

SIT Sound Insulating Tiles and Washers for Cross Laminated Timber



SIT sound insulation tiling from Simpson Strong-Tie provides an acoustic barrier between timber floors and walls and is especially effective in cross laminated timber (CLT) structures.

Placed between CLT wall and floor panels, these specially designed strips of closed-cell polyurethane absorb acoustic energy, obstructing the transfer of sound and vibration from room to room.

Features:

- Consists of closed-cell polyurethane with excellent acoustic absorption properties
- Available in 6.25 mm and 12.5 mm thickness as per on cost/performance balance requirement
- Choose from five densities according to the weight of the wall

Advantages:

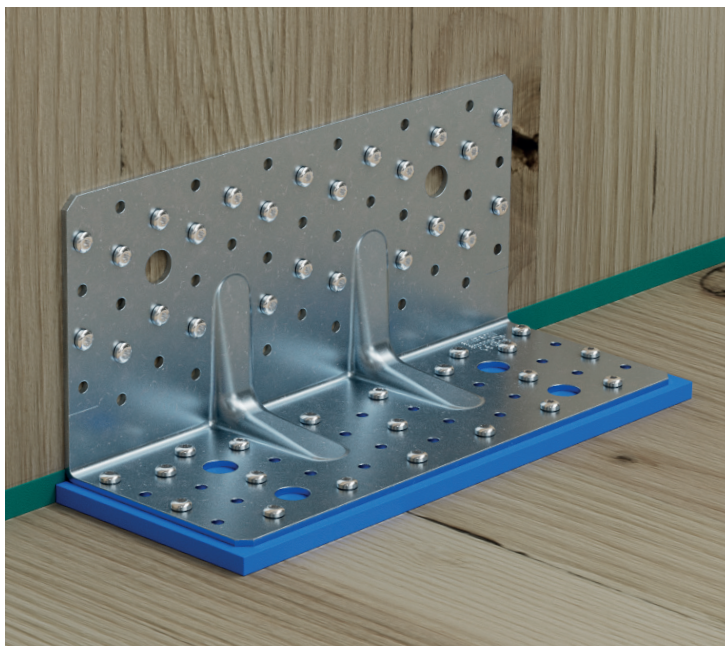
- Simple to install, just place the pre-cut strips between panels (or connectors/fasteners)
- Long service life: estimated 50 years+
- Contributes to draft sealing

Material:

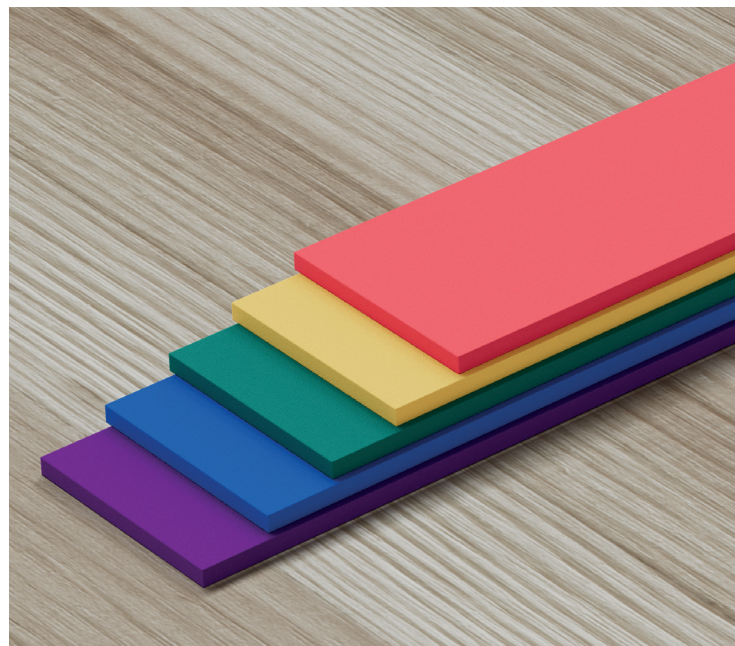
- Closed-cell structure polyurethane

Usage:

- SIT Strips (5m roll): Available in a combination of two thicknesses and five densities to suit the needs of the project, SIT is supplied as pre-cut rolls in widths specified by the building designer
- SITW Circular Washers: Available in two diameters, these are for use in conjunction with structural screws
- SITW Pads: Designed specifically for use in conjunction with Simpson Strong-Tie connectors (HTT, AKR and ABR)



ABR255 angle bracket installed over SITW pad.



SIT strips are available in five densities, identifiable by their colour.

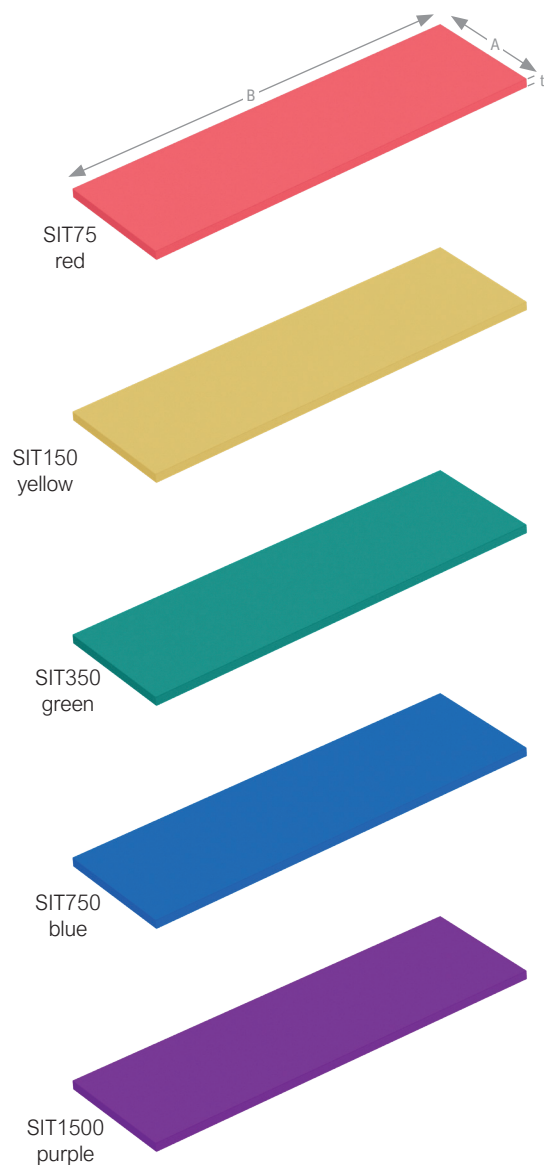
Technical Support Contact your local Simpson Strong-Tie technical support team at any time during the design stage. We can advise the optimal density and thickness combination for the project.

Options and Dimensions

SIT is available in two thicknesses. The 12.5 mm variant gives the highest performance, the 6.25 mm version offers a good balance between cost and performance. The five density variations are identified by the material colour, each capable of varying static loads. Select according to the expected load placed on them. It is recommended to achieve the same deformation level of the strip on the whole building. Where a higher load is expected on a CLT panel, a higher density SIT strip is advised.

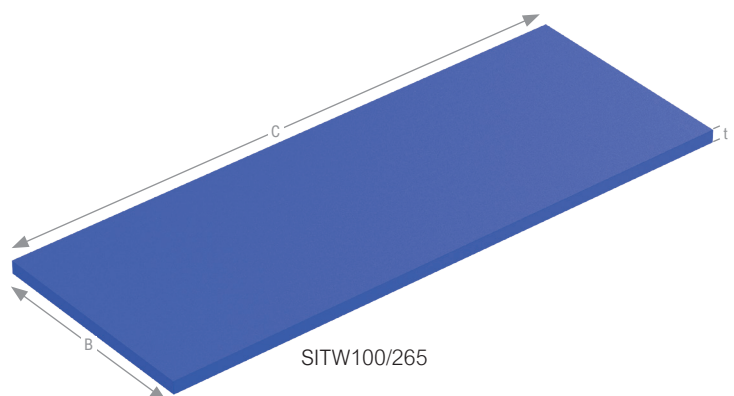
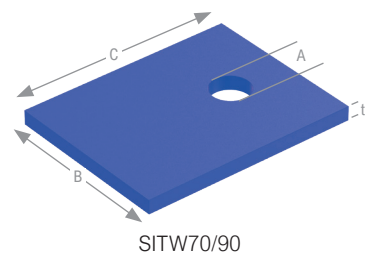
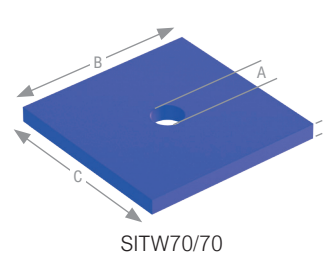
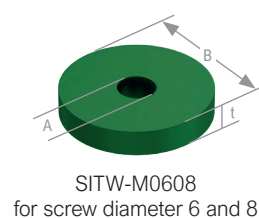
Dimensions, SIT

References	Color	Static loads [N/mm ²]		Dimensions [mm]		
		Min.	Max.	A	B	t
SIT75/X/6	Red	0.05	0.075	20-500	5 m	6.25
SIT150/X/6	Yellow	0.1	0.15	20-500	5 m	6.25
SIT350/X/6	Green	0.23	0.35	20-500	5 m	6.25
SIT750/X/6	Blue	0.5	0.75	20-500	5 m	6.25
SIT1500/X/6	Purple	1	1.5	20-500	5 m	6.25
SIT75/X/12.5	Red	0.05	0.075	20-500	5 m	12.5
SIT150/X/12.5	Yellow	0.1	0.15	20-500	5 m	12.5
SIT350/X/12.5	Green	0.23	0.35	20-500	5 m	12.5
SIT750/X/12.5	Blue	0.5	0.75	20-500	5 m	12.5
SIT1500/X/12.5	Purple	1	1.5	20-500	5 m	12.5



Dimensions, SITW

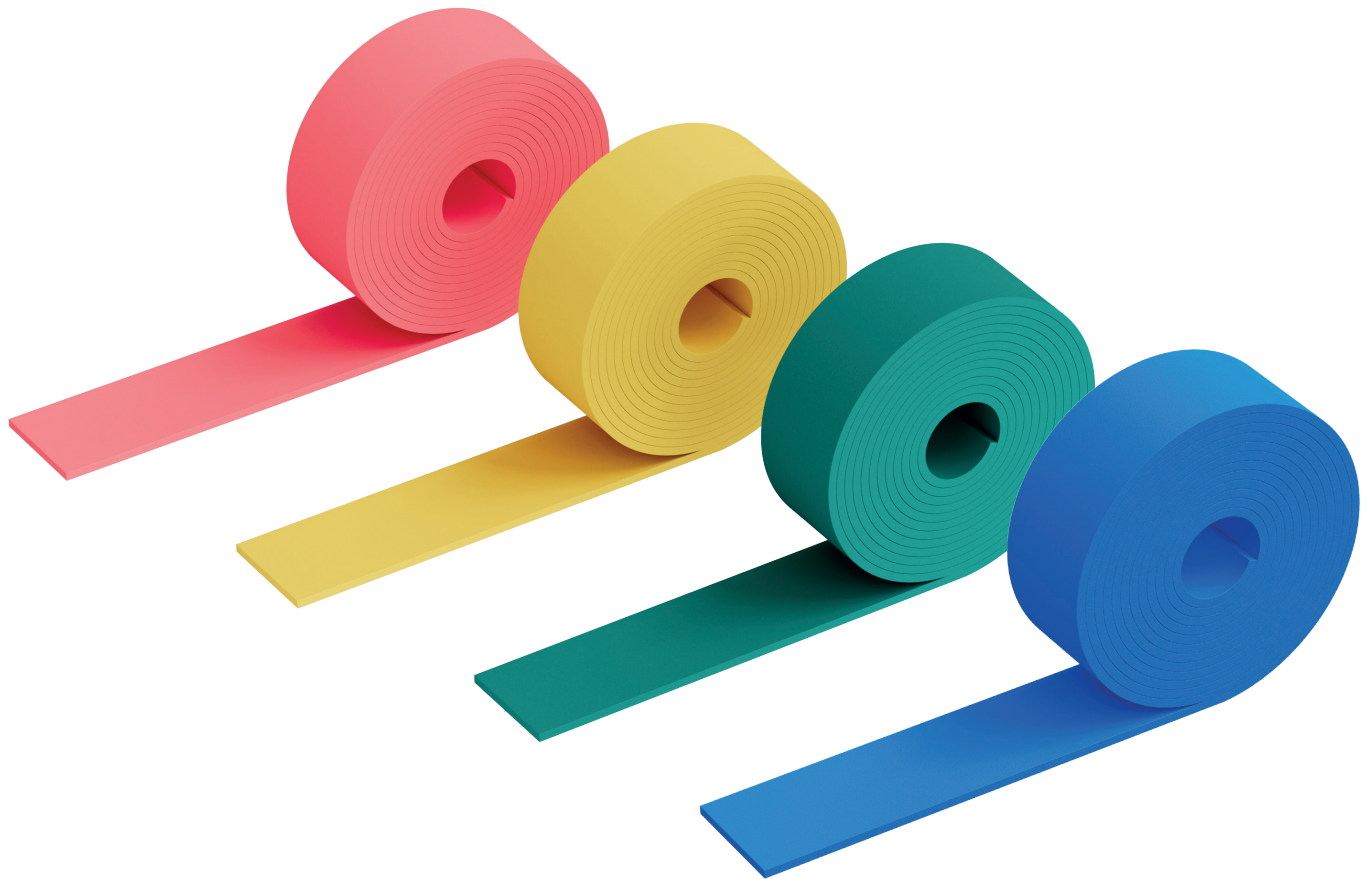
References	Compatible screw or product	Dimensions [mm]				Predrilling of the 1st member
		A	B	C	t	
SITW-M0608	Ø6 or 8	Ø8,5	Ø34	-	6.0	8 or 10
SITW-M1012	Ø10 or 12	Ø12,5	Ø49	-	6.0	12 or 14
SITW70/70	HTT	Ø~12	70	70	6.0	-
SITW70/90	AKR	Ø~16	70	90	6.0	-
SITW100/265	ABR255	-	100	265	6.0	-



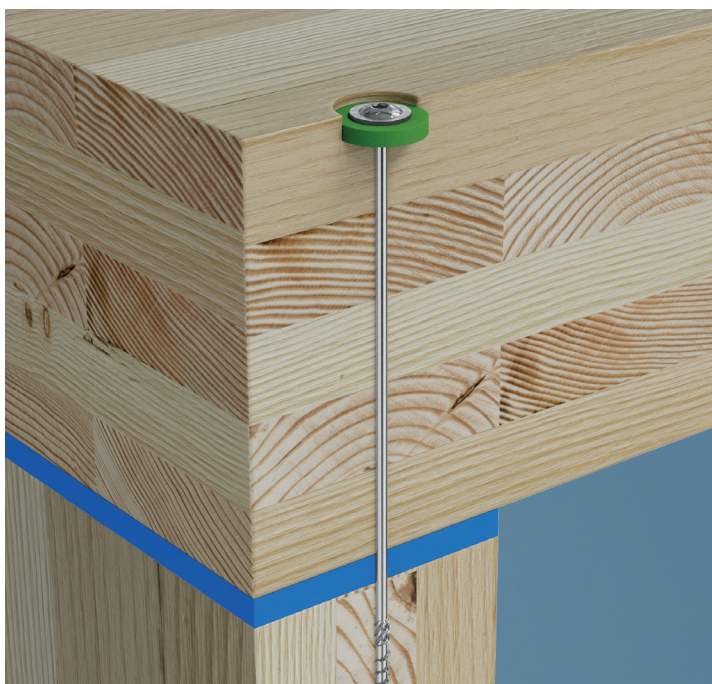
Mechanical Properties

References	Colour	Thickness	Static loads [N/mm ²]		Load peaks [N/mm ²]	Static E-modulus [N/mm ²]	Dynamic E-modulus [N/mm ²]	Static shear modulus [N/mm ²]	Dynamic shear modulus [N/mm ²]
			Min.	Max.					
SIT75/X/6	Red	6.25	0.05	0.075	2	0.75	0.85	0.12	0.17
SIT150/X/6	Yellow	6.25	0.1	0.15	3	1.13	1.32	0.19	0.26
SIT350/X/6	Green	6.25	0.23	0.35	4.2	3.01	3.42	0.38	0.55
SIT750/X/6	Blue	6.25	0.5	0.75	6	6.69	7.54	0.69	1.02
SIT1500/X/6	Purple	6.25	1	1.5	6.8	11.99	14.94	0.99	1.48
SIT75/X/12.5	Red	12.5	0.05	0.075	2	0.75	0.85	0.12	0.17
SIT150/X/12.5	Yellow	12.5	0.1	0.15	3	1.13	1.32	0.19	0.26
SIT350/X/12.5	Green	12.5	0.23	0.35	4.2	3.01	3.42	0.38	0.55
SIT750/X/12.5	Blue	12.5	0.5	0.75	6	6.69	7.54	0.69	1.02
SIT1500/X/12.5	Purple	12.5	1	1.5	6.8	11.99	14.94	0.99	1.48

See strongtie.eu for more information



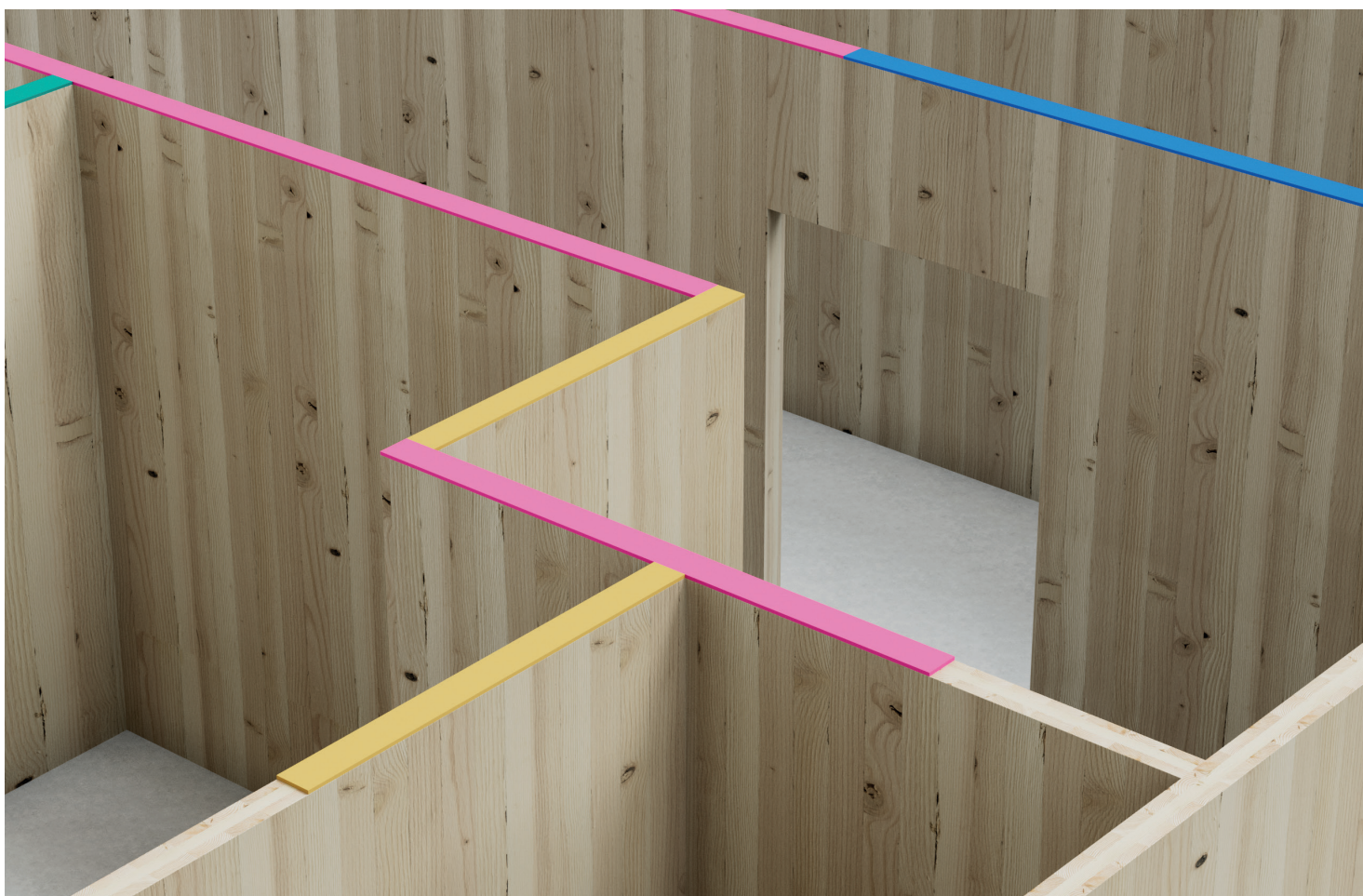
SIT strips are supplied on a 5 metre roll, with the width pre-cut to order (as per building designer specification).



SITW washer installed with Simpson Strong-Tie 'SWW' structural screw.



ABAI angle bracket featuring integrated acoustic insulation.



SIT provides a simple to install acoustic barrier, as well as additional draft sealing.