

perforated brick



Product	FIS H...N ¹⁾					FIS H...K							FIS H...L						
Size	16x85 ¹⁾	18x85 ¹⁾	20x85 ¹⁾	12x50 ¹⁾	12 x 85	16 x 85	16 x 130	20 x 85	20 x 130	20 x 200	18 x 130/200 ¹⁾	22 x 130/200 ¹⁾	12x1000 ¹⁾	16x1000 ¹⁾	22x1000 ¹⁾	30x1000 ¹⁾			
Art.-Nr.	50450	50472	50474	41900	41901	41902	41903	41904	46703	46704	45707	45708	50598	50599	45301	000645			
d ₀ [mm]	16	18	20	12	12	16	16	20	20	20	18	22	12	16	22	30			
t _d [mm]	≥ 95	≥ 95	≥ 95	≥ 55	≥ 90	≥ 90	≥ 135	≥ 90	≥ 135	≥ 205	≥ 135	≥ 135	-	-	-	-			
h _{ref} [mm]	85	85	85	50	85	85	130	85	130	200	130	130	-	-	-	-			
	15	17	19	5	10	12	15	15	25	40	35	45	12 ²⁾	14 ²⁾	20 ²⁾	26 ²⁾			
t _{inst. max} [Nm]	-	-	-	2					4							-	-	-	-

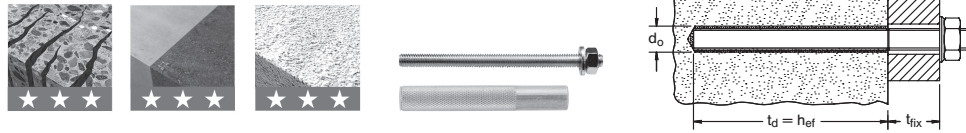
¹⁾ not part of the approval - ²⁾ per 10 cm anchoring depth h_{ref}

FIS A M 6 ¹⁾																	
FIS A M 8																	
FIS A M 10																	
FIS A M 12																	
FIS A M 16 ¹⁾																	
FIS A M 20 ¹⁾																	

FIS E 11x85 M 6																	
FIS E 11x85 M 8																	
FIS E 15x85 M 10																	
FIS E 15x85 M 12																	

¹⁾ not part of the approval

Concrete, solid brick, aerated concrete



Product	FIS A...					Product	FIS E...			
Size	M6 ¹⁾	M8	M10	M12	M16 ¹⁾	Größe	M6	M8	M10	M12
d ₀ [mm]	8	10	12	14	18	d ₀ [mm]	14	14	18	18
h _{ref, min} [mm]	50 ³⁾	50 ³⁾	50 ³⁾	50 ³⁾	50 ³⁾	t _d [mm]	85	85	85	85
	2 ⁴⁾	2 ⁴⁾	3 ⁴⁾	4 ⁴⁾	6 ⁴⁾		4	4	5	5
t _{inst. max} [Nm] Solid brick	4	10	10	10	10	t _{inst. max} [Nm] Solid brick	4	10	10	10
t _{inst. max} [Nm] aerated concrete	1	1	2	2	2	t _{inst. max} [Nm] aerated concrete	1	1	2	2

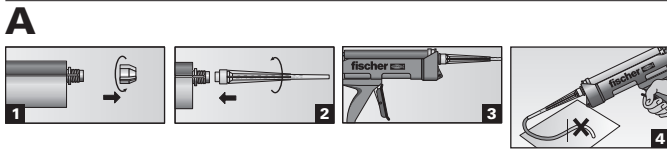
¹⁾ not part of the approval - ³⁾ in aerated concrete 100 mm - ⁴⁾ in aerated concrete double

fischer Injection mortar FIS AB / FIS AB W 300 T / 360 S / 300 T - CL



Produkt ist geprüft nach französischer Verordnung (Nr. 2011-321 vom 23.03.2011) über die Kennzeichnung von Bauprodukten zu deren Innenraumluftemissionen. Die Emissionen werden auf einer Skala von A+ (sehr emissionsarm) bis C (hohe Emissionen) bewertet.

Request the complete programme and approval notices directly from fischer, or on the Internet: www.fischer.at

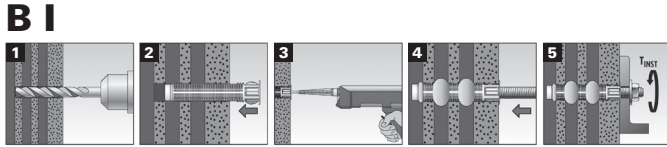


fischer Injection Mortar FIS AB

A Preparation Cartridge

1. Remove the cap.
2. Screw the static mixer tight. The mixing spiral in the static mixer must be clearly visible. Never use without static mixer! The Fischer Mixer Red with the red mixing spiral is suitable for all injection mortars.
3. Insert the cartridge into the dispenser.
4. Press out (approx. 10 cm long strand) until the emerging mortar is evenly coloured. Mortar that is not uniformly coloured will not set and should be discarded.

Attention: When assembly is complete, leave the static mixer on the cartridge.
If processing time is exceeded, use a new static mixer and remove any encrusted material from the cartridge opening.

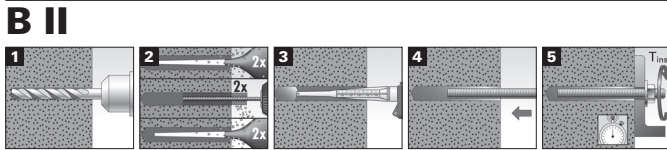


Installation in masonry

B I Installation with anchor sleeve

Suitable for use with: vertically perforated brick, solid brick, perforated sand-lime brick, solid sand-lime brick, hollow blocks, pumice stone, hollow body slabs and other perforated bricks.

1. Drill the hole. Observe the specified drilling diameter and drilling depth. Additional cleaning required when using solid building materials: **blow hole clear at least 2 times, brush hole at least 2 times and blow hole clear at least 2 times. A poorly cleaned hole has reduced bearing capacity!**
2. Insert the anchor sleeve flush into the anchoring base.
3. Starting at the bottom of the drill hole, fill with mortar, making sure that it does not contain air bubbles.
4. Then press in the anchoring element, turning it slightly until it reaches the bottom of the sleeve.
5. **Do not load the anchor until the recommended hardening time has elapsed (see Table I).**

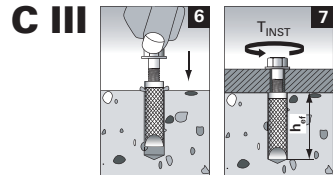
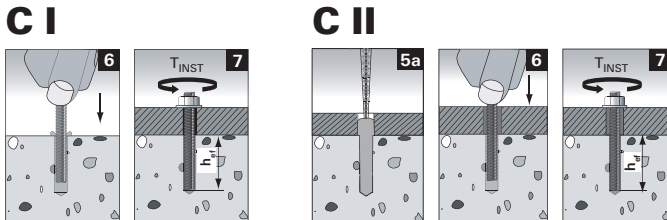
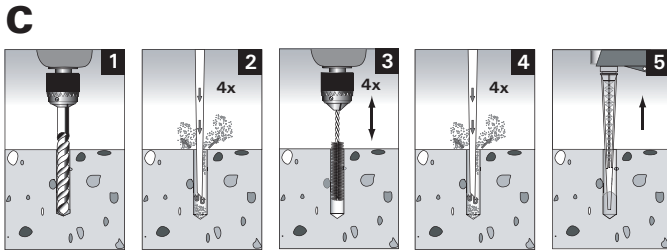


B II Installation without anchor sleeve

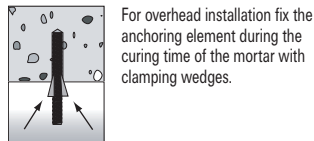
Suitable for use with: Concrete, lightweight concrete, solid brick, aircrete, solid pumice, natural stone and solid building materials. We recommend using an anchor sleeve with plastered masonry.

1. Drill the hole. Observe the specified drilling diameter and drilling depth.
2. Clean the hole thoroughly: **blow hole clear at least 2 times, brush hole at least 2 times and blow hole clear at least 2 times. A poorly cleaned hole has reduced bearing capacity!**
3. Starting at the bottom of the drill hole, fill with mortar, making sure that it does not contain air bubbles. (approx. 2/3 of the hole)
4. Press anchoring element down to the bottom of the hole, turning it slightly while doing so. After inserting the anchoring element, excess mortar must emerge from the mouth of the hole. If no mortar appears at the surface, remove the anchoring element immediately and inject more injection mortar.
5. **Do not load the anchorage until after the prescribed curing time (see Table I) has passed.**

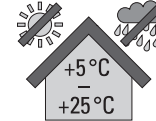
Attention: Depending on the building material, colour changes may occur. Check at a suitable place beforehand.



Accessories and installation data see reverse.



You can request the complete programme and approval certificates directly from fischer or find them online at: www.fischer.at



Store the mortar in a dry and cool location.

Installation in concrete

C Drilling the hole

1. Drill the hole. Observe the specified drilling diameter and drilling depth.
2. If necessary, free the hole of any water by blowing it clear or extracting it with a suction device. Clean hole thoroughly. A poorly cleaned hole has reduced bearing capacity! For sizes M6 to M12: blow clear forcefully four times using a hand-held blower (for size M6, use an adapter). For sizes M16 to M30: blow clear four times using oil-free pressurised air $p > 6$ bar (for sizes larger than M20, use a pressure nozzle with $\varnothing 19$ mm). For all other sizes and drilling depths: 4 x blow out with oil-free compressed air, $p > 6$ bar.
3. Brush mechanically four times. Clean soiled brushes. Use brush gauge to check for wear. Brush diameter must be larger than the control diameter.
4. Blow the hole clear again four times (see procedure step 2).
5. Starting at the bottom of the drill hole, fill with mortar, making sure that it does not contain air bubbles. (approx. 2/3 of the hole, see Table II). When space is limited or hef ≥ 150 mm, use an extension tube.

C I Pre-fixing installation

6. Press in the anchoring element, turning it slightly until it reaches the bottom of the hole. Once the anchoring element has set, excess mortar must exit the opening of the hole. If no mortar appears at the surface of the hole, the threaded rod must be removed immediately and chemical mortar must be injected again.
7. Do not load the anchor until the recommended hardening time has elapsed (see Table I).

C II Push-through installation

- 5a. For push-through installation, the hole in the attachment part must be filled with mortar.
6. Press the anchoring element down to the bottom of the borehole while rotating it slightly. After setting the anchoring element, excess mortar must escape from the mouth of the borehole. If no mortar escapes at the surface, pull the anchor rod immediately and inject injection mortar again.
7. Do not load the anchor until the recommended hardening time has elapsed (see Table I).

C III Installation using an RG MI internal-threaded anchor

6. Press the RG MI internal-threaded anchor into the hole and turn it slightly until it is flush to the surface. Once the anchoring element has set, excess mortar must exit the opening of the hole. If no mortar appears at the surface of the hole, the internal thread anchor must be removed immediately and chemical mortar must be injected again.
7. Do not load the anchor until the recommended hardening time has elapsed (see Table I).

Table I Processing and setting time

System temperature (mortar)	Open time/setting time		Construction material temperature	Setting time	
	FIS AB	FIS AB W		FIS AB	FIS AB W
-10°C – -6°C	–	–	-10°C – -6°C	–	12 h
-5°C – 0°C	–	5 min.	-5°C – 0°C	24 h	3 h
$+5^{\circ}\text{C}$	13 min.	5 min.	$+1^{\circ}\text{C}$ – $+5^{\circ}\text{C}$	3 h	3 h
$+10^{\circ}\text{C}$	9 min.	3 min.	$+6^{\circ}\text{C}$ – $+10^{\circ}\text{C}$	90 min.	50 min.
$+20^{\circ}\text{C}$	5 min.	1 min.	$+11^{\circ}\text{C}$ – $+20^{\circ}\text{C}$	60 min.	30 min.
$+30^{\circ}\text{C}$	4 min.	–	$+21^{\circ}\text{C}$ – $+30^{\circ}\text{C}$	45 min.	–
$+40^{\circ}\text{C}$	2 min.	–	$+31^{\circ}\text{C}$ – $+40^{\circ}\text{C}$	35 min.	–

* For damp surfaces, waiting times must be doubled.

Table II Installation data fischer threaded rod FIS A in concrete

Size	Anchoring depths h_{ef} = min. drill hole depth					Through-hole in attachment for push-through installation	$t_{inst,max}$	Reinigungsbürste BS
	Drill- \varnothing mm	$h_{ef,min}$ mm	Min. scale units	$h_{ef,max}$ mm	Max. scale units			
M 6	8	50	2	72	2	9	5	8
M 8	10	60	2	160	5	11	10	10
M10	12	60	3	200	7	14	20	12
M12	14	70	3	240	10	16	40	14
M16	18	80	5	320	19	20	60	18
M20	24	90	11	400	48	26	120	24
M24	28	96	15	480	75	30	150	28
M27	30	108	18	540	80	33	200	35
M30	35	120	28	600	130	40	300	35

Table III Installation data fischer internal threaded anchor RG MI in concrete

Size	Drill- \varnothing mm	h_{ef} mm	filling quantity scale units	Through-hole in attachment	$t_{inst,max}$ Nm	cleaning brush BS
M10	18	90	7	12	20	18
M12	20	125	11	14	40	20
M16	24	160	17	18	80	24
M20	32	200	48	22	120	35