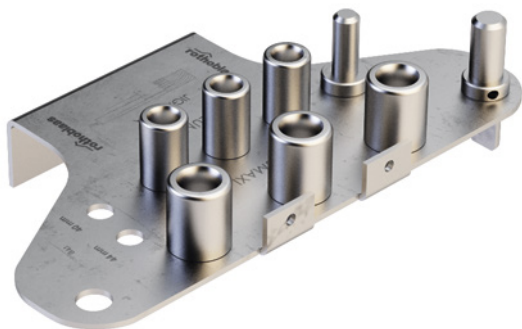


JIG ALU STA

INSTALLATION MANUAL



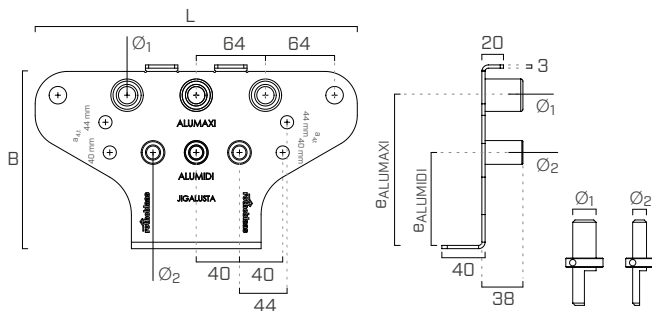
VIDEO



MANUALS



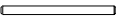
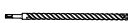
GEOMETRY



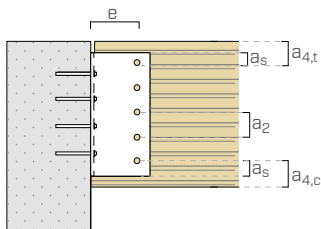
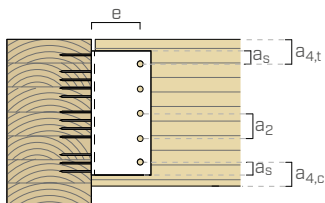
CODE AND DIMENSION

CODE	B [mm]	L [mm]	Ø ₁ [mm]	Ø ₂ [mm]	e _{ALUMIDI} [mm]	e _{ALUMAXI} [mm]
JIG ALU STA	164	298	16	12	86	139

ACCESSORY

CODE	description		d [mm]		
			ALUMIDI	ALUMAXI	
STA	smooth dowel		12,0	16,0	
TAPS	wooden caps		12,0	16,0	
LEWIS	wood drill		12,0	16,0	
SNAIL PULSE	concrete drill		8,0	18,0	
LBA	anker nail		4,0	6,0	
LBS	screw for plates		5,0	7,0	
SKR	screw anchor		10	-	
HYB-FIX	chemical anchor		M8	M16	
VIN-FIX	chemical anchor		M8	M16	

■ MINIMUM DISTANCES FOR ALUMIDI AND ALUMAXI BRACKETS[*]



secondary beam - timber			ALUMIDI STA Ø12	ALUMAXI STA Ø16
dowel - dowel	a_2 [mm]	-	40	64
dowel - top of beam	$a_{4,t}$ [mm]	-	40 / 44	64
dowel - bottom of beam	$a_{4,c}$ [mm]	$\geq 3 d$	≥ 36	≥ 48
dowel - bracket edge	a_s [mm]	$\geq 1,2 d_0^{(1)}$	≥ 16	≥ 21
dowel - main beam	e [mm]	-	86	139

⁽¹⁾ Hole diameter.

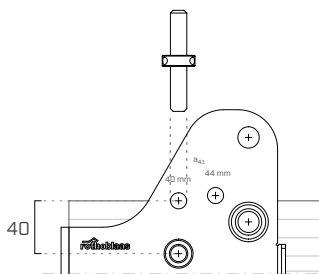
^(*) According to EN 1995-1-1.

■ ALUMIDI - REDUCED DISTANCE FIRST DOWEL [$a_{4,t}$]

SYMMETRIC INSTALLATION⁽¹⁾

$a_{4,t} = 40 \text{ mm}$

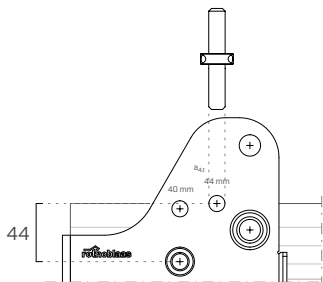
$a_{4,c} = 40 \text{ mm}$



OPTIMISED INSTALLATION⁽²⁾

$a_{4,t} = 44 \text{ mm}$

$a_{4,c} = 36 \text{ mm}$



- ALU centered in the beam.
Reduction factor:

$$k_4 = \sqrt{40/48} = 0,91$$

- Reduced distance have no influence according to tests.

- Good compromise between required minimum distance and minimum height of the beam.
Reduction factor:

$$k_4 = \sqrt{44/48} = 0,96$$

NOTES:

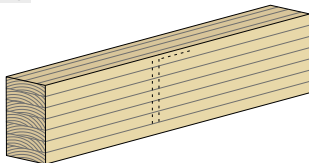
k_4 = shear strength reduction factor of the single dowel.

⁽¹⁾ Corresponding to static values in plates catalogue.

⁽²⁾ The positive effect can be considered by increasing the shear resistance of the dowels by 5% (according to ETA-09/0361).

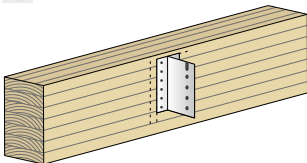
■ INSTALLATION

1a



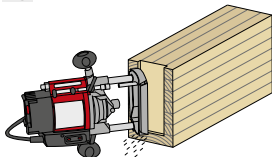
1a. Sign position of ALU bracket.

1b



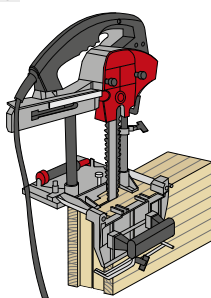
1b. Fix ALU bracket to main beam.

1c



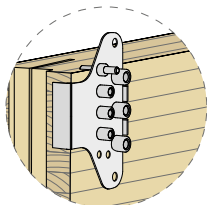
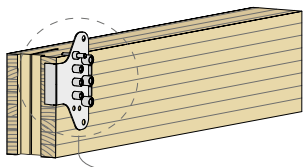
1c. Milling for ALU back.

1d



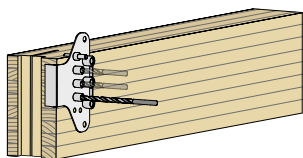
1d. Milling for ALU sword.

2



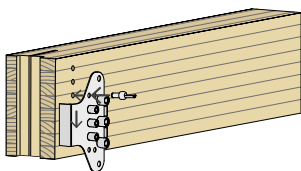
2. Position the JIG. Make sure that the upper pin rests with the flat side on the upper edge of the beam.

3



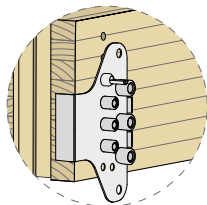
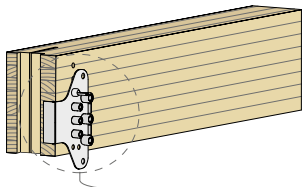
3. Drill the first three holes.

4



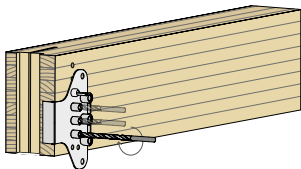
4. Remove JIG. Switch pin and insert the whole round section.

5



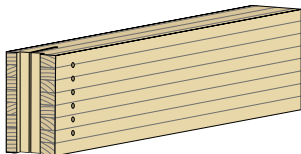
5. Positioning the JIG on the beam inserting the pin in the last drill hole.

6



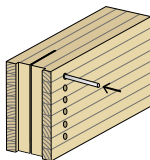
6. Drill next three holes.

7



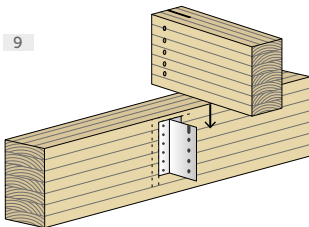
7. Repeat step 4-6 until the necessary holes are drilled.

8



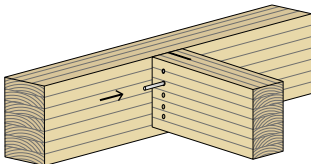
8. Insert upper dowel.

9



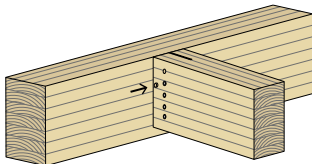
9. Mount the secondary beam. The upper dowel serves as an installation aid.

10



10. Insert the remaining dowels.

11



11. Seal the holes with TAPs.



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09/21

JIGALUSTA



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