

## JES Joist End Support

The JES is a two piece metal-work system which enables the use of engineered timber I-joists in loft conversions, offering a safe and economic alternative to the traditional method which requires steel girders.

It provides reinforcement to the joist ends where they are cut to fit within the eaves of the existing roof. Each JES is supplied as 2 plates, as required for each joist end.

- The I-joists are installed from wall plate to wall plate, which means there is no need for a costly Party Wall Agreement.
- Steel beams can be eliminated, so there is no need for a crane, or to remove all the roof tiles.

### Why Convert Lofts Using I-Joists?

- No need to install steel girders
- No need to hire a crane
- I-joists installed from wall plate to wall plate
- No need for a Party Wall Agreement
- Light weight
- Loft conversions also possible in timber frame houses
- Suits roof slopes of 30° or greater

## Features

### Material

- Pre-galvanised mild steel



JES  
Joist End Support

## Technical Data

### JES Product Dimensions

References	Hanger Dimensions [mm]			Holes	
	A	B	t	Ø6.4	Ø6.4 Obround
JES099SCR	99	18	2.5	2	2
JES116SCR	116	18	2.5	3	2
JES124SCR	124	18	2.5	3	2
JES136SCR	136	18	2.5	3	2
JES139SCR	139	18	2.5	3	2
JES149SCR	149	18	2.5	4	2
JES156SCR	156	18	2.5	5	2
JES179SCR	179	18	2.5	5	2
JES204SCR	204	18	2.5	5	2
JES216SCR	216	18	2.5	5	2
JES240SCR	240	18	2.5	5	2
JES254SCR	254	18	2.5	5	2
JES276SCR	276	18	2.5	5	2
JES294SCR	294	18	2.5	5	2
JES304SCR	304	18	2.5	5	2
JES316SCR	316	18	2.5	5	2

### JES Product Capacities - James Jones

References	Product Capacities - James Jones					
	Joist Width [mm]	Joist Height	Joist End Bearing Capacity [kN]			
			Characteristic Capacity	Safe Working Loads		
				Long Term	Medium	Short Term
JES099SCR	47-97	195	8.1	2.4	3.1	4
JES124SCR	47-97	220	8.1	2.4	3.1	4
JES139SCR	47-97	235	8.1	2.4	3.1	4
JES149SCR	47-97	245	8.1	2.4	3.1	4
JES204SCR	47-97	300	9.8	3	3.8	4.9
JES254SCR	47-97	350	10.5	3.2	4	5.2
JES304SCR	47-97	400	12	3.6	4.6	5.9

### JES Product Capacities - Masonite

References	Product Capacities - Masonite					
	Joist Width [mm]	Joist Height [mm]	Joist End Bearing Capacity [kN]			
			Characteristic Capacity	Safe Working Loads		
				Long Term	Medium Term	Short Term
JES116SCR	47-97	220	8.1	2.4	3.1	4
JES139SCR	47-97	240	8.1	2.4	3.1	4
JES179SCR	47-97	300	9.8	3	3.8	4.9
JES240SCR	47-97	350	10.5	3.2	4	5.2
JES294SCR	47-97	400	12	3.6	4.6	5.9

## JES Joist End Support

### JES Product Capacities - MetsaWood

References	Product Capacities - MetsaWood					
	Joist Width [mm]	Joist Height [mm]	Joist End Bearing Capacity [mm]			
			Characteristic Capacity	Safe Working Loads		
				Long Term	Medium Term	Short Term
JES116SCR	45-96	200	7.7	2.3	3	3.8
JES136SCR	45-96	220	7.7	2.3	3	3.8
JES156SCR	45-96	240	11.5	3.5	4.4	5.7
JES216SCR	45-96	300	11.5	3.5	4.4	5.7
JES276SCR	45-96	360	11.5	3.5	4.4	5.7
JES316SCR	45-96	400	11.5	3.5	4.4	5.7

### JES Product capacities - Steico

References	Product Capacities - Steico					
	Joist Width [mm]	Joist Height [mm]	Joist End Bearing Capacity [kN]			
			Characteristic Capacity	Safe Working Loads		
				Long Term	Medium Term	Short Term
JES116SCR	45-90	200	7.7	2.3	3	3.8
JES136SCR	45-90	220	7.7	2.3	3	3.8
JES156SCR	45-90	240	10.9	3.3	4.2	5.4
JES216SCR	45-90	300	10.9	3.3	4.2	5.4
JES276SCR	45-90	360	10.9	3.3	4.2	5.4
JES316SCR	45-90	400	10.9	3.3	4.2	5.4

## Installation

### Installation

**Step 1:**

Use one plate as a template to mark the cut line and fastener hole positions on the end of the I-joist as shown, ensuring that the ends are flush. Remove the JES plate before cutting and drilling the I-joist.

**Step 2:**

Cut and drill the I-joist. Use a 6mm diameter drill bit to create the holes.

**Step 3:**

Securely install a JES plate on both sides of the I-joist using the M6 x 30mm Hex bolts and washers supplied.

Note the position of the lip on the JES which must be installed with the lip following the top-most edge of the adapted I-joist.

**Step 4:**

Position I-joist in between the existing trusses as shown, ensuring that a minimum 90mm of end bearing is achieved.

Joist layouts will vary - please refer to engineer responsible for floor design.

