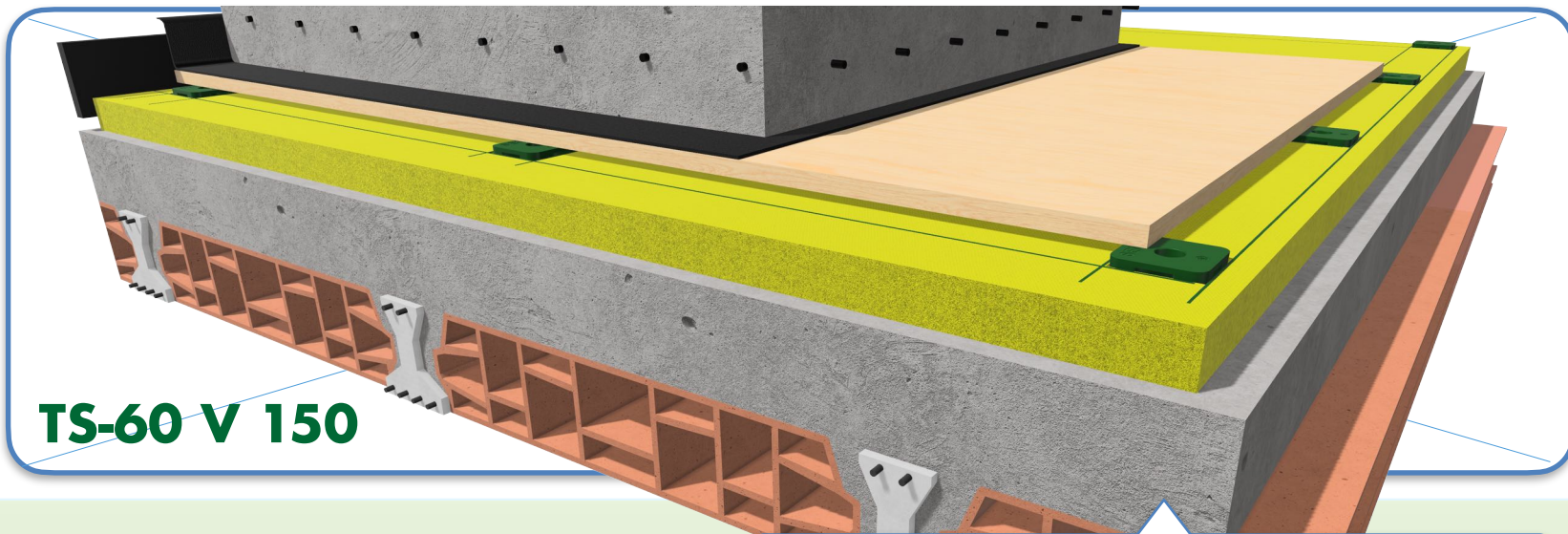
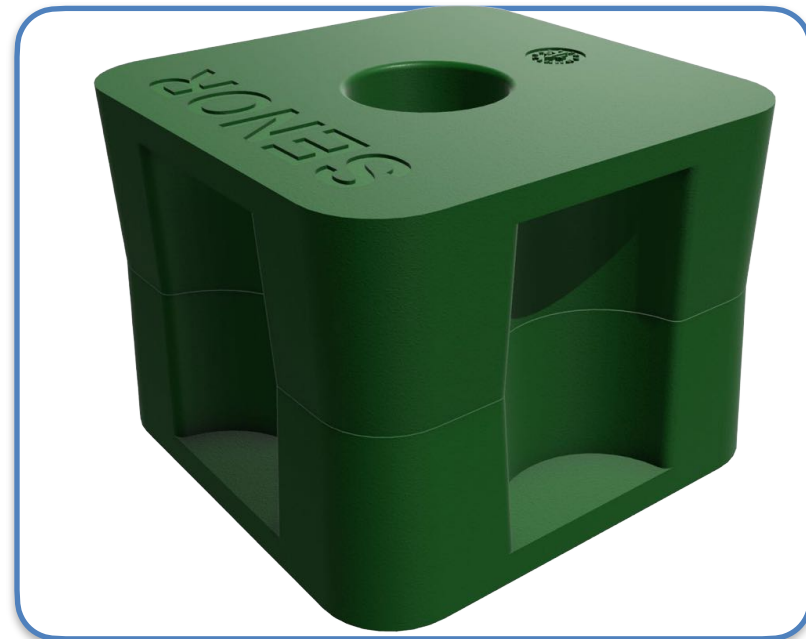


## TS-60 V 150

RUBBER DAMPER WITH INCREASED HEIGHT FOR THE PRODUCTION OF ACOUSTIC RAISED FLOORS OR INERTIA BENCHES WITH ALREADY TESTED RESULTS.

It is a different and renewed, high-performance **RUBBER** shock absorber. Manufactured using the most advanced technology and designed to eradicate all solid-borne noise pollution.

**SE-TS-60 V 150** has the same features as **TS-80**, only varies in its height. With its trapezoidal design and four indentations inwards forming an X-shape, exponentially improving its internal elasticity, providing greater performance in the acoustic field and favouring a perfect seating on the ground.



## TS-60 V 150

**Suggested use:** fourth generation rubber damper recommended for raised access floors under reinforced concrete slabs. Its new composition has a higher damping factor than standard polymers (Polyurethane, polystyrene, EPDM, etc..).

| REF.           | COLOUR | THICKNESS (mm) | USES            | LOAD (Kg) MIN-MAX | PACKING (Units) |
|----------------|--------|----------------|-----------------|-------------------|-----------------|
| SE-TS-60 V 150 |        | 60             | Acoustic Floors | 35 - 200          | 25              |

SCAN ME



**I+D+i**

\*This product has been registered in the **Spanish Patents and Trademarks Office**

**Quality of the polymer:**

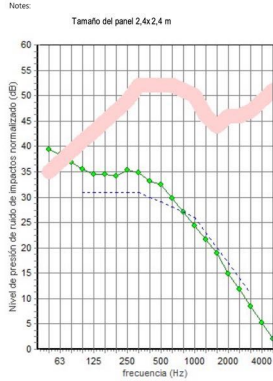
● Polymer: **KRAIBURG-TPE - TC4/GPN** (tested according to the Standard **UNE-EN ISO 10846-1:2009**).

✓ Resonance frequency: **7-15 Hz**.

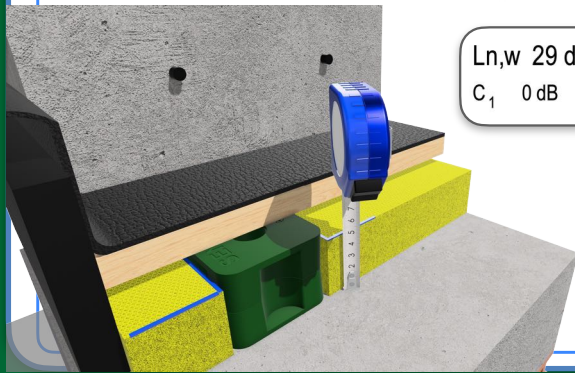
✓ Recommended load range: **35 Kg - 200Kg**.

Predicción del aislamiento acústico (v9.0.23)

Program copyright Marshall Day Acoustics 2017  
Margin of error is generally within Ln,w ± 5 dB  
Key No: 5719  
Job Name:  
Date: 27/07/2022  
File Name: ensayo a ruido de IMPACTO.d

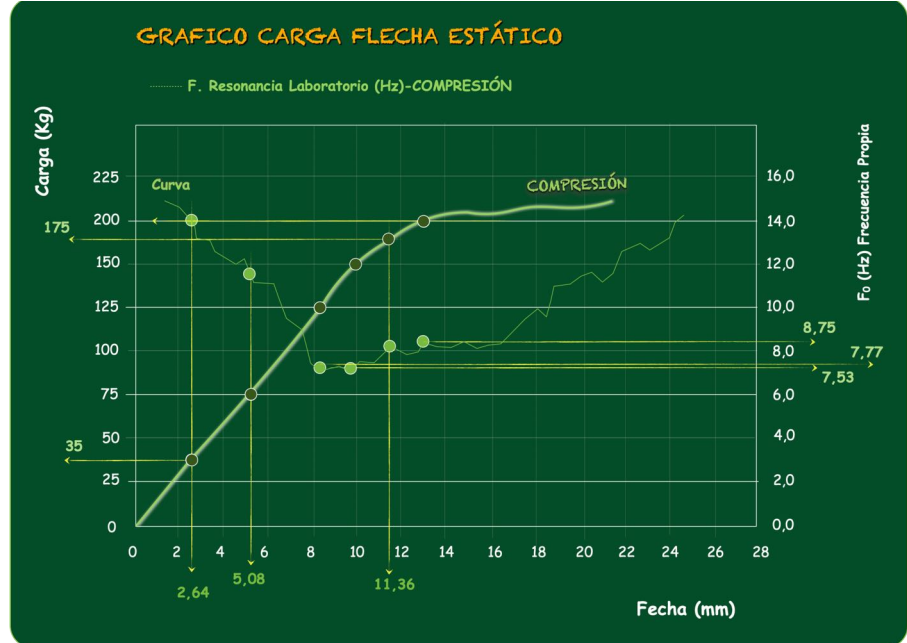


| frecuencia (Hz) | Ln(dB) | Ln(dB) |
|-----------------|--------|--------|
| 50              | 39     |        |
| 63              | 38     | 43     |
| 80              | 37     |        |
| 100             | 36     |        |
| 125             | 34     | 40     |
| 160             | 34     |        |
| 200             | 34     |        |
| 250             | 35     | 40     |
| 315             | 35     |        |
| 400             | 33     |        |
| 500             | 32     | 37     |
| 630             | 30     |        |
| 800             | 27     |        |
| 1000            | 24     | 30     |
| 1250            | 22     |        |
| 1600            | 19     |        |
| 2000            | 15     | 21     |
| 2500            | 12     |        |
| 3150            | 8      |        |
| 4000            | 5      | 11     |
| 5000            | 2      |        |



Ln,w 29 dB  
C<sub>1</sub> 0 dB

Laboratory test UNE-EN ISO 10846-1:2009



Axial compression results

| LOAD (Kg) | DEFORMATION (mm) | RESONANCE FREQUENCY (Hz) | SWEEP (Hz) |    | SOUNDPROFING LEVEL (%) |       |
|-----------|------------------|--------------------------|------------|----|------------------------|-------|
| 35        | 2,64             | 14,00                    | 25         | 50 | 54,31                  | 91,49 |
| 75        | 5,08             | 11,85                    | 25         | 50 | 71,02                  | 94,05 |
| 125       | 8,26             | 7,77                     | 25         | 50 | 89,31                  | 97,53 |
| 150       | 9,86             | 7,53                     | 25         | 50 | 90,02                  | 97,68 |
| 175       | 11,36            | 8,25                     | 25         | 50 | 87,78                  | 97,20 |
| 200       | 12,94            | 8,75                     | 25         | 50 | 86,04                  | 96,84 |



Data sheet

TC4GPN (GP/FG Series)

THERMOLAST® K

Product properties

Name TC4GPN

Series GP/FG

Colour / RAL DESIGN Natural

Mechanical properties

Hardness 39 +- 5 ShoreA DIN ISO 7619-1

Density 1.100 g/cm<sup>3</sup> DIN EN ISO 1183-1

Tensile strength<sup>1</sup> 6.5 MPa DIN 53504/ISO 37

Elongation at break<sup>1</sup> 800 % DIN 53504/ISO 37

Tear resistance 14.0 N/mm ISO 34-1 Methode B (b)(Graves)

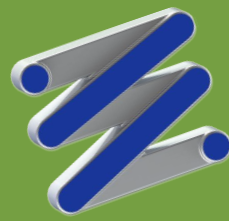
CS 72 h/23 °C 12 % DIN ISO 815-1 Method A

CS 24 h/70 °C 23 % DIN ISO 815-1 Method A

CS 24 h/100 °C 59 % DIN ISO 815-1 Method A

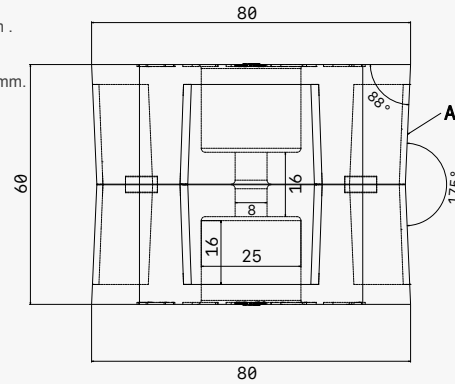
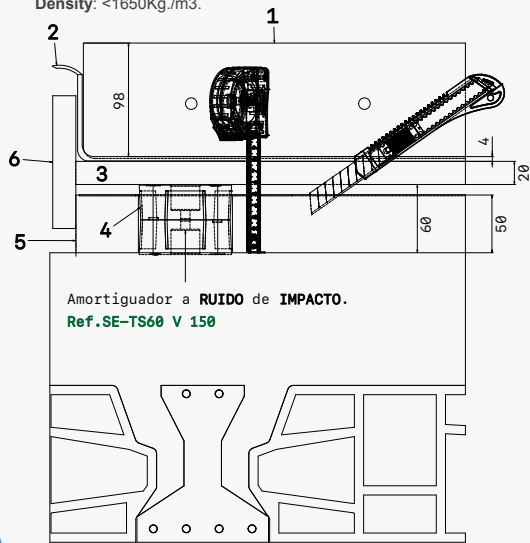
<sup>1</sup> Deviating from ISO 37 standard test piece S2 is tested with a traverse speed of 200 mm/min.

All values published in this data sheet are rounded average values.



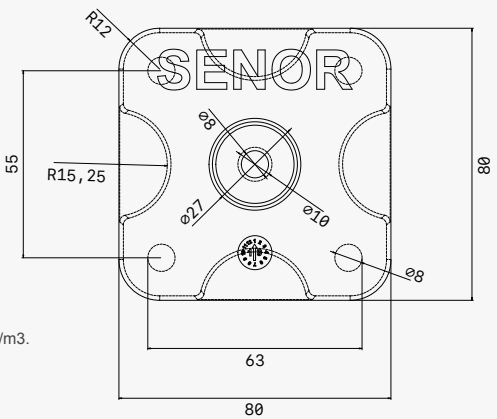
1º. Concrete slab HA-20 con malla 15x15x10 with a thickness of 10 cm .  
Density: >2450Kg./m3.

2º. ViscoLAM-65 (acoustic membrane) with a thickness of 4 mm.  
Density: <1650Kg./m3.



FRONT  
VIEW

PLAN  
VIEW



3º. DMF board with a thickness of 19 mm. Density:>650Kg./m3.

4º. SE-TS-60 V 150

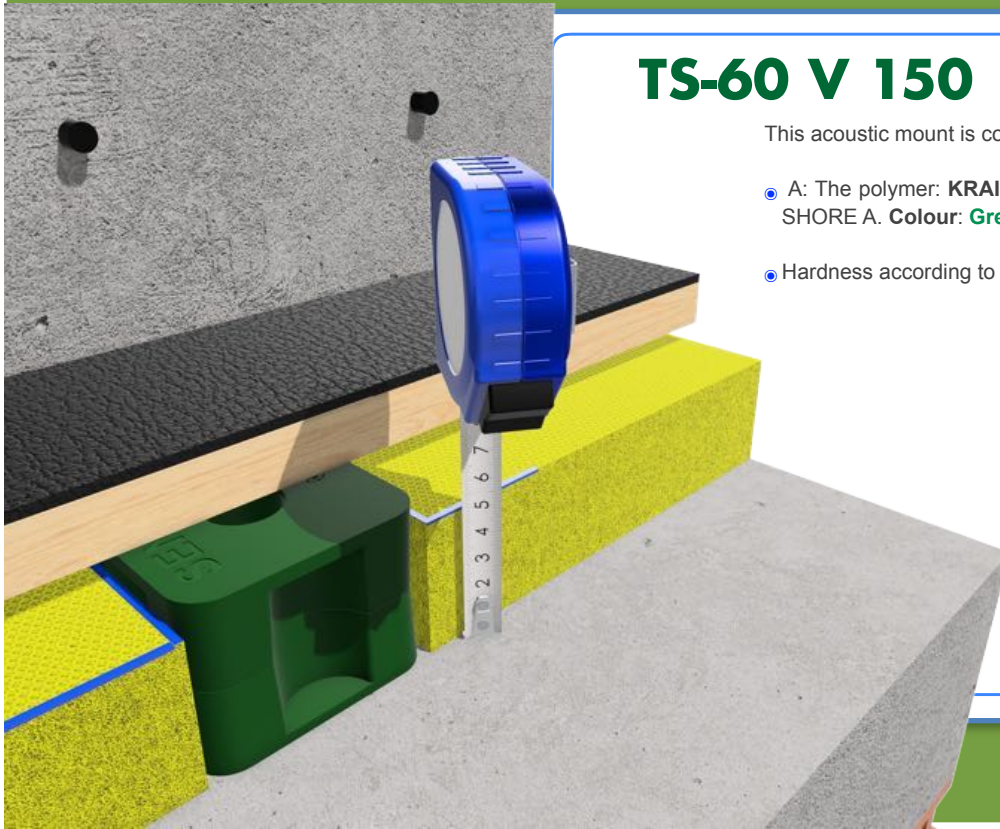
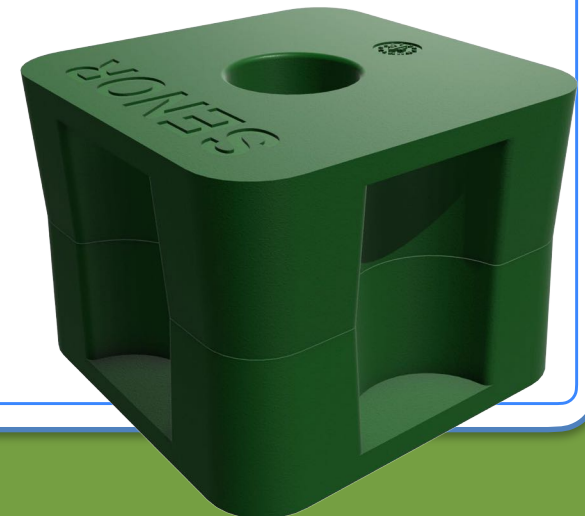
5º. Mineral wool (Arena APTA) with a thickness. Density < 30Kg./m3.

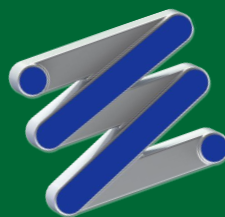
6º. Acoustic Band EPDM CR-130 type BEC-15x150

## TS-60 V 150

This acoustic mount is composed of:

- A: The polymer: **KRAIBURG-TPE / TC4-GPN**. Hardness: 39+- 5° SHORE A. Colour: **Green**
- Hardness according to the Standard ISO 48-4 o DIN ISO 7619-1

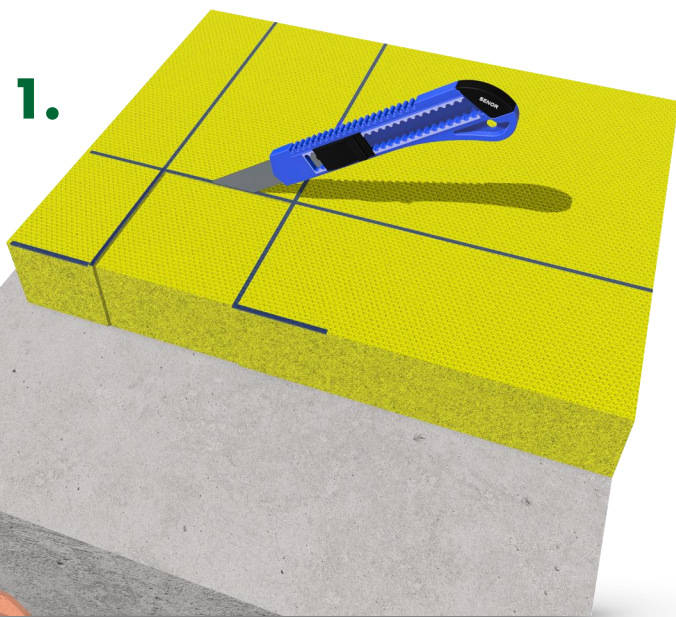




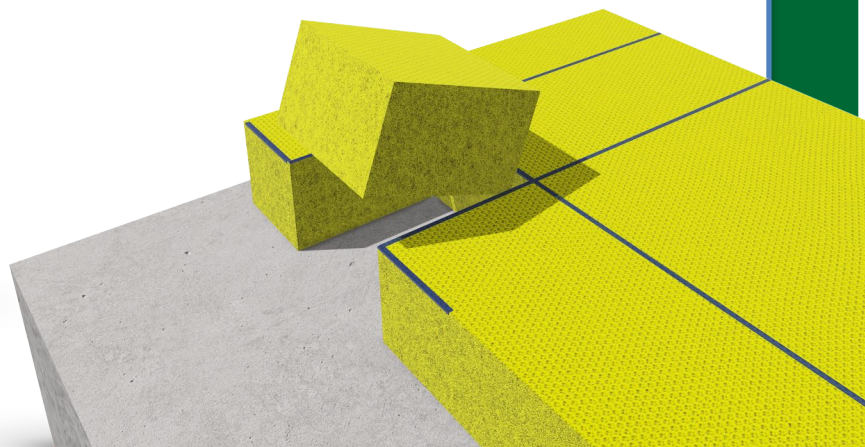
# Ref. SE-TS-60 V 150

## Installation

1.



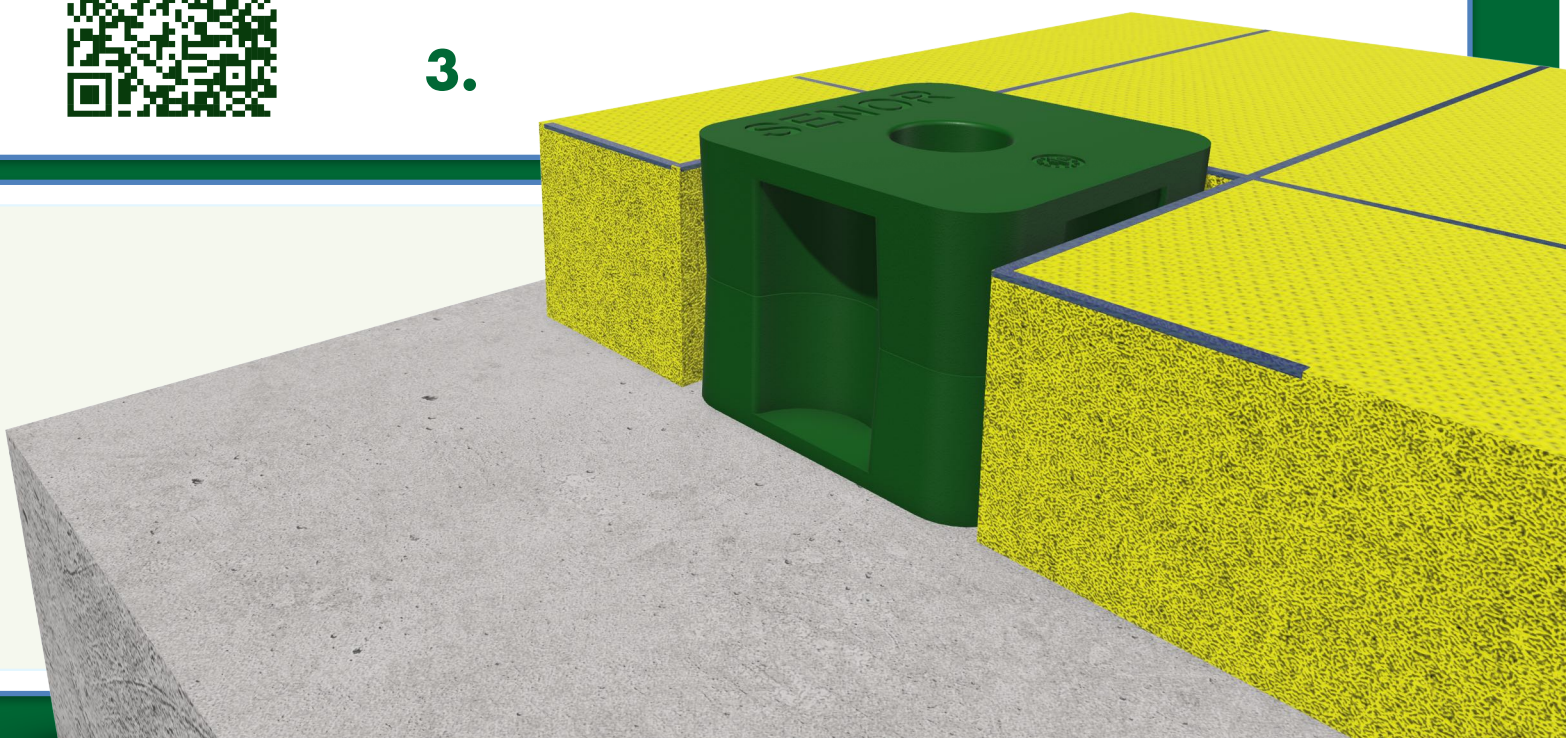
2.



SCAN ME



3.

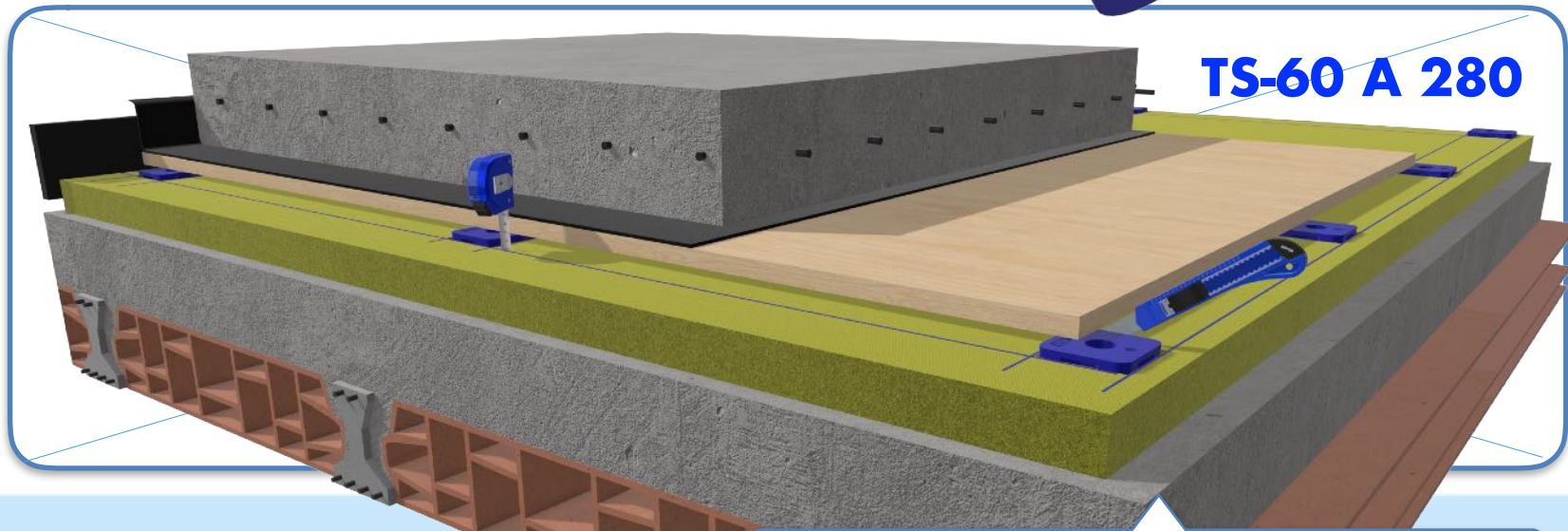
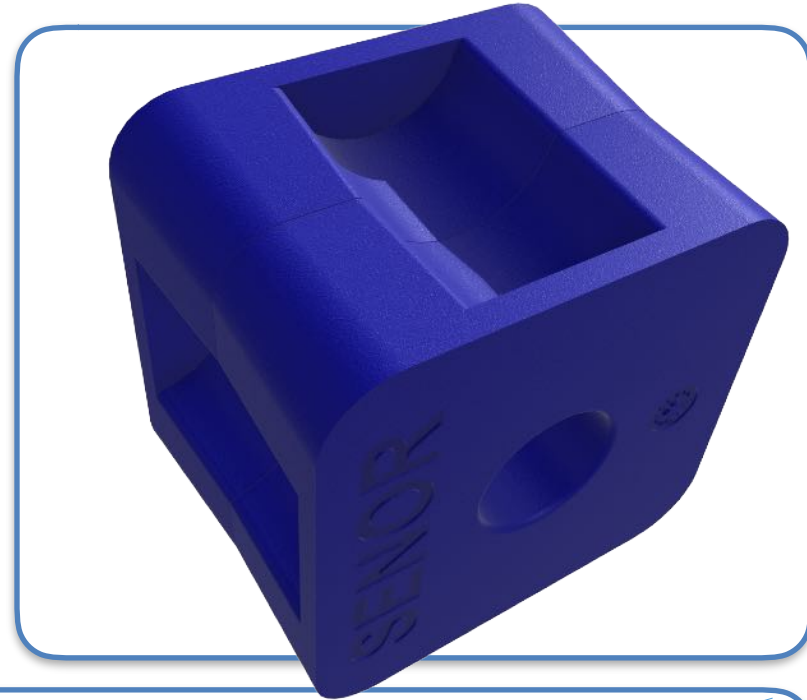


## TS-60 A 280

### HIGHER RUBBER MOUNT WITH RESTRAINT SYSTEM FOR ACOUSTIC FLOORS OR INERTIA BASES


This model is a **RUBBER** wall mount for acoustic floors devised to provide quality to any given acoustic system and to eradicate sound frequencies and vibrations.

The model **SE-TS-60 A 280** has the same features than the **TS-80** but with **more height**. It is designed in the shape of trapezium with **X** shaped base improving the elasticity of the system and proving an excellent performance in the soundproofing field.



## TS-60 A 280

**Suggested use:** rubber mount for acoustic floors under concrete slab. This type of polymer has a better damping result than other rubbers such as polyurethane, polystyrene, EPDM, among others.

| REF            | COLOUR  | THICKNESS (mm) | USES            | LOAD (kg) MIN-MAX | PACKING (Units) |
|----------------|---|----------------|-----------------|-------------------|-----------------|
| SE-TS-60 A 280 |  | 60             | Acoustic floors | 150 - 280         | 25              |

 SCAN ME



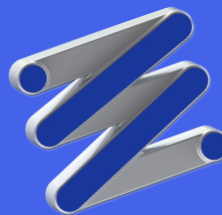
**I+D+i**

\*This product has been registered in the Spanish Patents and Trademarks Office

#### Quality of the polymer:

- Polymer: **KRAIBURG-TPE - TC5/EXN** (tested according to the Standard **UNE-EN ISO 10846-1:2009**).

- ✓ Resonance frequency: **7-15 Hz**.
- ✓ Recommended load range: **150 kg - 280 kg**.



# Ref. SE-TS-60 A 280

## Predicción de Impacto Sonoro (v8.0.1)

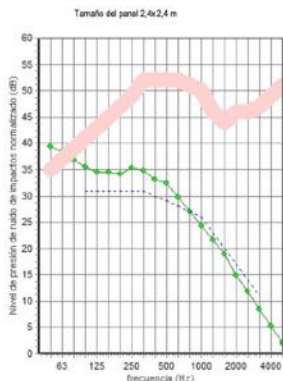
Derechos de autor del programa Marshall Day Acoustics 2014

- Key No. 6719

Margen de error de Predicción de Impacto Sonoro está generalmente entre  $L_{n,w} \pm 5$  dB

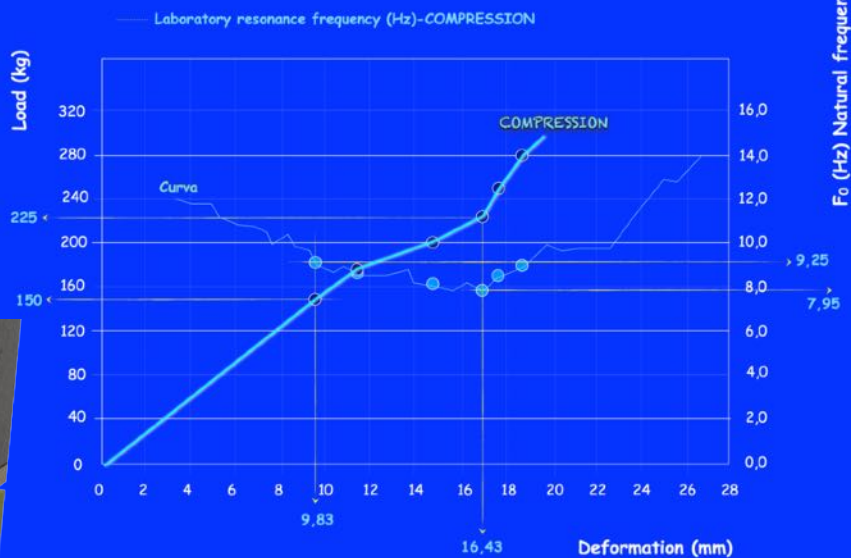


| frecuencia (Hz) | Ln(dB) | Ln(dB) |
|-----------------|--------|--------|
| 50              | 39     |        |
| 63              | 38     | 43     |
| 80              | 37     |        |
| 100             | 36     |        |
| 125             | 34     | 40     |
| 160             | 34     |        |
| 200             | 34     |        |
| 250             | 35     | 40     |
| 315             | 35     |        |
| 400             | 33     |        |
| 500             | 32     | 37     |
| 630             | 30     |        |
| 800             | 27     |        |
| 1000            | 24     | 30     |
| 1250            | 22     |        |
| 1600            | 19     |        |
| 2000            | 15     | 21     |
| 2500            | 12     |        |
| 3150            | 8      |        |
| 4000            | 5      | 11     |
| 5000            | 2      |        |



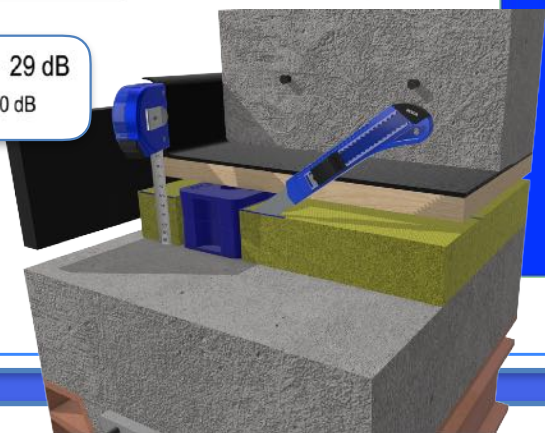
## Laboratory test UNE-EN ISO 10846-1:2009

### STATIC LOAD DEFORMATION



$L_{n,w}$  29 dB

$C_1$  0 dB



### Axial compression results

| LOAD (kg) | DEFORMATION (mm) | RESONANCE FREQUENCY (Hz) | SWEEP (Hz) |    | SOUNDPROFING LEVEL (%) |       |
|-----------|------------------|--------------------------|------------|----|------------------------|-------|
|           |                  |                          | 25         | 50 |                        |       |
| 150       | 9,83             | 9,25                     | 25         | 50 | 84,14                  | 96,46 |
| 175       | 11,45            | 8,75                     | 25         | 50 | 86,04                  | 96,84 |
| 200       | 14,88            | 8,02                     | 25         | 50 | 88,53                  | 97,36 |
| 225       | 16,43            | 7,95                     | 25         | 50 | 88,75                  | 97,41 |
| 250       | 17,90            | 8,24                     | 25         | 50 | 87,81                  | 97,21 |
| 280       | 18,60            | 8,92                     | 25         | 50 | 85,41                  | 96,71 |



TC5EXN

THERMOLAST® K

#### Products properties

Name of the product TC5EXN

Colour / RAL DESIGN Blue

Processing method Extrusion, Injection Molding

#### Mechanical properties

Hardness 46 +- Shore A DIN ISO 7619-1

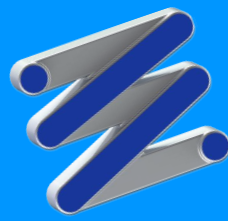
Density 1.176 g/cm<sup>3</sup> DIN EN ISO 1183-1

Tensile Strength<sup>1</sup> 6.3 MPa DIN 53504/ISO 37

Elongation at Break<sup>1</sup> 825 % DIN 53504/ISO 37

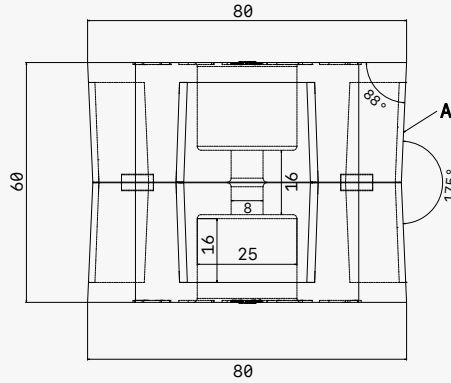
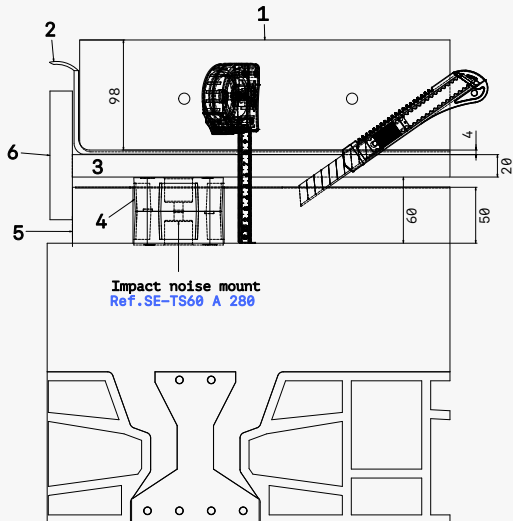
<sup>1</sup>Deviating from ISO 37 standard test piece S2 is tested with a traverse speed of 200 mm/min.

All values published in this data sheet are rounded average values.



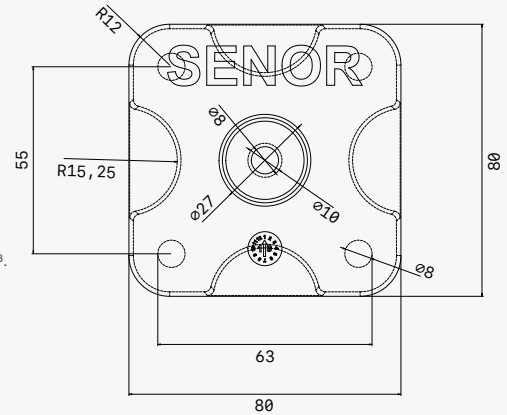
1°- Concrete slab HA-20 15x15x10 with a thickness of 10 cm.  
Density: > 2450 kg/m<sup>3</sup>

2°- ViscoLAM-65 (acoustic membrane) with a thickness of 4 mm.  
Density: <1650 kg/m<sup>3</sup>.



FRONT  
VIEW

PLAN  
VIEW



3°- MDF board with a thickness of 19 mm. Density: > 650 kg/m<sup>3</sup>.

4°- SE-TS-60 A 280

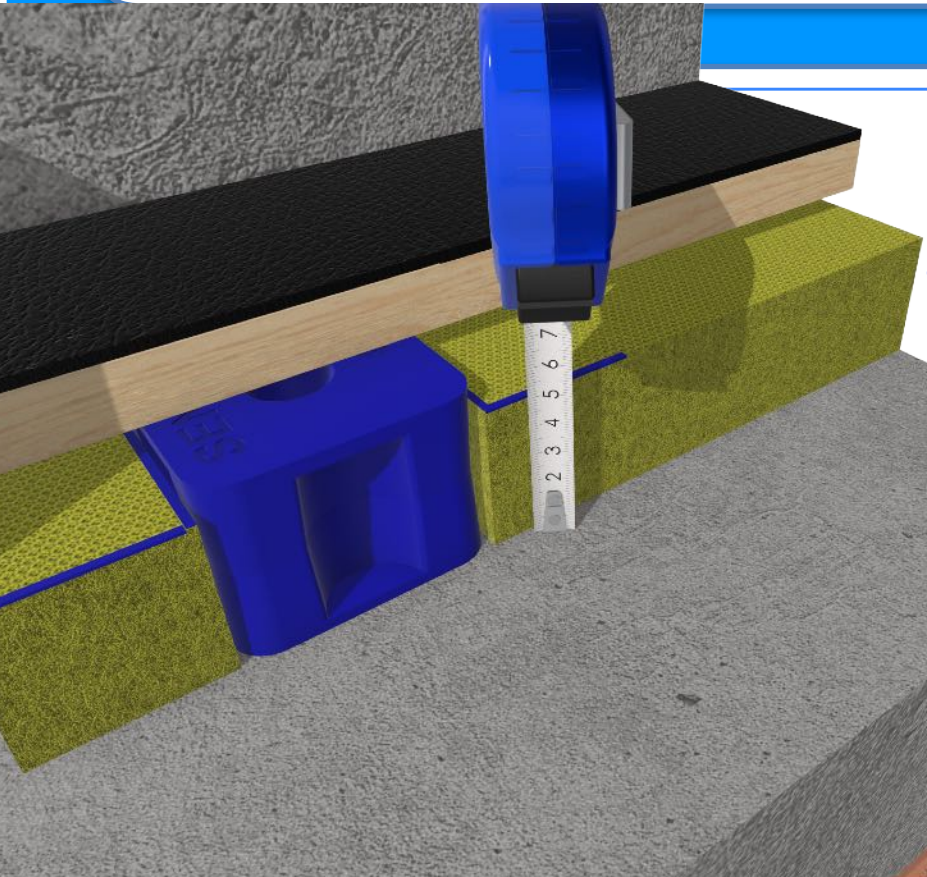
5°- Mineral wool (Arena APTA) with a thickness of 50 mm.  
Density: < 30 kg/m<sup>3</sup>.

6°- Acoustic band EPDM CR-130 type BEC-15x150

## MATERIALS

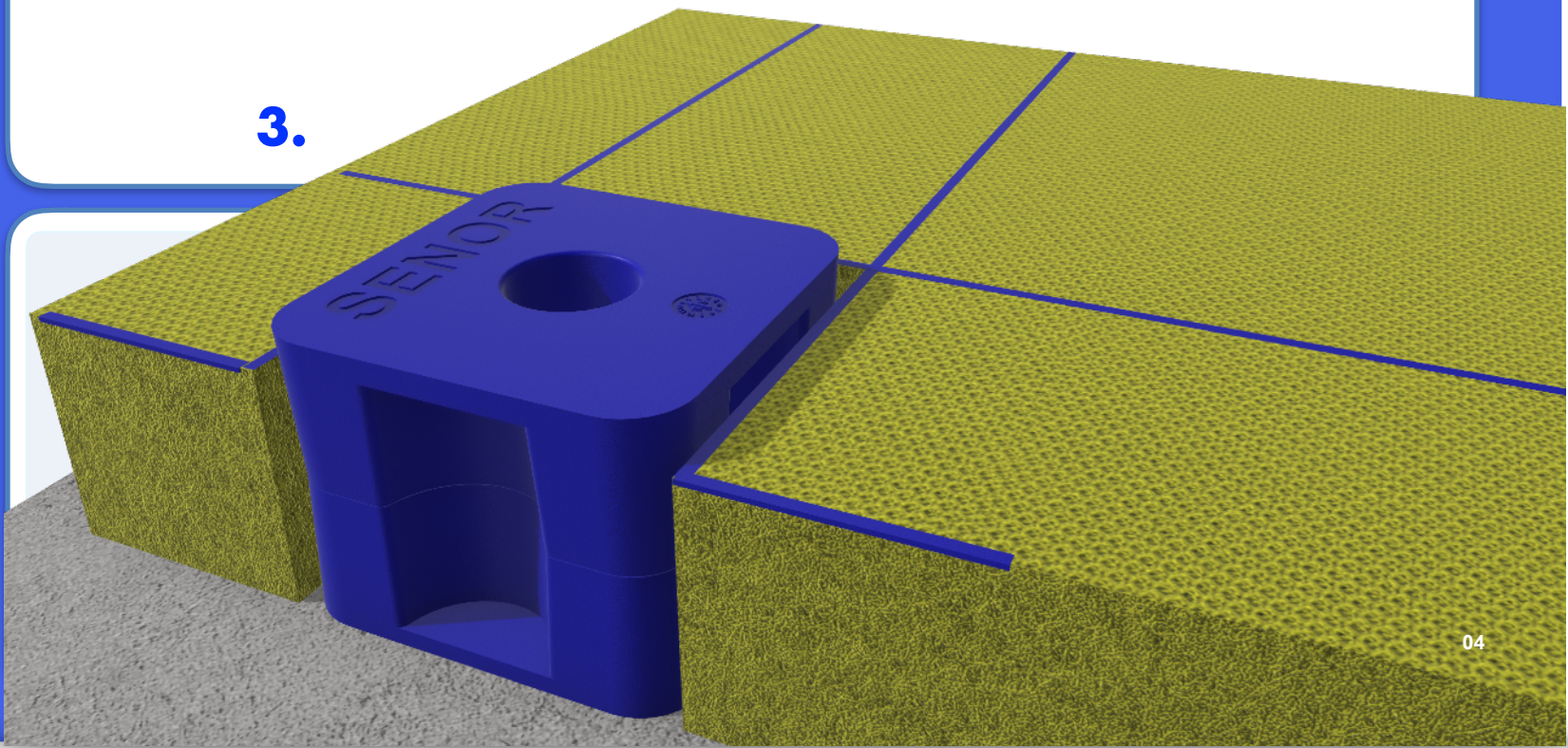
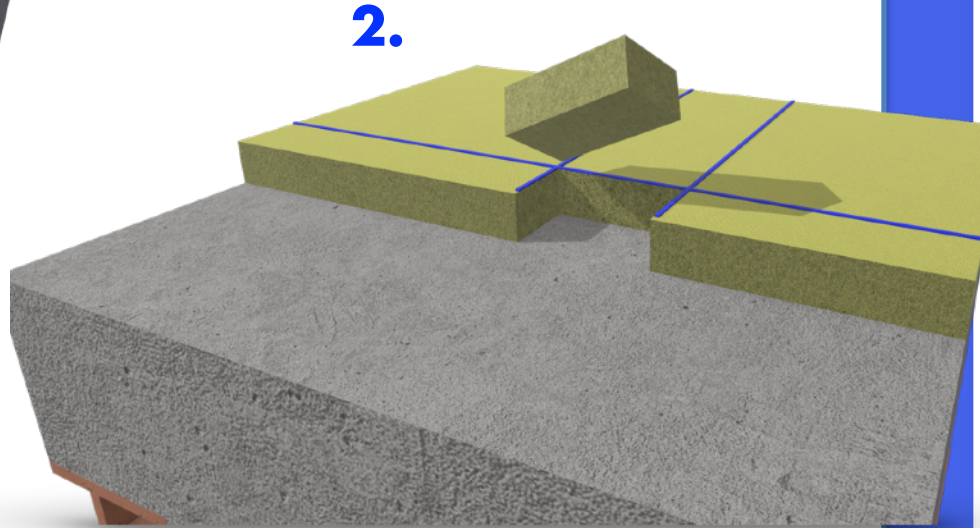
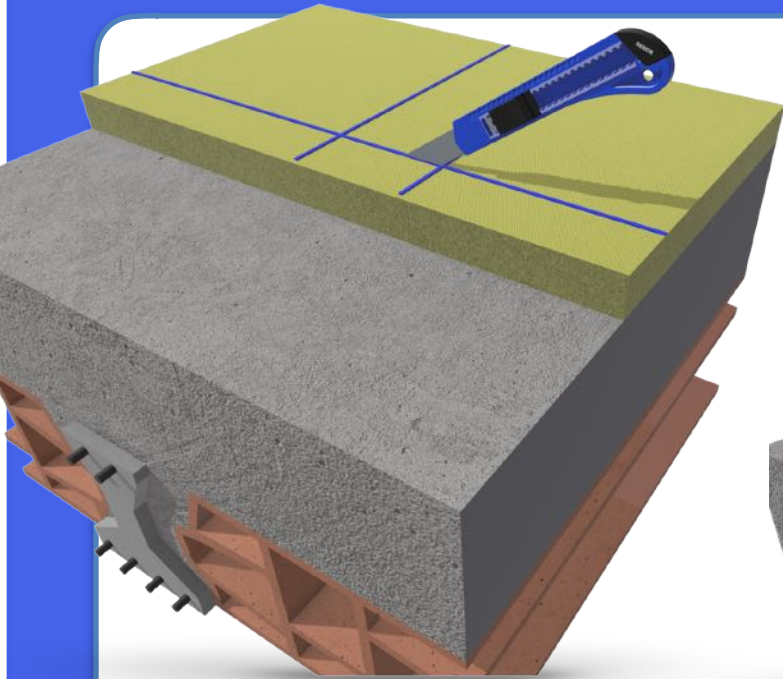
This acoustic mount is composed of:

- A: The polymer: **KRAIBURG-TPE / TC5EXN**. Hardness: 45 +- 5° SHORE A. Colour: **Blue**. Hardness according to the Standard ISO 48-4 o DIN ISO 7619-1



# Ref. SE-TS-60 A 280

## Installation



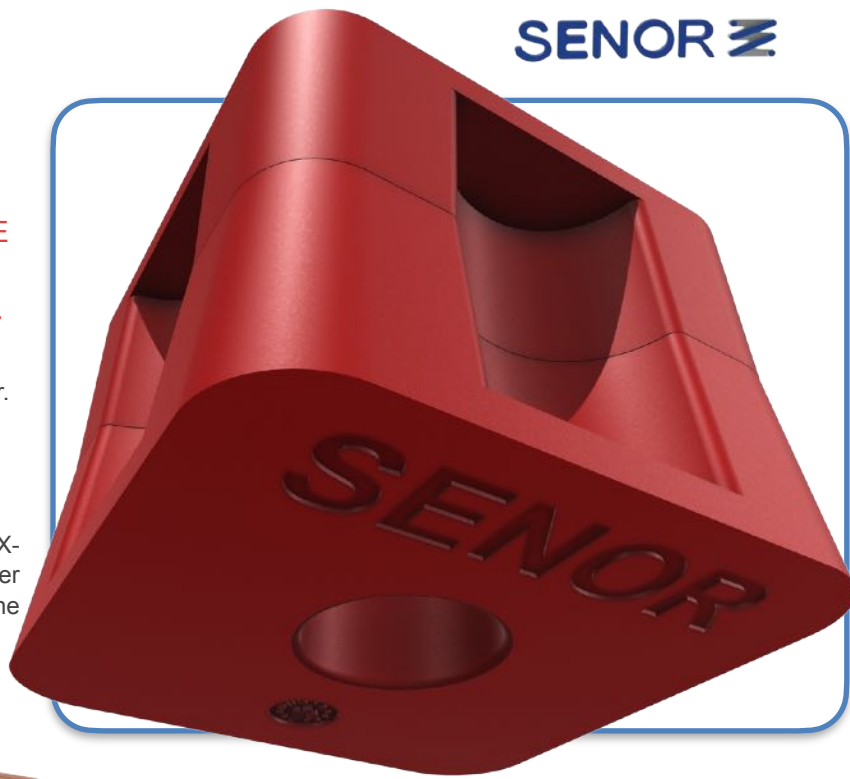


## TS-60 R 400

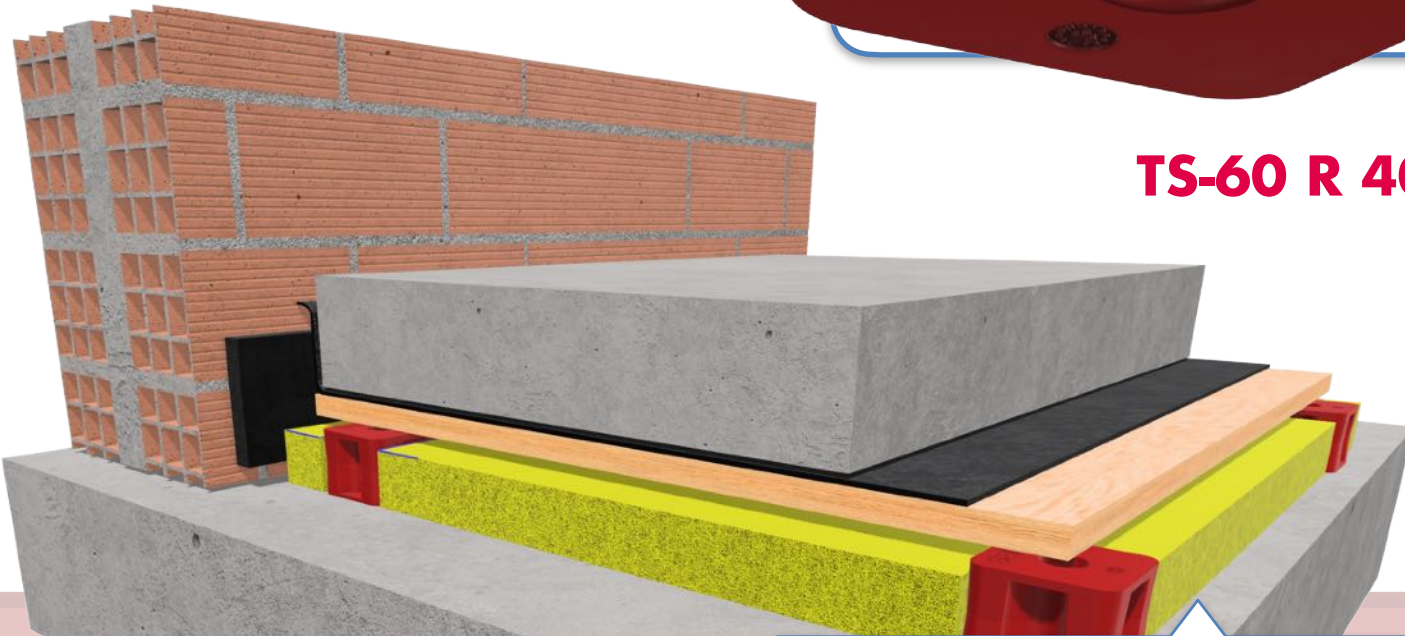
RUBBER DAMPER WITH INCREASED HEIGHT FOR THE PRODUCTION OF ACOUSTIC RAISED FLOORS OR INERTIA BENCHES WITH ALREADY TESTED RESULTS.

It is a different and renewed, high-performance **RUBBER** shock absorber. Manufactured using the most advanced technology and designed to eradicate all solid-borne noise pollution.

**SE-TS-60 R 400** has the same features as **TS-80**, only varies in its height. With its trapezoidal design and four indentations inwards forming an X-shape, exponentially improving its internal elasticity, providing greater performance in the acoustic field and favouring a perfect seating on the ground.



## TS-60 R 400



**Suggested use:** fourth generation rubber damper recommended for raised access floors under reinforced concrete slabs. Its new composition has a higher damping factor than standard polymers (Polyurethane, polystyrene, EPDM, etc..).

| REF.           | COLOUR | THICKNESS (mm) | USES            | LOAD (Kg) MIN-MAX | PACKING (Units) |
|----------------|--------|----------------|-----------------|-------------------|-----------------|
| SE-TS-60 R 400 |        | 60             | Acoustic Floors | 270 - 400         | 25              |

SCAN ME



**I+D+i**

\*This product has been registered in the Spanish Patents and Trademarks Office

Quality of the polymer:

• Polymer: **KRAIBURG-TPE - TC6-EXN** (tested according to the Standard **UNE-EN ISO 10846-1:2009**).

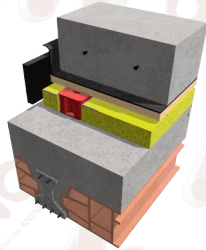
✓ Resonance frequency: **7-15 Hz**.

✓ Recommended load range: **270Kg - 400Kg**.

# Ref. SE-TS-60 R 400

## Predicción del aislamiento acústico (v9.0.23)

Program copyright Marshall Day Acoustics 2017 Margin of error is generally within Ln,w ±5 dB -Key No. 6719



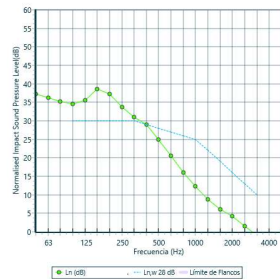
Ln,w 28 dB

Frecuencia de resonancia masa aire masa = 22 Hz  
Tamaño de Panel = 2.4 m x 2.4 m  
Partion surface mass = 172 kg/m<sup>2</sup>

### System description

Panel 1 : 1 x 120 mm Homigon (ρ=2340 kg/m<sup>3</sup>, E=110Pa, α=0.03, ps=251 kg/m<sup>2</sup>, fc=249 Hz)  
+ 1 x 4 mm Lámina de Goma (Alta densidad) (ρ=1600 kg/m<sup>3</sup>, E=0,83GPa, α=0.01, ps=6,5 kg/m<sup>2</sup>, fc=8074 Hz)  
+ 1 x 19 mm Aglomerado de Madera (Alta densidad) (ρ=560 kg/m<sup>3</sup>, E=0,83GPa, α=0.01, ps=18,2 kg/m<sup>2</sup>, fc=2674 Hz)  
Entonador Amortiguador a ruido de impacto GOMA (Ø80mm x 60 mm ), Espacado entre sí 800 mm , Cavely Width 30 mm , 1 x Lana de vidrio, 45mm, URSA GLASSWOL  
Panel 2 : 1 x 200 mm Homigon (ρ=2340 kg/m<sup>3</sup>, E=110Pa, α=0.03, ps=469 kg/m<sup>2</sup>, fc=150 Hz)

| freq. (Hz) | Ln(dB) | Ln(dB) |
|------------|--------|--------|
| 50         | 37     |        |
| 63         | 36     | 41     |
| 80         | 35     |        |
| 100        | 35     | 41     |
| 125        | 36     |        |
| 160        | 39     |        |
| 200        | 37     |        |
| 250        | 34     | 40     |
| 315        | 31     |        |
| 400        | 29     |        |
| 500        | 25     | 31     |
| 630        | 21     |        |
| 800        | 16     |        |
| 1000       | 12     | 18     |
| 1250       | 9      |        |
| 1600       | 6      |        |
| 2000       | 4      | 9      |
| 2500       | 2      |        |
| 3150       | -1     |        |
| 4000       | -4     | 2      |
| 5000       | -6     |        |



## Laboratory test UNE-EN ISO 10846-1:2009

### GRÁFICO CARGA FLECHA ESTÁTICO



### Axial compression results

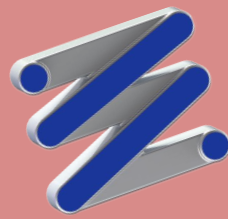
| LOAD (Kg) | DEFORMATION (mm) | RESONANCE FREQUENCY (Hz) | SWEEP (Hz) |    | SOUNDPROFING LEVEL (%) |       |
|-----------|------------------|--------------------------|------------|----|------------------------|-------|
|           |                  |                          | 25         | 50 |                        |       |
| 275       | 10,02            | 9,50                     | 25         | 50 | 83,12                  | 96,25 |
| 300       | 11,24            | 9,25                     | 25         | 50 | 84,14                  | 96,46 |
| 325       | 12,12            | 8,05                     | 25         | 50 | 88,43                  | 97,34 |
| 350       | 13,56            | 7,90                     | 25         | 50 | 88,91                  | 97,44 |
| 375       | 14,32            | 8,30                     | 25         | 50 | 87,61                  | 97,17 |
| 400       | 16,02            | 9,25                     | 25         | 50 | 84,14                  | 96,46 |



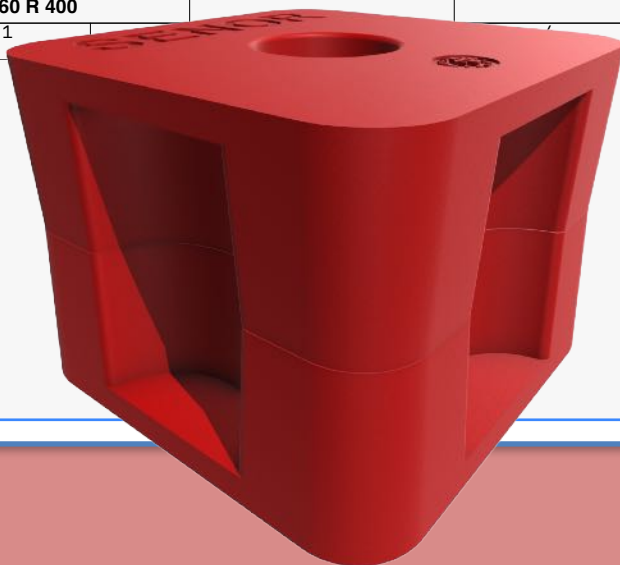
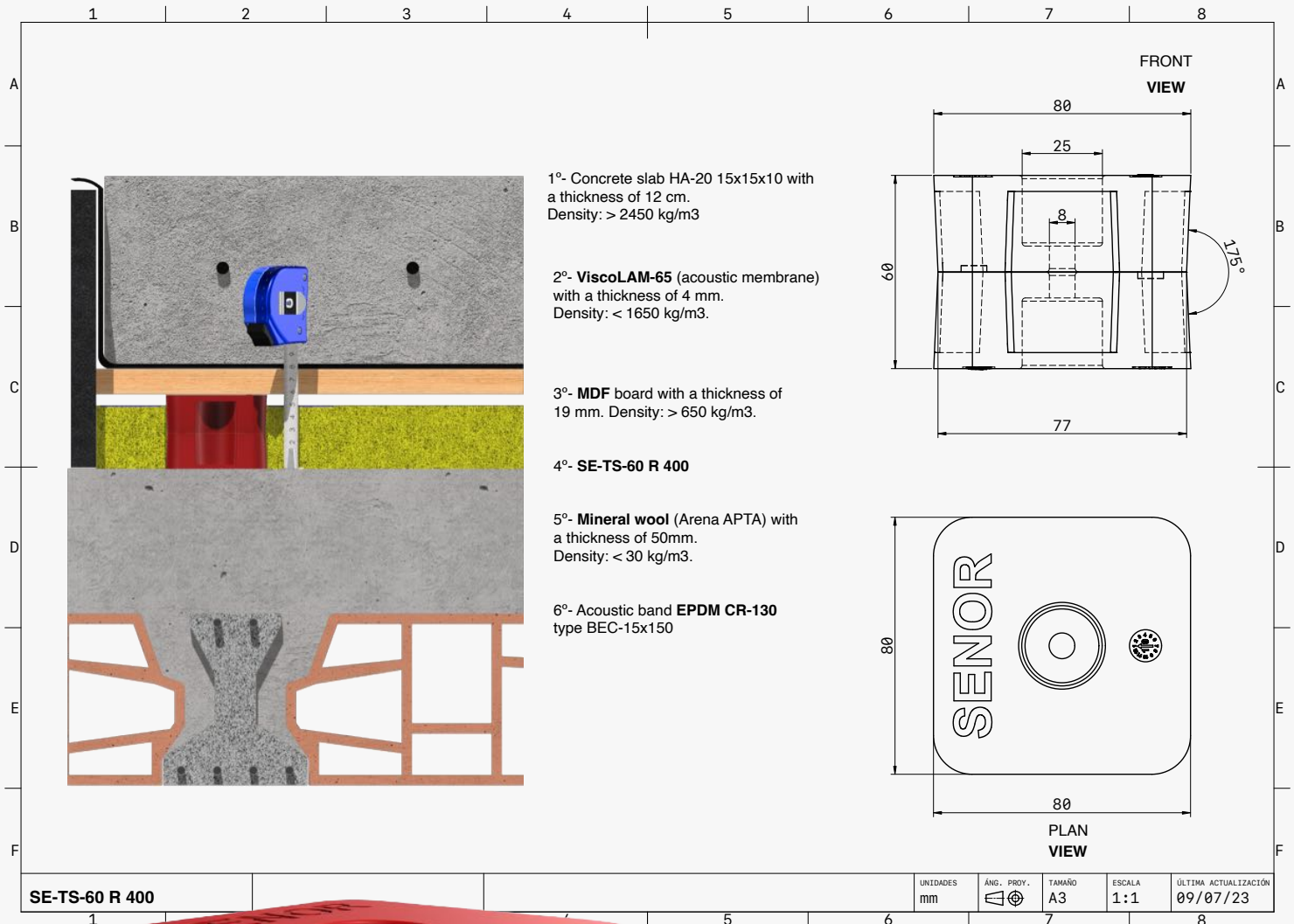
### Datasheet

| TC6EXN                           |                         | THERMOLAST® K          |
|----------------------------------|-------------------------|------------------------|
| <b>Product</b>                   |                         |                        |
| Compound                         | TC6EXN                  |                        |
| Color / RAL                      | Rojo                    |                        |
| Processing                       | Extrusion, Injection    |                        |
| <b>Mechanical</b>                |                         |                        |
| Hardne                           | 58° + 5° Shore A        | DIN ISO 7619-1         |
| Density                          | 1.190 g/cm <sup>3</sup> | DIN EN ISO 1183-1      |
| Tensile Strength <sup>1</sup>    | 7.0 MPa                 | DIN 53504/ISO 37       |
| Elongation at Break <sup>1</sup> | 675 %                   | DIN 53504/ISO 37       |
| Tear Resistance                  | 19.0 N/mm               | ISO 34-1 Methode B (b) |

<sup>1</sup>Deviating from ISO 37 standard test piece S2 is tested with a traverse  
All values published in this data sheet are rounded average values.



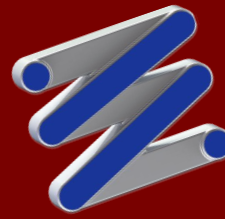
# Ref. SE-TS-60 R 400



## TS-60 R 400

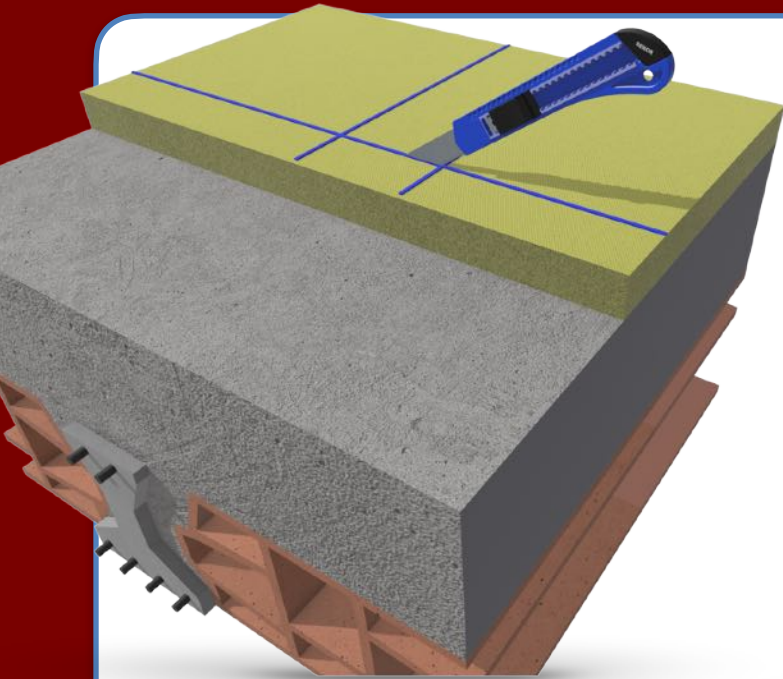
This acoustic mount is composed of:

- A: The polymer: **KRAIBURG-TPE - TC6-EXN**. Hardness: 58 +- 5° SHORE A. Colour: **Red**.
- Hardness according to the Standard **ISO 48-4** o **DIN ISO 7619-1**

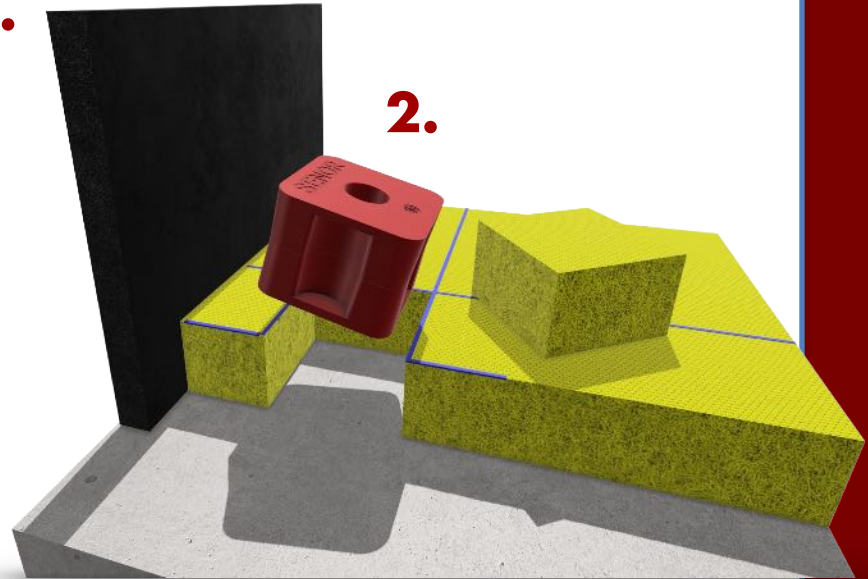


# Ref. SE-TS-60 R 400

## Installation



1.



2.

SCAN ME



3.

