Regufoam® Vibration 300plus

Standard forms of delivery, ex Lebanon, PA

Sheets
Thickness: 25 mm and 12.5 mm
Custom thicknesses available on request
Length: 16.4' (5,000 mm)
Width: 59" (1,500 mm)

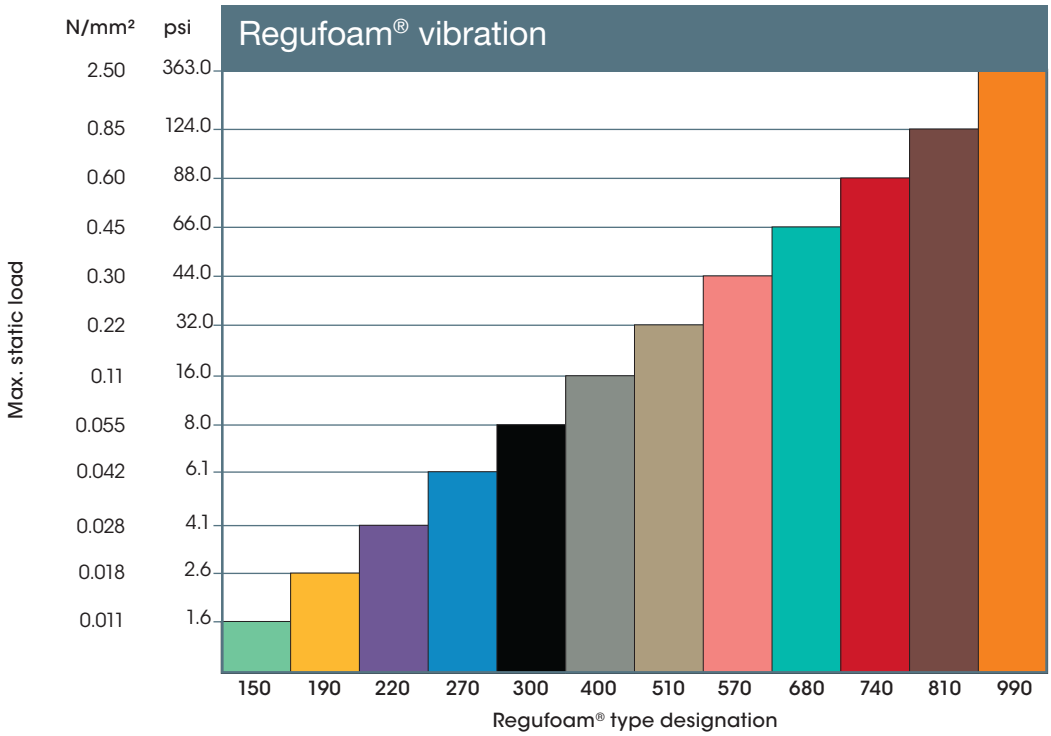
Max. static load
8.0 psi

Peak loads (rare, short-term loads)
up to 290.1 psi

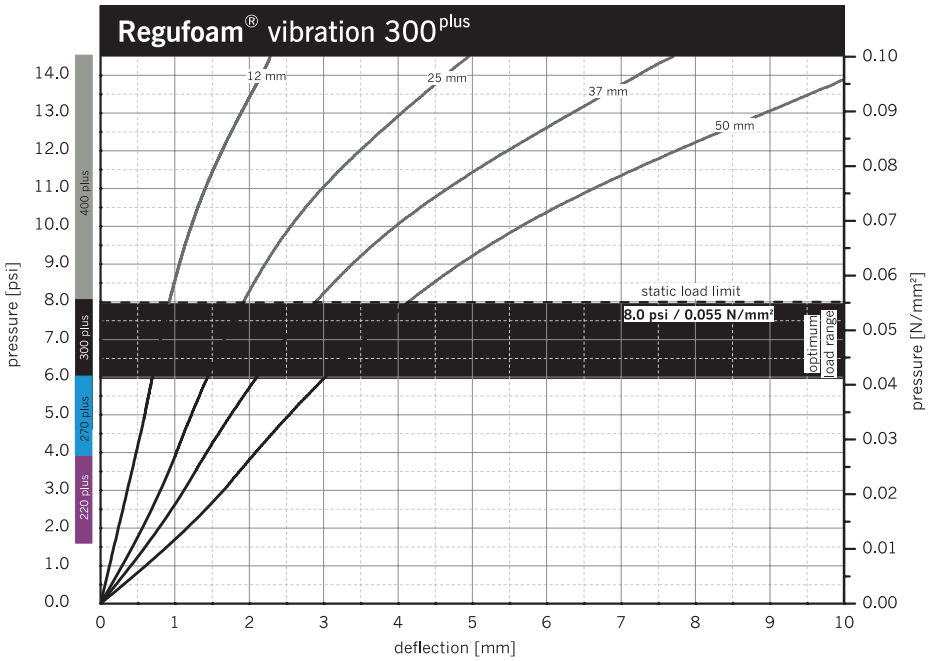
Color: Black

Static modulus of elasticity	Based on EN 826	50.8 - 84.1 0.35 - 0.58	psi N/mm²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	98.6 - 181.3 0.68 - 1.25	psi N/mm²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.18	[-]	Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	3.4	%	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs
Tensile strength	Based on DIN EN ISO 1798	174.0 1.2	psi N/mm²	
Elongation at break	Based on DIN EN ISO 1798	240	%	
Tear resistance	Based on DIN ISO 34-1	27.4	lbs/in	
Sliding friction	In-house laboratory In-house laboratory	0.6 0.75	[-] [-]	Steel (dry) Concrete (dry)
Compression hardness	Based on DIN EN ISO 3386-2	82	kPa	Compressive stress at 25 % deformation Test specimen h = 25 mm
Rebound elasticity	Based on DIN EN ISO 8307	44	%	Depending on thickness, Test specimen h = 25 mm
Force reduction	DIN EN 14904	72	%	Depending on thickness, Test specimen h = 25 mm

Load Ranges



Load Deflection



Examination of deflection in accordance to DIN EN 826, between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 mm x 300 mm.

Vibration Isolation

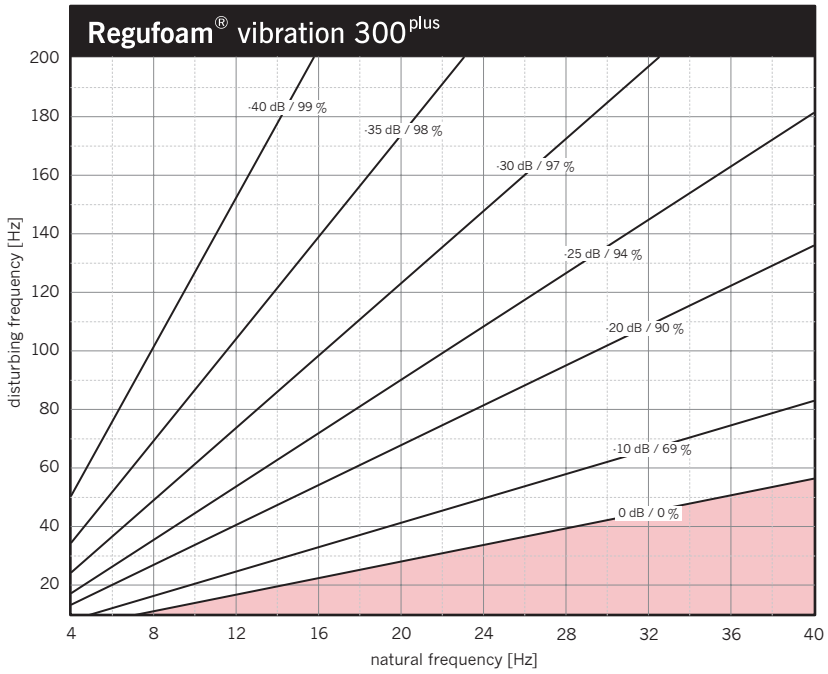
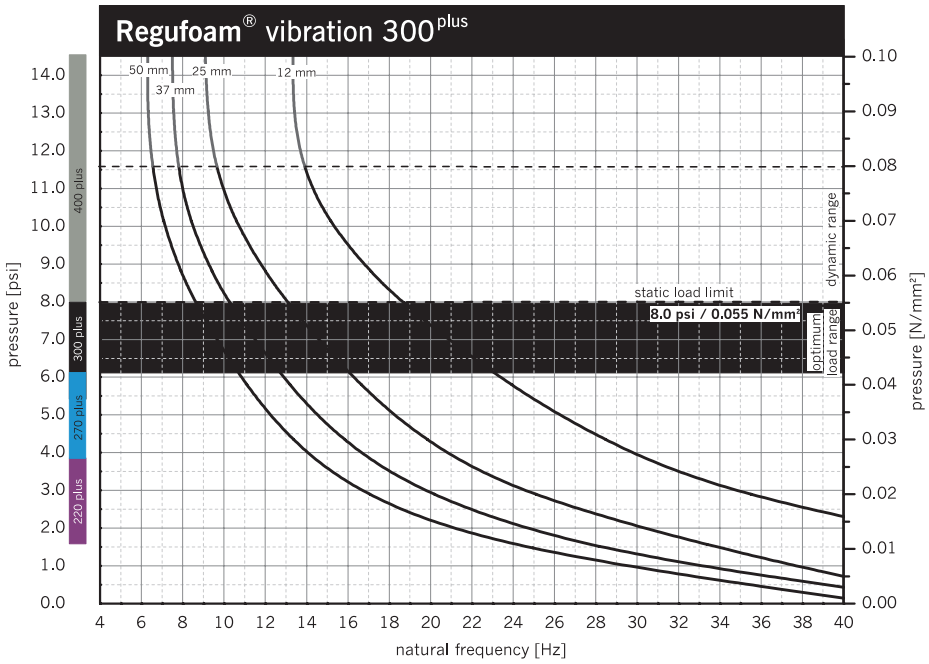


Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **Regufoam® vibration 300 plus**. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

Natural Frequency



Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **Regufoam® vibration 300 plus** on a rigid base. Dimensions of test specimens 300 mm x 300 mm.

Modulus of Elasticity

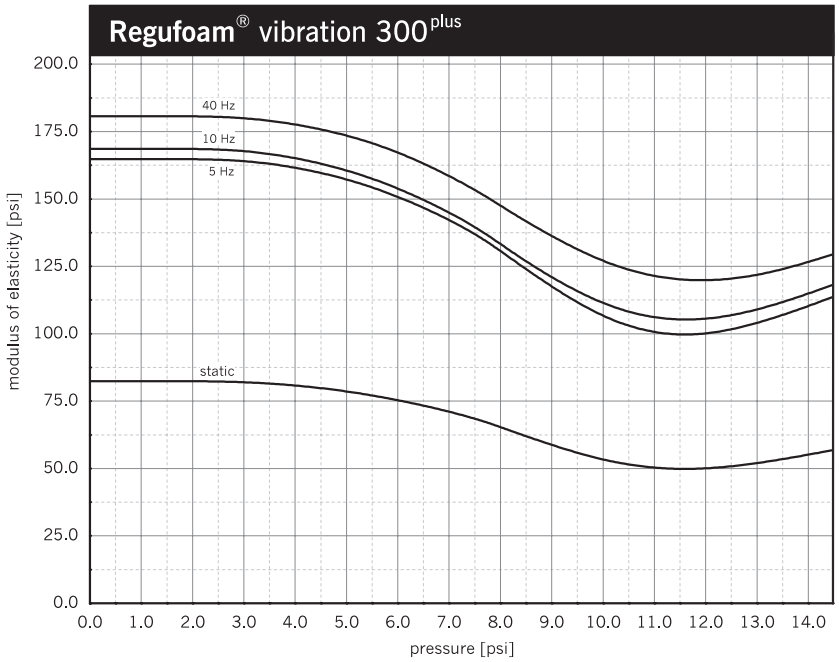


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of +/- 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Dynamic Stiffness

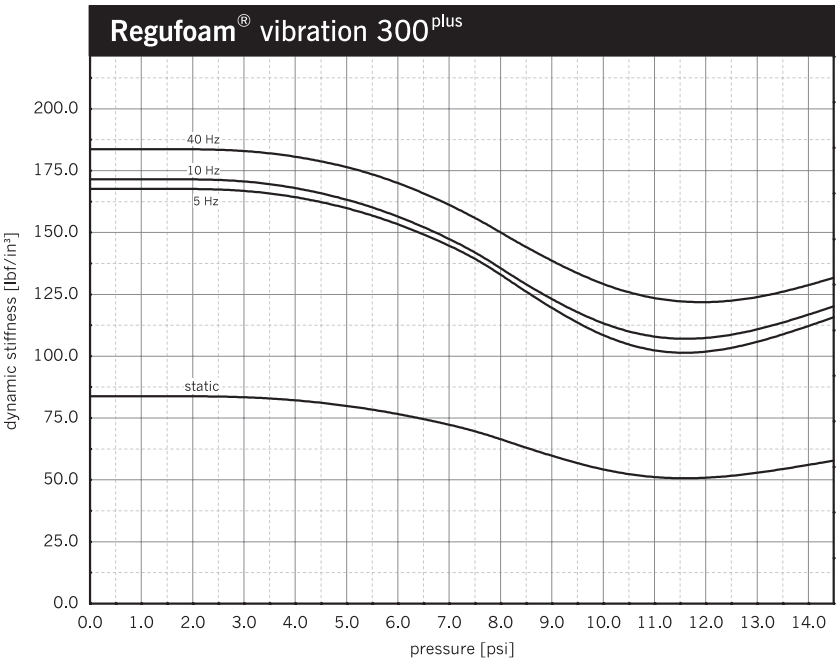
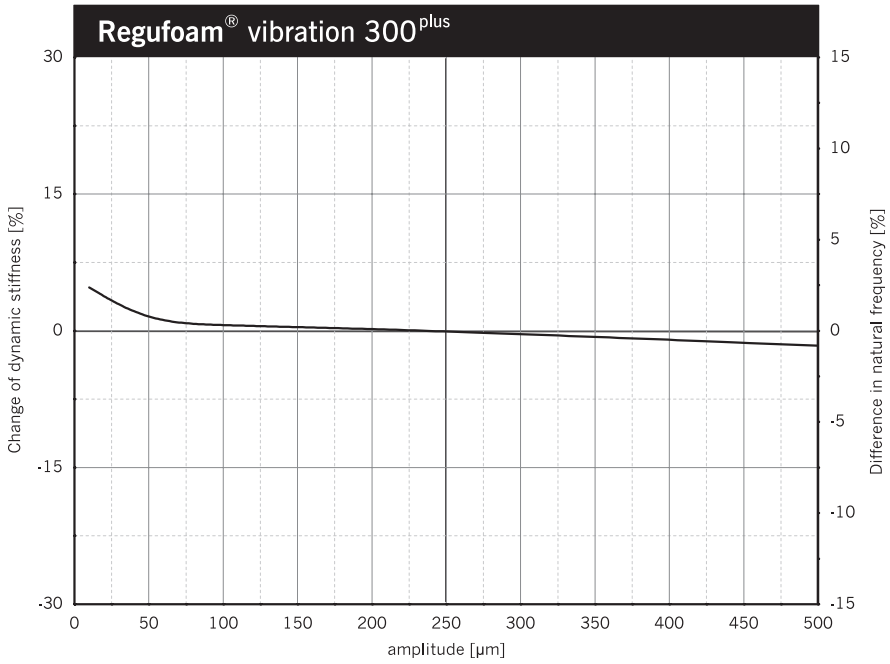
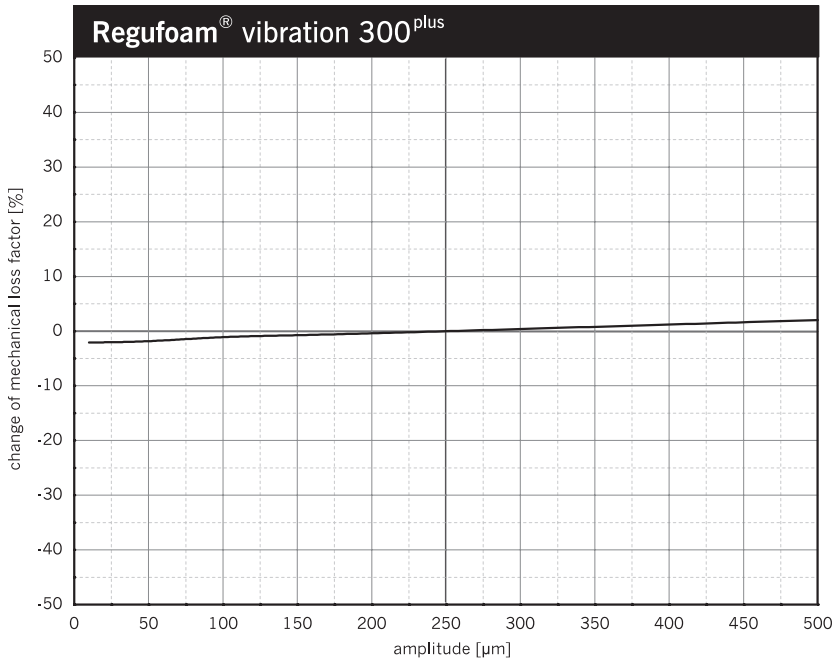


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of +/- 0.25 mm. Dimension of specimens 300 x 300 x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Influence of Amplitude

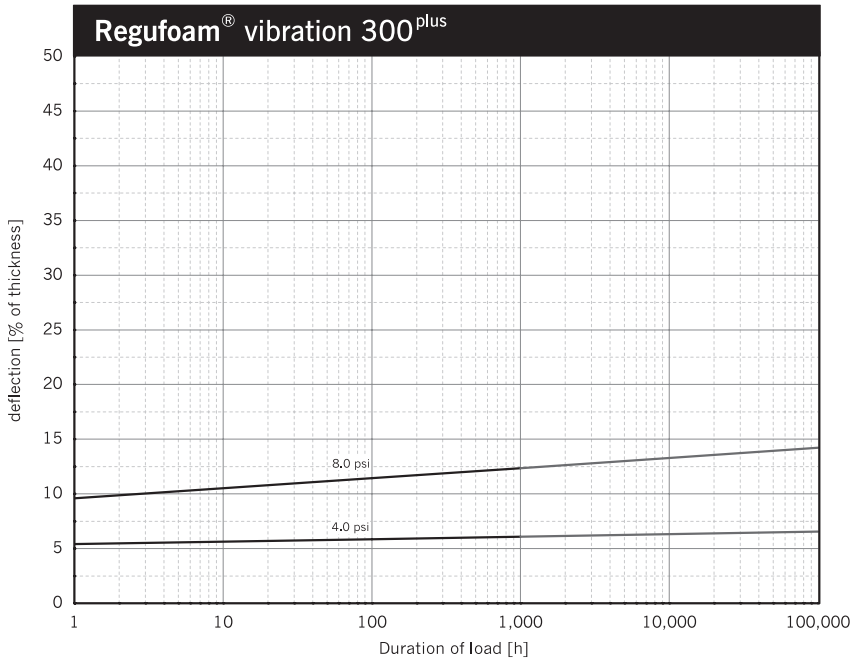


Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation.
Sinusoidal excitation at a constant mean load of 0.055 N/mm², dimensions of the specimens 300 x 300 x 25 mm.
Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



Change of the mechanical loss factor due to changes in amplitudes.
Sinusoidal excitation at a constant mean load of 0.055 N/mm², dimensions of the specimens 300 x 300 x 25 mm.

Long-Term Creep Test



Dimension of specimens 300 x 300 x 50 mm.

REGUPOL® AMERICA