

Technical data sheet

NPB255

Nail plate for CLT

SIMPSON

Strong-Tie

Nail plate NPB255 has been developed to fix to provide support for and CLT panels to CLT Floors, timber supports or concrete supports. Versatile and simple to install, centre markings are stamped onto the plate to assist accurate positioning over the CLT panels.

Features

Material

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

Advantages

- Ideal for use in Timber and CLT buildings
- Great versatility: can be utilised for Timber to Timber, Timber to concrete, CLT to CLT or CLT to concrete connections,
- High performance for horizontal (F_2 / F_3) and vertical (F_1) loads directions.

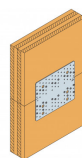
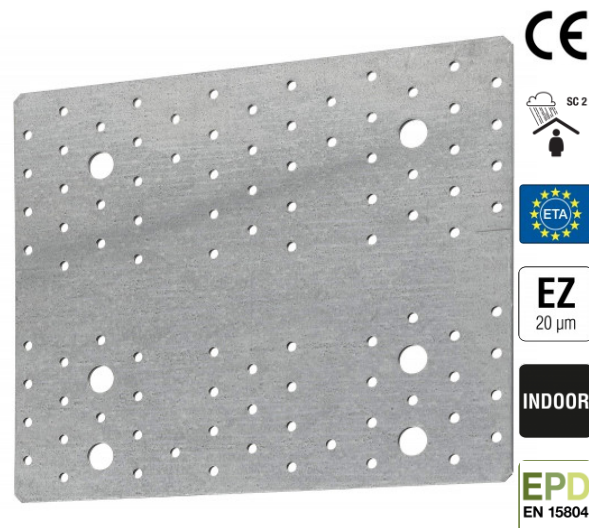
Applications

Applications

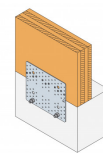
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Domaine d'utilisation

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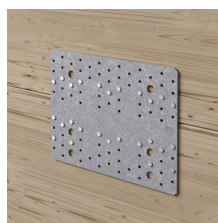
Wood to wood



Wood to concrete



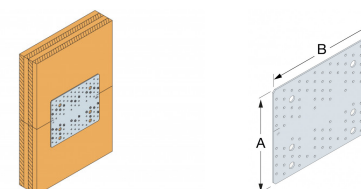
Installation - Timber to Concrete



NPB255 Nail plate for CLT

Technical Data

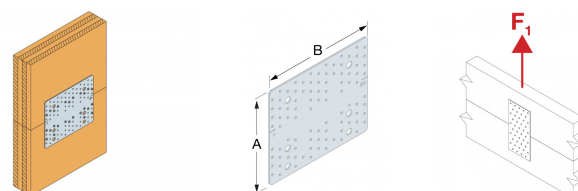
Product Dimensions



Wood to wood

References	Dimensions [mm]			Box Quantity	Weight [kg]
	A	B	t		
NPB255	214	255	3	10	1.2
NPB255S0	294	255	3	10	1.7

Product Characteristic Capacities - Timber to Timber - Nailing Pattern 1

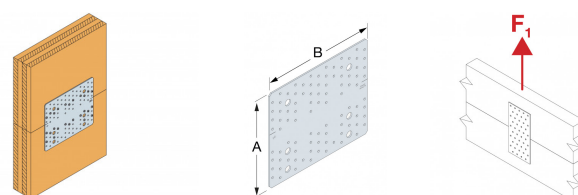


Wood to wood

References	Product capacities - Timber to timber - Nailing pattern 1					
	Fasteners		Product characteristic capacities - Timber C24 [kN]			
	Top part	Bottom part	R _{1,k}		R _{2,k}	
			CNA4.0x50	CSA5.0x50	CNA4.0x50	CSA5.0x50
NPB255	11	15	23.9	27.6	20.8	24
NPB255S0	-	-	-	-	-	-

- The timber member must be prevented from rotation (by other means)

Product Characteristic Capacities - Timber to Timber - Nailing Pattern 2



Wood to wood

References	Product capacities - Timber to timber - Nailing pattern 2					
	Fasteners		Product characteristic capacities - Timber C24 [kN]			
	Top part	Bottom part	R _{1,k}		R _{2,k}	
			CNA4.0x50	CSA5.0x50	CNA4.0x50	CSA5.0x50
NPB255	13	15	28.3	32.6	19.4	22.3
NPB255S0	-	-	-	-	-	-

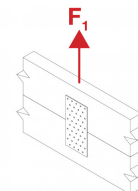
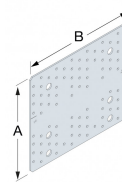
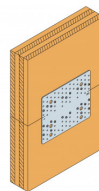
- The timber member must be prevented from rotation (by other means)

Technical data sheet



NPB255 Nail plate for CLT

Product Characteristic Capacities - Timber to Timber - Nailing Pattern 3

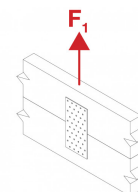
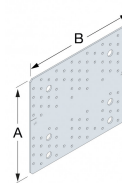
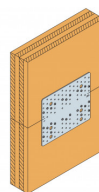


Wood to wood

References	Product capacities - Timber to timber - Nailing pattern 3		
	Fasteners		Product characteristic capacities - Timber C24 [kN]
	Top part	Bottom part	$R_{2,k}$ CSA5.0x50
NPB255	11	15	20.7
NPB255S0	-	-	-

- The timber member must be prevented from rotation (by other means)

Product Characteristic Capacities - Timber to Timber - Nailing Pattern 4

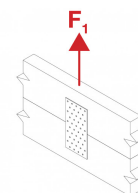
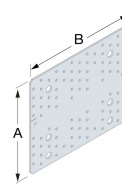
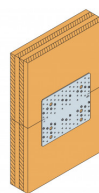


Wood to wood

References	Product capacities - Timber to timber - Nailing pattern 4		
	Fasteners		Product characteristic capacities - Timber C24 [kN]
	Top part	Bottom part	$R_{2,k}$ CSA5.0x50
NPB255	17	24	27.8
NPB255S0	-	-	-

- The timber member must be prevented from rotation (by other means)

Product Characteristic Capacities - Timber to Timber - Nailing Pattern 5



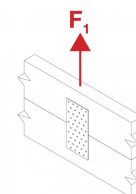
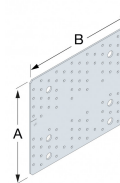
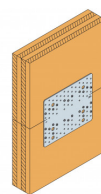
Wood to wood

References	Product capacities - Timber to timber - Nailing pattern 5		
	Fasteners		Product characteristic capacities - Timber C24 [kN]
	Top part	Bottom part	$R_{2,k}$ CSA5.0x50
NPB255	16	23	30.6
NPB255S0	-	-	-

- The timber member must be prevented from rotation (by other means)

NPB255 Nail plate for CLT

Product Characteristic Capacities - Timber to Timber - Nailing Pattern 6

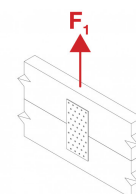
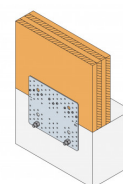


Wood to wood

References	Product capacities - Timber to timber - Nailing pattern 6		
	Fasteners		Product characteristic capacities - Timber C24 [kN]
	Top part	Bottom part	$R_{2,k}$
			CSA5.0x50
NPB255	30	34	44
NPB255S0	-	-	-

- The timber member must be prevented from rotation (by other means)

Product Characteristic Capacities - Timber to Rigid Support - Nailing Pattern 1

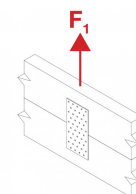
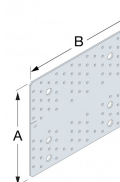


Wood to concrete

References	Product capacities - Timber to Rigid support - Nailing pattern 1					
	Fasteners		Product characteristic capacities - Timber C24 [kN]			
	Top part	Bottom part	$R_{1,k}$		$R_{2,k}$	
			CNA4.0x50	CSA5.0x50	CNA4.0x50	CSA5.0x50
NPB255	11	2	23.9	27.6	22.8	26.3
NPB255S0	-	-	-	-	-	-

- The timber member must be prevented from rotation (by other means)
- The group composed of two anchors shall be checked with shear loads F_1 and F_2 , and a moment applied at the middle between the two anchor is equal to $F_2 \cdot 120\text{mm}$ (spacing of anchors: 160 mm)

Product Characteristic Capacities - Timber to Rigid Support - Nailing Pattern 2



References	Product capacities - Timber to Rigid support - Nailing pattern 2					
	Fasteners		Product characteristic capacities - Timber C24 [kN]			
	Top part	Bottom part	$R_{1,k}$		$R_{2,k}$	
			CNA4.0x50	CSA5.0x50	CNA4.0x50	CSA5.0x50
NPB255	-	-	-	-	-	-
NPB255S0	-	-	-	-	-	-

- The timber member must be prevented from rotation (by other means)
- The group composed of two anchors shall be checked with shear loads F_1 and F_2 , and a moment applied at the middle between the two anchor is equal to $F_2 \cdot 120\text{mm}$ (spacing of anchors: 160 mm)

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SIMPSON

Strong-Tie[®]

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Nail plate for CLT

Installation

Fasteners

CLT Connection:

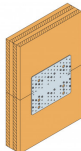
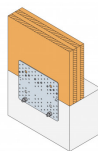
- CNA annular ring shank nails dia. 4.0 x 50 mm,
- CSA screws dia. 5.0 x 40 mm.

Concrete Connection :

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

Applications

Nailing pattern

*Wood to wood**Wood to concrete*

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