

Installation parameters

		ResiTHERM® S	ResiTHERM® 120	ResiTHERM® 160	ResiTHERM® 200
Anchor length	L [mm]	125	245	285	325
Thickness of insulation material	h_d [mm]	0	60 ¹⁾ - 120	120 ¹⁾ - 160	160 ¹⁾ - 200
Anchor \varnothing	d [mm]	37		37	
Drill hole \varnothing	d_0 [mm]	39 - 40		39 - 40	
Drill hole depth	$h_1 \geq$ [mm]	130		130	
Anchorage depth	h_{nom} [mm]	125 \pm 10 ²⁾		125 \pm 10 ²⁾	
Connection thread	[mm]	M12		M12	
Insertion depth of M12 threaded stud	l_s min-max [mm]	35 - 40		35 - 80	
Thickness of fixture	$t_{fix} \leq$ [mm]	22 ³⁾		22 ³⁾	
\varnothing of clearance hole in fixture	$d_f \leq$ [mm]	14		14	
Required volume of ResiFIX VY per ResiTHERM®	[ml]	ca. 140		ca. 140	
Installation torque for mounting the fixture	$T_{inst} \leq$ [Nm]	20		20	

¹⁾ ResiTHERM® may be cut up to 40 mm if needed. ResiTHERM® 120: If thickness of insulation material is 60 mm, set 20 mm deeper.

²⁾ Tests with a minimum anchorage depth of 115 mm showed the same pulled-out values, see test report from IFBT, Leipzig.

³⁾ When using the included threaded stud with L=70 mm. If needed a longer threaded stud or metric screw can be used.

Loads and displacements/deflections ResiTHERM®: tested system with injection system ResiFIX VY

Building material	System	Thickness of insulation material	Recommended load ¹⁾	Displacement/deflection at recommended load ²⁾
Recommended tension load			N_{rec} [kN]	δ [mm]
Hollow brick T1.0-240	Single fastening	all	1,74	0,24
Hollow brick T10-300	Single fastening	all	1,56	0,31
Aerated concrete PP2-0,35	Single fastening	all	1,21	0,14
Aerated concrete PP4-0,55	Single fastening	all	2,12	0,32
Recommended pressure load			F_{rec} [kN]	δ [mm]
Hollow brick T1.0-240	Single fastening	all	4,23	0,57
Hollow brick T10-300	Single fastening	all	1,17	0,11
Recommended shear load²⁾			V_{rec} [kN]	δ [mm]
Hollow brick T1.0-240	Single fastening	0	3,77	1,80
		120	0,97	3,90
		160	0,90	6,31
		200	0,49	5,81
	Double fastening ³⁾	120	1,27	1,61
		160	0,98	2,45
Hollow brick T10-300	Single fastening	0	1,39	0,39
		120	0,97	2,50
		160	0,90	7,10
		200	0,49	5,52
	Double fastening ³⁾	120	0,52	0,54
		160	0,41	0,69
		200	0,40	2,02

¹⁾ Recommended loads include the partial safety factor on action of $\gamma_f = 1.4$.

²⁾ For interpolated values see test report from IFBT, Leipzig.

³⁾ Spacing of 77 mm (standard awning console).

⁴⁾ Movement of ResiTHERM® in load direction at recommended load.

Application of ResiTHERM® in solid building materials is possible. For details please contact Apolo MEA or see test report from IFBT, Leipzig.

Spacing and edge distance

		ResiTHERM® S, 120, 160, 200
Minimum spacing	S_{min} [mm]	77 ³⁾
Minimum edge distance	C_{min} [mm]	125
Min. thickness of structural part	h_{min} [mm]	200

