND 48 INCHES MAXIMUM OF THE FLOOR; FOR HIGH FORWARD REACH AREAS WITH OBSTRUCTIONS THE CLEAR FLOOR SPACE SHALL EXTEND BENEATH THE ELEMENT FOR A DISTANCE NOT LESS THAN THE REQUIRED REACH DEPTH OVER THE OBSTRUCTION AND THE HEIGHT OF THE SPACE SHALL BE 48 INCHES MAXIMUM AND THE DEPTH OF THE SPACE SHALL BE 20 INCHES MAXIMUM EXCEPT THE DEPTH MAY BE 25 INCHES MAXIMUM IF THE HEIGHT IS 44 INCHES MAXIMUM FOR HIGH SIDE REACH AREAS WITH OBSTRUCTIONS THE HEIGHT OF THE OBSTRUCTION SHALL BE 34 INCHES MAXIMUM AND THE DEPTH OF THE OBSTRUCTION SHALL BE 24 INCHES MAXIMUM AND THE DEPTH OF THE OBSTRUCTION SHALL BE 24 INCHES MAXIMUM AND THE DEPTH OF THE OBSTRUCTION SHALL BE 24 INCHES MAXIMUM AND THE DEPTH OF THE OBSTRUCTION SHALL BE 36 INCHES MAXIMUM AND THE DEPTH OF THE OBSTRUCTION SHALL BE 36 INCHES MAXIMUM AND THE DEPTH OF THE OBSTRUCTION SHALL BE 36 INCHES MAXIMUM AND THE DEPTH OF THE OBSTRUCTION SHALL BE 36 INCHES MAXIMUM AND THE DEPTH OF THE OBSTRUCTION SHALL BE 36 INCHES MAXIMUM AND THE DEPTH OF THE OBSTRUCTION SHALL BE 36 INCHES MAXIMUM.

7. WHERE EMERGENCY WARNING SYSTEMS ARE PROVIDED, THEY SHALL INCLUDE BOTH AUDIBLE AND VISUAL ALARMS. THE VISUAL ALARMS SHALL BE LOCATED THROUGHOUT, INCLUDING RESTROOMS, AND PLACED IN ACCORDANCE WITH NFPA 72.

8. DOORS TO ALL ACCESSIBLE SPACES SHALL HAVE ACCESSIBLE HARDWARE (i.e. LEVER-OPERATED, PUSH-TYPE, U-SHAPED) MOUNTED NO HIGHER THAN 48 INCHES ABOVE THE FLOOR.

9. FLOOR SURFACES SHALL BE STABLE, FIRM, AND SLIP-RESISTANT. CHANGES IN LEVEL BETWEEN 0.25 INCH AND 0.5 INCH SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1:2. CHANGES IN LEVEL GREATER THAN 0.5 INCH REQUIRE RAMPS. CARPET PILE THICKNESS SHALL BE 0.5 INCH MAX. GRATINGS IN FLOOR SHALL BE SPACES NO GREATER THAN 0.5 INCH WIDE IN ONE DIRECTION. DOORWAY THRESHOLDS SHALL NOT EXCEED 0.5 INCH IN HEIGHT.

10. ALL DOORS SHALL BE OPENABLE BY A SINGLE EFFORT. THE MAXIMUM FORCE REQUIRED TO OPEN A DOOR SHALL NOT EXCEED 8.5 LBS. FOR EXTERIOR SWINGING DOORS AND 5 LBS. FOR ALL SLIDING, FOLDING, AND INTERIOR SWINGING DOORS.

11. DOORS AND SIDELITES ADJACENT TO DOORS CONTAINING ONE OR MORE GLAZING PANELS THAT PERMIT VIEWING THROUGH THE PANELS SHALL HAVE THE BOTTOM OF AT LEAST ONE PANEL ON EITHER THE DOOR OR AN ADJACENT SIDELITE 43 INCHES MAXIMUM ABOVE THE FLOOR. VISION LITES WITH THE LOWEST PART MORE THAN 66 INCHES ABOVE THE FLOOR ARE EXEMPT FROM THIS REQUIREMENT.

# **GENERAL NOTES:**

1. ALL CONSTRUCTION, MATERIALS, AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE CODES SPECIFIED ON THESE

2. THESE PLANS INCLUDE DESIGN FOR THE FACTORY BUILT PORTION OF THE MODULAR STRUCTURE AND PORTIONS OF THE SITE BUILT CONSTRUCTION. THESE PLANS AND DESIGN PLANS FOR ALL ELEMENTS DESIGNATED TO BE DESIGNED BY OTHERS AND/OR SITE INSTALLED MUST BE SUBMITTED TO AND REVIEWED BY THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE 2. ALL CIRCUITS AND EQUIPMENT SHALL BE GROUNDED IN ACCORDANCE WITH THE APPROPRIATE ARTICLES OF THE NATIONAL ELECTRICAL CODE (NEC). ALL EQUIPMENT SHALL BE LISTED AND IDENTIFIED FOR USE WITH 75°C OR 90°C CONDUCTORS UNLESS OTHERWISE SPECIFIED. (DESIGNER OF RECORD) FOR COMPATIBILITY WITH THE DESIGN OF THE OVERALL BUILDING PROJECT AS REQUIRED BY THE

3. ALL PARTIES RESPONSIBLE FOR DESIGN WORK SHALL BE QUALIFIED AND LICENSED AS REQUIRED BY THE JURISDICTIONS HAVING AUTHORITY OR SHALL RETAIN SUCH QUALIFIED AND LICENSED ENTITIES TO PERFORM SUCH WORK.

4. TRANSPORTATION AND ERECTION OF THIS BUILDING IS DESIGNED BY OTHERS. ANY TRANSPORTATION AND/OR LIFTING ELEMENTS SHOWN IN THESE PLANS MUST BE EVALUATED BY TRANSPORTATION AND ERECTION DESIGNER FOR SUITABILITY. 5. REFER TO MANUFACTURER'S APPROVED SYSTEMS PACKAGE FOR ADDITIONAL CONSTRUCTION DETAILS AND SPECIFICATIONS NOT INCLUDED IN THESE PLANS.

6. REFER TO ATTACHED ENERGY CODE COMPLIANCE FORM AND CHECKLIST FOR ADDITIONAL ENERGY CODE CONSTRUCTION REQUIREMENTS NOT INCLUDED IN THESE PLANS.

7. ALL DOORS SHALL BE OPENABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY, TOOL, SPECIAL KNOWLEDGE OR EFFORT. MANUALLY OPERATED FLUSH BOLTS OR SURFACE BOLTS SHALL NOT BE USED. DOORS THAT OPEN INTO THE PATH OF EGRESS TRAVEL SHALL PARTIALLY OR FULLY OPEN IN SUCH A MANNER THAT THE CODE REQUIRED PATH OF EGRESS WIDTH IS NOT REDUCED TO LESS THAN ONE-HALF DURING THE COURSE OF THE SWING. WHEN FULLY OPEN, THE DOOR SHALL NOT PROJECT MORE THAN 7 INCHES INTO THE CODE REQUIRED WIDTH.

8. WHEN NOT SHOWN ON THE PLANS PROVISIONS FOR EXIT DISCHARGE LIGHTING (INCLUDING DUAL ELEMENT EXIT DISCHARGE EMERGENCY LIGHTING) ARE DESIGNED BY OTHERS AND THE RESPONSIBILITY OF THE BUILDING OWNER AND SUBJECT TO LOCAL JURISDICTION APPROVAL.

9. PORTABLE FIRE EXTINGUISHERS SHALL BE PROVIDED BY OTHERS AS REQUIRED BY THE IFC.

10. ALL GLAZING WITHIN A 24 INCH ARC OF DOORS WHOSE BOTTOM EDGE IS LESS THAN 60 INCHES ABOVE THE FLOOR AND ALL GLAZING IN DOORS SHALL BE SAFETY GLASS.

11. WHERE EGRESS THROUGH INTERVENING SPACE(S) EXIST AND ARE PERMITTED, SUCH SPACE(S) SHALL PROVIDED A DISCERNABLE PATH OF EGRESS TRAVEL TO THE EXIT. THE PATH SHALL MEET ALL CODE REQUIRED EXIT ACCESS CRITERIA. ALL SUCH EGRESS IS SUBJECT TO INSPECTION AND APPROVAL BY THE JURISDICTION HAVING AUTHORITY.

12. INTERIOR NON-LOADBEARING PARTITIONS SHALL BE MINIMUM 2X4 SYP#2 STUDS AT 16 INCHES ON CENTER UNLESS OTHERWISE SPECIFIED.

13. THIS BUILDING SHALL NOT BE INSTALLED AT ANY LOCATION WHERE THE SNOW LOAD AS DETERMINED FROM LOCAL METEOROLOGICAL DATA EXCEEDS THE SNOW LOAD LISTED ON THESE PLANS.

14. THIS BUILDING IS NOT DESIGNED TO BE LOCATED IN A WIND BORNE DEBRIS REGION

15. STRAPPING MUST BE TESTED AND/OR CERTIFIED TO VERIFY THE STRUCTURAL CAPACITY. APPROPRIATE DOCUMENTATION MUST BE ON FILE AT THE MODULAR BUILDING FACTORY.

16. ALL INTERIOR WALL AND CEILING FINISH MATERIALS SHALL BE CLASS A RATED IN ACCORDANCE WITH ASTM E 84 OR UL 723. WHERE CARPET IS USED FOR INTERIOR FLOOR COVERING IT SHALL BE OF CLASS I OR II MATERIALS IN ACCORDANCE WITH NFPA 253 AND SHALL COMPLY WITH THE DOCFF-1 "PILL TEST" (CPSC 16 CRF, PART 1630).

17. ALL DIMENSIONS SHOWN ON FLOOR PLAN ARE TO THE EDGE OF FRAMING MEMBERS UNLESS OTHERWISE SPECIFIED. WHERE "CLEAR" IS SPECIFIED THE DIMENSION IS TO THE FINISHED SURFACE. DIMENSIONS ARE TO THE CLOSEST EDGE OF ALL NON-WALL ELEMENTS SUCH AS COUNTERS AND FIXTURES. DIMENSIONS ARE TO THE FINISHED SURFACE OF PREFABRICATED RESTROOM DIVIDER PARTITIONS.

## MECHANICAL NOTES:

1. ALL SUPPLY AIR REGISTERS SHALL BE 10 INCHES X 10 INCHES ADJUSTABLE WITH 8 INCHES X 18 INCHES (INSIDE) OVERHEAD FIBERGLASS DUCT, UNLESS OTHERWISE SPECIFIED.

2. DUCTS LOCATED OUTSIDE THE BUILDING ENVELOPE INCLUDING ATTIC DUCTS LOCATED ABOVE CEILING INSULATION SHALL HAVE R-8 MINIMUM INSULATION VALUE. DUCTS LOCATED IN UNCONDITIONED SPACES INCLUDING ATTIC DUCTS LOCATED BELOW CEILING OR ROOF INSULATION SHALL HAVE R-6 MINIMUM INSULATION VALUE.

3. FIBERGLASS DUCTS SHALL BE CONSTRUCTED WITH CLASS 0 OR CLASS 1 DUCT MATERIAL IN ACCORDANCE WITH UL 181. FIBERGLASS DUCT CONSTRUCTION AND INSTALLATION SHALL CONFORM TO THE SMACNA FIBEROUS GLASS DUCT CONSTRUCTION STANDARDS OR NAIMA FIBEROUS GLASS DUCT CONSTRUCTION STANDARDS. METAL DUCTS SHALL BE CONSTRUCTED AS SPECIFIED IN THE SMACNA HAVAC DUCT CONSTRUCTION STANDARDS — METAL AND FLEXIBLE. FLEXIBLE AIR DUCTS, BOTH FIBERGLASS AND METAL, SHALL BE TESTED IN ACCORDANCE WITH UL 181 AND SHALL BE LISTED AND LABELED AS CLASS 0 OR CLASS 1 FLEXIBLE AIR DUCT. ALL DUCTS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S

- 4. INTERIOR DOORS SHALL BE UNDERCUT 1.5 INCHES ABOVE FINISHED FLOOR FOR AIR RETURN AND OR AS NOTED ON FLOOR PLAN.
- 5. VENT FANS SHALL BE DUCTED TO THE EXTERIOR AND TERMINATE AT AN APPROVED VENT CAP.
- 7. THERMOSTATS SHALL BE PROGRAMMABLE AS REQUIRED BY THE APPLICABLE ENERGY CODE. IF PROGRAMMABLE THERMOSTATS ARE NOT INSTALLED IN THE FACTORY THEY SHALL BE PROVIDED BY THE BUILDING OWNER AND SITE INSTALLED BY OTHERS.

8. MECHANICAL ATTIC VENTILATION SHALL BE USED AS FOLLOWS:

INSTALL FAN(S) CAPABLE OF EXHAUSTING AT LEAST 0.02 CFM PER SQUARE FOOT OF HORIZONTAL ATTIC AREA. EACH FAN SHALL EXHAUST 100 CFM MINIMUM. IN ADDITION, INSTALL GABLE AND/OR ROOF VENTS WITH AT LEAST 50 SQUARE INCHES OF NET FREE AREA PER FAN. THE FAN(S) AND GABLE OR ROOF VENTS SHALL BE POSITIONED SO AS TO ALLOW CROSS VENTILATION OF ALL ATTIC SPACES. EACH FAN SHALL BE AUTOMATICALLY CONTROLLED TO OPERATE WHEN THE RELATIVE HUMIDITY IN THE ATTIC EXCEEDS 60%. EACH FAN SHALL OPERATE ON 120 VOLT, 14 POWER, 50 WATTS MAXIMUM. EACH BRANCH CIRCUIT SERVING A FAN SHALL BE EQUIPPED WITH A "SWD" TYPE BREAKER AT THE ELECTRICAL PANEL.

9. THIS BUILDING HAS BEEN DESIGNED TO COMPLY WITH THE FRESH AIR REQUIREMENTS OF THE APPLICABLE MECHANICAL CODE. THE HVAC SYSTEM MAY NOT BE CAPABLE OF CONTROLLING STANDARD HUMIDITY, COOLING AND HEATING COMFORT LEVELS DURING CERTAIN DESIGN CONDITIONS. BY ACCEPTANCE AND USE OF THIS BUILDING THE OWNER RELEASES THE BUILDING DESIGNER OF ALL LIABILITIES RELATING TO THIS ISSUE. IT IS THE BUILDING OWNERS RESPONSIBILITY TO OBTAIN REDESIGN AND MODIFICATION OF THE MECHANICAL SYSTEM IF ALTERNATE CONDITIONS ARE DESIRED BY THE OWNER OR REQUIRED BY THE JURISDICTION HAVING AUTHORITY.

# PLUMBING NOTES:

1. WHEN REQUIRED RESTROOM FACILITIES ARE NOT PROVIDED WITHIN THE BUILDING THEY SHALL BE LOCATED IN AN ADJACENT BUILDING OR SITE INSTALLED AND ARE SUBJECT TO THE APPROVAL AND INSPECTION BY THE JURISDICTION HAVING AUTHORITY. ALL SITE INSTALLED FACILITIES ARE DESIGNED BY OTHERS. THIS SHALL BE NOTED ON THE BUILDING DATA

2. BUILDING OWNER ASSUMES ALL RESPONSIBILITY FOR DRINKING WATER FACILITIES, SERVICE SINK AND ALL OTHER REQUIRED PLUMBING FACILITIES NOT SHOWN ON FLOOR PLAN. ALL BUILDING OWNER PROVIDED FACILITIES ARE DESIGNED BY OTHERS.

STATE

**VIRGINIA** 

FOR FOUNDATION DESIGN REFER TO THE ATTACHED FOUNDATION PLANS PREPARED BY THE BUILDING DESIGNER. IF FOUNDATION PLANS ARE DESIGNED BY OTHERS, THE BUILDING DESIGNER SHALL NOT BE HELD RESPONSIBLE OR LIABLE FOR THE FOUNDATION DESIGN & THE CONSEQUENTIAL PERFORMANCE OF THE SUPERSTRUCTURE'S STRUCTURAL COMPONENTS AND SYSTEMS RELATING THERETO.

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W/ VA REV.

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1. ALL EQUIPMENT SHALL BE LISTED BY UL FOR THE APPLICATION FOR WHICH IT IS USED AND ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE LISTING.

3. HVAC EQUIPMENT SHALL BE PROVIDED WITH READILY ACCESSIBLE DISCONNECTS ADJACENT TO THE EQUIPMENT SERVED. A UNIT SWITCH WITH A MARKED "OFF" POSITION THAT IS A PART OF THE HVAC EQUIPMENT AND DISCONNECTS ALL UNGROUNDED CONDUCTORS SHALL BE PERMITTED AS THE DISCONNECTING MEANS WHERE OTHER DISCONNECTING MEANS ARE

4. PRIOR TO ENERGIZING THE ELECTRICAL SYSTEM THE INTERRUPTING RATING OF THE MAIN BREAKER MUST BE DESIGNED AND VERIFIED AS BEING IN COMPLIANCE WITH SECTION 110-9 OF THE NEC BY LOCAL ELECTRICAL CONSULTANT.

5. THE SERVICE DISCONNECTING MEANS, MAIN ELECTRICAL PANEL, AND FEEDERS TO ALL PANELS ARE DESIGNED BY OTHERS, SITE INSTALLED AND SUBJECT TO LOCAL JURISDICTION APPROVAL.

6. THE FRONT SIDE OF ALL ELECTRICAL PANELS SHALL BE PROVIDED WITH A MINIMUM CLEAR WORKING SPACE DEPTH OF 36 INCHES PERPENDICULAR TO THE FACE OF THE PANEL AND A MINIMUM CLEAR WORKING SPACE WIDTH EQUAL TO THE PANEL WIDTH OR 30 INCHES, WHICHEVER IS GREATER, PARALLEL TO THE FACE OF THE PANEL. THE CLEAR WORKING SPACE SHALL NOT BE USED FOR STORAGE.

7. OVERCURRENT DEVICES (CIRCUIT BREAKERS) SHALL BE READILY ACCESSIBLE AND INSTALLED SO THAT THE CENTER OF THE GRIP OF THE OPERATING HANDLE, WHEN IN THE HIGHEST POSITION, IS NOT MORE THAN 6'-7" ABOVE THE STANDING SURFACE ADJACENT TO THE DEVICE LOCATION.

8. ALL CIRCUITS CROSSING OVER MODULE MATING LINE(S) SHALL BE SITE CONNECTED WITH APPROVED ACCESSIBLE JUNCTION BOXES OR CABLE CONNECTORS.

9. FIRE ALARM PULL STATION OPERABLE DEVICE SHALL BE LOCATED 42 TO 48 INCHES ABOVE FINISHED FLOOR. TOP OF FIRE ALARM HORN DEVICE SHALL BE LOCATED 90 INCHES MINIMUM ABOVE FINISHED FLOOR AND 6 INCHES MINIMUM BELOW CEILING, WHERE CEILING HEIGHT PERMITS. BOTTOM OF STROBE DEVICE SHALL BE LOCATED 80 INCHES MINIMUM AND 96 INCHES MOVED FINISHED FLOOR

10. ALL RECEPTACLES INSTALLED IN WET LOCATIONS (EXTERIOR) SHALL HAVE WEATHER PROOF (WP) ENCLOSURES, THE INTEGRITY OF WHICH IS NOT AFFECTED WHEN AN ATTACHMENT PLUG CAP IS INSERTED OR REMOVED. IN ADDITION NONLOCKING RECEPTACLES SHALL BE LISTED WEATHER—RESISTANT TYPE.

11. ALL EXTERIOR LIGHTS SHALL BE EQUIPPED WITH PHOTOCELLS FOR AUTOMATIC SHUT-OFF WHEN DAYLIGHT IS AVAILABLE. 12. EMERGENCY LIGHTING SHALL BE CAPABLE OF PROVIDING INITIAL ILLUMINATION THAT IS AT LEAST AN AVERAGE OF 1 FOOT—CANDLE (fc) AND A MINIMUM OF 0.1 fc MEASURED ALONG THE PATH OF EGRESS AT THE FLOOR LEVEL. ILLUMINATION LEVELS SHALL BE PERMITTED TO DECLINE TO 0.6 fc AVERAGE AND A MINIMUM AT ANY POINT OF 0.06 fc AT THE END OF THE EMERGENCY LIGHT TIME DURATION. A MAXIMUM—TO—MINIMUM ILLUMINATION UNIFORMITY RATIO OF 40 TO 1 SHALL NOT

13. WHEN A SINGLE RECEPTACLE IS INSTALLED ON AN INDIVIDUAL BRANCH CIRCUIT THE RECEPTACLE SHALL HAVE AN AMPERE RATING NOT LESS THAN THAT OF THE BRANCH CIRCUIT.

14. ELECTRICAL PANELS SHALL BE EQUIPPED WITH A MAIN BREAKER OF THE SAME SIZE AS THE PANEL UNLESS OTHERWISE SPECIFIED.

15. EXCEPT FOR AREAS REQUIRING 24 HOUR LIGHTING; SPACES WHERE PATIENT CARE IS RENDERED; AND SPACES WHERE AUTOMATIC LIGHTING SHUTOFF WOULD ENDANGER THE SAFETY OR SECURITY OF THE ROOM OR BUILDING, ALL INTERIOR LIGHTING SHALL BE CONTROLLED BY OCCUPANT SENSORS THAT TURN OFF THE LIGHTS WITHIN 30 MINUTES OF ALL OCCUPANTS LEAVING THE SPACE, AND SHALL EITHER BE MANUAL ON OR SHALL BE CONTROLLED TO AUTOMATICALLY TURN THE LIGHTING ON TO NOT MORE THAN 50 PERCENT POWER. EXCEPTION: FULL AUTOMATIC—ON CONTROLS SHALL BE PERMITTED TO CONTROL LIGHTING IN PUBLIC CORRIDORS, STAIRWAYS, RESTROOMS, PRIMARY BUILDING ENTRANCE AREAS AND 

BUILDING OCCUPANTS.

LIGHTING SHALL INCORPORATE A MANUAL CONTROL TO ALLOW OCCUPANTS TO TURN LIGHTS OFF. MANUAL CONTROL SHALL BE READILY ACCESSIBLE AND LOCATED SO THE OCCUPANTS CAN SEE THE CONTROLLED LIGHTS.

ALL CONTROLLED LIGHTING SHALL HAVE AT LEAST ONE CONTROL STEP BETWEEN 30% AND 70% OF FULL LIGHTING POWER IN ADDITION TO ALL OFF. CONTINUOUS DIMMING CONTROL MAY BE USED TO SATISFY THIS REQUIREMENT. EXCEPTION: CONTROL STEP IS NOT REQUIRED FOR LIGHTING IN CORRIDORS, ELECTRICAL/MECHANICAL ROOMS, PUBLIC LOBBIES, RESTROOMS, STAIRWAYS, STORAGE ROOMS, SPACES WITH ONLY ONE LUMINAIRE WITH RATED INPUT POWER LESS THAN 100 WATTS, AND SPACES WITH LIGHTING POWER ALLOWANCE OF LESS THAN 0.6 W/FT2.

16. IF REQUIRED OCCUPANT SENSORS FOR LIGHTING ARE NOT FACTORY INSTALLED THEN THEY SHALL BE SITE INSTALLED BY OTHERS AND SUBJECT TO THE APPROVAL OF THE JURISDICTION HAVING AUTHORITY.

17. IF OCCUPANT SENSORS FOR CONTROL OF 50% OF THE RECEPTACLES ARE NOT FACTORY INSTALLED THEN THEY SHALL BE SITE INSTALLED BY OTHERS AND SUBJECT TO THE APPROVAL OF THE JURISDICTION HAVING AUTHORITY.

18. ALL CIRCUITS POWERING UNSWITCHED LIGHTS SHALL BE PROTECTED BY "SWD" TYPE BREAKERS.

19. ALL RECEPTACLES IN AREAS ACCESSIBLE TO CHILDREN SHALL BE TAMPER RESISTANT TYPE.

#### SITE INSTALLED ITEMS:

NOTE THAT THIS LIST DOES NOT NECESSARILY LIMIT THE ITEMS OF WORK AND MATERIALS THAT MAY BE REQUIRED FOR A COMPLETE INSTALLATION. ALL SITE RELATED ITEMS ARE SUBJECT TO LOCAL JURISDICTION APPROVAL.

- 1. THE COMPLETE FOUNDATION SUPPORT AND TIE DOWN SYSTEM
- 2. RAMPS, STAIRS AND GENERAL ACCESS TO THE BUILDING.
- PORTABLE FIRE EXTINGUISHER(S).

4. SUB-FLOOR SANITARY DRAINAGE SYSTEM, BUILDING DRAINS, CLEANOUTS, AND HOOK-UP TO THE PLUMBING SYSTEM. FREEZE PROTECTION OF ALL WATER, SOIL AND WASTE PIPES LOCATED OUTSIDE OF THE BUILDING THERMAL ENVELOPE.

- 6. THE SERVICE DISCONNECTING MEANS, MAIN ELECTRICAL PANEL, AND FEEDERS TO ALL PANELS.
- 7. ALL WIRING RUN TO EMPTY J-BOXES SHOWN ON ELECTRICAL PLAN
- REQUIRED OCCUPANT SENSORS THAT ARE NOT FACTORY INSTALLED.

9. ALL METAL FRAMING MEMBERS SHALL BE BONDED TO THE BUILDINGS ELECTRICAL SYSTEM. THE BUILDING OWNER IS RESPONSIBLE FOR RETAINING APPROPRIATELY QUALIFIED AND LICENSED ENTITIES TO DESIGN AND INSTALL REQUIRED BONDING.

- 10. DUAL ELEMENT EXTERIOR EXIT DISCHARGE LIGHTING WHEN NOT SHOWN ON PLANS.

13. WATER-PRESSURE REDUCING VALVE, WATER-HAMMER ARRESTOR(S), AND WATER HEATER THERMAL EXPANSION DEVICE(S) WHEN REQUIRED.

- PROGRAMMABLE THERMOSTATS IF NOT INSTALLED AT FACTORY.
- 15. DRINKING FOUNTAIN & SERVICE SINK WHEN NOT SHOWN ON FLOOR PLAN
- 16. ALL SIGNS, INCLUDING TACTILE SIGNS, UNLESS OTHERWISE SPECIFIED.
- 17. CONNECTIONS OF ELECTRICAL CIRCUITS CROSSING OVER MODULE MATING LINE(S) (MULTI-UNITS ONLY).
- 18. STRUCTURAL AND AESTHETIC INTERCONNECTIONS BETWEEN MODULES (MULTI-UNITS ONLY).

19. ANY AIR GAPS BETWEEN MODULES AT FLOOR AND CEILING LINES AND ANY OTHER PENETRATIONS THROUGH THE BUILDING ENVELOPE SHALL BE CAULKED, GASKETED, WEATHER-STRIPPED, WRAPPED OR OTHERWISE SEALED TO LIMIT UNCONTROLLED AIR MOVEMENT.

20. RODENT PROOFING IN ACCORDANCE WITH IBC APPENDIX F SHALL BE INSTALLED ON ALL BUILDINGS IN LOCATIONS WHERE THE JURISDICTION HAVING AUTHORITY HAS ADOPTED APPENDIX F. RODENT PROOFING IS DESIGNED BY OTHERS, SITE INSTALLED AND SUBJECT TO THE APPROVAL OF THE JURISDICTION HAVING AUTHORITY.

21. MANUAL FIRE ALARM SIGNALING SYSTEM

#### **BUILDING DATA NOTES:**

- 1. CONSTRUCTION IS TYPE V-B. 2,800 GROSS SQUARE FEET.
- 2. OCCUPANCY IS EDUCATIONAL (AGES 12 YEARS AND OLDER).
- 3. MEANS OF EGRESS IS DESIGNED FOR AN OCCUPANT LOAD OF 1 PERSON PER 20 SQUARE FEET OF NET CLASSROOM FLOOR AREA. (34 OCCUPANTS PER CLASSROOM 136 TOTAL OCCUPANTS).
- 4. FIRE RATING OF EXTERIOR WALLS IS 0 HOURS.

5. THIS BUILDING REQUIRES A FIRE SEPARATION DISTANCE OF 10 FEET OR MORE IN ACCORDANCE WITH TABLE 602 AND SECTION 705.3 OF THE IBC AND IS SUBJECT TO LOCAL JURISDICTION APPROVAL. THIS STRUCTURE SHALL HAVE A MINIMUM OF 60'-0" CLEARANCE FROM UNLIMITED AREA BUILDINGS.

6. THIS BUILDING SHALL HAVE A FIRE ALARM SYSTEM (PROTECTIVE G. THIS BUILDING SHALL HAVE A FIRE ALARM SISTEM (PROTECTIVE SIGNALING SYSTEMS, FIRE DETECTION SYSTEMS, ETC.) INSTALLED IN ACCORDANCE WITH NFPA-72. THE FIRE ALARM SYSTEM IS DESIGNED BY OTHERS, SITE INSTALLED AND SUBJECT TO THE APPROVAL OF THE LOCAL JURISDICTION HAVING AUTHORITY. THE FIRE ALARM CONTROL PANEL MUST BE INSTALLED IN A HIGHLY VISIBLE LOCATION ACCEPTABLE TO THE LOCAL JURISDICTION HAVING AUTHORITY. (THE FACP CANNOT BE INSTALLED IN A CLOSET OR BATHROOM).

VIRGINIA STRUCTURAL LOAD LIMITATIONS: FLOOR LIVE LOAD: B. 100# CONCENTRATED LOAD OVER 30 INCH X 30 INCH AREA LOCATED ANYWHERE ON FLOOR.

ROOF SNOW LOAD:
A. GROUND SNOW LOAD:
B. FLAT—ROOF SNOW LOAD:
C. SNOW EXPOSURE FACTOR:
C. SNOW IMPORTANCE FACTOR:
E. SNOW HERMAL FACTOR:
F. ROOF SLOPE FACTOR:
C. SLOPED ROOF SNOW LOAD:
D. SLOPED ROOF S

ULTIMATE WIND SPEED (3-SEC GUST):

NOMINAL WIND SPEED (3-SEC GUST): RISK CATEGORY Vasd = 90 MPH RISK CATEGORY II

WIND EXPOSURE CATEGORY: EXP. = C

INTERNAL PRESSURE COEFFICIENT: GCpi = 0.18

COMPONENT & CLADDING PRESSURES (ROOF 0 TO 7 DEG.):

WALL ZONE 5: Pult = +/-38.6 PSF (Pasd = +/-23.2 PSF)

WALL ZONE 4: Pult = +/-31.2 PSF (Pasd = +/-18.7 PSF)

ROOF ZONE 3: Pult = -72.7 PSF (Pasd = -43.6 PSF)

ROOF ZONE 2: Pult = -48.3 PSF (Pasd = -29.0 PSF) ROOF ZONE 1: Puit = -28.8 PSF (Pasd = -23.0 FSF)
ROOF ZONE 1: Puit = -28.8 PSF (Pasd = -17.3 PSF)
G. THIS BUILDING IS NOT DESIGNED FOR PLACEMENT ON THE UPPER
HALF OF A HILL OR ESCARPMENT EXCEEDING 15 FEET IN HEIGHT.
H. BUILDING DESIGN IS BASED ON "ENCLOSED" CLASSIFICATION.
I. BUILDING MEAN ROOF HEIGHT SHALL NOT EXCEED 15 FEET.

SEISMIC LOAD:
A. RISK CATEGORY IS II.
B. SEISMIC IMPORTANCE FACTOR IS 1.0
C. SEISMIC SITE CLASS IS D.
D. SPECTRAL RESPONSE COEFFICIENTS:
Ss = 0.48 S1 = 0.12
Sds = 0.45 Sd1 = 0.19
E. SEISMIC DESIGN CATEGORY IS C.
F. SEISMIC FORCE RESISTING SYSTEM IS A13.
G. SIMPLIFIED SEISMIC ANALYSIS PROCEDURE HAS BEEN USED.
H. RESPONSE MODIFICATION FACTOR R = 6.5.
I. SEISMIC RESPONSE COEFFICIENT Cs = N/A.
J. DESIGN BASE SHEAR V = 1.5K PER MODULE

FLOOD LOAD: THIS BUILDING IS NOT DESIGNED TO BE LOCATED IN A FLOOD

**RADCO APPROVED** May 22, 2017 RESOURCES, APPLICATIONS, DESIGN & CONTROLS, INC. EASTERN NATIONAL REGION CODE SUMMARY: **5801 BENJAMIN CENTER DRIVE, SUITE 102** TAMPA, FL 33634 BUILDING **ELECTRICAL** MECHANICAL PLUMBING ACCESSIBILITY ENERGY (813) 243-0370 - O | (813) 243-1314 - F Lic. No. 20536 www.radcoinc.com 2012 IPC 2010 ADA, ASHRAE W/ VA REV. 09 ANSI A117.1 90.1-2010 2012 IBC 2011 NEC

THIRD PARTY DESIGN APPROVAL & INSPECTION AGENCY

05-21-2017 SIONAL. UNAL

TITAN MODULAR SYSTEMS, INC.

**INDEX:** 

SHEET DESCRIPTION

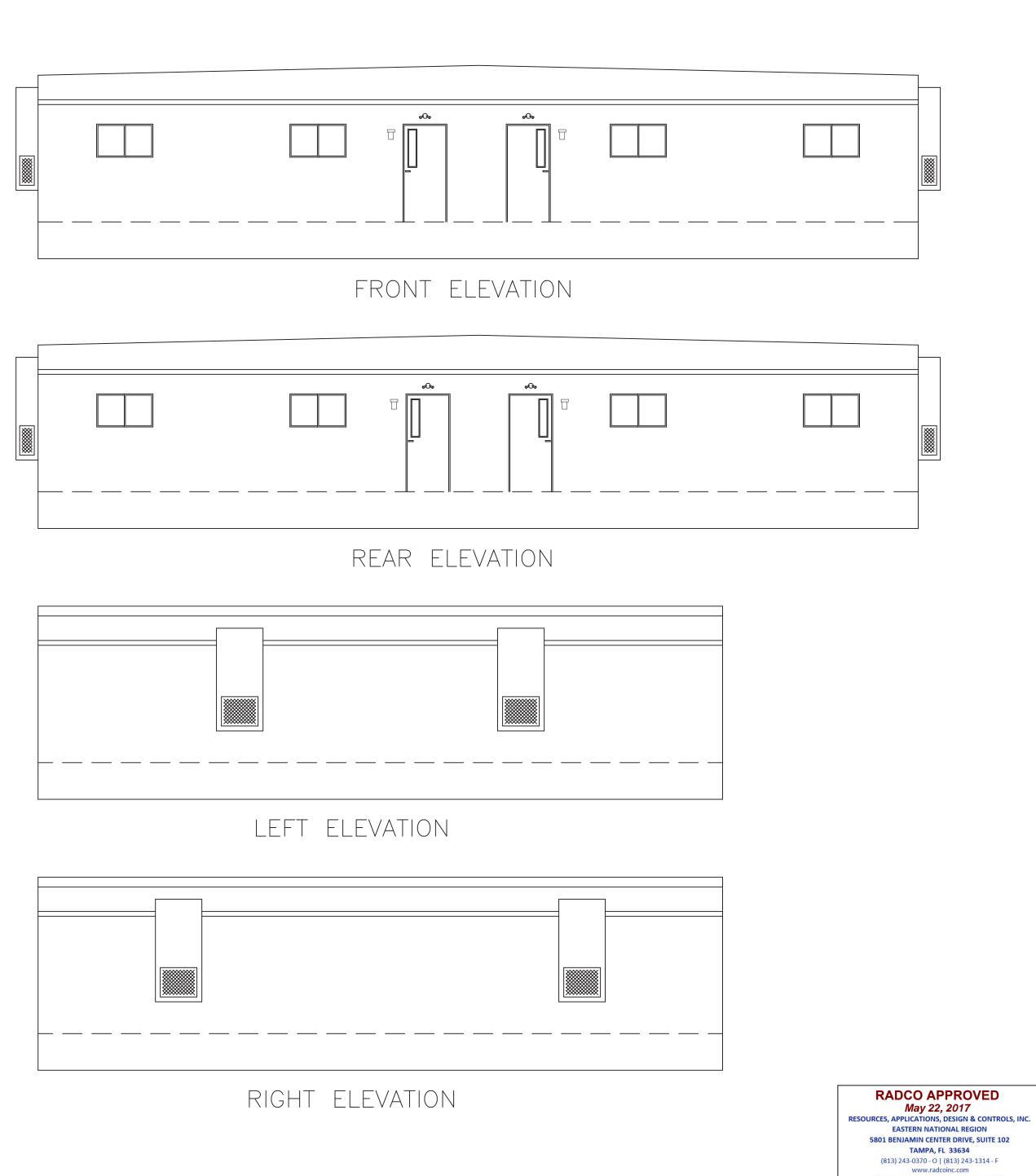
1 OF 5 COVER SHEET 2 OF 5 ELEVATIONS 3 OF 5 FLOOR PLAN

5 OF 5 CROSS SECTION

ELECTRICAL & MECHANICAL PLAN

1 OF 2 FOUNDATION PLAN 2 OF 2 FOUNDATION NOTES & DETAILS

162 INDUSTRIAL DRIVE ALMA, GEORGIA 31510 (912) 632-3344 KENNETH A. GODFREY, P.E. DATE: 05/16/2017 CONSULTING ENGINEER
490 RUSTIC BARN TRAIL SCALE: - N/A MORGANTON, GA 30560 REVISIONS: CODES: SEE SUMMARY KAG. LABELS: RADCO., VA. BUILDING DESTINATION: HERNDON, VA. SHEET TMS 3350-62 A/D OF 5 KAG. NO. COVER SHEET 051217TMS



#### TYPICAL ELEVATION NOTES:

1. ALL SITE INSTALLED ITEMS ARE SUBJECT TO THE APPROVAL OF THE JURISDICTION HAVING AUTHORITY.

2. ACCESSIBLE RAMP(S), STAIR(S), AND HANDRAILS ARE DESIGNED BY OTHERS AND SITE INSTALLED.

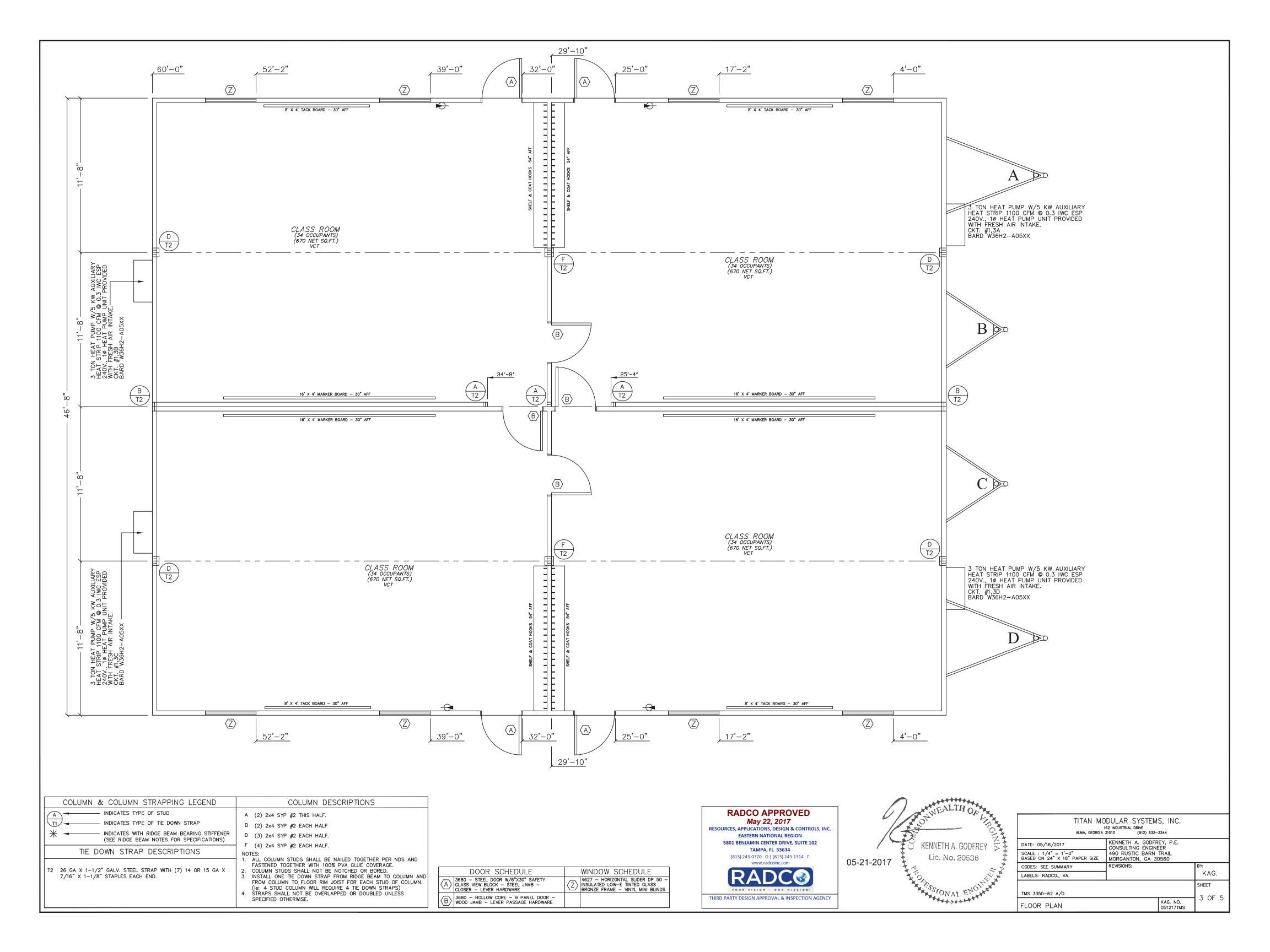
3. FOUNDATION ENCLOSURE (IF PROVIDED) IS DESIGNED BY OTHERS AND SITE INSTALLED. ENCLOSURE MUST HAVE A MINIMUM NET AREA OF VENTILATION OPENINGS OF NOT LESS THAN ONE SQUARE FOOT FOR EACH 150 SQUARE FEET OF CRAWL SPACE AREA. LOCATE OPENINGS TO PROVIDE CROSS VENTILATION OF ENTIRE CRAWL SPACE. INSTALL AN 18" X 24" MINIMUM OPENING FOR CRAWL SPACE ACCESS.

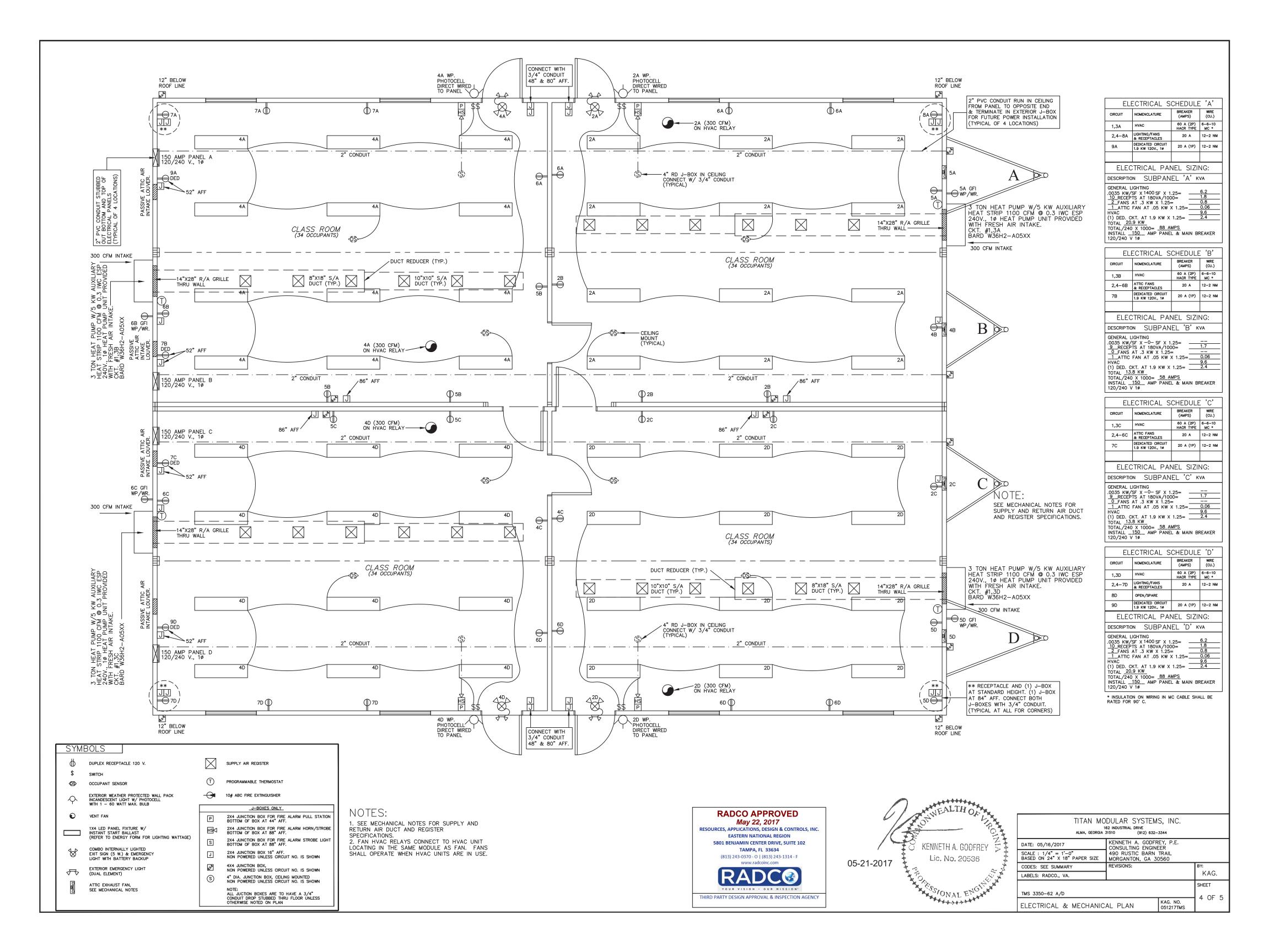
4. SEE MECHANICAL NOTES AND/OR CROSS SECTION FOR METHOD OF ATTIC VENTILATION.

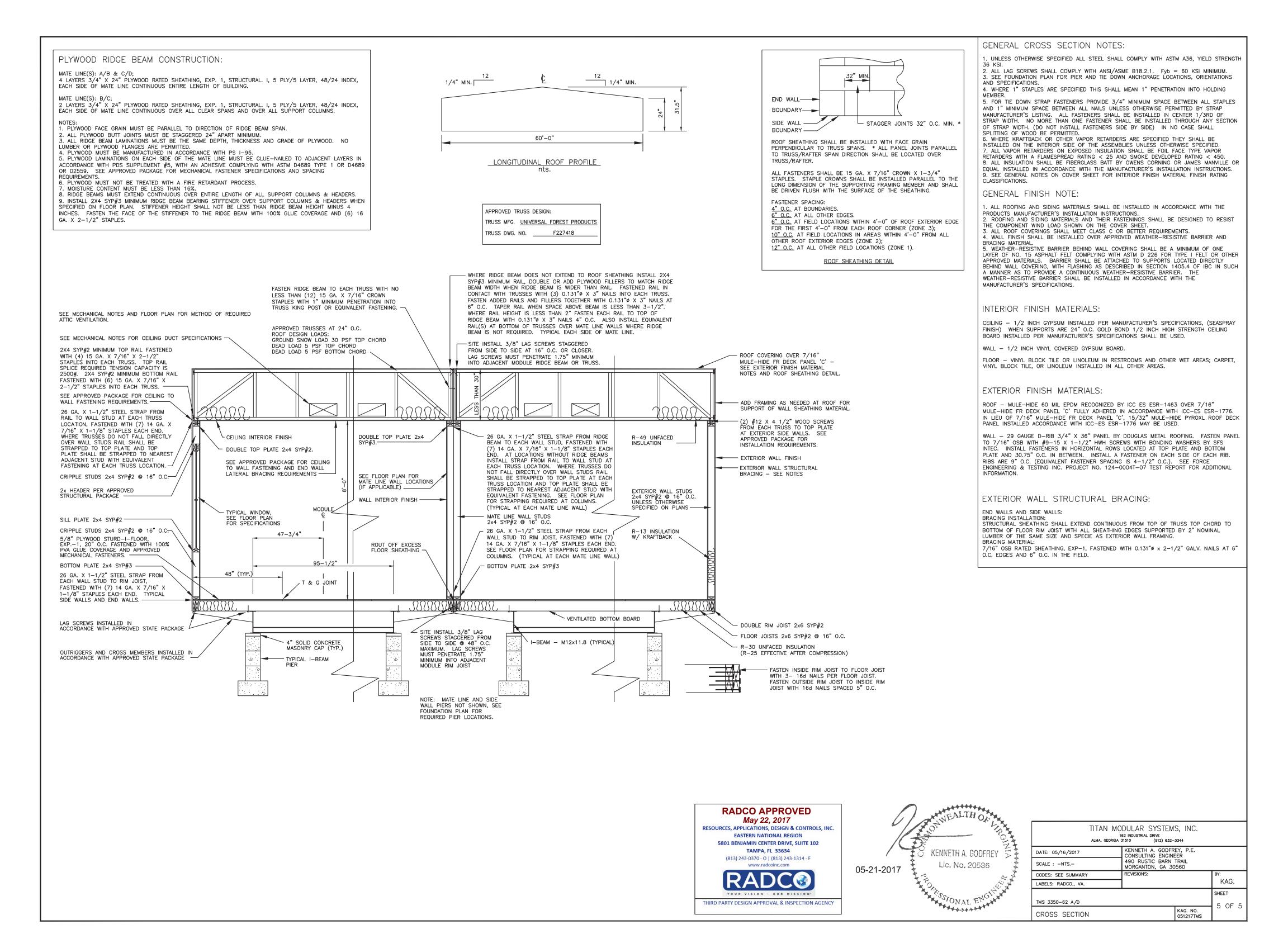


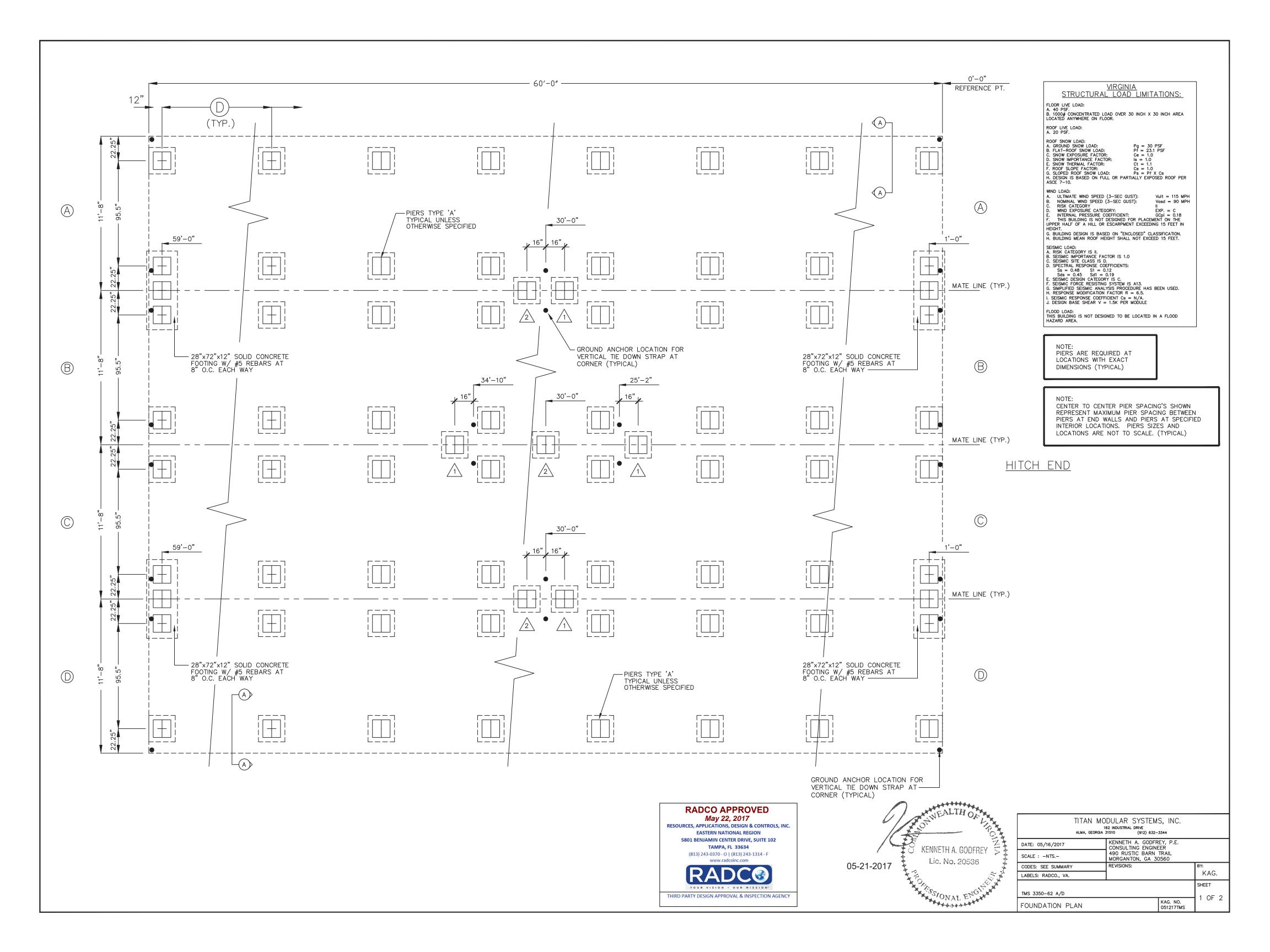


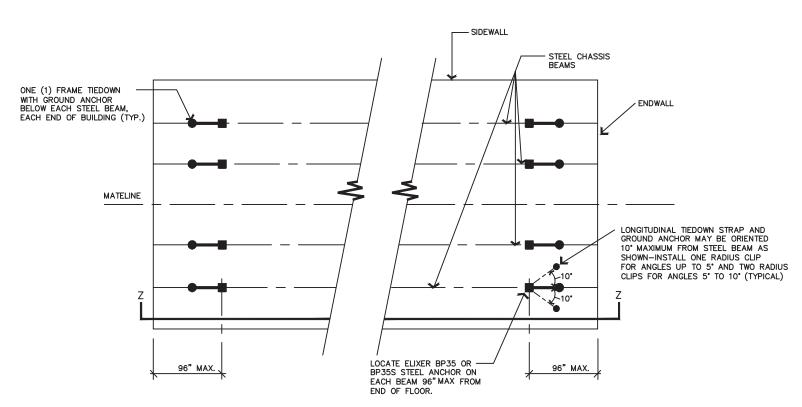
TITAN MODULAR SYSTEMS, INC. 162 INDUSTRIAL DRIVE ALMA, GEORGIA 31510 (912) 632–3344				
DATE: 05/16/2017	KENNETH A. GODFR CONSULTING ENGINE			
SCALE : 3/16" = 1'-0" BASED ON 24" X 18" PAPER SIZE	490 RUSTIC BARN TRAIL MORGANTON, GA 30560			
CODES: SEE SUMMARY	REVISIONS: BY:			
LABELS: RADCO., VA.	KAG.			
			SHEET	
TMS 3350-62 A/D	2 OF 5			
ELEVATIONS		KAG. NO. 051217TMS		



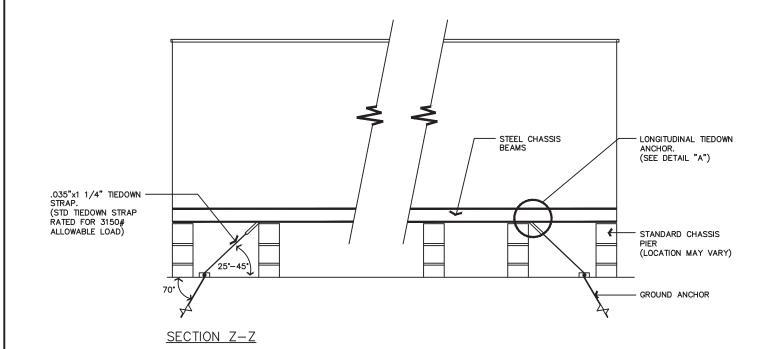


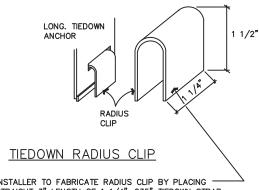




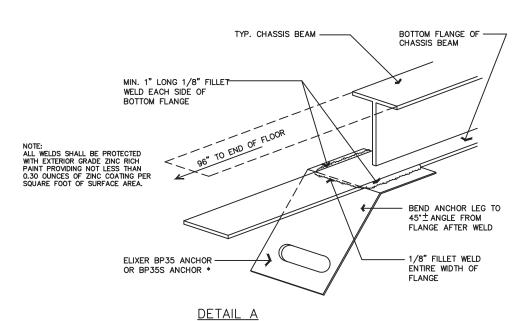


#### PLAN VIEW





INSTALLER TO FABRICATE RADIUS CLIP BY PLACING — STRAIGHT 3" LENGTH OF 1 1/4"x.035" TIEDOWN STRAP IN ANCHOR SLOT AND MANUALLY BENDING THE STRAP TO THE CONFIGURATION SHOWN.



\* IN LIEU OF THE ELIXER ANCHOR SPECIFIED ABOVE, "LONGITUDINAL FRAME BEAM CLAMPS" BY TIE DOWN ENGINEERING, INC. MAY BE USED. IF USED, THEY SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH TEST REPORT 99—MH03—TDE BY K2 ENGINEERING, INC. WHEN USED, TWO GROUND ANCHORS AND TIE DOWN STRAPS ARE REQUIRED AT EACH CLAMP LOCATIONS. ONE STRAP SHALL BE INSTALLED ON EACH SIDE OF THE I—BEAM AT EACH CLAMP LOCATION. EACH STRAP SHALL BE INSTALLED ON EACH SIDE OF SET 10" FROM THE DIRECTION PARALLEL TO THE I—BEAM AS SHOWN IN THE PLAN VIEW ON THIS PAGE.

# **FOUNDATION NOTES:**

1. THIS FOUNDATION PLAN IS PROVIDED FOR REFERENCE AS A TYPICAL STANDARD. ACTUAL FOUNDATION CONDITIONS MUST BE EVALUATED FOR APPLICABILITY IF THIS PLAN IS TO BE USED. ALTERNATE FOUNDATION PLANS MAY BE DESIGNED BY OTHERS IN ACCORDANCE WITH THE REQUIREMENTS OF THE JURISDICTION HAVING AUTHORITY. IF FOUNDATION PLANS ARE DESIGNED BY OTHERS, THE ENGINEER OF THE BUILDING PLANS SHALL NOT BE HELD RESPONSIBLE OR LIABLE FOR THE FOUNDATION DESIGN AND THE CONSEQUENTIAL PERFORMANCE OF THE SUPERSTRUCTURE'S STRUCTURAL COMPONENTS AND SYSTEMS RELATED THERETO.

2. ALL FOUNDATION CONSTRUCTION MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL CODES.

3. TIE DOWN STRAPS TO BE 1-1/4" X .035" TYPE-1, FINISH B, GRADE 1 ZINC COATED STEEL STRAPPING CERTIFIED BY A REGISTERED ENGINEER OR ARCHITECT AS CONFORMING WITH ASTM 03953-91. TIE DOWN STRAPS AND CONNECTING HARDWARE SHALL HAVE 3150# MINIMUM WORKING CAPACITY.

4. EACH GROUND ANCHOR SHALL HAVE A WORKING CAPACITY NO LESS THAN THE SUM OF THE REQUIRED WORKING CAPACITIES OF ALL TIE DOWN STRAPS CONNECTED TO THE GROUND ANCHOR, AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. DESIGN OF GROUND ANCHOR, INCLUDING SHAFT LENGTH, NUMBER AND DIAMETER OF HELIXES, ETC, TO BE AS SPECIFIED BY THE GROUND ANCHOR MANUFACTURER FOR THE ACTUAL SOIL TYPE ENCOUNTERED, IF THE HOLDING OR PULLOUT CAPACITIES OF GROUND ANCHORS ARE BELOW THE ASSUMED DESIGN VALUES, THE ARCHITECT/ENGINEER MUST BE CONSULTED FOR AN ALTERNATE ANCHORAGE DESIGN.

5. EXCAVATE AN ADDITIONAL 1 TO 2 INCHES AT BOTTOM AND SIDES OF ALL FOOTINGS THAT ARE POURED DIRECTLY AGAINST EARTH.

6. ALL PIERS SHALL BE CONSTRUCTED OF 8" X 8" X 16" NOMINAL STANDARD WEIGHT CONCRETE MASONRY UNITS CONFORMING TO ASTM C90 HAVING A UNIT COMPRESSIVE STRENGTH OF 1900 PSI (f'm = 1500 PSI). MASONRY UNITS SHALL BE FULLY LAID IN TYPE M OR S MORTAR OR COVERED WITH SURFACE BONDING CEMENT COMPLYING WITH ASTM C887 AND APPLIED IN STRICT ACCORDANCE WITH THE CEMENT MANUFACTURER'S INSTRUCTIONS, WITH THE BOTTOM COARSE FULLY LAID IN TYPE M OR S MORTAR. REINFORCEMENT BARS AND PIER FOOTINGS SHALL BE DESCRIBED IN THE PIER DETAILS.

7. CONCRETE SHALL BE STANDARD WEIGHT (150 PCF) WITH A MINIMUM COMPRESSIVE STRENGTH 3000 PSI AT 28 DAYS. MORTAR SHALL COMPLY WITH ASTM C270. GROUT SHALL COMPLY WITH ASTM C476 AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI.

8. ALL REINFORCEMENT BARS SHALL COMPLY WITH ASTM A615, GRADE 60. REINFORCEMENT BARS SHALL BE UNCOATED DEFORMED BARS (NO EPOXY). REINFORCEMENT BARS SHALL BE EQUALLY SPACED AND PLACED WITH 3" CLEARANCE FROM BOTTOM AND SIDES OF THE FOOTING. AT SPLICES LAP ALL #4 BARS 24 INCHES MINIMUM AND LAP ALL #5 BARS 30 INCHES MINIMUM. OFF SET ALL SPLICES 30 INCHES MINIMUM.

9. ALL PIERS SHALL BE CAPPED WITH 4 INCHES OF SOLID MASONRY OR CONCRETE OR THE CAVITIES OF THE TOP COURSE SHALL BE FILLED WITH CONCRETE OR GROUT. PIERS SHALL PROVIDE A TRUE AND EVEN BEARING SURFACE.

10. THE CENTERLINE OF EACH PIER SHALL BE LOCATED DIRECTLY BELOW THE I-BEAM CENTERLINE WITH 1 INCH MAXIMUM TOLERANCE.

11. SOIL BEARING CAPACITY SHOWN ON THIS PLAN IS ASSUMED. IF THE ACTUAL SOIL BEARING CAPACITY IS LESS THAN 2000 PSF, THE ENGINEER MUST BE CONSULTED FOR REQUIRED ALTERNATE FOUNDATION DESIGN. FOOTINGS SHALL BE PLACED ON NON-EXPANSIVE SOILS ONLY.

12. WHEN CONTINUOUS PERIMETER SUPPORT IS NOT PROVIDED, INSTALL A TYPICAL I-BEAM TYPE PIER ON EACH SIDE OF ALL EXTERIOR DOOR OPENINGS. (MANUFACTURER'S RECOMMENDATION ONLY— OPTIONAL WHEN NOT SHOWN) SLIGHT ADJUSTMENT MAY BE REQUIRED TO INSURE OPERABILITY AFTER INSTALLATION OF BUILDING IS COMPLETE.

13. THE AREA UNDER FOOTINGS AND FOUNDATIONS SHALL HAVE ALL VEGETATION, STUMPS, ROOTS, AND FOREIGN MATERIALS REMOVED PRIOR TO THEIR CONSTRUCTION.

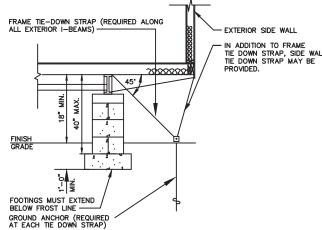
14. THE PERIMETER GRADE SHALL BE SLOPED AWAY FROM THE BUILDING TO PROVIDE POSITIVE DRAINAGE. THE GRADE OF THE GROUND UNDER THE BUILDING SHALL NOT BE LOWER THAN THE LOWEST SURROUNDING FINISHED LOT AREA GRADE IN ORDER TO PREVENT THE ACCUMULATION AND STANDING OF WATER UNDER THE BUILDING.

15. ALL STAIRS, RAMPS, DECKS AND OTHER SITE WORK NOT SHOWN ON THESE DRAWINGS ARE DESIGNED BY OTHERS AND SUBJECT TO THE APPROVAL OF THE JURISDICTION HAVING AUTHORITY.

16. TERMITE PROTECTION SHALL BE PROVIDED IN ACCORDANCE WITH THE APPLICABLE CODES WHEN REQUIRED BY SUCH CODES.

17. FOUNDATION ENCLOSURE (IF PROVIDED) IS DESIGNED BY OTHERS. ENCLOSURE MUST HAVE A MINIMUM NET VENT AREA OF VENTILATION OPENINGS OF NOT LESS THAN 1 SQUARE FOOT FOR EACH 150 SQUARE FEET OF CRAWL SPACE AREA. LOCATE OPENINGS TO PROVIDE CROSS VENTILATION OF ENTIRE CRAWL SPACE. INSTALL AN 18" X 24" MINIMUM OPENING FOR CRAWL SPACE ACCESS.

18. THE FOUNDATION DIMENSIONS SHOWN ARE EXPECTED ACTUAL MODULE WIDTHS FROM THE FACTORY. TYPICALLY A ONE INCH GAP AT EACH MATE LINE IS NEEDED TO ACCOUNT FOR MODULE EXPANSION, SETTING TOLERANCES, ETC. THE FOUNDATION CONTRACTOR SHOULD CONSULT WITH THE MANUFACTURER OF THE MODULES PRIOR TO CONSTRUCTION OF THE FOUNDATION TO DETERMINE THE EXACT AMOUNT OF INCREASED WIDTH TO BE ADDED AT EACH MATE LINE. TAKE CAUTION AS THIS WILL AFFECT THE OVERALL DIMENSIONS OF THE FOUNDATION.



SECTION A-A

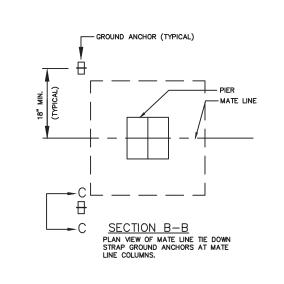
ULTIMATE WIND ASD WIND WITHIN 9'-4" ELSEWHERE SPEED OF END WALLS 12'-0" 1. ALL POINTS ALONG I-BEAMS SHALL BE WITHIN 1/2 OF

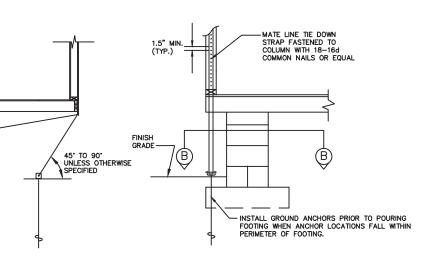
THE SPECIFIED DIMENSIONS OF A STRAP/ANCHOR LOCATIONS.

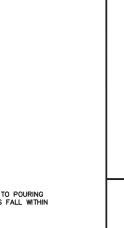
WALL SHALL NOT EXCEED 1/2 OF THE SPECIFIED DIMENSIONS AT END WALLS.

2. THE FIRST STRAP/ANCHOR LOCATION FROM EACH END

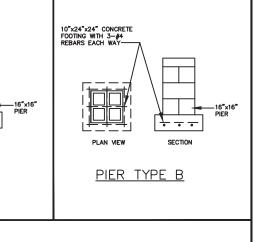
FRAME TIE-DOWN STRAP & GROUND ANCHOR ON CENTER SPACING CHART

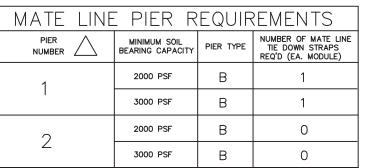






PIER TYPE A

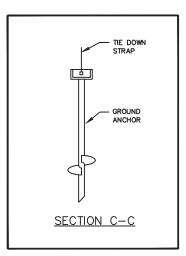




MATE LINE TIE DOWN STRAP DETAIL

. — —		_ ~	
ER ABER	MINIMUM SOIL BEARING CAPACITY	PIER TYPE	NUMBER OF MATE LINE TIE DOWN STRAPS REQ'D (EA. MODULE)
	2000 PSF	В	1
	3000 PSF	В	1
)	2000 PSF	В	0
<u>′</u>	3000 PSF	В	0

SOIL BEARING CAPACITY (PSF)	MAXIMUM PIER SPACING
2000	8'-0"
3000	10'-0"





THIRD PARTY DESIGN APPROVAL & INSPECTION AGENCY



TITAN MODULAR SYSTEMS, INC.  162 INDUSTRIAL DRIVE ALMA, GEORGIA 31510 (912) 632–3344				
DATE: 05/16/2017	KENNETH A. GODFR CONSULTING ENGINE			
SCALE : -NTS	490 RUSTIC BARN TRAIL MORGANTON, GA 30560			
CODES: SEE SUMMARY	REVISIONS: BY:			
LABELS: RADCO., VA.	KAG.			
SH			SHEET	
TMS 3350-62 A/D	2 OF 2			
FOUNDATION NOTES & DE	KAG. NO. 051217TMS	2 OF 2		

Qty Job Truss Type Ply Truss First String Space 316 GA 68206 3163212 F227418 FLAT 1 Job Reference 3163212 Universal Forest Products Inc., Grand Rapids, MI 49525, Michael Adams 7.350 e Sep 27 2012 MiTek Industries, Inc. Fri Jun 14 09:59:19 2013 Page 1 of 1 F227418 = IBC2012 F227419 = IBC2006/2009 3-2-0 5-8-0 3-2-0 3x4 2x3 2x3 3 2-0-0 (2-0-0 to 3-0-0) 5-6-8 W2 W1 W1 2x5 2x5 W3 W3 8" x 18" Duct 8" x 18" Duc x 18" Duc 9 0-8-0 fxed B1 8 5 6 1x3 : 1x3 3x4 3x4 3-2-0 3-2-0 5-8-0 12-0-0 (11-2-0 to 12-0-0) Plate Offsets (X,Y): [2:0-1-8,0-1-4], [3:0-1-8,0-1-4], [5:Edge,0-3-8], [9:0-2-8,0-0-0], [10:0-2-8,0-0-0] SPACING: 1-4-0 SPACING: 2-0-0 **SPACING** DEFL I/defl L/d **PLATES** GRIP 2-0-0 CSI in (loc) LOADING (psf) LOADING (psf) >648 240 MT20 Plates Increase 1.15 TC 0.79 Vert(LL) 0.22 6-7 244/190 TCLL 26.9 TCLL 40.4 -0.23 Lumber Increase 1.15 BC 0.54 Vert(TL) 6-7 >613 180 (Ground Snow=35.0) (Ground Snow=52.5) Rep Stress Incr YES 0.55 -0.02WB 5 n/a n/a Horz(TL) TCDL 7.0 **TCDL** 10.5 Weight: 36 lb Code IBC2012/TPI2007 (Matrix) BCLL 0.0BCLL 0.0 FT = 0% BCDL 7.0 BCDL 10.5 LUMBER BRACING TOP CHORD 2x3 SP No.1 TOP CHORD Structural wood sheathing directly applied or 4-11-7 oc [P] 2x3 SP No.1 purlins, except end verticals. BOT CHORD 2x2 SP No.2 \*Except\* **BOT CHORD WEBS** Rigid ceiling directly applied or 5-2-4 oc bracing W1: 2x4 SP No.2 REACTIONS (lb/size) 8=401/0-3-8 (min. 0-1-8), 5=401/0-3-8 (min. 0-1-8) Max Horz 8=-170(LC 7) Max Uplift 8=-542(LC 7), 5=-542(LC 8) APPROVED Max Grav 8=479(LC 2), 5=479(LC 2) FORCES (lb) - Maximum Compression/Maximum Tension May 22, 2017 TOP CHORD 8-9=-425/598, 1-9=-58/98, 1-2=-320/233, 2-3=-680/1007, 3-4=-320/233, 5-10=-425/598, 4-10=-58/98 **BOT CHORD** 7-8=-838/680, 6-7=-838/680, 5-6=-838/680 2-7=0/147, 3-6=0/147, 2-9=-983/1341, 3-10=-983/1341 WEBS NOTES 1) Wind: ASCE 7-10; Vult=178mph (3-second gust) Vasd=141mph @24in o.c.; TCDL=2.8psf; BCDL=2.8psf; (Alt. 180mph @16in o.c.; TCDL=4.2psf; BCDL=4.2psf); h=30ft; Cat. II; Exp C; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for

- reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-10; Pg=35.0 psf (ground snow); Ps=26.9 psf (roof snow); Category II; Exp C; Partially Exp.; Ct=1.1, Lu=50-0-0
- 3) Roof design snow load has been reduced to account for slope.
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 542 lb uplift at joint 8 and 542 lb uplift at joint 5.
- 8) This truss is designed in accordance with the 2012 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- 9) When adjusting the variable span dimension, adjust the post placement dimensions proportional to the change in span
- 10) Based on: F227408
- 11) Revision: Increased wind from 140 mph, Increased all lumber to SP.

WARNING - Verify design parameters and READ NOTES

The professional engineering seaf indicates that a licensed professional has reviewed the design under the standards referenced within this document, not necessarily the current state building code. The engineering seal is not an approval to use in a specific state. The final determination on whether a truss design is acceptable under the locally adopted building code rest with the building official or designated appointee.

Universal Forest Products, Inc.

2801 EAST BELTLINE RD. NE GRAND RAPIDS, MI 49525

PHONE (616)-364-6161 FAX (616)-365-0060 This building component has only been designed for the loads noted on this drawing. Construction and lifting forces have not been considered. The builder is responsible

for lifting methods and system design. Builder responsibilities are defined under TPI1. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult BCSI 1-06 from the Wood Truss Council of America and Truss Plate Institute Recommendation available from WTCA, 6300 Enterprise LN, Madison, WI 53719 J:\support\MitekSupp\templates\ufp.tpe c@yright 2013 by: Universal Forest Products, Inc.



W. FREE MAN GISTER

PE 10001303

NOIANA CITY



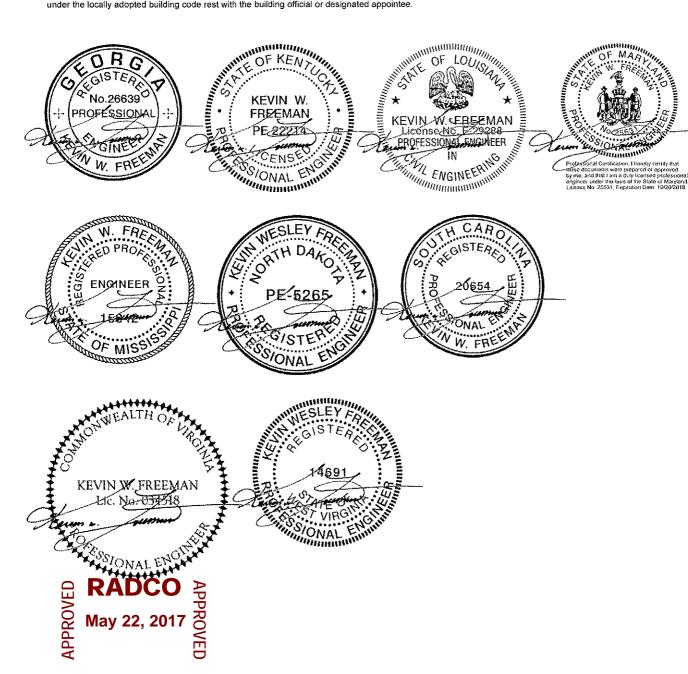
Job 68206

F227418

#### NC.

UNIVERSAL FOREST PRODUCTS, IN					
Customer	MFG				
FIRST STRING SPACE	316				

The professional engineering seal indicates that a licensed professional has reviewed the design under the standards referenced within this document, not necessarily the current state building code. The engineering seal is not an approval to use a design in a specific state. The final determination on whether a truss design is acceptable under the locally adopted building code rest with the building official or designated appointee.



# COMcheck Software Version 4.0.5.1 Envelope Compliance Certificate



Page

1 of 20

#### **Project Information**

Energy Code: 90.1 (2010) Standard

Project Title: TMS 3350-62 KAG.# 051217TMS

Location: Herndon, Virginia

Climate Zone: 4a

Project Type: New Construction

Vertical Glazing / Wall Area: 4%

Construction Site: Owner/Agent: Designer/Contractor:

Kenneth A. Godfrey, P.E. Titan Modular Systems, Inc. 162 Industrial Drive Alma, GA 31510 912-632-3344

Building Area Floor Area

1-School/University: Nonresidential 2800

#### **Envelope Assemblies**

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U- Factor <sub>(a)</sub>
Roof 1: Attic Roof with Wood Joists, [Bldg. Use 1 - School/University]	2800	49.0	0.0	0.021	0.027
Exterior Wall 1: Wood-Framed, 16" o.c., [Bldg. Use 1 - School/University]	1708	13.0	0.0	0.089	0.089
Window 1: Metal Frame with Thermal Break, Perf. Specs.: Product ID KINRO, SHGC 0.24, [Bldg. Use 1 - School/University] (b)	69			0.550	0.550
Door 1: Insulated Metal, Swinging, [Bldg. Use 1 - School/University]	80			0.300	0.700
Floor 1: Wood-Framed, [Bldg. Use 1 - School/University]	2800	25.0	0.0	0.039	0.033

- (a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.
- (b) Fenestration product performance must be certified in accordance with NFRC and requires supporting documentation.

#### Envelope PASSES: Design 3% better than code

#### **Envelope Compliance Statement**

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 90.1 (2010) Standard requirements in COMcheck Version 4.0.5.1 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Project Title: TMS 3350-62 KAG.# 051217TMS Report date: 05/18/17

Kenneth A.	Godfrey,	P.E
Name - Titl	е	

Signature



Page



Project Title: Report date: 05/18/17 TMS 3350-62 KAG.# 051217TMS 2 of 20



# COMcheck Software Version 4.0.5.1 Interior Lighting Compliance Certificate RADCO May 22, 2017

#### **Project Information**

**Energy Code:** 90.1 (2010) Standard

Project Title: TMS 3350-62 KAG.# 051217TMS

**New Construction** Project Type:

Construction Site: Owner/Agent: Designer/Contractor: Kenneth A. Godfrey, P.E. Titan Modular Systems, Inc. 162 Industrial Drive Alma, GA 31510 912-632-3344

#### **Allowed Interior Lighting Power**

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts (B X C)
1-School/University	2800	0.99	2772
		Total Allowed Watts =	2772
Proposed Interior Lighting Power			

Proposed Interior Lighting Power					
A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)	
1-School/University					
LED 1: LED Panel 41W:	1	48	40	1920	
		Total Propos	sed Watts =	1920	

#### Interior Lighting PASSES: Design 31% better than code

#### **Interior Lighting Compliance Statement**

Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 90.1 (2010) Standard requirements in COMcheck Version 4.0.5.1 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Kenneth A. Godfrey, P.E. Name - Title Signature Date



Project Title: TMS 3350-62 KAG.# 051217TMS Data filename: C:\Users\Public\Documents\Comcheck\Titan\TMS 3350-62 VA.cck

Page 3 of 20

Report date: 05/18/17



Page

4 of 20

#### **Project Information**

**Energy Code:** 90.1 (2010) Standard

Project Title: TMS 3350-62 KAG.# 051217TMS

Project Type: **New Construction** 

Exterior Lighting Zone 2 (Neighborhood business district)

Designer/Contractor: Construction Site: Owner/Agent:

Kenneth A. Godfrey, P.E. Titan Modular Systems, Inc. 162 Industrial Drive Alma, GA 31510 912-632-3344

#### **Allowed Exterior Lighting Power**

A Area/Surface Category	B Quantity	C Allowed Watts / Unit	D Tradable Wattage	E Allowed Watts (B X C)
Main entry	3 ft of door	20	Yes	60
Main entry	3 ft of door	20	Yes	60
Main entry	3 ft of door	20	Yes	60
Main entry	3 ft of door	20	Yes	60
		Total Tradable Watts (		240
		Total Al	lowed Watts =	240
	Total All	owed Supplemen	tal Watts (b) =	600

<sup>(</sup>a) Wattage tradeoffs are only allowed between tradable areas/surfaces.

#### **Proposed Exterior Lighting Power**

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Main entry (3 ft of door width): Tradable Wattage				
Incandescent 1: Incandescent 60W:	1	1	60	60
Incandescent 2: Incandescent 60W:	1	1	60	60
Incandescent 3: Incandescent 60W:	1	1	60	60
Incandescent 4: Incandescent 60W:	1	1	60	60
	Total Trad	dable Propos	ed Watts =	240

#### Exterior Lighting PASSES: Design 71% better than code

#### **Exterior Lighting Compliance Statement**

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 90.1 (2010) Standard requirements in COMcheck Version 4.0.5.1 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Project Title: TMS 3350-62 KAG.# 051217TMS Report date: 05/18/17

<sup>(</sup>b) A supplemental allowance equal to 600 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.



# Mechanical Compliance Certificate Mechanical Certific

#### **Project Information**

Energy Code: 90.1 (2010) Standard

Project Title: TMS 3350-62 KAG.# 051217TMS

Location: Herndon, Virginia

Climate Zone:

Project Type: **New Construction** 

Construction Site: Owner/Agent: Designer/Contractor:

> Kenneth A. Godfrey, P.E. Titan Modular Systems, Inc. 162 Industrial Drive Alma, GA 31510 912-632-3344

> > Page

6 of 20

#### **Mechanical Systems List**

#### **Quantity System Type & Description**

HVAC System 1 (Single Zone):

Single Package Vertical Unit Heat Pump Heating Mode: Capacity = 35 kBtu/h,

Proposed Efficiency = 3.00 COP, Required Efficiency = 3.00 COP

Cooling Mode: Capacity = 35 kBtu/h,

Proposed Efficiency = 9.00 EER, Required Efficiency: 9.00 EER

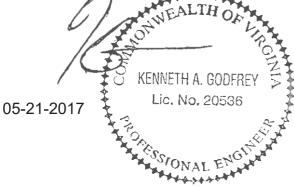
Fan System: FAN SYSTEM 1 -- Compliance (Motor nameplate HP method): Passes

FAN 1 Supply, Constant Volume, 1100 CFM, 0.3 motor nameplate hp

#### **Mechanical Compliance Statement**

Compliance Statement: The proposed mechanical design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 90.1 (2010) Standard requirements in COMcheck Version 4.0.5.1 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Kenneth A. Godfrey, P.E Name - Title Signature Date



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## **COMcheck Software Version 4.0.5.1**

# **Inspection Checklist**

Energy Code: 90.1 (2010) Standard

Requirements: 0.0% were addressed directly in the COMcheck software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section			
# & Reg.ID	Plan Review	Complies?	Comments/Assumptions
4.2.2,5.4. 3.1.1,5.7 [PR1] <sup>1</sup>	Plans and/or specifications provide all information with which compliance can be determined for the building envelope and document where exceptions to the standard are claimed.	□Complies □Does Not □Not Observable □Not Applicable	
4.2.2,6.4. 4.2.1,6.7. 2 [PR2] <sup>1</sup>	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the mechanical systems and equipment and document where exceptions to the standard are claimed. Load calculations per acceptable engineering standards and handbooks.	□Complies □Does Not □Not Observable □Not Applicable	
4.2.2,8.4. 1.1,8.4.1. 2,8.7 [PR6] <sup>2</sup>	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the electrical systems and equipment and document where exceptions are claimed. Feeder connectors sized in accordance with approved plans and branch circuits sized for maximum drop of 3%.	□Complies □Does Not □Not Observable □Not Applicable	
4.2.2,9.4. 4,9.7 [PR4] <sup>1</sup>	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	□Complies □Does Not □Not Observable □Not Applicable	
9.7 [PR8] <sup>1</sup>	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the exterior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include exterior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	□Complies □Does Not □Not Observable □Not Applicable	
6.7.2.4 [PR5] <sup>1</sup>	Detailed instructions for HVAC systems commissioning included on the plans or specifications for projects >=50,000 ft2.	□Complies □Does Not □Not Observable □Not Applicable	
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Section # & Req.ID	Footing / Foundation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
5.5.3.3 [FO1] <sup>2</sup>	Below-grade wall insulation R-value.	R	R	□Complies □Does Not	See the Envelope Assemblies table for values.
				□Not Observable □Not Applicable	
5.5.3.5 [FO3] <sup>2</sup>	Slab edge insulation R-value.	R Unheated	R Unheated	□Complies □Does Not	See the Envelope Assemblies table for values.
		☐ Heated	☐ Heated	□Not Observable □Not Applicable	
5.5.3.5 [FO5] <sup>2</sup>	Slab edge insulation depth/length.	ft	ft	□Complies □Does Not	See the Envelope Assemblies table for values.
			 	□Not Observable □Not Applicable	
5.8.1.7.3 [FO7] <sup>1</sup>	Insulation in contact with the ground has <=0.3% water			□Complies □Does Not	
	absorption rate per ASTM C272.			□Not Observable □Not Applicable	
6.4.3.8 [FO9] <sup>3</sup>	Freeze protection and snow/ice melting system sensors for future			□Complies □Does Not	 
	connection to controls.			□Not Observable □Not Applicable	
6.4.4.1.5 [FO11] <sup>3</sup>	Bottom surface of floor structures incorporating radiant heating	R	R	□Complies □Does Not	See the Envelope Assemblies table for values.
	insulated to >=R-3.5.		 	□Not Observable □Not Applicable	

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Section		Plans Verified	Field Verified		
# & Req.ID	Framing / Rough-In Inspection	Value	Value	Complies?	Comments/Assumptions
5.4.3.2 [FR1] <sup>3</sup>	Factory-built fenestration and doors are labeled as meeting air leakage requirements.			□Complies □Does Not □Not Observable □Not Applicable	
5.4.3.4 [FR4] <sup>3</sup>	Vestibules are installed where building entrances separate conditioned space from the exterior, and meet exterior envelope requirements. Doors have self-closing devices, and are >=7 ft apart.			□Complies □Does Not □Not Observable □Not Applicable	
5.5.4.3a [FR8] <sup>1</sup>	Vertical fenestration U-Factor.	U	U	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
5.5.4.3b [FR9] <sup>1</sup>	Skylight fenestration U-Factor.	U	U	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
5.5.4.4.1 [FR10] <sup>1</sup>	Vertical fenestration SHGC value.	SHGC:	SHGC:	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
5.5.4.4.2 [FR11] <sup>1</sup>	Skylight SHGC value.	SHGC:	SHGC:	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
5.8.2.1 [FR12] <sup>2</sup>	Fenestration products rated in accordance with NFRC.			□Complies □Does Not □Not Observable □Not Applicable	
5.8.2.2 [FR13] <sup>1</sup>	Fenestration products are certified as to performance labels or certificates provided.			□Complies □Does Not □Not Observable □Not Applicable	
5.8.2.3,5. 5.3.6 [FR14] <sup>2</sup>	U-factor of opaque doors associated with the building thermal envelope meets requirements.	U Swinging Nonswinging	U Swinging Nonswinging	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
5.4.3.1 [FR15] <sup>1</sup>	Continuous air barrier is wrapped, sealed, caulked, gasketed, and/or taped in an approved manner, except in semiheated spaces and in climate zones 1-6.			□Complies □Does Not □Not Observable □Not Applicable	

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Section # & Req.ID	Mechanical Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
6.4.1.4,6. 4.1.5 [ME1] <sup>2</sup>	HVAC equipment efficiency verified. Non-NAECA HVAC equipment labeled as meeting 90.1.	Efficiency:	Efficiency:	□Complies □Does Not □Not Observable □Not Applicable	See the Mechanical Systems list for values.
6.4.3.4.1 [ME3] <sup>3</sup>	Stair and elevator shaft vents have motorized dampers that automatically close.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
6.4.3.4.2, 6.4.3.4.3 [ME4] <sup>3</sup>	Outdoor air and exhaust systems have motorized dampers that automatically shut when not in use and meet maximum leakage rates. Check gravity dampers where allowed.			□Complies □Does Not □Not Observable □Not Applicable	
6.4.3.4.5 [ME39] <sup>3</sup>	Enclosed parking garage ventilation has automatic contaminant detection and capacity to stage or modulate fans to 50% or less of design capacity.			□Complies □Does Not □Not Observable □Not Applicable	
6.4.3.4.4 [ME5] <sup>3</sup>	Ventilation fans >0.75 hp have automatic controls to shut off fan when not required.			□Complies □Does Not □Not Observable □Not Applicable	
6.4.3.9 [ME6] <sup>1</sup>	Demand control ventilation provided for spaces >500 ft2 and >40 people/1000 ft2 occupant density and served by systems with air side economizer, auto modulating outside air damper control, or design airflow >3,000 cfm.			□Complies □Does Not □Not Observable □Not Applicable	
6.4.3.10 [ME40] <sup>2</sup>	Single zone HVAC systems with fan motors >=5 hp have variable airflow controls. Air conditioning equipment with a cooling capacity >=110,000 Btu/h has variable airflow controls.			□Complies □Does Not □Not Observable □Not Applicable	See the Mechanical Systems list for values.
6.4.4.1.1 [ME7] <sup>3</sup>	Insulation exposed to weather protected from damage. Insulation outside of the conditioned space and associated with cooling systems is vapor retardant.			□Complies □Does Not □Not Observable □Not Applicable	
6.4.4.1.2 [ME8] <sup>2</sup>	HVAC ducts and plenums insulated. Where ducts or plenums are installed in or under a slab, verification may need to occur during Foundation Inspection.	R	R	□Complies □Does Not □Not Observable □Not Applicable	
6.4.4.1.3 [ME9] <sup>2</sup>	HVAC piping insulation thickness. Where piping is installed in or under a slab, verification may need to occur during Foundation Inspection.	in.	in.	□Complies □Does Not □Not Observable □Not Applicable	
6.4.4.1.4 [ME41] <sup>3</sup>	Thermally ineffective panel surfaces of sensible heating panels have insulation >= R-3.5.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

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Section # & Req.ID	Mechanical Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
6.4.4.2.1 [ME10] <sup>2</sup>	Ducts and plenums sealed based on static pressure and location.			□Complies □Does Not	
				□Not Observable □Not Applicable	
6.4.4.2.2 [ME11] <sup>3</sup>	Ductwork operating >3 in. water column requires air leakage testing.			□Complies □Does Not	
	testing.			□Not Observable □Not Applicable	
6.5.2.3 [ME19] <sup>3</sup>	Dehumidification controls provided to prevent reheating,			□Complies □Does Not	
	recooling, mixing of hot and cold airstreams or concurrent heating and cooling of the same airstream.			□Not Observable □Not Applicable	
6.5.3.3 [ME42] <sup>3</sup>	Multiple zone VAV systems with DDC of individual zone boxes			□Complies □Does Not	See the Mechanical Systems list for values.
	have static pressure setpoint reset controls.			□Not Observable □Not Applicable	1 1 1 1 1
6.5.4.1 [ME25] <sup>3</sup>	HVAC pumping systems >10 hp designed for variable fluid flow.			□Complies □Does Not	
				□Not Observable □Not Applicable	1 1 1 1 1
6.5.6.1 [ME56] <sup>1</sup>	Exhaust air energy recovery on systems meeting Table 6.5.6.1.			□Complies □Does Not	
				□Not Observable □Not Applicable	
6.5.7.1.1 [ME32] <sup>2</sup>	Kitchen hoods >5,000 cfm have make up air >=50% of exhaust			☐Complies ☐Does Not	
	air volume.			□Not Observable □Not Applicable	
6.5.7.1.2 [ME46] <sup>3</sup>	Conditioned supply air to space with a kitchen hood shall not			☐Complies ☐Does Not	1 1 1 1 1
	exceed the greater of a) supply flow required to meet space heating or cooling, or b) hood exhaust flow minus the available air transfer from available spaces.			□Not Observable □Not Applicable	
6.5.7.1.5 [ME49] <sup>3</sup>	Approved field test used to evaluate design air flow rates			☐Complies ☐Does Not	
	and demonstrate proper capture and containment of kitchen exhaust systems.			□Not Observable □Not Applicable	
6.5.7.2 [ME33] <sup>1</sup>	Fume hoods exhaust systems >=15,000 cfm have VAV hood			☐Complies ☐Does Not	
	exhaust and supply systems, direct make-up air or heat recovery.			□Not Observable □Not Applicable	
6.5.8.1 [ME34] <sup>2</sup>	Unenclosed spaces that are heated use only radiant heat.			□Complies □Does Not	
				□Not Observable □Not Applicable	

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Section #	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
& Req.ID			
8.4.2 [EL10] <sup>2</sup>	20-Amp receptacles are controlled by	□Complies □Does Not	
	an automatic control device.	□Not Observable □Not Applicable	
9.4.1.1 [EL1] <sup>2</sup>	Automatic controls to shut off all building lighting.	□Complies □Does Not	
		□Not Observable □Not Applicable	
9.4.1.2 [EL2] <sup>2</sup>	Independent lighting controls installed per approved lighting plans and all	□Complies □Does Not	
	manual controls readily accessible and visible to occupants.	□Not Observable □Not Applicable	
9.4.1.3 [EL11] <sup>2</sup>	with required lighting controls and	□Complies □Does Not	
	daylight transition zone lighting.	□Not Observable □Not Applicable	
9.4.1.4 [EL12] <sup>1</sup>	are equipped with required lighting	□Complies □Does Not	
	controls.	□Not Observable □Not Applicable	
9.4.1.5 [EL13] <sup>1</sup>	under skylights and rooftop monitors	□Complies □Does Not	
	>900 ft2 are equipped with required lighting controls.	□Not Observable □Not Applicable	
9.4.1.7 [EL3] <sup>2</sup>	Automatic lighting controls for exterior lighting installed.	□Complies □Does Not	
		□Not Observable □Not Applicable	
9.4.1.6 [EL4] <sup>1</sup>	specific uses installed per approved	□Complies □Does Not	
	lighting plans.	□Not Observable □Not Applicable	
9.4.2 [EL6] <sup>1</sup>	Exit signs do not exceed 5 watts per face.	□Complies □Does Not	
		□Not Observable □Not Applicable	
9.4.3 [EL7] <sup>1</sup>	provides >60 lm/W unless on motion	□Complies □Does Not	
	sensor or fixture is exempt from scope of code or from external LPD.	□Not Observable □Not Applicable	
9.6.2 [EL8] <sup>1</sup>	allowed for special functions per the	□Complies □Does Not	
	approved lighting plans and is automatically controlled and	□Not Observable □Not Applicable	
10.4.1 [EL9] <sup>2</sup>	Electric motors meet requirements	□Complies □Does Not	
		□Not Observable □Not Applicable	

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Section # & Req.ID	Insulation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
5.4.3.1 [IN1] <sup>1</sup>	All sources of air leakage in the building thermal envelope are sealed, caulked, gasketed, weather stripped or wrapped with moisture vapor-permeable wrapping material to minimize air leakage.			□Complies □Does Not □Not Observable □Not Applicable	
5.5.3.1 [IN2] <sup>1</sup>	Roof R-value. For some ceiling systems, verification may need to occur during Framing Inspection.	R Above deck  Metal  Attic	R Above deck  Metal  Attic	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
5.8.1.2,5. 8.1.3 [IN3] <sup>1</sup>	Roof insulation installed per manufacturer's instructions. Blown or poured loose-fill insulation is installed only where the roof slope is <=3 in 12.			□Complies □Does Not □Not Observable □Not Applicable	
5.5.3.2 [IN6] <sup>1</sup>	Above-grade wall insulation R-value.	R Mass Metal Steel Wood	R Mass Metal Steel Wood	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
5.8.1.2 [IN7] <sup>1</sup>	Above-grade wall insulation installed per manufacturer's instructions.			□Complies □Does Not □Not Observable □Not Applicable	
5.5.3.4 [IN8] <sup>2</sup>	Floor insulation R-value.	R Mass Steel Wood	R Mass Steel Wood	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
5.8.1.2 [IN9] <sup>2</sup>	Floor insulation installed per manufacturer's instructions.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
5.8.1.1 [IN10] <sup>2</sup>	Building envelope insulation is labeled with R-value or insulation certificate providing R-value and other relevant data.			□Complies □Does Not □Not Observable □Not Applicable	
5.8.1.4 [IN11] <sup>2</sup>	Eaves are baffled to deflect air to above the insulation.			□Complies □Does Not □Not Observable □Not Applicable	
5.8.1.5 [IN12] <sup>2</sup>	Insulation is installed in substantial contact with the inside surface separating conditioned space from unconditional space.			□Complies □Does Not □Not Observable □Not Applicable	
5.8.1.6 [IN13] <sup>2</sup>	Recessed equipment installed in building envelope assemblies does not compress the adjacent insulation.			□Complies □Does Not □Not Observable □Not Applicable	

2 Medium Impact (Tier 2)

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3 Low Impact (Tier 3)

Section # & Req.ID	Insulation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
5.8.1.7 [IN14] <sup>2</sup>	Exterior insulation is protected from damage with a protective material. Verification for exposed foundation insulation may need to occur during Foundation Inspection.			□Complies □Does Not □Not Observable □Not Applicable	
5.8.1.7.1 [IN15] <sup>2</sup>	Attics and mechanical rooms have insulation protected where adjacent to attic or equipment access.			□Complies □Does Not □Not Observable □Not Applicable	
5.8.1.7.2 [IN16] <sup>2</sup>	Foundation vents do not interfere with insulation.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
5.8.1.8 [IN17] <sup>3</sup>	Insulation intended to meet the roof insulation requirements cannot be installed on top of a suspended ceiling. Mark this requirement compliant if insulation is installed accordingly.			□Complies □Does Not □Not Observable □Not Applicable	

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Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
5.4.3.3 [FI1] <sup>1</sup>		□Complies □Does Not	
		□Not Observable □Not Applicable	
6.4.3.1.2 [FI3] <sup>3</sup>	Thermostatic controls have a 5 °F deadband.	□Complies □Does Not	
		□Not Observable □Not Applicable	
6.4.3.2 [FI20] <sup>3</sup>		□Complies □Does Not	
		□Not Observable □Not Applicable	
6.4.3.3.1 [FI21] <sup>3</sup>		□Complies □Does Not	
		□Not Observable □Not Applicable	
6.4.3.3.2 [FI22] <sup>3</sup>	restart and temporary operation as	□Complies □Does Not	
	required for maintenance.	□Not Observable □Not Applicable	
6.4.3.5 [FI5] <sup>3</sup>	supplemental electric resistance heat	□Complies □Does Not	
	from coming on when not needed.	□Not Observable □Not Applicable	
6.4.3.7 [FI6] <sup>3</sup>	dehumidification are provided to a	□Complies □Does Not	
	zone, simultaneous operation is prohibited.	□Not Observable □Not Applicable	
6.7.2.1 [FI7] <sup>3</sup>	submitted within 90 days of system	□Complies □Does Not	
	acceptance.	□Not Observable □Not Applicable	
6.7.2.2 [FI8] <sup>3</sup>	systems within 90 days of system	□Complies □Does Not	
	acceptance.	□Not Observable □Not Applicable	
6.7.2.3 [FI9] <sup>1</sup>	balancing report is provided for HVAC	□Complies □Does Not	
	systems serving zones >5,000 ft2 of conditioned area.	□Not Observable □Not Applicable	
6.7.2.4 [FI10] <sup>1</sup>	tested to ensure proper operation,	□Complies □Does Not	
	calibration and adjustment of controls.	□Not Observable □Not Applicable	
8.7.1 [FI16] <sup>3</sup>	electric power systems within 30 days	□Complies □Does Not	
	of system acceptance.	□Not Observable □Not Applicable	
8.7.2 [FI17] <sup>3</sup>	systems and equipment to the	□Complies □Does Not	
	building owner or designated representative.	□Not Observable □Not Applicable	

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2 Medium Impact (Tier 2)

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1 High Impact (Tier 1)

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
9.2.2.3 [FI18] <sup>1</sup>	Interior installed lamp and fixture lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	□Complies □Does Not □Not Observable □Not Applicable	See the Interior Lighting fixture schedule for values.
9.4.3 [FI19] <sup>1</sup>	Exterior lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	□Complies □Does Not □Not Observable □Not Applicable	See the Exterior Lighting fixture schedule for values.
10.4.3 [FI24] <sup>2</sup>	Elevators are designed with the proper lighting, ventilation power, and standby mode.	□Complies □Does Not □Not Observable □Not Applicable	

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