

## Technical data sheet

**SIMPSON**  
**Strong-Tie®**

### ABAI Angle bracket for CLT

The ABAI is a bracket for static structural joints between wall and ceiling panels of laminated wood. They are separated by 12 mm thick sound insulation support.

## Features

### Material

- **Galvanized steel S250GD with zinc coating thickness of 20 microns**
- **Sylodyn®: Polyurethane Syloer SR220**

### Benefits

- Load capacity in all directions
- Saving time and cost to build, because there is no need for additional sound insulation
- Reduces sound transmission
- More living space because of additional sound insulation
- A positive impact on the indoor environment, greater wind resistance, due to isolation SYLODYN along the outer walls

## Applications

### Applicatons

**Supporting member:**

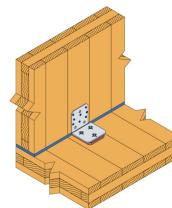
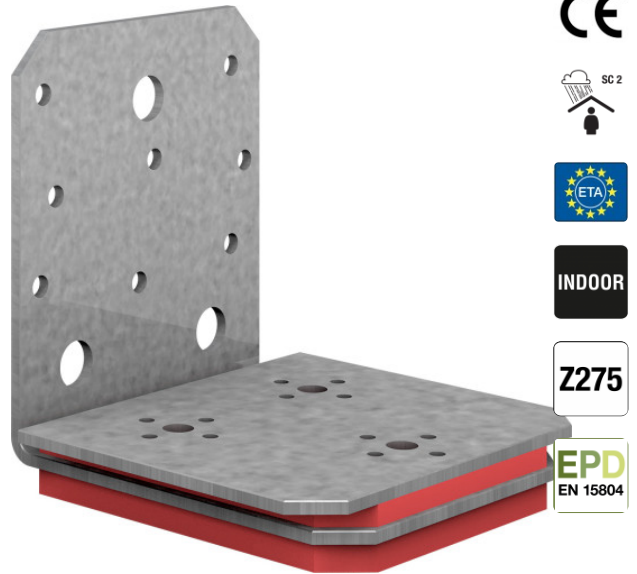
**Plywood boards**

**Supported member:**

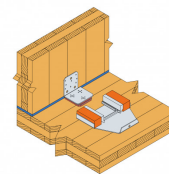
**Plywood boards**

### Scope

- The ABAI soundproofing angles are used for connections between wall and ceiling elements made of plywood boards
- The connection to the base plate by means of Simpson Strong-Tie® special screws. The MOABAI insertion device is to be used
- The connections can be made on one side or with opposing angle brackets.



Fixation de l'équerre avec les vis SDS



Installation with MOABAI insertion device

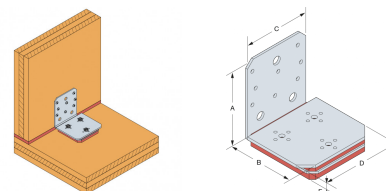


Sample application

## ABAI Angle bracket for CLT

## Technical Data

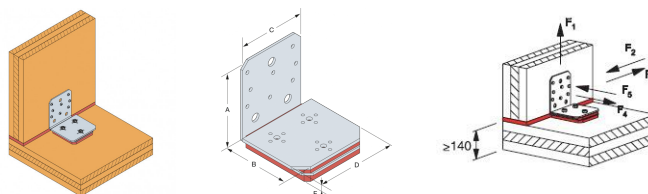
### Product Dimensions



References	Tun / DB nr.	NOB nr.	Product Dimensions [mm]							Joist		Holes flange B	Box Quantity	Weight [kg]
			A	B	C	D	E	t	Ø5	Ø11	Ø7			
ABAI105	1923004	46900855	113	103	90	106	18	3	8	3	3	20	0.81	

Single-sided connection with a Sylodyn insulation strips d = 12 mm between wall and ceiling

### Product capacities - ABAI



References	Product capacities - Timber to timber - Full nailing											
	Number of Fasteners				Characteristic capacities - Timber C24 - 1 angle brackets per connection [kN]				Slip modulus $K_{ser}$ for load direction [kN/mm]			
	Joist		Flange B		$R_{1.k}$	$R_{2/3.k}$	$R_{4.k}$	$R_{5.k}$	$R_{1.k}$	$R_{2/3.k}$	$R_{4.k}$	$R_{5.k}$
	Qty	type	Qty	type								
ABAI105	8	CNA4,0x60	3	SDS25600	2,0/kmod	2,0/kmod	3,3/kmod	2,3/kmod	0.8	0.68	1.16	0.8

### Design:

For the overlap of the action must be proven:

$$\sum \left( \frac{F_{i,d}}{R_{i,d}} \right)^2 \leq 1$$

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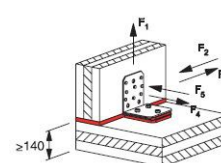
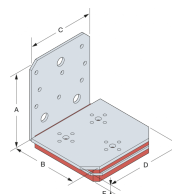
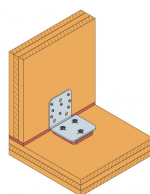
**SIMPSON**

**Strong-Tie**

ABAI

**Angle bracket for CLT**

Simplified characteristic capacities -  
Wood to wood - 1 bracket per  
connection



References	Simplified product capacities - Timber to timber – Full nailing											
	Number of Fasteners				Simplified characteristic capacities - Timber C24 - 2 angle brackets per connection [kN]				Slip modulus $k_{ser}$ for load duration			
	Joist		Flange B		$R_{1,k}$	$R_{2/3,k}$	$R_{4,k}$	$R_{5,k}$	$R_{1,k}$	$R_{2/3,k}$	$R_{4,k}$	$R_{5,k}$
	Qty	Type	Qty	Type								
ABAI105	8	CNA4,0x60	3	SDS25600	2.2	2.2	3.7	2.6	0.8	0.68	1.16	0.8

The published characteristic capacity is based on short term load duration and service class 2 according to EC5 (EN 1995) –  $k_{mod} = 0.9$ . For other load duration and service class, please refer to the ETA to get more accurate capacities  
for load combination:

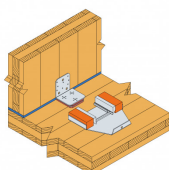
$$\sum \left( \frac{F_{i,d}}{R_{i,d}} \right)^2 \leq 1$$

## ABAI Angle bracket for CLT

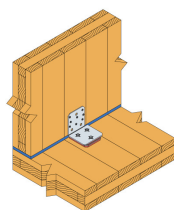
### Installation

#### Installation

- Vertical: 8xCNA4,0x60 (O11; 3 St.) nebo CSA5,0x50
- Bottom: 3xSDS25600
- The MOABAI insertion device is to be used.



*Installation with MOABAI insertion device*



*Fixation de l'équerre avec les vis SDS*



*Gabarit MOABAI*



*Sample application*

ABAI  
Angle bracket for CLT

