PRODUCT DATA SHEET

HEAVY DUTY JOIST HANGER (JHH)

AS1684 & AS1720 COMPLIANT

- Minimum Z275 galvanised steel
- Design values tested in accordance to the relevant standard

FEATURES AND BENEFITS

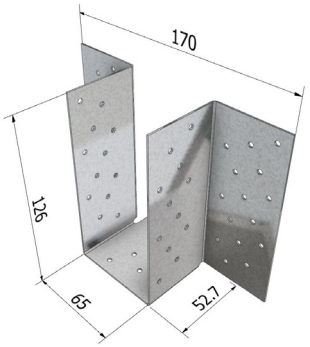
EASY: Preformed to common high-capacity timber sizes including two-ply trusses.

FAST: Can be fastened with Pryda 12-35mm Screws.

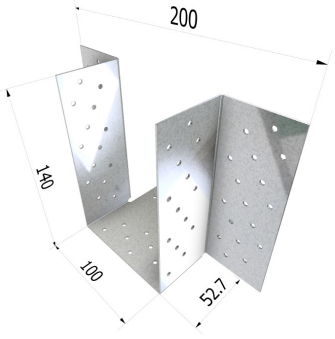
STRONG: 1.2mm thick galvanised steel engineered to resist gravity loads and wind uplift loads as well as lateral rotation.

SPECIFICATIONS

STEEL	G300
THICKNESS	1.2mm
CORROSION RESISTANCE	Z275
FASTENERS REQUIRED	Pryda 35 x 3.15mm Timber Connector Nails OR Pryda Red Painted hex head 12G x 35mm Screws



JHH65

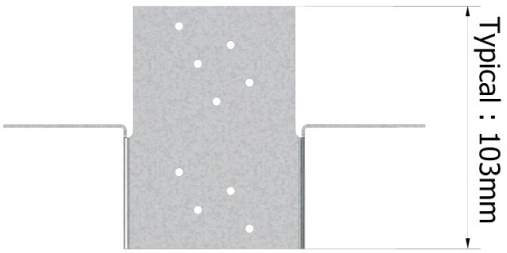


JHH100

Heavy duty hanger for higher load applications.

Note: The internal dimension of the JHH100 hanger is only 95mm, specially designed to cater for 2/45 thick beams, i-joists or trusses or 90mm thick floor trusses or equivalent.

JHH75 (internal dimension of 75mm) is suitable for 2/35 thick beams or trusses or 70mm thick floor trusses or equivalent.



BASE VIEW

HEAVY DUTY HANGERS

PRODUCT CODE	MATERIAL	SUIT TIMBER WIDTH (MM)	HEIGHT (MM)	QUANTITY
JHH65	1.2mm G300 Z275 Galvanised Steel	65	128	10
JHH100		95	142	10

PRYDA 12-35 SCREWS

PRODUCT CODE	MATERIAL	TYPE	SIZE	PACK CONFIGURATION	QUANTITY
TCS12-35/1k	Galvanised Steel	Red Hex Head 5/16 or 8mm socket size Zip Drilling Tip	12G x 35mm	1 Carton	1000
TCS12-65/1K		Black Hex Head 5/16 or 8mm socket size Zip Drilling Tip	12G x 65mm	1 Carton	1000

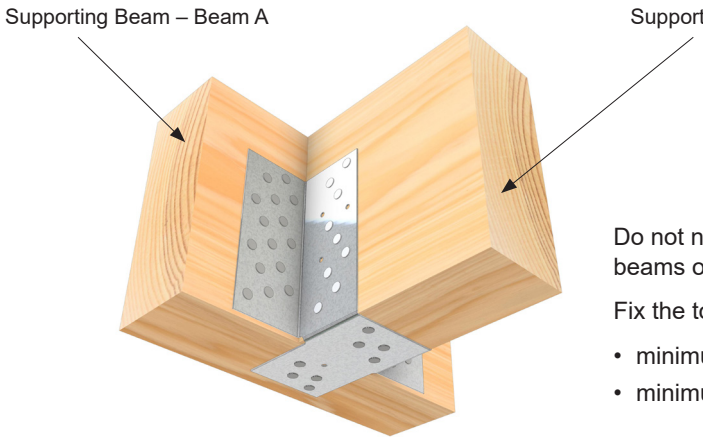
PRYDA TIMBER CONNECTOR NAILS

PRODUCT CODE	MATERIAL	TYPE	SIZE	PACK CONFIGURATION	QUANTITY
OSNGB	Galvanised Steel	Flat Head	35 x 3.15mm	500g cardboard packs x 10	5kg
OSNG				1kg cardboard packs x 10	10kg
TPOSNG				5kg Trade pack x 1	5kg
OSNBCI/SS	S316 Stainless Steel			500g clamshell pack x 1	500g

LOOKING FOR MORE DETAILS OR OTHER HANGERS & TRUSS BOOTS IN OUR RANGE?

SEE OUR HANGERS & TRUSS BOOTS DESIGN GUIDE AVAILABLE AT PRYDA.COM.AU

DESIGN CAPACITIES



Do not nail or screw within 30mm of the ends of the timber beams or within 6mm of beam edge.

Fix the tongue to the underside of supporting beam A with:

- minimum 4 nails of single laminate Beam A.
- minimum 3 nails into each laminate for multi-laminate Beam A.

NAIL FIXING – 35 X 3.15MM PRYDA TIMBER CONNECTOR NAILS

LOAD CASE	DESIGN CAPACITIES (ΦNJ) IN KN					
	30 NAILS TO BEAM A 18 NAILS* TO BEAM B			34 NAILS TO BEAM A 22 NAILS* TO BEAM B		
	JD5	JD4	JD3	JD5	JD4	JD3
1.35G	10.7	12.7	17.8	12.1	14.4	20.2
1.2G + 1.5Qf	12.9	15.4	21.6	14.6	17.5	24.5
1.2G + 1.5Qr	14.4	17.2	24.1	16.3	19.5	27.3
1.2G + Wd	24.4	29	30	27.6	30	30
Wind Uplift	13	15.4	13.7*	16.1	19.2	17.1*

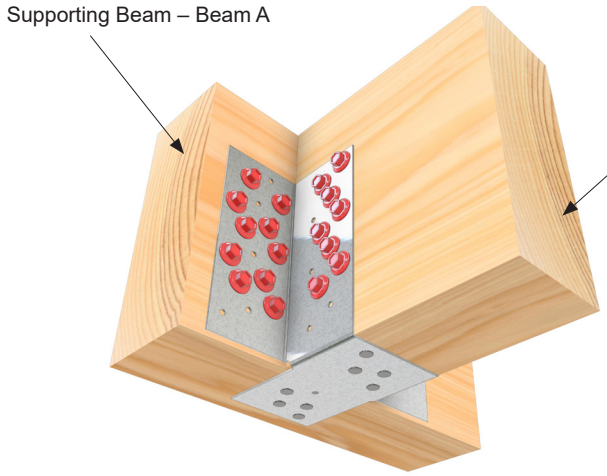
Notes:

1. Beam A = Supporting Beam, Beam B = Supported Beam.
2. **Wind capacities** – The JD3 capacities (marked *) are based on 11 nails for JHH65 and 14 nails for JHH100 to satisfy end distance requirements (also see Note 3). Limiting capacity of the hangers = 30.0 kN
3. **Supported Beam prone to Splitting** - JHH brackets are not recommended to resist uplift loads for supported members using timbers that are prone to splitting (like hardwoods-JD3 joint group) unless additional precautions are taken. These can be in the form of pre-bored holes or provision of anti-split nailplates at ends of the supported beam.
4. **Multiple Laminated Supporting Beams** - Fasteners with longer lengths are required when JHH brackets are fixed into a multiple laminated supporting beam. For double laminates, use 65 long nails or screws. Alternatively, for double or triple laminated supporting beams, additional fixings may be provided at hanger locations to laminate plies. Seek advice from the beam design Engineer.
5. The values in the table apply directly for Category 1 joints. Refer to ‘General Notes’ found in the Pryda Hangers and Truss Boots Guide for advice on how the values should be reduced for Category 2 and Category 3 joints.
6. **Beams must be at least 140mm deep**. For beams of lesser depths, the tabulated capacities may be adjusted by a factor equal to the ratio of the number of effective fasteners by the number of fasteners tabulated above. Unless the top of the supported beam is provided with additional lateral restraints, the bracket must cover at least 60% of the depth of the supported beam.

IMPORTANT:

READ THIS DATASHEET IN CONJUNCTION WITH PRYDA HANGERS & TRUSS BOOTS DESIGN GUIDE AND REFER TO ESSENTIAL NOTES AND GENERAL NOTES.

DESIGN CAPACITIES



Do not nail or screw within 30mm of the ends of the timber beams or within 6mm of beam edge.

Fix the tongue to the underside of supporting beam A with:

- minimum 4 nails of single laminate Beam A.
- minimum 3 nails into each laminate for multi-laminate Beam A.

SCREW FIXING – PRYDA TCS12-35 SCREWS

LOAD CASE	DESIGN CAPACITIES (ΦNJ) IN KN					
	OPTION 1 12 SCREWS TO BEAM A 8 SCREWS TO BEAM B			OPTION 2 20 SCREWS TO BEAM A 16 SCREWS TO BEAM B		
	JD5	JD4	JD3	JD5	JD4	JD3
1.35G	10	14	20	15.9	22.5	30
1.2G + 1.5Qf	12.2	17	24.3	19.3	27.2	30
1.2G + 1.5Qr	13.6	19	27.1	21.5	30	30
1.2G + Wd	20.1	28	30	30	30	30
Wind Uplift	14.4	20	28.7	26	30	30

Notes:

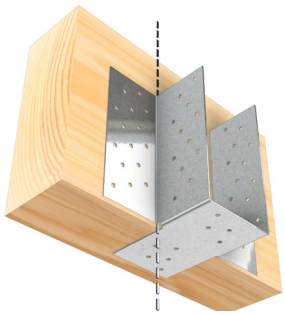
1. Beam A = Supporting Beam, Beam B = Supported Beam.
2. **Wind capacities** – The JD3 capacities (marked *) are based on 11 nails for JHH65 and 14 nails for JHH100 to satisfy end distance requirements (also see Note 3). Limiting capacity of the hangers = 30.0 kN
3. **Supported Beam prone to Splitting** - JHH brackets are not recommended to resist uplift loads for supported members using timbers that are prone to splitting (like hardwoods-JD3 joint group) unless additional precautions are taken. These can be in the form of pre-bored holes or provision of anti-split nailplates at ends of the supported beam.
4. **Multiple Laminated Supporting Beams** - Fasteners with longer lengths are required when JHH brackets are fixed into a multiple laminated supporting beam. For double laminates, use 65 long nails or screws. Alternatively, for double or triple laminated supporting beams, additional fixings may be provided at hanger locations to laminate plies. Seek advice from the beam design Engineer.
5. The values in the table apply directly for Category 1 joints. Refer to ‘General Notes’ found in the Pryda Hangers and Truss Boots Guide for advice on how the values should be reduced for Category 2 and Category 3 joints.
6. **Beams must be at least 140mm deep**. For beams of lesser depths, the tabulated capacities may be adjusted by a factor equal to the ratio of the number of effective fasteners by the number of fasteners tabulated above. Unless the top of the supported beam is provided with additional lateral restraints, the bracket must cover at least 60% of the depth of the supported beam.

IMPORTANT:

READ THIS DATASHEET IN CONJUNCTION WITH PRYDA HANGERS & TRUSS BOOTS DESIGN GUIDE AND REFER TO ESSENTIAL NOTES AND GENERAL NOTES.

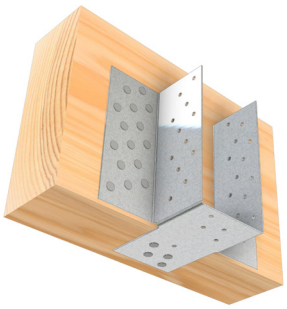
INSTALLATION

STEP 1



- Determine the number of fasteners required using the design values table and your plan. Consult with your project Engineer / Designer. Measure and mark the location on the supporting beam.

STEP 2

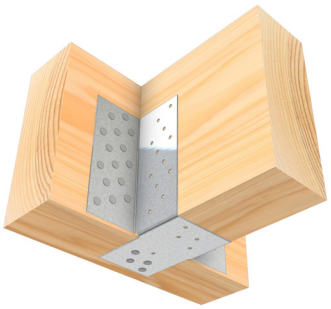


- Line up Heavy Duty Hanger on the supporting beam and fasten only one side initially.

CAUTION

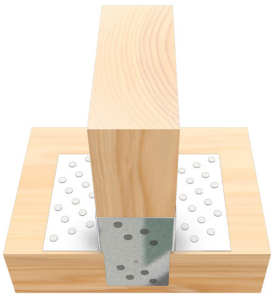
- If both sides are fastened before the supported beam is slotted in, the final connection to the supported beam could be:
  - Too loose, leading to squeaking and reduced design values.
  - Too tight, meaning the beam will not fit.

STEP 3



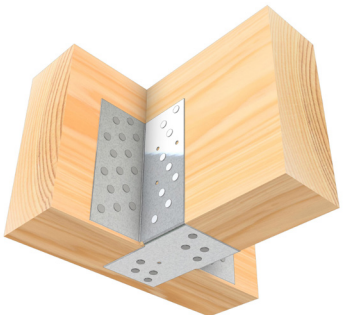
- Place the supported beam into the Heavy Duty Hanger ensuring it is right up against supporting beam.

STEP 4



- Cup the Heavy Duty Hanger tight against the supported beam. Fasten off to the supporting beam.

STEP 5



- Finish by fixing the supported beam on both sides and underside.

FASTENING HEAVY DUTY HANGERS

BUILD WITH CONFIDENCE

Where possible, hand nailing with Pryda Timber Connector nails is always preferred, why?

- Pryda Timber Connector Nails are forged in one piece, unlike clouts that are two pieces soldered together, meaning the head can pop off.
- Pryda Nails are the correct diameter, ensuring a tight fit in pre-punched holes = a stronger connection.
- Design values and testing have all been conducted using Pryda Timber Connector Nails.
- Hand hammered nails ensure correct nail positioning and drive depth (not driven to shallow or too deep).

LOOKING FOR MORE DETAILS OR OTHER HANGERS & TRUSS BOOTS IN OUR RANGE?

SEE OUR HANGERS & TRUSS BOOTS DESIGN GUIDE AVAILABLE AT PRYDA.COM.AU