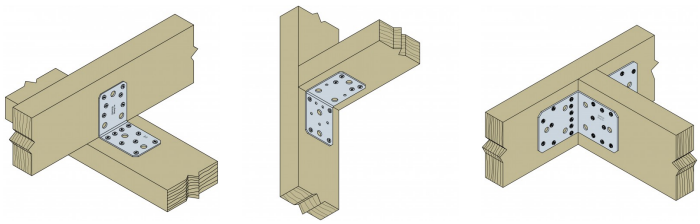
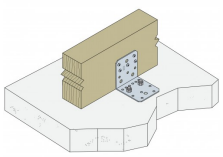
Technical data sheet

AB-S

No dimple-ribs, stainless steel (70 90 105)

They are suitable for joints in load-bearing wood construction. In the case of increased demands on load capacity, we recommend using the crease. AB angle is suitable as connecting means for the connection with a small load. They are suitable for joints in wood and other materials with nails or screws.
DoP:
DE-DoP-E06 / 0106





Features

Material

Steel quality:
• Stainless steel 1.4401 or 1.4404 (V4A), in accordance with EN10088.
• Resistance to acid - A4

Benefits

• load distribution in all directions, improved values for load capacity

• Suitable for joints in wood and concrete using anchor bolts

• Suitable for attaching beams medium size.

Applications

Applicable materials

• Suitable for connections wood-wood, concrete, steel.

Application area

• Angles AB70,90,105 without ribs are also suitable for transverse joints and beams and columns, in the case of increased demands on load capacity, we recommend using the crease.

Technical data sheet

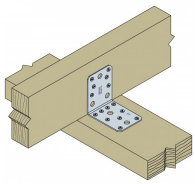
AB-S

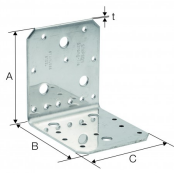
No dimple-ribs, stainless steel (70 90 105)

SIMPSON Strong-Tie

Technical Data

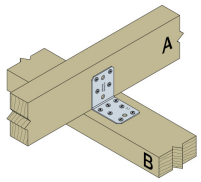
Product Dimensions

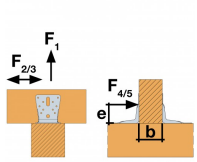




References	Tun / DB nr.	NOB nr.	Product Dimensions [mm]				Joist			Holes flange B			Box Quantity	Weight [kg]
			A	B	C	t	Ø5 [mm]	Ø8.5 [mm]	Ø11 [mm]	Ø5 [mm]	Ø8.5 [mm]	Ø11 [mm]		
AB70S	5650114	22062855	70	70	55	2	4	2	-	7	1	-	100	0.11
AB90S	2914711	21221387	88	88	65	2.5	6	-	3	9	-	2	100	0.2
AB105S	2914661	21221403	103	103	90	3	8	-	3	11	-	3	50	0.38

Product capacities - Beam to beam - maximum nailing





References	Product capacities - beam to beam - Full nailing										
	Number of Fasteners		Characteristic capacities - Timber C24 - 2 angle brackets per connection [kN]								
	Joist	Flange B	$R_{1,k}$				$R_{2,k} = R_{3,k}$				$R_{4,k}$
	Qty	Qty	CNA4.0x35	CNA4.0x40	CNA4.0x50	CNA4.0x60	CNA4.0x35	CNA4.0x40	CNA4.0x50	CNA4.0x60	CNA4.0x40
AB70S	4	7	3.1/kmod^0.3	3.8/kmod^0.3	5.0/kmod^0.3	-	-	5.3	-	-	1.4/kmod^0
AB90S	6	9	4.2/kmod^0.3	5.1/kmod^0.3	6.7/kmod^0.3	7.5/kmod^0.3, max: 6.9/kmod	6.8	7.1	9.4	10.4	1.9/kmod^0
AB105S	8	11	7.0/kmod^0.3	8.5/kmod^0.3	11.2/kmod^0.3	12.7/kmod^0.3	12.2	13.3	16.9	18.1	3.3/kmod^0

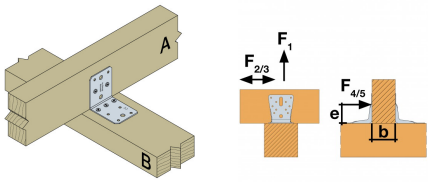
1) $R_{4/5,k}$ is determined for beam width b = 75 mm and essentricity e = 130 mm. See ETA for other values of b ar

Technical data sheet

AB-S

No dimple-ribs, stainless steel (70 90 105)

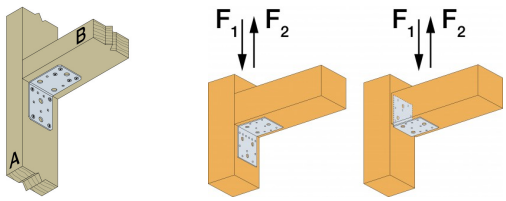
Product capacitiues - Beam to beam - minimum nailing



References	Product capacities - beam to beam - Partial nailing							
	Number of Fasteners		Characteristic capacities - Timber C24 - 2 angle brackets per connection [kN]					
	Joist	Flange B	$R_{1,k}$		$R_{2,k} = R_{3,k}$		$R_{4,k} = R_{5,k}$	
	Qty	Qty	CNA4.0x40	CNA4.0x60	CNA4.0x40	CNA4.0x60	CNA4.0x40	CNA4.0x60
AB70S	2	3	3.8/kmod^0.3	-	3.8	-	1.4/kmod^0.3	-
AB90S	4	4	3.1/kmod^0.3	4.4/kmod^0.3	5.5	7.3	1.2/kmod^0.5	1.7/kmod^0.3
AB105S	4	5	5.2/kmod^0.3	7.4/kmod^0.3	4	7.5	2.1/kmod^0.5	2.9/kmod^0.4

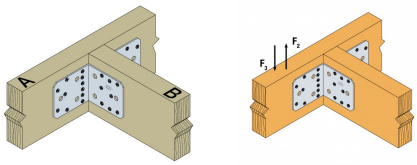
The load capacity belongs to a load group with the modification factor k_{mod}.
1) $R_{4/5,k}$ is determined for beam width b = 75 mm and essentricity e = 130 mm. See ETA for other values of b and e.
If the overall structure prevents the rotation of the purlin, the load values $R_{1,k}$ and $R_{2/3,k}$ in an assembly with only one bracket equal to half of the given value in table 2. See ETA if the purlin is able to rotate.

Product capacities - Beam to column



References	Product capacities - Timber column to beam		Characteristic capacities - Timber C24 - 1 angle brackets per connection [kN]					
	Number of Fasteners		$R_{1,k}$				$R_{2,k} = R_{3,k}$	
	Joist	Flange B	Flap turned downwards		Flap turned upwards		CNA4.0x40	CNA4.0x60
	Qty	Qty	CNA4.0x40	CNA4.0x60	CNA4.0x40	CNA4.0x60		
AB90S	4	4	4.0/ kmod^0.75	4.0/ kmod^0.75	5.2/ kmod^0.55	5.2/ kmod^0.55	0.7/ kmod	0.7/ kmod
AB105S	6	5	8.1/ kmod^0.75	8.1/ kmod^0.75	10,0; max:9,8/ kmod	9.4/ kmod^0.6	1.4/ kmod	1.4/ kmod

Product capacities - trimmer connection



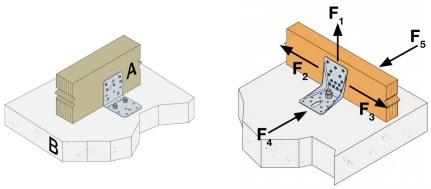
References	Product capacities - Trimmer connection			
	Number of Fasteners		Characteristic capacities - Timber C24 - 2 angle brackets per connection [kN]	
	Joist	Flange B	$R_{2,k} = R_{3,k}$	
	Qty	Qty	CNA4.0x40	CNA4.0x60
AB90S	9	6	7.2	10.2
AB105S	11	8	13.3	18.1

Technical data sheet

AB-S

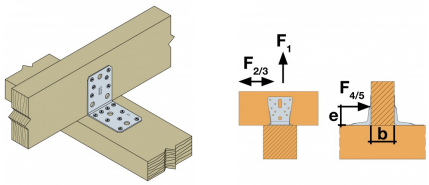
No dimple-ribs, stainless steel (70 90 105)

Product capacities - Timber to concrete



References	Product capacities - Timber beam to Concrete											
	Number of Fasteners				Characteristic capacities - Timber C24 - 2 angle brackets per connection [kN]							
	Joist		Flange B		$R_{1,k}$				$R_{2,k} = R_{3,k}$			
	Qty	Type	Qty	Type	CNA4.0x35	CNA4.0x40	CNA4.0x50	CNA4.0x60	CNA4.0x35	CNA4.0x40	CNA4.0x50	CNA4.0x60
AB90S	5	CNA*	2	Ø10	5.4/kmod	5.4/kmod	5.4/kmod	5.4/kmod	4.73	5.03	6.3	6.66
AB105S	5	CNA*	2	Ø10	min(12.3 ; 11.3/kmod)	min(13.7 ; 11.3/kmod)	min(17.5 ; 11.3/kmod)	min(19.7 ; 11.3/kmod)	4.8	5.1	6.4	6.8

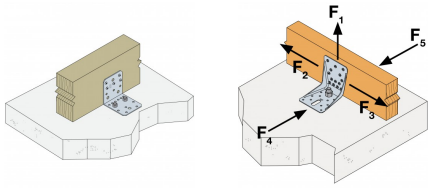
Simplified characteristic capacities - beam to beam



References	Simplified product capacities - Timber to timber – Full nailing					
	Number of Fasteners		Simplified characteristic capacities - Timber C24 - 2 angle brackets per connection [kN]			
	Joist	Flange B	$R_{1,k}$		$R_{2,k} = R_{3,k}$	
	Qty	Qty	CNA4.0x35	CNA4.0x50	CNA4.0x35	CNA4.0x50
AB90S	6	9	4.3	6.9	6.8	9.4
AB105S	8	11	7.2	11.5	12.2	16.9

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.

Simplified characteristic capacities - beam to concrete



References	Simplified product capacities - Timber to Concrete							
	Number of Fasteners				Simplified characteristic capacities - Timber C24 - 2 angle brackets per connection [kN]			
	Joist		Flange B		$R_{1,k}$		$R_{2,k} = R_{3,k}$	
	Qty	Type	Qty	Type	CNA4.0x35	CNA4.0x50	CNA4.0x35	CNA4.0x50
AB90S	5	CNA*	2	Ø10	6	6	4.7	6.25
AB105S	5	CNA*	2	Ø10	12.3	12.5	4.9	6.4

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

Installation

Installation

- **connections using screws or nails CSA5,0xl CNA4,0xl**