

INFAB™ Isolation Material

Fabreeka® Infab™ vibration isolators are composed of a molded elastomer, which has been compounded and designed to offer low frequency isolation and high load capacity.

Infab™ isolation systems have natural frequencies as low as 6.0 Hz and can be designed to exhibit low or high internal damping. Infab™ solutions are used under large concrete foundations supporting heavy machinery, buildings, measuring machines, roller mills and similar equipment.

Infab™ isolators are available in two types to suit a wide range of design options when considering the formwork required to provide proper support during the foundation construction process. Infab™ isolators may be supplied as individual units (blocks) or as isolation panels to facilitate ease of installation.

Type 1T and 2T isolators support loads from 800 lbs (3,600 kg) to 2,500 lbs (1,125 kg) each and have natural frequencies of 6.0 Hz to 9.0 Hz, with damping in the range of 2% to 6%. The Infab™ "T" series isolator's unique design utilizes a steel coil spring inside oil/ozone resistant neoprene. The spring portion of the isolator provides a low natural frequency, while the elastomeric/neoprene portion provides damping. Therefore, at higher loads, these isolators exhibit a slightly higher natural frequency with lower damping, since the elastomer (rubber) governs the spring rate. At lower loads, the coil spring portion of the isolator governs the spring rate, resulting in a slightly lower natural frequency but with higher damping due to the influence of the neoprene.



Type 2T Infab™ isolators positioned on pit floor prior to forming the foundation above.

Infab™ Type "T"

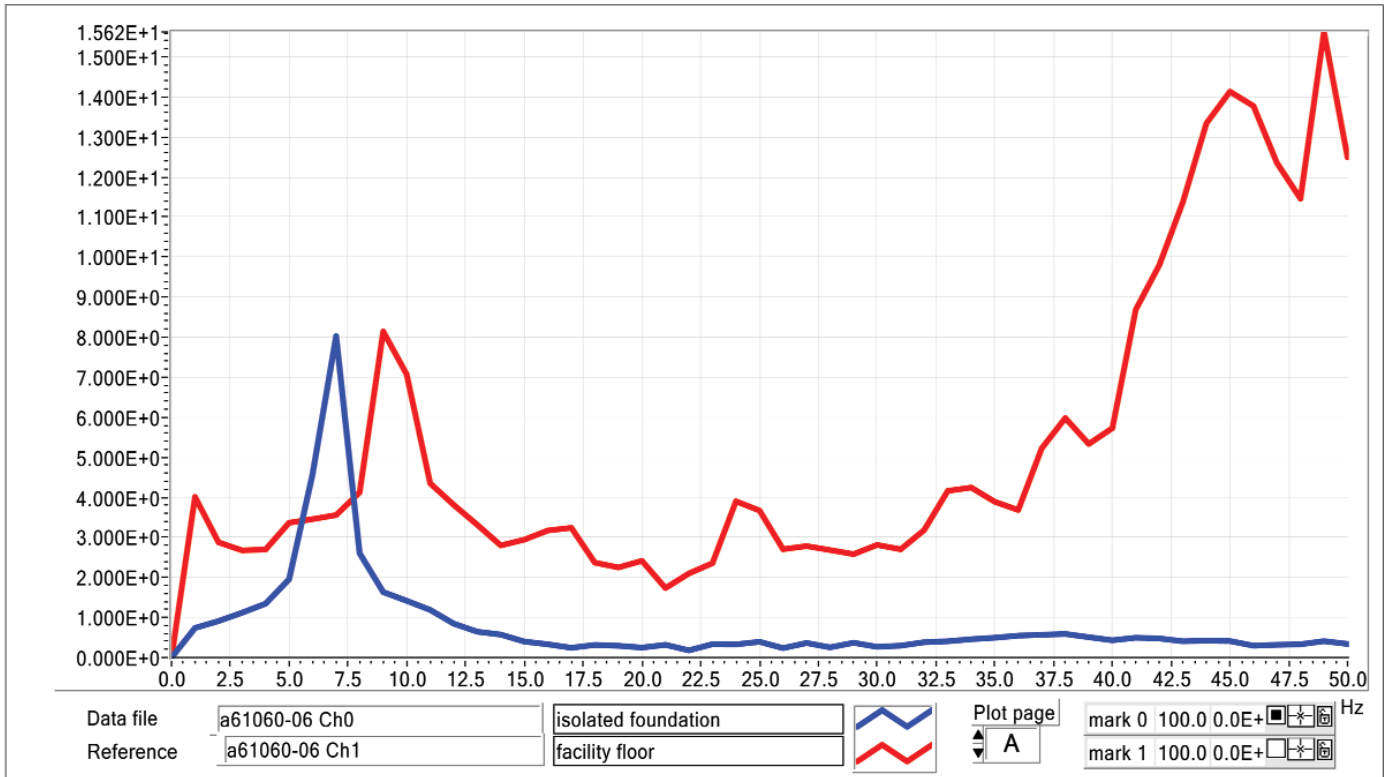
Dynamic Natural Frequency and Damping

Type 1T

Axis	Load (lbs)	F _N (Hz)	Damp (%)
Vertical	875	6.0	5
Horizontal	875	4.0	2
Vertical	1,750	7.0	5
Horizontal	1,750	3.0	3

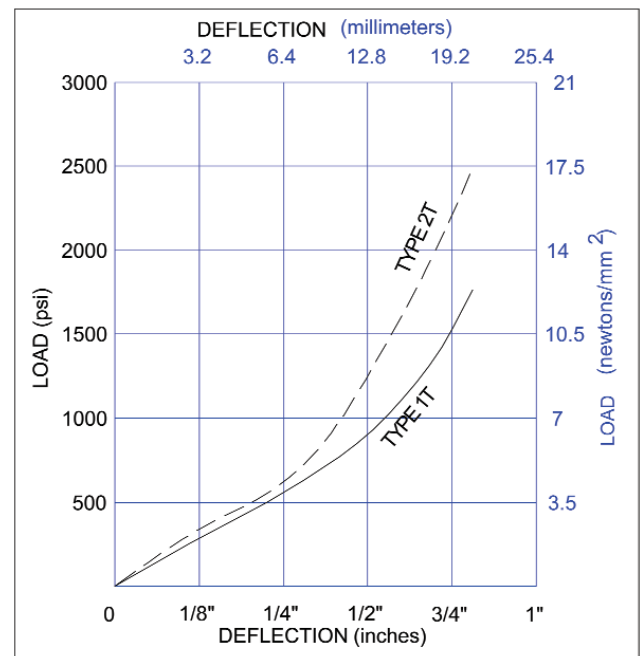
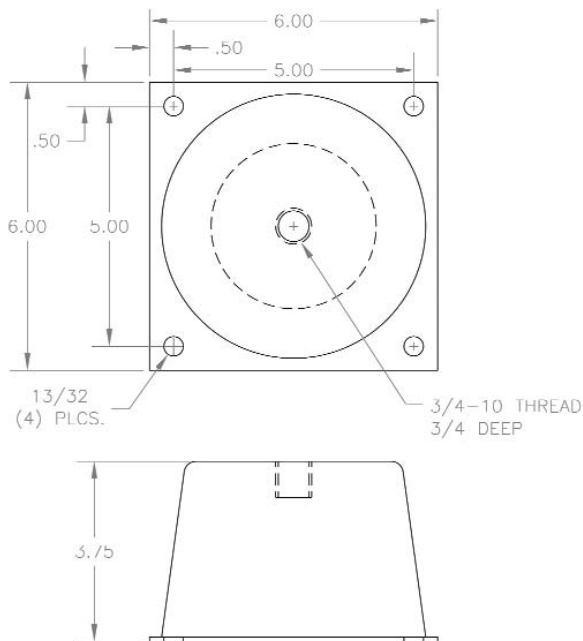
Type 2T

Axis	Load (lbs)	F _N (Hz)	Damp (%)
Vertical	1,750	8.0	6
Horizontal	1,750	3.0	4
Vertical	2,500	9.0	3.5
Horizontal	2,500	4.0	4.5



Acceptance Test Data

Vibration amplitudes are measured on the facility floor (red) and on the isolated machine foundation (blue). Note: The natural frequency of the Infab™ 1T isolators is 7.0 Hz and the input floor vibrations that occur from 10 Hz to 50 Hz are greatly reduced.



Infab™ Type 1T and 2T dimensions.