



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

ITEM	WEIGHT
SONA4	624
SONA5	725

GENERAL NOTES:

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



New England's Premier Precaster  
 800-696-7432 (SHEA)  
 www.sheaconcrete.com

FOOTING/FROST POST  
 SONATUBE 8" SQUARE

773 Salem Street  
 P.O. Box 520  
 Wilmington, MA 01887

87 Haverhill Road  
 P.O. Box 807  
 Amesbury, MA 01913

160 Old Turnpike Road  
 Nottingham, NH 03290

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3/2/2010

