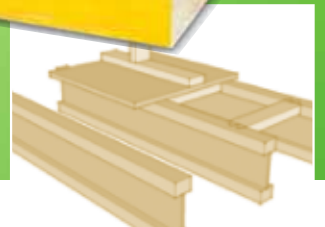


# STEICO *tradejoist*

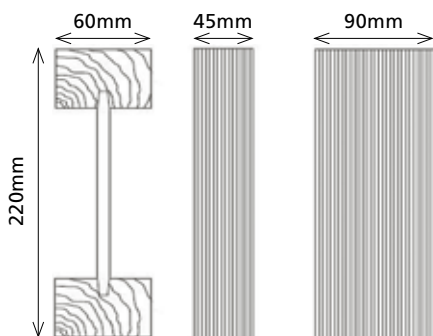
## Joist Selection Guide

Construction elements –  
made naturally out of wood



**NEW  
PRODUCT**

### STEICO *tradejoist* TJ60/220 THE SIMPLER SOLUTION



- STEICO *tradejoist* available in 3.6 m, 4.8 m & 6.0 m
- STEICO *ultralam* sizes to suit – 45 mm @ 3.0 m, 90 mm @ 4.8 m
- Spans up to 5.0 m for standard loads
- Solid timber flange for traditional fixings
- Colour coated for enhanced moisture resistance
- All beams clearly stamped with usage criteria
- STEICO complete floor kits, properly installed eliminates floor squeaks
- Lightweight and easy to cut
- Ease of access for service runs
- Consistent quality BBA approved product

For further information, please visit [www.steico.co.uk](http://www.steico.co.uk)

## THE SIMPLER ENGINEERED JOIST SOLUTION STEP 1, STEP 2, STEP 3 ... ✓

### STEP 1 Select center spacing for joist A&B

Clear Span of Joist		<4.0m	4.1m	4.2m	4.3m	4.4m	4.5m	4.6m	4.7m	4.8m	4.9m	5.0m	5.1m
300 c/c													x
400 c/c									x	x	x	x	x
480 c/c							x	x	x	x	x	x	x
600 c/c			x	x	x	x	x	x	x	x	x	x	x

x not allowed

All dimensions are Permissible clear spans for domestic floor joists designed to BS5268

Service Class 1

Imposed load not exceeding 1.5 kN/m<sup>2</sup>. Dead load not exceeding 0.75 kN/m<sup>2</sup> (0.5 kN/m<sup>2</sup> Dead + 0.25 kN/m<sup>2</sup> non-load bearing partitions)

### STEP 2 Select Header C

Clear Span of Header C		1.0m	1.5m	2.0m	2.5m	3.0m
Clear Span of Joist B	1.0m					use TJ60/220
	1.5m					
	2.0m					
	3.0m					use 45mm ULR
	3.5m					use 90mm ULR
4.0m						

The following notes should be considered when selecting Header C materials in STEP 2:

a. When Trimmer D or Header C support staircase loads from above **and** below, Header C material should be a minimum 45 mm STEICOultralam R (ULR).

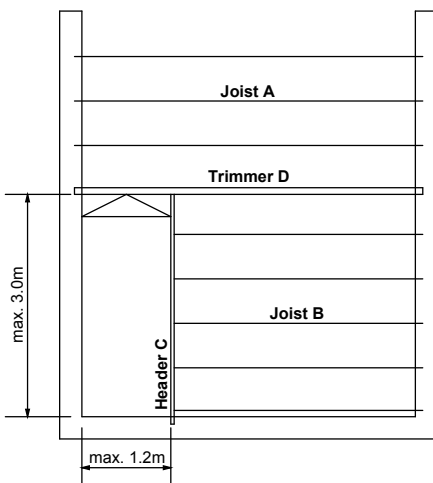
b. Where Header C is 2.0 m or longer, and supports the head of the staircase, Header C material should be a minimum 45 mm STEICOultralam R (ULR).

### STEP 3 Select Trimmer D

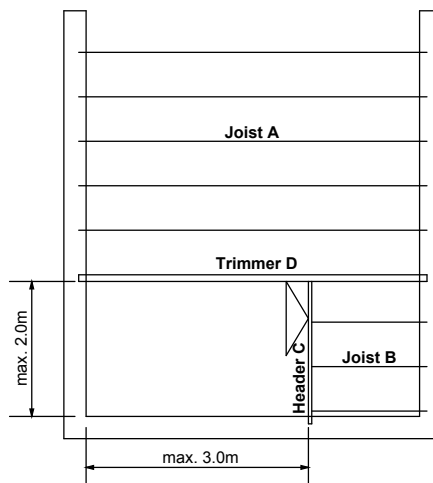
Header C Material	Clear Span of Trimmer D				
	3.6m	3.9m	4.2m	4.5m	4.8m
TJ60/220	2 x TJ	2 x TJ	2 x TJ	90 ULR	2 x 90 ULR
45 mm STEICOultralam	2 x TJ	2 x TJ	90 ULR	2 x 90 ULR	2 x 90 ULR
90 mm STEICOultralam	2 x TJ	90 ULR	2 x 90 ULR	2 x 90 ULR	2 x 90 ULR

## WORKED EXAMPLE

### Staircase Perpendicular to Joists



### Staircase Parallel to Joists



Joist span = 4.5 m

Staircase perpendicular = 2.8 m x 1.1 m

#### STEP 1

Joist A Span = 4.5 m

Centers = 400 mm

Joist B Span = 3.4 m (4.5 m – 1.1 m)

Centers = 600 mm

#### STEP 2

Span Joist B = 3.4 m (use 3.5 m)

Length of Header C = 2.8 m

(use 3.0 m)

Header C = 45 mm STEICOultralam R

#### STEP 3

Header C material = 45 mm

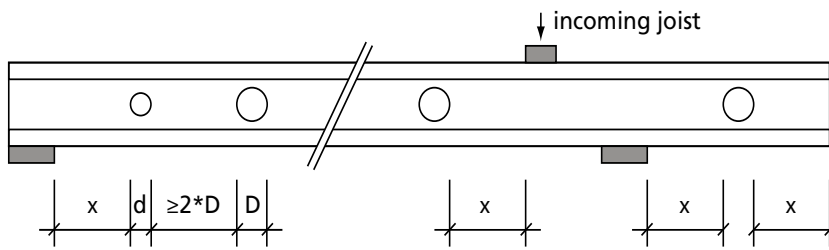
STEICOultralam R

Span of Trimmer D = 4.5 m

Trimmer D = 2 x 90 mm

STEICOultralam R

**HOLES CAN BE CUT THROUGH THE STEICOtradejoist IN LINE WITH THE DRAWING AND TABLE BELOW**



Round Hole Size [mm]	50	75	100	120
Distance X*	220	220	580	880

\*Minimum distance in mm from inside face of any support to nearest edge of hole.

20mm holes can be drilled anywhere in the web. Distance between hole edges min 40mm.

For larger holes close to supports use Simpson IHS. Fixed in line with manufacturers recommendations.



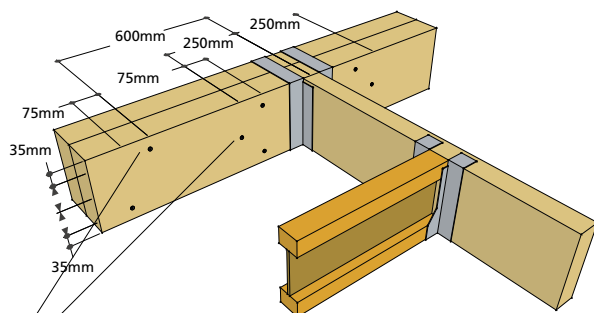
**METALWORK SELECTOR**

Masonry		use	Simpson	or	Cullen
Single	TJ60/220	→	JHMI225/61	→	JHI-61-225
Double	TJ60/220	→	HJHMI225/120	→	RBJHI-122-225
Single	45mm STEICOultralam	→	HJHMI225/45	→	RBJHI-46-225
Single	90mm STEICOultralam	→	HJHMI225/91	→	RBJHI-92-225
Double	90mm STEICOultralam	→	HJHMI225/180	→	RBJHI-183-225
Timber		use	Simpson	or	Cullen
Single	TJ60/220*	→	ITB220/61	→	UH-61-220
Single	45mm STEICOultralam	→	HITB-LT220/47	→	HUH-46-220
Single	90mm STEICOultralam	→	HITB-LT220/91	→	HUH-92-220

\*if TJ60/220 is a Stair Header use HITB-LT220/61 or HUH-61-220.

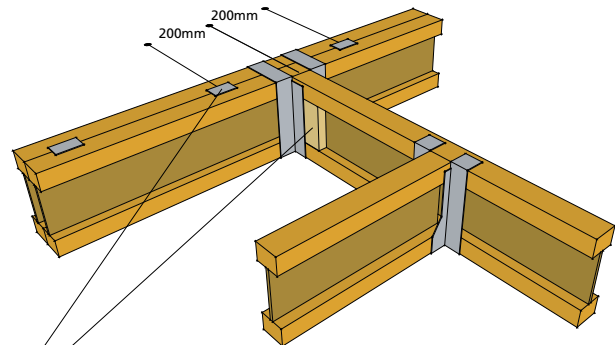


**STEICOultralam CONNECTION**



Fix with 2 rows of Simpson SDW22634 screws at max 600mm centers, with an additional 3 screws both sides of incoming member

**STEICOtradejoist CONNECTION**



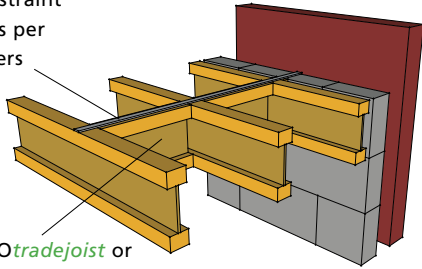
Use 25 mm x 100 mm x 125 mm ply/OSB web stiffener with STEICOtradejoist header.

Number of multi ply connections at incoming member as table below.

Incoming Member	Simpson MJC	Cullen I-Clip
TJ60/220	1 pair either side	1-either side
STEICOultralam	2 pairs either side	2-either side

### Masonry wall restraint

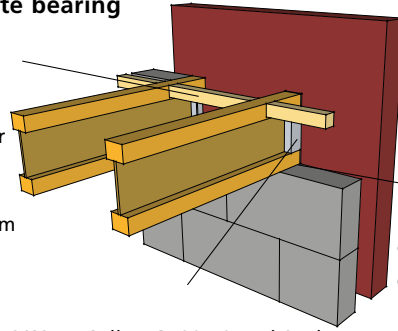
Simpson™ HES or Cullen™ PFS restraint strap required as per Building Designers specification



Full depth STEICO tradejoist or min 38\*120 solid timber noggin

### Intermediate bearing

Min. 38\*38 perimeter noggin fixed with Z-Clip or skew nailed. Positioned 25-75mm from face of wall.

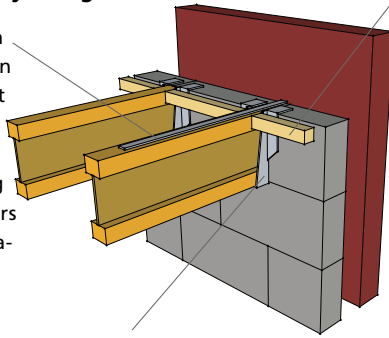


Min. 90mm end bearing.

Simpson SES143/63 or Cullen GR225-2 End Seal to ensure compliance with air leakage requirements

### Masonry Hanger

Simpson or Cullen restraint strap as per Building Designers specification

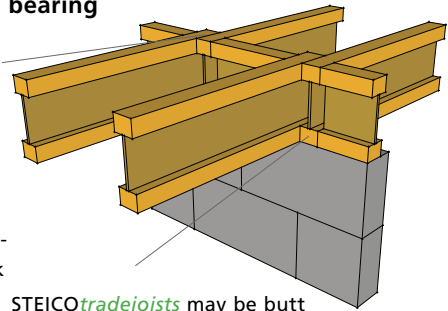


Min. 38\*38 perimeter noggin fixed with Z-Clip or skew nailed. Positioned 25-75mm from face of wall.

Simpson or Cullen Masonry hangers

### Intermediate bearing

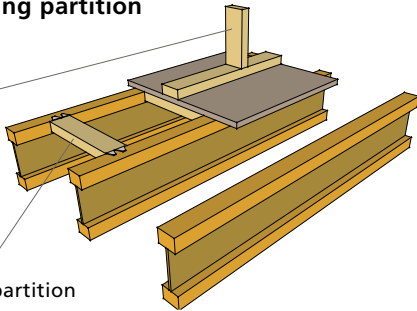
Stagger end of joists and ensure either STEICO tradejoist blocking is fitted or continuous blockwork



STEICO tradejoists may be butt jointed where there is a minimum of 45mm bearing available.

### Non load bearing partition

Maximum weight of non load bearing partitions 0.8 kN/m.



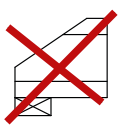
Minimum 38\*75 partition noggin fixed to STEICO tradejoist at 600mm centers using Z-Clip

### Temporary Bracing

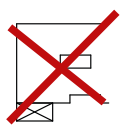


Proper erection and installation of bracing is essential to safe construction when using STEICO tradejoist. For detailed information please visit [www.steico.co.uk](http://www.steico.co.uk).

For additional fixing details please refer to full STEICO Technical manual available at [www.steico.co.uk](http://www.steico.co.uk)



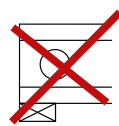
Do not angle cut



Do not notch



Do not walk on unbraced joists



Do not cut holes over bearings



Do not splay hangers



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