

# Technical data sheet

**SIMPSON**

**Strong-Tie**

HGUS  
**Heavy Engineered Timber Hanger**

*The HGUS joist hanger is designed to support trusses and girder trusses from timber members.*

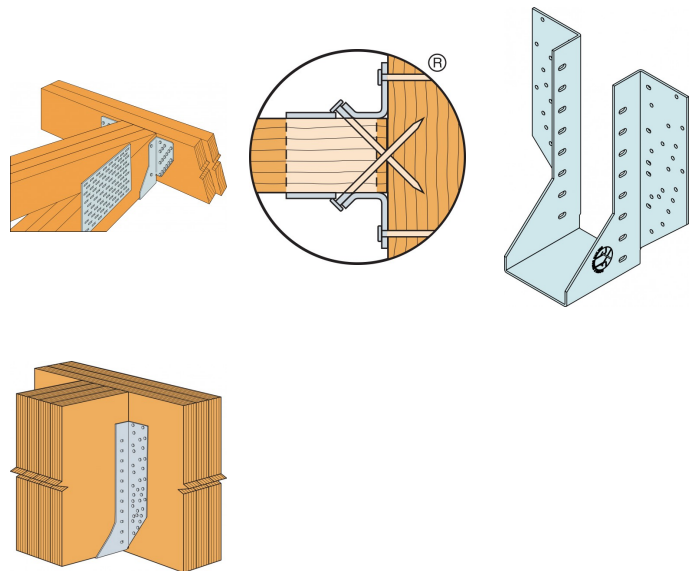
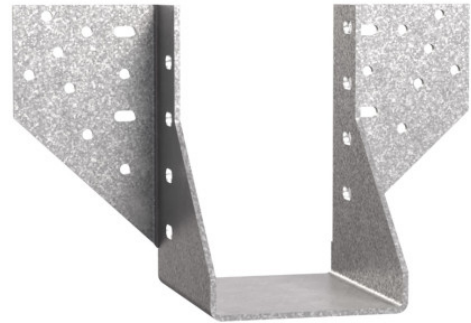
CE

EPD  
EN 15804

## Features

### Material

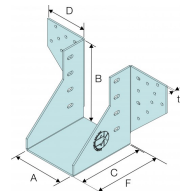
- Pre-galvanised mild steel



## HGUS Heavy Engineered Timber Hanger

### Technical Data

#### Product Dimensions

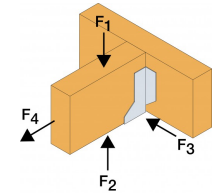


References	Joist dimensions [mm]	Product dimensions [mm]						Header holes		Joist holes			Weight [kg]
	Width	A	B	C	D	F	t	Ø5	Ø5x10 Obround	Ø5x10 Obround	Ø6x12 Obround		
HGUS125/80N	2x35	80	122	100	66	107	2.5	16	4	-	8	1	
HGUS145/80N	2x35	80	145	100	66	107	2.5	22	6	-	10	1.1	
HGUS125/105N	2x47	105	110	100	66	107	2.5	16	4	-	8	1.1	
HGUS145/105N	2x47	105	145	100	66	107	2.5	22	6	-	10	1.2	
HGUS145/120N	3x35	120	145	100	66	107	2.5	22	6	-	10	1.2	
HGUS145/155N	3x47	155	145	100	66	107	2.5	22	6	-	10	1.3	
HGUS48N	89x241	92	180	100	66	107	2.5	28	10	10	-	0.98	
HGUS410N	89x240 to 457	92	229	100	66	107	2.5	36	10	16	-	1.1	
HGUS412N	89x300 to 457	92	265	100	66	107	2.5	44	12	20	-	1.4	
HGUS414N	89x350 to 457	92	316	100	66	107	2.5	52	14	22	-	1.6	
HGUS180/135N	133x200 to 302	135	180	100	66	107	2.5	28	8	10	-	2	
HGUS5.50/10N	133x240 to 457	140	214	100	66	107	2.5	36	10	16	-	2.4	
HGUS5.50/12N	133x300 to 457	140	265	100	66	107	2.5	44	12	20	-	2.6	
HGUS5.50/14N	133x350 to 457	140	316	100	66	107	2.5	52	14	22	-	2.9	
HGUS7.25/10N	180x240 to 457	184	219	100	66	107	2.5	36	10	16	-	2.7	
HGUS7.25/12N	180x300 to 457	184	270	100	66	107	2.5	44	12	20	-	1.6	
HGUS7.25/14N	180x350 to 457	184	320	100	66	107	2.5	52	14	22	-	1.8	
Spec HGUS48N	Variable	92 - 300	180	100	66	107	2.5	28	10	10	-	-	

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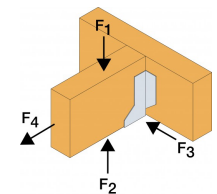
## HGUS Heavy Engineered Timber Hanger



### HGUS - Product Capacities

References	Fasteners		Product Characteristic Capacities (TR26 Timbers) [kN]				Safe Working Load [kN]					
	Header	Joist	R <sub>1,k</sub>		R <sub>2,k</sub>		R <sub>1,SWL,Long term</sub>		R <sub>1,SWL,Medium Term</sub>		R <sub>2,SWL,Short term</sub>	
	Qty	Qty	CNA4.0x60	4.0x100mm	CNA4.0x60	4.0x100mm	CNA4.0x60	4.0x100mm	CNA4.0x60	4.0x100mm	CNA4.0x60	4.0x100mm
HGUS125/80N	20	8	25.1	-	7.8	-	11.5	-	10.1	-	3.9	-
HGUS145/80N	28	10	33.3	-	9.8	-	17.3	-	15.1	-	4.9	-
HGUS125/105N	20	8	25.1	-	7.8	-	11.5	-	10.1	-	3.9	-
HGUS145/105N	28	10	33.3	-	9.8	-	17.3	-	15.1	-	4.9	-
HGUS145/120N	28	10	33.3	-	9.8	-	17.3	-	15.1	-	4.9	-
HGUS145/155N	28	10	33.3	-	9.8	-	17.3	-	15.1	-	4.9	-
HGUS48N	36	10	-	16.1	-	11.1	-	27.8	-	-	-	7.5
HGUS410N	46	16	-	20.5	-	17.7	-	35.9	-	-	-	9.0
HGUS412N	56	20	-	26.4	-	22.1	-	40.9	-	-	-	11.0
HGUS414N	66	22	-	34.4	-	24.3	-	43.5	-	-	-	12.0
HGUS180/135N	36	10	-	15.9	-	11.1	-	27.8	-	-	-	7.5
HGUS5.50/10N	46	16	-	20.7	-	17.7	-	35.9	-	-	-	9.0
HGUS5.50/12N	56	20	-	26.6	-	22.1	-	40.9	-	-	-	11.0
HGUS5.50/14N	66	22	-	34.6	-	24.3	-	43.5	-	-	-	12.0
HGUS7.25/10N	46	16	-	21.3	-	17.7	-	35.9	-	-	-	9.0
HGUS7.25/12N	56	20	-	27.4	-	22.1	-	40.9	-	-	-	11.0
HGUS7.25/14N	66	22	-	34.5	-	24.3	-	43.5	-	-	-	12.0
Spec HGUS48N	36	10	-	-	-	-	-	27.8	-	-	-	7.5

### HGUS Heavy Engineered Timber Hanger - Manufactured to Order 92-184mm



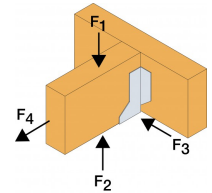
References	Joist dimensions [mm]	Product dimensions [mm]							Header holes		Joist holes	Fasteners		Safe Working Load [kN]		
	Width	A	B	C	D	F	t	Ø5	Ø5x10 Obround	Ø6x12 Obround	Header Qty	Joist Qty	R <sub>1,SWL,Long term</sub>	R <sub>1,SWL,Medium Term</sub>	R <sub>2,SWL,Short term</sub>	
													4.0x100mm	4.0x100mm	4.0x100mm	
Spec HGUS48N	Variable	92 - 300	180	100	66	107	2.5	28	10	-	36	10	27.8	-	7.5	

# Technical data sheet



HGUS  
Heavy Engineered Timber Hanger

HGUS Heavy Engineered Timber Hanger - Manufactured to Order 185-300mm



References	Joist dimensions [mm]	Product dimensions [mm]							Header holes		Joist holes		Fasteners		Safe Working Load [kN]		
	Width	A	B	C	D	F	t	Ø5	Ø5x10 Obround	Ø6x12 Obround	Header	Joist	R <sub>1,SWL,Long term</sub>	R <sub>1,SWL,Medium Term</sub>	R <sub>2,SWL,Short term</sub>		
											Qty	Qty	4.0x100mm	4.0x100mm	4.0x100mm		
Spec HGUS48N	Variable	185 - 300	180	100	66	107	2.5	28	10	-	36	10	18.3	-	7.5		

## HGUS Heavy Engineered Timber Hanger

### Installation

#### Installation

- Double shear nailing allows distribution of the carried members load through two points on each nail for greater strength.
- Joist nails must be driven at 45° through the joist dome (pan or obround nail holes) into the joist, then the header to achieve the table loads.
- The thickness of the supporting timber must be equal or greater than the fastener length.
- Verify the header can take the required fasteners specified within the table.
- Use all specified fasteners.

