Technical Sheet

SES
Simpson End Seal

Simpson End Seal: One solution for air leakage and sound transference requirements.The SES Simpson End Seal provides a fast and effective solution to reduce air leakage through 'pocket masonry' in block walls. Once installed, it removes the need for mastic sealant around the perimeter of joists (subject to good workmanship when mortar keying).
The SES is a cost effective way to help comply with the requirements of Part L (reduced air leakage) and Part E (reduced sound transference).



Features

Material

Pre-galvanised mild steel.

Applications

Benefits

The SES allows for a full 100mm bearing of joist onto masonry walls.

- Air leakage - reduces air leakage without the need for mastic sealant.
- Sound - meets the sound requirements of a proprietary joist cap as specified by Appendix A, Robust Details Part E Handbook.
- Fire - provides 1 hour of fire resistance (in compliance with approved Document B).
- Can be used on external and party walls.
- Meets the NHBC Technical requirements.
- Secure fixing - provided by 30mm Square Twist Nails.

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Technical Data

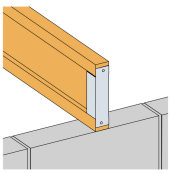
Product Dimensions & I-Joist Manufacturer

Reference	Hanger capacity				Connector Dimensions			
	I-Joist Manufacturer				Product Dimensions[mm]			Other
	Masonite	MetsaWood	James Jones	Steico	A[mm]	B[mm]	E[mm]	Weight[kg]
SES101/45	-	-	JJI 195/47-45	-	45	157	101	0.14
SES118/45	-	FJI 200/45-36 FJI 200/53-36	-	S 200/45-39	45	174	118	0.131
SES122/45	M 220/45-47	-	JJI 200/47-45	-	45	178	122	0.15
SES138/45	M 240/47-47	FJI 220/45-36 FJI 220/53-36	JJI 235/47-45	S 220/45-39	45	194	138	0.15
SES151/45	-	FJI 240/45-36 FJI 240/53-36	JJI 245/47-45	S 240/45-39	45	207	151	0.163
SES202/45	M 300/47-47	-	JJI 300/47-45	-	45	258	202	0.214
SES218/45	-	FJI 200/45-36 FJI 300/53-36	-	S 300/45-39	45	274	218	0.23
SES278/45	-	FJI 360/45-36 FJI 360/53-36	-	S 360/45-39	45	338	278	0.289
SES118/60	-	-	-	S 200/60-39	60	174	118	0.154
SES122/60	M 220/60-47	-	JJI 220/63-45	-	60	178	122	0.16
SES138/60	M 240/60-47	-	JJI 235/63-45	S 220/60-39	60	194	138	0.18
SES151/60	-	-	JJI245/63-45	S 240/60-39	60	207	151	0.192
SES202/60	M 300/60-47	-	JJI 300/63-45	-	60	258	202	0.251
SES218/60	-	-	-	S 300/60-39	60	274	218	0.269
SES252/60	M 350/60-47	-	-	-	60	308	252	0.308
SES278/60	-	-	-	S 360/60-39	60	334	278	0.338
SES302/60	M 400/60-47	-	-	-	60	358	202	0.365
SES318/60	-	-	-	S 400/60-39	60	374	318	0.384
SES101/69	-	-	JJI 195/72-45	-	69	157	101	0.148
SES122/69	M 220/70-47	FJI 200/69-36	JJI 220/72-45	-	69	178	122	0.175
SES138/69	M 240/70-47	FJI 220/69-36	JJI 235/72-45	-	69	194	138	0.195
SES151/69	-	FJI 240/69-36	JJI 245/72-45	-	69	207	151	0.211
SES202/69	M 300/70-47	-	JJI 300/72-45	-	69	258	202	0.275
SES218/69	-	FJI 300/69-36	-	-	69	274	218	0.296
SES252/69	-	-	JJI 350/72-45	-	69	308	252	0.338
SES278/69	-	FJI 360/69-36	-	-	69	334	278	0.371
SES302/69	-	-	JJI 400/72-45	-	69	358	302	0.401
SES318/69	-	FJI 400/69-36	-	-	69	374	318	0.422
SES118/90	-	FJI 200/96-39	-	S 200/90-39	90	174	118	0.203
SES122/90	M 220/97-47	-	JJI 220/97-45	-	90	178	122	0.21
SES138/90	M 240/97-47	FJI 220/96-39	JJI 235/97-45	S 220/90-39	90	194	138	0.232
SES151/90	-	FJI 240/96-39	JJI 245/97-45	S 240/90-39	90	207	151	0.252
SES202/90	M 300/97-47	-	JJI 300/97-45	-	90	258	202	0.327
SES218/90	-	FJI 300/96-39	-	S 300/90-39	90	274	218	0.351
SES252/90	M 350/97-47	-	JJI 350/97-45	-	90	308	252	0.402
SES278/90	-	FJI 360/96-39	-	S 360/90-39	90	334	278	0.44
SES302/90	M 400/97-47	-	JJI 400/97-45	-	90	358	302	0.476
SES318/90	-	FJI 400/96-39	-	S 400/90-39	90	374	318	0.5

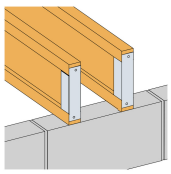
Installation

Installation

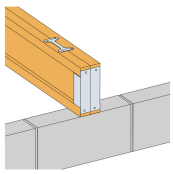
Step 1: Prepare block work to accept floor joists - no need for mortar on top. Position floor joists onto wall (only one joist shown for clarity). Fit the End Seal to the end of the joist as shown. Ensure that the End Seal is tight against the joist end and secure with 2 No 3.75x30 square twist nails.
Step 2: When preparing a double joist, repeat installation step 1 on the second I-Joist.
Step 3: Join the I-Joists together, use mastic or expanding foam between the two joists to ensure air tight seal. It is recommended that the I-Joists are joined together using 2 MJC (multi joist connector), one on top and one on the bottom of the I-Joist at 200mm from the bearing point (SDW screws can be used as an alternative to MJC). Check with I-Joist manufacturer.
Step 4: Apply mortar to the void between the top and bottom chords of the I-Joist on both sides of a single joist and to the outsides of a double joist, ensuring the mortar is packed against the End Seal.
Step 5: Lay a bed of mortar onto the top of the blocks ensuring mortar is laid tight up against the joist end. Lay blocks either side of the joist, ensuring mortar is applied to the block ends, completely fill all joints.
Lay the next bed of mortar on top of the blocks. Continue to build the wall as normal.



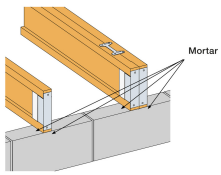
Step 1



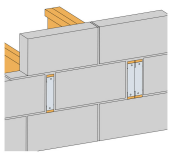
Step 2



Step 3



Step 4



Step 5

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