Installation instruction ResiTHERM[®]12



Installation parameters:





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			Installation in concrete	Installation in aerated concrete/solid brick	Installation in perforated brick
Anchor length	L _d	[mm]	2951)	295 ¹⁾	2951)
Thickness of insulation material (incl. plaster)	е	[mm]	60 - max. 220	60- max. 190	60 - max. 160
Length of thermal separation module (to lower edge of cover plate)	L _m	[mm]	60	60	60
Diameter cover plate	K _D	[mm]	42	42	42
Threaded rod		[mm]	M12x2601)	M12x2601)	M12x2601)
Insertion depth of M12 threaded stud	l _{s2 min-max}	[mm]	24-27	24-27	24-27
Drill hole diameter	d _o	[mm]	14	14	20
Drill hole depth	h₁ ≥	[mm]	80 + e	110 + e	140 + e
Anchorage depth	h _{ef}	[mm]	70	100	130
Plastic sleeve SH			-	-	20-130
Connecting thread		[mm]	M12 ³⁾	M12 ³⁾	M12 ³⁾
Insertion depth of M12 threaded stud	s1 min-max	[mm]	30-34	30-34	30-34
Thickness of fixture	t _{fix} ≤	[mm]	242)	242)	24 ²⁾
Ø of clearance hole in fixture	d _f ≤	[mm]	14	14	14
Torque	T _{inst} ≤	[Nm]	194)	194)	194)

¹⁾ Threaded rod M12 has to be cut as needed.

For further technical values, see ETA-assessment/ETA-approval of the ResiFIX injection system used.

²⁾ When using the threaded stud with length L=70 mm, completely arcewed in. Otherwise, a longer threaded stud or a longer metric screw can be used.
³⁾ Alternative, if a M10 connecting thread is needed: Threaded stud adapter M12/M10, length 70 mm, stainless steel A4, Art-No X70M12M10ECT4.
⁴⁾ The torque applies to the thermal separation module. Note any different max. installtion torque in the ETA approval of used injection system ResiFIX has to be observed.

Accessories:



If the thermal separation module has to be unscrewed (or screwed in) due to an unevenness in the wall or similar

Two-hole nut driver, DIN 3116C for adjusting ResiTHERM® 12

Туре	Art-No	Length L [mm]	Width B [mm]	Sheet thickness t _m [mm]	Suitable for	[pc]	ff [pcs]
Two-hole nut driver	155253AMT	155	25	3	ResiTHERM [®] 16	1	15
M12 Threaded st	tud adapter N	Alternative, if a M10 c	connecting thread is need	led incl. M10 nut and was	sher		A4 STAINLESS STEEL
Туре	А	rt-No	Length L [mm]	Suitable for	<u>ا</u>	∄ pc]	⑦ [pcs]
Threaded sud ac	dapter X70M1	2M10ECT4	70	ResiTHERM® 1	2	4	60





Туре	Art-No	Content [m]]	Mixing nozzles included [pcs]	Shelf life [Months]		B [pcs]
VY 300 SF	300VSF	280	2	18	•	12
VY 345 SF	345VSF	345	2	18	•	12
VY 410 SF	410VYSF	410	1	18	•	12

Vinylester VY ECO SF (styrene free)

Туре	Art-No	Content [m]]	Mixing nozzles included [pcs]	Shelf life [Months]	ETA	[pcs]
VY ECO 300 SF	300VYECOSF	300	2	18	•	12

PY 165 SF Polyester PYSF (styrene free)

Туре	Art-No	Content [m]]	Mixing nozzles included [pcs]	Shelf life [Months]		[pcs]
PY 165 SF	165PSF	165	2	18	•	1/12
PY 300 SF	300PSF	300	1	18	•	12
PY 345 SF	345PSF	345	1	18	•	12
PY 410 SF	410PYSF	410	1	18	•	12

PY 300 SF

Cleaning brush RBS		Extension 🚽 Har	ndle "	eaning brush RBK	Blow our	pump AB
Туре	Art-No	Length [mm]	Suitable for drill hole Ø [mm]	Suitable for anchor rod	Connecting thread	[pcs]
RBS Ø16 for concrete and masonry	9M16RBK	200	14	M12	M6	5
Extension for RBS Ø20	MRBKH	-	all	all	M6	5
Handle for RBS Ø20	MRBKV	140	all	all	M6	5
RBK Ø20 for masonry*	9PLRBK	300	up to 20	up to M16	-	5
Blow out purps AB	ROP	200	0	_	_	1

out pump A * not part of the ETA assessments / ETA approvals of the ResiFIX injection mortars

anananan	Miz	xing nozzle MD king nozzle extensi	on MDV	
Туре	Art-No	Outer-Ø [mm]	Length [mm]	[pcs]
MD	9MRMEA	-	215	20
MDV 10	9MDV	10	200	10

APP300	APP380	APVM	
Туре	Art-No	suitable for ResiFIX Type	[pcs]
APP 300	300APP	300/165/280	1
APP 380	380APP	410	1
APVM	345APVM	345/300/280/165	1

PY 345 SF

Mounting in masonry (perforated brick)

2. Clean the drill hole:

2x blow - 2x brush - 2x blow

thermal separation module

3. Cut the ResiTHERM® 12 to length:

system

module

similar.





1. Drill a hole: Observe the drilling method of the approval/assessment of the ResiFIX injection mortar. Concrete/solid brick: hammer drilling; aerated concrete: Rotary drilling - without impact

Drill hole diameter = 14 mm Concrete: Drill hole depth ≥ 80 mm + insulation thickness (incl. plaster) Solid brick: Drill hole depth ≥ 110 mm + insulation thickness (incl. plaster)

2. Clean the drill hole:

The drill hole must be cleaned properly; see approval/assessment of the ResiFIX injection system 4x blow - 4x brush - 4x blow

3. Cut the ResiTHERM® 12 to length:

The pre-assembled threaded rod M12 is already completely screwed into the thermal separation module Correct length L_{av} from the tip of the threaded rod to the lower edge of the cover plate of the

thermal separation module (see table):

Correct length L _{dk} = Anchorage depth h _{ef} ⊦ insulation thickness e	Anchoring in concrete	Anchoring in aerated concrete/solid l
$L_{dk} = h_{ef} + e$	L _{dk} = 70 mm + e	L _{dk} = 100 mm + e

After determining the correct length, cut the threaded rod M12 to length with a metal saw or similar



4. **Note:** In seldom cases, you may not be able to get through the plaster properly with the thermal separation module (if the plaster is more than 8 mm thick or very hard). Therefore, we recommend the following test: Screw the thermal separation module 2 thread turns through the

If you notice that there is abrasion on the plastic part, drill out the hole in the plaster to approx. 26 mm or "ream" it with the drill.

5. Attach the mixing nozzle extension MDV to the mixing nozzle MD.



Squeeze out the injection mortar until the mortar has a uniform grey mixing colour - discard the pre-run of at least 3 pumps.

6. Fill the drill hole with injection mortar ResiFIX (start from the bottom of drill hole):

Drill hole depth h, [mm]	ResiFIX 165/280/300 ml Number of pumps	ResiFIX 345 ml Number of pumps	ResiFIX 410 ml Number of pumps
Concrete: 80	5	5	4-5
Solid brick/aerated concrete: 110	6	6	5-6

Important: Follow the installation instructions and processing time of the ResiFIX injection mortar used in accordance with the approval/assessment.

7. Insert the hexagon bit (included in the set) into the M12 threaded stud and screw in the ResiTHERM® 12 using a cordless screwdriver until the seal is pressed firmly against the plaster. A standard cordless screwdriver is sufficient for this. Note: The thermal separation module drills itself through the insulation. The foamed EPDM sealing ring ensures optimum sealing and prevents the entry of driving rain into the insulation (additional sealing with e.g. acrylic is not necessary, unless the plaster is very rough). For details

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8. Observe the curing time of the injection system, see cartridge label of the ResiFIX injection mortar.

on driving rain tightness, see ETA.

9. Afterwards, the attachment can be mounted (max. torque $T_{inst} = 19$ Nm). Note: Observe an eventually varying installation torque in the ETA approval of the used injection system ResiFIX.

Note: The screw insertion depth of the M12 threaded stud in the ResiTHERM® 12 is min. 30 mm, max. 34 mm. This means that it may be unscrewed by max. 4 mm - this corresponds to approx. 2 turns.



10. If the ResiTHERM® 12 needs to be adjusted due to an unevenness in the wall or similar. a) Place distance washers under the fixture (e.g. Art-No 129021AS, polyamide washers, DIN 9021, 37x13x3 mm). Or:

b) The thermal separation module may be unscrewed by max. 3 mm (equivalent to approx. 1 ½ turns).

Use the CELO two-hole nut driver 25x3 for example (Art-No 155253AMT). Note: We recommend in this case to seal the opening gap with a suitable sealant (e.g. StickFX).









4. Enlarge the opening in the plaster for the collar of the plastic sleeve to 26 mm. To do this: - Screw the thermal separation module only approx. 2 thread turns through the plaster using a cordless screwdriver and the bit included in the set. Then screw it out again. Note: If the plaster is very thick and hard, use a Ø 26 mm drill bit or "ream" the hole in the plaster to approx. 26 mm with the drill.

The drill hole must be cleaned properly; see approval/assessment of the ResiFIX injection

The pre-assembled threaded rod M12 is already completely screwed into the thermal separation

Correct length L_{dk} from the tip of the threaded rod to the lower edge of the cover plate of the

After determining the correct length, cut the threaded rod M12 to length with a metal saw or

Anchorage depth in plastic sleeve (125 mm) + insulation thickness e (incl. plaster)



5. Push the plastic sleeve into the drill hole with the help of a folding ruler or similar. Then remove the folding ruler or similar from the drill hole Note: This is an ideal way to ensure that the sleeve SH 20x130 is correctly inserted in the drill



Squeeze out the injection mortar until the mortar has a uniform grey mixing colour - discard the pre-run of at least 3 full strokes.



7. Fill the plastic sleeve completely with injection mortar (start from the bottom/back of the sleeve):

6. Attach the mixing nozzle extension MDV to the mixing nozzle MD.

13 pumps = 38 mm Scale shares	12 pumps = 34 mm Scale shares	13 pumps = 24 mm Scale shares
ResiFIX 165/280/300 ml	ResiFIX 345 ml	ResiFIX 410 ml

Important: Follow the installation instructions and processing time of the ResiFIX injection mortar. The necessary information is on the label, for further information see approval/ assessment



8. Insert the hexagon bit (included in the set) into the M12 threaded stud and screw in the ResiTHERM® 12 using a cordless screwdriver until the sealing ring is pressed firmliy against the plaster. A standard cordless screwdriver is sufficient for this

Note: The thermal separation module drills itself through the insulation. The foamed EPDM sealing ring ensures optimum sealing and prevents the entry of driving rain into the insulation (additional sealant material is not necessary, unless the plaster is very rough). For details on driving rain tightness, see ETA.



9. Observe the curing time of the injection mortar ResiFIX (see label)!



10. Afterwards, the attachment can be mounted (max. torque T_{inst} = 19 Nm). Note: Observe an eventually varying installation torque in the ETA approval of the used injection system ResiFIX

Note: The screw insertion depth of the M12 threaded stud in the ResiTHERM® 12 is min. 30 mm, max. 34 mm. This means that it may be unscrewed by max. 4 mm - this corresponds to approx. 2 turns.



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b) The thermal separation module may be unscrewed by max. 3 mm (equivalent to approx. 1 ½ turns).

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Note: We recommend in this case to seal the opening gap with a suitable sealant (e.g. StickFX).

Cutting aid (insulation thickness Concrete / aerated concrete & so

-09

0

80

20

00

40

20

60

40

80

<u>6</u>0

200

80

2