

Precision Grouting
 SIG Construction Accessories supply cementitious, polyester or epoxy products for the alignment and leveling and gap filling in the following and many more applications:

- Crane rails.
- Capstans.
- Landing lights.
- Under-rail pads.
- Sleeper bearings.
- Bridge bearings.
- Balustrades.
- Crash barriers.
- Pump bases.
- Sluice gates.
- Machine bedding.
- Baseplates.

Anchoring & Fixing

We offer products to aid the high strength and corrosion resistant anchoring of bolts and bars in concrete, rock, masonry or brickwork particularly where speed of installation and early application of load is required.

Our range includes cementitious, polyester, epoxy, cartridge systems and capsules for use in:

- Anchoring of bolts.
- Anchoring of rebar.
- Anchoring of dowels.
- Fixing of cavity wall ties.
- Fixings to soffits and walls.
- Fixing landing lights.
- Fixing of threaded studs.



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Cementitious Grouts

weber Five Star Grout

A standard cementitious grout developed for applications where an economical grout with good flow and strength is required. Five Star Grouts are based on specially selected Portland cements, graded aggregates and admixtures including a special form of carbon.

This special formulation produces a grout that conforms to ASTM C827 Early Volume Change of Cementitious Mixtures. Does not contain iron, aluminium or other additives which eliminates any subsequent problems of dimensional instability, corrosion or staining.

Five Star Grout is designed primarily as a flowing grout but can also be used at a trowellable or dry pack consistency. It can be applied in thicknesses from 10 to 100mm.

Uses:

- Under stanchion plates and machinery (static loads only).
- Grouting bearings, precast units, floors etc.
- Fixing anchor bolts, ballustrades, crash barriers, starter bars.
- Underpinning.
- Void filling.

Five Star Grout SP

Five Star Grout SP is a special performance, higher flow version of the standard grout. It can be applied in thicknesses from 10 to 50mm. It has superior properties and complies with HA Spec 2601.4 for use in bridge bearings.

Five Star Grout Fast Set

A rapid setting, rapid strength cementitious grout which is shrinkage compensated by means of a special nonmetallic additive.

weber.cem Grout (Construction Grout)

weber.cem grout is a premixed non-shrink cementitious grout developed for applications where an effective grout with adequate flow and strength is required. It is designed primarily as a pourable grout but can also be used at a plastic or dry pack consistency.

This grout can be pumped or poured and can be applied in thicknesses ranging from 10mm to 100mm. It can be used for many general purposes.

weber.cem Grout HF (High Flow)

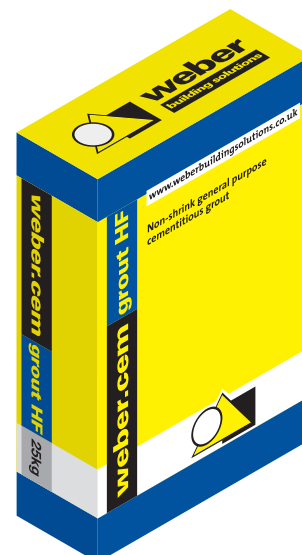
weber.cem grout HF is a cementitious, 'non-shrink' grout developed for applications where a cost efficient grout with high fluidity and adequate compressive strength is required. weber.cem grout HF is designed primarily as a fluid grout but can also be used at a pourable or dry pack consistency.

weber.cem Duct Grout

A quality-controlled premixed cementitious grout developed for the grouting of tendons, bars and anchors in internal prestressing ducts. Complies with testing outlined in TR47.

Weber Cementitious Grouts

Type	Size (kg)	Yield / Coverage
Five Star	25	14 litres at pourable consistency
Five Star SP	25	14 litres at pourable consistency
Five Star grout fast set	25	14 litres at pourable consistency
weber.cem grout	25	13 litres at pourable consistency
weber.cem grout HF	25	13 litres at pourable consistency
weber.cem duct grout	25	16 litres at fluid consistency



Masterflow 765

A ready to use, non-shrink construction grout for effective contact and support. It can be used from fluid to plastic consistencies for grouting of equipment and machinery, bearing pads, rails and anchoring.

- High early strength for rapid installation and use of plant.
- Durable, uniform dense structure.
- Good workability for up to 1 hour at 20C.
- Can be applied in thicknesses ranging from 10-75mm.

Recommended for:

- Grouting bearing pads and plinths.
- Grouting under machinery base plates, stanchion bases and crane rails.
- Anchoring bolts, reinforcing bars and rods.
- Underpinning.





Conbextra GP

General purpose, non-shrink cementitious grout for gap thicknesses 10 to 75mm. Recommended applications at flowable consistency include stanchion base plates, bolt pockets and void filling. At trowellable consistency it is recommended for bedding load bearing components. Yield: 25kg produces 12.5 litres. Available in 25kg packs.

Conbextra HF

High flow, non-shrink, cementitious grout for gap thicknesses 10 to 100mm. Recommended applications include:

- Large stanchion baseplates.
- Joints between pre-cast concrete panels.
- Pumped grouting applications.
- Grouting applications where pouring access is restricted.

Yield: 25kg produces 13.25 litres. Available in 25kg packs.

Conbextra BB

Non-shrink cementitious bridge bearing grout. Used for grouting beneath bridge bearings, parapet posts, flanged lighting columns.

Conbextra TS

Non-shrink cementitious grout for thick section grouting of thicknesses 75-500mm. It is ideally suited to thick section grouting as it contains aggregates that reduce exothermic heat generation and risk of thermal cracking common with gap thicknesses in excess of 100mm.

Conbextra UW

Non shrink cementitious grout for underwater applications.

Cebex 100

Expanding and plasticising grout admixture used with either neat cement or sand and cement mixes. It is incompatible with High Alumina Cement. Available in 227g packs.

Fosroc Cementitious Grouts

Type	Size (kg)	Yield
Conbextra GP	25 bags	Flowable: 13.25 litres
Conbextra HF	25 bags	Flowable: 13.25 litres
Conbextra BB	25 bags	Flowable: 13.5 litres
Conbextra TS	25 bags	Flowable: 12 litres
Conbextra UW	25 bags	Flowable: 14.5 litres
Cebex 100	227g units	1 - 2 units per 50kg of cement



Sika Grout 212

A high strength pre-packed non shrink cementitious grout. For grouting bolts, fittings, anchor bolts, machine beds, chain bolts, columns, bridge bearings, holes, cavities, etc. For gap sizes 10 - 75mm.

Sika Armorex Construction Grout

A one-component, Flowable, general purpose cementitious construction grout for gap sizes 10-100mm.

Sika Armorex L2 High Flow

A one-component, high strength, shrinkage compensated cementitious grout for gap sizes 10-100mm. Available in grey only.

Sika Cementitious Grouts

Type	Size (kg)	Coverage
Sika Grout 212	25	14 litres at pourable consistency
Sika Armorex Construction Grout	25	14.2 litres
Sika Armorex L2 High Flow	25	13.5 litres



Anchoring Grouts

weber.tec grout

weber.tec anchor grout

A two-component pourable grade polyester resin and special catalysed filler that has been developed for anchoring and fixing.

weber.tec grout FG (Certite Pourable Grout Fine Grade)

A two-component polyester grout for anchoring and fixing. Fast setting version available for rapid installation and can be used down to 0°C.

weber.tec EP pourable grout

A high flow pourable grout is specially formulated from epoxy resin and graded aggregates producing materials with exceptional toughness, chemical resistance, good flow characteristics and negligible shrinkage.

weber.tec EP TAG

A specially formulated epoxy resin system for securing horizontal fixings, such as dowel bars, starter bars, threaded studding and bolts into concrete or brickwork.

Weber Anchoring Grouts

Type	Size	Yield / Coverage
weber.tec anchor grout	2.5 litre buckets	2.5 litres
weber.tec grout FG	22.5kg packs	12 litres unbulked
weber.tec EP pourable grout	Pack size 25kg	14 litres
weber.tec EP TAG	6.4kg pack	4 litres resin



Fosroc Grouts

Conbextra EP10 and EPR

Epoxy resin grouts for use where extremely high strength and/or chemical resistance is required. Uses include grouting in heavy machinery, crane and transporter rails, high speed turbines, drop forges, refineries, electroplating works and chemical plants.

Conbextra EP10 is for grouting gap thicknesses from 0.25 to 10mm. It is an all-liquid system consisting of a base and hardener. Conbextra EPR is for grouting gap thicknesses from 10 to 120mm and is a three-component system consisting of base resin, liquid hardener and specially graded inert fillers.

Polyester Anchor Grouts

High-strength corrosion-resistant anchoring of bolts and bars into concrete, rock, masonry or brickwork where high speed of installation and early application of load is required. Permanent installation of reinforcement starter bars, MOT bolts, foundation bolts, base plates, balustrading, barriers and safety fences, railway tracks and tie-back anchors.

Lokfix S25 (pourable grade, 25 minute gel at 20°C):

For use where the hole is 8 to 40mm greater in diameter than the bar.

Lokfix P25 (pumpable grade, 25 minute gel at 20°C):

Used in overhead or horizontal holes where the hole is up to 25mm greater in diameter than the bar. The thixotropic nature of Lokfix P25 reduces flow of grout out of the hole.

Fosroc Grouts

Type	Size (litres)	Yield (litres)
Conbextra EP10	3	-
Conbextra EPR	8, 16	-
Lokfix S25	2.5	2.5
Lokfix P25	2.5	2.5



Fosroc Lokfix usage guide

To determine the quantity of material per 100ml of hole depth

Hole Dia (mm)	12mm (litre)	16mm (litre)	20mm (litre)	25mm (litre)	32mm (litre)	38mm (litre)	44.5mm (litre)	51mm (litre)
20	0.020	-	-	-	-	-	-	-
25	0.038	0.029	-	-	-	-	-	-
32	0.069	0.060	0.049	0.031	-	-	-	-
38	-	0.093	0.082	0.064	-	-	-	-
45	-	-	0.128	0.110	0.079	0.046	-	-
51	-	-	-	0.155	0.124	0.091	-	-
57	-	-	-	0.206	0.175	0.142	0.100	-
64	-	-	-	0.273	0.241	0.208	0.166	0.117
76	-	-	-	-	-	0.340	0.298	0.249

Chemical Fixings**Sika AnchorFix-1**

AnchorFix-1 can be injected into most substrates including concrete, brickwork, blockwork, hollow and solid masonry, solid rock and natural stone and is suitable for practically every type of anchoring and fastening method, such as threaded rods, steel reinforcement, masonry wall ties and anchor sockets. Supplied in a single 300ml cartridge that fits into a standard sealant gun, the two-component styrene free polyester resin Sika AnchorFix-1 is mixed in the nozzle for simplicity and error free operation.

Sika AnchorFix-2

A solvent and styrene free, epoxy acrylate based, two-part anchoring adhesive.

Sikadur 42

Pourable epoxy grout. Cures down to 5°C. Fast setting.

Sika Anchoring Grouts

Type	Size	Coverage
Sika AnchorFix-1	300ml standard cartridge	-
Sika AnchorFix-2	300ml standard cartridge	-
Sikadur 42	24kg	6 litres (grout) per 12kg

**Bar Grout Estimator**

Guide for number of bolt with 2.5 litre pack based on hole depth 150mm.

Hole (mm)	Bolt sizes			
	12mm	16mm	20mm	25mm
16	180	-	-	-
20	80	150	-	-
25	30	40	60	-
32	20	22	26	40

fischer FIPSC SYSTEMS Fischer FIPC 700

The fischer FIPC 700 is two-part chemical anchoring cartridge system based on a polyester resin. Versatile in use, FIPC 700 is suitable for fixing studs, bolts, wall ties, starter bars in a wide range of substrates such as concrete internally and lightweight concrete, brickwork, masonry, stone in both internal and also external applications. If combined with a sleeve or sieve, it can be used also in hollow base materials. Because the resin system is classified as a 'stress free system', it is ideal for applications with small axial or edge spacing.

Fischer Gelling and Curing times

Temperature (°C)	Gelling time (Minutes)	Curing time (Minutes)
5	15 - 30	180
10	10 - 20	120
20	5 - 10	60
25	3½ - 7	28
30	3 - 6	45

FIS-EM390

Best performance mortar in the shuttle cartridge based on epoxy resin. Optimum solution for concrete (anchor rods and reinforcement bars). Resin and hardener are stored in two separate chambers and are not mixed and activated until pushed through the static mixer. Partially used cartridges can easily be reused by changing the static mixer.

FIS-P380C

Styrene-free, injection mortar which contains a strong, quick setting two-component mortar, which is stored in separated compartments. Only when using the setting mortar the two components are combined in the static mixer. The setting mortar is activated, when the extruded mortar turns grey in colour.

FIS-V360S

Styrene-free, quick-curing high-performance hybrid mortar (contains vinyl ester resin and cement). Resin and cement as well as water and hardener are stored in two separate chambers and are not mixed and activated until pushed through the static mixer. Partially-used cartridges can easily be reused by changing the static mixer.

FIP-300SF

Styrene-free, low odour, injection mortar which contains a strong, quick setting two-component mortar, which is stored in separated compartments. Only when using the setting mortar the two components are combined in the static mixer. The setting mortar is activated, when the extruded mortar turns grey in colour.

Fischer Chemical Fixings and Accessories

Type	Size (ml)	Quantity
FIS-EM390	390	6 cartridges + 2 nozzles each
FIS-P380C	380	12 cartridges + static mixer nozzle
FIS-V360S	360	1 cartridge + static mixer nozzle
FIP-300SF	300	10 cartridges + static mixer nozzle
FIPC 700	400	1 cartridge + static mixer nozzle

FIS-AK Gun

Applicator gun for use with FIS V360 S, FIS HB, FIS EM 390 S, FIS VS 150 C and Single-component PU foam.

FIP Co-axial Applicator Gun

Applicator gun for use with FIS P380 C and FIPC Super 700.

Blow Pump / Brush

For blowing clean drilled holes before applying chemical anchor.

**fischer Fischer Resin Capsules**

- This tried and tested fixing system consists of the RGM threaded rod and the resin capsule RM.
- The 2-component resin capsule RM contains quick-setting styrene-free vinyl resin and hardener.
- During setting, the edges of the threaded rod destroy the capsule in the drill hole, which mix and activate the mortar.
- Resin adheres to the entire surface of the threaded rod, bonding it to the wall of the drilled hole.

Advantages/Benefits:

- Threaded rods are supplied with an easy to use hexagonal installation drive or can be installed with an adapter.
- High-performance resin guarantees high loads in non-cracked concrete.
- The resin anchoring is free of expansion forces and permits small axial spacings and edge distances.
- New European design method enables optimum use of the anchor system for cost-efficient fixing.

Fischer Resin Capsules

Fixing Length (mm)	Min. Drill Hole Depth (mm)	Drill Diameter (mm)	Quantity
80	80	10	10
90	90	12	10
110	110	14	10
125	125	18	10
170	170	25	10
210	210	28	10



fischer Fischer Resin Anchor Studs

The Resin Anchoring System is free of expansion forces and permits low axial spacings and edge distances. High permissible loads in the concrete compressive zone and simple installation make the Fischer resin anchor system a highly practical composite system in solid concrete. All threaded rods up to 300mm are supplied with an easy to assemble hexagonal installation drive.

Installation instructions:

- Clean drill hole thoroughly.
- The threaded rod must be placed in with an impact – rotational process using an electric tool (hammer drill with a speed of 750 rpm).
- The temperature – dependant waiting periods until complete setting of the resin must be borne in mind.
- The anchor may also be set in moist drill holes (remove surplus water from drill holes). The waiting periods then have to be doubled.

Fischer Stainless Steel A4 Threaded Rod

Hexagon Nut (mm)	Width Across Nut (mm)	Max. Usable Length (mm)	Effective Anchoring Depth (mm)	Threaded Rod Length (mm)	Box Quantity
13	5	13	80	110	10
17	7	20	90	130	10
19	8	25	110	160	10
24	12	35	125	190	10
30	12	65	170	260	10
36	-	65	210	300	10

Fischer Zinc Plated Steel Threaded Rod

Hexagon Nut (mm)	Width Across Nut (mm)	Max. Usable Length (mm)	Effective Anchoring Depth (mm)	Threaded Rod Length (mm)	Box Quantity
13	5	13	80	110	10
17	7	20	90	130	10
19	8	25	110	160	10
24	12	35	125	190	10
30	12	65	170	260	10
36	-	65	210	300	10

Steel Anchors

fischer Fischer High Performance Steel Anchors

- Specification Advisory Service available. • Technical Support.
- On Site Testing.

The FBN bolt is a flexible anchor for economical performance. Available in Grade 1.4401 (316) stainless steel and Zinc plated steel.

For fixing of:

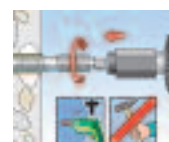
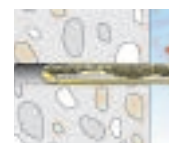
Brick support systems, metal constructions, formwork, brackets, beams, racking, machinery etc.

Installation instructions:

Before tapping in, place the nut in the best position for installation. (Bolt projects approx. 2-3mm).

Fischer FBN Bolts Stainless Steel

Type	Thread Dia x Length	Total Length (mm)	Drill Diameter (mm)	Effective Anchor Depth (mm)	Useable Length (mm)	Box Quantity
FBN 6/10 A4	M6 x 25	68	6	40	10	100
FBN 6/30 A4	M6 x 30	88	6	40	30	100
FBN 8/10 A4 + 23 A4	M8 x 41	76	8	48/35	10/23	50
FBN 8/50 + 63 A4	M8 x 81	116	8	48/35	50/63	50
FBN 10/15 + 23 A4	M10 x 51	89	10	50/42	15/23	50
FBN 10/50 + 58 A4	M10 x 87	125	10	50/42	50/58	20
FBN 10/100 + 108 A4	M10 x 134	174	10	50/42	100/108	20
FBN 12/15 + 35 A4	M12 x 71	113	12	70/50	15/35	20
FBN 12/45 + 65 A4	M12 x 103	143	12	70/50	45/65	20
FBN 12/100 + 120 A4	M12 x 157	202	12	70/50	100/120	20
FBN 16/10 A4	M16 x M54	109	16	64	10	10
FBN 16/25 + 45 A4	M16 x 89	144	16	84/64	25/45	10
FBN 16/50 + 70 A4	M16 x 114	169	16	84/64	50/70	10



Fischer FBN Bolts Hot Dip Galvanised

Type	Thread Dia x Length	Total Length (mm)	Drill Diameter (mm)	Effective Anchor Depth (mm)	Useable Length (mm)	Box Quantity
FBN 8/10 HDG	M8 x 41	76	8	48	10	50
FBN 8/50 HDG	M8 x 81	116	8	48	50	50
FBN 10/15 HDG	M10 x 51	89	10	50	15	50
FBN 10/50 HDG	M10 x 87	124	10	50	50	20
FBN 10/100 HDG	M10 x 134	174	10	50	100	20
FBN 12/15 HDG	M12 x 71	113	12	70	15	20
FBN 12/45 HDG	M12 x 103	143	12	70	45	20
FBN 12/100 HDG	M12 x 137	202	12	70	100	20
FBN16/10 HDG	M16 x 54	109	16	64	10	10
FBN 16/25 HDG	M16 x 89	144	16	84	25	10
FBN 16/50 HDG	M16 x 114	169	16	84	50	10



Fischer FSA Sleeve Anchors

FSA-S / FSA-B

Light sleeve anchor for push-through installation. When the hexagon nut or bolt is tightened, the tapered bolt is pulled into the expansion sleeve and expands it against the hole wall.

Sizes: 8/15, 8/40, 8/65, 10/10, 10/35, 10/60, 12/10, 12/25, 12/50 diameter (mm) / usable length (mm).



Fischer FH High Performance Anchors

FH-H / FH-B / FH-S

Heavy-duty sleeve anchor for push-through installation. When the hexagon nut or screw is tightened, the cone is pulled into the expansion sleeve and expands tensioning it against the hole wall. A4 stainless steel version for outdoor use and in damp conditions (not part of the approval).

Sizes: (FH-H) 10/10, 10/25, 10/50, 12/25, 12/50, 15/25, 15/50, 18 x 80/25, 18 x 80/50, 18 x 100/25, 18 x 100/50, 24/25, 24/50 diameter (mm) / usable length (mm).

Sizes: (FH-B) 10/10, 10/25, 10/50, 12/-, 12/10, 12/25, 12/50, 12/100, 15/-, 15/10, 15/25, 15/50, 15/100, 18 x 80/-, 18 x 80/10, 18 x 80/25, 18 x 80/50, 18 x 80/100, 18 x 100/25, 18 x 100/50, 18 x 100/100, 24/-, 24/10, 24/25, 24/50, 24/100, 28/30, 28/60, 32/30, 32/60 diameter (mm) / usable length (mm).

A4

Sizes: (FH-B / FH-S) 10/10, 12/10, 12/25, 15/10, 15/25, 15/50, 18 x 100/25, 18 x 100/50 diameter (mm) / usable length (mm).

Galvanised

Sizes: (FH-B / FH-S) 10/-, 10/10, 10/25, 10/50, 12/-, 12/10, 12/25, 12/50, 15/-, 15/10, 15/25, 15/50, 18 x 80/-, 18 x 80/10, 18 x 80/25, 18 x 80/50, 18 x 100/25, 18 x 100/50, 24/10, 24/25, 24/50 diameter (mm) / usable length (mm).

Sizes: (FH-B / FH-S): 12/10, 12/50, 15/10, 15/50 diameter (mm) / usable length (mm).



Fischer FWB Wallbolts

The segmented steel expander shield is assembled ready for use with bolts or threaded rods of appropriate diameter.

Fischer FWB Wallbolts

Type	Size (mm)	Quantity
FWB S Wallbolt – shield only	6, 8, 10, 12, 16 & 20	10, 25, 50
FWB L Wallbolt – loose bolt type	6, 8, 10, 12, 16 & 20	10, 25, 50
FWB P Wallbolt – projecting bolt type	6, 8, 10, 12, 16 & 20	10, 25, 50
FWB H Wallbolt – hook bolt type	12, 14, 16 & 20	25, 50
FWB E Wallbolt – eye bolt type	6, 8, 10, 12 & 16	10, 25, 50



Mild Steel Threaded Studding Studding, Washers, Nuts & Connectors

Quality mild steel all-threaded studding for civil engineering construction use. Supplied with full range of nuts, washers and connectors. Suitable for use with SIG Construction Accessories chemical anchoring systems.

Studding

Size
M12 x 1000mm
M16 x 1000mm
M20 x 1000mm
M24 x 1000mm
M12 x 3000mm
M16 x 3000mm
M20 x 3000mm
M24 x 3000mm

Washers

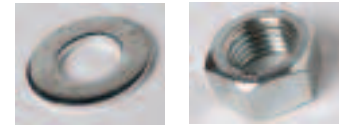
Size
M12
M16
M20
M24

Nuts

Size
M12
M16
M20
M24

Connectors

Size
M12
M16
M20
M24



Set Screws

Set Screws, available in Self Colour. Galvanised and Stainless Steel in both 304 and 316 grades.

Set Screws

Size				
M6	M8	M10	M12	M16
M6 x 20	M8 x 25	M10 x 20	M12 x 25	M16 x 50
M6 x 25	M8 x 35	M10 x 25	M12 x 30	M16 x 60
M6 x 30	M8 x 45	M10 x 30	M12 x 40	M16 x 70
M6 x 40	M8 x 40	M10 x 40	M12 x 45	
		M10 x 45	M12 x 50	
		M10 x 50		

