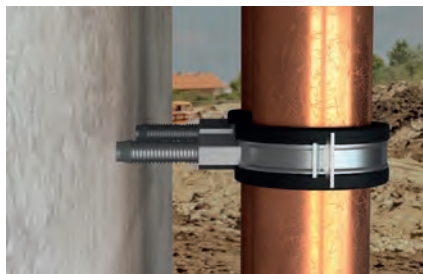


Aircrete anchor GB

The special plug for different fixings in aerated concrete



Pipes



Trellis

6

Applications

- Light cable trays
- Pipelines
- Guard rails
- Façade and roof constructions made of wood and metal
- Light canopy brackets
- Letter boxes
- Trellis

Advantages

- The general building approval guarantees approved safety for use in safety-relevant applications.
- The spiral-shaped outer ribs cut a positive fit in the soft building material, thus ensuring the best pressure distribution and load-bearing capacity.
- Can be applied with a hammer - there

is no need for special tools, thus saving time and money for the installation.

- The GB can also be used safely outside (e.g. in façade installation) when combined with the approved fischer safety screw in A4.

Certificates



Building materials

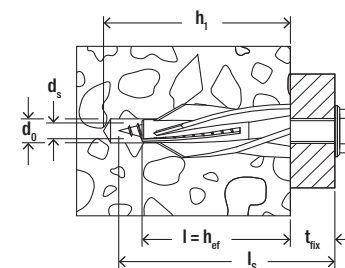
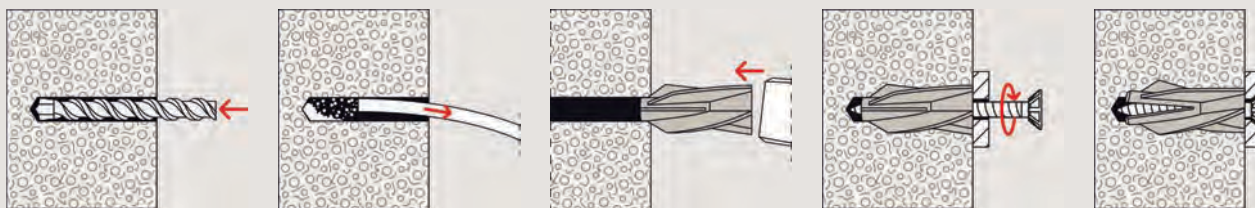
Approved for (GB 10) resp. suitable for (GB 8 and GB 14):

- Aerated concrete $\geq$ AAC 2
- Also suitable for:
- Aerated concrete and ceiling panels of compressive strength $\geq$ 3.3

Functioning

- The GB is suitable for pre-positioned installation.
- The spiral-shaped outer ribs ensure a positive fit connection between the building material and anchor.
- The required screw length is given by: Anchor length + fixture thickness + 1 x screw diameter.
- The GB 10 must be used with fischer safety screws to fulfil the approval and to achieve the maximum load-bearing capacity.
- Use rotary drilling to create the drill hole
- Can be used in unplastered aerated concrete

Installation GB



Technical data

Aircrete anchor GB



GB

	Item No.	Approval	Drill hole diameter d_0 [mm]	Min. drill hole depth h_1 [mm]	Plug length = min. anchorage depth $l = h_{ef}$ [mm]	fischer safety screw $d_s \times l_s$ [mm]	Sales unit [pcs]
Item		DIBt					
GB 8	050491	—	8	60	50	5	25
GB 10	050492	●	10	65	55	7	20
GB 14	050493	—	14	90	75	10	10

fischer Safety screw for GB

Type	Usable length		Screw dimension* $\emptyset \times l_s$	Zinc plated and passivated steel		Stainless steel, corrosion resistance class III, e. g. A4	
	min. t_{fix} [mm]	max. t_{fix} [mm]		Countersunk head, TX star recess drive Art.-No.	Hexagonal head Art.-No.	Countersunk head, TX star recess drive Art.-Nr.	Hexagonal head Art.-Nr.
GB 8	5	30	5 x 85	089230 ¹⁾		089240 ¹⁾	
GB 10	0	5	7 x 67		80404		
	5	25	7 x 87	89170	80405	89244	80261
	25	45	7 x 107	89172			
	40	58	7 x 120	89174	80407		
	60	78	7 x 140	89176	80408		
GB 14	85	105	7 x 167	89178			
	0	10	10 x 95		80412		
	0	20	10 x 105	89186	80413		80271
	35	55	10 x 140	89188	80415		
	60	80	10 x 165		80416		

¹⁾ Cross drive recess Z.²⁾ Further sizes on request.

Loads

Aircrete anchor GB						
Permissible or recommended loads ^{1) 2)} for a single anchor in aerated concrete.						
Type			GB 10 ²⁾	GB 8 ³⁾	GB 10 ³⁾	GB 14 ³⁾
Screw diameter		[mm]	7	5	6	10
Minimum spacing ⁴⁾	s _{min}	[mm]	100	150 (100) ⁶⁾	150 (100) ⁶⁾	300 (200) ⁶⁾
Minimum edge distance ⁵⁾	c _{min}	[mm]	100	100 (75) ⁶⁾	100 (75) ⁶⁾	200 (150) ⁶⁾
Minimum member thickness	h _{min}	[mm]	120	75	120	200
Nominal embedment depth	h _{nom}	[mm]	55	50	55	75
Load in the respective base material			Permissible loads F _{perm} ⁷⁾	Recommended loads F _{rec} ⁸⁾		
AAC 2	ρ ≥ 0.35 [kg/dm ³]	[kN]	0.21	0.18	0.20	0.40
AAC 4	ρ ≥ 0.50 [kg/dm ³]	[kN]	0.54 (0,71) ⁹⁾	0.40	0.50	0.90

¹⁾ Required safety factors are considered. Valid for tension load, shear load and oblique load under any angle.
²⁾ In case of the design of the GB 10 for tension, shear and bending the complete approval Z-21.2-123 has to be considered.
³⁾ Not part of the approval.
⁴⁾ Minimum possible axial spacing while reducing the permissible load.
⁵⁾ Minimum possible edge distance.
⁶⁾ Values in brackets apply to AAC 2.
⁷⁾ Value only applies in connection with GB 10 and fischer safety screw according to approval Z-21.2-123.
⁸⁾ Values are valid in combination with wood screws acc. DIN 571.
⁹⁾ The values in brackets are decisive for member thickness ≥ 150 mm.