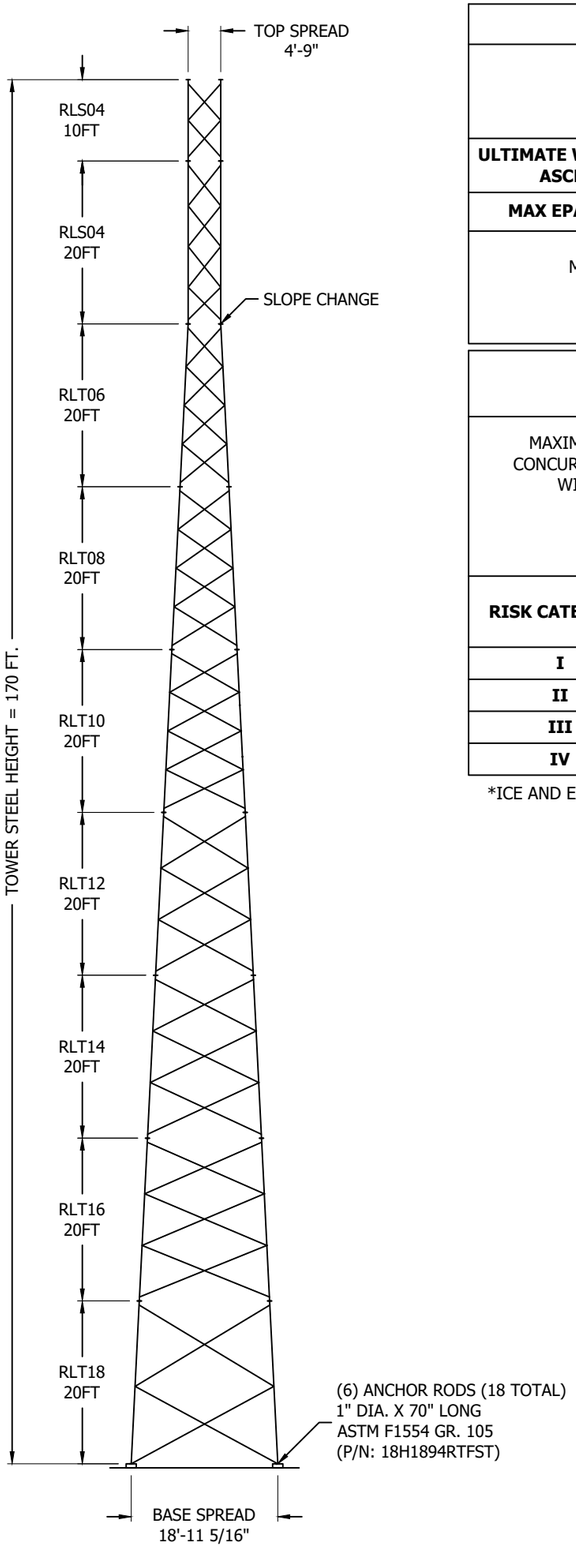

WIND LOADING CRITERIA

3-SECOND GUST WIND SPEEDS AT 33 FT ABOVE GRADE (MPH)
BASED ON DESIRED RISK CATEGORY
TOPOGRAPHIC CATEGORY 1, EXPOSURE CATEGORY C, Z_S = 0 FT.
ANSI/TIA-222-H

ULTIMATE WIND SPEED ASCE 7-16	85	90	95	100	105	110	115	120	130	140	150
MAX EPA (SQ FT)	250	250	250	250	225	200	173	153	92	40	N/A

(12) 7/8 INCH LINES ON A WAVEGUIDE LADDER, (1) 3/8 INCH SAFETY CABLE
MAXIMUM APPURTENANCE WEIGHT: 3,000 LBS WITHOUT ICE AND 6,000 LBS WITH ICE
TABULATED EPA VALUES INCREASED 100% FOR ICE LOADING CONDITION
TABULATED EPA VALUES LIMITED TO A MAXIMUM OF 250 SQ FT
k_a=1.0 FOR ALL TABULATED EPA

ICE LOADING CRITERIA

MAXIMUM RADIAL GLAZE ICE THICKNESS
CONCURRENT WITH 40 MPH 3-SECOND GUST
WIND SPEED 33 FT ABOVE GRADE
TOPOGRAPHIC CATEGORY 1
EXPOSURE CATEGORY C
ANSI/TIA-222-H

RISK CATEGORY	ASCE 7-16 500-YR MRI
I	N/A*
II	2.00
III	1.73
IV	1.63

EARTHQUAKE LOADING CRITERIA

S_S = SPECTRAL RESPONSE ACCELERATION PARAMETER AT SHORT PERIODS
S_1 = SPECTRAL RESPONSE ACCELERATION PARAMETER AT 1 SECOND PERIOD
T_L = LONG PERIOD TRANSITION PERIOD
SITE CLASS D
ANSI/TIA-222-H

RISK CATEGORY	MAX S_S	MAX S_1	T_L
I	N/A*	N/A*	N/A*
II	2.50	1.00	6.00
III	2.00	0.80	6.00
IV	1.67	0.67	6.00

*ICE AND EARTHQUAKE LOADING NEED NOT BE CONSIDERED FOR RISK CATEGORY I STRUCTURES.

MAXIMUM FACTORED REACTIONS

TOTAL O.T.M. (FT-KIPS)	2902.76
TOTAL SHEAR (KIPS)	35.6
TOTAL VERTICAL MAX. (KIPS)	75.58
TOTAL VERTICAL MIN. (KIPS)	17.03
MAX COMPRESSION/LEG (KIPS)	184.41
MAX TENSION/LEG (KIPS)	157.84
MAX SHEAR/LEG (KIPS)	20.89

GENERAL NOTES

1. THE SUITABILITY OF THE TABULATED TOWER DESIGN CRITERIA FOR A SPECIFIC APPLICATION MUST BE VERIFIED PRIOR TO INSTALLATION BY THE PURCHASER BASED ON SITE-SPECIFIC DATA AND THE INTENDED USE OF THE STRUCTURE.
2. ALL USERS ARE SOLELY RESPONSIBLE FOR THE INSTALLATION, USE, MAINTENANCE, INSPECTION, CONDITION ASSESSMENTS AND OTHER WORK TO BE PERFORMED IN COMPLIANCE WITH ALL APPLICABLE INDUSTRY, LOCAL, STATE AND FEDERAL REQUIREMENTS.
3. THE TABULATED ALLOWABLE EFFECTIVE PROJECTED AREAS (EPA) REPRESENT THE SUMMATION OF THE PROJECTED AREAS OF ALL ANTENNAS, MOUNTS, AND APPURTENANCES MULTIPLIED BY APPROPRIATE DRAG FACTORS. THE ALLOWABLE PROJECTED AREAS ARE ASSUMED TO BE PLACED SYMMETRICALLY ON THE STRUCTURE. LOWER EPA VALUES MAY APPLY FOR OTHER EPA ARRANGEMENTS.
4. THE FOLLOWING MATERIAL SPECIFICATIONS APPLY TO THE TOWER DESIGN:
   STRUCTURAL STEEL: 50 KSI MINIMUM YIELD STRENGTH
   FASTENERS: 120 KSI MINIMUM TENSILE STRENGTH
   ANCHOR RODS: 125 KSI MINIMUM TENSILE STRENGTH
   GALVANIZING: PER ANSI/TIA-222-H
5. TOWER FABRICATION SHALL BE BY ROHN PRODUCTS, LLC, CERTIFIED AISC FABRICATOR.
6. THE TOWER DESIGN ASSUMES INSTALLATION ON A PROPERLY DRAINED LEVEL SITE. THE TOWER DESIGN MAY REQUIRE MODIFICATIONS FOR INSTALLATIONS ON SITES WITH A SLOPING GRADE OR FOR TOWERS SUPPORTED ON OTHER STRUCTURES.
7. INSTALLATION SHALL BE IN ACCORDANCE WITH ANSI/TIA-222-H. INITIAL CONSTRUCTION INSPECTION REQUIREMENTS SHALL BE DETERMINED AND PERFORMED BY THE PURCHASER BASED ON THE LOCATION AND USE OF THE STRUCTURE.
8. SAFETY, STRENGTH AND STABILITY REQUIREMENTS FOR THE STRUCTURE FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES SHALL BE IN ACCORDANCE WITH ANSI/ASSE A10.48, "CRITERIA FOR SAFETY PRACTICES WITH THE CONSTRUCTION, DEMOLITION, MODIFICATION AND MAINTENANCE OF COMMUNICATION STRUCTURES" AND ALL APPLICABLE INDUSTRY, LOCAL, STATE AND FEDERAL REGULATIONS AND STANDARDS.
9. ALL RIGGING, SAFETY EQUIPMENT AND TEMPORARY SUPPORTS REQUIRED FOR CONSTRUCTION AND MAINTENANCE SHALL BE DETERMINED, FURNISHED AND INSTALLED BY THE CONTRACTOR BASED ON THE MEANS AND METHODS CHOSEN BY THE CONTRACTOR. ALL CONSTRUCTION AND MAINTENANCE ACTIVITIES SHALL BE PERFORMED BY COMPETENT, QUALIFIED AND TRAINED PERSONNEL.
10. FIELD CONNECTIONS SHALL BE BOLTED . NO FIELD WELDING SHALL BE ALLOWED.
11. UNLESS OTHERWISE SPECIFIED, BOLTS SHALL BE TIGHTENED TO A "SNUG TIGHT" CONDITION WITH A NUT-LOCKING DEVICE IN ACCORDANCE WITH ANSI/TIA-222-H WITH NO MINIMUM INSTALLED BOLT TENSION OR TORQUE VALUES REQUIRED.
12. STEP BOLTS SHALL BE INSTALLED AS A CLIMBING FACILITY IN ACCORDANCE WITH ANSI/TIA-222-H FOR CLIMBING THE ENTIRE HEIGHT OF THE STRUCTURE. CLIMBING SHALL BE RESTRICTED TO COMPETENT CLIMBERS ONLY.
13. A SAFETY CLIMB SYSTEM SHALL BE USED IN ACCORDANCE WITH ANSI/TIA-222-H. ALL CLIMBING FACILITIES, INCLUDING SAFETY CLIMB SYSTEMS, SHALL BE INSPECTED PRIOR TO EACH USE.
14. PURCHASER SHALL VERIFY THAT THE INSTALLATION IS IN CONFORMANCE WITH ALL APPLICABLE INDUSTRY, LOCAL, STATE, AND FEDERAL REQUIREMENTS FOR GROUNDING AND OBSTRUCTION MARKING.
15. MAINTENANCE AND CONDITION ASSESSMENTS SHALL BE PERFORMED OVER THE LIFE OF THE STRUCTURE IN ACCORDANCE WITH ANSI/TIA-222-H.
16. FOUNDATIONS SHALL BE DESIGNED TO SUPPORT THE TABULATED FACTORED REACTIONS FOR THE CONDITIONS EXISTING AT THE SITE.
17. THE PROPER DEVELOPMENT OF ANCHOR RODS FOR THE TOWER SHALL BE VERIFIED BY THE FOUNDATION ENGINEER.

SECTION MAIN MEMBER SCHEDULE

SECTION	LEGS	DIAGONALS	NOMINAL WEIGHT (LBS)
RLS04	HSS 2.875 X 0.203	L1 3/4 X 1 3/4 X 1/8	410
RLT04	HSS 2.875 X 0.203	L1 3/4 X 1 3/4 X 1/8	810
RLT06	HSS 2.875 X 0.276	L1 3/4 X 1 3/4 X 1/8	1000
RLT08	HSS 3.500 X 0.300	L1 3/4 X 1 3/4 X 1/8	1290
RLT10	HSS 3.500 X 0.300	L1 3/4 X 1 3/4 X 1/8	1370
RLT12	HSS 4.000 X 0.318	L2 1/2 X 2 1/2 X 3/16	2070
RLT14	HSS 4.500 X 0.337	L2 1/2 X 2 1/2 X 3/16	2410
RLT16	HSS 4.500 X 0.337	L3 X 3 X 3/16	2830
RLT18	HSS 5.563 X 0.375	L3 1/2 X 3 1/2 X 1/4	3670

FILE NO.
RTL-CATALOG

REVISIONS

REV.	DESCRIPTION	DWN	CHK	APP

ROHN® PRODUCTS LLC
PO BOX 5999
PEORIA, IL 61601-5999
TOLL FREE 800-727-ROHN

P/N: RTL170H
170 FT HEAVY SERIES
STANDARD RTL TOWER DESIGN
ANSI/TIA-222-H

DWN:	CHK'D:	DATE:
CEJ		03/25/2022

ENG'R:	SHEET #:
SWG	1 OF 1

PRJ. ENG'R:	PRJ. MANG'R:

DRAWING NO:	REV:
RTL170H-D	0