

Technical Sheet

SIMPSON

Strong-Tie

AB255HD

Heavy Duty Angle Bracket for CLT with skewed screws

The AB255HD angle bracket is developed for CLT construction. Flexible, it is designed for both shear and vertical loading. With skewed full threaded screws, it enables very high uplift capacities and it can be hidden under concrete screed.

Features

Material

- Pre-galvanised mild steel.
- S 250 GD + Z 275 according to EN 10346

Benefits

- Perfect for CLT building,
- Very high capacity : F2/3 and F1
- can be hidden in concrete screed

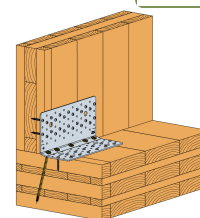
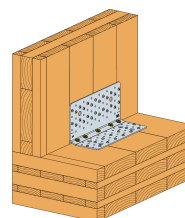
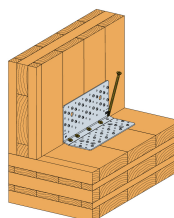
Applications

Suitable On

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

When to Use

- Solid timber panels,
- CLT panels.

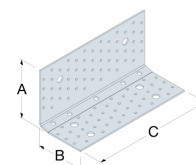


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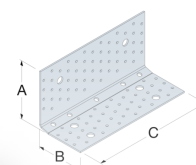
Technical Data

Product dimensions



Reference	Rozměry konektoru										
	Other		Rozměry a typické hodnoty[mm]				Příruba A[mm]		Hlava[mm]		
	Qty per Box	Hmotnost[kg]	A[mm]	B[mm]	C[mm]	Tloušťka[mm]	Round		Round		
							Ø[mm]	Ø14[mm]	n[mm]	n	Ø14[mm]
AB255HD	10.0	1.2	123	100	255	3	56	2	41	5	4

Product characteristic capacities - Timber to timber - 1 angle bracket - Nailing pattern 1



Reference	Product characteristic capacities											
	- Timber to timber - 1 angle bracket - Nailing pattern 1											
	See full table online →											
	Přírub	Capacity - dřevo C24[kN]										
		R4,k										
	Množství	typ	množství	typ	2	typ 2	CNA4,0x50	CNA4,0x50	CNA4,0x50	CNA4,0x50	mit CNA4,0x50	CSA5.0

Product characteristic capacities
- Timber to timber - 1 angle
bracket - Nailing pattern 1

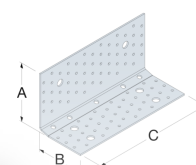
See full table online [→](#)



Capacity - dřevu C24[kN]

R4,k

Product characteristic capacities - Timber to timber - 1 angle bracket - Nailing pattern 2



Reference	Product characteristic capacities - Timber to timber - 1 angle bracket - Nailing pattern 2 See full table online ➔ 										Capacity - dřevo C24[kN]		
	Přírub										R5,k		
	Množství	typ	množství	typ	2	type 2	CNA4,0x50	CNA4,0x50	CNA4,0x50	CNA4,0x50	mit	CSA5.0x50	m

Product characteristic capacities
- Timber to timber - 1 angle
bracket - Nailing pattern 2

See full table online [→](#)



Capacity - dřevu C24[kN]

R5,k

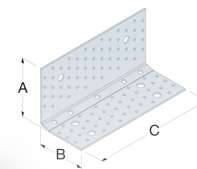
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Product characteristic capacities - Timber to timber - 1 angle bracket -
Nailing pattern 3

Reference	Product characteristic capacities - Timber to timber - 1 angle bracket - Nailing pattern 3 See full table online →										Capacity - dřevo C24[kN]	
	Přírub										R2,k = R3,k	
Množství	typ	Množství	typ	2	type 2	CNA4,0x50	CNA4,0x50	mit CNA4,0x50	CNA4,0x50		mit CNA4,0x50	CSA5
						min / AG 9	min / AG 9					

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Installation

Fasteners

On timber:

- CNA 4.0x50, CNA4.0x60
- CSA 5.0x50 screws
- ESCRFTC8.0xL (various length allowed, depending on the requested capacity)

On concrete:

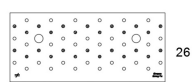
- Mechanical anchor: WA M12-104/5
- Chemical anchor: AT-HP resin + LMAS M12-150/35 threaded rod

Installation

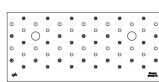
Set CNA nails or CSA screws first, then set the ESCRFTC8.0 full threaded screws at an approximate 70° angle.

A jig is recommended for skewed screw installation (SSJ jig is available)

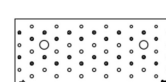
The possible screwing/nailing pattern are displayed below:



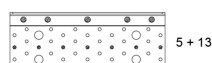
26



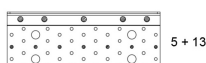
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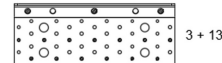
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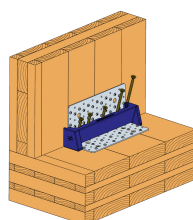
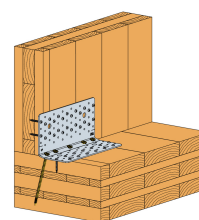
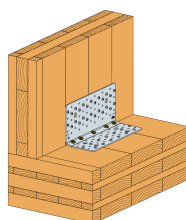
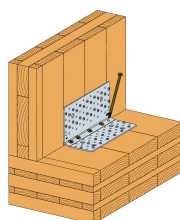
5 + 13



5 + 13



3 + 13



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