

## Technical data sheet

**SIMPSON**

**Strong-Tie**

SPR

### Timber Joist Hanger Slope Adjustable

*The SPR connector supports rafters from other timber members and can be sloped up or down by up to 45 degrees.*

- Slope angle can be adjusted on-site.
- Adjustable between 0 and 45 degree, up and down.
- supports a range of timber heights from 145mm to 250mm.

## Features

### Material

- Galvanized steel S250GD + Z275 according to NF EN 10346.

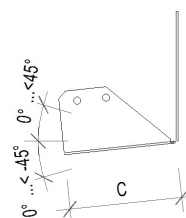
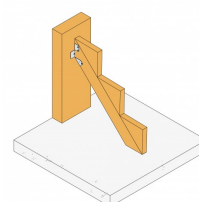
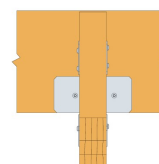
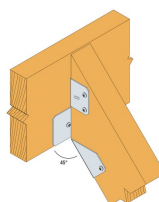
## Applications

### For Connecting

- **Supporting member:** solid wood, composite lumber, glued-laminated wood, concrete, steel.
- **Supported member:** solid wood, composite lumber, glued-laminated wood.

## Applications

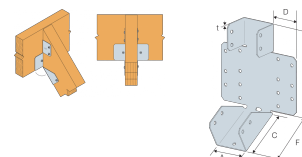
- Joists,
- Purlins,
- Smooth beams...



## SPR Timber Joist Hanger Slope Adjustable

## Technical Data

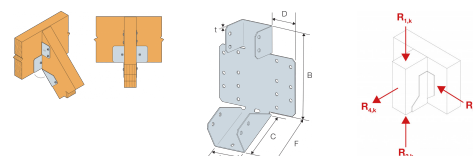
### Product dimensions



References	Joist dimensions [mm]				Product dimensions [mm]						Header holes	Joist holes	
	Width		Height		A	B	C	D	F	t	Ø5	Ø5	Traingular
	Min.	Max.	Min.	Max.									
SPR47/140	45	47	145	200	47	140	74	43	78	1.5	13	8	2
SPR47/200	45	47	200	250	47	200	74	43	78	1.5	17	14	2
SPR91/140	89	91	145	200	91	140	74	43	78	1.5	18	8	2
SPR91/200	89	91	200	250	91	200	74	43	78	1.5	24	14	2

The lower heel of the joist hanger must be bent only once along the desired angle  $\alpha$ .  
The height of joist is dependet on the slope.

### Product characteristic capacities - Timber beam to timber beam



References	Fasteners		Product characteristic capacities - Timber C24 [kN]		Safe working loads - timber C24 [kN]		
	Header	Joist	$R_{1,k}$	$R_{2,k}$	$R_{1,SWL,Long\ term}$	$R_{1,SWL,Medium\ Term}$	$R_{2,SWL,Short\ term}$
	Qty	Qty	N3.75x30	N3.75x30	N3.75x30	N3.75x30	N3.75x30
SPR47/140	13	10	6	6	2.5	2.9	3
SPR47/200	17	16	12.2	12.2	5.1	5.8	6.1
SPR91/140	18	10	8.3	8.3	3.5	4	4.2
SPR91/200	24	16	14.5	14.5	6	6.9	7.2

number in ( ) are the number of square twist nails N3,75x30

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## Installation

### Fasteners

#### **On supported member:**

- CNA annular ring-shank nails dia. 4.0 x 35 mm or CNA dia. 4.0 x 50 mm.
- Square twist nails N3,75x30

#### **On supporting member:**

##### ***Wood substrate:***

- CNA annular ring-shank nails dia. 4.0 x 35 or CNA dia. 4.0 x 50 mm.
- Lag screws and bolts dia. 10 mm.
- Square twist nails N3,75x30

##### ***Concrete substrate:***

- Mechanical anchor: WA M10-78/5 .
- Chemical anchor threaded rod dia. 10 mm: LMAS M10-130 with AT-HP resin.

##### ***Metal substrate:***

**Bolts dia. 10 mm.**

### Installation

- Use all specified fasteners.
- Bend only once.
- To ensure proper seat installation, install the bottom nails prior to the side nails.
- Attach the sloped joist at both ends so that the horizontal force developed by the slope is fully supported by the carried members.

