FREESTANDING ALUMINUM TOWER
MODEL #HD 8-80

TOTAL WEIGHT: 283 LBS.

WIND LOADING:
7.27 Sq. Ft.

Contact Universal Towers to confirm geographical location of your tower and all wind load implications.

WARRANTY
UNIVERSAL TOWERS ARE WARRANTED AGAINST DEFECTIVE MATERIAL OR WORKMANSHIP AND ARE SUBJECT TO REPAIR OR TO MATERIAL REPLACEMENT ONLY IF FAILURE RESULTS FROM THESE FACTORS WITHIN ONE YEAR FROM PURCHASE BY USER. THIS WARRANTY DOES NOT EXTEND TO ANY OF OUR PRODUCTS WHICH HAVE BEEN SubjectED TO MISUSE, NEGLECT, ACCIDENT, IMPROPER INSTALLATION OR APPLICATION, NOR SHALL IT EXTEND TO UNITS WHICH HAVE BEEN REPAIRED OR SUBSTANTIALLY ALTERED OUTSIDE OF OUR FACTORY. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED.

ELEVATION
SCALE: 3/32"=1'=0"

ISOMETRIC
SCALE: N.T.S.

UNIVERSAL TOWERS
UNIVERSAL MANUFACTURING CORP,
48900 GROESBECK HWY,
CLINTON TOWNSHIP, MI 48036
PH: (586) 463-2560
FAX: (586) 463-2964

ALUMINUM TOWER

JOB NO.: HD 8-80

COMPONENT:
1½" MIN. LENGTH ARGON GAS 'MIG' WELD (TYP.)

3½" DIA. ALUMINUM BARS - BENT AS SHOWN - ½" R. MIN.

1½" WALL ALUMINUM TUBE

SWAGE 3" OF BOTTOM ENDS OF ALL THREE TUBES AND INSERT A 9" LONG SECTION OF ALUM. TUBE 0.85" DIA. 0.035" WALL FOR CONNECTION TO ADJACENT TOWER SECTION OR BASE

ISOMETRIC
SCALE: N.T.S.

ELEVATION
SCALE: 1/2"=1'-0"

PLAN VIEW
SCALE: 1/2"=1'-0"
3/4" DIA. ALUMINUM BARS - BENT AS SHOWN - 1/4" R. MIN.
1" x 0.065 WALL ALUMINUM TUBE

SWAGE 3" OF BOTTOM ENDS OF ALL THREE TUBES AND INSERT A 9" LONG SECTION OF ALUM. TUBE 0.85" DIA. 0.035" WALL FOR CONNECTION TO ADJACENT TOWER SECTION OR BASE

1/2" MIN. LENGTH ARGON GAS 'MIG' WELD (TYP.)

6 EQUAL SPACES AT 18" EACH = 96"

1/2" = 1'-0"

ELEVATION

PLAN VIEW

SCALE: 1/2" = 1'-0"

TAPERED SECTION

UNIVERSAL TOWERS
UNIVERSAL MANUFACTURING CORP.
43900 GROSEBECK HWY.
CLINTON TOWNSHIP, MI 48036
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JOB NO.:

COMPONENT:

14-TAPR
1 1/2" MIN. LENGTH ARGON GAS 'MIG' WELD (TYP.)

1/4" DIA. ALUMINUM BARS - BENT AS SHOWN - 1 1/4" MIN.

1/4" x 0.083 WALL ALUMINUM TUBE

SWAGE 3.26" OF BOTTOM ENDS OF ALL THREE TUBES AND INSERT A 9" LONG SECTION OF ALUM. TUBE 1" DIA. 0.065" WALL FOR CONNECTION TO ADJACENT TOWER SECTION OR BASE
**TAPERED SECTION**

**ISOMETRIC**
- Scale: N.T.S.
- ½" Dia. Aluminum bars - bent as shown - ½"R. Min.
- 1⅛" x 1.300" I.D. Aluminum tube
- Swage 3.26" of bottom ends of all three tubes and insert a 9" long section of Alum. tube 1.25" Dia. 0.083" wall for connection to adjacent tower section or base.

**ELEVATION**
- Scale: 1/2"=1'-0"

**PLAN VIEW**
- Scale: 1/2"=1'-0"
\[
\frac{1}{2}'' \text{ DIA. ALUMINUM BARS - BENT AS SHOWN - } \frac{1}{2}'' \text{ R. MIN.}
\]

\[
\frac{1}{4}'' \times 1.300'' \text{ I.D. ALUMINUM TUBE}
\]

SWAGE 3.26'' OF BOTTOM ENDS OF ALL THREE TUBES AND INSERT A 9'' LONG SECTION OF ALUM. TUBE 1.25'' DIA. 0.083'' WALL FOR CONNECTION TO ADJACENT TOWER SECTION OR BASE

**ISOMETRIC**

**SCALE:** N.T.S.

**ELEVATION**

**SCALE:** 1/2'' = 1'-0''

**PLAN VIEW**

**SCALE:** 1/2'' = 1'-0''

**STRAIGHT SECTION**
1½" MIN. LENGTH ARGON GAS 'MIG' WELD (TYP.)

2½" MIN. LENGTH ARGON GAS 'MIG' WELD (TYP.)

2-3/4" TAPER

6 EQUAL SPACES AT 18" EACH = 6'-0"

1½" MIN. LENGTH ARGON GAS 'MIG' WELD (TYP.)

ISOMETRIC
SCALE: N.T.S.

ELEVATION
SCALE: 1/2"=1'-0"

PLAN VIEW
SCALE: 1/2"=1'-0"

1/8" DIA. ALUMINUM BARS - BENT AS SHOWN - 1½" R. MIN.

1¾"x1.300" I.D. ALUMINUM TUBE

SWAGE 3.26" OF BOTTOM ENDS OF ALL THREE TUBES AND INSERT A 9" LONG SECTION OF ALUM. TUBE 1.25" DIA. 0.083" WALL FOR CONNECTION TO ADJACENT TOWER SECTION OR BASE.

TAPERED SECTION

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43900 GROESECK HWY.
CLINTON TOWNSHIP, MI 48036
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JOB NO.: 26-TAPR

COMPONENT:
Tapered Section

Elevation
Scale: 1/2"=1'-0"

Plan View
Scale: 1/2"=1'-0"

Isometric
Scale: N.T.S.

1/8" Dia. Aluminum Bars - Bent as Shown - 1/2" R. Min.

1.708"x1.300" I.D. Aluminum Tube

Swage 4/2" of Bottom Ends of All Three Tubes for Connection to Adjacent Tower Section or Base

1/8" Min. Length Argon Gas 'Mig' Weld (Typ.)

6 Equal Spaces at 18’ Each = 90’
HINGED CONNECTION ASSEMBLY - REFER TO ENLARGED DETAIL BELOW

2"x2"x2\(\frac{1}{4}\) ANCHORAGE

2" T.S. 0.10" WALL - 72" LONG

OUTLINE OF CONCRETE FOOTING

SEE ENLARGED DETAIL - THIS SHEET

THREE (3) \(\frac{3}{8}\)" THRU- HOLES PERPENDICULAR TO EACH OTHER

TWO (2) \(\frac{1}{2}\)" GRD. 8 BOLTS

NOTE: FOUNDATIONS ARE DESIGNED FOR FIRM BEARING SOIL.