on your wavelength



Regufoam[®]

Vibration Isolation Technical Details



Cover Rf, Version 1, Release 03 2013, Sheet 1 of 1

Downloads



2

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vibration 150 plus

2.1

N/mm²

-0.85

-0.60

-0.45

snld066

810plus

740plus

680plus

570plus

510plus

400plus

300plus

270plus

220plus

190plus

150plus

Standard forms of delivery, ex warehouse Rolls

Thickness:12 and 25 mm, special thicknesses on requestLength:5,000 mm, special lengths availableWidth:1,500 mm

Stripping/Plates

On request Die-cutting, water-jet cutting, self-adhesive versions possible

Continuous static load

0.011 N/mm² Continuous and variable loads/operating load range 0 to 0.016 N/mm² Peak loads (rare, short-term loads) 0.5 N/mm²



Static modulus of elasticity	Based on EN 826	0.06 - 0.16	N/mm ²	Tangential modulus, see figure "Modulus of elasticity"	-0.3
Dynamic modulus of elasticity	Based on DIN 53513	0.15 - 0.38	N/mm ²	Depending on frequency, load and thickness, see figure "dynamic stiffness"	-0.2
Mechanical loss factor	DIN 53513	0.28	[-]	Load-, amplitude- and frequency-dependent	
Compression set	Based on DIN EN ISO 1856	1.6	%	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs	-0.1
Tensile strength	Based on DIN EN ISO 1798	0.31	N/mm ²		-0.0
Elongation at break	Based on DIN EN ISO 1798	220	%		-0.0
Tear resistance	Based on DIN ISO 34-1	1.2	N/mm		
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	[-] [-]	Normal flammability	-0.0
Sliding friction	BSW-laboratory BSW-laboratory	0.7 0.8	[-] [-]	Steel (dry) Concrete (dry)	
Compression hardness	Based on DIN EN ISO 3386-2	14	kPa	Compressive stress at 25 % deformation test specimen h = 25 mm	-0.0
Rebound elasticity	Based on DIN EN ISO 8307	34	%	dependent on thickness, test specimen $h = 25 \text{ mm}$	-0.0
Force reduction	DIN EN 14904	49	%	dependent on thickness, test specimen $h = 25 \text{ mm}$	
	1				0







Load Deflection



vibration 150 plus

Vibration Isolation



Natural Frequency





2.1

Regufoam®

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 0.011 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



of 0.011 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm.

vibration 150 plus



vibration 150 plus

Modulus of Elasticity



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

Long-Term Creep Test



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vibration 150 plus

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Regufoam 150, Version 1, Release 03 2013, sheet 2 of 2

vibration 190 plus

2.2

N/mm²

-0.85

-0.60

-0.45

snid066

810plus

740plus

680plus

570plus

510plus

400plus

300plus

270plus

220plus

150^{plus}

Standard forms of delivery, ex warehouse Rolls

Thickness:12 and 25 mm, special thicknesses on requestLength:5,000 mm, special lengths availableWidth:1,500 mm

Stripping/Plates

On request Die-cutting, water-jet cutting, self-adhesive versions possible

Continuous static load

0.018 N/mm² Continuous and variable loads/operating load range 0 to 0.028 N/mm² Peak loads (rare, short-term loads) 0.8 N/mm²



Static modulus of elasticity	Based on EN 826	0.1 - 0.25	N/mm ²	Tangential modulus, see figure "Modulus of elasticity"	-0.30
Dynamic modulus of elasticity	Based on DIN 53513	0.25 - 0.55	N/mm²	Depending on frequency, load and thickness, see figure "dynamic stiffness"	-0.22 -
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	-0.11 -
Tensile strength	Based on DIN EN ISO 1798	0.4	N/mm ²		-0.055
Elongation at break	Based on DIN EN ISO 1798	220	%		-0.042
Tear resistance	Based on DIN ISO 34-1	2.0	N/mm		
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	[-] [-]	Normal flammability	-0.028
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	-0.018
Rebound elasticity	Based on DIN EN ISO 8307	35	%	dependent on thickness, test specimen $h = 25 \text{ mm}$	-0.011
Force reduction	DIN EN 14904	61	%	dependent on thickness, test specimen $h = 25 \text{ mm}$	0
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Load Deflection



vibration 190 plus

Vibration Isolation



Natural Frequency



N/mm² -2.50-066 -0.85 ŏ 81 -0.60-40 -0.45 680 -0.30ō 57 0.22 õ ß 0.11 400 -0.055 300 -0.042 270^p -0.028 220F -0.018 -0.011 150p

0

2.2

Regufoam®



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/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



of 0.018 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm.

vibration 190 plus



vibration 190 plus

2.2

Modulus of Elasticity



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

Regufoam®

Long-Term Creep Test

50 45 40 35 ŝ 30 [% of 25 20 15 0.018 N/m 10 0.009 N/mm/ 0 10 100 Durati

Dimensions of specimens 300 mm x 300 mm x 50 mm

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vibration 190 plus

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Regufoam 190, Version 1, Release 03 2013, sheet 2 of 2

vibration 220 plus

2.3

N/mm²

-0.85

-0.60

-0.45

snid066

810plus

740plus

680plus

570plus

510plus

400plus

300plus

270plus

220plus

190plus

150^{plus}

Standard forms of delivery, ex warehouse Rolls

Thickness:12 and 25 mm, special thicknesses on requestLength:5,000 mm, special lengths availableWidth:1,500 mm

Stripping/Plates

On request Die-cutting, water-jet cutting, self-adhesive versions possible

Continuous static load

0.028 N/mm² Continuous and variable loads/operating load range 0 to 0.04 N/mm² Peak loads (rare, short-term loads) 0.9 N/mm²



Static modulus of elasticity	Based on EN 826	0.15 - 0.35	N/mm²	Tangential modulus, see figure "Modulus of elasticity"	-0
Dynamic modulus of elasticity	Based on DIN 53513	0.35 - 0.75	N/mm ²	Depending on frequency, load and thickness, see figure "dynamic stiffness"	-0
Mechanical loss factor	DIN 53513	0.22	[-]	Load-, amplitude- and frequency-dependent	
Compression set	Based on DIN EN ISO 1856	2.3	%	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs	-0
Tensile strength	Based on DIN EN ISO 1798	0.5	N/mm ²		-0
Elongation at break	Based on DIN EN ISO 1798	180	%		-0
Tear resistance	Based on DIN ISO 34-1	2.1	N/mm		
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	[-] [-]	Normal flammability	-0
Sliding friction	BSW-laboratory BSW-laboratory	0.7 0.8	[-] [-]	Steel (dry) Concrete (dry)	
Compression hardness	Based on DIN EN ISO 3386-2	39	kPa	Compressive stress at 25 % deformation test specimen $h = 25 \text{ mm}$	-0
Rebound elasticity	Based on DIN EN ISO 8307	47	%	dependent on thickness, test specimen $h = 25 \text{ mm}$	-0
Force reduction	DIN EN 14904	69	%	dependent on thickness, test specimen $h = 25 \text{ mm}$	
					0

vibration 220 plus







Load Deflection



vibration 220 plus

Vibration Isolation



Natural Frequency



N/mm² -2.50-066 -0.85 ŏ $\overline{\mathbf{0}}$ -0.60 40 -0.45 680 0.30 ō 5 0.22 ŏ ß 0.11 400 -0.055 300 -0.042 ŏ 2 0.028 220^{pl} -0.018 06 -0.011 150^p 0

2.3

Regufoam®





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 0.028 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



of 0.028 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm.

vibration 220 plus



vibration 220 plus

2.3

Modulus of Elasticity



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

Regufoam[®]

Long-Term Creep Test

Regufoam[®] vibration 220 50 45 40 35 30 to. 26] U 25 20 15 0.028 N/mm 10 0.014 N/mm 5 0 10 100 Durati

Dimensions of specimens 300 mm x 300 mm x 50 mm

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vibration 220 plus



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1,000	10,000	100

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Regufoam 220, Version 1, Release 03 2013, sheet 2 of 2

vibration 270 plus

2.4

N/mm² 2.50

snid066

810plus

740plus

680plus

570plus

510plus

400plus

300plus

27

220plus

190plus

150^{plus}

Standard forms of delivery, ex warehouse Rolls

Thickness: 12 and 25 mm, special thicknesses on request Length: 5,000 mm, special lengths available Width: 1,500 mm

Stripping/Plates

On request Die-cutting, water-jet cutting, self-adhesive versions possible

Continuous static load

0.042 N/mm² Continuous and variable loads/operating load range 0 to 0.062 N/mm² Peak loads (rare, short-term loads) 1.2 N/mm²



Static modulus of elasticity	Based on EN 826	0.25 - 0.45	N/mm ²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	0.60 - 1.05	N/mm ²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.2	[-]	Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	3.2	%	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs
Tensile strength	Based on DIN EN ISO 1798	0.9	N/mm ²	
Elongation at break	Based on DIN EN ISO 1798	210	%	
Tear resistance	Based on DIN ISO 34-1	4.5	N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	[-] [-]	Normal flammability
Sliding friction	BSW-laboratory BSW-laboratory	0.7 0.8	[-] [-]	Steel (dry) Concrete (dry)
Compression hardness	Based on DIN EN ISO 3386-2	63	kPa	Compressive stress at 25 % deformation test specimen h = 25 mm
Rebound elasticity	Based on DIN EN ISO 8307	38	%	dependent on thickness, test specimen $h = 25 \text{ mm}$
Force reduction	DIN EN 14904	70	%	dependent on thickness, test specimen $h = 25 \text{ mm}$

vibration 270 plus







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.

Regufoam 270, Version 1, Release 03 2013, sheet 1 of 2

vibration 270 plus

Vibration Isolation



Natural Frequency





2.4

Regufoam[®]

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 0.042 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



vibration 270 plus



Modulus of Elasticity

1,2

1.0

0,8

E-Modul [N/n 00

0,4

0,2

0,0

0.00

10 1

5 H

static

Regufoam[®] vibration 270 plus

0.02

2.4

Regufoam[®]

Long-Term Creep Test



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.

0.04

pressure [N/mm²]

0.06

0.08

Dynamic Stiffness



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

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vibration 270 plus



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1,000	10,000	100

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Regufoam 270, Version 1, Release 03 2013, sheet 2 of 2

vibration 300 plus

2.5

N/mm² 2.50

snid066

810plus

740plus

680plus

570plus

510plus

400plus

300plus

270plus

220plus

190plus

150^{plus}

-0.45

Standard forms of delivery, ex warehouse Rolls

Thickness: 12 and 25 mm, special thicknesses on request Length: 5,000 mm, special lengths available Width: 1,500 mm

Stripping/Plates

On request Die-cutting, water-jet cutting, self-adhesive versions possible

Continuous static load

0.055 N/mm² Continuous and variable loads/operating load range 0 to 0.08 N/mm² Peak loads (rare, short-term loads) 2 N/mm²



Static modulus of elasticity	Based on EN 826	0.35 - 0.58	N/mm ²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	0.68 - 1.25	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	1.2	N/mm ²	
Elongation at break	Based on DIN EN ISO 1798	240	%	
Tear resistance	Based on DIN ISO 34-1	4.8	N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	[-] [-]	Normal flammability
Sliding friction	BSW-laboratory BSW-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	%	dependent on thickness, test specimen $h = 25 \text{ mm}$
Force reduction	DIN EN 14904	72	%	dependent on thickness, test specimen $h = 25 \text{ mm}$

vibration 300 plus







Load Deflection



vibration 300 plus

Vibration Isolation



Natural Frequency





2.5

Regufoam[®]





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 mm x 300 mm x 25 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



of 0.055 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm.

vibration 300 plus



vibration 300 plus

2.5

Modulus of Elasticity



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 an and amplitude of \pm 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Regufoam[®]

Long-Term Creep Test



vibration 300 plus

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1,000	10,000	100

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Regufoam 300, Version 1, Release 03 2013, sheet 2 of 2

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vibration 400 plus

2.6

N/mm² 2.50

snid066

810plus

740plus

680plus

570plus

510plus

400plus

300plus

270plus

220plus

190 plus

150^{plus}

-0.45

Standard forms of delivery, ex warehouse Rolls

Thickness: 12 and 25 mm, special thicknesses on request Length: 5,000 mm, special lengths available Width: 1,500 mm

Stripping/Plates

On request Die-cutting, water-jet cutting, self-adhesive versions possible

Continuous static load

0.11 N/mm² Continuous and variable loads/operating load range 0 to 0.16 N/mm² Peak loads (rare, short-term loads) up to 3 N/mm²



	1				
Static modulus of elasticity	Based on EN 826	0.6 - 1.0	N/mm ²	Tangential modulus, see figure "Modulus of elasticity"	-0.30 -
Dynamic modulus of elasticity	Based on DIN 53513	1.2 - 2.0	N/mm²	Depending on frequency, load and thickness, see figure "dynamic stiffness"	-0.22-
Mechanical loss factor	DIN 53513	0.17	[-]	Load-, amplitude- and frequency-dependent	
Compression set	Based on DIN EN ISO 1856	3.9	%	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs	-0.11 -
Tensile strength	Based on DIN EN ISO 1798	1.5	N/mm ²		-0.055
Elongation at break	Based on DIN EN ISO 1798	220	%		-0.042
Tear resistance	Based on DIN ISO 34-1	6.0	N/mm		
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	[-] [-]	Normal flammability	-0.028
Sliding friction	BSW-laboratory BSW-laboratory	0.7 0.8	[-] [-]	Steel (dry) Concrete (dry)	
Compression hardness	Based on DIN EN ISO 3386-2	170	kPa	Compressive stress at 25 % deformation test specimen h = 25 mm	-0.018
Rebound elasticity	Based on DIN EN ISO 8307	57	%	dependent on thickness, test specimen $h = 25 \text{ mm}$	-0.011
Force reduction	DIN EN 14904	68	%	dependent on thickness, test specimen $h = 25 \text{ mm}$	
		1			0

Regufoam 400, Version 1, Release 03 2013, sheet 1 of 2







Load Deflection



vibration 400 plus

Vibration Isolation



Natural Frequency





2.6

Regufoam[®]



excitation at a constant mean load of 0.11 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



of 0.11 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm.

vibration 400 plus



vibration 400 plus

2.6

Modulus of Elasticity



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

Regufoam®

Long-Term Creep Test



Dimensions of specimens 300 mm x 300 mm x 50 mm

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vibration 400 plus



1,000 load [h]	10,000	100,0

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Regufoam 400, Version 1, Release 03 2013, sheet 2 of 2

vibration 510 plus

2.7

N/mm²

-0.85

-0.60

-0.45

snid066

810plus

740plus

680plus

570plus

510plus

400plus

300plus

270plus

220plus

190^{plus}

150^{plus}

Standard forms of delivery, ex warehouse Rolls

Thickness:12 and 25 mm, special thicknesses on requestLength:5,000 mm, special lengths availableWidth:1,500 mm

Stripping/Plates

On request Die-cutting, water-jet cutting, self-adhesive versions possible

Continuous static load

0.22 N/mm² Continuous and variable loads/operating load range 0 to 0.32 N/mm² Peak loads (rare, short-term loads) up to 4 N/mm²



Static modulus of elasticity	Based on EN 826		N/mm ²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	2.2 - 3.7	N/mm ²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.15		Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	4.2	%	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs
Tensile strength	Based on DIN EN ISO 1798	2.4	N/mm ²	
Elongation at break	Based on DIN EN ISO 1798	240	%	
Tear resistance	Based on DIN ISO 34-1	9.3	N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	[-] [-]	Normal flammability
Sliding friction	BSW-laboratory BSW-laboratory	0.7 0.8	[-] [-]	Steel (dry) Concrete (dry)
Compression hardness	Based on DIN EN ISO 3386-2	330	kPa	Compressive stress at 25 % deformation test specimen h = 25 mm
Rebound elasticity	Based on DIN EN ISO 8307	60	%	dependent on thickness, test specimen $h = 25 \text{ mm}$
Force reduction	DIN EN 14904	61	%	dependent on thickness, test specimen $h = 25 \text{ mm}$

vibration 510 plus







Load Deflection



vibration 510 plus

Vibration Isolation



Natural Frequency





2.7

Regufoam[®]





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 0.22 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



of 0.22 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm.

vibration 510 plus



vibration 510 plus

Modulus of Elasticity



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



Dimensions of specimens 300 mm x 300 mm x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Long-Term Creep Test



Contact: Steffen Blecher, Phone: +49 2751 803-126 • s.blecher@berleburger.de; Florian Sassmannshausen, Phone: +49 2751 803-230 • f.sassmannshausen@berleburger.de • Downloads at www.bsw-vibration-technology.com

vibration 510 plus



is		
1,000 of load [h]	10,000	100,000

Exclusion of Liability

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Regufoam 510, Version 1, Release 03 2013, sheet 2 of 2

vibration 570 plus

2.8

N/mm²

-0.85

-0.60

-0.45

snid066

810plus

740plus

680plus

570plus

510plus

400plus

300plus

270plus

220plus

190^{plus}

150^{plus}

Standard forms of delivery, ex warehouse Rolls

Thickness: 12 and 25 mm, special thicknesses on requestLength:5,000 mm, special lengths availableWidth:1,500 mm

Stripping/Plates

On request Die-cutting, water-jet cutting, self-adhesive versions possible

Continuous static load

0.30 N/mm² Continuous and variable loads/operating load range 0 to 0.42 N/mm² Peak loads (rare, short-term loads) up to 4.5 N/mm²



Static modulus of elasticity	Based on EN 826	2.6 - 2.7	N/mm ²	Tangential modulus, see figure "Modulus of elasticity"	-0.3
Dynamic modulus of elasticity	Based on DIN 53513	5.1 - 6.3	N/mm ²	Depending on frequency, load and thickness, see figure "dynamic stiffness"	-0.2
Mechanical loss factor	DIN 53513	0.14	[-]	Load-, amplitude- and frequency-dependent	
Compression set	Based on DIN EN ISO 1856	4.4	%	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs	-0.1
Tensile strength	Based on DIN EN ISO 1798	2.9	N/mm ²		-0.0
Elongation at break	Based on DIN EN ISO 1798	210	%		-0.0
Tear resistance	Based on DIN ISO 34-1	14.1	N/mm		
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	[-] [-]	Normal flammability	-0.0
Sliding friction	BSW-laboratory BSW-laboratory	0.6 0.7	[-] [-]	Steel (dry) Concrete (dry)	
Compression hardness	Based on DIN EN ISO 3386-2	620	kPa	Compressive stress at 25 % deformation test specimen h = 25 mm	-0.0
Rebound elasticity	Based on DIN EN ISO 8307	58	%	dependent on thickness, test specimen $h = 25 \text{ mm}$	-0.0
Force reduction	DIN EN 14904	50	%	dependent on thickness, test specimen $h = 25 \text{ mm}$	
	ļ	Į	<u> </u>		0

vibration 570 plus











vibration 570 plus

Vibration Isolation



Natural Frequency





2.8

Regufoam[®]





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 0.30 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



vibration 570 plus



vibration 570 plus

2.8

Modulus of Elasticity



Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of \pm 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



Dimensions of specimens 300 mm x 300 mm x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Regufoam[®]

Long-Term Creep Test



Dimensions of specimens 300 mm x 300 mm x 50

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vibration 570 plus

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Regufoam 570, Version 1, Release 03 2013, sheet 2 of 2

vibration 680 plus

2.9

N/mm²

-0.85

-0.60

-0.45

snid066

810plus

740plus

680plus

570plus

510plus

400plus

300plus

270plus

220plus

190plus

150^{plus}

Standard forms of delivery, ex warehouse Rolls

Thickness:12 and 25 mm, special thicknesses on requestLength:5,000 mm, special lengths availableWidth:1,500 mm

Stripping/Plates

On request Die-cutting, water-jet cutting, self-adhesive versions possible

Continuous static load

0.45 N/mm² Continuous and variable loads/operating load range 0 to 0.62 N/mm² Peak loads (rare, short-term loads) up to 5 N/mm²



Static modulus of elasticity	Based on EN 826	2.0 - 2.9	N/mm ²	Tangential modulus, see figure "Modulus of elasticity"	-0.30
Dynamic modulus of elasticity	Based on DIN 53513	6.8 - 10.0	N/mm ²	Depending on frequency, load and thickness, see figure "dynamic stiffness"	-0.22
Mechanical loss factor	DIN 53513	0.12	[-]	Load-, amplitude- and frequency-dependent	
Compression set	Based on DIN EN ISO 1856	6.2	%	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs	-0.11
Tensile strength	Based on DIN EN ISO 1798	3.6	N/mm ²		-0.05
Elongation at break	Based on DIN EN ISO 1798	230	%		-0.04
Tear resistance	Based on DIN ISO 34-1	18.5	N/mm		
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	[-] [-]	Normal flammability	-0.02
Sliding friction	BSW-laboratory BSW-laboratory	0.6 0.7	[-] [-]	Steel (dry) Concrete (dry)	
Compression hardness	Based on DIN EN ISO 3386-2	840	kPa	Compressive stress at 25 % deformation test specimen h = 25 mm	-0.01
Rebound elasticity	Based on DIN EN ISO 8307	58	%	dependent on thickness, test specimen $h = 25 \text{ mm}$	-0.01
Force reduction	DIN EN 14904	44	%	dependent on thickness, test specimen $h = 25 \text{ mm}$	0
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0





Load Deflection



2.9
vibration 680 plus

Vibration Isolation



Natural Frequency





2.9

Regufoam[®]





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 0.45 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



vibration 680 plus



of 0.45 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm.

Modulus of Elasticity

14

12

10

8

2

0

0.0

E-Modul [N/r

vibration 680 ^{plus}

Regufoam[®] vibration 680 plus

static

0.2

0.3

0,1

2.9

Regufoam[®]

Long-Term Creep Test



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.

pressure [N/mm²]

0.4

0.5

0.6

0.7

0.8

0.9

Dynamic Stiffness



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

Contact: Steffen Blecher, Phone: +49 2751 803-126 • s.blecher@berleburger.de; Florian Sassmannshausen, Phone: +49 2751 803-230 • f.sassmannshausen@berleburger.de • Downloads at www.bsw-vibration-technology.com

vibration 680 plus



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		_
		11111
1,000 of load [h]	10,000	100,0

Exclusion of Liability

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Regufoam 570, Version 1, Release 03 2013, sheet 2 of 2

vibration 740 plus



N/mm²

snld066

810plus

740^{plu}

680plus

570plus

510plus

400plus

300plus

270plus

220plus

190plus

150^{plus}

Standard forms of delivery, ex warehouse Rolls

Thickness:12 and 25 mm, special thicknesses on requestLength:5,000 mm, special lengths availableWidth:1,500 mm

Stripping/Plates

On request Die-cutting, water-jet cutting, self-adhesive versions possible

Continuous static load

0.60 N/mm² Continuous and variable loads/operating load range 0 to 0.85 N/mm² Peak loads (rare, short-term loads) up to 6 N/mm²



Static modulus of elasticity	Based on EN 826	4.3 - 5.9	N/mm²	Tangential modulus, see figure "Modulus of elasticity"	-0.3
Dynamic modulus of elasticity	Based on DIN 53513	7.9 - 13.0	N/mm²	Depending on frequency, load and thickness, see figure "dynamic stiffness"	-0.2
Mechanical loss factor	DIN 53513	0.11	[-]	Load-, amplitude- and frequency-dependent	
Compression set	Based on DIN EN ISO 1856	4.8	%	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs	-0.1
Tensile strength	Based on DIN EN ISO 1798	4.0	N/mm ²		-0.0
Elongation at break	Based on DIN EN ISO 1798	210	%		-0.(
Tear resistance	Based on DIN ISO 34-1	19.0	N/mm		
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	[-] [-]	Normal flammability	-0.0
Sliding friction	BSW-laboratory BSW-laboratory	0.6 0.7	[-] [-]	Steel (dry) Concrete (dry)	
Compression hardness	Based on DIN EN ISO 3386-2	1050	kPa	Compressive stress at 25 % deformation test specimen $h = 25 \text{ mm}$	-0.0
Rebound elasticity	Based on DIN EN ISO 8307	59	%	dependent on thickness, test specimen $h = 25 \text{ mm}$	-0.0
Force reduction	DIN EN 14904	39	%	dependent on thickness, test specimen $h = 25 \text{ mm}$	
		1			0

vibration 740 plus













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 250 mm x 250 mm.

vibration 740 plus

Vibration Isolation



Natural Frequency



-2.50-066 -0.85 ŏ $\overline{\mathbf{0}}$ -0.60-40 -0.45 680 -0.30ō 5 0.22 ŏ ß 0.11 400 -0.055 300 -0.042 2 N -0.028 220 -0.018 06 -0.011 150^p 0

2.10

N/mm²

Regufoam[®]

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 0.60 N/mm², dimensions of the specimens 250 mm x 250 mm x 50 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 0.60 N/mm², dimensions of the specimens 250 mm x 250 mm x 50 mm.

vibration 740 plus



vibration 740 plus

2.10

Modulus of Elasticity



Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of \pm 0.25 mm. Dimensions of specimens 250 mm x 250 mm x 50 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 an and amplitude of \pm 0.25 mm. Dimensions of specimens 250 mm x 250 mm x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Regufoam®

Long-Term Creep Test

Dimensions of specimens 250 mm x 250 mm x 50 mm

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vibration 740 plus



1,000	10,000	100,0

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Regufoam 740, Version 1, Release 03 2013, sheet 2 of 2

vibration 810 plus

2.11

N/mm² 2.50

-0.85

-0.60

-0.45

snld066

810plus

740plus

680plus

570plus

510plus

400plus

300plus

270plus

Standard forms of delivery, ex warehouse Rolls

Thickness: 12 and 25 mm, special thicknesses on request Length: 5,000 mm, special lengths available Width: 1,500 mm

Stripping/Plates

On request Die-cutting, water-jet cutting, self-adhesive versions possible

Continuous static load

0.85 N/mm² Continuous and variable loads/operating load range 0 to 1.20 N/mm² Peak loads (rare, short-term loads) up to 7 N/mm²



Static modulus of elasticity	Based on EN 826	5.8 - 7.2	N/mm ²	Tangential modulus, see figure "Modulus of elasticity"	-0.3
Dynamic modulus of elasticity	Based on DIN 53513	11.0 - 16.5	N/mm²	Depending on frequency, load and thickness, see figure "dynamic stiffness"	-0.2
Mechanical loss factor	DIN 53513	0.10	[-]	Load-, amplitude- and frequency-dependent	
Compression set	Based on DIN EN ISO 1856	7.9	%	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs	-0.1
Tensile strength	Based on DIN EN ISO 1798	4.6	N/mm ²		-0.0
Elongation at break	Based on DIN EN ISO 1798	230	%		-0.0
Tear resistance	Based on DIN ISO 34-1	20.0	N/mm		
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	[-] [-]	Normal flammability	-0.0
Sliding friction	BSW-laboratory BSW-laboratory	0.6 0.75	[-] [-]	Steel (dry) Concrete (dry)	
Compression hardness	Based on DIN EN ISO 3386-2	1241	kPa	Compressive stress at 25 % deformation test specimen h = 25 mm	-0.0
Rebound elasticity	Based on DIN EN ISO 8307	58	%	dependent on thickness, test specimen $h = 25 \text{ mm}$	-0.0
Force reduction	DIN EN 14904	35	%	dependent on thickness, test specimen $h = 25 \text{ mm}$	0

220plus 8 190plus 1 150^{plus}

Regufoam 810, Version 1, Release 03 2013, sheet 1 of 2

vibration 810 plus









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 250 mm x 250 mm.

vibration 810 plus

Vibration Isolation



Natural Frequency





2.11

Regufoam[®]

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 0.85 N/mm², dimensions of the specimens 250 mm x 250 mm x 25 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



of 0.85 N/mm², dimensions of the specimens 250 mm x 250 mm x 25 mm.

vibration 810 plus



vibration 810 plus

2.11

Modulus of Elasticity



Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of \pm 0.10 mm. Dimensions of specimens 250 mm x 250 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 an and amplitude of \pm 0.10 mm. Dimensions of specimens 250 mm x 250 mm x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Long-Term Creep Test



Dimensions of specimens 250 mm x 250 mm x 50 mm

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vibration 810 plus



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		_	
		-	
1,000	10,0	00	100.00
of load [h]	10,0		100,00

Exclusion of Liability

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Regufoam 810, Version 1, Release 03 2013, sheet 2 of 2

vibration 990 plus

2.12

N/mm² 2.50

-0.85

-0.60

-0.45

066

810plus

740plus

680plus

570plus

510plus

400plus

300plus

270plus

220plus

190plus

150^{plus}

Standard forms of delivery, ex warehouse Rolls

Thickness: 12 and 25 mm, special thicknesses on requestLength:5,000 mm, special lengths availableWidth:1,500 mm

Stripping/Plates

On request Die-cutting, water-jet cutting, self-adhesive versions possible

Continuous static load

2.5 N/mm² Continuous and variable loads/operating load range 0 to 3.5 N/mm² Peak loads (rare, short-term loads) up to 8.0 N/mm²



Static modulus of elasticity	Based on EN 826	20.0 - 78.0	N/mm ²	Tangential modulus, see figure "Modulus of elasticity"	-0
Dynamic modulus of elasticity	Based on DIN 53513	41.0 - 160.0	N/mm²	Depending on frequency, load and thickness, see figure "dynamic stiffness"	-0
Mechanical loss factor	DIN 53513	0.09	[-]	Load-, amplitude- and frequency-dependent	
Compression set	Based on DIN EN ISO 1856	8.6	%	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs	-0
Tensile strength	Based on DIN EN ISO 1798	6.9	N/mm ²		-0
Elongation at break	Based on DIN EN ISO 1798	190	%		-0
Tear resistance	Based on DIN ISO 34-1	34.5	N/mm		
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	[-] [-]	Normal flammability	-0
Sliding friction	BSW-laboratory BSW-laboratory	0.5 0.6	[-] [-]	Steel (dry) Concrete (dry)	
Compression hardness	Based on DIN EN ISO 3386-2	3640	kPa	Compressive stress at 25 % deformation test specimen h = 25 mm	-0
Rebound elasticity	Based on DIN EN ISO 8307	55	%	dependent on thickness, test specimen $h = 25 \text{ mm}$	-0
Force reduction	DIN EN 14904	20	%	dependent on thickness, test specimen $h = 25 \text{ mm}$	









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 125 mm x 125 mm.

vibration 990 plus

Vibration Isolation



Natural Frequency





Regufoam[®]

Influence of Amplitude

In order to get information of changes in mechanical loss or dynamic stiffness due to changes in amplitudes please ask technical staff of BSW.

vibration 990 plus



vibration 990 plus

2.12

Modulus of Elasticity



Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of \pm 0.10 mm. Dimensions of specimens 125 mm x 125 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 an and amplitude of \pm 0.10 mm. Dimensions of specimens 125 mm x 125 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Regufoam®

Long-Term Creep Test



Dimensions of specimens 125 mm x 125 mm x 50 mm

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vibration 990 plus



1,000 of load [h]	10,000	100,00

nm

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Regufoam 990, Version 1, Release 03 2013, sheet 2 of 2