

## Regufoam® Vibration 190<sup>plus</sup>

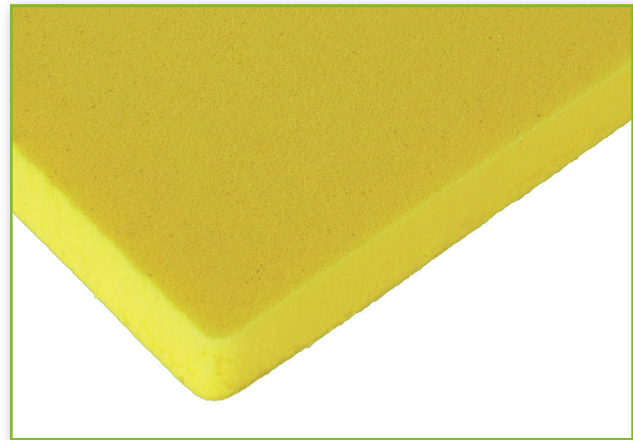
Standard forms of delivery, ex Lebanon, PA

**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  
 2.6 psi

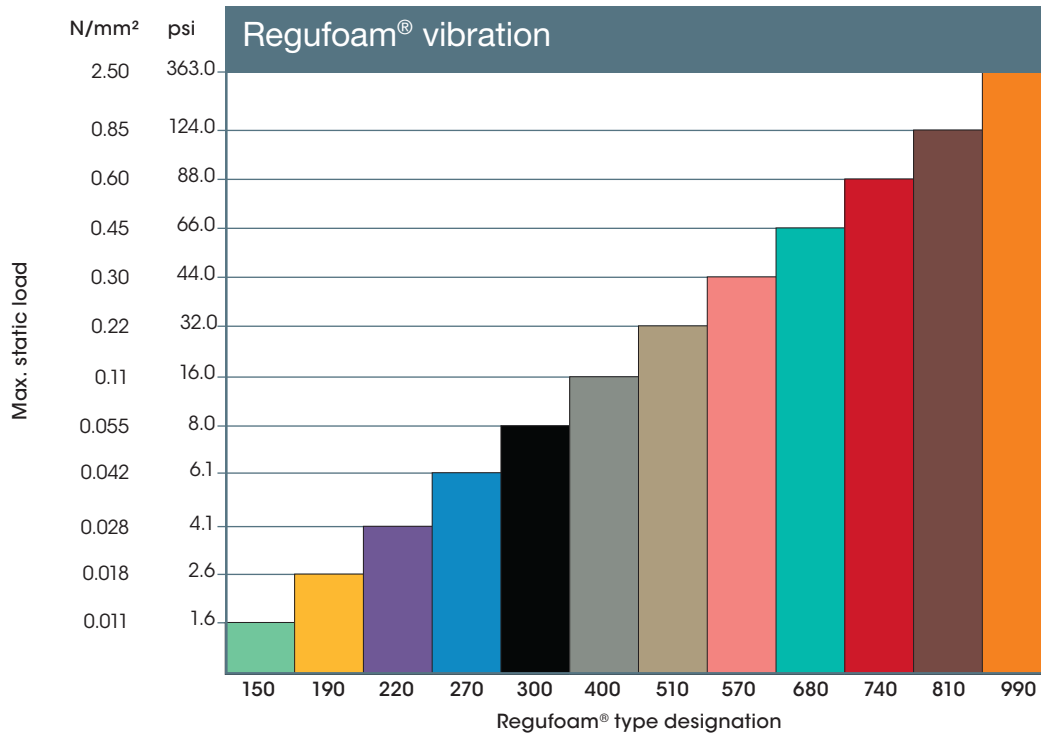
Peak loads (rare, short-term loads)  
 up to 116.0 psi



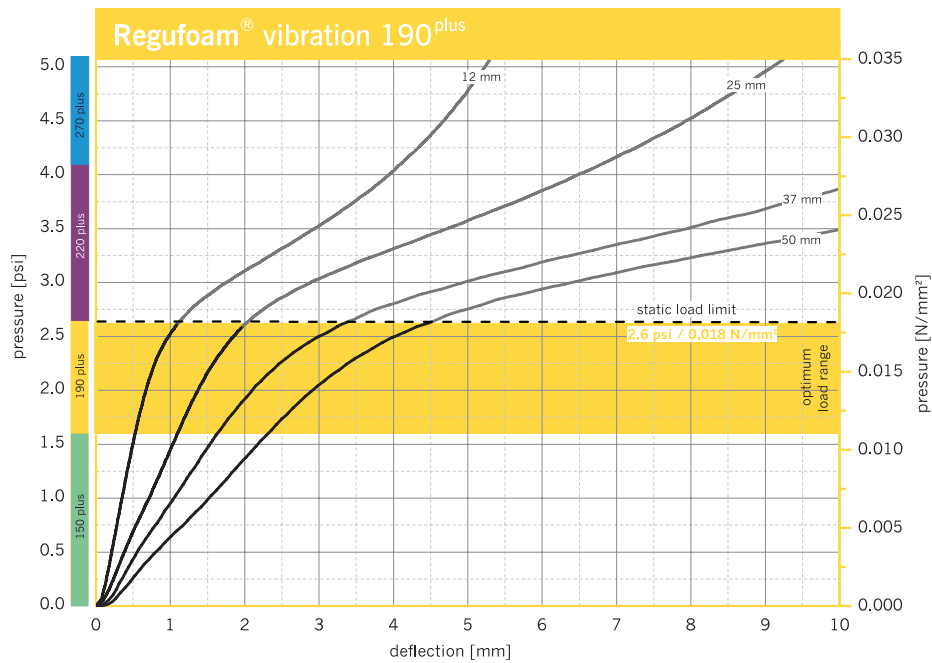
Color: Yellow

Static modulus of elasticity	Based on EN 826	14.5 - 36.3 0.10 - 0.25	psi N/mm <sup>2</sup>	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	36.3 - 79.8 0.25 - 0.55	psi N/mm <sup>2</sup>	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.25	[-]	Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	2.0	%	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs
Tensile strength	Based on DIN EN ISO 1798	58.0 0.4	psi N/mm <sup>2</sup>	
Elongation at break	Based on DIN EN ISO 1798	220	%	
Tear resistance	Based on DIN ISO 34-1	11.4	lbs/in	
Sliding friction	BSW laboratory BSW laboratory	0.7 0.8	[-] [-]	Steel (dry) Concrete (dry)
Compression hardness	Based on DIN EN ISO 3386-2	22	kPa	Compressive stress at 25 % deformation Test specimen h = 25 mm
Rebound elasticity	Based on DIN EN ISO 8307	35	%	Depending on thickness, Test specimen h = 25 mm
Force reduction	DIN EN 14904	61	%	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

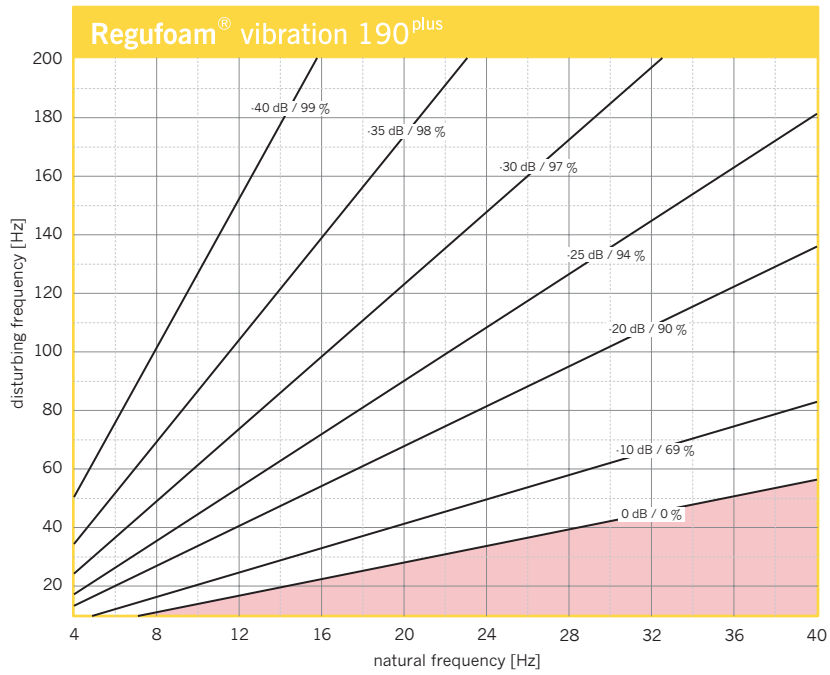
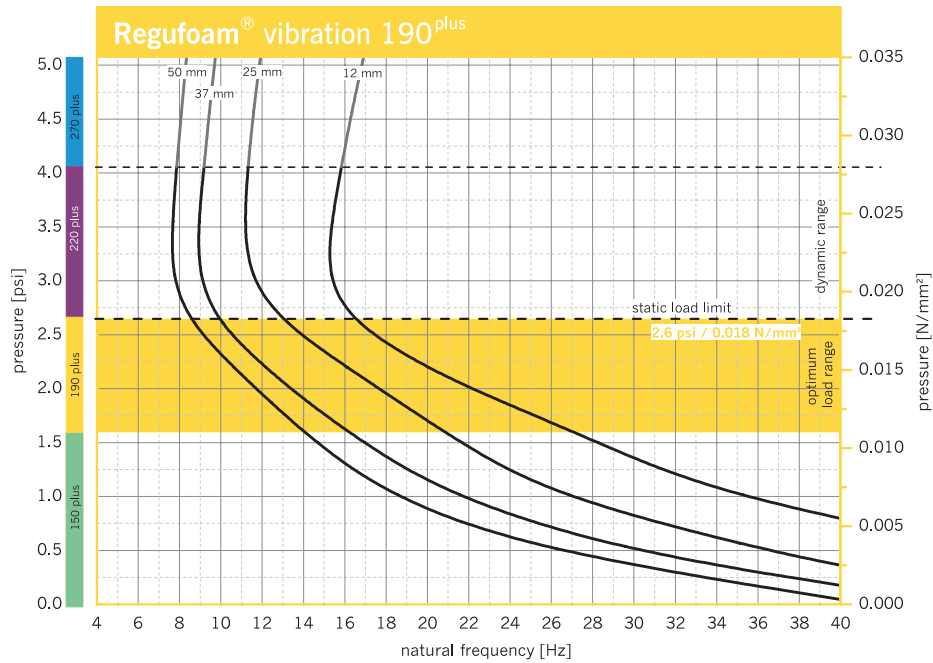


Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **Regufoam® vibration 190 plus**. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

## Natural Frequency



Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **Regufoam® vibration 190<sup>plus</sup>** on a rigid base. Dimensions of test specimens 300 mm x 300 mm.

## Modulus of Elasticity

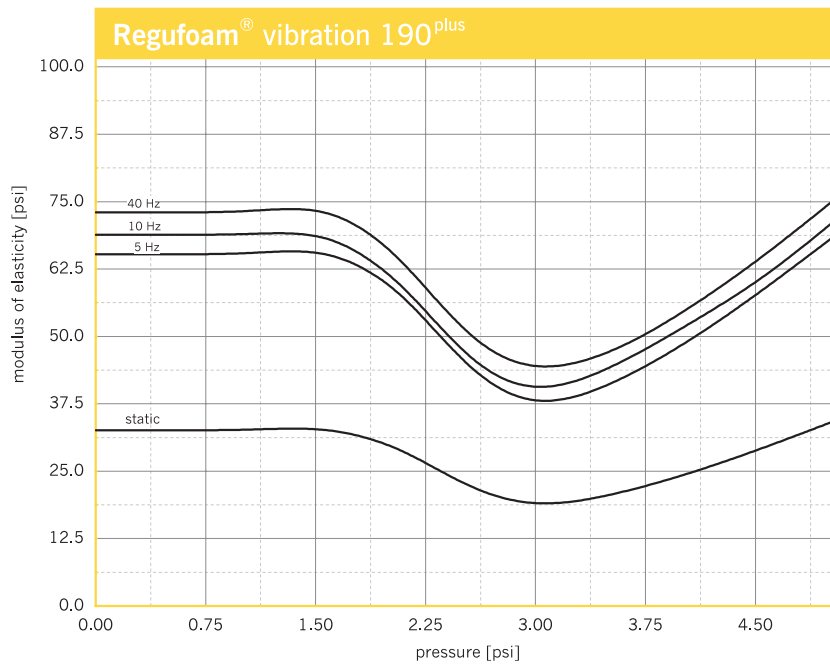


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of +/- 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with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

## Dynamic Stiffness

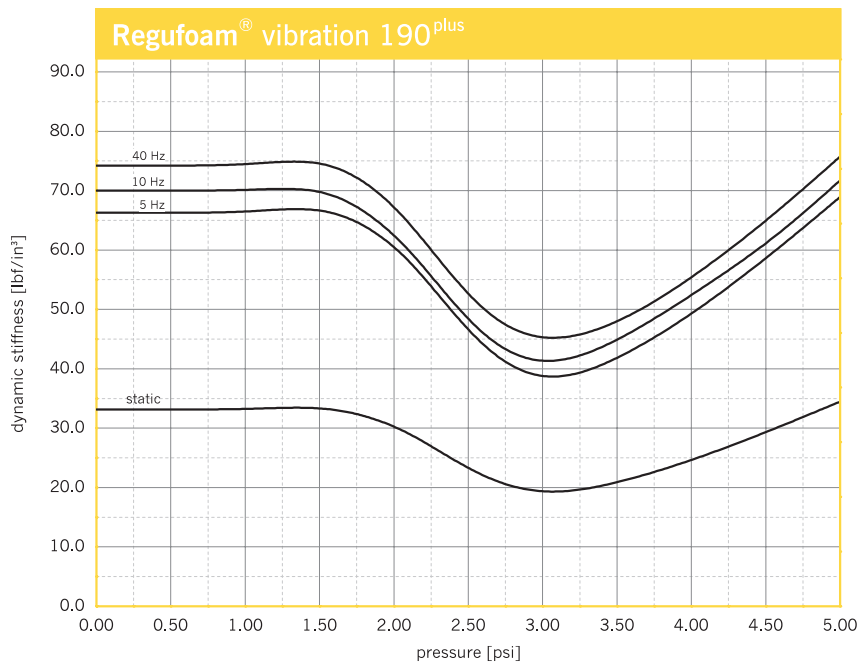
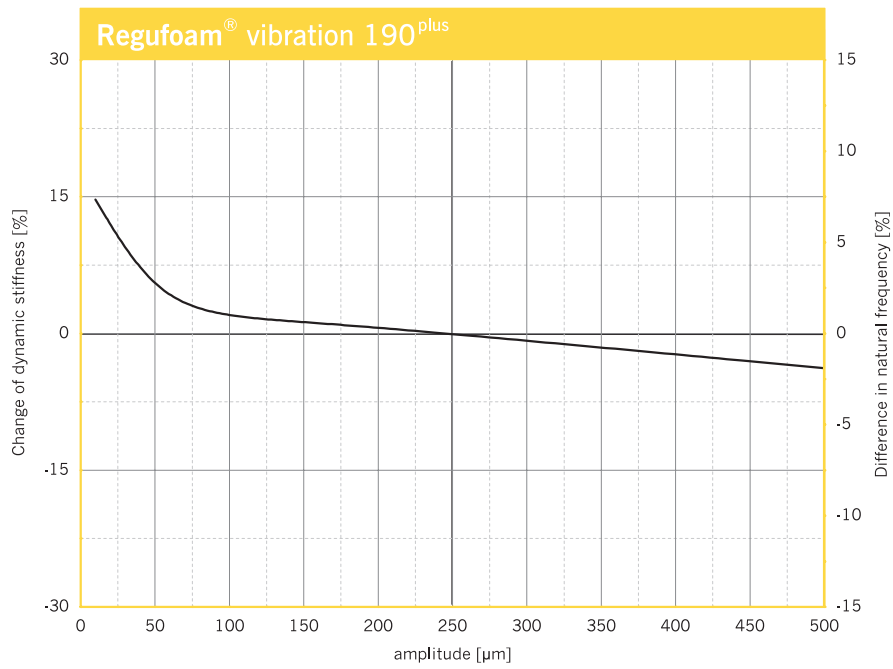
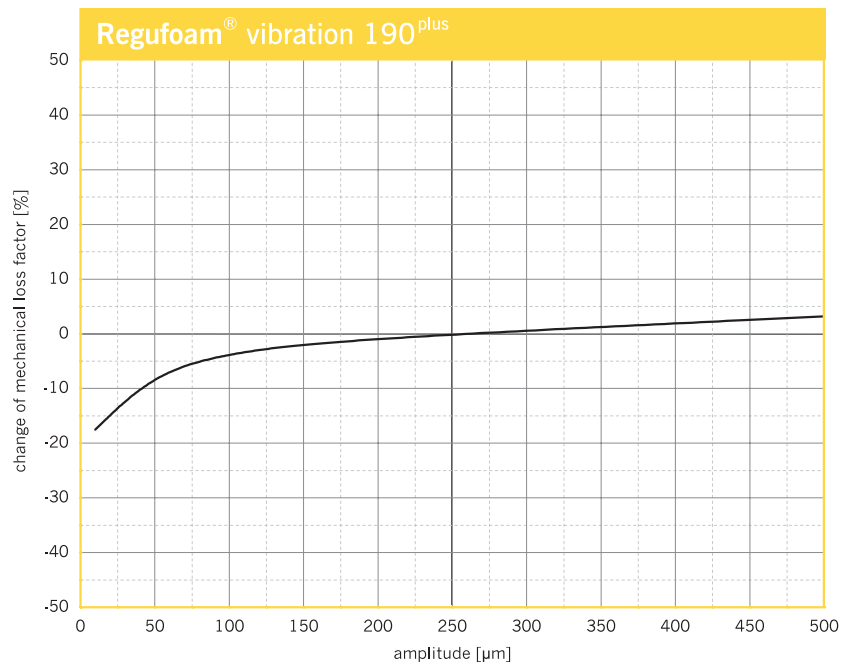


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of +/- 0.25 mm. Dimension of specimens 300 x 300 x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

## Influence of Amplitude

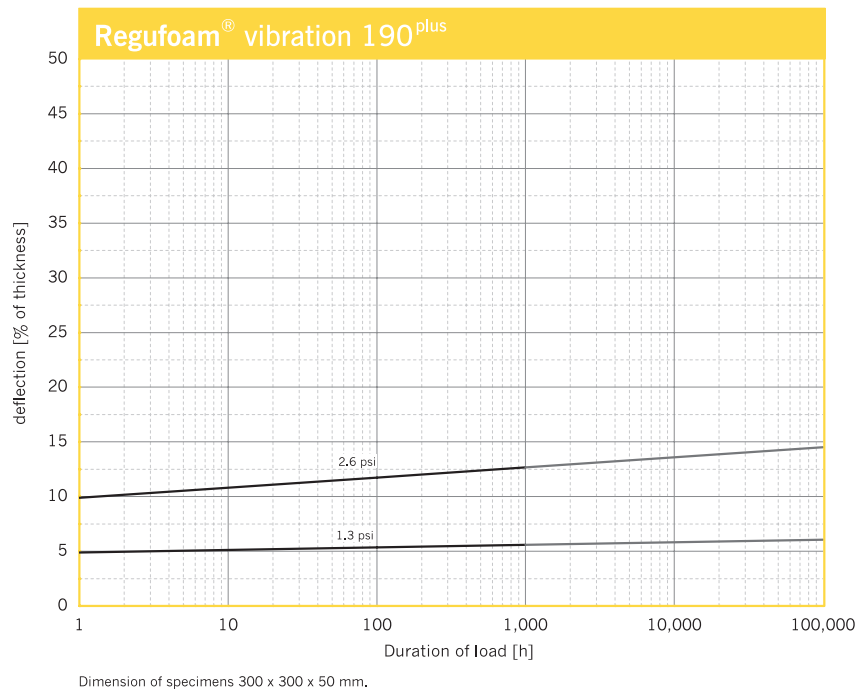


Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.018 N/mm<sup>2</sup>, dimensions of the specimens 300 x 300 x 25 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.018 N/mm<sup>2</sup>, dimensions of the specimens 300 x 300 x 25 mm.

## Long-Term Creep Test



Regupol America, LLC is a product manufacturer and does not represent itself as a consultant, engineer, or advisor in construction methods, standards, and compliance. Therefore, Regupol America only warrants its products under its standard limited warranty (available by request), and does not represent or warrant any advice, suggestions, instructions, whether formal or informal, oral or written, in conjunction with any sales of its products. Any such advice is not intended for a particular purpose and should not be acted or relied upon as such. Any such advice is not represented as being all-inclusive, correct, complete or up-to-date.

The information and data contained herein are based on industry accepted testing, manufacturing tolerances and prior product usage as set forth. It is intended as descriptive of the performance characteristics and capabilities of Regupol/Regufoam and does not certify applicability for any particular or specific project. Technical assistance, calculations and design recommendations are available from Regupol America, and are subject to terms and conditions provided upon request.