

KC Insulation washer

Insulation washer with integral cap suitable for attachment of insulation layers to wooden and sheet metal substrates.



Product information

Features and benefits

- Recommended for the attachment of ETICS to wooden substrates using UC screws, or to sheet metal using WB screws.
- Special design of integral fastener cap allows reduction of thermal bridges.
- Consistent and reliable holding force
- Quick, simple and clean installation.
- Can be used in combination with additional KWL plate - 90, 110 or 140mm diameter.

Applications

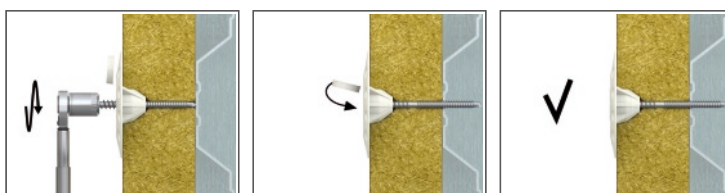
- External Thermal Insulation Composite Systems (ETICS)
- Polystyrene (EPS) boards
- Mineral wool (MW) boards
- Polyurethane (PU) boards

Base materials

Approved for use in:

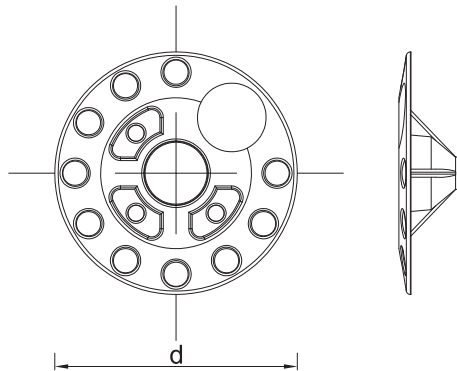
- Metal Sheet & Profiles
- Wood

Installation guide



1. Lightly insert KC washer into surface of insulation material.
2. Drive the required screw through the washer and insulation material into the substrate, until fixing depth is reached.
3. In wooden substrates the washer is recommended for use with the UC chipboard screw.
4. In sheet metal the washer is recommended for use with either the WB or WX self-drilling screw.

Product information



Size	Product Code	Fixing			Fixture
		Screw diameter	Length	Plate diameter	Max. thickness
		d	L	D	t _{fix}
[mm]					
KC with screw to wood					
Ø5	KC + UC-5050	5	50	60	30
	KC + UC-5060	5	60	60	40
	KC + UC-5070	5	70	60	50
	KC + UC-5080	5	80	60	60
	KC + UC-5090	5	90	60	70
	KC + UC-50100	5	100	60	80
Ø6	KC + UC-60100	6	100	60	75
	KC + UC-60120	6	120	60	95
	KC + UC-60140	6	140	60	115
	KC + UC-60160	6	160	60	135
	KC + UC-60200	6	200	60	175
KC with selfdrilling screw to steel sheet					
Ø5	KC + WB-48100	4.8	100	60	90
	KC + WB-48120	4.8	120	60	110
	KC + WB-48140	4.8	140	60	130
	KC + WB-48160	4.8	160	60	150
	KC + WB-48170	4.8	170	60	160
	KC + WB-48180	4.8	180	60	170
	KC + WB-48200	4.8	200	60	190
	KC + WB-48220	4.8	220	60	210

Installation data

Substrate			Timber		Steel
	d	[mm]	5	6	4.8
Fixing diameter	d	[mm]	5	6	4.8
Hole diameter in substrate	d ₀	[mm]	-	-	-
Min. hole depth in substrate	h ₀	[mm]	-	-	-
Min. installation depth	h _{nom}	[mm]	20	25	0.75
Min. substrate thickness	h _{min}	[mm]	20	25	0.75
Min. spacing	s _{min}	[mm]	100	100	100
Min. edge distance	c _{min}	[mm]	100	100	100

Basic performance data

Performance data for single anchor without influence of edge distance and spacing

Substrate		Timber	Timber	Steel
Effective embedment depth h_{ef}	[mm]	20	25	0.75
MEAN ULTIMATE LOAD $N_{Rt,m}$				
KC + UC \varnothing 5	[kN]	0.78	-	-
KC + UC \varnothing 6	[kN]	-	0.98	-
KC + WB	[kN]	-	-	0.86
CHARACTERISTIC LOAD N_{Rk}				
KC + UC \varnothing 5	[kN]	0.73	-	-
KC + UC \varnothing 6	[kN]	-	0.91	-
KC + WB	[kN]	-	-	0.81
DESIGN LOAD N_{Rd}				
KC + UC \varnothing 5	[kN]	0.24	-	-
KC + UC \varnothing 6	[kN]	-	0.30	-
KC + WB	[kN]	-	-	0.44
RECOMMENDED LOAD N_{rec}				
KC + UC \varnothing 5	[kN]	0.17	-	-
KC + UC \varnothing 6	[kN]	-	0.22	-
KC + WB	[kN]	-	-	0.31
Fixing type		KC		
Plate stiffness	[kN/mm]	0.4		