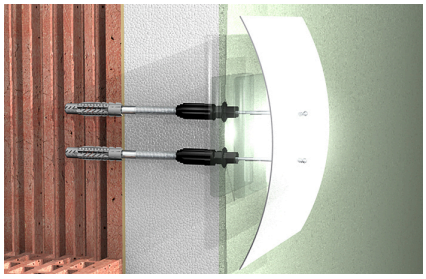
The thermally separated stand-off installation in external thermal insulation composite systems (ETICS)



BUILDING MATERIALS

- Concrete
- Vertically perforated brick
- Hollow block made from lightweight concrete
- Perforated sand-lime brick
- Solid sand-lime brick
- Building brick
- Aerated concrete

ADVANTAGES

- The stand-off installation allows for the fixture to be adjusted to the exact position required, whereby pressure marks and damage to the ETICS are avoided. Combining Thermax 8 and 10 with the universal plug UX provides a secure anchoring in the substrate.
- The plastic cone creates a thermal barrier between the fixture and the inner fixture, and offers an energy-optimised fixing.
- The glass-fibre-reinforced plastic cone cuts its own way through the ETICS with a positive fit, and allows for a simple and fast installation without the need for any special tools.

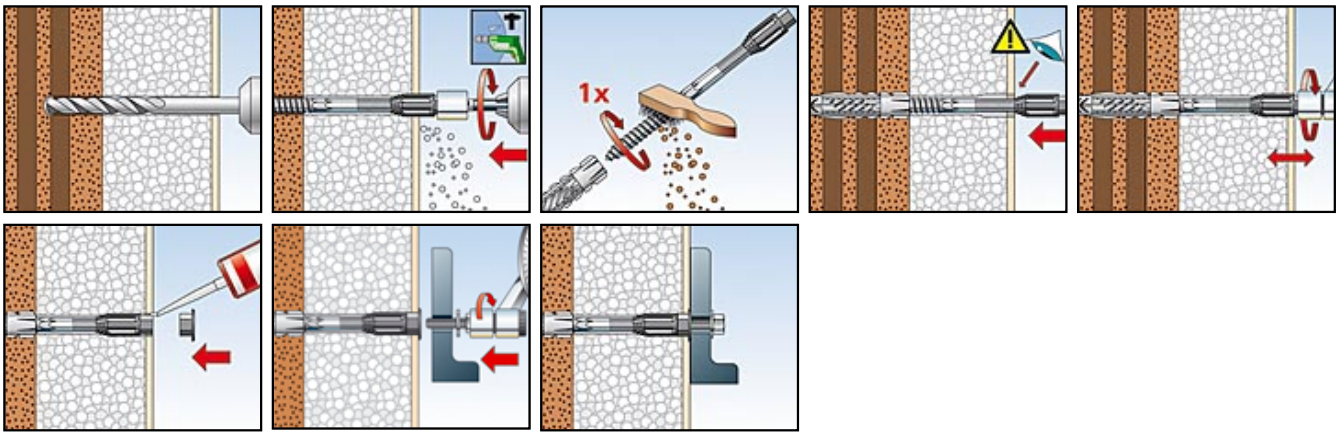
APPLICATIONS

For the thermally separated fixing of:

- Signs
- Lighting
- Letter boxes
- Motion detectors
- Downpipes
- Lightning rods
- Blind guide rails

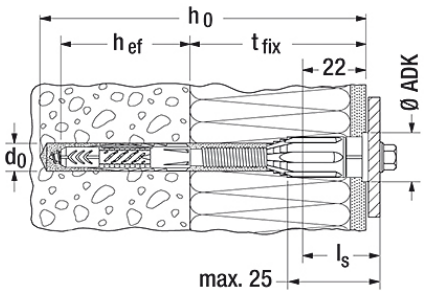
FUNCTIONING

- The Thermax 8 and 10 systems are suitable for pre-positioned installation.
- The self-tapping, glass-fibre-reinforced cone cuts its own way through the plaster into the insulation during installation.
- The anti-cold cone uses a thermal barrier to minimise heat losses.
- Installation without any special tools.
- The extensive range features fitting options with metric screws (M6/8/10), sheet screws (6.3 mm), chipboard screws (6.0 mm) or chipboard screws (4.5 - 5.5 mm) when using an SX 5 expansion plug.



TECHNICAL DATA

Stand-off installation Thermax 8 / 10



Article name	Art.-No.	Drill hole diameter d_0 [mm]	Usable length t_{fix} [mm]	Chipboard / metric / sheet metal screw	Usable length (hef red.) t_{fix} [mm]
Thermax 8/60 M6	**045685**	10	45 - 60	4,5 - 6,0 / M6 / 6,3	
Thermax 8/80 M6	**045686**	10	60 - 80	4,5 - 6,0 / M6 / 6,3	
Thermax 8/100 M6	**045687**	10	80 - 100	4,5 - 6,0 / M6 / 6,3	
Thermax 8/120 M6	**045688**	10	100 - 120	4,5 - 6,0 / M6 / 6,3	
Thermax 8/140 M6	**045689**	10	120 - 140	4,5 - 6,0 / M6 / 6,3	
Thermax 8/160 M6	**045690**	10	140 - 160	4,5 - 6,0 / M6 / 6,3	
Thermax 8/180 M6	**045691**	10	160 - 180	4,5 - 6,0 / M6 / 6,3	
Thermax 10/100 M6	**045692**	12	80 - 100	4,5 - 6,0 / M6 / 6,3	
Thermax 10/120 M6	**045693**	12	100 - 120	4,5 - 6,0 / M6 / 6,3	
Thermax 10/140 M6	**045694**	12	120 - 140	4,5 - 6,0 / M6 / 6,3	
Thermax 10/160 M6	**045695**	12	140 - 160	4,5 - 6,0 / M6 / 6,3	
Thermax 10/180 M6	**045696**	12	160 - 180	4,5 - 6,0 / M6 / 6,3	
Thermax 10/200 M6	**512605**	12	180 - 200	4,5 - 6,0 / M6 / 6,3	
Thermax 10/220 M6	**514250**	12	200 - 220	4,5 - 6,0 / M6 / 6,3	
Thermax 10/240 M6	**514251**	12	220 - 240	4,5 - 6,0 / M6 / 6,3	
Thermax 10/100 M8	**045697**	12	80 - 100	M8	
Thermax 10/120 M8	**045698**	12	100 - 120	M8	
Thermax10/140 M8	**045699**	12	120 - 140	M8	
Thermax 10/160 M8	**045700**	12	140 - 160	M8	
Thermax 10/180 M8	**514252**	12	160 - 180	M8	
Thermax 10/200 M8	**514253**	12	180 - 200	M8	
Thermax 10/220 M8	**514254**	12	200 - 220	M8	
Thermax 10/240 M8	**514255**	12	220 - 240	M8	
Thermax 10/100 M10	**045702**	12	80 - 100	M10	
Thermax 10/120 M10	**045703**	12	100 - 120	M10	
Thermax 10/140 M10	**045704**	12	120 - 140	M10	
Thermax 10/160 M10	**045705**	12	140 - 160	M10	
Thermax 10/180 M10	**514256**	12	160 - 180	M10	
Thermax 10/200 M10	**514257**	12	180 - 200	M10	
Thermax 10/220 M10	**514258**	12	200 - 220	M10	
Thermax 10/240 M10	**514259**	12	220 - 240	M10	

LOADS

Stand-off installation Thermax 8 and 10

Highest recommended tensile loads[1] for a single anchor.

Type			UX10/Thermax 8	UX12/Thermax 10
Recommended tensile loads in the respective base material N_{rec}[2]				
Concrete[3] [4]	≥ C20/25	[kN]	1,00	1,00
Solid brick[3] [4]	≥ Mz 12	[kN]	0,50	0,70
Perforated sand-lime brick[3] [4]	≥ KSL 12	[kN]	0,60	0,80
Vertically perforated brick[4]	≥ Hlz 12	[kN]	0,20	0,30
Aerated concrete[3] [4]	≥ P 4	[kN]	0,40	0,60

[1] Includes the safety factor 7.

[2] The UX-plug must be installed in the base material with full anchorage depth. The drilling method is to be adapted to the building material used. As different joint qualities are possible, the given values only apply for installation in the brick.

[3] The given recommended tensile loads apply for fastenings with metric screws. When using chipboard screws with diameter 6,0 mm they have to be reduced to 0,35 kN.

[4] The given recommended tensile loads apply for fastenings with metric screws. When using a SX 5-plug chipboard screws with diameter 4,5 - 5,5 mm they have to be reduced to 0,1 kN.

LOADS

Stand-off installation Thermax 8 and 10

Highest recommended shear loads[1] for a single anchor.

Type			UX10/Thermax 8	UX12/Thermax 10
Recommended shear loads V_{rec}[1]				
External Thermal Insulation Composite System[2]	≤ 180 mm	[kN]	0,15	0,20

[1] Required safety factors are considered.

[2] Values are valid for an EWI made from PS- respectively PU-rigid foam panels.