AODISI

FIRE TECHNOLOGY

产品资料与销售咨询

PRODUCT DOCUMENTATION & SALES CONTACT

REGUFOAM FR - Technical Data Sheet-en

澳迪斯防火科技（廊坊）有限公司

Aodisi Fire Technology (Langfang) Co., Ltd.

销售及选型联系 / Sales & product enquiries

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以上为销售联系信息，不替代安全数据表中的应急联系电话。
原始技术内容及制造商、检测机构和证书签发信息见后续资料页。

Sales contact only; emergency contacts in safety data sheets remain applicable.
Original technical, manufacturer and certification details follow.

Technical Data Sheet

REGUPOL

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REGUFOAM FR Series

Sound insulating, fire retardant polyurethane foam

Description

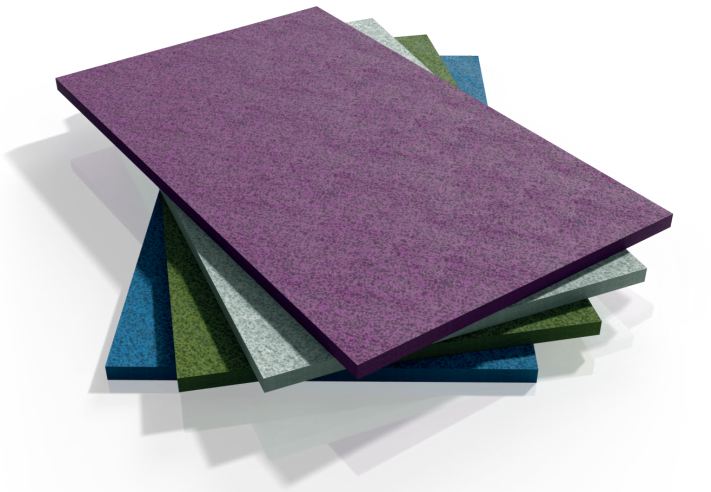
REGUFOAM FR is a sound-insulating, flame-retardant polyurethane foam with a mixed-cell structure. The material is available in various thicknesses, lengths and widths and is intended for use in rail vehicles as well as for structure-borne sound decoupling, vibration isolation and shock protection.

The products of the REGUFOAM FR series exhibit defined static and dynamic load ranges, characterised bedding curves and specific natural frequency behaviour based on their dynamic stiffness. Physical properties include mechanical loss factor, tensile strength, elongation at break and fire performance in accordance with DIN EN 45545-2 (R10, HL3).

Die-cut parts, water-jet-cut parts and self-adhesive versions are available on request.

Areas of Application

- Rolling stock
- Structure-borne sound decoupling
- Vibration isolation
- Vibration protection
- On request



Properties

- Sound-insulating, flame-retardant polyurethane foam with a mixed-cell structure
- Defined static and dynamic load ranges for alternating and short-term loading
- Characteristic bedding and natural frequency behaviour depending on dynamic stiffness
- Mechanical loss factor, tensile strength and elongation at break according to DIN EN ISO 1798
- Fire performance in accordance with DIN EN 45545-2 (R10, HL3)
- Available in various thicknesses, lengths and widths; die-cut parts, water-jet cuts and self-adhesive versions on request

Delivery and Packaging

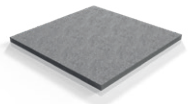
REGUFOAM FR Series

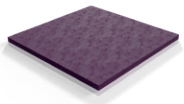
Thickness	12.5 mm and 25 mm (customised thicknesses on request)
Length	1500 mm and 5000 mm (customised measurements possible)
Width	1000 mm and 1500 mm (customised widths possible)

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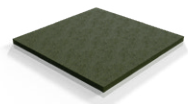
REGUPOL

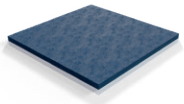
REGUFOAM FR Series





	REGUFOAM FR 221		REGUFOAM FR 301	
Maximum static load [N/mm²]	0.028		0.055	
Maximum dynamic load range for alternating loads [N/mm²]	0-0.040		0-0.080	
short-term loads [N/mm²]	≤ 0.9		≤ 2.0	
Thickness [mm]	12.5	25	12.5	25
Dimensions [mm]	5000 × 1500	5000 × 1500	5000 × 1500	5000 × 1500
Weight per [g/m²]	approx. 3000	approx. 6000	approx. 4000	approx. 8000
Article number	0773212000	0773225000	0773312000	0773325000





	REGUFOAM FR 401		REGUFOAM FR 511	
Maximum static load [N/mm²]	0.110		0.220	
Maximum dynamic load range for alternating loads [N/mm²]	0-0.160		0-0.320	
short-term loads [N/mm²]	≤ 3.0		≤ 4.0	
Thickness [mm]	12.5	25	12.5	25
Dimensions [mm]	1500 × 1000	1500 × 1000	1500 × 1000	1500 × 1000
Weight per [g/m²]	approx. 5000	approx. 10 000	approx. 7000	approx. 14 000
Article number	0773412000	0773425000	0773512000	0773525000

Physical properties

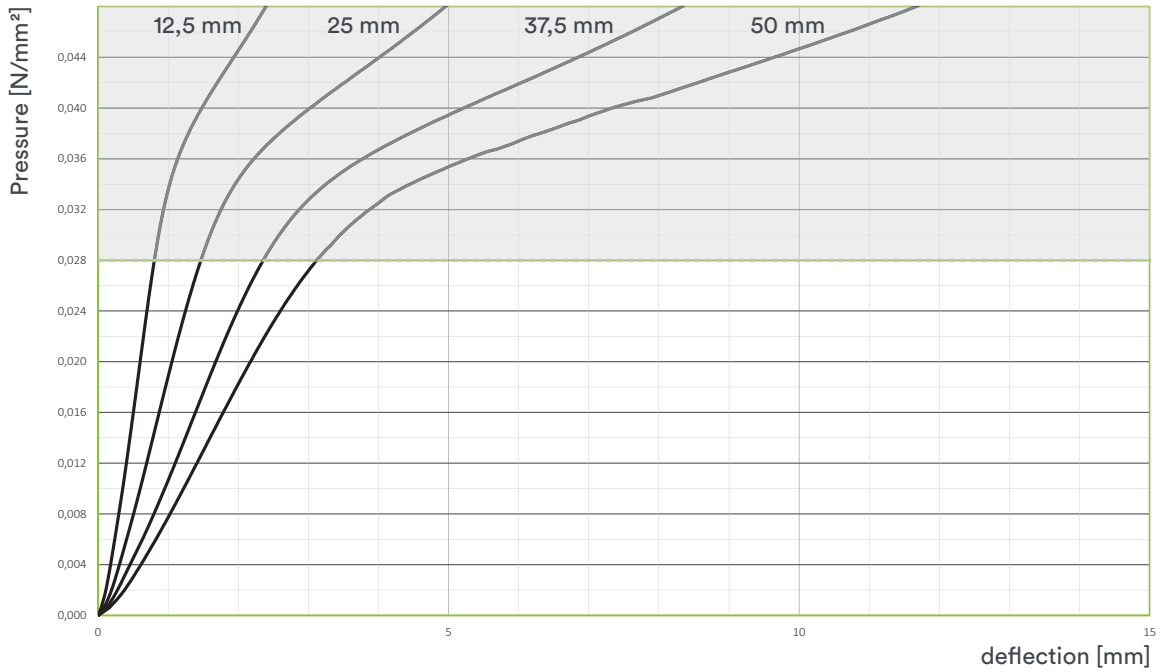
	Standard	Result	Comment
Mechanical loss factor	DIN 53513	0.11	depending on load, amplitude and frequency
Tensile strength	in acc. with DIN EN ISO 1798	0.75 N/mm²	
Elongation at break	in acc. with DIN EN ISO 1798	100 %	
Fire behaviour	DIN EN 45545-2	HL3	requirements for R10

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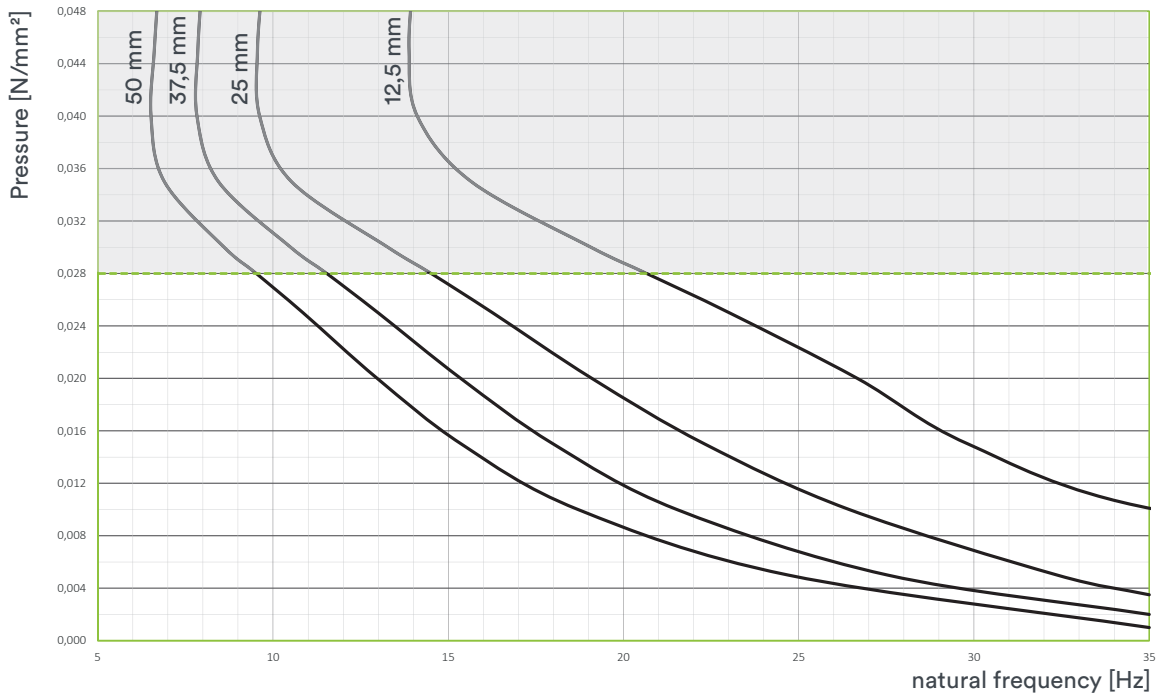
REGUFOAM FR 221

Load deflection



Examination of deflection in accordance with 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 specimens 300 × 300 × 25 mm.

Natural frequency



Natural frequency responses for a one-dimensional spring-mass oscillator considering the dynamic stiffness of REGUFOAM FR 221 on a rigid substrate. Sample dimensions: 300 × 300 × 25 mm.

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REGUFOAM FR 221

Dynamic stiffness

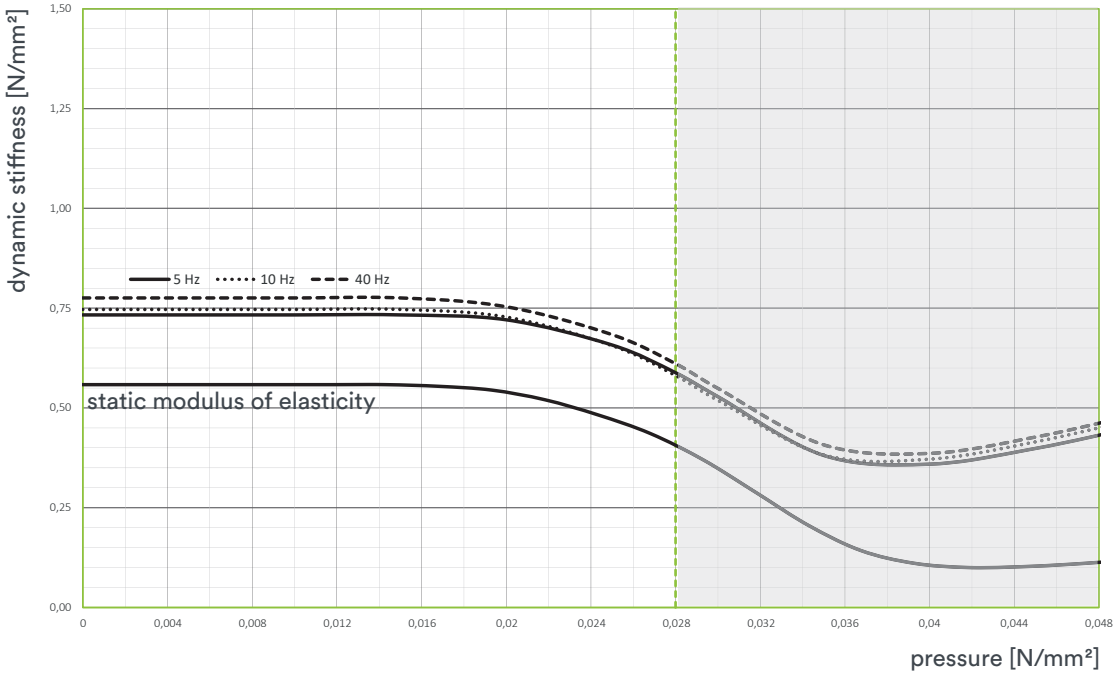
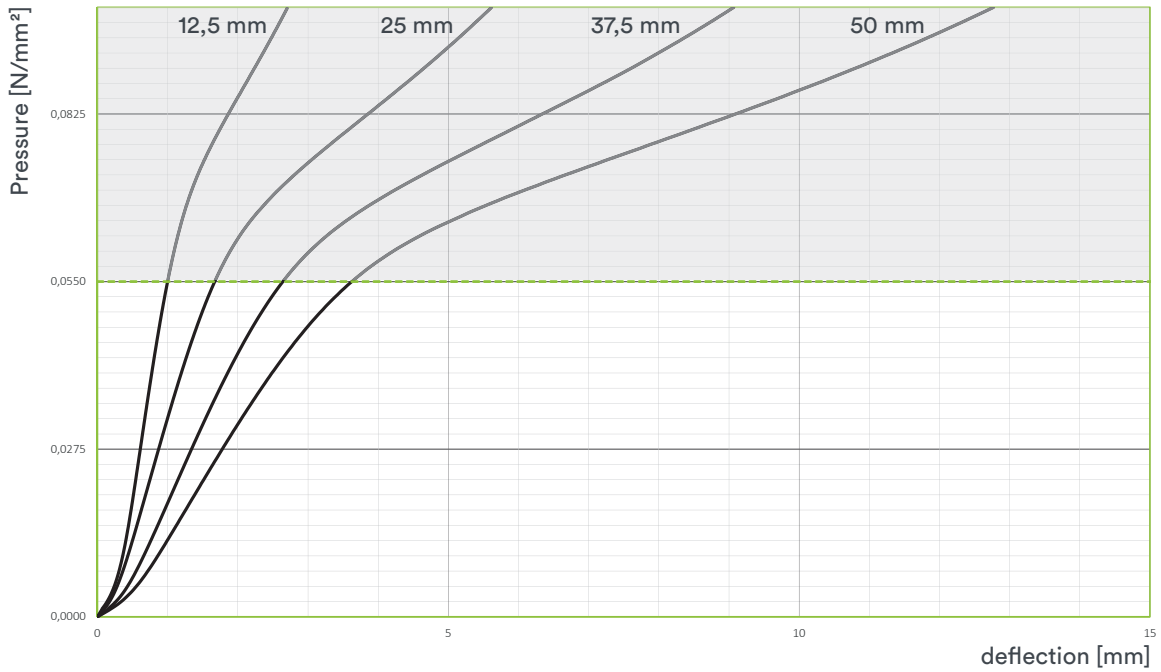


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 × 300 × 25 mm. Tested in accordance with DIN 53513



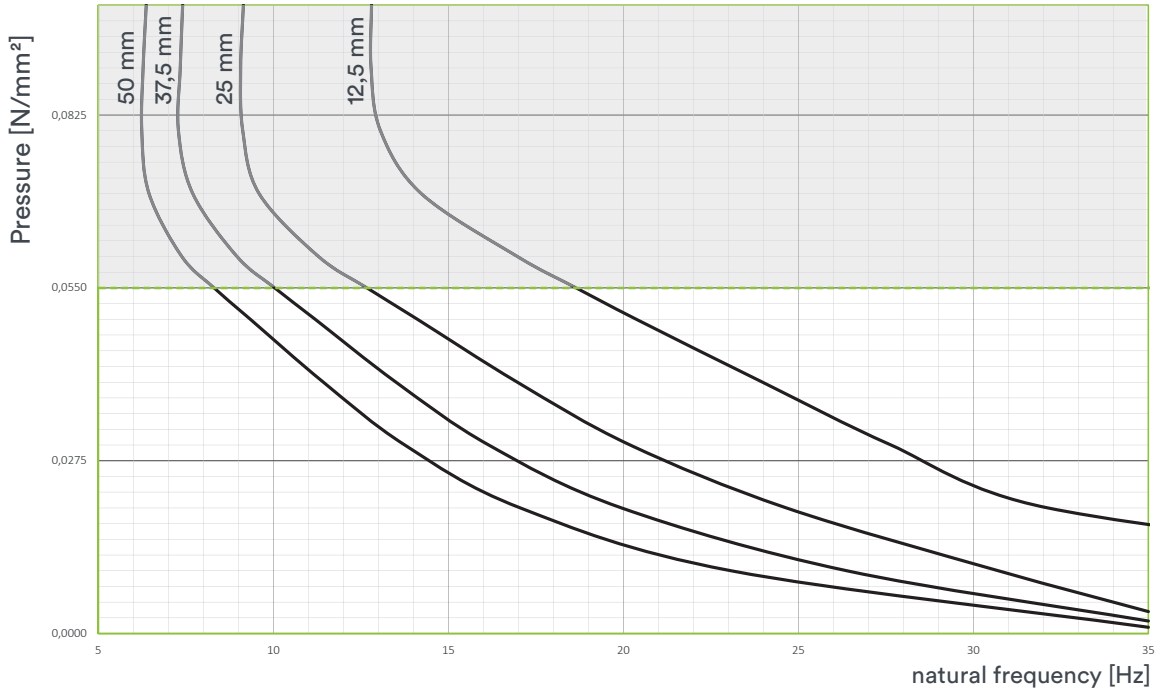
REGUFOAM FR 301

Load deflection



Examination of deflection in accordance with 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 specimens 300 × 300 × 25 mm.

Natural frequency



Natural frequency responses for a one-dimensional spring-mass oscillator considering the dynamic stiffness of REGUFOAM FR 301 on a rigid substrate. Sample dimensions: 300 × 300 × 25 mm.

REGUPOL

REGUFOAM FR 301

Dynamic stiffness

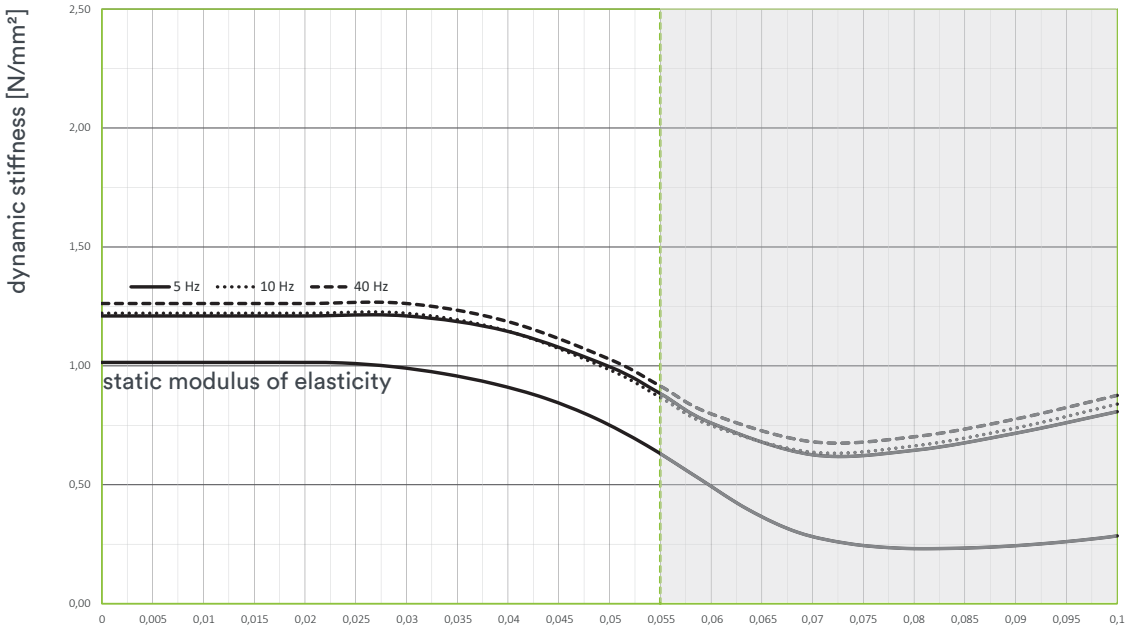
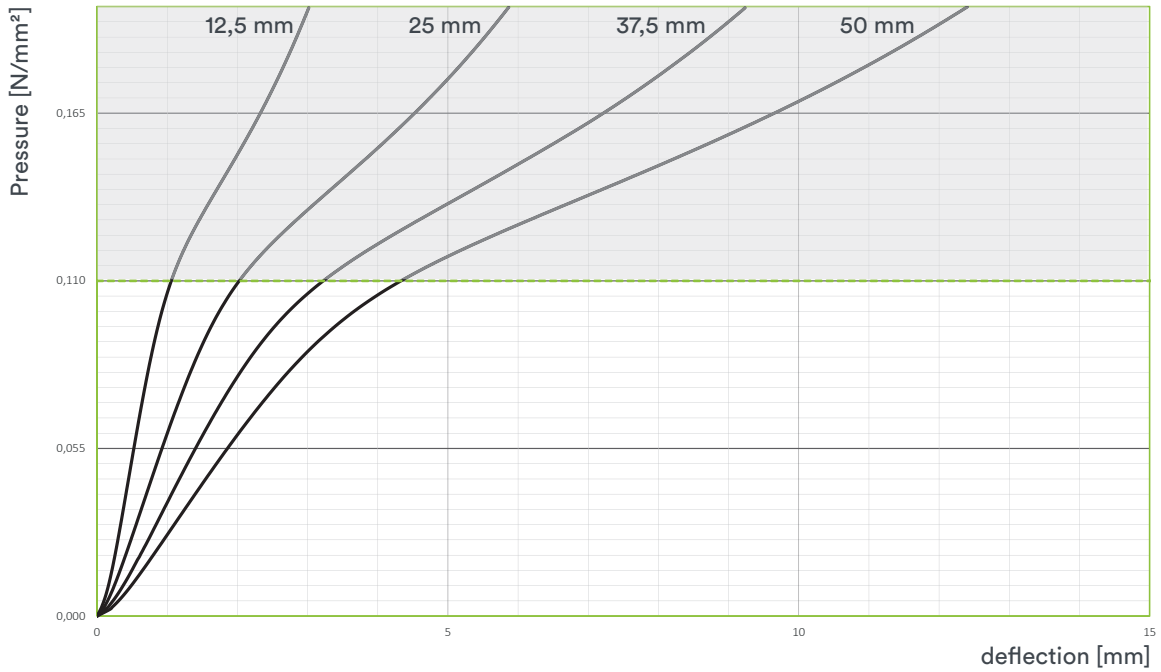


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 × 300 × 25 mm. Tested in accordance with DIN 53513.



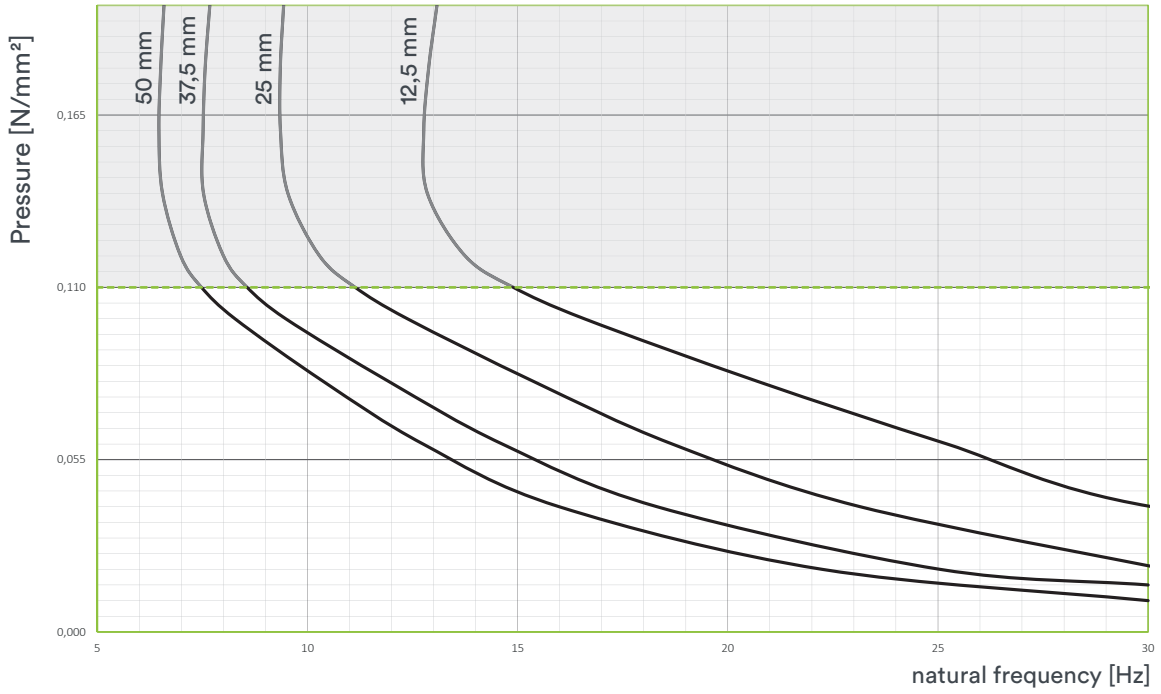
REGUFOAM FR 401

Load deflection



Examination of deflection in accordance with 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 specimens 300 × 300 × 25 mm.

Natural frequency



Natural frequency responses for a one-dimensional spring-mass oscillator considering the dynamic stiffness of REGUFOAM FR 401 on a rigid substrate. Sample dimensions: 300 × 300 × 25 mm.

REGUPOL

REGUFOAM FR 401

Dynamic stiffness

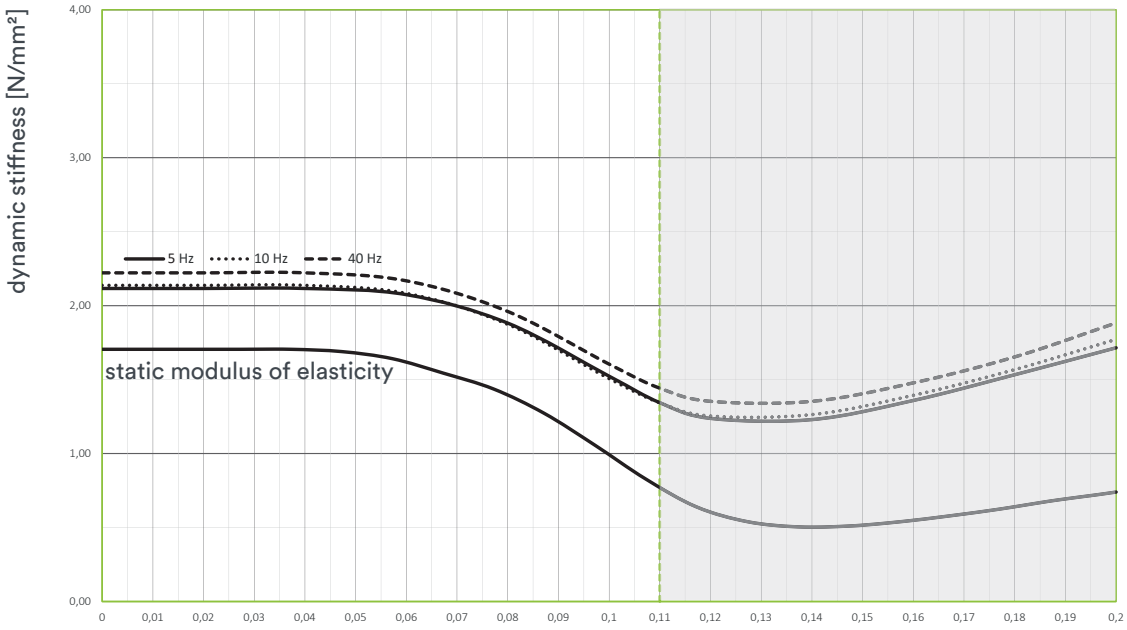
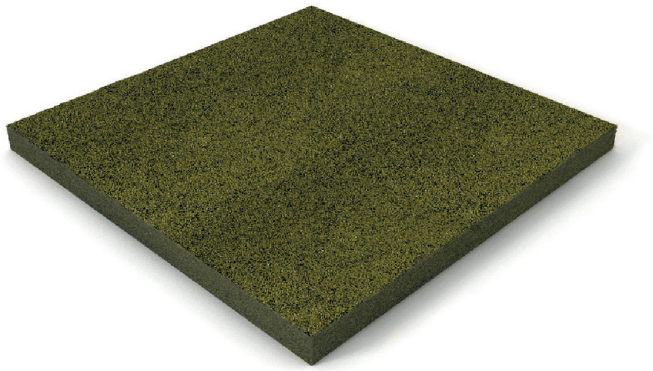
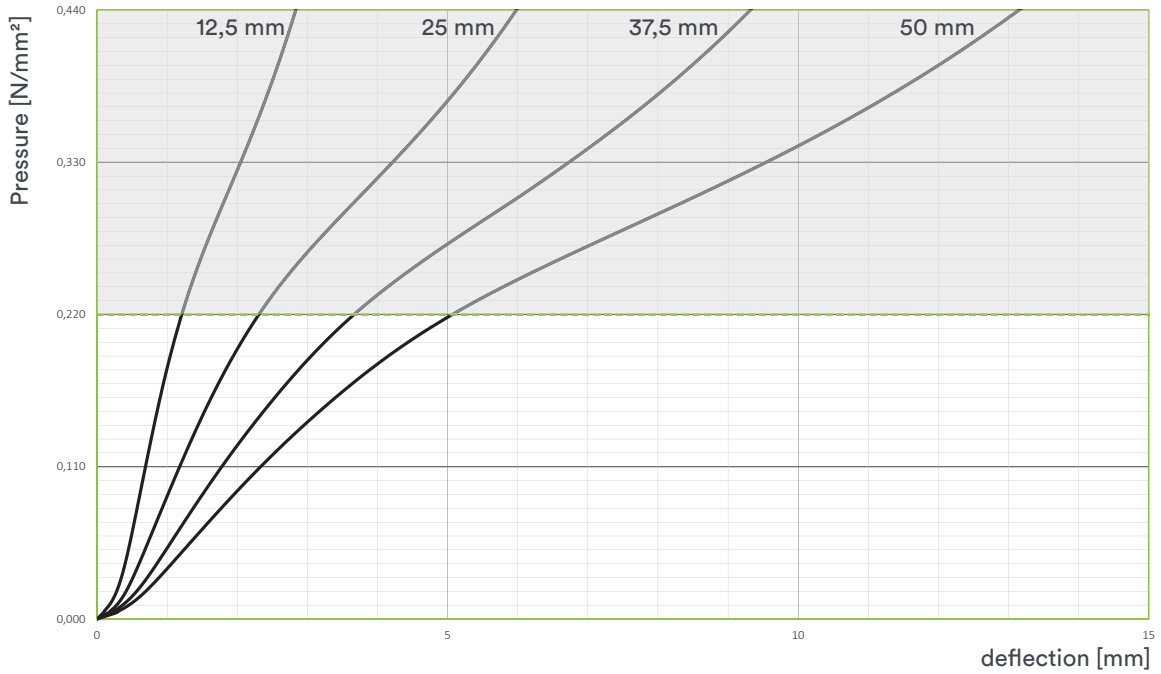


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 × 300 × 25 mm. Tested in accordance with DIN 53513.



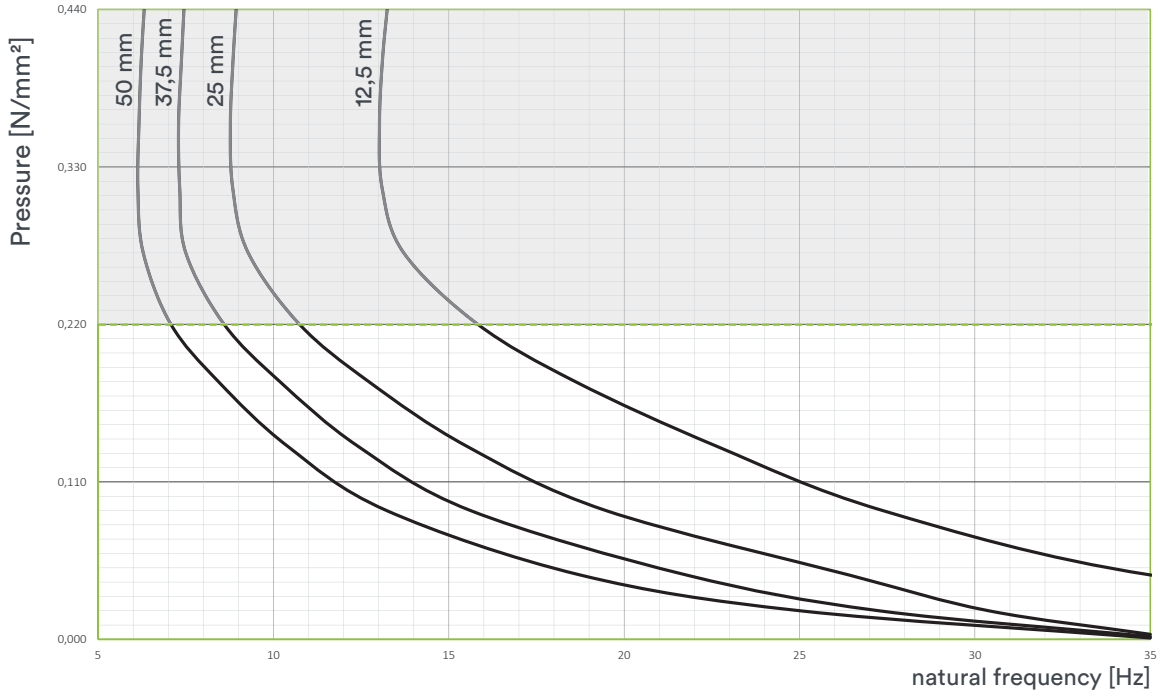
REGUFOAM FR 511

Load deflection



Examination of deflection in accordance with 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 specimens 300 × 300 × 25 mm.

Natural frequency



Natural frequency responses for a one-dimensional spring-mass oscillator considering the dynamic stiffness of REGUFOAM FR 511 on a rigid substrate. Sample dimensions: 300 × 300 × 25 mm.

REGUPOL

REGUFOAM FR 511

Dynamic stiffness

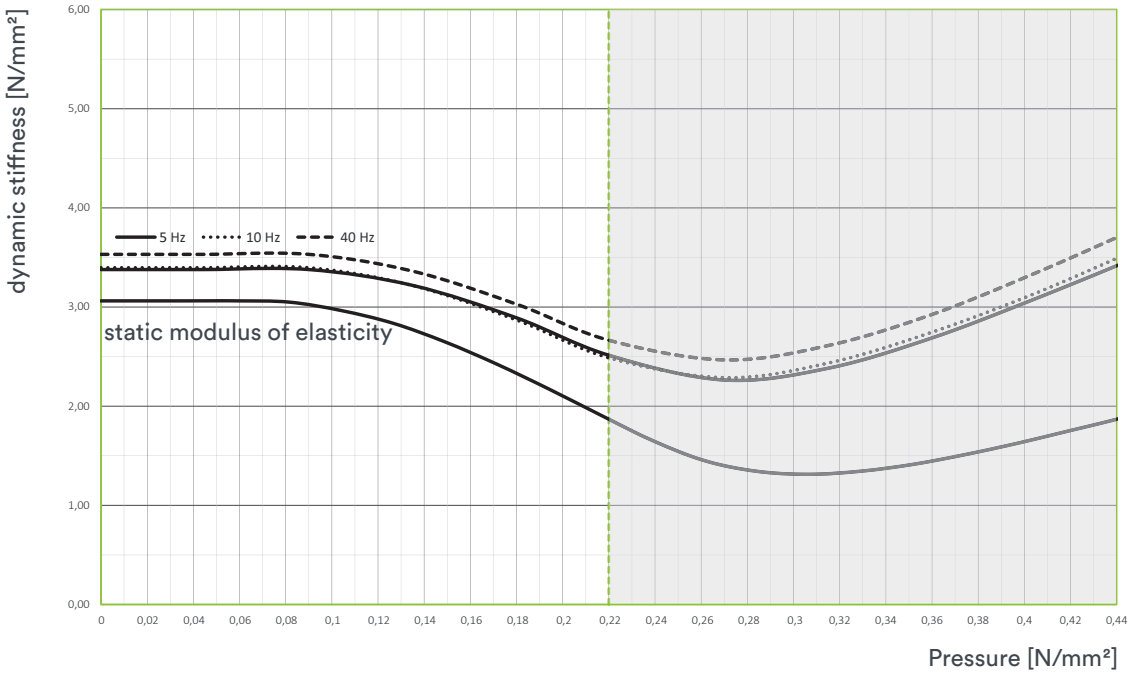


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 × 300 × 25 mm. Tested in accordance with DIN 53513.

