FREESTANDING ALUMINUM TOWER
MODEL #HD 21-60

TOTAL WEIGHT: 256 LBS.

WIND LOADING:
21.08 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: 3/16"=1'=0"

ISOMETRIC
SCALE: N.T.S.

UNIVERSAL TOWERS
A DIVISION OF UNIVERSAL MANUFACTURING CORP,
48800 GROESBECK HWY,
CLINTON TOWNSHIP, MI 48036
PH: (586) 463-2360
FAX: (586) 463-2364

ALUMINUM TOWER

JOB NO.: HD 21-60

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

3¾" DIA. ALUMINUM BARS - BENT AS SHOWN - 1½" R. MIN.

1"x0.065 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

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

PLAN VIEW
Scale: 1/2"=1'-0"
1½" MIN. LENGTH ARGON GAS 'MIG' WELD (TYP.)

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

1½"x0.083 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

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

PLAN VIEW
SCALE: 1/2"=1'-0"
6 EQUAL SPACES AT 18" EACH = 9'-0"

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

1-1/2" DIA. ALUMINUM BARS - BENT AS SHOWN - 1-1/2" R. MIN.

1-1/8" 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

ISOMETRIC
SCALE: N.T.S.

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

PLAN VIEW
SCALE: 1/2"=1'-0"
$\frac{3}{8}$" DIA. ALUMINUM BARS - BENT AS SHOWN - $\frac{1}{2}''$ R. MIN.

1\(\frac{3}{16}\)" 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.

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

6 EQUAL SPACES AT 18" EACH = 9'-0"

2'-0¾" TAPER

1'-6"

1'-6"

10'-0"

ELEVATION

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

PLAN VIEW

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

TAPERED SECTION

JOB NO.: 26-TAPR

COMPONENT:

UNIVERSAL TOWERS

A SUBSIDIARY OF UNIVERSAL MANUFACTURING CORP.

43900 GROSEBECK HWY.

CLINTON TOWNSHIP, MI 48036

PH: (586) 463-2560

FAX: (586) 463-2964
1/2" MIN. LENGTH ARGON GAS 'MIG' WELD (TYP.)

1 1/8" DIA. ALUMINUM BARS - BENT AS SHOWN - 1 1/4" R. MIN.

1.708"x1.300" I.D. ALUMINUM TUBE

SWAGE 4/5" OF BOTTOM ENDS OF ALL THREE TUBES FOR CONNECTION TO ADJACENT TOWER SECTION OR BASE

6 EQUAL SPACES AT 18" EACH = 90"

10-0"

1-6"

2-03/4"

TAPER

2-4"

5"

1"

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TAPERED SECTION

JOB NO.: 30-TAPR

COMPONENT:

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

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

ISOMETRIC
SCALE: N.T.S.

3
$\frac{3}{16}$" DIA. ALUMINUM BARS - BENT AS SHOWN - $\frac{1}{2}$'R. MIN.

1.708"x1.300" I.D. ALUMINUM TUBE

SWAGE 4\frac{1}{2}" OF BOTTOM ENDS OF ALL THREE TUBES FOR CONNECTION TO ADJACENT TOWER SECTION OR BASE

$1\frac{1}{2}$" MIN. LENGTH ARGON GAS 'MIG' WELD (TYP.)

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

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

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

ISOMETRIC
SCALE: N.T.S.

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

BASE FOOTING
NOTE: FOUNDATIONS ARE DESIGNED FOR FIRM BEARING SOIL.

UNIVERSAL TOWERS
X X X X
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JOB NO.: B-30

COMPONENT:

OUTLINE OF CONCRETE FOOTING

HINGED CONNECTION ASSEMBLY - REFER TO ENLARGED DETAIL BELOW

2"x2"x1/4" ANCHORAGE

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

SEE ENLARGED DETAIL - THIS SHEET

THREE (3) 3/8" THRU- HOLES PERPENDICULAR TO EACH OTHER

TWO (2) 1/2" GRD. 8 BOLTS

6" HINGED SLEEVE

2" x 1.300" I.D. STEEL TUBE

6.0" PLATE

4.0" GAP

2.0" x 1/2" PLATE