



PRECAST VS. CONVENTIONAL

CONVENTIONAL 12" DIAMETER SONOTUBE:
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 FOOTING/FROST POST:
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" SONOTUBE

GENERAL NOTES:

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

SHEA PRODUCT ID:
SONA4/SONA5

PREPARED FOR:

FILE NAME:
FrostPost8SQ.dwg

WEIGHT (LBS):
624#/725#

DRAWN BY:
ARO

DATE:
03/01/2018

PAGE:
M7.1

