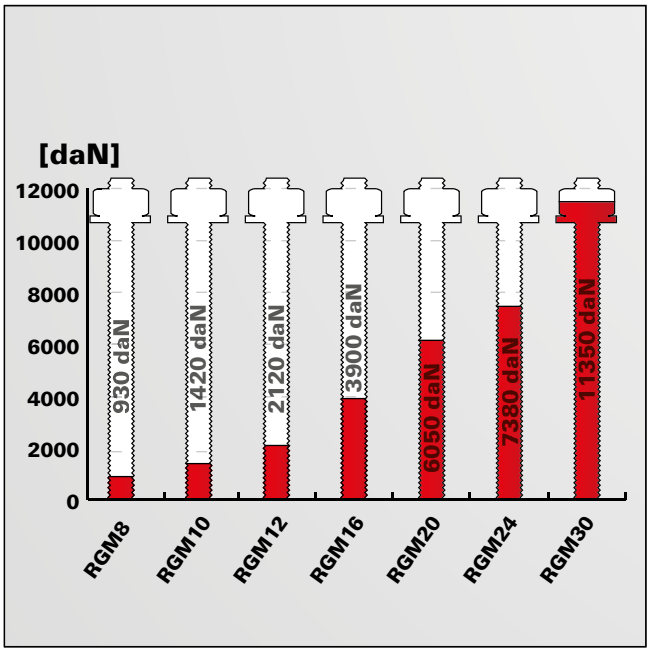
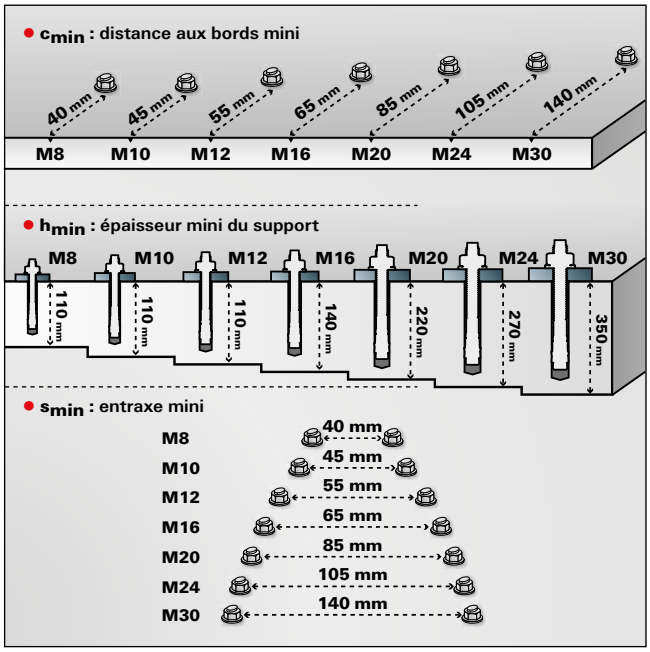
CHARGES

Ampoule Superbond RSB avec tige filetée RGM (Classe d'acier 5.8)

Charges admissibles maximales pour un ancrage isolé N_{els} dans un béton non fissuré C20/25.



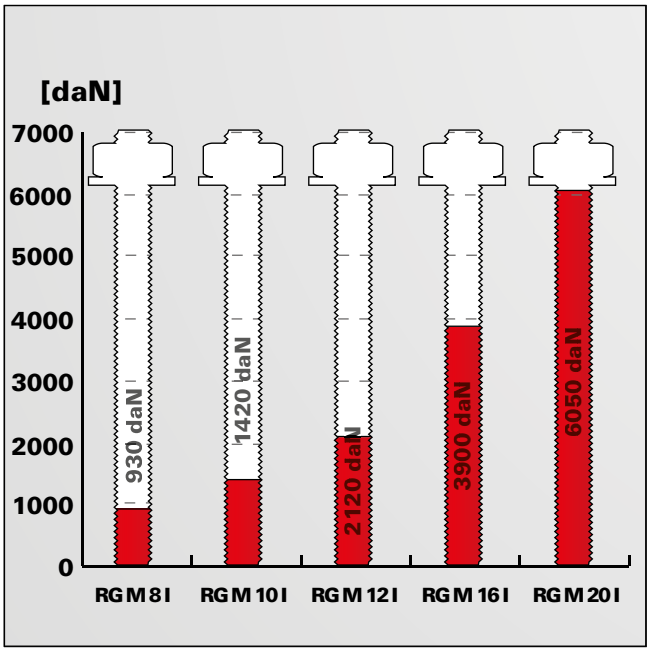


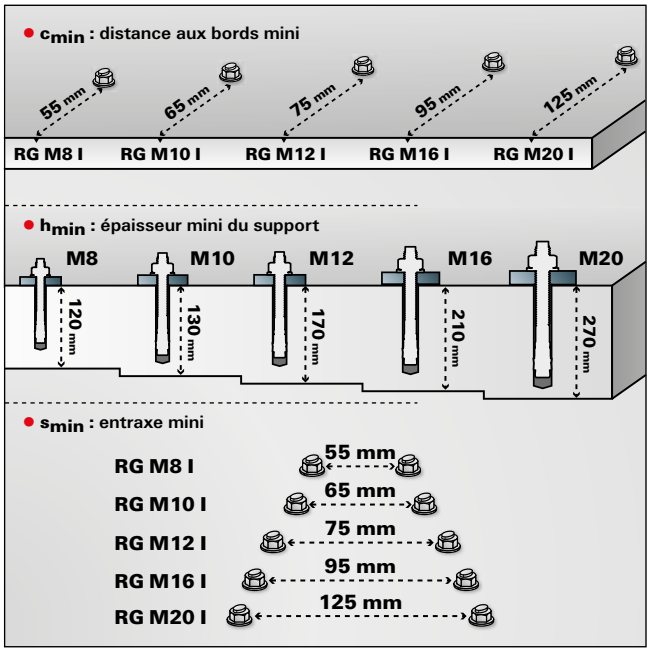
Pour les caractéristiques exactes de résistance et de pose, il convient de respecter toutes les exigences mentionnées dans l'Évaluation technique Européenne (ETE-12/0258) ainsi que sur la notice de pose.
Les charges indiquées tiennent compte de coefficients de sécurité.
Pour des conditions d'implantation personnalisées vous pouvez procéder à la vérification des capacités de la cheville avec notre logiciel de dimensionnement.

CHARGES

Ampoule Superbond RSB avec douille taraudée RGM I (Classe d'acier 5.8)

Charges admissibles maximales pour un ancrage isolé N_{els} dans un béton non fissuré C20/25.





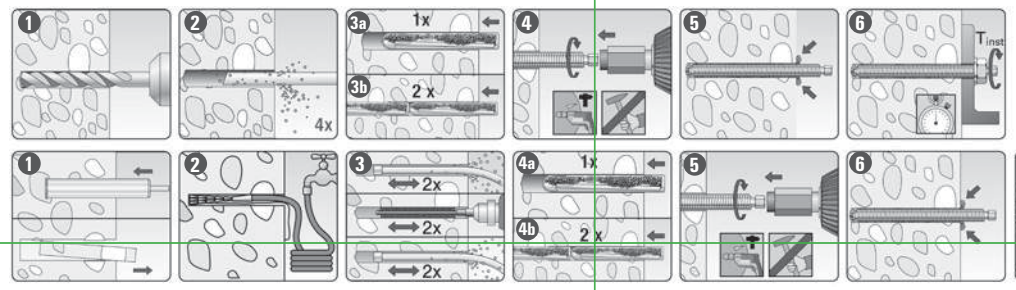
Pour les caractéristiques exactes de résistance et de pose, il convient de respecter toutes les exigences mentionnées dans l'Évaluation technique Européenne (ETE-12/0258) ainsi que sur la notice de pose.
Les charges indiquées tiennent compte de coefficients de sécurité.
Pour des conditions d'implantation personnalisées vous pouvez procéder à la vérification des capacités de la cheville avec notre logiciel de dimensionnement.

RSB



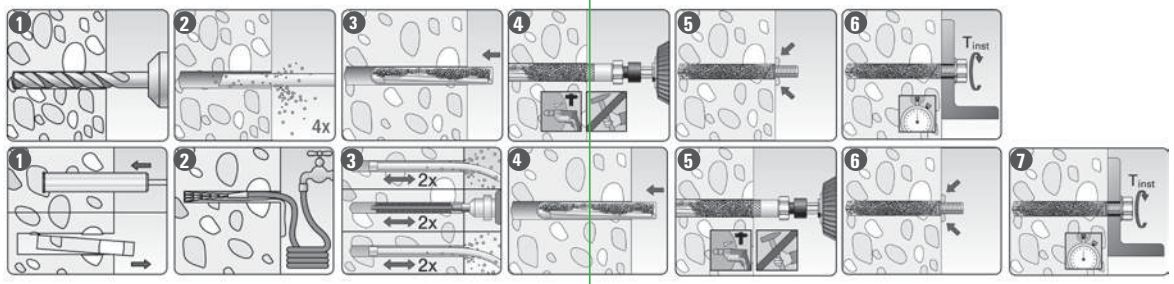


	mm	d_o	h_{ef}	Ø d_b	$T_{inst, max}$	1 x / 2 x	RSB	Art. No.
RG M	M8	Ø 10 mm	80 mm	11	10	1 x	RSB 8	518807
	M10	Ø 12 mm	75 mm	14	20	1 x	RSB 10 mini	518820
			90 mm	14	20	1 x	RSB 10	518821
			150 mm	14	20	2 x	RSB 10 mini	518820
	M12	Ø 14 mm	75 mm	16	40	1 x	RSB 12 mini	518822
			110 mm	16	40	1 x	RSB 12	518823
			150 mm	16	40	2 x	RSB 12 mini	518822
	M16	Ø 18 mm	95 mm	20	60	1 x	RSB 16 mini	518824
			125 mm	20	60	1 x	RSB 16	518825
			190 mm	20	60	2 x	RSB 16 mini	518824
	M20	Ø 25 mm	170 mm	27	120	1 x	RSB 20	518827
			210 mm	27	120	1 x	RSB 20 E / 24	518828
	M24	Ø 28 mm	210 mm	30	150	1 x	RSB 20 E / 24	518828
	M30	Ø 35 mm	280 mm	40	300	1 x	RSB 30	518829



°C	-30 – -20	-19 – -15	-14 – -10	-9 – -5	-4 – ±0	+1 – +5	+6 – +10	+11 – +20	+21 – +30	+31 – +40
	120 h	48 h	30 h	16 h	10 h	45 min	30 min	20 min	5 min	3 min

	mm	d_o	h_{ef}	Ø d_b	$T_{inst, max}$	1 x	RSB	Art. No.
RG MI	M8	Ø 14 mm	90 mm	16	10	1 x	RSB 10	518821
	M10	Ø 18 mm	90 mm	20	20	1 x	RSB 12	518823
	M12	Ø 20 mm	125 mm	25	40	1 x	RSB 16	518825
	M16	Ø 24 mm	160 mm	26	80	1 x	RSB 16 E	518826
	M20	Ø 32 mm	200 mm	40	120	1 x	RSB 20 E / 24	518828



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Hand pump
Art. No. 089300

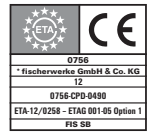


Compressed air pistol
Art. No. 09286

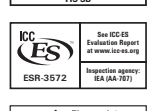


RSB
Superbond System









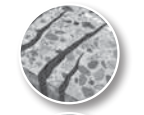


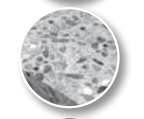


*** Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant de A+ (très faibles émissions) à C (fortes émissions).**













RA-SDS
Art. No. 062420



SDS max 1/2" VK (M16 - M20)
Art. No. 001538





SDS max 3/4" VK (M20 - M30)
Art. No. 001539





SDS plus 1/2" VK (M8 - M16)
Art. No. 001537



SK SW 8 1/2" VK (M8 - M22)
Art. No. 001536

Installation instruction

see ICC-ES Evaluation Report
No. 3572 at www.icc-es.org
Quality Contr ol Agency IEA (AA -707)

fischer adhesive anchoring system RSB

fischer RSB is an adhesive anchoring system for fastenings in normal weight concrete.

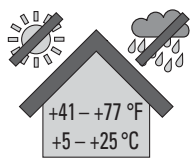
Important:
Before use, read and review the installation instructions and the SDS (safety data sheet). Do not use expired adhesive.

A Installation in hammer-drilled hole

1. Drill the hole. Drill hole diameter $\mathbf{d_o}$ and drill hole depth $\mathbf{h_o}$, see **Table 2** or **3.**
2. Drill hole cleaning: Blow out the drill hole four times with oil-free compressed air ($p \geq 6$ bar). The use of a manual blow-out pump is possible, if at the same time the drill hole diameter is less than 18 mm and the embedment depth h_{ef} is less than 10d.
3. Resin capsule RSB or two RSB mini, must be pushed into the drill hole by hand. Depending on the anchor being installed, a suitable setting tool should be used.
4. Only use clean and grease-free anchors. Using a suitable adapter, drive the RG M into the capsule using a hammer drill set on rotary hammer action. Stop when the anchor reaches the bottom of the hole and is set to the correct embedment depth.
5. When fully embedded, excess mortar must emerge from the mouth of the drill hole. If not, the anchor must be pulled out directly and a second resin capsule must be pushed into the drill hole. Setting process must be repeated, step (4).
6. Wait for the specified curing time. T_{cure} see **Table 1.**
   Mounting the fixture $T_{inst,max}$ see **Table 3.**

B Installation in diamond-drilled hole

1. Drill the hole. Drill hole diameter $\mathbf{d_o}$ and drill hole depth $\mathbf{h_o}$, see **Table 2** or **3.** Break the drill core and remove.
2. Flush the drill hole until the water becomes clear.
3. Blow out the drill hole two times, using oil-free compressed air ($p > 6$ bar). Brush the drill hole two times using a power drill. Blow out the drill hole two times, using oil-free compressed air ($p > 6$ bar).
4. Resin capsule RSB or two RSB mini, must be pushed into the drill hole by hand. Depending on the anchor being installed, use a suitable setting tool.
5. Only use clean and grease-free anchors. Using a suitable adapter, drive the RG M into the capsule using a hammer drill set on rotary hammer action. Stop when the anchor reaches the bottom of the hole and is set to the correct embedment depth.
6. When reaching the correct embedment, excess mortar must emerge from the mouth of the drill hole. If not, the anchor must be pulled out directly and a second resin capsule must be pushed into the drill hole. Setting process must be repeated (5).
6. Wait for the specified curing time. t_{cure} see **Table 1.**
   Mounting the fixture $T_{inst,max}$ see **Table 3.**



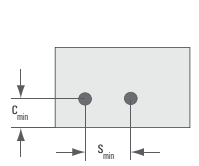
Store mortar in a cool dry place.

Table I Curing times

Temperature range °C	Temperature range °F	Curing time t_{cure}
> –20 to –15	> –4 to +5	48 h
> –15 to –10	> +5 to +14	30 h
> –10 to –5	> +14 to +23	16 h
> –5 to ±0	> +23 to +32	10 h
> ±0 to +5	> +32 to +41	45 min
> +5 to +10	> +41 to +50	30 min
> +10 to +20	> +50 to +68	20 min
> +20 to +30	> +68 to +86	5 min
> +30 to +40	> +86 to +104	3 min

Table II

	Rods mm	Ø inch	Drill bit d_o	Anchoring depth h_{ef}	Brush Ø d_b	Capsule	RSB	Item No.
RG M	M8	3/8	Ø 10 mm	80 mm	11	1 x	RSB 8	518807
	M10	15/32	Ø 12 mm	75 mm	14	1 x	RSB 10 mini	518820
				90 mm	14	1 x	RSB 10	518821
				150 mm	14	2 x	RSB 10 mini	518820
	M12	9/16	Ø 14 mm	75 mm	16	1 x	RSB 12 mini	518822
				110 mm	16	1 x	RSB 12	518823
				150 mm	16	2 x	RSB 12 mini	518822
	M16	1 1/16	Ø 18 mm	95 mm	20	1 x	RSB 16 mini	518824
				125 mm	20	1 x	RSB 16	518825
				190 mm	20	2 x	RSB 16 mini	518824
	M20	1	Ø 25 mm	170 mm	27	1 x	RSB 20	518827
				210 mm	27	1 x	RSB 20 E / 24	518828
	M24	1 1/8	Ø 28 mm	210 mm	30	1 x	RSB 20 E / 24	518828
	M30	1 3/8	Ø 35 mm	280 mm	40	1 x	RSB 30	518829



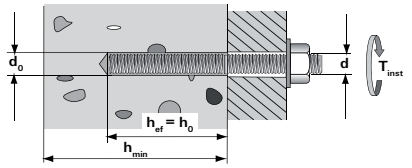
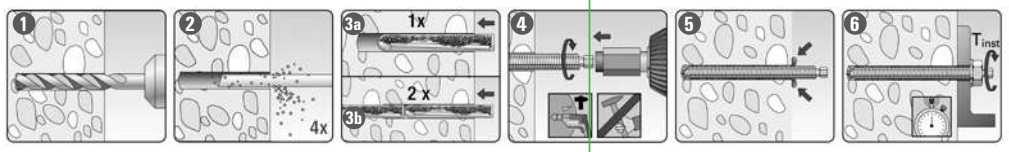


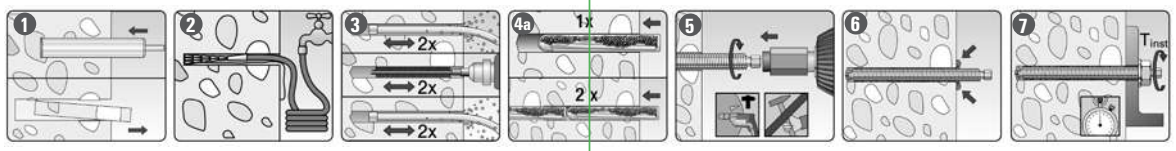
Table III Threaded rod

d mm	Drill bit d_o mm	Drill bit d_o inch	Anchoring depth h_{ef} mm	Anchoring depth h_{ef} inch	Minimum member thickness h_{min} mm	Minimum member thickness h_{min} inch	Minimum spacing, edge distance $s_{min} = c_{min}$ mm	Minimum spacing, edge distance $s_{min} = c_{min}$ inch	Maximum torque $T_{inst, max}$ Nm	Maximum torque $T_{inst, max}$ $f_t - l_b$
M8	10	3/8	80	3.15	h_{ef} + 30	h_{ef} + 1.25	40	1.57	10	7.35
M10	12	15/32	75	2.95			45	1.77	20	14.75
			90	3.54			45	1.77	20	14.75
			150	5.91			45	1.77	20	14.75
M12	14	9/16	75	2.95			55	2.17	40	29.50
			110	4.33			55	2.17	40	29.50
			150	5.91			55	2.17	40	29.50
M16	18	11/16	95	3.74	h_{ef} + 2d_o	h_{ef} + 2d_o	65	2.56	60	44.25
			125	4.92			65	2.56	60	44.25
			190	7.48			65	2.56	60	44.25
M20	25	1	170	6.69			85	3.35	120	88.50
			210	8.27			85	3.35	120	88.50
M24	28	1 1/8	210	8.27			105	4.13	150	110.60
M30	35	1 3/8	280	11.02			140	5.51	300	221.25

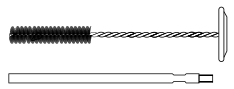
A Installation in hammer-drilled hole



B Installation in diamond-drilled hole



Brush with extension

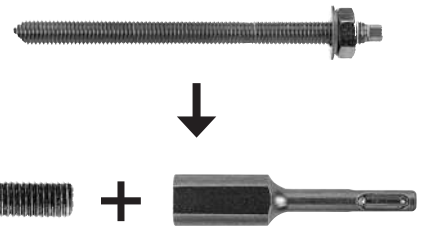


Hand pump



Compressed air pistol





RA-SDS
Art. No. 062420



SDS max 1/2" VK (M16 - M20)
Art. No. 001538



SDS max 3/4" VK (M20 - M30)
Art. No. 001539



SDS plus 1/2" VK (M8 - M16)
Art. No. 001537



SK SW 8 1/2" VK (M8 - M22)
Art. No. 001536

fischer innovative solutions

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Loads

Superbond-System: Resin capsule RSB with Internal threaded anchor RG M I

Permissible loads of a single anchor[1) 2)] in normal concrete of strength class C20/25.
For the design the complete current assessment ETA-12/0258 has to be considered.

					Cracked concrete				Non-cracked concrete			
					Permissible tension (N_{perm}) and shear loads (V_{perm}); minimum spacing (s_{min}) and edge distances (c_{min}) with reduced loads				Permissible tension (N_{perm}) and shear loads (V_{perm}); minimum spacing (s_{min}) and edge distances (c_{min}) with reduced loads			
Type	Screw material[3)]	Effective anchorage depth h_{ef} [mm]	Minimum member thickness h_{min} [mm]	Maximum installation-torque $T_{inst,max}$ [Nm]	N_{perm}[4)] [kN]	V_{perm}[4)] [kN]	s_{min}[4)] [mm]	c_{min}[4)] [mm]	N_{perm}[4)] [kN]	V_{perm}[4)] [kN]	s_{min}[4)] [mm]	c_{min}[4)] [mm]
RG M8 I	5.8	90	120	10	8.1	5.3	55	55	9.0	5.3	55	55
	8.8	90	120	10	8.1	8.3	55	55	13.8	8.3	55	55
	R-70	90	120	10	8.1	5.9	55	55	9.9	5.9	55	55
RG M10 I	5.8	90	130	20	10.8	8.3	65	65	13.8	8.3	65	65
	8.8	90	130	20	10.8	13.3	65	65	20.0	13.3	65	65
	R-70	90	130	20	10.8	9.3	65	65	15.7	9.3	65	65
RG M12 I	5.8	125	170	40	16.8	12.1	75	75	20.5	12.1	75	75
	8.8	125	170	40	16.8	19.3	75	75	32.4	19.3	75	75
	R-70	125	170	40	16.8	13.5	75	75	22.5	13.5	75	75
RG M16 I	5.8	160	210	80	26.3	22.4	95	95	37.6	22.4	95	95
	8.8	160	210	80	26.3	30.9	95	95	47.4	30.9	95	95
	R-70	160	210	80	26.3	25.1	95	95	42.0	25.1	95	95
RG M20 I	5.8	200	260	120	41.9	35.4	125	125	58.6	35.4	125	125
	8.8	200	260	120	41.9	51.4	125	125	66.3	51.4	125	125
	R-70	200	260	120	41.9	39.4	125	125	65.7	39.4	125	125

[1)] Design according to EN 1992-4:2018 (for static resp. quasi-static loads). The partial safety factors for material resistance as regulated in the ETA as well as a partial safety factor for load actions of $\gamma_L = 1.4$ are considered. As a single anchor counts e.g. an anchor with a spacing $s \geq 3 \times h_{ef}$ and an edge distance $c \geq 1.5 \times h_{ef}$. Accurate data see ETA.

[2)] The specified loads are valid for anchorages in dry and damp concrete. For temperatures in the anchoring substrate up to 50 °C (resp. short term up to 80 °C). Drill hole cleaning as per specification in the ETA. The factor Ψ_{sus} for sustained load was taken into account with 1.0.

[3)] Further steel grades, versions and technical data see ETA, e.g. for dry internal conditions, galvanised steel (gvz); for damp interiors and for outdoor use, stainless steel (R).

[4)] In the case of combinations of tension and shear loads, bending moments with reduced or minimum spacing and edge distances (anchor groups), the design must be carried out in accordance with the provisions of the complete ETA and the provisions of the EN 1992-4:2018. We recommend using our anchor design software C-FIX.

CURING TIME

Temperature in anchoring base	Curing time RSB
- 30°C – - 20°C	120 hrs.
- 19°C – - 15°C	48 hrs.
- 14°C – - 10°C	30 hrs.
- 9°C – - 5°C	16 hrs.
- 4°C – ± 0°C	10 hrs.
+ 1°C – + 5°C	45 min.
+ 6°C – +10°C	30 min.
+ 11°C – +20°C	20 min.
+ 21°C – +30°C	5 min.
+ 31°C – +40°C	3 min.