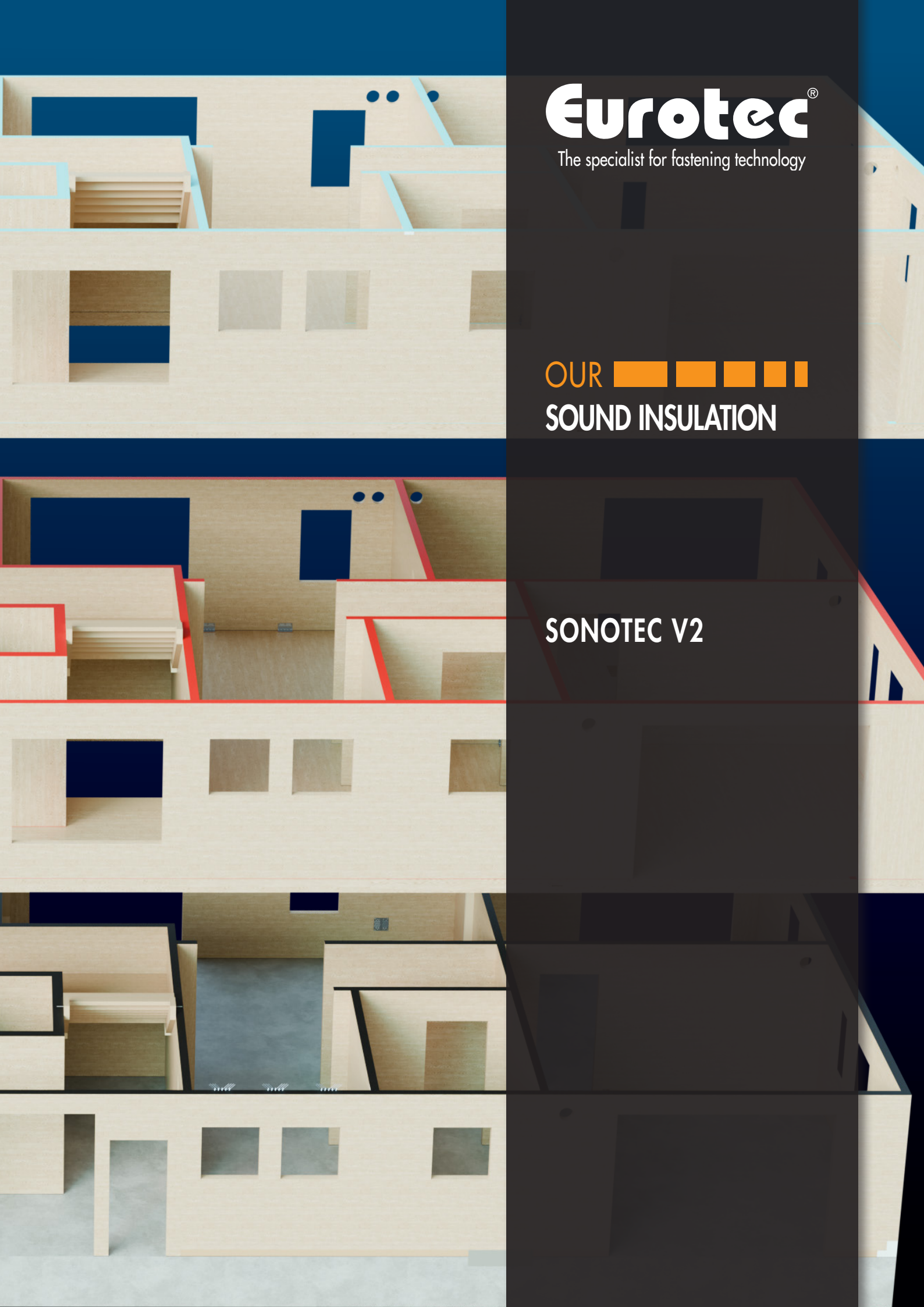


Eurotec®

The specialist for fastening technology

OUR SOUND INSULATION

SONOTEC V2

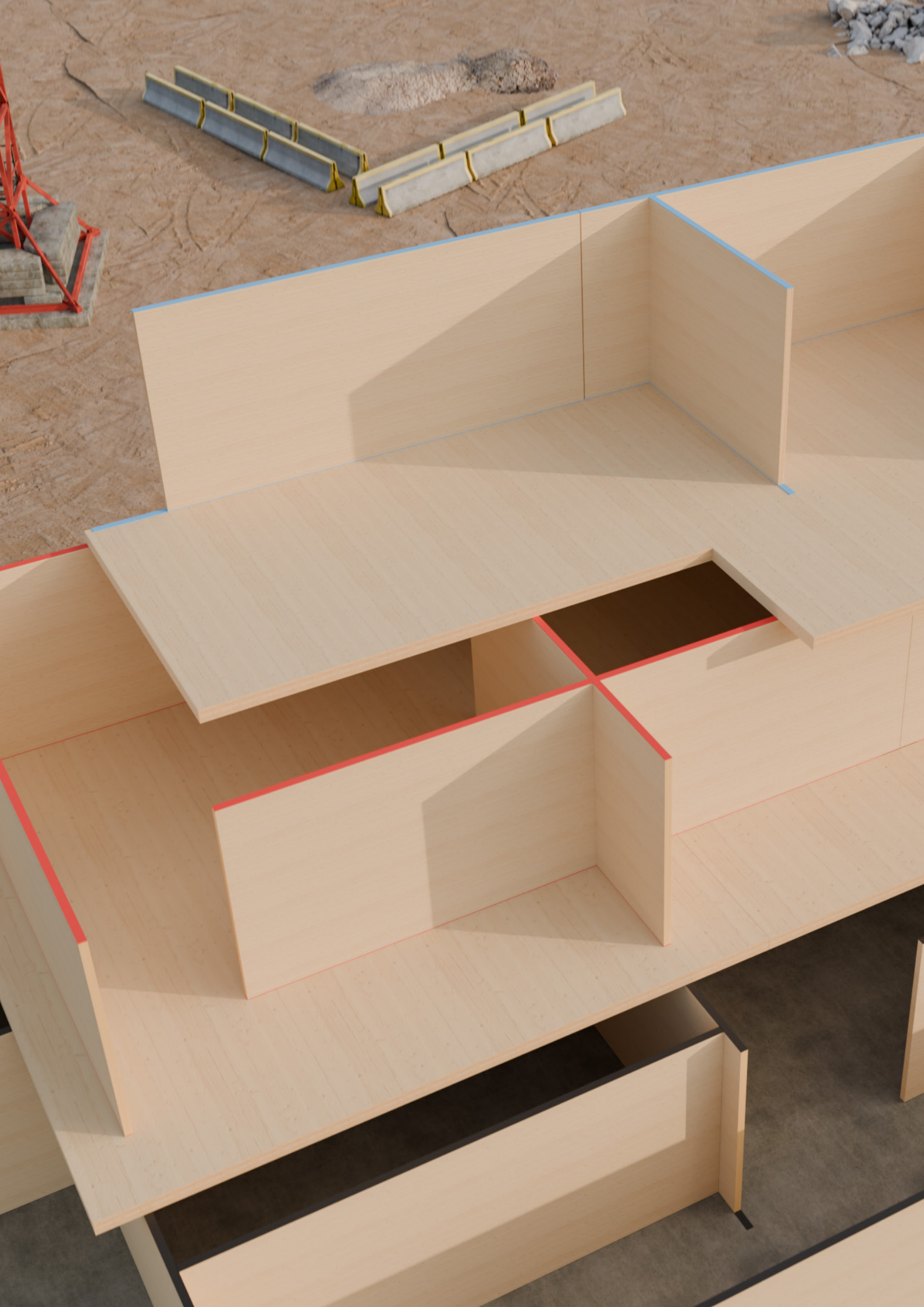
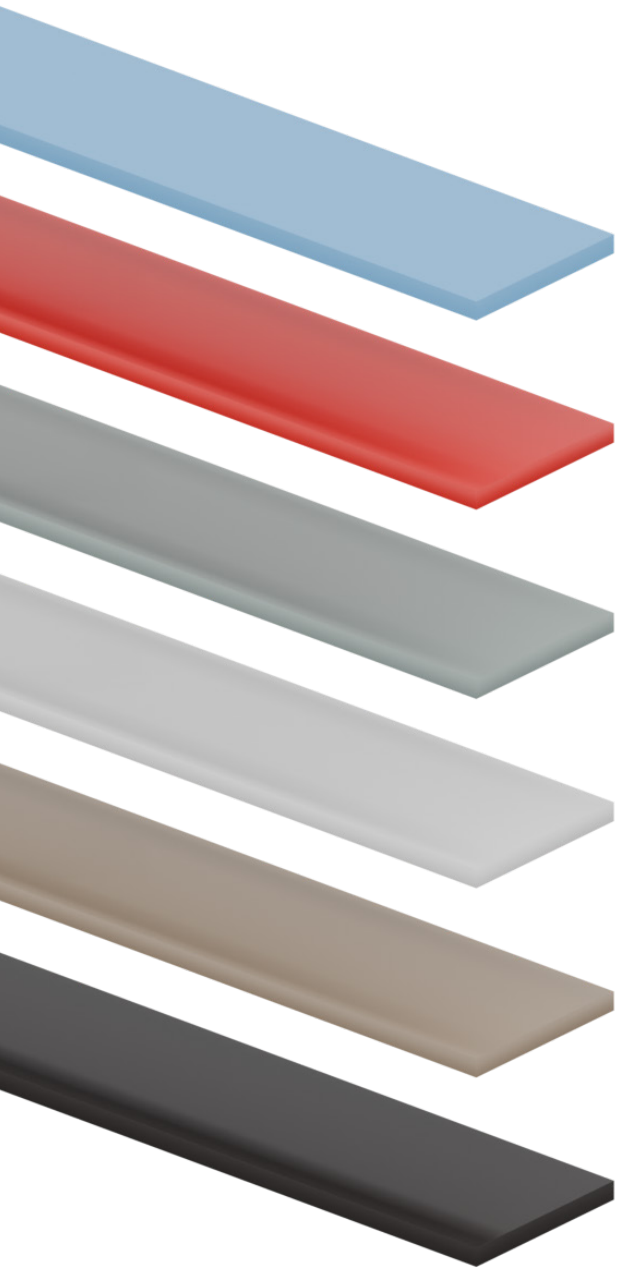


TABLE OF CONTENTS



SONOTEC V2

The SonoTec V2 line bearings enable you to specifically counteract the transmission of sound in the flank. Using the six different variants with a hardness of up to 58 Shore A, the line bearings are even used in high-rise buildings and have a real sound insulation measurement R'W of up to 7 dB. The versatility of the line bearing makes it suitable for CLT, GLT, LVL and for steel and concrete. If the SonoTec V2 (line bearings) are used, the Eurotec CLT brackets do not require any more decoupling (this has been certified).

ADVANTAGES/FEATURES

- Resistant, waterproof and airtight
- Enduring quality
- Tested for harmful substances and safe
- Environmentally friendly and sustainable
- Tested real sound insulation measurement R'W of up to 7 dB
- Six variants with hardnesses of up to 58 Shore
- Versatile uses (CLT, GLT, LVL, steel and concrete)

MATERIAL

THERMOPLASTIC POLYMER – QUALITY, ENVIRONMENTAL AWARENESS AND PRECISION

The SonoTec V2 is more than just a strip that provides sound insulation – it is the result of modern material technology. Made from a high-quality thermoplastic polymer, it combines excellent sound insulation with exceptional durability and precise dimensional stability.

The innovative polymer delivers effective sound absorption, reduces disruptive vibrations and guarantees long-term functional reliability, even in varying temperatures or when subjected to mechanical stresses. Its closed, fine structure allows for easy processing and clean edges – making it ideal for professional use.

The SonoTec V2 also leads the way when it comes to sustainability: The thermoplastic material is recyclable, environmentally friendly and bears the SG seal for materials that have been tested for harmful substances – providing maximum safety and a good feeling with every application. With the SonoTec V2, you are choosing quality, environmental awareness and acoustic precision. The line bearings were developed specifically to dampen noise and make rooms noticeably quieter.

WATERPROOF AND AIRTIGHT

SonoTec V2 offers reliable protection against moisture and air penetration. Its dense polymer structure ensures that it remains fully water-repellent and gas-tight, even under pressure or when there are temperature fluctuations.

ENDURING QUALITY

The SonoTec V2 impresses with its constant stability and long-lasting elasticity. The material retains its shape and function even when it is used intensively. There is no structural failure, even after many years of use. In addition, it is resistant to cracks, UV radiation and many chemicals and resistant to oils and greases. For consistent performance you can rely on.

TESTED FOR HARMFUL SUBSTANCES AND SAFE

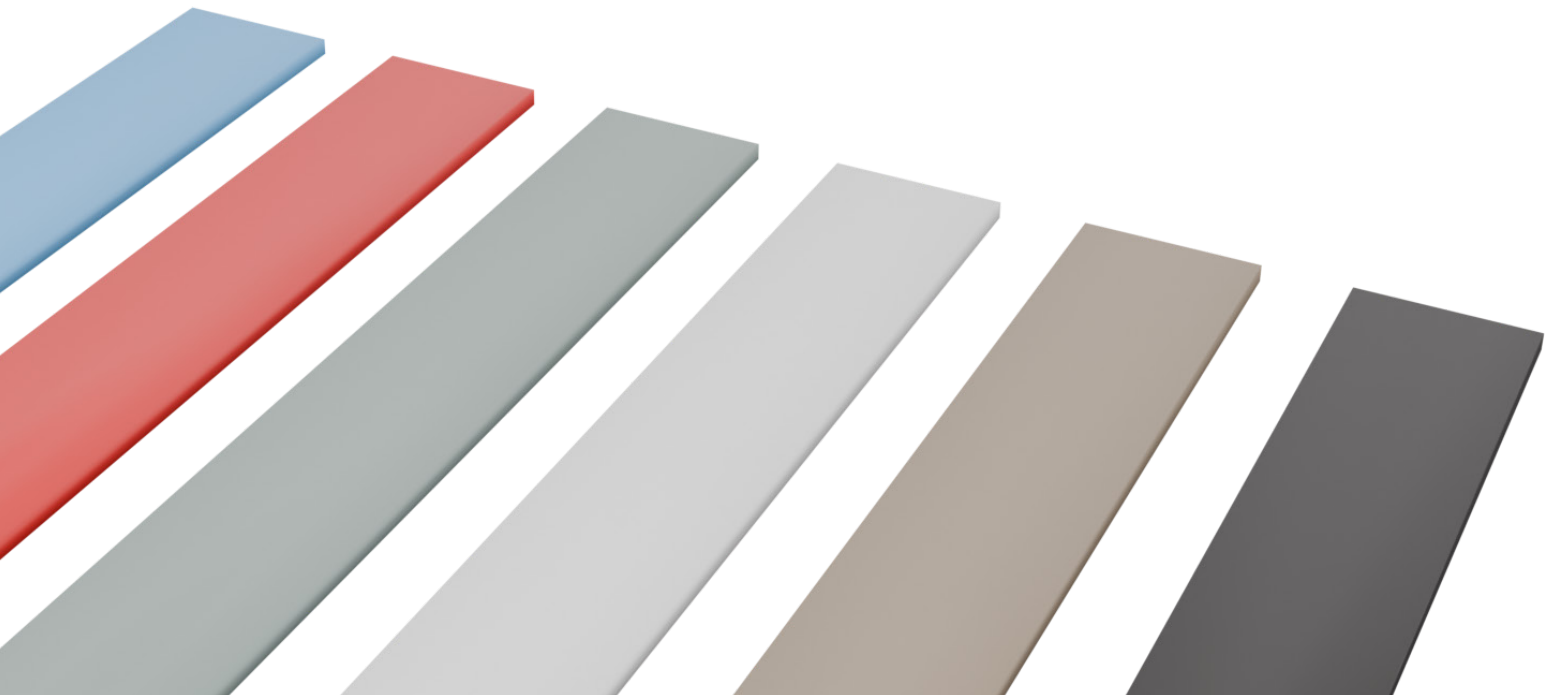
SonoTec V2 is renowned for maximum material purity and safety. It is free of DEHP, latex proteins, nanomaterials and carcinogenic substances, which means it can be used safely in sensitive areas. Tested by the renowned Pirmasens Testing and Research Institute and awarded the SG seal for materials that have been tested for harmful substances, the SonoTec V2 guarantees maximum safety and confidence – Made in Germany.

ENVIRONMENTALLY FRIENDLY AND SUSTAINABLE

SonoTec V2 was developed with a focus on the environment and conserving resources. The thermoplastic polymer that is used is recyclable and enables eco-conscious recycling. Thanks to its long lifespan and the fact it can be reused, the SonoTec V2 makes a lasting contribution to preventing waste – delivering technology with responsibility.

PRODUCT TABLE

SonoTec V2							
Art. no.	Designation	Dimension [mm]			Colour	Hardness [Shore A]	PU
		Length	Width	Height			
946360	SonoTec V2 25 - 80	1150	80	10	Light blue	25	20
946340	SonoTec V2 25 - 100	1150	100	10	Light blue	25	20
946361	SonoTec V2 25 - 120	1150	120	10	Light blue	25	20
946362	SonoTec V2 25 - 140	1150	140	10	Light blue	25	20
946364	SonoTec V2 30 - 80	1150	80	10	Red	30	20
946341	SonoTec V2 30 - 100	1150	100	10	Red	30	20
946365	SonoTec V2 30 - 120	1150	120	10	Red	30	20
946366	SonoTec V2 30 - 140	1150	140	10	Red	30	20
946367	SonoTec V2 30 - 160	1150	160	10	Red	30	20
946346	SonoTec V2 35 - 100	1160	100	10	Light grey	35	20
946369	SonoTec V2 35 - 120	1160	120	10	Light grey	35	20
946370	SonoTec V2 35 - 140	1160	140	10	Light grey	35	20
946371	SonoTec V2 35 - 160	1160	160	10	Light grey	35	20
946342	SonoTec V2 40 - 100	1140	100	10	White	40	20
946373	SonoTec V2 40 - 120	1140	120	10	White	40	20
946374	SonoTec V2 40 - 140	1140	140	10	White	40	20
946375	SonoTec V2 40 - 160	1140	160	10	White	40	20
946343	SonoTec V2 50 - 100	1120	100	10	Stone	50	20
946377	SonoTec V2 50 - 120	1120	120	10	Stone	50	20
946378	SonoTec V2 50 - 140	1120	140	10	Stone	50	20
946379	SonoTec V2 50 - 160	1120	160	10	Stone	50	20
946344	SonoTec V2 58 - 100	1100	100	10	Black	58	20
946381	SonoTec V2 58 - 120	1100	120	10	Black	58	20
946382	SonoTec V2 58 - 140	1100	140	10	Black	58	20
946383	SonoTec V2 58 - 160	1100	160	10	Black	58	20



COMPARISON OF PRODUCTS AT A GLANCE

Product	Strength	Max. applicable load (compression 2 mm) [N/mm²]	Acoustic improvement in real airborne sound insulation measurement ΔR'w [dB]	Dynamic modulus of elasticity E´ 5 Hz - E´ 50 Hz [MPa]	Loss modulus E´´ 5 Hz - E´´ 50 Hz [MPa]	Damping factor tan δ 5 Hz - tan δ 50 Hz
SonoTec V2 25	10	0,157	7	1,63 - 2,33	0,20 - 0,34	0,12 - 0,14
SonoTec V2 30	10	0,194	6-7	1,85 - 2,61	0,25 - 0,41	0,13 - 0,16
SonoTec V2 35	10	0,247	6-7	2,83 - 3,85	0,36 - 0,57	0,13 - 0,15
SonoTec V2 40	10	0,371	6-7	3,84 - 5,62	0,48 - 0,78	0,13 - 0,14
SonoTec V2 50	10	0,637	6-7	6,07 - 8,76	0,79 - 1,20	0,13 - 0,14
SonoTec V2 58	10	1,25	6-7	9,34 - 14,21	1,12 - 1,97	0,12 - 0,14

STRUCTURAL PROPERTIES

LOAD TABLE IN KG PER LINEAR METRE FOR SONOTEC V2

Tested in 2025 by MFPA Leipzig GmbH, examiner: Dr. – Ing. Stephan Reichel

The maximum loads for SonoTec V2 with 10 % (1 mm) and 20 % (2 mm) compression are shown below. We recommend limiting the maximum deformation to 10 % (1 mm) as any degree of compression higher than this may cause the connecting elements between the components to fail or become damaged. The maximum permitted compression is 2 mm (20 %).

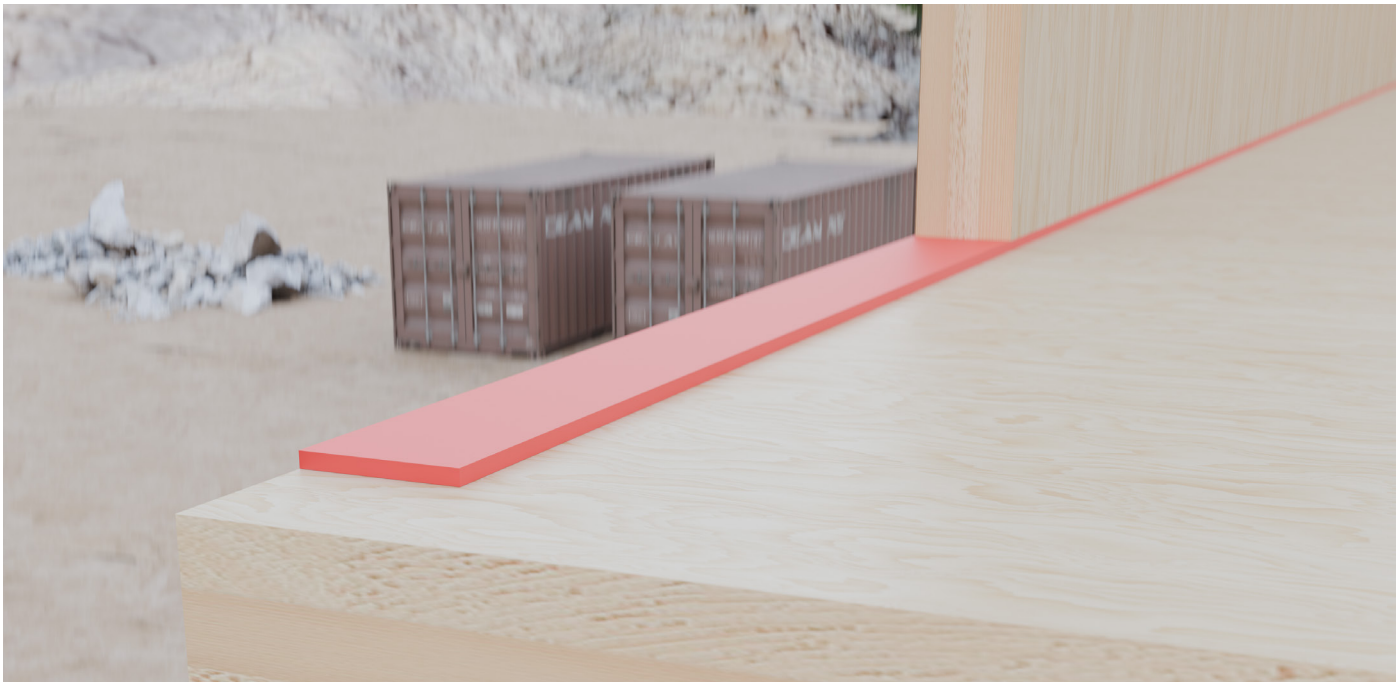
WITH SURFACE TREATMENT (SILICONE OIL)

	100 mm Width		120 mm Width		140 mm Width		160 mm Width	
Compression	10 % (1 mm)	20 % (2 mm)	10 % (1 mm)	20 % (2 mm)	10 % (1 mm)	20 % (2 mm)	10 % (1 mm)	20 % (2 mm)
SonoTec V2 25	1300 kg	1570 kg	1560 kg	1884 kg	1820 kg	2198 kg	2080 kg	2512 kg
SonoTec V2 30	1620 kg	1940 kg	1944 kg	2328 kg	2268 kg	2716 kg	2592 kg	3104 kg
SonoTec V2 35	2060 kg	2390 kg	2472 kg	2868 kg	2884 kg	3346 kg	3296 kg	3824 kg
SonoTec V2 40	3190 kg	3710 kg	3828 kg	4452 kg	4466 kg	5194 kg	5104 kg	5936 kg
SonoTec V2 50	5910 kg	6370 kg	7092 kg	7644 kg	8274 kg	8918 kg	9456 kg	10192 kg
SonoTec V2 58	10750 kg	12500 kg	12900 kg	15000 kg	15050 kg	17500 kg	17200 kg	20000 kg

WITHOUT SURFACE TREATMENT

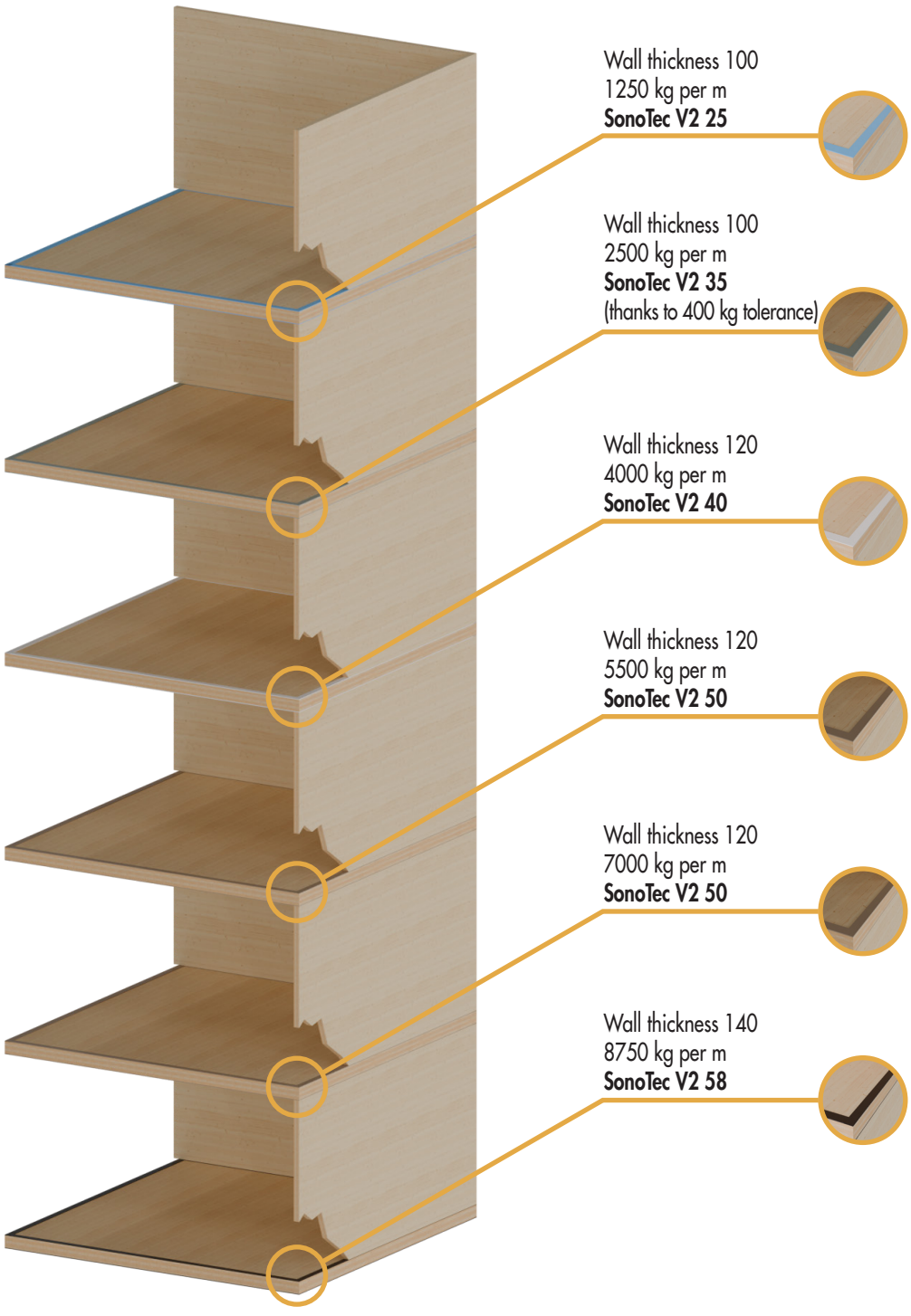
	100 mm Width		120 mm Width		140 mm Width		160 mm Width	
Compression	10 % (1 mm)	20 % (2 mm)	10 % (1 mm)	20 % (2 mm)	10 % (1 mm)	20 % (2 mm)	10 % (1 mm)	20 % (2 mm)
SonoTec V2 25	1250 kg	1510 kg	1500 kg	1812 kg	1750 kg	2114 kg	2000 kg	2416 kg
SonoTec V2 30	1530 kg	1830 kg	1836 kg	2196 kg	2142 kg	2562 kg	2448 kg	2928 kg
SonoTec V2 35	2140 kg	2470 kg	2568 kg	2964 kg	2996 kg	3458 kg	3424 kg	3952 kg
SonoTec V2 40	3140 kg	3650 kg	3768 kg	4380 kg	4396 kg	5110 kg	5024 kg	5840 kg
SonoTec V2 50	5590 kg	6020 kg	6708 kg	7224 kg	7826 kg	8428 kg	8944 kg	9632 kg
SonoTec V2 58	10570 kg	12260 kg	12684 kg	14712 kg	14798 kg	17164 kg	16912 kg	19616 kg

The maximum weight tolerance is 400 kilograms per metre. This means, for example, that the weight of SonoTec 30 with a width of 100 mm should be between 1420 and 1820 kg. The softest available variant should be chosen to provide a significantly better level of sound insulation. Although harder versions have a higher load-bearing capacity, the sound-insulating properties decrease as the hardness increases. For example, with a width of 100 mm and a weight of 1600 kg per linear metre, SonoTec V2 30 should be chosen rather than SonoTec V2 35.



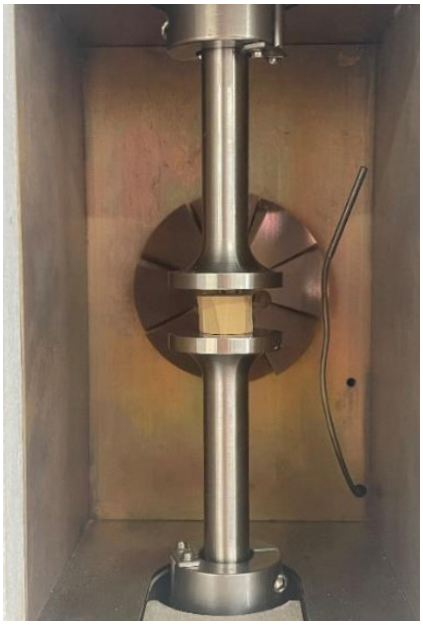
MAXIMUM LOADS EXPLAINED

An estimated load-bearing capacity of around 1100 kg to 1400 kg per linear metre can be assumed for each floor. The following example shows a possible strategy for distributing SonoTec over several floors, taking into account a maximum deformation of 20 %. This scenario is for the purpose of illustration only; the actual planning must be adapted to reflect the specific structural requirements and design of the respective building.



THE DYNAMIC MODULUS OF ELASTICITY AND DAMPING FACTOR ACCORDING TO ISO 4664-1

Tested in 2025 by Fraunhofer Institute for Wood Research WKI, , examiner: Filip Majstorovic

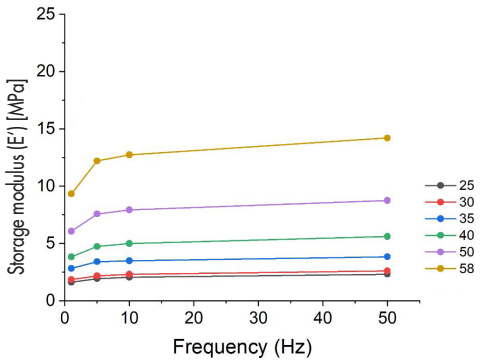


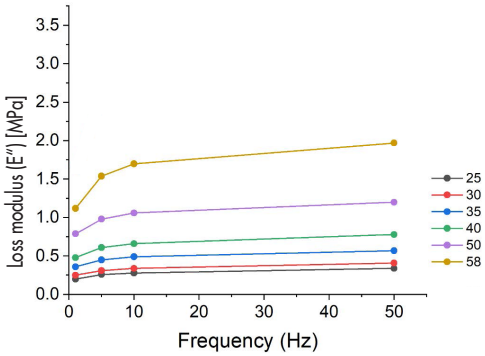
Test chamber for the dynamic mechanical thermal analysis.
The disc specimen is placed between the upper and lower pressure specimen holders. The upper holder controls the dynamic load during the measurement, while the lower holder remains fixed in place.

The dynamic modulus of elasticity and damping factor explained in brief

According to ISO 4664-1, the dynamic modulus of elasticity is typically determined using a dynamic mechanical analyser testing machine. For this purpose, a standardised rubber test specimen (e.g. a rectangular strip or short rod) is clamped in a clamping device (axially or with a torsion mount). The test specimen is subjected to sinusoidal, forced oscillation (constant frequency and amplitude) – with tensile, compressive, shear or bending loads all being possible. During the test, the force (tension) and displacement (strain) are recorded; the complex modulus of elasticity (storage modulus E´ and loss modulus E´´) and the damping factor tan δ are calculated from this. The measurement is performed in a temperature-controlled furnace (e.g. 23 °C or temperature-program-controlled) over a typical frequency range of 1-50 Hz and with small strain amplitudes (linear range).

Description	Storage modulus (E') [MPa]				Loss modulus (E'') [MPa]				Damping factor (tan δ)			
	1 Hz	5 Hz	10 Hz	50 Hz	1 Hz	5 Hz	10 Hz	50 Hz	1 Hz	5 Hz	10 Hz	50 Hz
SonoTec V2 25	1.63	1.94	2.06	2.33	0.20	0.26	0.28	0.34	0.12	0.13	0.14	0.14
SonoTec V2 30	1.85	2.18	2.31	2.61	0.25	0.31	0.34	0.41	0.13	0.14	0.15	0.16
SonoTec V2 35	2.83	3.42	3.50	3.85	0.36	0.45	0.49	0.57	0.13	0.13	0.14	0.15
SonoTec V2 40	3.84	4.75	5.01	5.62	0.48	0.61	0.66	0.78	0.13	0.13	0.13	0.14
SonoTec V2 50	6.07	7.58	7.94	8.76	0.79	0.98	1.06	1.20	0.13	0.13	0.13	0.14
SonoTec V2 58	9.34	12.21	12.74	14.21	1.12	1.54	1.70	1.97	0.12	0.13	0.13	0.14



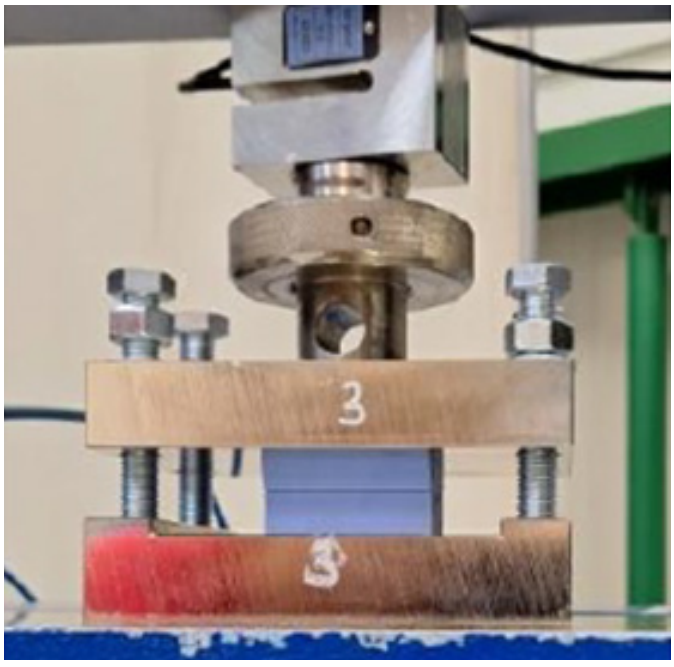


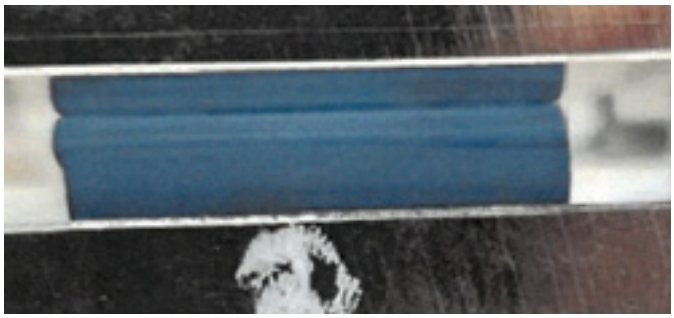
COMPRESSION SET ACCORDING TO DIN EN ISO 844

Tested in 2025 by MFPA Leipzig GmbH, examiners: Dipl.-Ing. M. Orgass and Dipl.-Ing. M. Maske

Our product is designed in a way that ensures it will still work reliably and retain its elasticity even after many years of use. To assess this property, DIN EN ISO 844 defines a test method for determining the compression set once the product has been compressed to 50 % for 22 hours.

Sample	Hardness	Compression set c.s. [%]
SonoTec V2 25	25	11,4
SonoTec V2 30	30	10,0
SonoTec V2 35	35	10,2
SonoTec V2 40	40	9,9
SonoTec V2 50	50	13,4
SonoTec V2 58	58	15,2





Compression set
explained in brief

The test of the compression set according to DIN EN ISO 844 involves examining the extent to which SonoTec remains permanently deformed after being subjected to a defined compressive load. To do this, a sample with a defined size is first prepared and then measured very precisely to determine its initial height. This sample is then positioned between two plates in a testing machine and pressed together with a precisely defined force or up to a compression level of 50 %. This load is maintained constantly for 22 hours to ensure that the material has the opportunity to deform under the pressure.

Once the load has been removed, the sample is allowed to recover for half an hour before the height is measured again. By comparing the original height with the height after the recovery phase, it is possible to determine what proportion of the deformation is retained permanently. This “remaining” deformation is referred to as the compression set. The result shows the extent to which a material returns to its original shape after being subjected to a load and thus provides an indication of its durability and dimensional stability under real-life application conditions.

SOUND-INSULATING PROPERTIES

PLANNING CERTAINTY THANKS TO REAL-LIFE TESTS

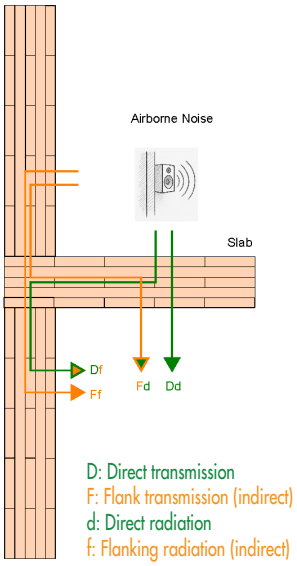
STRUCTURE-BORNE SOUND TRANSMISSION EXPLAINED

Airborne sound – impact sound

Real airborne sound insulation measurement R'w

- Describes the sound insulation of components against airborne sound (e.g. loudspeakers)
- The higher the R'w value, the better the insulation.
- Can be improved by SonoTec V2
- Transmission paths:
  Ceiling–ceiling Dd (1x)
  Ceiling–flank Df (4x)
  Flank–ceiling Fd (4x)
  Flank–flank Ff (4x)

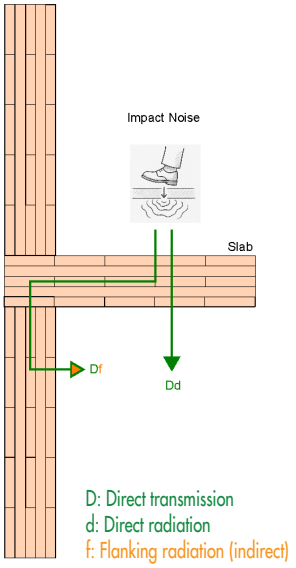
→ 13 transmission paths, mainly via the flanks.



Real impact sound level measurement L'n,w

- Describes the sound insulation of components against impact sound (e.g. footsteps, furniture sliding)
- The lower the L'n,w value, the better the insulation
- Is reduced primarily by secondary installations, such as grit fill, an impact sound insulation panel and dry screed
- Transmission paths:
  Ceiling–ceiling Dd (1x)
  Ceiling–flank Df (4x)

→ 5 transmission paths, mainly via the ceiling.



SOUND INSULATION CLASSES ACCORDING TO DEGA GUIDELINE 103-1

It is crucial to select the desired sound insulation class carefully because this will largely determine the level of acoustic comfort that is achieved in the finished building and what structural measures need to be put in place to achieve this. If requirements are clearly defined at an early stage, this will avoid any misunderstandings, safeguard the quality of the planning and help prevent any subsequent adjustments or conflicts between the client, the planner and the party executing the construction work.

DEGA Guideline 103-1 (Sound insulation in residential construction) offers a practical system of classes for classifying and agreeing on enhanced sound insulation requirements above the minimum requirements that are set out by the building supervisory authorities. It enables us to clearly define different comfort levels and stipulate them at the planning stage.

Class	Airborne sound R´w	Impact sound L´n,w	Description for sound insulation	Typical building structures
A*	<51	>60	Very good sound insulation Undisturbed living, with almost no need to consider neighbours	Generally multi-layer design. Multi-layer designs make it possible to provide better sound insulation in the area of impact sound insulation and structure-borne sound transmission, for example. The requirements for sound insulation can often also be achieved with lighter building structures by using a multi-layer design. Note: A special level of care and detailed advice is required for the specialist planning of residential classes belonging to classes A*, A and B.
A	≥51	≤60	Very good sound insulation Undisturbed living, with almost no need to consider neighbours	
B	≥54	≤53	Good sound insulation Quiet living is possible with mutual consideration of neighbours	
C	≥57	≤46	Good sound insulation Quiet living is possible with the customary mutual consideration of neighbours	Single or two-layer design, depending on which building materials are used.
D	≥62	≤39	Minimum sound insulation according to DIN 4109-1 for new builds Protection against unreasonable disturbance from sound transmission guaranteed	In solid construction, generally single-layer apartment partition walls.
E	≥67	≤37	Minimum sound insulation requirement according to DIN 4109-1 not met No guaranteed protection from disturbance No protection of privacy	Old existing buildings with wooden beam ceilings, light hollow bodies or similar without any floating screed structures. Partly directly applied soft resilient floor coverings, apartment partition walls of an “old” design with low bulk densities.
F	≥72	≤30	Minimum sound insulation requirement according to DIN 4109-1 not met No guaranteed protection from disturbance No protection of privacy Without a sound insulation requirement, e.g. old building without any underlays present	

EXAMINATION OF R'W AND L'N,W

Tested by the Technical University of Innsbruck, examiner: Prof. Dr. Dipl.- Ing. Anton Kraler

To examine the effectiveness of SonoTec V2 on cross-laminated timber ceiling elements, a practical test set-up replicating realistic conditions that are found on construction sites was chosen. The aim of the examination is to test how different dynamic stiffnesses, fastening variants and load conditions impact the transmission of sound (both airborne and impact sound, including flanking transmission).

Set-up overview

- The test bench consists of three spaces: transmitting space, receiver space and a small measuring space.
- The transmission is measured at five points: at each outer flank and in the receiver space.
- Its dimensions correspond to a standardised test bench (area-related and volume-related) and enable measurements according to ÖNORM EN ISO 16283-1 (airborne sound) and ÖNORM EN ISO 16283-2 (impact sound).

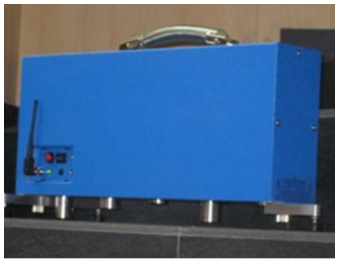
Additional facts

- It is possible to simulate practical load conditions (e.g. different floor loads or load levels) and test the effectiveness of the decoupler bearings under varying loads.
- In addition to standardised airborne sound and impact sound measurements, flank transmissions (secondary routes for sound) can be measured. To do this, accelerometers are used on flank components and ceiling elements.
- All of the measuring instruments used are calibrated in accordance with the relevant standards.

Practical benefits

- The test bench permits realistic measurements that have a practical relevance for construction. This includes examining the influence of fastening variants (number of brackets, screws, etc.), mass impact and different decoupler strip stiffnesses.
- The combination of the dimensional accuracy of the laboratory (standardised conditions) and the possibility of testing real alternative set-ups means that the test bench provides reliable data to deliver planning certainty in wood construction.

Soundbook



Standardised tapping machine

Dodecahedron

Microphone

Accelerometer

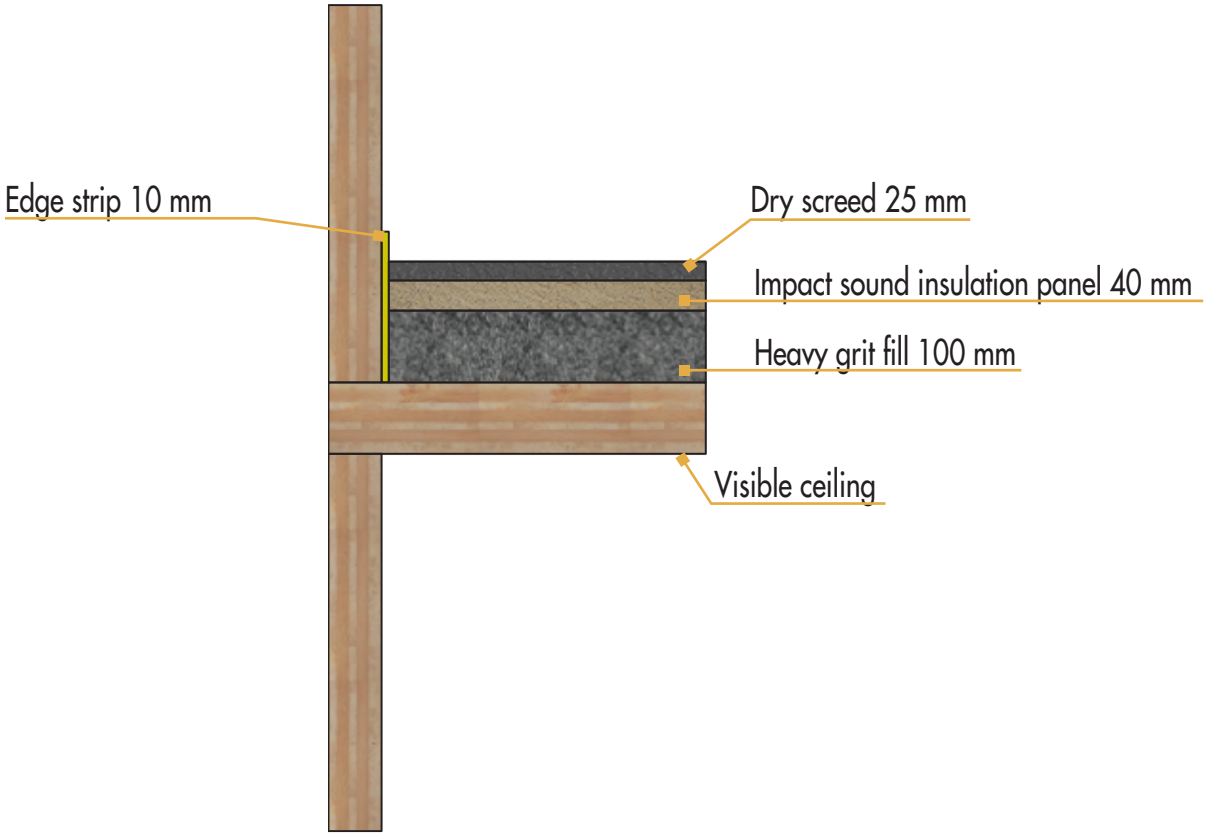
EXAMINATION OF R'W AND L'N,W

Tested by the Technical University of Innsbruck, examiner: Prof. Dr. Dipl.- Ing. Anton Kraler

As an example, we will show you three test set-ups on the following pages:
- Without a sound insulation strip
- With SonoTec V2 25 above
- With SonoTec V2 25 above and below

To illustrate the improvement, here we show you the comparison with the sound insulation classes according to DEGA Guideline 103-1.

TEST 1: WITHOUT A SOUND INSULATION STRIP



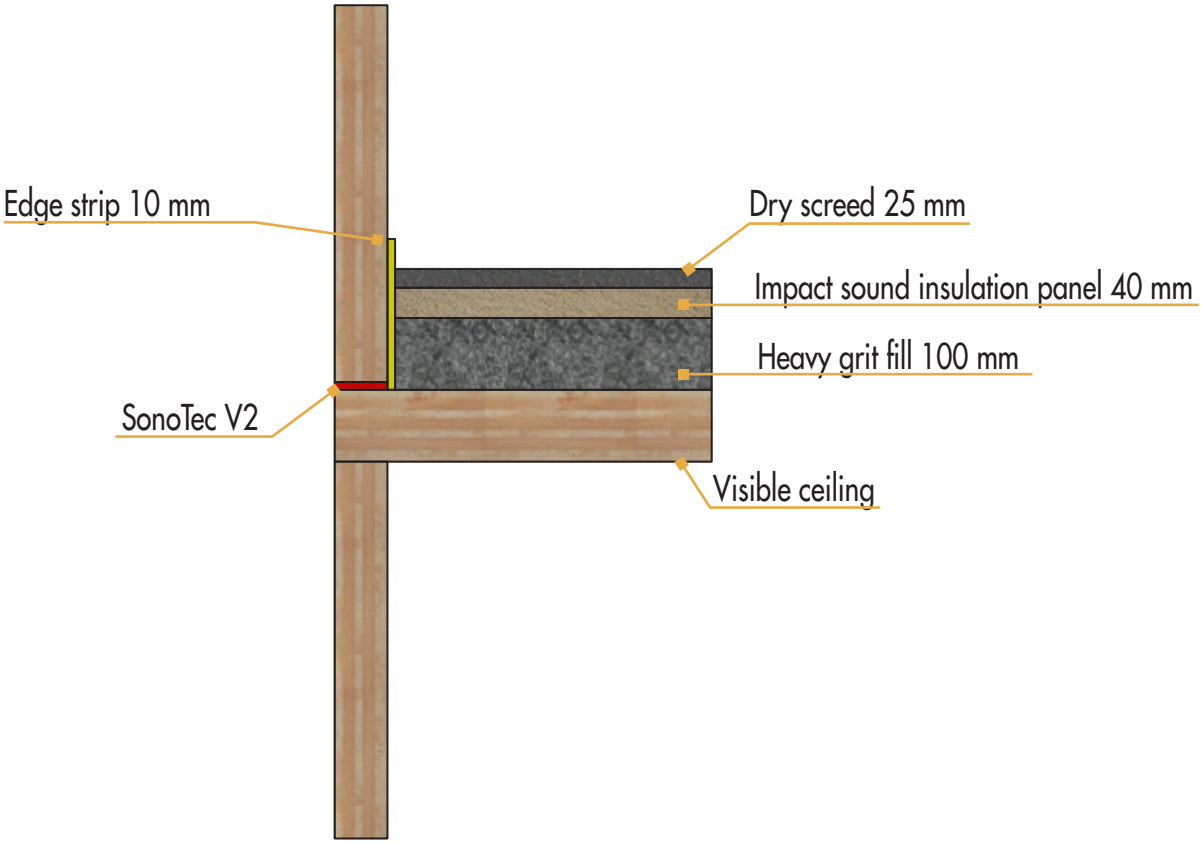
		F	E	D	C	B	A	A*
	L´n,w	>60 dB	≤60 dB	≤50 dB	≤45 dB	≤40 dB	≤35 dB	≤30 dB
	R´w	>50 dB	≥50 dB	≥54 dB	≥57 dB	≥62 dB	≥67 dB	≥72 dB
Our result	L´n,w			54 dB				
	R´w			54 dB				

Performed by the technical University of Innsbruck, examiner: Prof. Dr. Dipl.- Ing. Anton Kraler

EXAMINATION OF R'W AND L'N,W

Tested by the Technical University of Innsbruck, examiner: Prof. Dr. Dipl.- Ing. Anton Kraler

TEST 2: WITH SONOTEC V2 25 ABOVE



		F	E	D	C	B	A	A*
	L'n,w	>60 dB	≤60 dB	≤50 dB	≤45 dB	≤40 dB	≤35 dB	≤30 dB
	R'w	>50 dB	≥50 dB	≥54 dB	≥57 dB	≥62 dB	≥67 dB	≥72 dB
Unser Ergebnis	L'n,w			54 dB				
	R'w				59 dB			

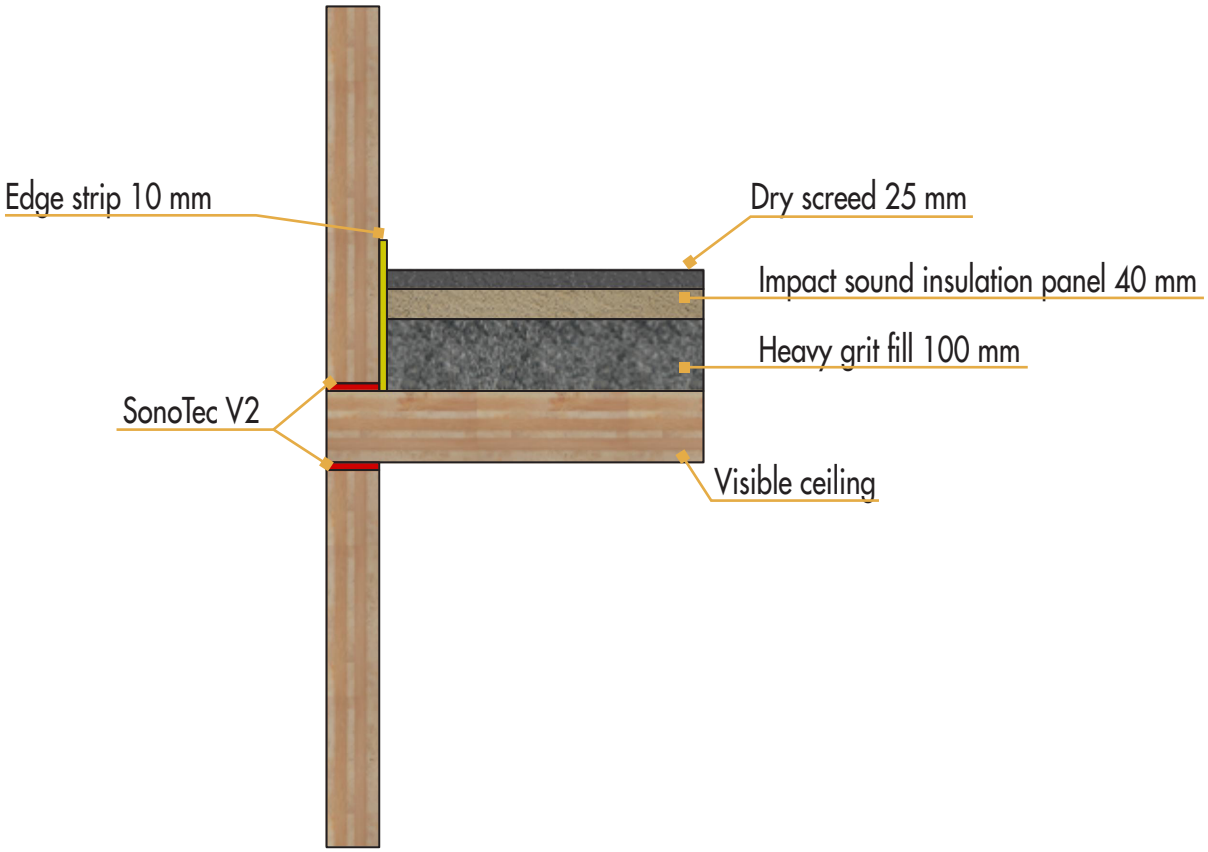
Performed by the technical University of Innsbruck, examiner: Prof. Dr. Dipl.- Ing. Anton Kraler

Note
Improvement in R'w by 5 dB

EXAMINATION OF R'W AND L'N,W

Tested by the Technical University of Innsbruck, examiner: Prof. Dr. Dipl.- Ing. Anton Kraler

TEST 3: WITH SONOTEC V2 25 ABOVE AND BELOW



		F	E	D	C	B	A	A*
	L´n,w	>60 dB	≤60 dB	≤50 dB	≤45 dB	≤40 dB	≤35 dB	≤30 dB
	R´w	>50 dB	≥50 dB	≥54 dB	≥57 dB	≥62 dB	≥67 dB	≥72 dB
Unser Ergebnis	L´n,w			54 dB				
	R´w				61 dB			

Performed by the technical University of Innsbruck, examiner: Prof. Dr. Dipl.- Ing. Anton Kraler

Note
Improvement in R'w by 5 dB

PLANNING CERTAINTY THANKS TO REAL-LIFE TESTS

Kij compared to the real measurement R'w / L'n,w

Most suppliers of sound insulation products specify the junction insulation measurement Kij as sound reducing values. This is examined in the laboratory by constructing a set-up of the type shown in Figure 1 and measuring the transmission of sound across the junctions (K13, K23, K12 in the example). However, as is apparent from Figures 2 and 3, sound is not just transmitted across the junctions, but also via a wide variety of different transmission paths. So although the Kij value provides a good guide, it is always only an approximate value. According to DIN 4109 Supplement 2 (2018) and EN 12354-1 (Annex E), an allowance of at least 2 dB, and in unfavourable cases up to 5 dB, must be taken into account when laboratory values are transferred to practical use in construction. Even then, the Kij remains just a rough guideline. In contrast, our R'w and L'n,w values from the tests conducted on the test bench provide real values that can be used reliably in planning.

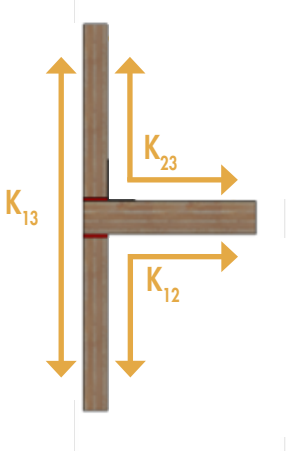


Figure 1 Test of junction insulation measurement Kij
K13: wall, K23: wall-ceiling, K12: ceiling-wall

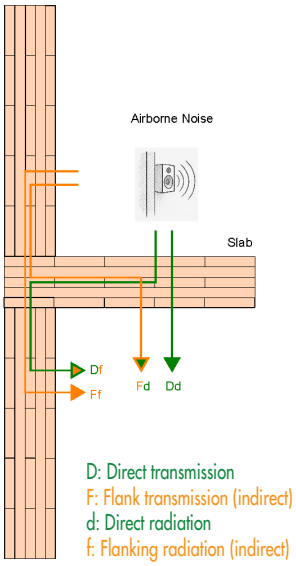


Figure 2 Transmission paths for airborne sound

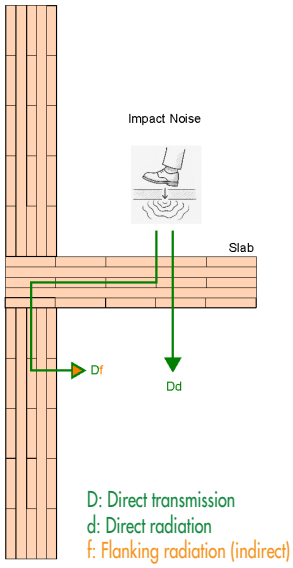


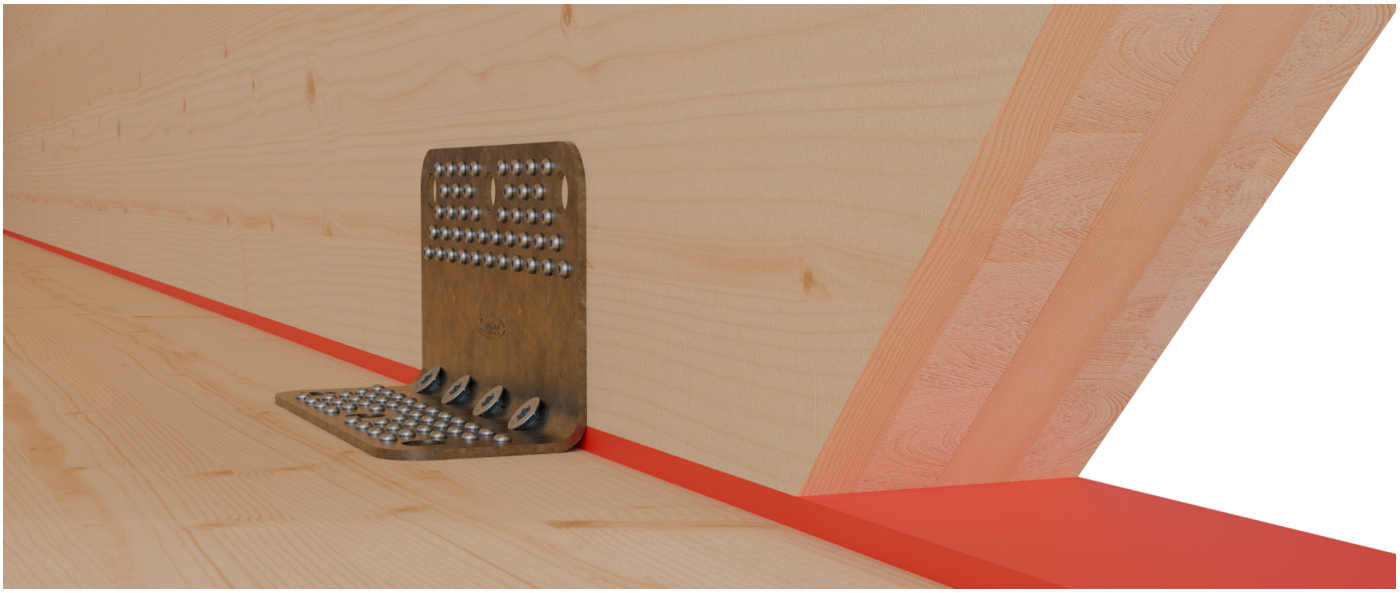
Figure 3 Transmission paths for impact sound

COMBINATION OF SONOTEC V2 AND CLT BRACKET

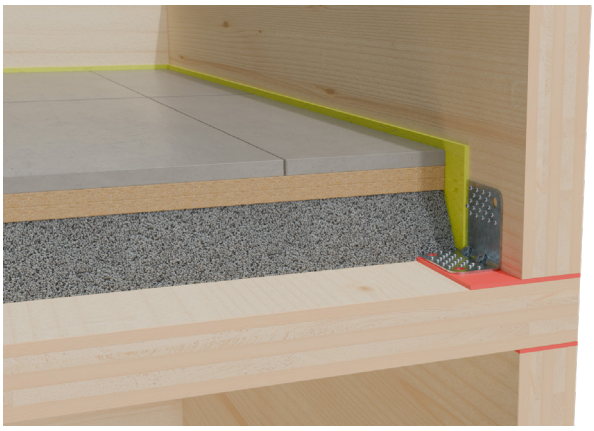
Performed by the technical University of Innsbruck, examiner: Prof. Dr. Dipl.- Ing. Anton Kraler

The brackets do not need to be decoupled thanks to SonoTec V2!
Our tests show that when using SonoTec V2 sound insulation strips and a floor structure as shown in the diagram, no decoupling is necessary at our angles. Such a floor structure (or comparable) is generally a prerequisite for achieving the required sound insulation values.

- Less material required
- Better force transmission of the Eurotec brackets
- Less work required

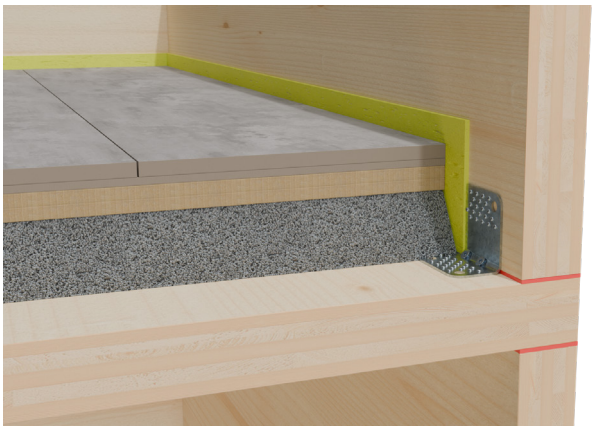


With bracket and decoupler



Assessed sound insulation measurement
R'w=61 dB
Assessed standard impact sound level
L'n,w=53 dB

With bracket without decoupler



Assessed sound insulation measurement
R'w=61 dB
Assessed standard impact sound level
L'n,w=53 dB

Note
R'w and L'n,w remain unchanged – regardless of whether or not the bracket is decoupled. This means there is no need for a decoupler under the bracket.

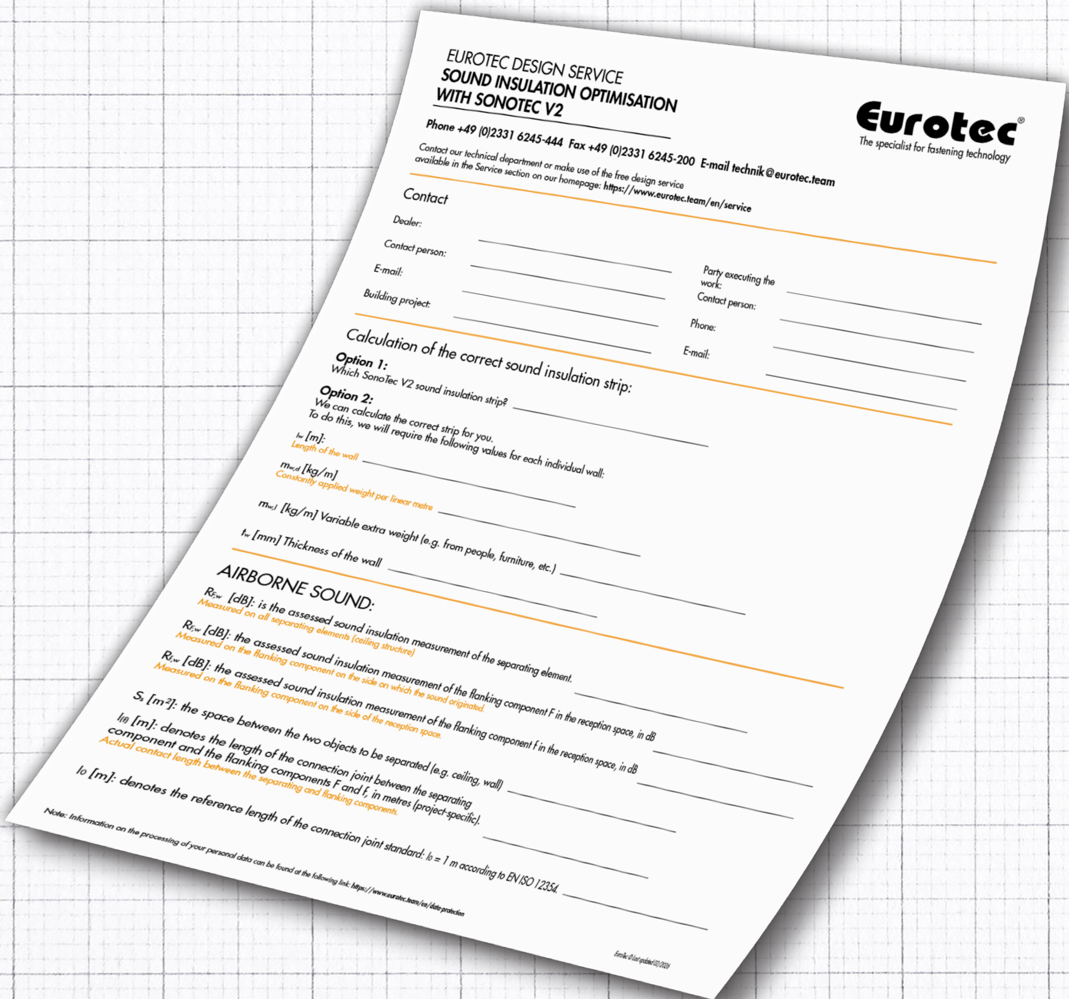
WE'LL DO THE CALCULATION FOR YOU

The standard EN ISO 12354-1/2:2017 is normally used to calculate acoustic certification. This standard was originally designed for construction involving heavy components such as steel and concrete, but not for wood and lightweight construction. Despite the reference to lightweight and wood construction, the actual reduction in sound insulation may be lower than the calculated values.

This is why we conducted extensive, practical test procedures and measurements in cooperation with the University of Innsbruck, the Fraunhofer WKO and MFPA Leipzig. We were able to demonstrate an improvement in sound insulation of 6-7 dB in the flank when the SonoTec V2 line bearings are at the ideal level of compression.

Choosing the right sound insulation strip
You can use our design service to work out the right product for optimum compression. Scan the following QR code to access the relevant design form.

Acoustic certification according to EN 12354-1 (airborne sound) and EN 12354-2 (impact sound)
If you still require acoustic certification according to EN 12354 for your project, we can of course help you with this.
Scan the following QR code to access the relevant design form.


EUROTEC DESIGN SERVICE
SOUND INSULATION OPTIMISATION WITH SONOTEC V2

Eurotec® The specialist for fastening technology

Phone +49 (0)2331 6245-444 Fax +49 (0)2331 6245-200 E-mail technik@eurotec.team

Contact our technical department or make use of the free design service available in the Service section on our homepage: **https://www.eurotec.team/en/service**

Contact

Dealer: ______

Contact person: ______

E-mail: ______

Building project: ______

Party executing the work: ______

Contact person: ______

Phone: ______

E-mail: ______

Calculation of the correct sound insulation strip:

Option 1:
Which SonoTec V2 sound insulation strip? ______

Option 2:
We can calculate the correct strip for you.
To do this, we will require the following values for each individual wall:

l_w [m]: Length of the wall ______

m_{st} [kg/m] Constantly applied weight per linear metre ______

m_{var} [kg/m] Variable extra weight (e.g. from people, furniture, etc.) ______

t_w [mm] Thickness of the wall ______

AIRBORNE SOUND:

R_{Dw} [dB]: is the assessed sound insulation measurement of the separating element. ______
Measured on all separating elements (ceiling structure)

R_{Fw} [dB]: the assessed sound insulation measurement of the flanking component F in the reception space, in dB ______
Measured on the flanking component on the side on which the sound originated.

R_{fw} [dB]: the assessed sound insulation measurement of the flanking component f in the reception space, in dB ______
Measured on the flanking component on the side of the reception space.

S_s [m²]: the space between the two objects to be separated (e.g. ceiling, wall) ______

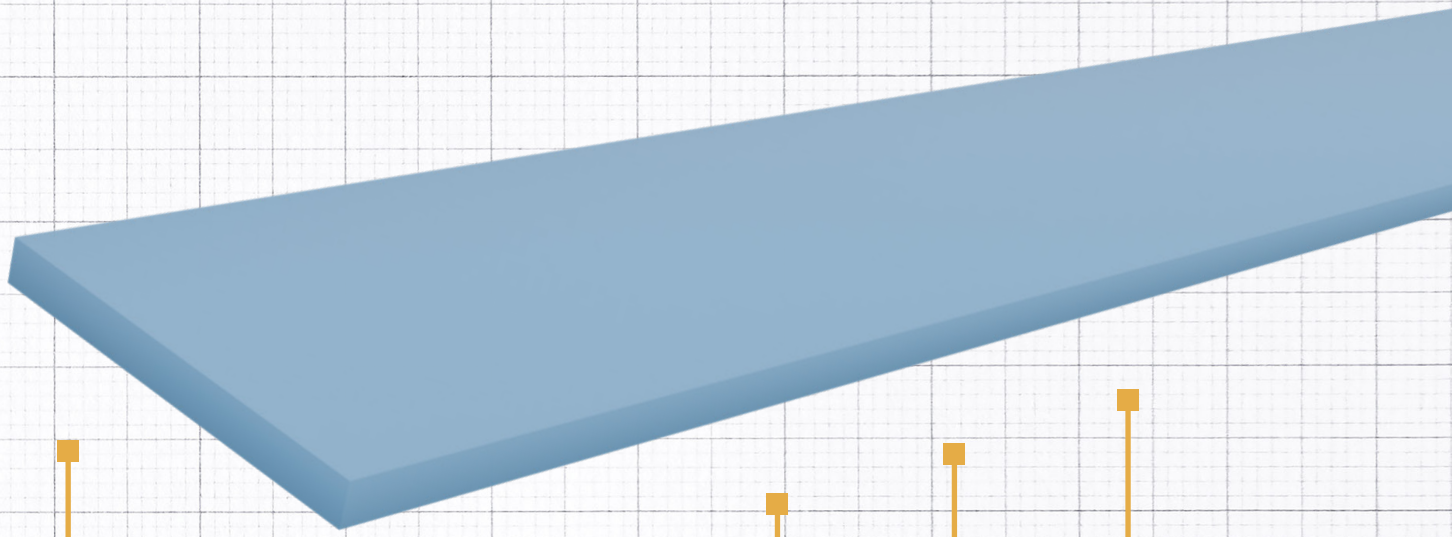
l_{f} [m]: denotes the length of the connection joint between the separating component and the flanking components F and f, in metres (project-specific). ______
Actual contact length between the separating and flanking components.

l_0 [m]: denotes the reference length of the connection joint standard: l_0 = 1 m according to EN ISO 12354. ______

Note: Information on the processing of your personal data can be found at the following link: https://www.eurotec.team/en/data-protection

TESTS OF LINE BEARINGS

To enable us to offer a safe and reliable product for sound insulation, we have subjected the line bearings to a range of different tests:



AIRBORNE SOUND
ACCORDING TO DIN 16283-1

IMPACT SOUND
ACCORDING TO DIN 16283-2

PRESSURE RESPONSE
ACCORDING TO DIN EN ISO 844

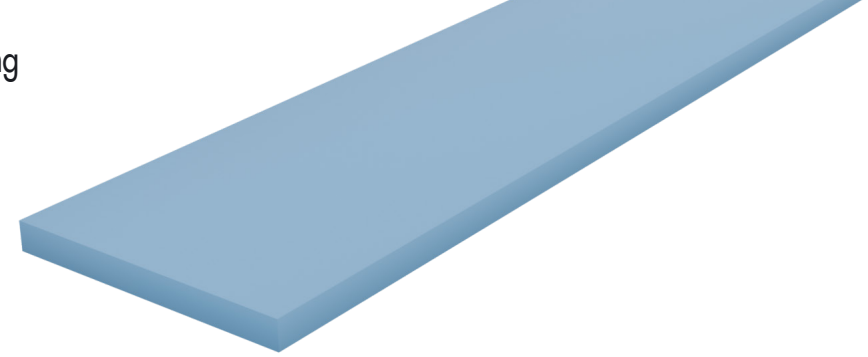
COMPRESSION SET
ACCORDING TO DIN EN ISO 844

FIRE BEHAVIOUR CLASS E
ACCORDING TO DIN EN 13501-1

JUNCTION INSULATION MEASUREMENT KIJ
ACCORDING TO DIN EN ISO 10848

DYNAMIC MODULUS OF ELASTICITY AND DAMPING FACTOR
ACCORDING TO ISO 4664-1

SONOTEC V2 25



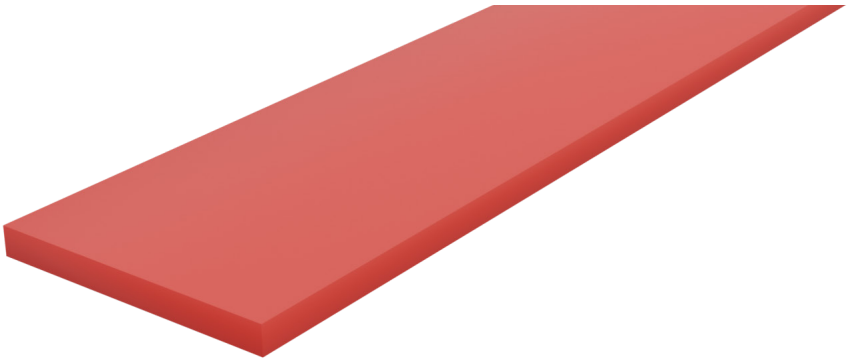
Art. no.	Designation	Dimensions [mm]			Colour	Hardness [Shore A]	PU
		Length	Width	Height			
946360	SonoTec V2 25 - 80	1150	80	10	Light blue	25	20
946340	SonoTec V2 25 - 100	1150	100	10	Light blue	25	20
946361	SonoTec V2 25 - 120	1150	120	10	Light blue	25	20
946362	SonoTec V2 25 - 140	1150	140	10	Light blue	25	20

Technical specifications

Properties	Value	Test standard
Acoustic improvement $\Delta R'w$[1)]	7 dB	DIN 16283-1
Maximum pressure with 1 mm deformation (10 %)	0,130 N/mm²	DIN EN ISO 844
Maximum pressure with 2 mm deformation (20 %)	0,157 N/mm²	DIN EN ISO 844
Dynamic modulus of elasticity E'5 Hz-E'-50 Hz	1,63-2,33 N/mm²	ISO 4664-1
Loss modulus E''5 Hz-E''-50 Hz	0,20-0,34 N/mm²	ISO 4664-1
Damping factor tan δ 5 Hz- tan δ 50 Hz	0,12-0,14	ISO 4664-1
Compression set c.s.	11,4 %	DIN EN ISO 844
Fire performance	Class F	DIN EN 13501-1

[1)] $\Delta R'w$=R'w with SonoTec – R'w without SonoTec. Value may be lower if the optimum load is not complied with.

SONOTEC V2 30



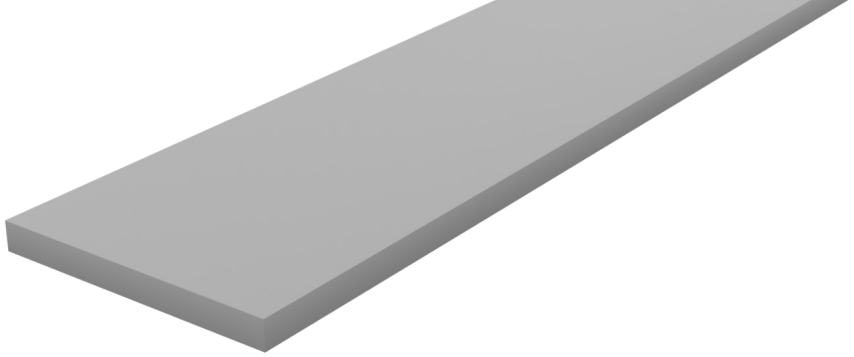
Art. no.	Designation	Dimensions [mm]			Colour	Hardness [Shore A]	PU
		Length	Width	Height			
946341	SonoTec V2 30 - 100	1150	100	10	Red	30	20
946365	SonoTec V2 30 - 120	1150	120	10	Red	30	20
946366	SonoTec V2 30 - 140	1150	140	10	Red	30	20
946367	SonoTec V2 30 - 160	1150	130	10	Red	30	20

Technical specifications

Properties	Value	Test standard
Acoustic improvement $\Delta R'w$[1)]	6-7 dB	DIN 16283-1
Maximum pressure with 1 mm deformation (10 %)	0,162 N/mm²	DIN EN ISO 844
Maximum pressure with 2 mm deformation (20 %)	0,194 N/mm²	DIN EN ISO 844
Dynamic modulus of elasticity E'5 Hz-E'-50 Hz	1,85-2,61N/mm²	ISO 4664-1
Loss modulus E''5 Hz-E''-50 Hz	0,25-0,41 N/mm²	ISO 4664-1
Damping factor tan δ 5 Hz- tan δ 50 Hz	0,13-0,16	ISO 4664-1
Compression set c.s.	10,0 %	DIN EN ISO 844
Fire performance	Class E	DIN EN 13501-1

[1)] $\Delta R'w$=R'w with SonoTec – R'w without SonoTec. Value may be lower if the optimum load is not complied with.

SONOTEC V2 35



Art. no.	Designation	Dimensions [mm]			Colour	Hardness [Shore A]	PU
		Length	Width	Height			
946346	SonoTec V2 35 - 100	1160	100	10	Light grey	35	20
946369	SonoTec V2 35 - 120	1160	120	10	Light grey	35	20
946370	SonoTec V2 35 - 140	1160	140	10	Light grey	35	20
946371	SonoTec V2 35 - 160	1160	160	10	Light grey	35	20

Technical specifications

Properties	Value	Test standard
Acoustic improvement $\Delta R'w^{1)}$	6-7 dB	DIN 16283-1
Maximum pressure with 1 mm deformation (10 %)	0,214 N/mm²	DIN EN ISO 844
Maximum pressure with 2 mm deformation (20 %)	0,247 N/mm²	DIN EN ISO 844
Dynamic modulus of elasticity E'5 Hz-E'-50 Hz	2,83-3,85 N/mm²	ISO 4664-1
Loss modulus E''5 Hz-E''-50 Hz	0,36-0,57 N/mm²	ISO 4664-1
Damping factor tan δ 5 Hz- tan δ 50 Hz	0,13-0,15	ISO 4664-1
Compression set c.s.	10,2 %	DIN EN ISO 844
Fire performance	Class E	DIN EN 13501-1

[1] ΔR'w=R'w with SonoTec – R'w without SonoTec. Value may be lower if the optimum load is not complied with.

SONOTEC V2 40

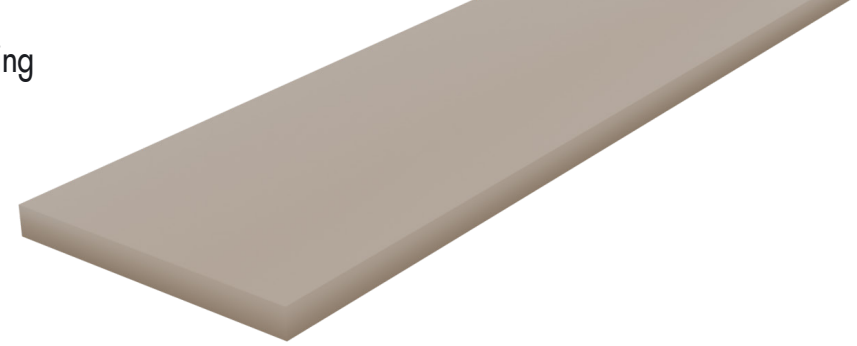
Art. no.	Designation	Dimensions [mm]			Colour	Hardness [Shore A]	PU
		Length	Width	Height			
946342	SonoTec V2 40 - 100	1140	100	10	White	40	20
946373	SonoTec V2 40 - 120	1140	120	10	White	40	20
946374	SonoTec V2 40 - 140	1140	140	10	White	40	20
946375	SonoTec V2 40 - 160	1140	160	10	White	40	20

Technical specifications

Properties	Value	Test standard
Acoustic improvement $\Delta R'w^{1)}$	6-7 dB	DIN 16283-1
Maximum pressure with 1 mm deformation (10 %)	0,319 N/mm²	DIN EN ISO 844
Maximum pressure with 2 mm deformation (20 %)	0,371 N/mm²	DIN EN ISO 844
Dynamic modulus of elasticity E'5 Hz-E'-50 Hz	3,84-5,62 N/mm²	ISO 4664-1
Loss modulus E''5 Hz-E''-50 Hz	0,48-0,78 N/mm²	ISO 4664-1
Damping factor tan δ 5 Hz- tan δ 50 Hz	0,13-0,14	ISO 4664-1
Compression set c.s.	9,9 %	DIN EN ISO 844
Fire performance	Class E	DIN EN 13501-1

[1] ΔR'w=R'w with SonoTec – R'w without SonoTec. Value may be lower if the optimum load is not complied with.

SONOTEC V2 50



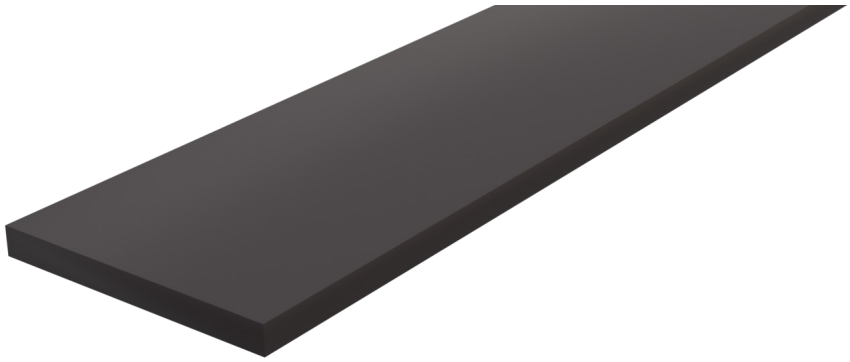
Art. no.	Designation	Dimensions [mm]			Colour	Hardness [Shore A]	PU
		Length	Width	Height			
946343	SonoTec V2 50 - 100	1120	100	10	Stone	50	20
946377	SonoTec V2 50 - 120	1120	120	10	Stone	50	20
946378	SonoTec V2 50 - 140	1120	140	10	Stone	50	20
946379	SonoTec V2 50 - 160	1120	160	10	Stone	50	20

Technical specifications

Properties	Value	Test standard
Acoustic improvement $\Delta R'w^{1)}$	6-7 dB	DIN 16283-1
Maximum pressure with 1 mm deformation (10 %)	0,591 N/mm²	DIN EN ISO 844
Maximum pressure with 2 mm deformation (20 %)	0,637 N/mm²	DIN EN ISO 844
Dynamic modulus of elasticity E'5 Hz-E'-50 Hz	6,07-8,76 N/mm²	ISO 4664-1
Loss modulus E''5 Hz-E''-50 Hz	0,79-1,20 N/mm²	ISO 4664-1
Damping factor tan δ 5 Hz- tan δ 50 Hz	0,13-0,14	ISO 4664-1
Compression set c.s.	13,4 %	DIN EN ISO 844
Fire performance	Class E	DIN EN 13501-1

[1] ΔR'w=R'w with SonoTec – R'w without SonoTec. Value may be lower if the optimum load is not complied with.

SONOTEC V2 58



Art. no.	Designation	Dimensions [mm]			Colour	Hardness [Shore A]	PU
		Length	Width	Height			
946344	SonoTec V2 58 - 100	1100	100	10	Black	58	20
946381	SonoTec V2 58 - 120	1100	120	10	Black	58	20
946382	SonoTec V2 58 - 140	1100	140	10	Black	58	20
946383	SonoTec V2 58 - 160	1100	160	10	Black	58	20

Technical specifications

Properties	Value	Test standard
Acoustic improvement $\Delta R'w^{1)}$	6-7 dB	DIN 16283-1
Maximum pressure with 1 mm deformation (10 %)	1,075 N/mm²	DIN EN ISO 844
Maximum pressure with 2 mm deformation (20 %)	1,250 N/mm²	DIN EN ISO 844
Dynamic modulus of elasticity E'5 Hz-E'-50 Hz	9,34-14,21 N/mm²	ISO 4664-1
Loss modulus E''5 Hz-E''-50 Hz	1,12-1,97 N/mm²	ISO 4664-1
Damping factor tan δ 5 Hz- tan δ 50 Hz	0,12-0,14	ISO 4664-1
Compression set c.s.	15,2 %	DIN EN ISO 844
Fire performance	Class E	DIN EN 13501-1

[1] ΔR'w=R'w with SonoTec – R'w without SonoTec. Value may be lower if the optimum load is not complied with.

SPRAY ADHESIVE

PRODUCT DESCRIPTION

The spray adhesive from Eurotec has been specially designed for use with the SonoTec V2 line supports from our range and has been extensively tested with these products. It convinces with reliable adhesion and perfectly matches the requirements of the SonoTec V2 range.

Thanks to its efficient formula, you can glue up to 30 strips with just one can, depending on the application setting.
Ideal for precise, clean and fast results.

APPLICATION

Clean the surfaces of dust and dirt. Shake the can well and, during spraying, hold it at a distance of 15 to 20 cm from the application surface. The adhesive is applied as a contact adhesive to both components of a material combination. As soon as the adhesive has dried, attach the parts to each other and press them together. The bond strength increases continuously, with the final strength being reached after 24 hours (see technical information). Once you have finished applying the adhesive, turn the can upside down and spray until the spray head is free of adhesive residues.

STORAGE/TRANSPORT CONDITIONS

- Stored at 20 °C, unopened original containers can be stored for at least 18 months after manufacture
- Store between 5 °C and 35 °C
- Do not expose to direct sunlight

LABELLING

- According to CLP (see safety data sheet)

TECHNICAL INFORMATION

Spray adhesive						
Colour	Viscosity [mPa·s]	Flash-off time [min]	Solid state [%]	Final strength after [h]	Open time [min]	Suitable for
Colourless	125	5	26	24	2 – 13	EVA, metal, wood, glass, PU (foam), paper, textiles, cork, PE, nylon. The product is not suitable for laying carpet!

PRODUCT TABLE

Spray adhesive			
Art. no.	Product description	Contents [ml]	PU
946388	Spray adhesive for Sonotec	500	12

Eurotec®

The specialist for fastening technology

EVEN MORE INFORMATION ABOUT SOUND INSULATION

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