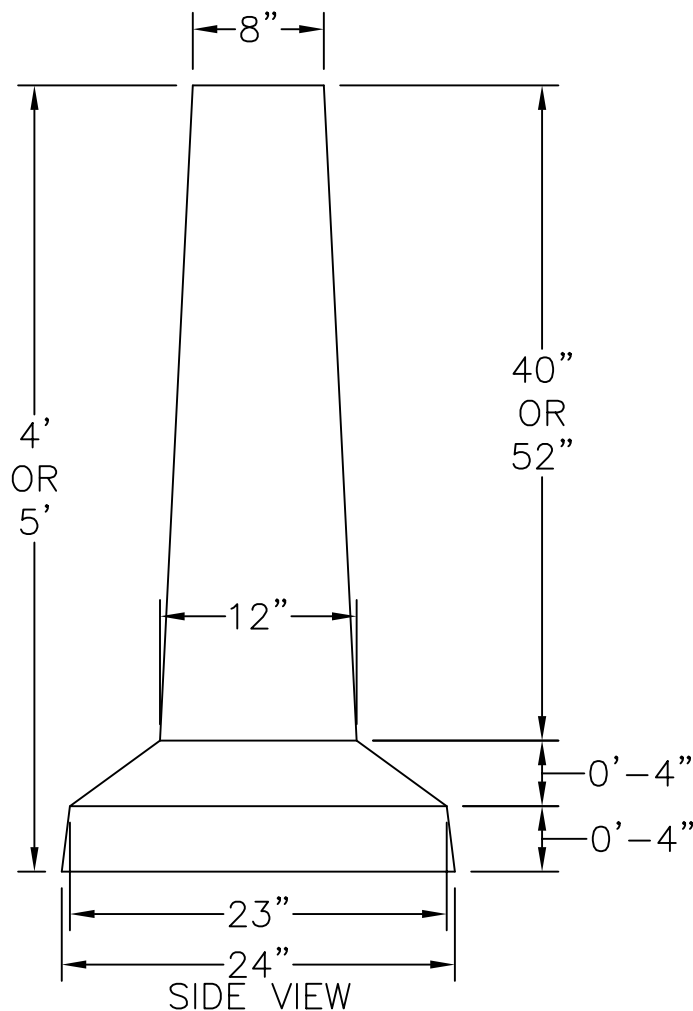
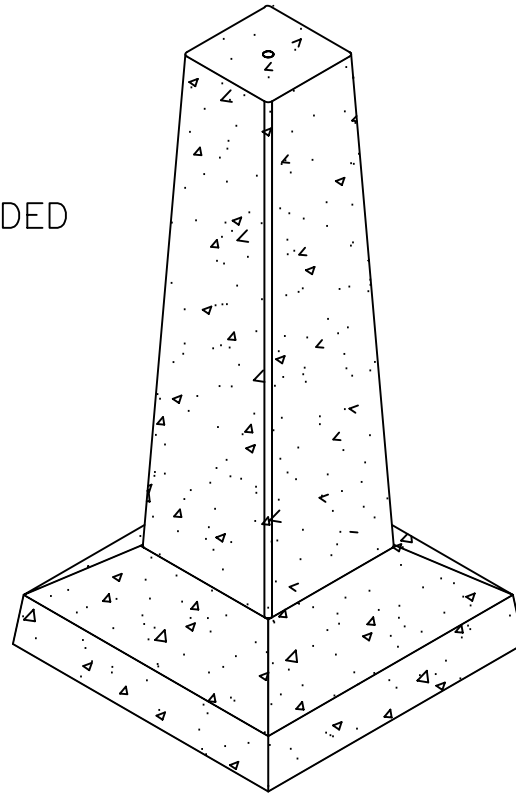


TOP VIEW



SIDE VIEW

ITEM	WEIGHT
SONAR4	624
SONAR5	725

GENERAL NOTES:

1. CONCRETE 4000 PSI IN 28 DAYS.
2. CALCULATIONS BASED ON SOIL PRESSURE OF 2000 PSF.

PRECAST VS. CONVENTIONAL

CONVENTIONAL 12" DIAMETER SONAR TUBE:
 ALLOWABLE LOAD BEARING AT SOIL =
 ALLOWABLE BEARING CAPACITY * AREA =
 $2000\text{PSF} * (0.5 * 0.5 * 3.142) = 1571\text{LBS}$
 MAX LOAD BEARING IS 1,571LBS

PRECAST SONAR TUBE:
 ALLOWABLE LOAD BEARING AT TOP =
 CONCRETE PSI * AREA / FACTOR OF SAFETY
 $4000\text{PSI} * (8 * 8) / 2.22 = 115,315\text{LBS}$

ALLOWABLE LOAD BEARING AT SOIL =
 ALLOWABLE BEARING CAPACITY * AREA =
 $2000\text{PSF} * (2 * 2) = 8,000\text{LBS}$

THEREFORE MAX ALLOWABLE LOAD APPLIED
 IS LIMITED BY THE SOILS CAPACITY OF
8,000LBS, WHICH IS GREATER THAN THE MAX
 LOAD OF 1,571LBS FOR THE 12" SONAR TUBE

E. F. SHEA
 NEW ENGLAND
 CONCRETE PRODUCTS, INC.

SONAR TUBES