

MD - 2018 IBC - STRUCTURAL LOAD LIMITATIONS

FLOOR LIVE LOAD:
 A. DEAD LOAD = 12 PSF (AVERAGE).
 B. UNIFORM LIVE LOAD = 100 PSF.
 C. CONCENTRATED LOAD (ALTERNATE) = 2,000 LB, OVER 30"x30" AREA AT ANY LOCATION.
 ROOF LIVE LOAD:
 A. DEAD LOAD = 15 PSF (AVERAGE).
 B. LIVE LOAD = 30 PSF.
 ROOF SNOW LOAD:
 A. GROUND SNOW LOAD: Pg = 30 PSF
 B. FLAT-ROOF SNOW LOAD Pf = 30 PSF
 C. SNOW EXPOSURE FACTOR Ce = 1.0
 D. SNOW IMPORTANCE FACTOR Is = 1.0
 E. SNOW THERMAL FACTOR Ct = 1.1
 F. ROOF SLOPE FACTOR Cs = 1.0
 G. SLOPED ROOF SNOW LOAD Ps = 20 PSF Ps = Pf x Cs
 H. Pm = 20 PSF LOW-SLOPE SNOW LOAD Pm = Pg x Is
 I. DESIGN IS BASED ON FULL OR PARTIALLY EXPOSED ROOF PER ASCE 7-16.
 WIND LOAD: ASCE 7-16
 A. BASIC WIND SPEED (3 SEC GUST) 130 MPH
 B. ASD WIND SPEED (3 SEC GUST) 101 MPH
 C. RISK CATEGORY II
 D. WIND EXPOSURE CATEGORY C
 E. INTERNAL PRESSURE COEFFICIENT GCpi = 0.18
 F. COMPONENT & CLADDING BASIC DESIGN PRESSURES, ASD DESIGN PRESSURE FOR ROOF 0 TO 7 DEGREES.
 WALL ZONE 5: P = +/- 49.2 psf (Pasd = +/- 29.5 PSF)
 WALL ZONE 4: P = +/- 39.9 psf (Pasd = +/- 24.0 PSF)
 ROOF ZONE 3: P = - 105.4 psf (Pasd = - 63.2 PSF)
 ROOF ZONE 2: P = - 77.3 psf (Pasd = - 46.4 PSF)
 ROOF ZONE 1: P = - 58.6 psf (Pasd = - 35.1 PSF)
 ROOF ZONE 1: P = - 33.6 psf (Pasd = - 20.2 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 II
 B. SEISMIC IMPORTANCE FACTOR Ie = 1.0
 C. SITE CLASS D
 D. SPECTRAL RESPONSE COEFFICIENTS:
 Es = < 0.173 S1 = < 0.046 Sds = < 0.184 Sd1 = < 0.073
 E. SEISMIC DESIGN CATEGORY C
 F. SEISMIC FORCE RESISTING SYSTEM 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 = 4,854 LB
 FLOOD LOAD:
 THIS BUILDING IS NOT DESIGNED TO BE LOCATED IN A FLOOD HAZARD AREA.
 ROOF RAIN LOAD:
 A. RAIN INTENSITY: i = 3.06 INCHES / HOUR.

NC/VA - STRUCTURAL LOAD LIMITATIONS

FLOOR LIVE LOAD:
 A. 100 PSF IN CORRIDOR, 50 PSF REMAINDER
 B. 2000 LB CONCENTRATED LOAD OVER 30"x30" AREA AT ANY LOCATION
 LOCATION
 ROOF LIVE LOAD:
 A. 30 PSF
 ROOF SNOW LOAD:
 A. Pg = 30 PSF GROUND SNOW LOAD
 B. Pf = 30 PSF FLAT ROOF SNOW LOAD
 C. Ce = 1.0 SNOW EXPOSURE FACTOR
 D. Is = 1.0 SNOW IMPORTANCE FACTOR
 E. Ct = 1.1 SNOW THERMAL FACTOR
 F. Cs = 1.0 ROOF SLOPE FACTOR
 G. Ps = 20 PSF SLOPED ROOF SNOW LOAD
 H. Pm = 20 PSF LOW-SLOPE SNOW LOAD
 I. DESIGN IS BASED ON FULL OR PARTIALLY EXPOSED ROOF PER ASCE 7-10.
 WIND LOAD: ASCE 7-10
 A. 130 MPH Vult ULTIMATE WIND SPEED
 B. 100 MPH Vasd NOMINAL WIND SPEED
 C. II RISK CATEGORY
 D. C WIND EXPOSURE CATEGORY
 E. GCpi = 0.18 INTERNAL PRESSURE COEFFICIENT
 F. COMPONENT & CLADDING PRESSURES (ROOF < 7 °)
 WALL ZONE 5: Pult = +/- 49.2 psf (Pasd = +/- 29.5 PSF)
 WALL ZONE 4: Pult = +/- 39.9 psf (Pasd = +/- 24.0 PSF)
 ROOF ZONE 3: Pult = - 92.9 psf (Pasd = - 55.8 PSF)
 ROOF ZONE 2: Pult = - 61.7 psf (Pasd = - 37.0 PSF)
 ROOF ZONE 1: Pult = - 36.8 psf (Pasd = - 22.1 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. II RISK CATEGORY
 B. Ie = 1.0 SEISMIC IMPORTANCE FACTOR
 C. D SITE CLASS
 D. SPECTRAL RESPONSE COEFFICIENTS:
 Ss = < 0.178 S1 = < 0.057 Sds = < 0.19 Sd1 = < 0.091
 E. C SEISMIC DESIGN CATEGORY
 F. A13 SEISMIC FORCE RESISTING SYSTEM
 G. SIMPLIFIED SEISMIC ANALYSIS PROCEDURE HAS BEEN USED.
 H. R = 6.5 RESPONSE MODIFICATION FACTOR
 I. Cs = N/A SEISMIC RESPONSE COEFFICIENT
 J. V = 5,013 LB DESIGN BASE SHEAR
 FLOOD LOAD:
 THIS BUILDING IS NOT DESIGNED TO BE LOCATED IN A FLOOD HAZARD AREA.

CODE SUMMARY:						
STATE	BUILDING	ELEC.	MECH.	PLUMB.	ACCESS.	ENERGY
MD	2018 IBC W/ MD AMEND. 2018 NFPA 101 LSC W/ MD AMEND.	2017 NEC W/ MD AMEND.	2018 IMC	2018 IPC W/ MD AMEND.	2012 M.A.C. 2010 ADA	2018 IECC W/ MD AMEND.
NC	NCBC 2018 2018 NCF	2017 NC ELECTRIC CODE	2018 NCMC	2018 NCP	NCBC 2012 CHPT.11 & ICC/ANSI A117.1-2009	2018 NC ENERGY CODE
VA	2015 VA UNIFORM STATEWIDE BLDG CODE, 2015 IBC, 2015 IFC	2014 NEC	2015 IMC W/ VA AMEND.	2015 IPC W/ VA AMEND.	ICC/ANSI A117.1-2009	2015 IECC

BUILDING DESIGN PARAMETERS

- USE / OCCUPANCY: OFFICE / BUSINESS
- CONSTRUCTION TYPE: VB
- SPRINKLER SYSTEM: N/A
- BUILDING AREA: 4,900 SQ FT
- BUILDING HEIGHT: < 15 FEET
- NUMBER OF STORIES: 1
- NUMBER OF MODULES: 7
- OCCUPANT LOAD (49) BASED ON [100] SQ FT PER OCCUPANT.-2015 IBC
- OCCUPANT LOAD (33) BASED ON [150] SQ FT PER OCCUPANT . - 2018 IBC
- EXTERIOR WALL FIRE RATING N/A
- THIS BUILDING MUST BE INSTALLED WITH THE FIRE SEPARATION DISTANCES REQUIRED BY THE IBC TABLE 602 AND SECTION 705.3
- ENERGY CODE COMPLIANCE: SEE ATTACHED ENERGY CALCULATIONS
- MANUFACTURERS DATA PLATE, STATE LABELS AND THIRD PARTY LABELS ARE TO BE LOCATED ADJACENT TO ELECTRICAL PANEL.

NORTH CAROLINA NOTES:

- THIS BUILDING HAS NOT BEEN DESIGNED FOR COASTAL HAZARD AREAS, OCEAN HAZARD OR REGULATORY FLOOD PLAIN AREAS.
- THE CLIMATE ZONE IS 3 OR 4.
- ALL OPAQUE EXTERIOR DOORS SHALL HAVE A U-VALUE OF 0.292 OR LESS.
- ALL EXTERIOR GLAZING SHALL HAVE A U-VALUE OF 0.45 OR LESS AND A SHGC OF 0.24 OR LESS.

DRAWING INDEX

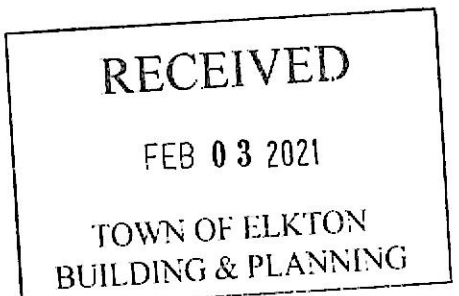
- 1 OF 8 STRUCT. / CODES
- 2 OF 8 NOTES
- 3 OF 8 FLOOR PLAN
- 4 OF 8 ELECTRICAL
- 5 OF 8 MECHANICAL
- 6 OF 8 REFLECTED CEILING
- 7 OF 8 ELEVATIONS
- 8 OF 8 CROSS SECTION
- 1 OF 1 FOUNDATION

MARYLAND PLAN NO.: TMS5885-A MD, TMS5885-B MD, TMS5885-C MD, TMS5885-D MD, TMS5885-E MD, TMS5885-F MD, TMS5885-G MD
 MARYLAND SERIAL NO.: 5885A, 5885B, 5885C, 5885D, 5885E, 5885F, 5885G

PERMIT # 2021-061 PLANS Modular
 REVIEWED [Signature] DATE 2-9-21
 APPLICANT WARRANTS THAT ALL PROVISIONS TO THE TOWN OF ELKTON BUILDING CODES WILL BE COMPLIED WITH WHETHER SPECIFIED OR NOT

THIS SET OF PLANS MUST BE KEPT AT THE BUILDING SITE AND BE AVAILABLE TO THE BUILDING INSPECTOR DURING NORMAL BUSINESS HOURS

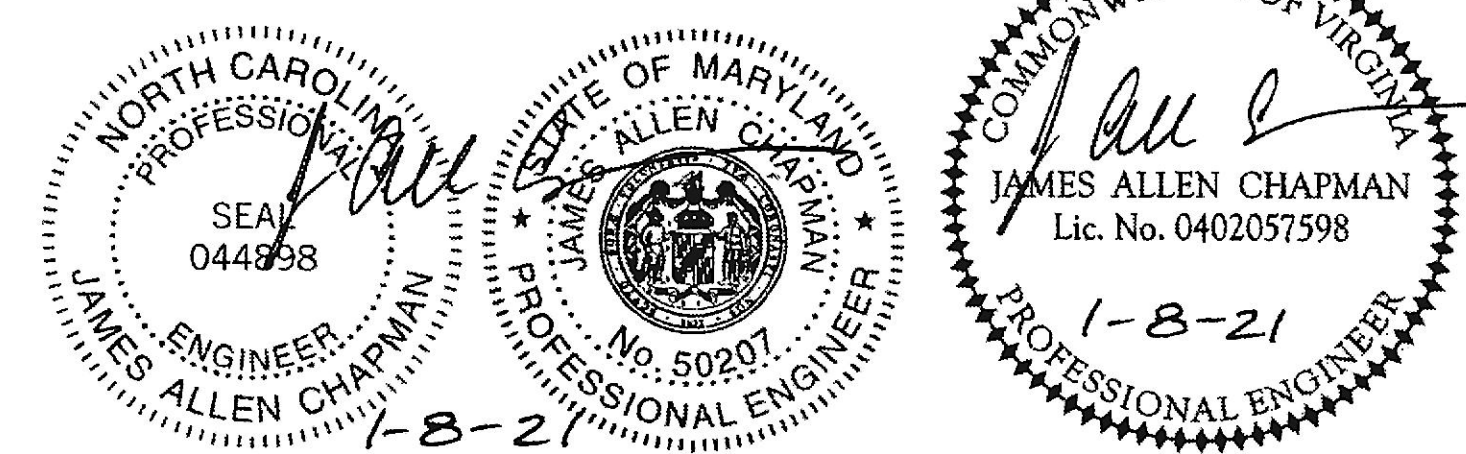
20 Sheets



VERIFIED BY
RADCO
 Reviewed Jan 08, 2021 Reviewed
 James Slaght, MCP

RADCO APPROVED
 Jan 08, 2021
 RESOURCES, APPLICATIONS, DESIGN & CONTROLS, INC.
 EASTERN NATIONAL REGION
 5801 BENJAMIN CENTER DRIVE, SUITE 102
 TAMPA, FL 33634
 (813) 243-0370 - O | (813) 243-1314 - F
 www.radcoinc.com

 THIRD PARTY DESIGN APPROVAL & INSPECTION AGENCY



PROFESSIONAL CERTIFICATION. I HEREBY 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 MARYLAND, LICENSE NO. 50207, EXPIRATION DATE: 11-30-2022.

DESTINATION: ELKTON, MD

TITAN MODULAR SYSTEMS, INC.	
162 INDUSTRIAL DRIVE * ALMA, GA 31510 912-632-3344 (PH) * 912-632-3345 (FX)	
DATE: 12-28-20	ENGINEERS: JAMES ALLEN CHAPMAN, P.E. AMERICUS, GA 31719
SCALE: N-T-S	
CODES: MD, NC, VA	
TMS-5885 A-G - 84'x60' - BUSINESS	
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