

Technical data sheet

SIMPSON

Strong-Tie

SIT Sound Insulation Tile

SIT acoustic isolating strips are recommended for CLT buildings that are required to deliver superior acoustic performance. They guarantee acoustic insulation between timber walls and floors. The choice of the strip's density depends on the weight of the wall.

Features

Material

- Polyurethane with closed cell structure
- Thickness 6 or 12.5 mm

Advantages

- Available in a strip 5m Length, width can be cut on demand,
- Absorbs vibrations
- Can be used in humid environments
- Estimated service life of 50 years
- Improved draught sealing

Applications

Header

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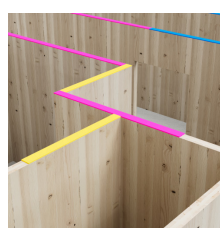
When to use

Suitable with Cross Laminated Timber (CLT)

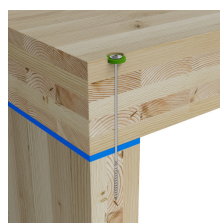
Brackets

Connection of floors and walls in CLT

Installations



Sample application



SIT Sound Insulation Tile

Technical Data

Mechanical properties - Part 1

References	Colour	Static loads (1) [N/mm ²]		Dynamic loads (1) [N/mm ²]	Load peaks (1) [N/mm ²]	Mechanical loss factor (2)	Static E-modulus (2) [N/mm ²]	Dynamic E-modulus (2) [N/mm ²]	Static shear modulus (2) [N/mm ²]	Dynamic shear modulus (2) [N/mm ²]
		Min.	Max.							
SIT75	yellow	0.05	0.075	0.12	2	0.06	0.63	0.92	0.16	0.27
SIT150	green	0.1	0.15	0.25	3	0.03	1.25	1.65	0.22	0.35
SIT350	blue	0.23	0.35	0.5	4	0.03	2.53	3.25	0.35	0.52
SIT750	red	0.5	0.75	1.2	6	0.04	5.21	8.88	0.8	1.22
SIT1500	orange	1	1.5	2	8	0.05	9.21	16.66	1.15	1.69

(1) Values apply to form factor $q = 3$

Mechanical properties - Part 2

References	Resistance to strain at 10% deformation [N/mm ²]	Residual compression set [%]	Tensile strength [N/mm ²]	Elongation at break [%]	Tear resistance [N/mm]	Rebound elasticity [%]	Specific volume resistance [$\Omega \cdot \text{cm}$]
SIT75	0.083	< 5	> 1,5	> 500	> 1,6	70	> 10 ¹¹
SIT150	0.16	< 5	> 2	> 500	> 2,1	70	> 10 ¹¹
SIT350	0.32	< 5	> 3,5	> 500	> 2,5	70	> 10 ¹¹
SIT750	0.59	< 6	> 5	> 500	> 4,3	70	> 10 ¹¹
SIT1500	0.94	< 8	> 7	> 500	> 5,6	70	> 10 ¹¹

(2) Measured at maximum limit of static application range

Thermal properties

References	Thermal conductivity [W/m.k]	Operating temperature [°C]	Temperature peak [°C]	Inflammability
SIT75	0.06	- 30 / + 70	+ 120	E / EN 13501-1
SIT150	0.075	- 30 / + 70	+ 120	E / EN 13501-1
SIT350	0.09	- 30 / + 70	+ 120	E / EN 13501-1
SIT750	0.1	- 30 / + 70	+ 120	E / EN 13501-1
SIT1500	0.11	- 30 / + 70	+ 120	E / EN 13501-1

(3) Test according to respective standards

SIT
Sound Insulation Tile

