## ABR - REINFORCED ANGLE BRACKET (105-R)





Reinforced angle brackets are suitable for structural applications in framing and wood-frame houses.



#### **FEATURES**

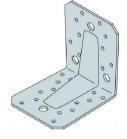


#### **Material**

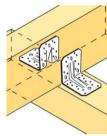
Pre-galvanised mild steel.

#### **Benefits**

- Load capacity in all directions
- Improved capacities for full and partial nailing







#### **APPLICATIONS**

### Suitable On

- Supporting member: solid wood, glued-laminated wood, concrete, steel, etc.
- Supported member: solid wood, composite lumber, glued-laminated wood, triangular trusses, profiles, etc.

#### When to Use

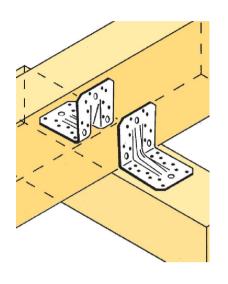
- Fastening of small trusses.
- Cladding plates, cladding uprights.
- Rafter anchors, cantilevers, headers, etc.

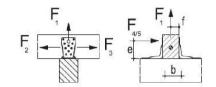
# ABR - REINFORCED ANGLE BRACKET (105-R)

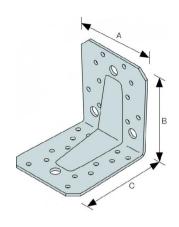


## TECHNICAL DATA

#### **Dimensions**

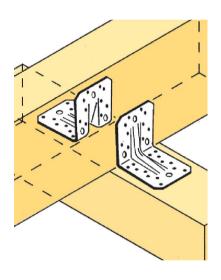






References	Dimensions				Holes leg B		Holes leg C	
	Α	В	С	t	nails or screws	bolts	nails or screws	bolts
ABR105-R	90	105	105	3	14 ø5	1 ø11	10 ø5	3 ø11

### Wood/wood connection beam/beam type - assembly with 2 angle brackets



	Fix	ing	Characteristic Values				
References	leg B	leg C	Tension (F1)		Shear (F2=F3)		
			CNA4.0x35	CNA4.0x50	CNA4.0x35	CNA4.0x50	
ABR105-R	14	10	8.9	14.3	13.6	19.1	

Winchester Road Cardinal Point Tamworth Staffordshire B78 3HG Tél.: +44 1827 255600 / Fax: +44 1827 255616

ABR - Reinforced Angle Bracket (105-R)

page 2/4

## ABR - REINFORCED ANGLE BRACKET (105-R)



#### **INSTALLATION**

#### **Fixing**

#### On wood:

- CNA annular ring-shank nails dia. 4.0 x 35 or dia. 4.0 x 50 mm.
- CSA screws dia. 5.0 x 35 mm or CSA screws dia. 5.0 x 40 mm.
- Bolts.
- LAG screws.

#### On concrete:

#### **Concrete substrate**

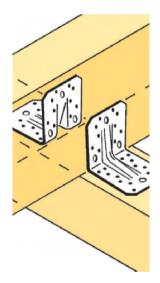
- Mechanical anchor: WA M10-78/5 OR WA M12-104/5 pin.
- Chemical anchor: AT-HP resin + LMAS M10-120/25 or LMAS M12-150/35 threaded rod.

### **Hollow masonry substrate:**

Chemical anchor: AT-HP or POLY-GP resin + LMAS M12-150/35 threaded rod + SH M16-130 screen.

#### On steel:

Bolts.



#### **TECHNICAL NOTES**

#### **Technical Info**

#### F1: tensile force in the central axis of the angle-bracket

Particular situation of a fastening with only one angle-bracket:

- If the overall structure prevents the rotation of the purlin or the post, the tensile strength is equal to half of the given value for two angle-brackets.
- Otherwise, the connection resistance depends on the « f » distance between the vertical contact surface and the
  point of load application.

#### F2 and F3: shear lateral force

Particular situation of a connection with only one angle-bracket:

Winchester Road Cardinal Point Tamworth Staffordshire B78 3HG Tél.: +44 1827 255600 / Fax: +44 1827 255616

ABR - Reinforced Angle Bracket (105-R)

page 3/4

#### Technical data sheet

## ABR - REINFORCED ANGLE BRACKET (105-R)



The resistance value to consider is equal to half of the one given for two angle-brackets.

## F4 and F5: transversal force directed towards or opposite the angle-bracket

- The connection resistance depends on the « e » distance between the base of the angle-bracket and the point of load application.
- To consult corresponding loads, contact us.

Only F1, F2 and F3 forces for connections with 2 angle-brackets are present on this sheet. For more information, contact us.