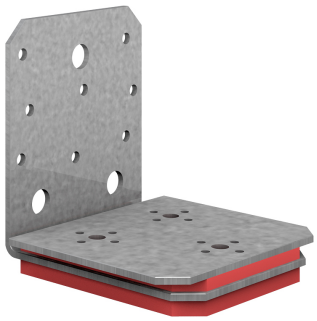
Technical Sheet

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

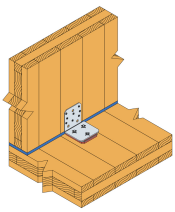
Applications

Applicatons

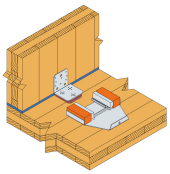
Supporting member:
Plywood boards
Supported member:
Plywood boards

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



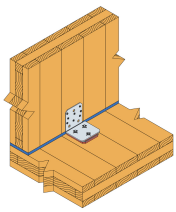
Installation with MOABAI insertion device



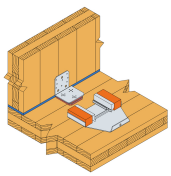
Sample application



ABAI with insulation strip



Fixation de l'équerre avec les vis SDS



Installation with MOABAI insertion device



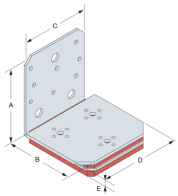
Sample application

Technical Sheet

ABAI
Angle bracket for CLT

Technical Data

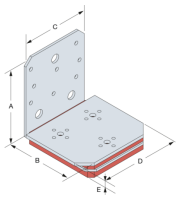
Product Dimensions



Reference	Connector Dimensions												
	Other				Product Dimensions[mm]						Joist[mm]		Flange B[mm]
	Tun / DB nr.	NOB nr.	Qty per Box	Weight[kg]	A[mm]	B[mm]	C[mm]	D[mm]	E[mm]	Thickness[mm]	Round		Round
											Ø5[mm]	Ø11[mm]	Ø7
ABAI105	1923004	46900855	20.0	0.81	113	103	90	106	18	3	8	3	3

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

Product capacities - ABAI

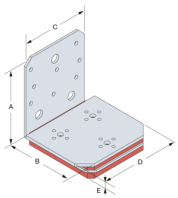


Reference	Angle bracket capacity											
	Product capacities - Timber to timber - Full nailing											
	Number of Fasteners				Characteristic capacities - Timber C24 - 1 angle brackets per connection[kN]				Slip modulus Kser for load direction[kN/mm]			
	Joist		Flange B		$R_{1,k}$	$R_{2/3,k}$	$R_{4,k}$	$R_{5,k}$	$R_{1,k}$	$R_{2/3,k}$	$R_{4,k}$	$R_{5,k}$
	Qty	Type	Qty	Type								
ABAI105	8.0	CNA4,0x60	3.0	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\le1

Technical Sheet

ABAI
Angle bracket for CLT



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

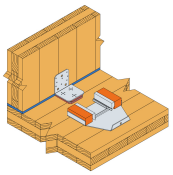
Reference	Angle bracket capacity											
	Simplified product capacities - Timber to timber – Full nailing											
	Number of Fasteners				Characteristic Capacities - Timber C24 - 2 Angle Brackets per Connection[kN]				Slip modulus kser for load duration			
	Joist		Flange B		$R_{1,k}$*	$R_{2/3,k}$	$R_{4,k}$	$R_{5,k}$	$R_{1,k}$	$R_{2/3,k}$	$R_{4,k}$	$R_{5,k}$
	Qty	Type	Qty	Type								
ABAI105	8.0	CNA4,0x60	3.0	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\le1

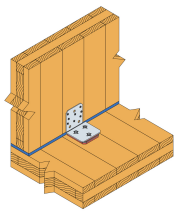
Installation

Installation

- Vertical: 8xCNA4,0x60 (O11; 3 St.) neboCSA5,0x50
- Bottom: 3xSDS25600
- The MOABAI insertion device is to be used.



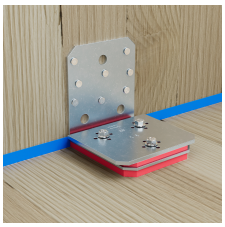
Installation with MOABAI insertion device



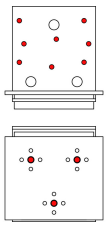
Fixation de l'équerre avec les vis SDS



Insertion device MOABAI



Sample application



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