WRAF

CONNECTOR FOR TIMBER-INSULATING LAYER-CEMENT WALLS

TIMBER-INSULATING LAYER-CEMENT ENVELOPE

Designed for binding the cement finishing layer with the timber substructure of prefabricated timber-insulating layer-cement envelope walls.

REDUCED CEMENT LAYER

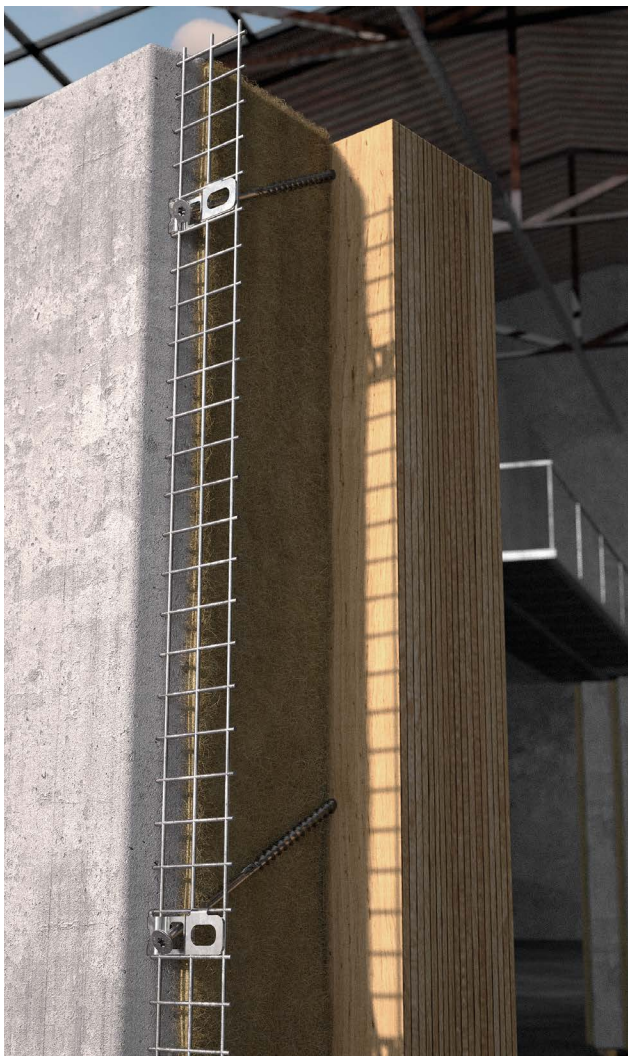
The omega shape of the connector allows the screw head to fit flush with the reinforcement of the cement layer without protruding, even in small thickness (up to 20 mm), and allows the screw to be applied at an angle of 0° to 45° to take full advantage of the screw thread withdrawal resistance.

LIFTING OF PREFABRICATED WALLS

Allowing the reduction of the cement finishing layer also results in a reduction of the layer's weight, thus returning the centre of gravity of the weight to the timber during handling and transport of the prefabricated walls.

WRAF

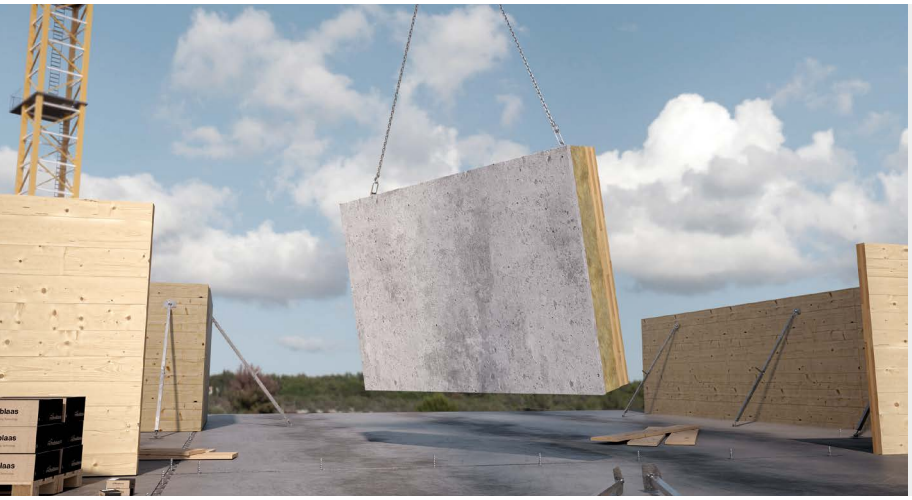
WRAFPP



MATERIAL

A2 | AISI304 austenitic stainless steel (CRC II)

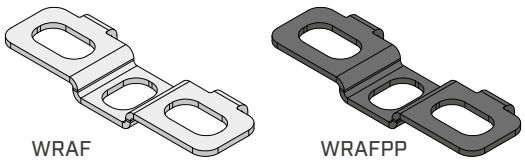
PP polypropylene



FIELDS OF USE

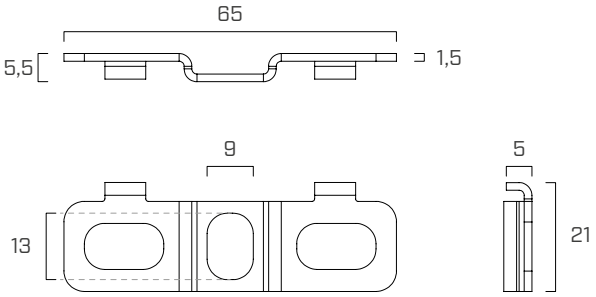
- lightweight frame substructures
- timber, LVL, CLT, NLT based panel substructures
- hard and soft insulation layer
- cement-based finishing layers (plaster, concrete, lightweight concrete, etc.)
- metal reinforcements (electrowelded mesh)
- plastic reinforcements

CODES AND DIMENSIONS



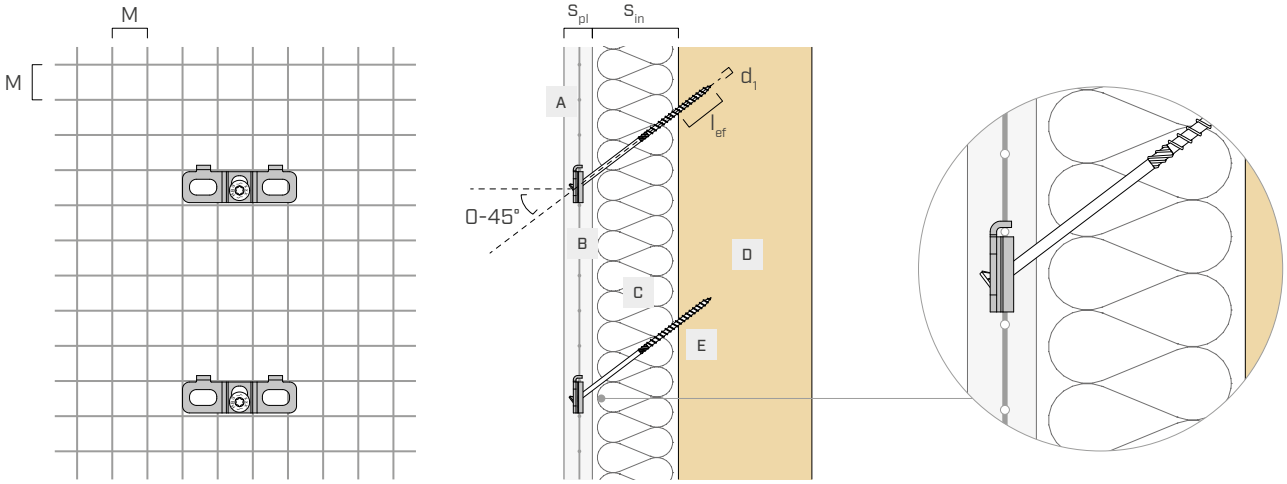
CODE	material	pcs
WRAF	A2 | AISI304	50
WRAFPP	polypropylene	50

GEOMETRY



INSTALLATION PARAMETERS

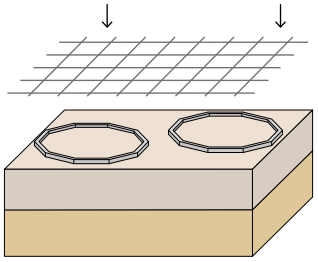
A **FINISH**	plaster, concrete, lightweight concrete, cement mortar	$s_{pl,min}$	[mm]	20	minimum thickness
B **GRID**	Ø2 mm steel	**M**	[mm]	20 ÷ 30	mesh size
C **INSULATION LAYER**	continuous insulation (soft or rigid)	$s_{in,max}$	[mm]	400	thickness
D **SUBSTRUCTURE**	solid timber, glulam, CLT, LVL	$l_{ef,min}$	[mm]	$4 \cdot d_1$	minimum penetration length
E **SCREWS**	HBS, HBS EVO, SCI	d_1	[mm]	6 ÷ 8	diameter



NOTE: The number and position of the fastening systems depends on the design of the surface, the kind of insulator and acting load.

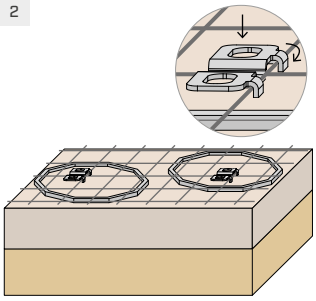
INSTALLATION SUGGESTIONS

1



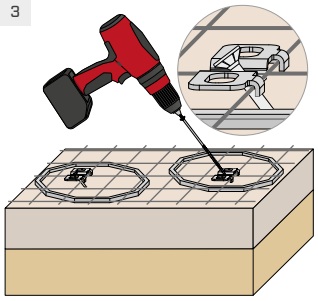
Place the mesh for the surface finishing layer on top of the insulation, spacing it with the appropriate supports.

2



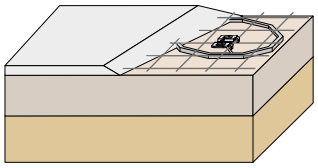
Apply the WRAF washers according to the defined arrangement, hooking it onto the net.

3



Fasten WRAF washers with screws to the substructure.

4



Apply the finishing coat to the wall.