

Technical data sheet

SIMPSON

Strong-Tie

AB255HD

Reinforced Angle Bracket for CLT

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

- Galvanized steel S250GD + Z275 according to EN 10346
- Thickness 3 mm

Benefits

- Ideal for use in CLT buildings,
- Great versatility: can be installed on wooden support and concrete support,
- High performance for horizontal (F_2 / F_3) and vertical (F_1) loads directions.

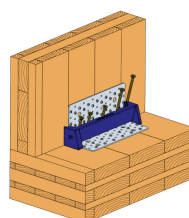
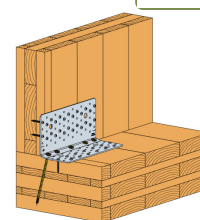
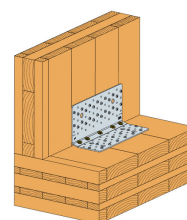
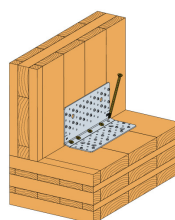
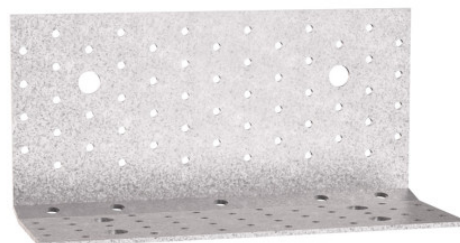
Applications

Suitable On

- **Supporting member:** solid wood, glulam, concrete, steel...
- **Supported member:** solid wood, glulam...

Scope

- Solid panels,
- Cross laminated panel (CLT).



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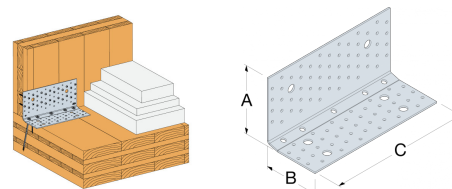
Strong-Tie®

AB255HD

Reinforced Angle Bracket for CLT

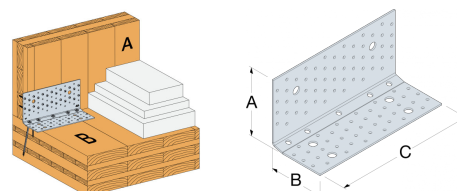
Technical Data

Product dimensions



References	DB nr.	NOBB nr.	Product dimensions [mm]				Holes flange A		Holes flange B			Box Quantity	Weight [kg]
			A	B	C	t	Ø5	Ø14	Ø5	Ø9	Ø14		
AB255HD	2112421	57294576	123	100	255	3	56	2	41	5	4	10	1.2

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



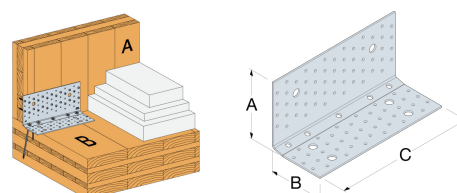
References	Product capacities - Timber to timber - Nail pattern 1												
	Fasteners						Characteristic capacities - Timber C24 - 1 angle bracket						
	Flange A		Flange B				R _{1,k}			R _{2,k} = R _{3,k}			
	Qty	Type	Qty	Type	Qty	Type	CNA4.0x40	CNA4.0x50	CNA4.0x60	CNA4.0x40	CNA4.0x50	CNA4.0x60	CNA4.0x40
AB255HD	26	CNA/CSA	5	ESCRFTC8.0x140	13	CNA/CSA	min (47.0 ; 56/kmod)	min (51.0 ; 56/kmod)	min (51.0 ; 56/kmod)	35	42.9	45.7	13.9/kmod^

The value in the table above can be used if the panel can't rotate.

The R_{1,k} values are valid for any quantity of CNA/CSA fasteners on flange B.

Values with other ESCRFTC length are available in ETA.

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



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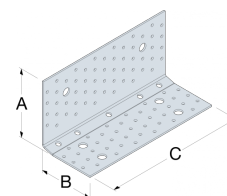
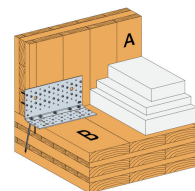
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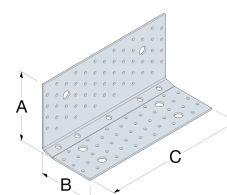
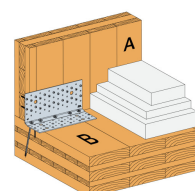
Reinforced Angle Bracket for CLT



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

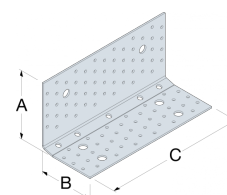
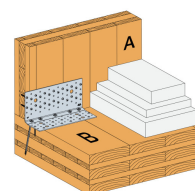
References	Fasteners						Product capacities - Timber to timber - Nail pattern 2						
	Flange A		Flange B				$R_{1,k}$				$R_{2,k} = R_{3,k}$		
	Qty	Type	Qty	Type	Qty	Type	CNA4.0x40	CNA4.0x50	CNA4.0x60	CSA5.0x50	CNA4.0x40	CNA4.0x50	CNA4.0x60
							min (54.2 ; 56/kmod)	min (66.4 ; 56/kmod)	min (70.8 ; 56/kmod)	min (72.4 ; 56/kmod)	37.7	46.5	49.7

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

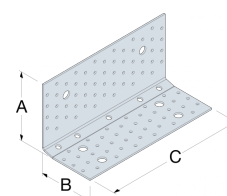
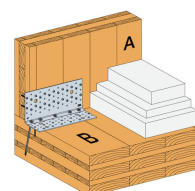
AB255HD



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

References	Fasteners						Product capacities - Timber to timber - Nail pattern 3						
	Flange A		Flange B				$R_{1,k}$				$R_{2,k} = R_{3,k}$		
	Qty	Type	Qty	Type	Qty	Type	CNA4.0x40	CNA4.0x50	CNA4.0x60	CSA5.0x50	CNA4.0x40	CNA4.0x50	CNA4.0x60
							min (46.8 ; 56/kmod)	min (46.8 ; 56/kmod)	min (46.8 ; 56/kmod)	min (46.8 ; 56/kmod)	28.3	32.4	32.4

The value in the table above can be used if the panel can't rotate.
The $R_{1,k}$ values are valid for any quantity of CNA/CSA fasteners on flange B.
Values with other ESCRFTC length are available in ETA.



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

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Reinforced Angle Bracket for CLT

Installation

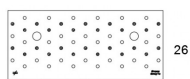
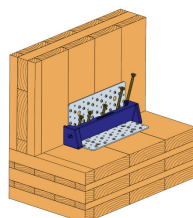
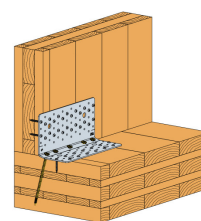
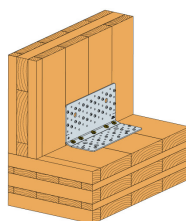
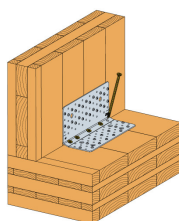
Fasteners

On wood :

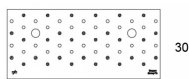
- CNA annular ring shank nails
- CSA screws
- Refer to performance tables for relevant sizes

On concrete :

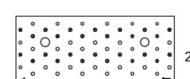
- *Chemical anchor:* AT-HP resin + LMAS M12-150/35 threaded rod.



Nail Pattern 1



Nail Pattern 2



Nail Pattern 3

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Reinforced Angle Bracket for CLT

