

PRODUCT DATA SHEET

JOIST HANGER, EXTERIOR

PRODUCT DESCRIPTION

Eurotec joist hangers are used to **affix main girder and secondary girder connections**. They can be used for **concrete or timber and installed** in KVH, BSH and CLT.

ADVANTAGES

- Corrosion protection through hot galvanising
- Ease of use and highly versatile

MATERIAL

- S250 GD
- Z 275

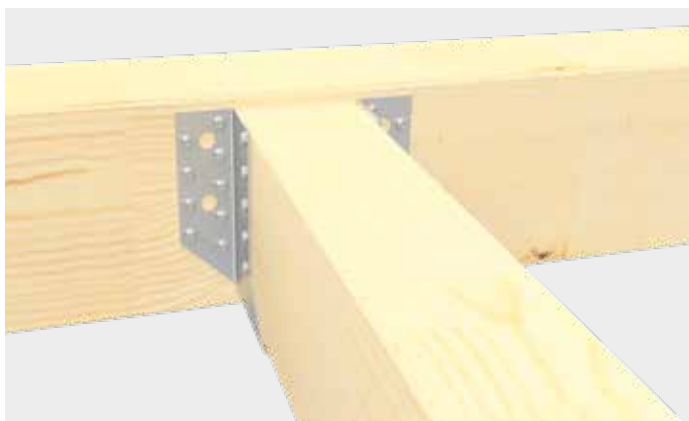


Joist Hanger, outer

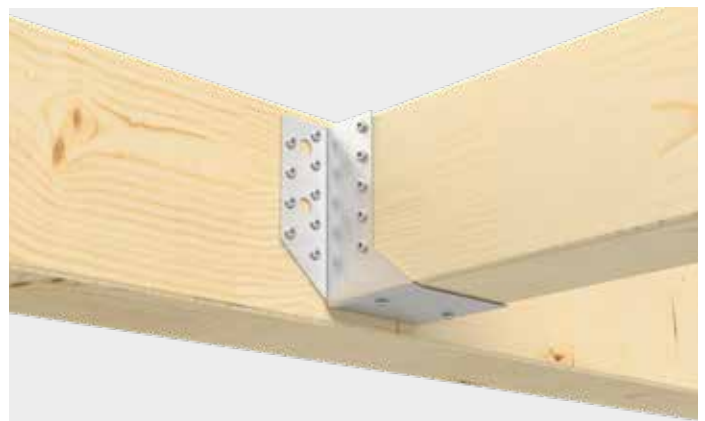
i INSTRUCTIONS FOR USE

The joist hangers can accommodate horizontal and vertical loads. They can be fully or partially unscrewed. As a means of joining for timber connections, anchor nails of $\varnothing 4$ mm, $L \geq 40$ mm to 60 mm, angle bracket screws of $\varnothing 5$ mm, $L \geq 25$ mm to 70 mm or conventional nails can be used.

IMAGES OF APPLICATIONS



Connect two wooden beams using the exterior joist hanger.

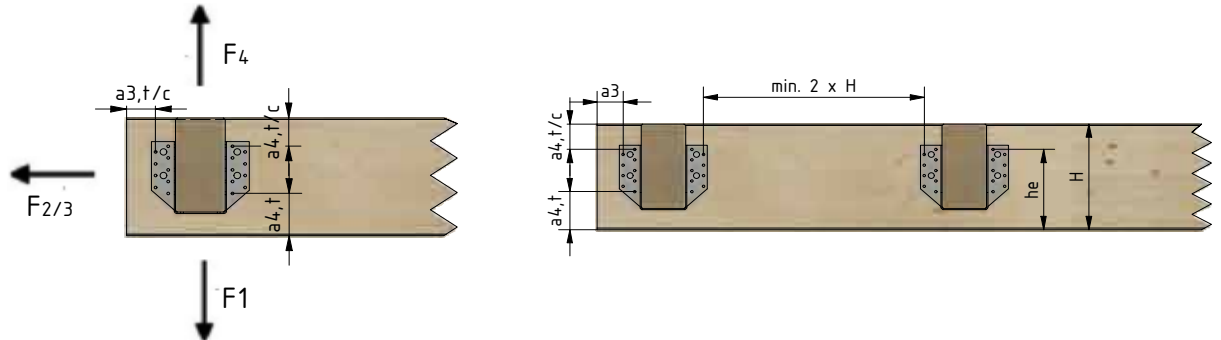


Connect two wooden beams using the exterior joist hanger.

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JOIST HANGER, EXTERIOR

TECHNICAL INFORMATION



		Wood/Wood								Wood – Concrete/Steel					
		Anchor nail				Angle-bracket screw				4 x 40		4 x 60			
		4 x 40		4 x 60		5 x 40		5 x 60							
40 x 110 x 20	Full utilisation a) ; c) ; e)	Dimensions [mm]	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	Number	nH (ø5)	nN (ø9)	nH (ø5)	nN (ø9)
		Number	14	4	–	–	14	4	–	–	Number	–	–	–	–
		char. tensile capacity	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	char. tensile capacity	[kN]	[kN]	[kN]	[kN]
		F1 [kN]	11,3		–		12		–		F1 [kN]	10,6		–	
		F2 [kN]	1,9		–		2,3		–		Char. Axial load per dowel	5,3		–	
	F4 [kN]	5,4		–		8		–		Shear load per dowel	2,1		–		
	Partial utilisation a) ; c) ; e)	Number	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	Number	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)
		Number	8	4	–	–	8	4	–	–	Number	–	–	–	–
		char. tensile capacity	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	char. tensile capacity	[kN]	[kN]	[kN]	[kN]
		F1 [kN]	8,7		–		12		–		F1 [kN]	10,6		–	
F2 [kN]		1,9		–		2,3		–		Char. Axial load per dowel	5,3		–		
F4 [kN]	3,3		–		6,6		–		Shear load per dowel	2,1		–			

^{a)} Anchor nails, 4.0 mm diameter x 40 mm long, arranged in a staggered pattern on the north side only, with partial nailing (up to a joist plate width of ≤ 54 mm)

^{b)} ABS ø 5.0 x 40 on the NT, arranged in a staggered pattern only, with partial nailing (up to a beam shoe width of ≤ 58 mm)

^{c)} ABS ø 5.0 x 25 on the NT, arranged in a staggered pattern only, with partial nailing (up to a beam shoe width of ≤ 44 mm)

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		Wood/Wood								Wood – Concrete/Steel					
		Anchor nail				Angle-bracket screw						4 x 40		4 x 60	
Dimensions [mm]		4 x 40		4 x 60		5 x 40		5 x 60				4 x 40		4 x 60	
44 x 108 x 20	Full utilisation a) ; c)	Number	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	Number	nH (ø5)	nN (ø9)	nH (ø5)	nN (ø9)
			14	8	–	–	14	8	–	–		–	–	–	–
		char. tensile capacity	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	char. tensile capacity	[kN]	[kN]	[kN]	[kN]
		F1 [kN]	11,3		–		12		–		F1 [kN]	10,6		–	
		F2 [kN]	2,3		–		2,5		–		Char. Axial load per dowel	5,3		–	
		F4 [kN]	8,5		–		8		–		Shear load per dowel	2,1		–	
	Partial utilisation a) ; c)	Number	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	Number	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)
			8	4	–	–	8	4	–	–		–	–	–	–
		char. tensile capacity	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	char. tensile capacity	[kN]	[kN]	[kN]	[kN]
		F1 [kN]	8,5		–		12		–		F1 [kN]	10,6		–	
	2,1		–		2,5		–		Char. Axial load per dowel	5,3		–			
	3,4		–		6,7		–		Shear load per dowel	2,1		–			

^{a)} Anchor nails, 4.0 mm diameter x 40 mm long, arranged in a staggered pattern on the north side only, with partial nailing (up to a joist plate width of ≤ 54 mm)

^{c)} ABS ø 5.0 x 40 on the NT, arranged in a staggered pattern only, with partial nailing (up to a beam shoe width of ≤ 58 mm)

		Wood/Wood								Wood – Concrete/Steel					
		Anchor nail				Angle-bracket screw						4 x 40		4 x 60	
Dimensions [mm]		4 x 40		4 x 60		5 x 40		5 x 60				4 x 40		4 x 60	
70 x 125 x 20	Full utilisation b) ; d)	Number	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	Number	nH (ø5)	nN (ø9)	nH (ø5)	nN (ø9)
			18	10	18	10	18	10	18	10		–	10	–	10
		char. tensile capacity	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	char. tensile capacity	[kN]	[kN]	[kN]	[kN]
		F1 [kN]	18,6		16,5		24,1		15,9		F1 [kN]	13,2		13,2	
		F2 [kN]	6,2		4,4		8,3		4,9		Char. Axial load per dowel	6,6		6,6	
		F4 [kN]	9,4		11,8		17,9		11,3		Shear load per dowel	2,3		2,3	
	Partial utilisation b) ; d)	Number	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	Number	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)
			10	5	10	5	10	5	10	5		–	–	–	–
		char. tensile capacity	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	char. tensile capacity	[kN]	[kN]	[kN]	[kN]
		F1 [kN]	10,5		15,8		19		15,9		F1 [kN]	13,2		13,2	
	3,7		4,4		5		4,9		Char. Axial load per dowel	6,6		6,6			
	5,5		8,9		10,4		11,3		Shear load per dowel	2,3		2,3			

^{b)} Anchor nails, 4.0 mm diameter x 60 mm long, arranged in a staggered pattern on the narrow side only, with partial nailing (up to a joist plate width of ≤ 74 mm)

^{d)} ABS ø 5.0 x 60 on the NT, arranged in a staggered pattern only, with partial nailing (up to a beam shoe width of ≤ 78 mm)

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JOIST HANGER, EXTERIOR

		Wood/Wood								Wood – Concrete/Steel					
		Anchor nail				Angle-bracket screw				4 x 40		4 x 60			
		4 x 40		4 x 60		5 x 40		5 x 60							
Dimensions [mm]	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	Number	nH (ø5)	nN (ø9)	nH (ø5)	nN (ø9)		
80 x 120 x 20	Full utilisation	Number	18	10	18	10	18	10	18	10	Number	–	10	–	10
		char. tensile capacity	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	char. tensile capacity	[kN]	[kN]	[kN]	[kN]
		F1 [kN]	17,5		26,6		24,1		27,2		F1 [kN]	13,2		13,2	
		F2 [kN]	6,6		9,5		9,2		11		Char. Axial load per dowel	6,6		6,6	
		F4 [kN]	9,8		15,9		18,5		22,7		Shear load per dowel	3,1		3,1	
		Partial utilisation	Number	10	5	10	5	10	5	10	5	Number	–	–	–
	char. tensile capacity	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	char. tensile capacity	[kN]	[kN]	[kN]	[kN]
	F1 [kN]	9,9		15		15,5		18,1		F1 [kN]	11,3		13,2		
	F2 [kN]	4		5,7		5,5		6,6		Char. Axial load per dowel	5,6		6,6		
	F4 [kN]	5,8		9,3		10,7		13,6		Shear load per dowel	2,7		3,1		

		Wood/Wood								Wood – Concrete/Steel					
		Anchor nail				Angle-bracket screw				4 x 40		4 x 60			
		4 x 40		4 x 60		5 x 40		5 x 60							
Dimensions [mm]	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	Number	nH (ø5)	nN (ø9)	nH (ø5)	nN (ø9)		
90 x 145 x 20	Full utilisation	Number	22	12	22	12	22	12	22	12	Number	–	–	–	–
		char. tensile capacity	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	char. tensile capacity	[kN]	[kN]	[kN]	[kN]
		F1 [kN]	25,7		33,1		28,1		31,7		F1 [kN]	13,2		13,2	
		F2 [kN]	8		11,6		11,1		13,4		Char. Axial load per dowel	6,6		6,6	
		F4 [kN]	15,4		24,4		24,1		27,2		Shear load per dowel	1,9		1,9	
		Partial utilisation	Number	12	6	12	6	12	6	12	6	Number	–	–	–
	char. tensile capacity	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	char. tensile capacity	[kN]	[kN]	[kN]	[kN]
	F1 [kN]	14,2		18,9		16		18,1		F1 [kN]	13,2		13,2		
	F2 [kN]	4,2		6,2		6,1		7,4		Char. Axial load per dowel	6,6		6,6		
	F4 [kN]	8,7		8,7		12		13,6		Shear load per dowel	1,9		1,9		

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JOIST HANGER, EXTERIOR

		Wood/Wood								Wood – Concrete/Steel						
		Anchor nail				Angle-bracket screw				4 x 40		4 x 60				
		4 x 40		4 x 60		5 x 40		5 x 60								
100 x 140 x 20	Full utilisation	Dimensions [mm]	nH (ø5)		nN (ø5)		nH (ø5)		nN (ø5)		Number	nH (ø5)		nN (ø9)		
		Number	22	12	22	12	22	12	22	12		–	–	–	–	
		char. tensile capacity	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]		char. tensile capacity	[kN]	[kN]	[kN]	[kN]
		F1 [kN]	24,5		33,1		28,1		31,7			F1 [kN]	13,2		13,2	
		F2 [kN]	8,4		12,3		12		14,6			Char. Axial load per dowel	6,6		6,6	
	F4 [kN]	15,9		25,1		24,1		27,2		Shear load per dowel	1,9		1,9			
	Partial utilisation	Number	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	Number	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	
			12	6	12	6	12	6	12	6		–	–	–	–	
		char. tensile capacity	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	char. tensile capacity	[kN]	[kN]	[kN]	[kN]	
		F1 [kN]	13,6		18,9		16		18,1		F1 [kN]	13,2		13,2		
F2 [kN]		4,4		6,5		6,5		8		Char. Axial load per dowel	6,6		6,6			
F4 [kN]	9		14,2		12		13,6		Shear load per dowel	1,9		1,9				

		Wood/Wood								Wood – Concrete/Steel						
		Anchor nail				Angle-bracket screw				4 x 40		4 x 60				
		4 x 40		4 x 60		5 x 40		5 x 60								
120 x 160 x 20	Full utilisation	Dimensions [mm]	nH (ø5)		nN (ø5)		nH (ø5)		nN (ø5)		Number	nH (ø5)		nN (ø9)		
		Number	26	14	26	14	26	14	26	14		–	–	–	–	
		char. tensile capacity	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]		char. tensile capacity	[kN]	[kN]	[kN]	[kN]
		F1 [kN]	24,5		33,1		28,1		31,7			F1 [kN]	13,2		13,2	
		F2 [kN]	8,4		12,3		12		14,6			Char. Axial load per dowel	6,6		6,6	
	F4 [kN]	15,9		25,1		24,1		27,2		Shear load per dowel	1,6		1,6			
	Partial utilisation	Number	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	Number	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	
			14	7	14	7	14	7	14	7		–	–	–	–	
		char. tensile capacity	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	char. tensile capacity	[kN]	[kN]	[kN]	[kN]	
		F1 [kN]	13,6		18,9		16		18,1		F1 [kN]	13,2		13,2		
F2 [kN]		4,4		6,5		6,5		8		Char. Axial load per dowel	6,6		6,6			
F4 [kN]	9		14,2		12		13,6		Shear load per dowel	1,6		1,6				

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		Wood/Wood								Wood – Concrete/Steel					
		Anchor nail				Angle-bracket screw				4 x 40		4 x 60			
		4 x 40		4 x 60		5 x 40		5 x 60							
Dimensions [mm]	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	nH (ø5)	nN (ø5)	Number	nH (ø5)	nN (ø9)	nH (ø5)	nN (ø9)		
140 x 180 x 20	Full utilisation	Number	30	16	30	16	30	16	30	16	Number	–	–	–	–
		char. tensile capacity	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	char. tensile capacity	[kN]	[kN]	[kN]	[kN]
		F1 [kN]	33,8		42,5		36,1		40,8		F1 [kN]	13,2		13,2	
		F2 [kN]	11,8		17,5		17,7		21,8		Char. Axial load per dowel	6,6		6,6	
		F4 [kN]	29,9		37,8		32,1		36,3		Shear load per dowel	1,4		1,4	
	Partial utilisation	Number	16	8	16	8	16	8	16	8	Number	–	–	–	–
		char. tensile capacity	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	char. tensile capacity	[kN]	[kN]	[kN]	[kN]
		F1 [kN]	18,8		23,6		20		22,7		F1 [kN]	13,2		13,2	
		F2 [kN]	6,1		9,1		9,4		11,7		Char. Axial load per dowel	6,6		6,6	
		F4 [kN]	15		18,9		16		11,2		Shear load per dowel	1,4		1,4	

PRODUCT TABLE

Joist Hanger, outer						
Art.-No.	Dimensions ¹⁾ [mm]	Material thickness [mm]	nH ¹⁾ (Ø 5 mm)	nN ²⁾ (Ø 5 mm)	nH ¹⁾ (Ø 11 mm)	PU
904629	40 x 110	2	14	8	4 x Ø 9	50
904642	45 x 108	2	14	8	4 x Ø 9	50
904630	70 x 125	2	18	10	4	50
904631	80 x 120	2	20	10	4	50
904632	90 x 145	2	22	12	4	50
904633	100 x 140	2	22	12	4	50
904634	120 x 160	2	26	14	6	20
904635	140 x 180	2	30	16	6	20

¹⁾Width x height

¹⁾nH: Number of holes in the brackets for the main girder

²⁾nN: Number of holes in the brackets for the secondary girder

If you are not familiar with how this product is used, and particularly with the product's intended use, please contact our Application Technology department (technik@eurotec.team).