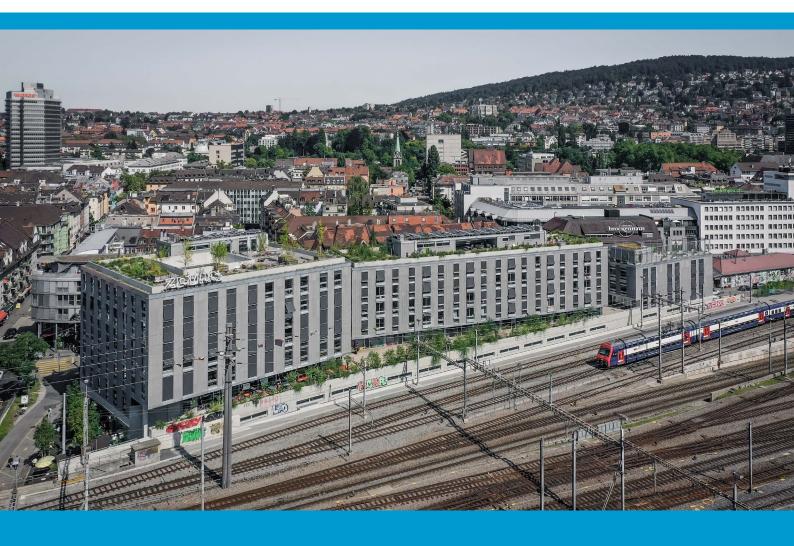


# ISOLMER®, ISOLDYN® Polyurethane foam mats



5000
Structure-borne sound isolation and shock protection



# **Contents**

# $\textbf{ISOLMER}^{\texttt{@}} \, / \, \textbf{ISOLDYN}^{\texttt{@}} \, \textbf{Polyurethane foam mats}$

Areas of application, main benefits, specification	3
Services	4
Range summary, impact sound reduction for smaller areas	
ISOLMER®-11	6
ISOLMER®-16	8
ISOLMER®-26	10
ISOLMER®-40.	
ISOLMER®-55	14
ISOLMER®-65	16
ISOLMER®-110	
ISOLMER®-170	20
ISOLMER®-260	
ISOLMER®-400	24
ISOLMER®-650	26
ISOLMER®-950	28
ISOLMER®-1500	30
ISOLMER®-2000	32
ISOLDYN®-50	34
ISOLDYN®-75	36
ISOLDYN®-150	38
ISOLDYN®-350	40
ISOLDYN®-750	42
ISOLDYN®-1500	44
ISOLDYN®-3000	46
ISOLDYN®-6000	48
ISOI DVN®_12000	50



# ISOLMER® / ISOLDYN® Polyurethane foam mats

Mixed and closed cellular polyurethane foam mats for structure-borne sound insulation and vibration protection

## Areas of application

ISOLMER® / ISOLDYN® Polyurethane foam mats are used for the permanent elastic, structure-borne sound and vibration-insulating support and separation bearing of buildings, parts of buildings and machine foundations in the following applications:

- Protection against vibrations from rail traffic and hydropower plants
- Insulation of vibrations and structure-borne sound in mixed uses such as offices/ laboratories, residential/commercial and manufacturing
- Vibration protection for production plants



#### Main benefits

ISOLMER® / ISOLDYN® Polyurethane foam mats are particularly suitable for elastic bearing arrangements with low tuning frequency and/or dynamic stresses.

- Depth of achievable natural frequencies of the constructions
- High insulating effect with shocks / vibrations
- Low, dynamic stiffening factor
- Constant characteristic values over a long service life
- Resistant to concrete grouts, oils, diluted acids and alkalis

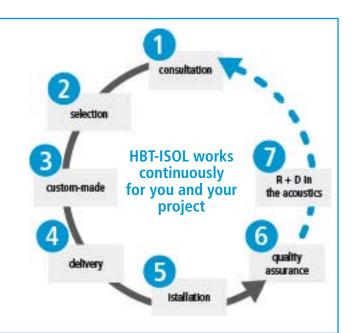


## **HBT-ISOL** services for you

The acoustic performance of a vibration and structure-borne sound insulating mounting is decisively determined by three factors:

- Performance of the product components
- Correct system selection
- Faultless installation

Experienced HBT-ISOL employees assist in all project phases - from planning to installation - and ensure that the planned solutions deliver the required performance.



Complete range: Fine load graduations and installation heights from 6.25 to 75 mm and higher, with colour-coded type identification



## Fine load graduations from 0.011 N/mm<sup>2</sup> to 12.000 N/mm<sup>2</sup>

A wide, finely graduated range offers the optimum, technically safe solution for low, medium and high loads.

## Installation heights from 6.25 to 75 mm

Two thicknesses of 12.5 and 25 mm are available as standard. Depending on the requirements for the insulating effect and the natural frequency, bearings with installation heights of 6.25 mm, 12.5 mm, 25 mm, 37.5 mm, 50 mm, 75 mm or more can be realised.

## Colour-coded type identification for maximum safety

The colour-coded type designation offers the highest level of safety during installation on the construction site and also enables efficient planning.



## **ISOLMER® / ISOLDYN® Polyurethane foam mats: Product range summary**

ISOLMER®-/ISOLDYN®-Type		Upper limit static Upper limit permanent load dynamic load		Rare load peaks		Natural frequency in Hz at max. static permanent load					
ISOLMER®-/ISO	LDYN®-Iype	N/mm²	kN/m²	N/mm²	kN/m²	N/mm²	kN/m²	Thickness 12.5 mm	Thickness 25 mm	Thickness 37.5 mm	Thickness 50 mm
ISOLMER®-11	Red	0.011	11	0.016	16	0.500	500	16	11	9	8
ISOLMER®-16	Pink	0.016	16	0.026	26	0.700	700	19	13	11	9
ISOLMER®-26	Orange	0.026	26	0.040	40	1.000	1000	19	13	11	9
ISOLMER®-40	Yellow	0.040	40	0.065	65	2.000	2000	19	14	11	9
ISOLMER®-55	Green-Yellow	0.055	55	0.085	85	2.000	2000	19	14	11	9
ISOLMER®-65	Light green	0.065	65	0.110	110	2.500	2500	18	13	10	9
ISOLMER®-110	Green	0.110	110	0.170	170	3.000	3000	19	13	11	9
ISOLMER®-170	Dark green	0.170	170	0.260	260	3.500	3500	16	11	9	8
ISOLMER®-260	Petrol	0.260	260	0.400	400	4.000	4000	17	12	10	8
ISOLMER®-400	Blue	0.400	400	0.650	650	4.500	4500	16	12	9	8
ISOLMER®-650	Dark blue	0.650	650	0.950	950	5.500	5500	17	12	10	8
ISOLMER®-950	Dark purple	0.950	950	1.500	1500	6.000	6000	20	14	11	10
ISOLMER®-1500	Purple	1.500	1500	2.000	2000	6.500	6500	21	15	12	10
ISOLMER®-2000	Bordeaux	2.000	2000	3.000	3000	7.000	7000	22	16	12	11
ISOLDYN®-50	Purple 1)	0.050	50	0.075	75	1.300	1300	17	12	10	8
ISOLDYN®-75	Yellow 1)	0.075	75	0.120	120	2.000	2000	16	11	9	8
ISOLDYN®-150	Green 1)	0.150	150	0.250	250	3.000	3000	15	11	9	7
ISOLDYN®-350	Blue 1)	0.350	350	0.500	500	4.000	4000	14	10	8	7
ISOLDYN®-750	Red 1)	0.750	750	1.200	1200	6.000	6000	16	11	8	8
ISOLDYN®-1500	Orange 1)	1.500	1500	2.000	2000	8.000	8000	15	10	8	7
ISOLDYN®-3000	Blue 1)	3.000	3000	4.500	4500	10.500	10500	17	12	10	9
ISOLDYN®-6000	Black-grey 1)	6.000	6000	9.000	9000	18.000	18000	21	15	12	11
ISOLDYN®-12000	Grey 1)	12.000	12000	16.000	16000	24.000	24000	25	18	14	12

<sup>1)</sup> Also available in 6 mm thickness

## **ISOLMER® / ISOLDYN® Production tolerances**

	<b>Cuts:</b> Length, width, thickness (mm)	class M4
from	to incl.	Tolerance ±
0	4	0.5 mm
4	6.3	0.5 mm
6.3	10.0	0.7 mm
10	16	0.8 mm
16	25	1.0 mm
25	40	1.3 mm
40	63	1.6 mm
63	100	2.0 mm
100	160	2.5 mm
160		1.5 %



#### Note on production tolerances

The specifications of the tolerances apply to a standard climate with +23 °C and 50% relative humidity. In the case of multi-layer superstructures, the tolerances per layer apply.

Static load: up to N/mm<sup>2</sup> 0.011

Dynamic load: up to N/mm²

0.016

Load peaks: up to N/mm<sup>2</sup> 0.500



# **ISOLMER®-11 Polyurethane foam mats**

Mixed cellular polyether-urethane mats for structure-borne sound insulation and vibration protection

- Low natural frequency
- High insulating effect with shocks / vibrations
- Low dynamic stiffening factor
- Constant characteristic values over a long service life
- Resistant to concrete grouts, oils, diluted acids and alkalis



Product- / Logistics data				
Thickness mm	12.5 and 25	Stockholding	Store in a dry place, do not expose to direct sunlight	
Length x width mm	1'000 x 500	Storage period	Unlimited with correct storage	

Technical data				
Size	Unit	Value	Test method	Comment
Mechanical loss factor		0.25	DIN 53513*	Guid value
Static E-modulus	N/mm <sup>2</sup>	0.048	DIN 53513*	Compression: 0.011 N/mm <sup>2</sup>
Dynamic shear modulus at 10 Hz	N/mm²	0.144	DIN 53513*	Compression: 0.011 N/mm <sup>2</sup>
Rebound elasticity	%	50	DIN EN ISO 8307	+/- 10 %
Residual compression set	%	< 5	DIN EN ISO 1856	50 %, + 23 °C, 70 h 30 min after unloading
Thermal conductivity	W/(m·k)	0.05	DIN 52612-1	
Specific volume resistance	Ω·cm	> 1012	DIN IEC 93	Dry
Coefficient of friction with steel $\mu_s$		0.5		Dry
Coefficient of friction with concrete $\mu_s$		0.7		Dry
Inflammability		E	EN 13501-1	Normal flammable
Long-term temperature resistance	°C	Long-term: -30 to +70 Short-term: to +120		

<sup>\*</sup> Measurement based on the corresponding standard.

Installation	
Surface	Avoid direct contact between ISOLMER® mats and materials containing plasticiser (use a release layer).  Requirements storage area: Load capacity > dynamic load. No loose parts. Power troweled. Free from teeth and gravel nets.  Flatness under 2-m-lath ≤ 10 mm, > 10 mm re-profiling. Clean swept (Standard SIA-271:2007)
Installation	The connection points are fully pushed. Before applying the concrete, the ISOLMER® mats are protected with a 2-ply tough PE foil (0.2 mm) and the overlap trapped to avoid cement contamination.
Screed requirement	Concrete or underlay flooring with flowable consistency as well as aerated concrete are only suitable to a limited extent and require additional, special sealing measures.
Processing instructions	The installation of ISOLMER® mats should only be carried out by trained personnel. When using auxiliary products, e.g. adhesives, the ambient temperature and humidity must meet the requirements of the auxiliary products used. The corresponding product data sheets are to be considered.
Water	When in contact with water, ISOLMER® boards absorb a certain amount of moisture, which impairs their full function with regard to structure-borne sound insulation. The ISOLMER® boards must therefore be protected against water penetration during the shell construction phase and in the final state.

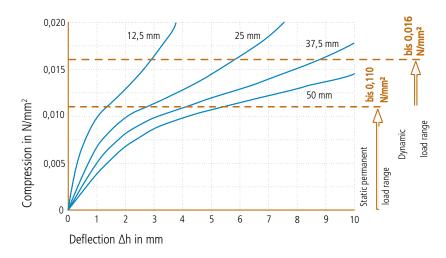
Safety- and Health instructions				
Safety note	The local safty requirements must be considered.			
Transportation	The ISOLMER® mats are not classified as "endangered products".			
Disposal	Waste code according to European Waste Cataloge Ordinance: 07 02 13. Local requirements must be considered.			



# **ISOLMER®-11 Polyurethane foam mats**

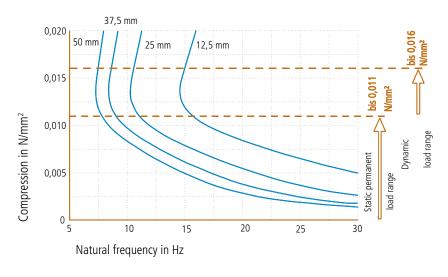
## Important physical properties for dimensioning

#### Load deflection curve



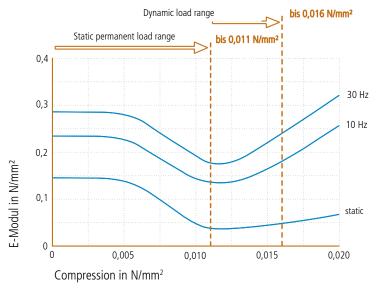
Spring characteristic curve. Test speed  $v=1\,\%$  of thickness. Test at room temperature between flat steel plates. Recording of the 3rd load. Form factor q=3.

## **Natural frequency**



Natural frequency of a system consisting of a rigid mass and a layer of ISOLMER® on a rigid base. Form factor q=3.

## Modulus of elasticity



Load dependence of the static and dynamic moduli of elasticity. Dynamic E-modulus: harmonic excitation with an amplitude of  $\pm$  0.22 mm at 10 Hz and

 $\pm$  0.08 mm at 30 Hz. Static E-modulus: tangent modulus from the spring characteristic.

Measurement according to DIN 53513. Form factor q = 3.

Static load: up to N/mm<sup>2</sup>

0.016

Dynamic load: up to N/mm<sup>2</sup>

0.026

Load peaks: up to N/mm<sup>2</sup>

0.700



# **ISOLMER®-16 Polyurethane foam mats**

Mixed cellular polyether-urethane mats for structure-borne sound insulation and vibration protection

- Low natural frequency
- High insulating effect with shocks / vibrations
- Low dynamic stiffening factor
- Constant characteristic values over a long service life
- Resistant to concrete grouts, oils, diluted acids and alkalis



Product- / Logistics data				
Thickness mm	12.5 and 25	Stockholding	Store in a dry place, do not expose to direct sunlight	
Length x width mm	1'000 x 500	Storage period	Unlimited with correct storage	

Technical data				
Size	Unit	Value	Test method	Comment
Mechanical loss factor		0.24	DIN 53513*	Guid value
Static E-modulus	N/mm <sup>2</sup>	0.111	DIN 53513*	Compression: 0.016 N/mm <sup>2</sup>
Dynamic shear modulus at 10 Hz	N/mm <sup>2</sup>	0.328	DIN 53513*	Compression: 0.016 N/mm <sup>2</sup>
Rebound elasticity	%	50	DIN EN ISO 8307	+/- 10 %
Residual compression set	%	< 5	DIN EN ISO 1856	50 %, + 23 °C, 70 h 30 min after unloading
Thermal conductivity	W/(m·k)	0.05	DIN 52612-1	
Specific volume resistance	Ω·cm	> 10 <sup>12</sup>	DIN IEC 93	Dry
Coefficient of friction with steel $\mu_s$		0.5		Dry
Coefficient of friction with concrete $\mu_s$		0.7		Dry
Inflammability		E	EN 13501-1	Normal flammable
Long-term temperature resistance	°C	Long-term: -30 to +70 Short-term: to +120		

<sup>\*</sup> Measurement based on the corresponding standard.

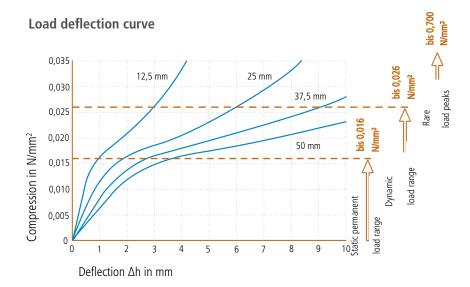
Installation	
Surface	Avoid direct contact between ISOLMER® mats and materials containing plasticiser (use a release layer).  Requirements storage area: Load capacity > dynamic load. No loose parts. Power troweled. Free from teeth and gravel nets.  Flatness under 2-m-lath ≤ 10 mm, > 10 mm re-profiling. Clean swept (Standard SIA-271:2007)
Installation	The connection points are fully pushed. Before applying the concrete, the ISOLMER® mats are protected with a 2-ply tough PE foil (0.2 mm) and the overlap trapped to avoid cement contamination.
Screed requirement	Concrete or underlay flooring with flowable consistency as well as aerated concrete are only suitable to a limited extent and require additional, special sealing measures.
Processing instructions	The installation of ISOLMER® mats should only be carried out by trained personnel. When using auxiliary products, e.g. adhesives, the ambient temperature and humidity must meet the requirements of the auxiliary products used. The corresponding product data sheets are to be considered.
Water	When in contact with water, ISOLMER® boards absorb a certain amount of moisture, which impairs their full function with regard to structure-borne sound insulation. The ISOLMER® boards must therefore be protected against water penetration during the shell construction phase and in the final state.

Safety- and Health instructions				
Safety note	The local safty requirements must be considered.			
Transportation	The ISOLMER® mats are not classified as "endangered products".			
Disposal	Waste code according to European Waste Cataloge Ordinance: 07 02 13. Local requirements must be considered.			



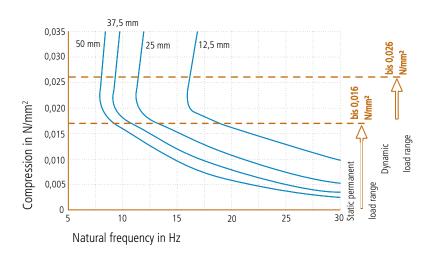
## **ISOLMER®-16 Polyurethane foam mats**

## Important physical properties for dimensioning



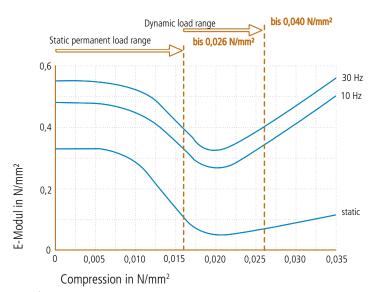
Spring characteristic curve. Test speed  $v=1\,\%$  of thickness. Test at room temperature between flat steel plates. Recording of the 3rd load. Form factor q=3.

#### **Natural frequency**



Natural frequency of a system consisting of a rigid mass and a layer of ISOLMER® on a rigid base. Form factor q=3.

## Modulus of elasticity



Load dependence of the static and dynamic moduli of elasticity. Dynamic E-modulus: harmonic excitation with an amplitude of  $\pm$  0.22 mm at 10 Hz and  $\pm$  0.08 mm at 30 Hz. Static E-modulus: tangent modulus from the spring characteristic. Measurement according to DIN 53513.

Form factor q = 3.

Orang

Static load: up to N/mm<sup>2</sup>

0.026

Dynamic load: up to N/mm<sup>2</sup>

0.040

Load peaks: up to N/mm<sup>2</sup>

1.000



# **ISOLMER®-26 Polyurethane foam mats**

Mixed cellular polyether-urethane mats for structure-borne sound insulation and vibration protection

- Low natural frequency
- High insulating effect with shocks / vibrations
- · Low dynamic stiffening factor
- Constant characteristic values over a long service life
- Resistant to concrete grouts, oils, diluted acids and alkalis



Product- / Logistics data				
Thickness mm	12.5 and 25	Stockholding	Store in a dry place, do not expose to direct sunlight	
Length x width mm	1'000 x 500	Storage period	Unlimited with correct storage	

Technical data				
Size	Unit	Value	Test method	Comment
Mechanical loss factor		0.22	DIN 53513*	Guid value
Static E-modulus	N/mm <sup>2</sup>	0.129	DIN 53513*	Compression: 0.026 N/mm <sup>2</sup>
Dynamic shear modulus at 10 Hz	N/mm²	0.443	DIN 53513*	Compression: 0.026 N/mm <sup>2</sup>
Rebound elasticity	%	50	DIN EN ISO 8307	+/- 10 %
Residual compression set	%	< 5	DIN EN ISO 1856	50 %, + 23 °C, 70 h 30 min after unloading
Thermal conductivity	W/(m·k)	0.06	DIN 52612-1	
Specific volume resistance	Ω·cm	> 1011	DIN IEC 93	Dry
Coefficient of friction with steel $\mu_s$		0.5		Dry
Coefficient of friction with concrete $\mu_s$		0.7		Dry
Inflammability		E	EN 13501-1	Normal flammable
Long-term temperature resistance	°C	Long-term: -30 to +70 Short-term: to +120		

<sup>\*</sup> Measurement based on the corresponding standard.

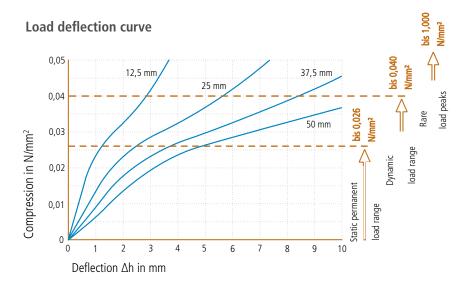
Installation	
Surface	Avoid direct contact between ISOLMER® mats and materials containing plasticiser (use a release layer).  Requirements storage area: Load capacity > dynamic load. No loose parts. Power troweled. Free from teeth and gravel nets.  Flatness under 2-m-lath ≤ 10 mm, > 10 mm re-profiling. Clean swept (Standard SIA-271:2007)
Installation	The connection points are fully pushed. Before applying the concrete, the ISOLMER® mats are protected with a 2-ply tough PE foil (0.2 mm) and the overlap trapped to avoid cement contamination.
Screed requirement	Concrete or underlay flooring with flowable consistency as well as aerated concrete are only suitable to a limited extent and require additional, special sealing measures.
Processing instructions	The installation of ISOLMER® mats should only be carried out by trained personnel. When using auxiliary products, e.g. adhesives, the ambient temperature and humidity must meet the requirements of the auxiliary products used. The corresponding product data sheets are to be considered.
Water	When in contact with water, ISOLMER® boards absorb a certain amount of moisture, which impairs their full function with regard to structure-borne sound insulation. The ISOLMER® boards must therefore be protected against water penetration during the shell construction phase and in the final state.

Safety- and Health instructions		
Safety note	The local safty requirements must be considered.	
Transportation	The ISOLMER® mats are not classified as "endangered products".	
Disposal Waste code according to European Waste Cataloge Ordinance: 07 02 13. Local requirements must be considered.		



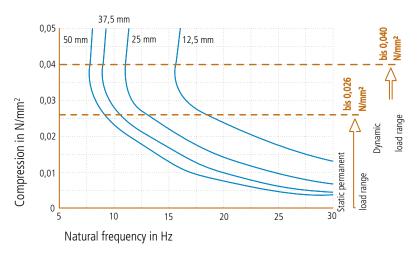
## **ISOLMER®-26 Polyurethane foam mats**

## Important physical properties for dimensioning



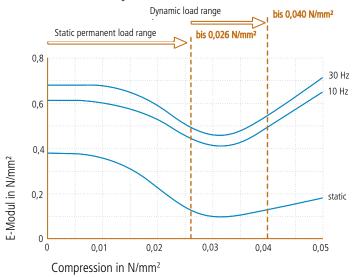
Spring characteristic curve. Test speed  $\nu=1$  % of thickness. Test at room temperature between flat steel plates. Recording of the 3rd load. Form factor q=3.

## **Natural frequency**



Natural frequency of a system consisting of a rigid mass and a layer of ISOLMER® on a rigid base. Form factor q=3.

## Modulus of elasticity



Load dependence of the static and dynamic moduli of elasticity. Dynamic E-modulus: harmonic excitation with an amplitude of  $\pm$  0.22 mm at 10 Hz and  $\pm$  0.08 mm at 30 Hz. Static E-modulus: tangent modulus from the spring characteristic. Measurement according to DIN 53513. Form factor q = 3.

Static load: up to N/mm<sup>2</sup>

0.040

Dynamic load: up to N/mm<sup>2</sup>

0.065

Load peaks: up to N/mm<sup>2</sup>

2.000



# ISOLMER® - 40 Polyurethane foam mats

Mixed cellular polyether-urethane mats for structure-borne sound insulation and vibration protection

- Low natural frequency
- High insulating effect with shocks / vibrations
- Low dynamic stiffening factor
- Constant characteristic values over a long service life
- Resistant to concrete grouts, oils, diluted acids and alkalis



Product- / Logistic	s data		
Thickness mm	12.5 and 25	Stockholding	Store in a dry place, do not expose to direct sunlight
Length x width mm	1'000 x 500	Storage period	Unlimited with correct storage

Technical data				
Size	Unit	Value	Test method	Comment
Mechanical loss factor		0.15	DIN 53513*	Guid value
Static E-modulus	N/mm <sup>2</sup>	0.316	DIN 53513*	Compression: 0.040 N/mm <sup>2</sup>
Dynamic shear modulus at 10 Hz	N/mm <sup>2</sup>	0.743	DIN 53513*	Compression: 0.040 N/mm <sup>2</sup>
Rebound elasticity	%	50	DIN EN ISO 8307	+/- 10 %
Residual compression set	%	< 5	DIN EN ISO 1856	50 %, + 23 °C, 70 h 30 min after unloading
Thermal conductivity	W/(m·k)	0.07	DIN 52612-1	
Specific volume resistance	Ω·cm	> 1011	DIN IEC 93	Dry
Coefficient of friction with steel $\mu_s$		0.5		Dry
Coefficient of friction with concrete $\mu_s$		0.7		Dry
Inflammability		E	EN 13501-1	Normal flammable
Long-term temperature resistance	°C	Long-term: -30 to +70 Short-term: to +120		

<sup>\*</sup> Measurement based on the corresponding standard.

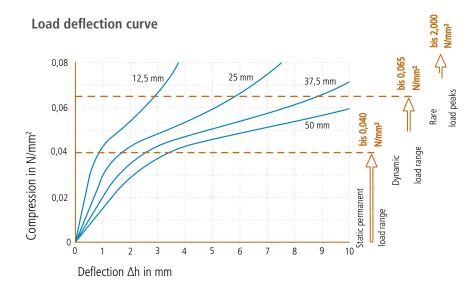
Installation	
Surface	Avoid direct contact between ISOLMER® mats and materials containing plasticiser (use a release layer).  Requirements storage area: Load capacity > dynamic load. No loose parts. Power troweled. Free from teeth and gravel nets.  Flatness under 2-m-lath ≤ 10 mm, > 10 mm re-profiling. Clean swept (Standard SIA-271:2007)
Installation	The connection points are fully pushed. Before applying the concrete, the ISOLMER® mats are protected with a 2-ply tough PE foil (0.2 mm) and the overlap trapped to avoid cement contamination.
Screed requirement	Concrete or underlay flooring with flowable consistency as well as aerated concrete are only suitable to a limited extent and require additional, special sealing measures.
Processing instructions	The installation of ISOLMER® mats should only be carried out by trained personnel. When using auxiliary products, e.g. adhesives, the ambient temperature and humidity must meet the requirements of the auxiliary products used. The corresponding product data sheets are to be considered.
Water	When in contact with water, ISOLMER® boards absorb a certain amount of moisture, which impairs their full function with regard to structure-borne sound insulation. The ISOLMER® boards must therefore be protected against water penetration during the shell construction phase and in the final state.

Safety- and Health instructions		
Safety note	The local safty requirements must be considered.	
Transportation	The ISOLMER® mats are not classified as "endangered products".	
Disposal	Waste code according to European Waste Cataloge Ordinance: 07 02 13. Local requirements must be considered.	



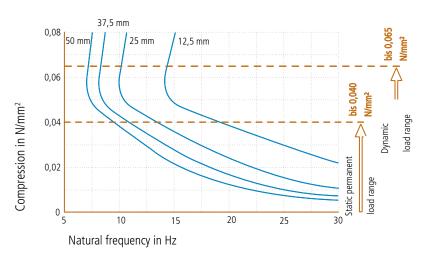
# ISOLMER®-40 Polyurethane foam mats

## Important physical properties for dimensioning



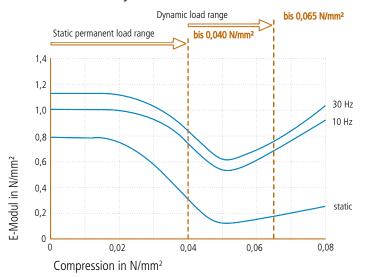
Spring characteristic curve. Test speed  $v=1\,\%$  of thickness. Test at room temperature between flat steel plates. Recording of the 3rd load. Form factor q=3.

## **Natural frequency**



Natural frequency of a system consisting of a rigid mass and a layer of ISOLMER® on a rigid base. Form factor q = 3.

## **Modulus of elasticity**



Load dependence of the static and dynamic moduli of elasticity. Dynamic E-modulus: harmonic excitation with an amplitude of  $\pm$  0.22 mm at 10 Hz and  $\pm$  0.08 mm at 30 Hz. Static E-modulus: tangent modulus from the spring characteristic. Measurement according to DIN 53513.

Form factor q = 3.



Green-Yellov

Static load: up to N/mm<sup>2</sup>

0.055

Dynamic load: up to N/mm<sup>2</sup>

0.085

Load peaks: up to N/mm<sup>2</sup>

2.000



# **ISOLMER®-55 Polyurethane foam mats**

Mixed cellular polyether-urethane mats for structure-borne sound insulation and vibration protection

- Low natural frequency
- High insulating effect with shocks / vibrations
- Low dynamic stiffening factor
- Constant characteristic values over a long service life
- Resistant to concrete grouts, oils, diluted acids and alkalis



Product- / Logistic	s data		
Thickness mm	12.5 and 25	Stockholding	Store in a dry place, do not expose to direct sunlight
Length x width mm	1'000 x 500	Storage period	Unlimited with correct storage

Technical data				
Size	Unit	Value	Test method	Comment
Mechanical loss factor		0.16	DIN 53513*	Guid value
Static E-modulus	N/mm <sup>2</sup>	0.332	DIN 53513*	Compression: 0.055 N/mm <sup>2</sup>
Dynamic shear modulus at 10 Hz	N/mm <sup>2</sup>	1.020	DIN 53513*	Compression: 0.055 N/mm <sup>2</sup>
Rebound elasticity	%	50	DIN EN ISO 8307	+/- 10 %
Residual compression set	%	< 5	DIN EN ISO 1856	50 %, + 23 °C, 70 h 30 min after unloading
Thermal conductivity	W/(m·k)	0.07	DIN 52612-1	
Specific volume resistance	Ω·cm	> 10 <sup>11</sup>	DIN IEC 93	Dry
Coefficient of friction with steel $\mu_s$		0.5		Dry
Coefficient of friction with concrete $\mu_s$		0.7		Dry
Inflammability		E	EN 13501-1	Normal flammable
Long-term temperature resistance	°C	Long-term: -30 to +70 Short-term: to +120		

<sup>\*</sup> Measurement based on the corresponding standard.

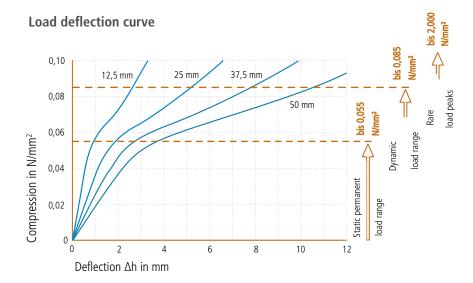
Installation	
Surface	Avoid direct contact between ISOLMER® mats and materials containing plasticiser (use a release layer).  Requirements storage area: Load capacity > dynamic load. No loose parts. Power troweled. Free from teeth and gravel nets.  Flatness under 2-m-lath ≤ 10 mm, > 10 mm re-profiling. Clean swept (Standard SIA-271:2007)
Installation	The connection points are fully pushed. Before applying the concrete, the ISOLMER® mats are protected with a 2-ply tough PE foil (0.2 mm) and the overlap trapped to avoid cement contamination.
Screed requirement	Concrete or underlay flooring with flowable consistency as well as aerated concrete are only suitable to a limited extent and require additional, special sealing measures.
Processing instructions	The installation of ISOLMER® mats should only be carried out by trained personnel. When using auxiliary products, e.g. adhesives, the ambient temperature and humidity must meet the requirements of the auxiliary products used. The corresponding product data sheets are to be considered.
Water	When in contact with water, ISOLMER® boards absorb a certain amount of moisture, which impairs their full function with regard to structure-borne sound insulation. The ISOLMER® boards must therefore be protected against water penetration during the shell construction phase and in the final state.

Safety- and Health instructions			
Safety note	The local safty requirements must be considered.		
Transportation	The ISOLMER® mats are not classified as "endangered products".		
Disposal Waste code according to European Waste Cataloge Ordinance: 07 02 13. Local requirements must be considered.			



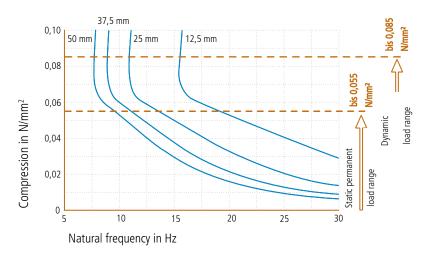
## **ISOLMER®-55 Polyurethane foam mats**

## Important physical properties for dimensioning



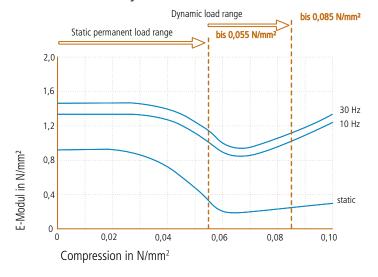
Spring characteristic curve. Test speed  $v=1\,\%$  of thickness. Test at room temperature between flat steel plates. Recording of the 3rd load. Form factor q=3.

#### **Natural frequency**



Natural frequency of a system consisting of a rigid mass and a layer of ISOLMER® on a rigid base. Form factor q=3.

## Modulus of elasticity



Load dependence of the static and dynamic moduli of elasticity. Dynamic E-modulus: harmonic excitation with an amplitude of  $\pm$  0.22 mm at 10 Hz and  $\pm$  0.08 mm at 30 Hz. Static E-modulus: tangent modulus from the spring characteristic. Measurement according to DIN 53513. Form factor q = 3.

Light green

Static load: up to N/mm<sup>2</sup>

0.065

Dynamic load: up to N/mm<sup>2</sup>

0.110

Load peaks: up to N/mm<sup>2</sup>

2.500



# **ISOLMER®-65 Polyurethane foam mats**

Mixed cellular polyether-urethane mats for structure-borne sound insulation and vibration protection

- Low natural frequency
- High insulating effect with shocks / vibrations
- · Low dynamic stiffening factor
- Constant characteristic values over a long service life
- Resistant to concrete grouts, oils, diluted acids and alkalis



Product-/Logistics data			
Thickness mm	12.5 and 25	Stockholding	Store in a dry place, do not expose to direct sunlight
Length x width mm	1'000 x 500	Storage period	Unlimited with correct storage

Technical data				
Size	Unit	Value	Test method	Comment
Mechanical loss factor		0.18	DIN 53513*	Guid value
Static E-modulus	N/mm <sup>2</sup>	0.453	DIN 53513*	Compression: 0.065 N/mm <sup>2</sup>
Dynamic shear modulus at 10 Hz	N/mm <sup>2</sup>	1.060	DIN 53513*	Compression: 0.065 N/mm <sup>2</sup>
Rebound elasticity	%	50	DIN EN ISO 8307	+/- 10 %
Residual compression set	%	< 5	DIN EN ISO 1856	50 %, + 23 °C, 70 h 30 min after unloading
Thermal conductivity	W/(m·k)	0.07	DIN 52612-1	
Specific volume resistance	Ω·cm	> 1011	DIN IEC 93	Dry
Coefficient of friction with steel $\mu_s$		0.5		Dry
Coefficient of friction with concrete $\mu_s$		0.7		Dry
Inflammability		E	EN 13501-1	Normal flammable
Long-term temperature resistance	°C	Long-term: -30 to +70 Short-term: to +120		

<sup>\*</sup> Measurement based on the corresponding standard.

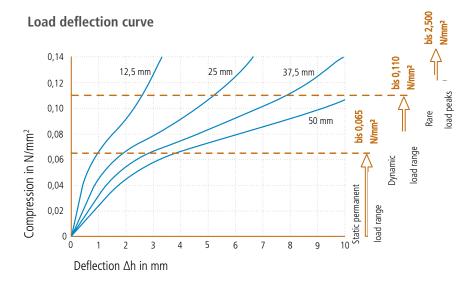
Installation	
Surface	Avoid direct contact between ISOLMER® mats and materials containing plasticiser (use a release layer).  Requirements storage area: Load capacity > dynamic load. No loose parts. Power troweled. Free from teeth and gravel nets.  Flatness under 2-m-lath ≤ 10 mm, > 10 mm re-profiling. Clean swept (Standard SIA-271:2007)
Installation	The connection points are fully pushed. Before applying the concrete, the ISOLMER® mats are protected with a 2-ply tough PE foil (0.2 mm) and the overlap trapped to avoid cement contamination.
Screed requirement	Concrete or underlay flooring with flowable consistency as well as aerated concrete are only suitable to a limited extent and require additional, special sealing measures.
Processing instructions	The installation of ISOLMER® mats should only be carried out by trained personnel. When using auxiliary products, e.g. adhesives, the ambient temperature and humidity must meet the requirements of the auxiliary products used. The corresponding product data sheets are to be considered.
Water	When in contact with water, ISOLMER® boards absorb a certain amount of moisture, which impairs their full function with regard to structure-borne sound insulation. The ISOLMER® boards must therefore be protected against water penetration during the shell construction phase and in the final state.

Safety- and Health instructions			
Safety note	The local safty requirements must be considered.		
Transportation	The ISOLMER® mats are not classified as "endangered products".		
Disposal Waste code according to European Waste Cataloge Ordinance: 07 02 13. Local requirements must be considered.			



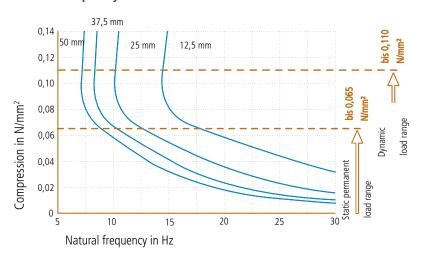
## **ISOLMER®-65 Polyurethane foam mats**

## Important physical properties for dimensioning



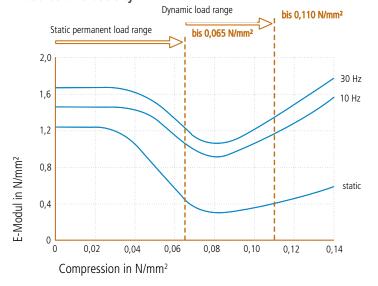
Spring characteristic curve. Test speed  $v=1\,\%$  of thickness. Test at room temperature between flat steel plates. Recording of the 3rd load. Form factor q=3.

## **Natural frequency**



Natural frequency of a system consisting of a rigid mass and a layer of ISOLMER® on a rigid base. Form factor q=3.

#### Modulus of elasticity



Load dependence of the static and dynamic moduli of elasticity. Dynamic E-modulus: harmonic excitation with an amplitude of  $\pm$  0.22 mm at 10 Hz and  $\pm$  0.08 mm at 30 Hz. Static E-modulus: tangent modulus from the spring characteristic. Measurement according to DIN 53513.

Form factor q = 3.

Greer

Static load: up to N/mm<sup>2</sup>

0.110

Dynamic load: up to N/mm<sup>2</sup>

0.170

Load peaks: up to N/mm<sup>2</sup> 3.000



# ISOLMER® - 110 Polyurethane foam mats

Mixed cellular polyether-urethane mats for structure-borne sound insulation and vibration protection

- Low natural frequency
- High insulating effect with shocks / vibrations
- Low dynamic stiffening factor
- Constant characteristic values over a long service life
- Resistant to concrete grouts, oils, diluted acids and alkalis



Product- / Logistics data			
Thickness mm	12.5 and 25	Stockholding	Store in a dry place, do not expose to direct sunlight
Length x width mm	1'000 x 500	Storage period	Unlimited with correct storage

Technical data				
Size	Unit	Value	Test method	Comment
Mechanical loss factor		0.12	DIN 53513*	Guid value
Static E-modulus	N/mm <sup>2</sup>	0.861	DIN 53513*	Compression: 0.110 N/mm <sup>2</sup>
Dynamic shear modulus at 10 Hz	N/mm <sup>2</sup>	1.860	DIN 53513*	Compression: 0.110 N/mm <sup>2</sup>
Rebound elasticity	%	50	DIN EN ISO 8307	+/- 10 %
Residual compression set	%	< 5	DIN EN ISO 1856	50 %, + 23 °C, 70 h 30 min after unloading
Thermal conductivity	W/(m·k)	0.08	DIN 52612-1	
Specific volume resistance	Ω·cm	> 1011	DIN IEC 93	Dry
Coefficient of friction with steel $\mu_s$		0.5		Dry
Coefficient of friction with concrete $\mu_s$		0.7		Dry
Inflammability		E	EN 13501-1	Normal flammable
Long-term temperature resistance	°C	Long-term: -30 to +70 Short-term: to +120		

<sup>\*</sup> Measurement based on the corresponding standard.

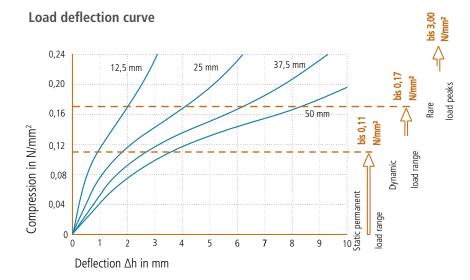
Installation		
Surface	Avoid direct contact between ISOLMER® mats and materials containing plasticiser (use a release layer).  Requirements storage area: Load capacity > dynamic load. No loose parts. Power troweled. Free from teeth and gravel nets.  Flatness under 2-m-lath ≤ 10 mm, > 10 mm re-profiling. Clean swept (Standard SIA-271:2007)	
Installation	The connection points are fully pushed. Before applying the concrete, the ISOLMER® mats are protected with a 2-ply tough PE foil (0.2 mm) and the overlap trapped to avoid cement contamination.	
Screed requirement	Concrete or underlay flooring with flowable consistency as well as aerated concrete are only suitable to a limited extent and require additional, special sealing measures.	
Processing instructions	The installation of ISOLMER® mats should only be carried out by trained personnel. When using auxiliary products, e.g. adhesives, the ambient temperature and humidity must meet the requirements of the auxiliary products used. The corresponding product data sheets are to be considered.	
Water	When in contact with water, ISOLMER® boards absorb a certain amount of moisture, which impairs their full function with regard to structure-borne sound insulation. The ISOLMER® boards must therefore be protected against water penetration during the shell construction phase and in the final state.	

Safety- and Health instructions		
Safety note	The local safty requirements must be considered.	
Transportation	The ISOLMER® mats are not classified as "endangered products".	
Disposal	Waste code according to European Waste Cataloge Ordinance: 07 02 13. Local requirements must be considered.	



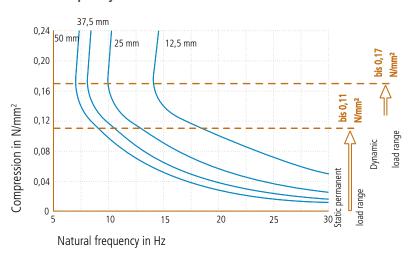
# ISOLMER® - 110 Polyurethane foam mats

## Important physical properties for dimensioning



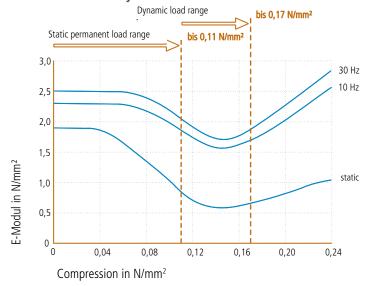
Spring characteristic curve. Test speed v=1 % of thickness. Test at room temperature between flat steel plates. Recording of the 3rd load. Form factor q=3.

#### **Natural frequency**



Natural frequency of a system consisting of a rigid mass and a layer of ISOLMER® on a rigid base. Form factor q=3.

#### Modulus of elasticity



Load dependence of the static and dynamic moduli of elasticity. Dynamic E-modulus: harmonic excitation with an amplitude of  $\pm$  0.22 mm at 10 Hz and  $\pm$  0.08 mm at 30 Hz. Static E-modulus: tangent modulus from the spring characteristic. Measurement according to DIN 53513. Form factor q = 3.



Dark greei

Static load: up to N/mm<sup>2</sup> 0.170

Dynamic load: up to N/mm<sup>2</sup>

0.260

Load peaks: up to N/mm<sup>2</sup> 3.500

Specification

- Low natural frequency
- High insulating effect with shocks / vibrations
- Low dynamic stiffening factor
- Constant characteristic values over a long service life
- Resistant to concrete grouts, oils, diluted acids and alkalis

ISOLMER® - 170 Polyurethane foam mats

for structure-borne sound insulation and vibration protection

Mixed cellular polyether-urethane mats



Product- / Logistics data				
Thickness mm	12.5 and 25	Stockholding	Store in a dry place, do not expose to direct sunlight	
Length x width mm	1'000 x 500	Storage period	Unlimited with correct storage	

Technical data				
Size	Unit	Value	Test method	Comment
Mechanical loss factor		0.13	DIN 53513*	Guid value
Static E-modulus	N/mm <sup>2</sup>	0.931	DIN 53513*	Compression: 0.170 N/mm <sup>2</sup>
Dynamic shear modulus at 10 Hz	N/mm <sup>2</sup>	2.270	DIN 53513*	Compression: 0.170 N/mm <sup>2</sup>
Rebound elasticity	%	50	DIN EN ISO 8307	+/- 10 %
Residual compression set	%	< 5	DIN EN ISO 1856	50 %, + 23 °C, 70 h 30 min after unloading
Thermal conductivity	W/(m·k)	0.08	DIN 52612-1	
Specific volume resistance	Ω·cm	> 1011	DIN IEC 93	Dry
Coefficient of friction with steel $\mu_s$		0.5		Dry
Coefficient of friction with concrete $\mu_s$		0.7		Dry
Inflammability		E	EN 13501-1	Normal flammable
Long-term temperature resistance	°C	Long-term: -30 to +70 Short-term: to +120		

<sup>\*</sup> Measurement based on the corresponding standard.

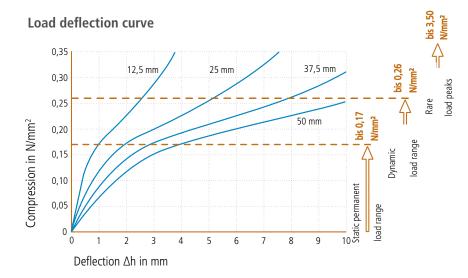
Installation	
Surface	Avoid direct contact between ISOLMER® mats and materials containing plasticiser (use a release layer).  Requirements storage area: Load capacity > dynamic load. No loose parts. Power troweled. Free from teeth and gravel nets.  Flatness under 2-m-lath ≤ 10 mm, > 10 mm re-profiling. Clean swept (Standard SIA-271:2007)
Installation	The connection points are fully pushed. Before applying the concrete, the ISOLMER® mats are protected with a 2-ply tough PE foil (0.2 mm) and the overlap trapped to avoid cement contamination.
Screed requirement	Concrete or underlay flooring with flowable consistency as well as aerated concrete are only suitable to a limited extent and require additional, special sealing measures.
Processing instructions	The installation of ISOLMER® mats should only be carried out by trained personnel. When using auxiliary products, e.g. adhesives, the ambient temperature and humidity must meet the requirements of the auxiliary products used. The corresponding product data sheets are to be considered.
Water	When in contact with water, ISOLMER® boards absorb a certain amount of moisture, which impairs their full function with regard to structure-borne sound insulation. The ISOLMER® boards must therefore be protected against water penetration during the shell construction phase and in the final state

Safety- and Health instructions			
Safety note	The local safty requirements must be considered.		
Transportation	The ISOLMER® mats are not classified as "endangered products".		
Disposal	Waste code according to European Waste Cataloge Ordinance: 07 02 13. Local requirements must be considered.		



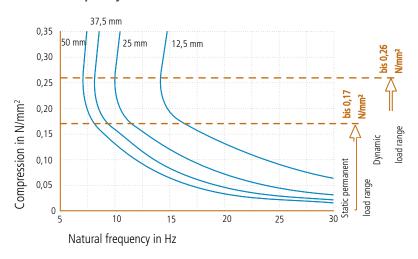
# ISOLMER® - 170 Polyurethane foam mats

## Wichtigste physikalischen Eigenschaften für die Bemessung



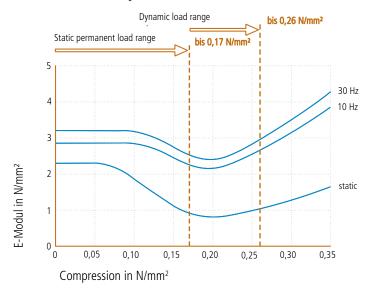
Spring characteristic curve. Test speed  $v=1\,\%$  of thickness. Test at room temperature between flat steel plates. Recording of the 3rd load. Form factor q=3.

## **Natural frequency**



Natural frequency of a system consisting of a rigid mass and a layer of ISOLMER® on a rigid base. Form factor q=3.

## Modulus of elasticity



Load dependence of the static and dynamic moduli of elasticity. Dynamic E-modulus: harmonic excitation with an amplitude of  $\pm$  0.22 mm at 10 Hz and  $\pm$  0.08 mm at 30 Hz. Static E-modulus: tangent modulus from the spring characteristic. Measurement according to DIN 53513. Form factor q = 3.

Static load: up to N/mm<sup>2</sup> 0.260

Dynamic load: up to  $N/mm^2$  0.400

Load peaks: up to N/mm<sup>2</sup> 4.000



# ISOLMER® - 260 Polyurethane foam mats

Mixed cellular polyether-urethane mats for structure-borne sound insulation and vibration protection

- Low natural frequency
- High insulating effect with shocks / vibrations
- Low dynamic stiffening factor
- Constant characteristic values over a long service life
- Resistant to concrete grouts, oils, diluted acids and alkalis



Product- / Logistics data			
Thickness mm	12.5 and 25	Stockholding	Store in a dry place, do not expose to direct sunlight
Length x width mm	1'000 x 500	Storage period	Unlimited with correct storage

Technical data				
Size	Unit	Value	Test method	Comment
Mechanical loss factor		0.11	DIN 53513*	Guid value
Static E-modulus	N/mm <sup>2</sup>	1.640	DIN 53513*	Compression: 0.260 N/mm <sup>2</sup>
Dynamic shear modulus at 10 Hz	N/mm <sup>2</sup>	3.630	DIN 53513*	Compression: 0.260 N/mm <sup>2</sup>
Rebound elasticity	%	50	DIN EN ISO 8307	+/- 10 %
Residual compression set	%	< 5	DIN EN ISO 1856	50 %, + 23 °C, 70 h 30 min after unloading
Thermal conductivity	W/(m·k)	0.08	DIN 52612-1	
Specific volume resistance	Ω·cm	> 1011	DIN IEC 93	Dry
Coefficient of friction with steel $\mu_s$		0.5		Dry
Coefficient of friction with concrete $\mu_s$		0.7		Dry
Inflammability		Е	EN 13501-1	Normal flammable
Long-term temperature resistance	°C	Long-term: -30 to +70 Short-term: to +120		

<sup>\*</sup> Measurement based on the corresponding standard.

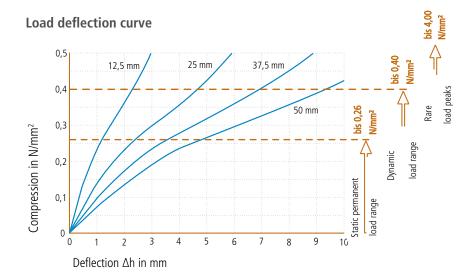
Installation	
Surface	Avoid direct contact between ISOLMER® mats and materials containing plasticiser (use a release layer).  Requirements storage area: Load capacity > dynamic load. No loose parts. Power troweled. Free from teeth and gravel nets.  Flatness under 2-m-lath ≤ 10 mm, > 10 mm re-profiling. Clean swept (Standard SIA-271:2007)
Installation	The connection points are fully pushed. Before applying the concrete, the ISOLMER® mats are protected with a 2-ply tough PE foil (0.2 mm) and the overlap trapped to avoid cement contamination.
Screed requirement	Concrete or underlay flooring with flowable consistency as well as aerated concrete are only suitable to a limited extent and require additional, special sealing measures.
Processing instructions	The installation of ISOLMER® mats should only be carried out by trained personnel. When using auxiliary products, e.g. adhesives, the ambient temperature and humidity must meet the requirements of the auxiliary products used. The corresponding product data sheets are to be considered.
Water	When in contact with water, ISOLMER® boards absorb a certain amount of moisture, which impairs their full function with regard to structure-borne sound insulation. The ISOLMER® boards must therefore be protected against water penetration during the shell construction phase and in the final state.

Safety- and Health instructions		
Safety note	The local safty requirements must be considered.	
Transportation	The ISOLMER® mats are not classified as "endangered products".	
Disposal	Waste code according to European Waste Cataloge Ordinance: 07 02 13. Local requirements must be considered.	



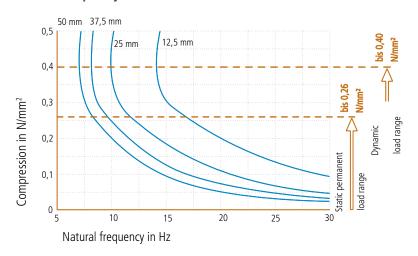
# ISOLMER® - 260 Polyurethane foam mats

## Important physical properties for dimensioning



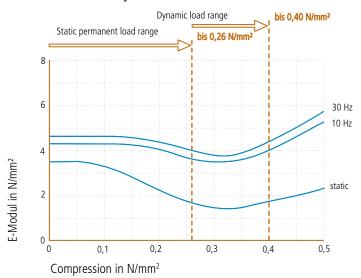
Spring characteristic curve. Test speed  $\nu=1$  % of thickness. Test at room temperature between flat steel plates. Recording of the 3rd load. Form factor q=3.

## **Natural frequency**



Natural frequency of a system consisting of a rigid mass and a layer of ISOLMER® on a rigid base. Form factor q=3.

#### Modulus of elasticity



Load dependence of the static and dynamic moduli of elasticity. Dynamic E-modulus: harmonic excitation with an amplitude of  $\pm$  0.22 mm at 10 Hz and  $\pm$  0.08 mm at 30 Hz. Static E-modulus: tangent modulus from the spring characteristic. Measurement according to DIN 53513. Form factor q = 3.

Static load: up to N/mm<sup>2</sup> 0.400

Dynamic load: up to N/mm<sup>2</sup> 0.650

Load peaks: up to N/mm<sup>2</sup> 4.500



# ISOLMER® - 400 Polyurethane foam mats

Mixed cellular polyether-urethane mats for structure-borne sound insulation and vibration protection

- · Low natural frequency
- High insulating effect with shocks / vibrations
- Low dynamic stiffening factor
- Constant characteristic values over a long service life
- Resistant to concrete grouts, oils, diluted acids and alkalis



Product- / Logistics data				
Thickness mm	12.5 and 25	Stockholding	Store in a dry place, do not expose to direct sunlight	
Length x width mm	1'000 x 500	Storage period	Unlimited with correct storage	

Technical data				
Size	Unit	Value	Test method	Comment
Mechanical loss factor		0.10	DIN 53513*	Guid value
Static E-modulus	N/mm <sup>2</sup>	2.720	DIN 53513*	Compression: 0.400 N/mm <sup>2</sup>
Dynamic shear modulus at 10 Hz	N/mm²	5.270	DIN 53513*	Compression: 0.400 N/mm <sup>2</sup>
Rebound elasticity	%	50	DIN EN ISO 8307	+/- 10 %
Residual compression set	%	< 6	DIN EN ISO 1856	50 %, + 23 °C, 70 h 30 min after unloading
Thermal conductivity	W/(m·k)	0.10	DIN 52612-1	
Specific volume resistance	Ω·cm	> 1011	DIN IEC 93	Dry
Coefficient of friction with steel $\mu_s$		0.5		Dry
Coefficient of friction with concrete $\mu_s$		0.7		Dry
Inflammability		E	EN 13501-1	Normal flammable
Long-term temperature resistance	°C	Long-term: -30 to +70 Short-term: to +120		

<sup>\*</sup> Measurement based on the corresponding standard.

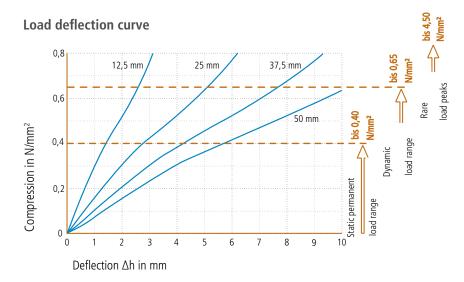
Installation	
Surface	Avoid direct contact between ISOLMER® mats and materials containing plasticiser (use a release layer).  Requirements storage area: Load capacity > dynamic load. No loose parts. Power troweled. Free from teeth and gravel nets.  Flatness under 2-m-lath ≤ 10 mm, > 10 mm re-profiling. Clean swept (Standard SIA-271:2007)
Installation	The connection points are fully pushed. Before applying the concrete, the ISOLMER® mats are protected with a 2-ply tough PE foil (0.2 mm) and the overlap trapped to avoid cement contamination.
Screed requirement	Concrete or underlay flooring with flowable consistency as well as aerated concrete are only suitable to a limited extent and require additional, special sealing measures.
Processing instructions	The installation of ISOLMER® mats should only be carried out by trained personnel. When using auxiliary products, e.g. adhesives, the ambient temperature and humidity must meet the requirements of the auxiliary products used. The corresponding product data sheets are to be considered.
Water	When in contact with water, ISOLMER® boards absorb a certain amount of moisture, which impairs their full function with regard to structure-borne sound insulation. The ISOLMER® boards must therefore be protected against water penetration during the shell construction phase and in the final state.

Safety- and Health instructions			
Safety note	The local safty requirements must be considered.		
Transportation	The ISOLMER® mats are not classified as "endangered products".		
Disposal	Waste code according to European Waste Cataloge Ordinance: 07 02 13. Local requirements must be considered.		



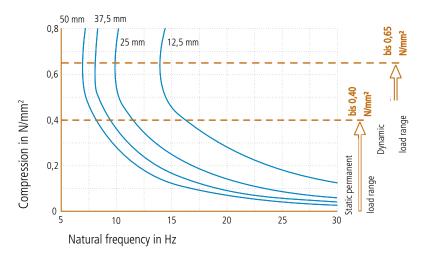
# ISOLMER® - 400 Polyurethane foam mats

## Important physical properties for dimensioning



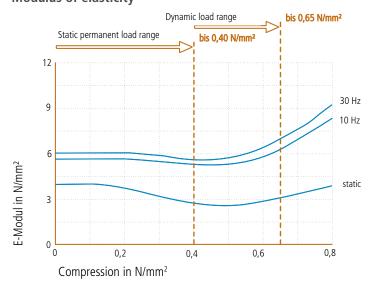
Spring characteristic curve. Test speed  $v=1\,\%$  of thickness. Test at room temperature between flat steel plates. Recording of the 3rd load. Form factor q=3.

#### **Natural frequency**



Natural frequency of a system consisting of a rigid mass and a layer of ISOLMER® on a rigid base. Form factor q=3.

## Modulus of elasticity



Load dependence of the static and dynamic moduli of elasticity. Dynamic E-modulus: harmonic excitation with an amplitude of  $\pm$  0.22 mm at 10 Hz and  $\pm$  0.08 mm at 30 Hz. Static E-modulus: tangent modulus from the spring characteristic. Measurement according to DIN 53513. Form factor q = 3.

Dark blu

Static load: up to N/mm<sup>2</sup> 0.650

Dynamic load: up to N/mm<sup>2</sup> 0.950

Load peaks: up to N/mm<sup>2</sup> 5.500



# ISOLMER®-650 Polyurethane foam mats

Mixed cellular polyether-urethane mats for structure-borne sound insulation and vibration protection

- Low natural frequency
- High insulating effect with shocks / vibrations
- · Low dynamic stiffening factor
- Constant characteristic values over a long service life
- Resistant to concrete grouts, oils, diluted acids and alkalis



Product-/Logistics data			
Thickness mm	12.5 and 25	Stockholding	Store in a dry place, do not expose to direct sunlight
Length x width mm	1'000 x 500	Storage period	Unlimited with correct storage

Technical data				
Size	Unit	Value	Test method	Comment
Mechanical loss factor		0.10	DIN 53513*	Guid value
Static E-modulus	N/mm <sup>2</sup>	4.570	DIN 53513*	Compression: 0.650 N/mm <sup>2</sup>
Dynamic shear modulus at 10 Hz	N/mm <sup>2</sup>	10.400	DIN 53513*	Compression: 0.650 N/mm <sup>2</sup>
Rebound elasticity	%	50	DIN EN ISO 8307	+/- 10 %
Residual compression set	%	< 7	DIN EN ISO 1856	50 %, + 23 °C, 70 h 30 min after unloading
Thermal conductivity	W/(m·k)	0.10	DIN 52612-1	
Specific volume resistance	Ω·cm	> 1011	DIN IEC 93	Dry
Coefficient of friction with steel $\mu_s$		0.5		Dry
Coefficient of friction with concrete $\mu_s$		0.7		Dry
Inflammability		E	EN 13501-1	Normal flammable
Long-term temperature resistance	°C	Long-term: -30 to +70 Short-term: to +120		

<sup>\*</sup> Measurement based on the corresponding standard.

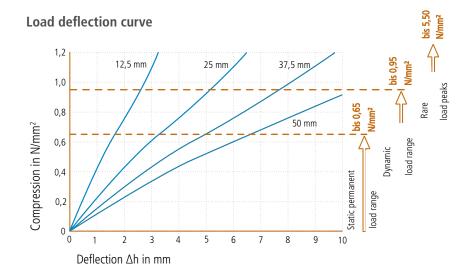
Installation	
Surface	Avoid direct contact between ISOLMER® mats and materials containing plasticiser (use a release layer).  Requirements storage area: Load capacity > dynamic load. No loose parts. Power troweled. Free from teeth and gravel nets.  Flatness under 2-m-lath ≤ 10 mm, > 10 mm re-profiling. Clean swept (Standard SIA-271:2007)
Installation	The connection points are fully pushed. Before applying the concrete, the ISOLMER® mats are protected with a 2-ply tough PE foil (0.2 mm) and the overlap trapped to avoid cement contamination.
Screed requirement	Concrete or underlay flooring with flowable consistency as well as aerated concrete are only suitable to a limited extent and require additional, special sealing measures.
Processing instructions	The installation of ISOLMER® mats should only be carried out by trained personnel. When using auxiliary products, e.g. adhesives, the ambient temperature and humidity must meet the requirements of the auxiliary products used. The corresponding product data sheets are to be considered.
Water	When in contact with water, ISOLMER® boards absorb a certain amount of moisture, which impairs their full function with regard to structure-borne sound insulation. The ISOLMER® boards must therefore be protected against water penetration during the shell construction phase and in the final state.

Safety- and Health instructions			
Safety note	The local safty requirements must be considered.		
Transportation	The ISOLMER® mats are not classified as "endangered products".		
Disposal	Waste code according to European Waste Cataloge Ordinance: 07 02 13. Local requirements must be considered.		



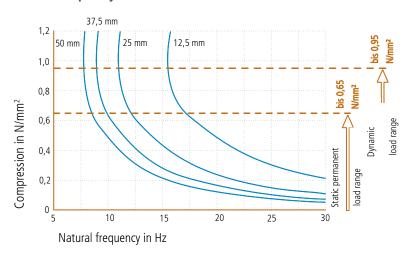
# ISOLMER® - 650 Polyurethane foam mats

## Important physical properties for dimensioning



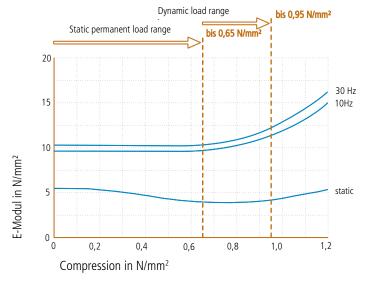
Spring characteristic curve. Test speed  $v=1\,\%$  of thickness. Test at room temperature between flat steel plates. Recording of the 3rd load. Form factor q=2.

## **Natural frequency**



Natural frequency of a system consisting of a rigid mass and a layer of ISOLMER® on a rigid base. Form factor q=2.

## Modulus of elasticity



Load dependence of the static and dynamic moduli of elasticity. Dynamic E-modulus: harmonic excitation with an amplitude of  $\pm$  0.22 mm at 10 Hz and  $\pm$  0.08 mm at 30 Hz. Static E-modulus: tangent modulus from the spring characteristic. Measurement according to DIN 53513. Form factor q = 2.



Static load: up to N/mm<sup>2</sup> 0.950

Dynamic load: up to N/mm<sup>2</sup>

1 500

Load peaks: up to N/mm<sup>2</sup> 6.000



# ISOLMER® - 950 Polyurethane foam mats

Mixed cellular polyether-urethane mats for structure-borne sound insulation and vibration protection

- Low natural frequency
- High insulating effect with shocks / vibrations
- Low dynamic stiffening factor
- Constant characteristic values over a long service life
- Resistant to concrete grouts, oils, diluted acids and alkalis



Product- / Logistics data			
Thickness mm	12.5 and 25	Stockholding	Store in a dry place, do not expose to direct sunlight
Length x width mm	1'000 x 500	Storage period	Unlimited with correct storage

Technical data				
Size	Unit	Value	Test method	Comment
Mechanical loss factor		0.10	DIN 53513*	Guid value
Static E-modulus	N/mm <sup>2</sup>	8.160	DIN 53513*	Compression: 0.950 N/mm <sup>2</sup>
Dynamic shear modulus at 10 Hz	N/mm <sup>2</sup>	21.500	DIN 53513*	Compression: 0.950 N/mm <sup>2</sup>
Rebound elasticity	%	50	DIN EN ISO 8307	+/- 10 %
Residual compression set	%	< 9	DIN EN ISO 1856	50 %, + 23 °C, 70 h 30 min after unloading
Thermal conductivity	W/(m·k)	0.11	DIN 52612-1	
Specific volume resistance	Ω·cm	> 1011	DIN IEC 93	Dry
Coefficient of friction with steel $\mu_s$		0.5		Dry
Coefficient of friction with concrete $\mu_s$		0.7		Dry
Inflammability		E	EN 13501-1	Normal flammable
Long-term temperature resistance	°C	Long-term: -30 to +70 Short-term: to +120		

<sup>\*</sup> Measurement based on the corresponding standard.

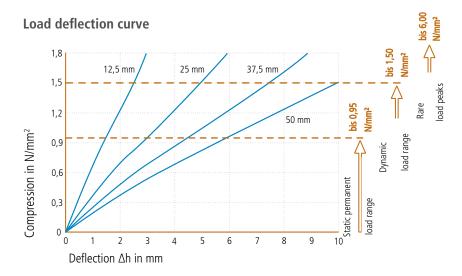
Installation	
Surface	Avoid direct contact between ISOLMER® mats and materials containing plasticiser (use a release layer).  Requirements storage area: Load capacity > dynamic load. No loose parts. Power troweled. Free from teeth and gravel nets.  Flatness under 2-m-lath ≤ 10 mm, > 10 mm re-profiling. Clean swept (Standard SIA-271:2007)
Installation	The connection points are fully pushed. Before applying the concrete, the ISOLMER® mats are protected with a 2-ply tough PE foil (0.2 mm) and the overlap trapped to avoid cement contamination.
Screed requirement	Concrete or underlay flooring with flowable consistency as well as aerated concrete are only suitable to a limited extent and require additional, special sealing measures.
Processing instructions	The installation of ISOLMER® mats should only be carried out by trained personnel. When using auxiliary products, e.g. adhesives, the ambient temperature and humidity must meet the requirements of the auxiliary products used. The corresponding product data sheets are to be considered.
Water	When in contact with water, ISOLMER® boards absorb a certain amount of moisture, which impairs their full function with regard to structure-borne sound insulation. The ISOLMER® boards must therefore be protected against water penetration during the shell construction phase and in the final state.

Safety- and Health instructions				
Safety note	The local safty requirements must be considered.			
Transportation	The ISOLMER® mats are not classified as "endangered products".			
Disposal	Waste code according to European Waste Cataloge Ordinance: 07 02 13. Local requirements must be considered.			



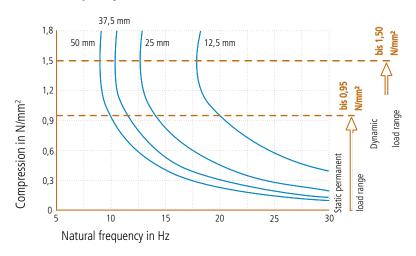
# ISOLMER® - 950 Polyurethane foam mats

## Important physical properties for dimensioning



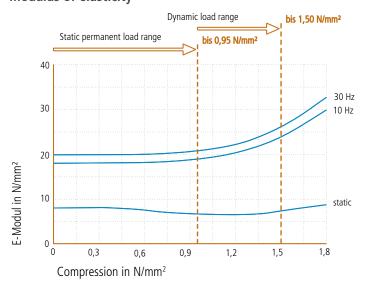
Spring characteristic curve. Test speed  $v=1\,\%$  of thickness. Test at room temperature between flat steel plates. Recording of the 3rd load. Form factor q=2.

#### **Natural frequency**



Natural frequency of a system consisting of a rigid mass and a layer of ISOLMER® on a rigid base. Form factor q=2.

## Modulus of elasticity



Load dependence of the static and dynamic moduli of elasticity. Dynamic E-modulus: harmonic excitation with an amplitude of  $\pm$  0.22 mm at 10 Hz and  $\pm$  0.08 mm at 30 Hz. Static E-modulus: tangent modulus from the spring characteristic.

Measurement according to DIN 53513. Form factor q = 2.

Purpl

Static load: up to N/mm<sup>2</sup> 1.500

Dynamic load: up to N/mm<sup>2</sup> 2.000

Load peaks: up to N/mm<sup>2</sup> 6.500



# **ISOLMER®-1500 Polyurethane foam mats**

Mixed cellular polyether-urethane mats for structure-borne sound insulation and vibration protection

- Low natural frequency
- High insulating effect with shocks / vibrations
- Low dynamic stiffening factor
- Constant characteristic values over a long service life
- Resistant to concrete grouts, oils, diluted acids and alkalis



Product-/Logistics data			
Thickness mm	12.5 and 25	Stockholding	Store in a dry place, do not expose to direct sunlight
Length x width mm	1'000 x 500	Storage period	Unlimited with correct storage

Technical data				
Size	Unit	Value	Test method	Comment
Mechanical loss factor		0.09	DIN 53513*	Guid value
Static E-modulus	N/mm <sup>2</sup>	12.000	DIN 53513*	Compression: 1.500 N/mm <sup>2</sup>
Dynamic shear modulus at 10 Hz	N/mm <sup>2</sup>	35.200	DIN 53513*	Compression: 1.500 N/mm <sup>2</sup>
Rebound elasticity	%	50	DIN EN ISO 8307	+/- 10 %
Residual compression set	%	< 9	DIN EN ISO 1856	50 %, + 23 °C, 70 h 30 min after unloading
Thermal conductivity	W/(m·k)	0.11	DIN 52612-1	
Specific volume resistance	Ω·cm	> 1011	DIN IEC 93	Dry
Coefficient of friction with steel $\mu_s$		0.5		Dry
Coefficient of friction with concrete $\mu_s$		0.7		Dry
Inflammability		E	EN 13501-1	Normal flammable
Long-term temperature resistance	°C	Long-term: -30 to +70 Short-term: to +120		

<sup>\*</sup> Measurement based on the corresponding standard.

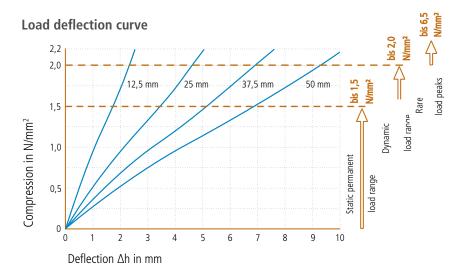
Installation		
Surface	Avoid direct contact between ISOLMER® mats and materials containing plasticiser (use a release layer).  Requirements storage area: Load capacity > dynamic load. No loose parts. Power troweled. Free from teeth and gravel nets.  Flatness under 2-m-lath ≤ 10 mm, > 10 mm re-profiling. Clean swept (Standard SIA-271:2007)	
Installation	The connection points are fully pushed. Before applying the concrete, the ISOLMER® mats are protected with a 2-ply tough PE foil (0.2 mm) and the overlap trapped to avoid cement contamination.	
Screed requirement	Concrete or underlay flooring with flowable consistency as well as aerated concrete are only suitable to a limited extent and require additional, special sealing measures.	
Processing instructions	The installation of ISOLMER® mats should only be carried out by trained personnel. When using auxiliary products, e.g. adhesives, the ambient temperature and humidity must meet the requirements of the auxiliary products used. The corresponding product data sheets are to be considered.	
Water	When in contact with water, ISOLMER® boards absorb a certain amount of moisture, which impairs their full function with regard to structure-borne sound insulation. The ISOLMER® boards must therefore be protected against water penetration during the shell construction phase and in the final state.	

Safety- and Health instructions			
Safety note	The local safty requirements must be considered.		
Transportation	The ISOLMER® mats are not classified as "endangered products".		
Disposal	Waste code according to European Waste Cataloge Ordinance: 07 02 13. Local requirements must be considered.		



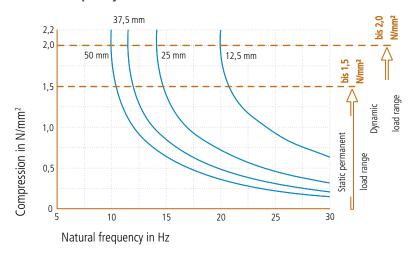
## ISOLMER® - 1500 Polyurethane foam mats

## Important physical properties for dimensioning



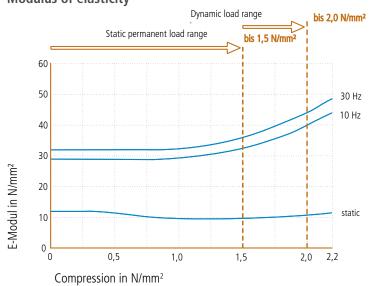
Spring characteristic curve. Test speed  $v=1\,\%$  of thickness. Test at room temperature between flat steel plates. Recording of the 3rd load. Form factor q=2.

#### **Natural frequency**



Natural frequency of a system consisting of a rigid mass and a layer of ISOLMER® on a rigid base. Form factor q=2.

## Modulus of elasticity



Load dependence of the static and dynamic moduli of elasticity. Dynamic E-modulus: harmonic excitation with an amplitude of  $\pm$  0.22 mm at 10 Hz and  $\pm$  0.08 mm at 30 Hz. Static E-modulus: tangent modulus from the spring characteristic.

Measurement according to DIN 53513. Form factor q = 2.

Bordeau:

Static load: up to N/mm<sup>2</sup> 2.000

Dynamic load: up to N/mm<sup>2</sup>

3.000

Load peaks: up to N/mm<sup>2</sup> 7.000



# ISOLMER® - 2000 Polyurethane foam mats

Mixed cellular polyether-urethane mats for structure-borne sound insulation and vibration protection

- Low natural frequency
- High insulating effect with shocks / vibrations
- Low dynamic stiffening factor
- Constant characteristic values over a long service life
- Resistant to concrete grouts, oils, diluted acids and alkalis



Product-/Logistics data			
Thickness mm	12.5 and 25	Stockholding	Store in a dry place, do not expose to direct sunlight
Length x width mm	1'000 x 500	Storage period	Unlimited with correct storage

Technical data				
Size	Unit	Value	Test method	Comment
Mechanical loss factor		0.09	DIN 53513*	Guid value
Static E-modulus	N/mm²	11.43	DIN 53513*	Compression: 2.000 N/mm <sup>2</sup>
Dynamic shear modulus at 10 Hz	N/mm²	48.16	DIN 53513*	Compression: 2.000 N/mm <sup>2</sup>
Rebound elasticity	%	50	DIN EN ISO 8307	+/- 10 %
Residual compression set	%	< 8	DIN EN ISO 1856	50 %, + 23 °C, 70 h 30 min after unloading
Thermal conductivity	W/(m·k)	0.11	DIN 52612-1	
Specific volume resistance	Ω·cm	> 1011	DIN IEC 93	Dry
Coefficient of friction with steel $\mu_s$		0.5		Dry
Coefficient of friction with concrete $\mu_s$		0.7		Dry
Inflammability		E	EN 13501-1	Normal flammable
Long-term temperature resistance	°C	Long-term: -30 to +70 Short-term: to +120		

<sup>\*</sup> Measurement based on the corresponding standard.

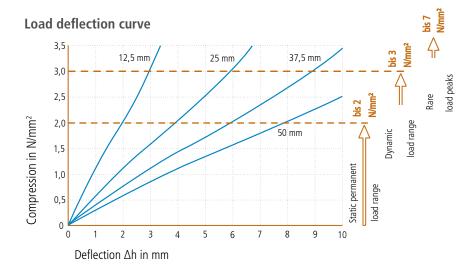
Installation	
Surface	Avoid direct contact between ISOLMER® mats and materials containing plasticiser (use a release layer).  Requirements storage area: Load capacity > dynamic load. No loose parts. Power troweled. Free from teeth and gravel nets.  Flatness under 2-m-lath ≤ 10 mm, > 10 mm re-profiling. Clean swept (Standard SIA-271:2007)
Installation	The connection points are fully pushed. Before applying the concrete, the ISOLMER® mats are protected with a 2-ply tough PE foil (0.2 mm) and the overlap trapped to avoid cement contamination
Screed requirement	Concrete or underlay flooring with flowable consistency as well as aerated concrete are only suitable to a limited extent and require additional, special sealing measures.
Processing instructions	The installation of ISOLMER® mats should only be carried out by trained personnel. When using auxiliary products, e.g. adhesives, the ambient temperature and humidity must meet the requirements of the auxiliary products used. The corresponding product data sheets are to be considered.
Water	When in contact with water, ISOLMER® boards absorb a certain amount of moisture, which impairs their full function with regard to structure-borne sound insulation. The ISOLMER® boards must therefore be protected against water penetration during the shell construction phase and in the final state.

Safety- and Health instructions				
Safety note	The local safty requirements must be considered.			
Transportation	The ISOLMER® mats are not classified as "endangered products".			
Disposal	Waste code according to European Waste Cataloge Ordinance: 07 02 13. Local requirements must be considered.			



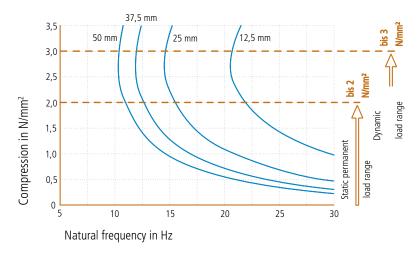
## ISOLMER® - 2000 Polyurethane foam mats

## Important physical properties for dimensioning



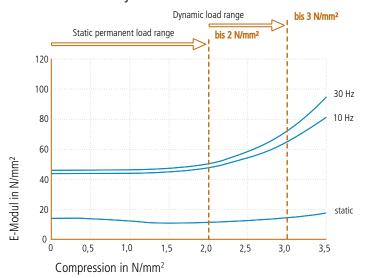
Spring characteristic curve. Test speed  $v=1\,\%$  of thickness. Test at room temperature between flat steel plates. Recording of the 3rd load. Form factor q=1.25.

#### **Natural frequency**



Natural frequency of a system consisting of a rigid mass and a layer of ISOLMER® on a rigid base. Form factor q=1.25.

## Modulus of elasticity



Load dependence of the static and dynamic moduli of elasticity. Dynamic E-modulus: harmonic excitation with an amplitude of  $\pm$  0.22 mm at 10 Hz and

 $\pm$  0.08 mm at 30 Hz. Static E-modulus: tangent modulus from the

spring characteristic. Measurement according to DIN 53513. Form factor q=1.25.

# ISOLDYN®-50

Purp

Static load: up to N/mm<sup>2</sup> 0.050

Dynamic load: up to N/mm<sup>2</sup> 0.075

Load peaks: up to N/mm<sup>2</sup>
1.300



# ISOLDYN® - 50 Polyurethane foam mats

Closed cellular polyether-urethane mats for structure-borne sound insulation and vibration protection

- Does not absorb water
- Low natural frequency
- High insulating effect with shocks / vibrations
- Low dynamic stiffening factor
- Constant characteristic values over a long service life
- Resistant to concrete grouts, oils, diluted acids and alkalis



Product-/Logistics data				
Thickness mm	12.5 and 25	Stockholding	Store in a dry place, do not expose to direct sunlight	
Length x width mm	1'000 x 500	Storage period	Unlimited with correct storage	

Technical data				
Size	Unit	Value	Test method	Comment
Mechanical loss factor		0.09	DIN 53513*	Guid value
Static E-modulus	N/mm <sup>2</sup>	0.322	DIN 53513*	Compression: 0.050 N/mm <sup>2</sup>
Dynamic shear modulus at 10 Hz	N/mm <sup>2</sup>	0.707	DIN 53513*	Compression: 0.050 N/mm <sup>2</sup>
Rebound elasticity	%	70	DIN EN ISO 8307	+/- 10 %
Residual compression set	%	< 5	DIN EN ISO 1856	50 %, + 23 °C, 70 h 30 min after unloading
Thermal conductivity	W/(m⋅k)	0.06	DIN 52612-1	
Specific volume resistance	Ω·cm	> 1011	DIN IEC 93	Dry
Coefficient of friction with steel $\mu_s$		0.5		Dry
Coefficient of friction with concrete $\mu_{\mbox{\tiny S}}$		0.7		Dry
Inflammability		E	EN 13501-1	Normal flammable
Long-term temperature resistance	°C	Long-term: -30 to +70 Short-term: to +120		

<sup>\*</sup> Measurement based on the corresponding standard.

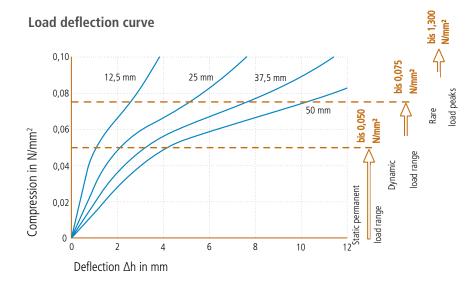
Installation	
Surface	Avoid direct contact between ISOLDYN® mats and materials containing plasticiser (use a release layer).  Requirements storage area: Load capacity > dynamic load. No loose parts. Power troweled. Free from teeth and gravel nets.  Flatness under 2-m-lath ≤ 10 mm, > 10 mm re-profiling. Clean swept (Standard SIA-271:2007)
Installation	The connection points are fully pushed. Before applying the concrete, the ISOLDYN® mats are protected with a 2-ply tough PE foil (0.2 mm) and the overlap trapped to avoid cement contamination.
Screed requirement	Concrete or underlay flooring with flowable consistency as well as aerated concrete are only suitable to a limited extent and require additional, special sealing measures.
Processing instructions	The installation of ISOLDYN® mats should only be carried out by trained personnel. When using auxiliary products, e.g. adhesives, the ambient temperature and humidity must meet the requirements of the auxiliary products used. The corresponding product data sheets are to be considered.
Water	ISOLDYN® mats do not absorb moisture. As a result, the full structure-borne sound insulation is maintained even when in contact with water the shell construction phase and in the final state.

Safety- and Health instructions			
Safety note	The local safty requirements must be considered		
Transportation	The ISOLDYN® mats are not classified as "endangered products".		
Disposal	Waste code according to European Waste Cataloge Ordinance: 07 02 13. Local requirements must be considered.		



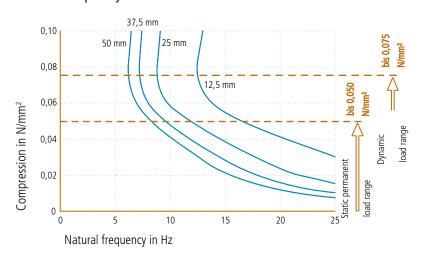
## ISOLDYN® - 50 Polyurethane foam mats

## Important physical properties for dimensioning



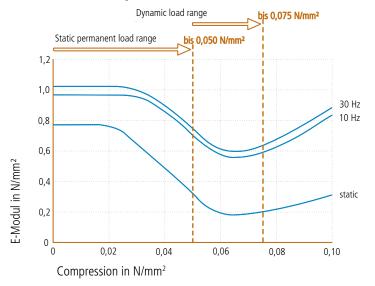
Spring characteristic curve. Test speed  $\nu=1$  % of thickness. Test at room temperature between flat steel plates. Recording of the 3rd load. Form factor q=3.

#### **Natural frequency**



Natural frequency of a system consisting of a rigid mass and a layer of ISOLDYN® on a rigid base. Form factor q=3.

## Modulus of elasticity



Load dependence of the static and dynamic moduli of elasticity.

Dynamic E-modulus: harmonic excitation with

an amplitude of  $\pm$  0.11 mm at 10 Hz and  $\pm$  0.04 mm at 30 Hz.

Static E-modulus: tangent modulus from the spring characteristic.

Measurement according to DIN 53513. Form factor q = 3.



Yellow

Static load: up to N/mm<sup>2</sup>

0.075

Dynamic load: up to N/mm<sup>2</sup>

0.120

Load peaks: up to N/mm<sup>2</sup>

2.000



# ISOLDYN® - 75 Polyurethane foam mats

Closed cellular polyether-urethane mats for structure-borne sound insulation and vibration protection

- Does not absorb water
- Low natural frequency
- High insulating effect with shocks / vibrations
- Low dynamic stiffening factor
- Constant characteristic values over a long service life
- Resistant to concrete grouts, oils, diluted acids and alkalis



Product-/Logistics data			
Thickness mm	6, 12.5 and 25	Stockholding	Store in a dry place, do not expose to direct sunlight
Length x width mm	1'000 x 500	Storage period	Unlimited with correct storage

Technical data				
Size	Unit	Value	Test method	Comment
Mechanical loss factor		0.06	DIN 53513*	Guid value
Static E-modulus	N/mm <sup>2</sup>	0.630	DIN 53513*	Compression: 0.075 N/mm <sup>2</sup>
Dynamic shear modulus at 10 Hz	N/mm²	0.920	DIN 53513*	Compression: 0.075 N/mm <sup>2</sup>
Rebound elasticity	%	70	DIN EN ISO 8307	+/- 10 %
Residual compression set	%	< 5	DIN EN ISO 1856	50 %, + 23 °C, 70 h 30 min after unloading
Thermal conductivity	W/(m·k)	0.06	DIN 52612-1	
Specific volume resistance	Ω·cm	> 10 <sup>11</sup>	DIN IEC 93	Dry
Coefficient of friction with steel $\mu_s$		0.5		Dry
Coefficient of friction with concrete $\mu_s$		0.7		Dry
Inflammability		E	EN 13501-1	Normal flammable
Long-term temperature resistance	°C	Long-term: -30 to +70 Short-term: to +120		

<sup>\*</sup> Measurement based on the corresponding standard.

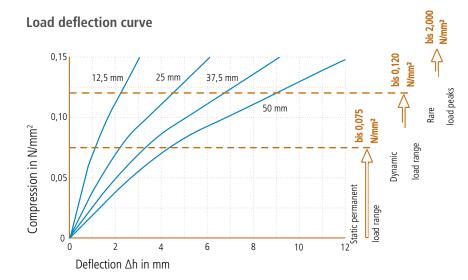
Installation	
Surface	Avoid direct contact between ISOLDYN® mats and materials containing plasticiser (use a release layer).  Requirements storage area: Load capacity > dynamic load. No loose parts. Power troweled. Free from teeth and gravel nets.  Flatness under 2-m-lath ≤ 10 mm, > 10 mm re-profiling. Clean swept (Standard SIA-271:2007)
Installation	The connection points are fully pushed. Before applying the concrete, the ISOLDYN® mats are protected with a 2-ply tough PE foil (0.2 mm) and the overlap trapped to avoid cement contamination.
Screed requirement	Concrete or underlay flooring with flowable consistency as well as aerated concrete are only suitable to a limited extent and require additional, special sealing measures.
Processing instructions	The installation of ISOLDYN® mats should only be carried out by trained personnel. When using auxiliary products, e.g. adhesives, the ambient temperature and humidity must meet the requirements of the auxiliary products used. The corresponding product data sheets are to be considered.
Water	ISOLDYN® mats do not absorb moisture. As a result, the full structure-borne sound insulation is maintained even when in contact with water the shell construction phase and in the final state.

Safety- and Health instructions			
Safety note	The local safty requirements must be considered		
Transportation	The ISOLDYN® mats are not classified as "endangered products".		
Disposal	Waste code according to European Waste Cataloge Ordinance: 07 02 13. Local requirements must be considered.		



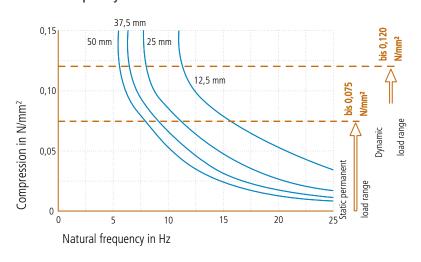
## ISOLDYN® - 75 Polyurethane foam mats

### Important physical properties for dimensioning



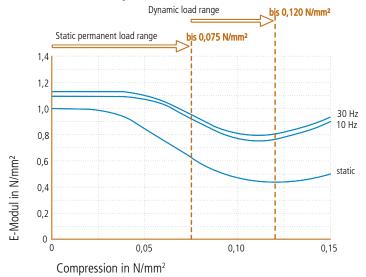
Spring characteristic curve. Test speed  $\nu=1$  % of thickness. Test at room temperature between flat steel plates. Recording of the 3rd load. Form factor q=3.

#### **Natural frequency**



Natural frequency of a system consisting of a rigid mass and a layer of ISOLDYN® on a rigid base. Form factor q=3.

#### Modulus of elasticity



Load dependence of the static and dynamic moduli of elasticity. Dynamic E-modulus: harmonic excitation with an amplitude of  $\pm$  0.11 mm at 10 Hz and  $\pm$  0.04 mm at 30 Hz.

Static E-modulus: tangent modulus from the spring characteristic.

Measurement according to DIN 53513. Form factor q = 3.

Green

Static load: up to N/mm<sup>2</sup> 0.150

Dynamic load: up to N/mm<sup>2</sup> 0.250

Load peaks: up to N/mm<sup>2</sup> 3.000



## **ISOLDYN® - 150 Polyurethane foam mats**

Closed cellular polyether-urethane mats for structure-borne sound insulation and vibration protection

- Does not absorb water
- Low natural frequency
- High insulating effect with shocks / vibrations
- Low dynamic stiffening factor
- Constant characteristic values over a long service life
- Resistant to concrete grouts, oils, diluted acids and alkalis



Product- / Logistics data				
Thickness mm	6, 12.5 and 25	Stockholding	Store in a dry place, do not expose to direct sunlight	
Length x width mm	1'000 x 500	Storage period	Unlimited with correct storage	

Technical data					
Unit	Value	Test method	Comment		
	0.03	DIN 53513*	Guid value		
N/mm <sup>2</sup>	1.250	DIN 53513*	Compression: 0.150 N/mm <sup>2</sup>		
N/mm <sup>2</sup>	1.650	DIN 53513*	Compression: 0.150 N/mm <sup>2</sup>		
%	70	DIN EN ISO 8307	+/- 10 %		
%	< 5	DIN EN ISO 1856	50 %, + 23 °C, 70 h 30 min after unloading		
W/(m·k)	0.075	DIN 52612-1			
Ω·cm	> 1011	DIN IEC 93	Dry		
	0.5		Dry		
	0.7		Dry		
	E	EN 13501-1	Normal flammable		
°C	Long-term: -30 to +70 Short-term: to +120				
	N/mm² N/mm² % % W/(m-k) Ω-cm	0.03  N/mm² 1.250  N/mm² 1.650  % 70  % < 5  W/(m⋅k) 0.075  Ω⋅cm > 10¹¹  0.5  0.7  E  CC Long-term: -30 to +70	0.03       DIN 53513*         N/mm²       1.250       DIN 53513*         N/mm²       1.650       DIN 53513*         %       70       DIN EN ISO 8307         %       < 5		

<sup>\*</sup> Measurement based on the corresponding standard.

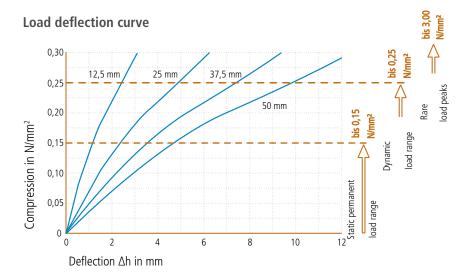
Installation		
Surface	Avoid direct contact between ISOLDYN® mats and materials containing plasticiser (use a release layer). Requirements storage area: Load capacity $>$ dynamic load. No loose parts. Power troweled. Free from teeth and gravel nets. Flatness under 2-m-lath $\le$ 10 mm, $>$ 10 mm re-profiling. Clean swept (Standard SIA-271:2007)	
Installation	The connection points are fully pushed. Before applying the concrete, the ISOLDYN® mats are protected with a 2-ply tough PE foil (0.2 mm) and the overlap trapped to avoid cement contamination.	
Screed requirement	Concrete or underlay flooring with flowable consistency as well as aerated concrete are only suitable to a limited extent and require additional, special sealing measures.	
Processing instructions	The installation of ISOLDYN® mats should only be carried out by trained personnel. When using auxiliary products, e.g. adhesives, the ambient temperature and humidity must meet the requirements of the auxiliary products used. The corresponding product data sheets are to be considered.	
Water	ISOLDYN® mats do not absorb moisture. As a result, the full structure-borne sound insulation is maintained even when in contact with water the shell construction phase and in the final state.	

Safety- and Health instructions			
Safety note	The local safty requirements must be considered		
Transportation	The ISOLDYN® mats are not classified as "endangered products".		
Disposal	Waste code according to European Waste Cataloge Ordinance: 07 02 13. Local requirements must be considered.		



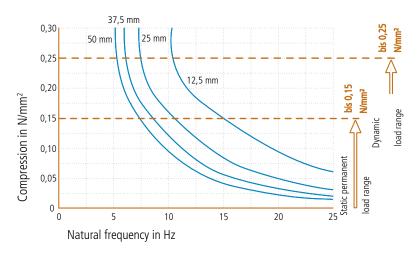
## ISOLDYN® - 150 Polyurethane foam mats

## Important physical properties for dimensioning



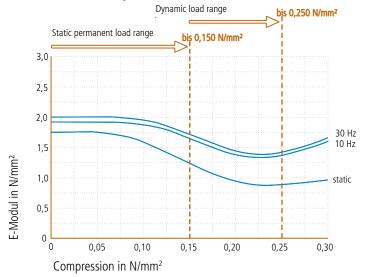
Spring characteristic curve. Test speed  $\nu=1$  % of thickness. Test at room temperature between flat steel plates. Recording of the 3rd load. Form factor q=3.

#### **Natural frequency**



Natural frequency of a system consisting of a rigid mass and a layer of ISOLDYN® on a rigid base. Form factor q=3.

#### Modulus of elasticity



Load dependence of the static and dynamic moduli of elasticity.

Dynamic E-modulus: harmonic excitation with

an amplitude of  $\pm$  0.11 mm at 10 Hz and  $\pm$  0.04 mm at 30 Hz.

Static E-modulus: tangent modulus from the spring characteristic.

Measurement according to DIN 53513. Form factor q = 3.

Blue

Static load: up to N/mm<sup>2</sup> 0.350

Dynamic load: up to N/mm<sup>2</sup> 0.500

Load peaks: up to N/mm<sup>2</sup> 4.000



## ISOLDYN® - 350 Polyurethane foam mats

Closed cellular polyether-urethane mats for structure-borne sound insulation and vibration protection

- Does not absorb water
- Low natural frequency
- High insulating effect with shocks / vibrations
- Low dynamic stiffening factor
- Constant characteristic values over a long service life
- Resistant to concrete grouts, oils, diluted acids and alkalis



Product- / Logistics data				
Thickness mm	6, 12.5 and 25	Stockholding	Store in a dry place, do not expose to direct sunlight	
Length x width mm	1'000 x 500	Storage period	Unlimited with correct storage	

Technical data					
Size	Unit	Value	Test method	Comment	
Mechanical loss factor		0.03	DIN 53513*	Guid value	
Static E-modulus	N/mm <sup>2</sup>	2.530	DIN 53513*	Compression: 0.350 N/mm <sup>2</sup>	
Dynamic shear modulus at 10 Hz	N/mm <sup>2</sup>	3.250	DIN 53513*	Compression: 0.350 N/mm <sup>2</sup>	
Rebound elasticity	%	70	DIN EN ISO 8307	+/- 10 %	
Residual compression set	%	< 5	DIN EN ISO 1856	50 %, + 23 °C, 70 h 30 min after unloading	
Thermal conductivity	W/(m⋅k)	0.090	DIN 52612-1		
Specific volume resistance	Ω·cm	> 1011	DIN IEC 93	Dry	
Coefficient of friction with steel $\mu_s$		0.5		Dry	
Coefficient of friction with concrete $\mu_s$		0.7		Dry	
Inflammability		E	EN 13501-1	Normal flammable	
Long-term temperature resistance	°C	Long-term: -30 to +70 Short-term: to +120			

<sup>\*</sup> Measurement based on the corresponding standard.

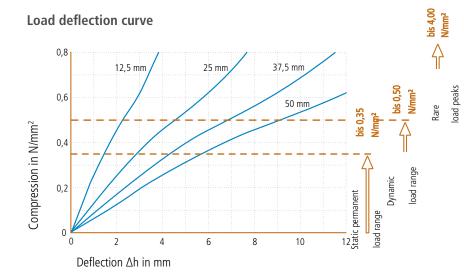
Installation		
Surface	Avoid direct contact between ISOLDYN® mats and materials containing plasticiser (use a release layer). Requirements storage area: Load capacity $>$ dynamic load. No loose parts. Power troweled. Free from teeth and gravel nets. Flatness under 2-m-lath $\le$ 10 mm, $>$ 10 mm re-profiling. Clean swept (Standard SIA-271:2007)	
Installation	The connection points are fully pushed. Before applying the concrete, the ISOLDYN® mats are protected with a 2-ply tough PE foil (0.2 mm) and the overlap trapped to avoid cement contamination.	
Screed requirement	Concrete or underlay flooring with flowable consistency as well as aerated concrete are only suitable to a limited extent and require additional, special sealing measures.	
Processing instructions	The installation of ISOLDYN® mats should only be carried out by trained personnel. When using auxiliary products, e.g. adhesives, the ambient temperature and humidity must meet the requirements of the auxiliary products used. The corresponding product data sheets are to be considered.	
Water	ISOLDYN® mats do not absorb moisture. As a result, the full structure-borne sound insulation is maintained even when in contact with water the shell construction phase and in the final state.	

Safety- and Health instructions			
Safety note	The local safty requirements must be considered		
Transportation	The ISOLDYN® mats are not classified as "endangered products".		
Disposal	Waste code according to European Waste Cataloge Ordinance: 07 02 13. Local requirements must be considered.		



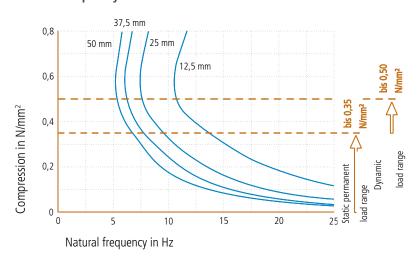
# ISOLDYN® - 350 Polyurethane foam mats

### Important physical properties for dimensioning



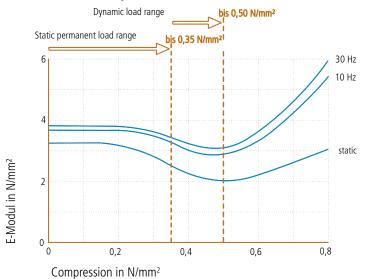
Spring characteristic curve. Test speed  $v=1\,\%$  of thickness. Test at room temperature between flat steel plates. Recording of the 3rd load. Form factor q=3.

#### **Natural frequency**



Natural frequency of a system consisting of a rigid mass and a layer of ISOLDYN® on a rigid base. Form factor q=3.

#### Modulus of elasticity



Load dependence of the static and dynamic moduli of elasticity. Dynamic E-modulus: harmonic excitation with an amplitude of  $\pm$  0.11 mm at 10 Hz and

 $\pm$  0.04 mm at 30 Hz. Static E-modulus: tangent modulus from the spring characteristic.

Measurement according to DIN 53513. Form factor q = 3.

Red

Static load: up to N/mm<sup>2</sup> 0.750

Dynamic load: up to N/mm<sup>2</sup>

1.200

Load peaks: up to N/mm<sup>2</sup>

6.000



## ISOLDYN® - 750 Polyurethane foam mats

Closed cellular polyether-urethane mats for structure-borne sound insulation and vibration protection

- Does not absorb water
- Low natural frequency
- High insulating effect with shocks / vibrations
- Low dynamic stiffening factor
- Constant characteristic values over a long service life
- Resistant to concrete grouts, oils, diluted acids and alkalis



Product- / Logistics data				
Thickness mm	6, 12.5 and 25	Stockholding	Store in a dry place, do not expose to direct sunlight	
Length x width mm	1'000 x 500	Storage period	Unlimited with correct storage	

Technical data					
Size	Unit	Value	Test method	Comment	
Mechanical loss factor		0.04	DIN 53513*	Guid value	
Static E-modulus	N/mm²	5.210	DIN 53513*	Compression: 0.750 N/mm <sup>2</sup>	
Dynamic shear modulus at 10 Hz	N/mm²	8.880	DIN 53513*	Compression: 0.750 N/mm <sup>2</sup>	
Rebound elasticity	%	70	DIN EN ISO 8307	+/- 10 %	
Residual compression set	%	< 6	DIN EN ISO 1856	50 %, + 23 °C, 70 h 30 min after unloading	
Thermal conductivity	W/(m·k)	0.100	DIN 52612-1		
Specific volume resistance	Ω·cm	> 1011	DIN IEC 93	Dry	
Coefficient of friction with steel $\mu_s$		0.5		Dry	
Coefficient of friction with concrete $\mu_{\mbox{\tiny S}}$		0.7		Dry	
Inflammability		E	EN 13501-1	Normal flammable	
Long-term temperature resistance	°C	Long-term: -30 to +70 Short-term: to +120			

<sup>\*</sup> Measurement based on the corresponding standard.

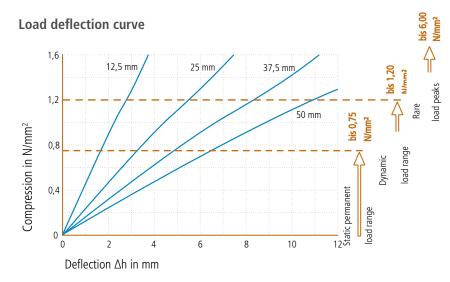
Installation	
Surface	Avoid direct contact between ISOLDYN® mats and materials containing plasticiser (use a release layer).  Requirements storage area: Load capacity > dynamic load. No loose parts. Power troweled. Free from teeth and gravel nets.  Flatness under 2-m-lath ≤ 10 mm, > 10 mm re-profiling. Clean swept (Standard SIA-271:2007)
Installation	The connection points are fully pushed. Before applying the concrete, the ISOLDYN® mats are protected with a 2-ply tough PE foil (0.2 mm) and the overlap trapped to avoid cement contamination.
Screed requirement	Concrete or underlay flooring with flowable consistency as well as aerated concrete are only suitable to a limited extent and require additional, special sealing measures.
Processing instructions	The installation of ISOLDYN® mats should only be carried out by trained personnel. When using auxiliary products, e.g. adhesives, the ambient temperature and humidity must meet the requirements of the auxiliary products used. The corresponding product data sheets are to be considered.
Water	ISOLDYN® mats do not absorb moisture. As a result, the full structure-borne sound insulation is maintained even when in contact with water the shell construction phase and in the final state.

Safety- and Health instructions			
Safety note	The local safty requirements must be considered		
Transportation	The ISOLDYN® mats are not classified as "endangered products".		
Disposal Waste code according to European Waste Cataloge Ordinance: 07 02 13. Local requirements must be considered.			



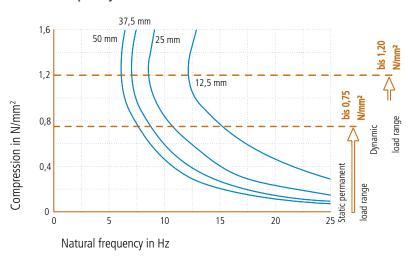
## ISOLDYN® - 750 Polyurethane foam mats

### Important physical properties for dimensioning



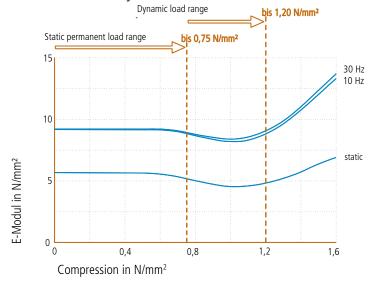
Spring characteristic curve. Test speed  $v=1\,\%$  of thickness. Test at room temperature between flat steel plates. Recording of the 3rd load. Form factor q=3.

#### **Natural frequency**



Natural frequency of a system consisting of a rigid mass and a layer of ISOLDYN® on a rigid base. Form factor q=3.

#### Modulus of elasticity



Load dependence of the static and dynamic moduli of elasticity. Dynamic E-modulus: harmonic excitation with an amplitude of  $\pm$  0.11 mm at 10 Hz and  $\pm$  0.04 mm at 30 Hz. Static E-modulus: tangent modulus from the spring characteristic.

Measurement according to DIN 53513. Form factor q = 3.

Orange

Static load: up to N/mm<sup>2</sup> 1.500

Dynamic load: up to N/mm<sup>2</sup>

Load peaks: up to  $N/mm^2$  8.000



## ISOLDYN® - 1500 Polyurethane foam mats

Closed cellular polyether-urethane mats for structure-borne sound insulation and vibration protection

- Does not absorb water
- Low natural frequency
- High insulating effect with shocks / vibrations
- Low dynamic stiffening factor
- Constant characteristic values over a long service life
- Resistant to concrete grouts, oils, diluted acids and alkalis



Product- / Logistics data				
Thickness mm	6, 12.5 and 25	Stockholding	Store in a dry place, do not expose to direct sunlight	
Length x width mm	1'000 x 500	Storage period	Unlimited with correct storage	

Technical data				
Size	Unit	Value	Test method	Comment
Mechanical loss factor		0.05	DIN 53513*	Guid value
Static E-modulus	N/mm <sup>2</sup>	9.210	DIN 53513*	Compression: 1.500 N/mm <sup>2</sup>
Dynamic shear modulus at 10 Hz	N/mm <sup>2</sup>	16.660	DIN 53513*	Compression: 1.500 N/mm <sup>2</sup>
Rebound elasticity	%	70	DIN EN ISO 8307	+/- 10 %
Residual compression set	%	< 8	DIN EN ISO 1856	50 %, + 23 °C, 70 h 30 min after unloading
Thermal conductivity	W/(m·k)	0.110	DIN 52612-1	
Specific volume resistance	Ω·cm	> 1011	DIN IEC 93	Dry
Coefficient of friction with steel $\mu_s$		0.5		Dry
Coefficient of friction with concrete $\mu_s$		0.7		Dry
Inflammability		E	EN 13501-1	Normal flammable
Long-term temperature resistance	°C	Long-term: -30 to +70 Short-term: to +120		

<sup>\*</sup> Measurement based on the corresponding standard.

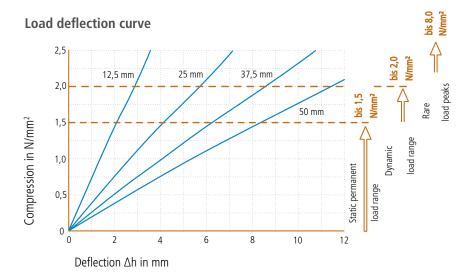
Installation	
Surface	Avoid direct contact between ISOLDYN® mats and materials containing plasticiser (use a release layer).  Requirements storage area: Load capacity > dynamic load. No loose parts. Power troweled. Free from teeth and gravel nets.  Flatness under 2-m-lath ≤ 10 mm, > 10 mm re-profiling. Clean swept (Standard SIA-271:2007)
Installation	The connection points are fully pushed. Before applying the concrete, the ISOLDYN® mats are protected with a 2-ply tough PE foil (0.2 mm) and the overlap trapped to avoid cement contamination.
Screed requirement	Concrete or underlay flooring with flowable consistency as well as aerated concrete are only suitable to a limited extent and require additional, special sealing measures.
Processing instructions	The installation of ISOLDYN® mats should only be carried out by trained personnel. When using auxiliary products, e.g. adhesives, the ambient temperature and humidity must meet the requirements of the auxiliary products used. The corresponding product data sheets are to be considered.
Water	ISOLDYN® mats do not absorb moisture. As a result, the full structure-borne sound insulation is maintained even when in contact with water the shell construction phase and in the final state.

Safety- and Health instructions			
Safety note	The local safty requirements must be considered		
Transportation	The ISOLDYN® mats are not classified as "endangered products".		
Disposal Waste code according to European Waste Cataloge Ordinance: 07 02 13. Local requirements must be considered.			



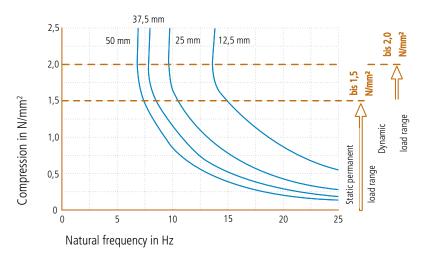
## ISOLDYN® - 1500 Polyurethane foam mats

### Important physical properties for dimensioning



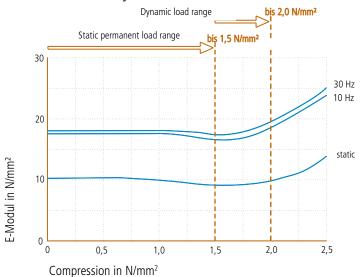
Spring characteristic curve. Test speed  $v=1\,\%$  of thickness. Test at room temperature between flat steel plates. Recording of the 3rd load. Form factor q=3.

#### **Natural frequency**



Natural frequency of a system consisting of a rigid mass and a layer of ISOLDYN® on a rigid base. Form factor q=3.

#### Modulus of elasticity



Load dependence of the static and dynamic moduli of elasticity. Dynamic E-modulus: harmonic excitation with an amplitude of  $\pm$  0.11 mm at 10 Hz and  $\pm$  0.04 mm at 30 Hz. Static E-modulus: tangent modulus from the spring characteristic. Measurement according to DIN 53513. Form factor q = 3.



Blu€

Static load: up to N/mm<sup>2</sup>
3.000

Dynamic load: up to N/mm<sup>2</sup> 4.500

Load peaks: up to N/mm<sup>2</sup> 10.500



Closed cellular polyether-urethane mats for structure-borne sound insulation and vibration protection

- Does not absorb water
- Low natural frequency
- High insulating effect with shocks / vibrations
- Low dynamic stiffening factor
- Constant characteristic values over a long service life
- Resistant to concrete grouts, oils, diluted acids and alkalis



Product- / Logistics data				
Thickness mm	6, 12.5 and 25	Stockholding	Store in a dry place, do not expose to direct sunlight	
Length x width mm	1'000 x 500	Storage period	Unlimited with correct storage	

Technical data				
Size	Unit	Value	Test method	Comment
Mechanical loss factor		0.09	DIN 53513*	Guid value
Static E-modulus	N/mm²	17	DIN 53513*	Compression: 3.000 N/mm <sup>2</sup>
Dynamic shear modulus at 10 Hz	N/mm <sup>2</sup>	43	DIN 53513*	Compression: 3.000 N/mm <sup>2</sup>
Residual compression set	%	< 5	DIN EN ISO 1856	50 %, + 23 °C, 70 h 30 min after unloading
Thermal conductivity	W/(m·k)	ca. 0.16	DIN 52612-1	
Specific volume resistance	Ω·cm	> 1011	DIN IEC 93	Dry
Coefficient of friction with steel $\mu_s$		0.5		Dry
Coefficient of friction with concrete $\mu_s$		0.7		Dry
Inflammability		E	EN 13501-1	Normal flammable
Long-term temperature resistance	°C	Long-term: -30 to +70 Short-term: to +120		

<sup>\*</sup> Measurement based on the corresponding standard.

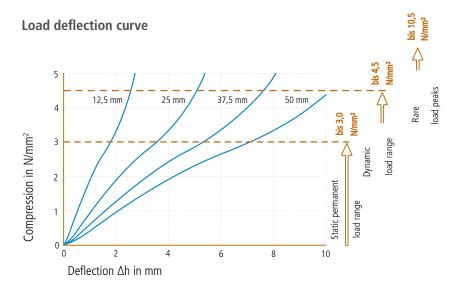
Installation	
Surface	Avoid direct contact between ISOLDYN® mats and materials containing plasticiser (use a release layer). Requirements storage area: Load capacity $>$ dynamic load. No loose parts. Power troweled. Free from teeth and gravel nets. Flatness under 2-m-lath $\le$ 10 mm, $>$ 10 mm re-profiling. Clean swept (Standard SIA-271:2007)
Installation	The connection points are fully pushed. Before applying the concrete, the ISOLDYN® mats are protected with a 2-ply tough PE foil (0.2 mm) and the overlap trapped to avoid cement contamination.
Screed requirement	Concrete or underlay flooring with flowable consistency as well as aerated concrete are only suitable to a limited extent and require additional, special sealing measures.
Processing instructions	The installation of ISOLDYN® mats should only be carried out by trained personnel. When using auxiliary products, e.g. adhesives, the ambient temperature and humidity must meet the requirements of the auxiliary products used. The corresponding product data sheets are to be considered.
Water	ISOLDYN® mats do not absorb moisture. As a result, the full structure-borne sound insulation is maintained even when in contact with water the shell construction phase and in the final state.

Safety- and Health instructions				
Safety note	The local safty requirements must be considered			
Transportation	The ISOLDYN® mats are not classified as "endangered products".			
Disposal Waste code according to European Waste Cataloge Ordinance: 07 02 13. Local requirements must be considered.				



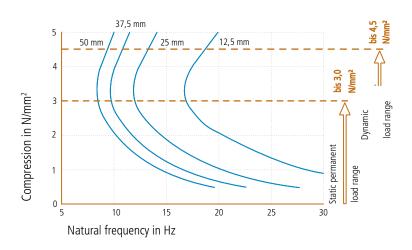
## ISOLDYN®-3000 Polyurethane foam mats

### Important physical properties for dimensioning



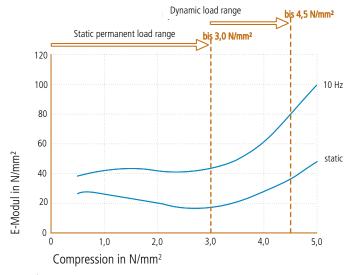
Spring characteristic curve. Test speed  $v=1\,\%$  of thickness. Test at room temperature between flat steel plates. Recording of the 3rd load. Form factor q=3.

## **Natural frequency**



Natural frequency of a system consisting of a rigid mass and a layer of ISOLDYN® on a rigid base. Form factor q=3.

#### Modulus of elasticity



Load dependence of the static and dynamic moduli of elasticity. Dynamic E-modulus: harmonic excitation with an amplitude of  $\pm$  0.11 mm at 10 Hz and  $\pm$  0.04 mm at 30 Hz. Static E-modulus: tangent modulus from the spring characteristic. Measurement according to DIN 53513.

Form factor q = 3.

Black-grey

Static load: up to N/mm<sup>2</sup> **6.000** 

Dynamic load: up to N/mm<sup>2</sup> 9.000

Load peaks: up to N/mm<sup>2</sup> 18.000



## ISOLDYN®-6000 Polyurethane foam mats

Closed cellular polyether-urethane mats for structure-borne sound insulation and vibration protection

- Does not absorb water
- Low natural frequency
- High insulating effect with shocks / vibrations
- Low dynamic stiffening factor
- Constant characteristic values over a long service life
- Resistant to concrete grouts, oils, diluted acids and alkalis



Product- / Logistics data				
Thickness mm	6, 12.5 and 25	Stockholding	Store in a dry place, do not expose to direct sunlight	
Length x width mm	1'000 x 500	Storage period	Unlimited with correct storage	

Technical data				
Size	Unit	Value	Test method	Comment
Mechanical loss factor		0.11	DIN 53513*	Guid value
Static E-modulus	N/mm <sup>2</sup>	55	DIN 53513*	Compression: 6.000 N/mm <sup>2</sup>
Dynamic shear modulus at 10 Hz	N/mm <sup>2</sup>	135	DIN 53513*	Compression: 6.000 N/mm <sup>2</sup>
Residual compression set	%	< 5	DIN EN ISO 1856	50 %, + 23 °C, 70 h 30 min after unloading
Thermal conductivity	W/(m·k)	ca. 0.17	DIN 52612-1	
Coefficient of friction with steel $\mu_s$		0.5		Dry
Coefficient of friction with concrete $\mu_{\scriptscriptstyle S}$		0.7		Dry
Inflammability		E	EN 13501-1	Normal flammable
Long-term temperature resistance	°C	Long-term: -30 to +70 Short-term: to +120		

<sup>\*</sup> Measurement based on the corresponding standard.

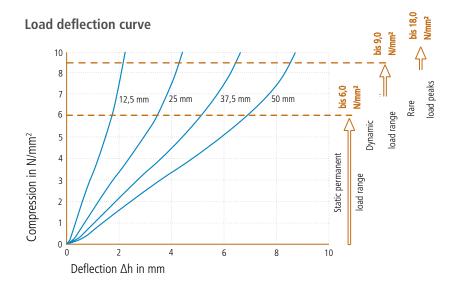
Installation	
Surface	Avoid direct contact between ISOLDYN® mats and materials containing plasticiser (use a release layer).  Requirements storage area: Load capacity > dynamic load. No loose parts. Power troweled. Free from teeth and gravel nets.  Flatness under 2-m-lath ≤ 10 mm, > 10 mm re-profiling. Clean swept (Standard SIA-271:2007)
Installation	The connection points are fully pushed. Before applying the concrete, the ISOLDYN® mats are protected with a 2-ply tough PE foil (0.2 mm) and the overlap trapped to avoid cement contamination.
Screed requirement	Concrete or underlay flooring with flowable consistency as well as aerated concrete are only suitable to a limited extent and require additional, special sealing measures.
Processing instructions	The installation of ISOLDYN® mats should only be carried out by trained personnel. When using auxiliary products, e.g. adhesives, the ambient temperature and humidity must meet the requirements of the auxiliary products used. The corresponding product data sheets are to be considered.
Water	ISOLDYN® mats do not absorb moisture. As a result, the full structure-borne sound insulation is maintained even when in contact with water the shell construction phase and in the final state.

Safety- and Health instructions			
Safety note	note The local safty requirements must be considered		
Transportation	The ISOLDYN® mats are not classified as "endangered products".		
Disposal Waste code according to European Waste Cataloge Ordinance: 07 02 13. Local requirements must be considered.			

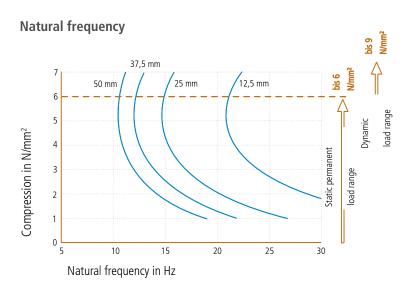


## ISOLDYN® - 6000 Polyurethane foam mats

### Important physical properties for dimensioning

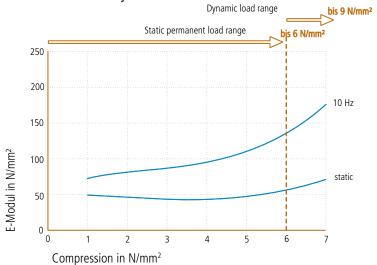


Spring characteristic curve. Test speed  $v=1\,\%$  of thickness. Test at room temperature between flat steel plates. Recording of the 3rd load. Form factor q=3.



Natural frequency of a system consisting of a rigid mass and a layer of ISOLDYN® on a rigid base. Form factor q=3.

## Modulus of elasticity



Load dependence of the static and dynamic moduli of elasticity. Dynamic E-modulus: harmonic excitation with an amplitude of  $\pm$  0.11 mm at 10 Hz and

 $\pm$  0.04 mm at 30 Hz. Static E-modulus: tangent modulus from the

spring characteristic. Measurement according to DIN 53513. Form factor q=3.



Gre۱

Static load: up to N/mm<sup>2</sup> 12.000

Dynamic load: up to N/mm<sup>2</sup> 16.000

Load peaks: up to N/mm<sup>2</sup> 24.000

# ISOLDYN® - 12000 Polyurethane foam mats

Closed cellular polyether-urethane mats for structure-borne sound insulation and vibration protection

- Does not absorb water
- Low natural frequency
- High insulating effect with shocks / vibrations
- Low dynamic stiffening factor
- Constant characteristic values over a long service life
- Resistant to concrete grouts, oils, diluted acids and alkalis



Product- / Logistics data					
Thickness mm	6, 12.5 and 25	Stockholding	Store in a dry place, do not expose to direct sunlight		
Length x width mm	2'000 x 500	Storage period	Unlimited with correct storage		

Technical data						
Size	Unit	Value	Test method	Comment		
Mechanical loss factor		0.11	DIN 53513*	Guid value		
Static E-modulus	N/mm <sup>2</sup>	140	DIN 53513*	Compression: 12.000 N/mm <sup>2</sup>		
Dynamic sher modulus at 10 Hz	N/mm <sup>2</sup>	370	DIN 53513*	Compression: 12.000 N/mm <sup>2</sup>		
Compression hardness	N/mm <sup>2</sup>	9.0		at 10% deformation		
Coefficient of friction with steel $\mu_s$		0.5		Dry		
Coefficient of friction with concrete µ <sub>s</sub>		0.7		Dry		
Inflammability		E	EN 13501-1	Normal flammable		
Long-term temperature resistance °C		Long-term: -30 to +70 Short-term: to +120				

<sup>\*</sup> Measurement based on the corresponding standard.

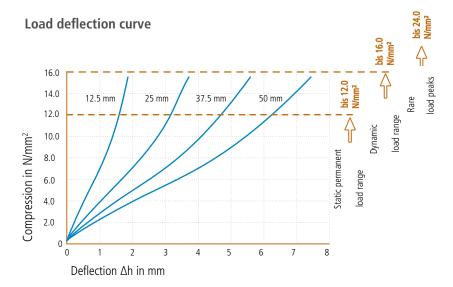
Avoid direct contact between ISOLDYN® mats and materials containing plasticiser (use a release layer).  Requirements storage area: Load capacity > dynamic load. No loose parts. Power troweled. Free from teeth and gravel nets.  Flatness under 2-m-lath ≤ 10 mm, > 10 mm re-profiling. Clean swept (Standard SIA-271:2007)		
The connection points are fully pushed. Before applying the concrete, the ISOLDYN® mats are protected with a 2-ply tough PE foil (0.2 mm) and the overlap trapped to avoid cement contamination.		
Concrete or underlay flooring with flowable consistency as well as aerated concrete are only suitable to a limited extent and require additional, special sealing measures.		
The installation of ISOLDYN® mats should only be carried out by trained personnel. When using auxiliary products, e.g. adhesives, the ambient temperature and humidity must meet the requirements of the auxiliary products used. The corresponding product data sheets are to be considered.		
ISOLDYN® mats do not absorb moisture. As a result, the full structure-borne sound insulation is maintained even when in contact with water the shell construction phase and in the final state.		

Safety- and Health instructions		
Safety note	The local safty requirements must be considered	
Transportation	The ISOLDYN® mats are not classified as "endangered products".	
Disposal	Disposal Waste code according to European Waste Cataloge Ordinance: 07 02 13. Local requirements must be considered.	

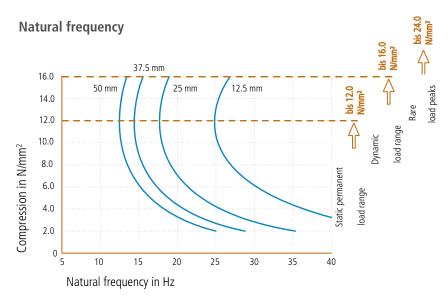


## ISOLDYN® - 12000 Polyurethane foam mats

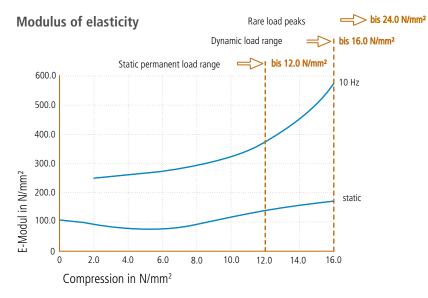
### Important physical properties for dimensioning



Spring characteristic curve. Test speed v = 1 % of thickness. Test at room temperature between flat steel plates. Recording of the 3rd load. Form factor q = 2.



Natural frequency of a system consisting of a rigid mass and a layer of ISOLDYN® on a rigid base. Form factor q=2.



Load dependence of the static and dynamic moduli of elasticity.

Dynamic E-modulus: harmonic excitation with an amplitude of  $\pm$  0.11 mm at 10 Hz.

Static E-modulus: tangent modulus from the spring characteristic. Measurement according to DIN 53513. Form factor q = 2.

# Expertise for your construction project

HBT-ISOL's innovative soundproofing solutions protect buildings, building users and occupants from internal and external sound and vibration.

- » protection for people and buildings from vibrations from rail traffic
- » effective insulation of structure-borne sound in mixed use buildings, such as residentialshopping, offices-commercial, gymnastics above classrooms, etc.
- » impact sound insulation in staircases
- » vibration and structure-borne sound insulation for HVAC
- » crack-reduction and sound insulation between walls and ceilings
- » structure-borne sound insulating fixings
- » vibration protection for production plants

First-class products, many years of experience and personalised support from conception to execution guarantee clients, building planners and building contractors economic efficiency and technical safety.



HBT-ISOL AG Im Stetterfeld 3 CH-5608 Stetten T +41 56 648 41 11 info@hbt-isol.com hbt-isol.com HBT-ISOL SA Rue Galilée 6 (CEI 3) CH-1400 Yverdon-les-Bains T +41 24 425 20 46 yverdon@hbt-isol.com hbt-isol.com HBT-ISOL GmbH Friedrichstrasse 95 DE-10117 Berlin T +49 30 9789 4707 info@hbt-isol.com hbt-isol.com

