webercem advanced precision grout

Non-shrink flowable precision grout

- Can be pumped, poured, trowelled or dry packed
- Developed for applications where good flow and strength is required
- Ideal for static loads

webercem ADVANCED

NON-SHRINK

MEETS BS EN 1504-3 and 6

PUMP OR HAND APPLIED

10 to 100 mm

APPLICATION DEPTH

13.5 L

FLOWABLE YIELD

POURABLE APPLICATION

About this product

webercem advanced precision grout is a premixed cementitious grout developed for applications where an economical grout with good flow and strength is required. **webercem advanced precision grout** is based on Portland cement, graded aggregates and specially selected additives.

webercem advanced precision grout is designed primarily as a flowing grout but can also be used at a trowellable or dry pack consistency.

Complies with BS EN 1504-3 and 6.

Features and benefits

- **webercem advanced precision grout** is shown to be non-shrink by Early Volume Change of Cementitious Mixtures which, unlike other methods, measures expansion or shrinkage from time of placing
- Volume expansion when unrestrained is greater than 1.0%
- Precision grout suitable for use over a range of temperatures and site conditions
- Can be pumped, poured, trowelled or dry packed
- Good flow properties
- Can be applied in thicknesses from 10 mm to 100 mm
- Does not significantly lose workability during pot life

webercem advanced precision grout

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

Constraints

- **webercem advanced precision grout** must only be used in confined situations, e.g. under baseplates, in holes etc.

Preparation

Concrete

All surfaces should be clean and sound. Concrete surfaces must be free from any contamination including oil, grease, laitance and dust – and for maximum bond, the surface should be roughened and pre-soaked with clean water.

Immediately prior to grouting, remove free water including that in bolt holes or recesses.

Metal surfaces must be free from rust, scale, oil or grease but removable metal shims should be lightly oiled.

Ensure bolt holes are free of dust, water or any loose material. Formwork should be well sealed to prevent leakage.

Mixing

Avoid entraining excessive quantities of air during mixing by keeping the mixing head below the grout level at all times. This grout needs only to be mixed with sufficient water to give the consistency required. Mixing should be carried out in a proprietary grout mixer or in a bucket (where the height is at least 1 $^1/_2$ times its diameter) by using a medium-speed drill (650 rpm) with an MR4-type helical attachment.

When using the maximum water to obtain a pourable grout, the following procedure is recommended. Pour 4.5 litres of water into a suitable bucket, followed by all the powder and mix to a pourable consistency.

Ensure any lumps are broken down by the shearing action. For optimum flow, use up to 5 litres of water per 25 kg bag.

Leave the mixed grout to stand for 1-2 minutes to get rid of any entrained air before application.Do not mix the grout for more than 5 minutes.

To obtain the consistency required, add water as follows:

Dry pack mix - Approx. 2.8 litres of water per 25 kg bag (dual blade, forced action mixer required)

Trowellable mix - Approx. 3.5 litres of water per 25 kg bag

Pourable mix - Up to 5 litres of water per 25 kg bag

Chemical resistance

When properly placed and cured **webercem advanced precision grout**. is a dense low permeability material which resists damage from frost attack and freeze/thaw conditions. Its permeability means it is highly durable and resistant to de-icing salts.

Application

When pouring, the area to be grouted should be shuttered and a header box used to maintain a grout head of 150 – 200 mm during the pour. Machine mixing is recommended to achieve continuous pouring. For large applications **webercem advanced precision grout** should be placed by pump and has been formulated to give a 35 minute working time. It does not contain metal particles; wear and tear on equipment is similar to conventional sand/ cement mixes.

Mixing and placement can be carried out between +5°C and +40°C.

Continuous grout flow is essential and sufficient grout and water should be available to be mixed to ensure there is no discontinuity of the flow.

Where the thickness of grout is greater than 100 mm, use **webercem advanced repair concrete**.

The grout around the edges of baseplates must be finished flush with the sides by cutting the grout while still green after stripping formwork. Cracking due to expansion may result in such areas where there is no restraint.

Precautions

webercem advanced precision grout is based on Portland cement and good concreting practice with regards to placing and curing especially under winter conditions must be observed.

Do not add water above the recommended stated dosages.

Use only clean (potable) water. Avoid leaving unconfined areas of grout proud around bearings etc.

Packaging and yield

webercem advanced precision grout is supplied in 25 kg polythene lined bags.

Coverage

For a pourable mix each 25 kg bag produces approximately 13.5 litres of grout. For estimating purposes, 5% extra should be allowed for spillage during mixing and placing.

Storage and shelf-life

When stored unopened in a dry place at temperatures above 5°C, shelf life is 12 months from date of manufacture.

Health and safety

For further information, please request the Material Safety Data Sheet for this product.

weber
SAINT-GOBAIN

webercem advanced
precision grout

Technical data

EN 1504	All tests carried out at max. water addition of 5 litres as per EN 1504 standard		
Performance characteristic	**Method**	**Requirement**	**Typical result***
Compressive strength	EN 12190	≥45 MPa	57.6 MPa
Chloride ion content	EN 1015-17	≤0.05 %	<0.01%
Adhesive bond	EN 1542	≥2.0 MPa	2.7 MPa
Carbonation resistance	EN 13295	dk ≤ control concrete	dk ≤ control concrete
Elastic modulus	EN 13412	≥20 GPa	20.2 GPa
Thermal compatibility Part 1 Freeze-thaw	EN 13687-1	Bond strength after 50 cycles ≥2.0 MPa	2.6 MPa
Capillary absorption	EN 13057	≤0.5 $kgm^{-2}h^{-0.5}$	0.3 $kgm^{-2}h^{-0.5}$
Reaction to fire	EN 13501-1	Declared class	Class A1
Pull-out	EN 1881	Displacement ≤ 0.6mm at 75 kN	≤ 0.6mm

DTp Specification c2600, Clause 2601.4		All tests carried out at max. water addition of 5 litres at 20°C	
Performance characteristic	**Method**	**Requirement**	**Typical result***
Flow cone at 5°C	ASTM C939	Efflux time of repeat to be within ±5% of each other & average recorded	40-50 seconds
Flow cone at 20°C			
Flow between glass plates at 5°C	HCD drawing no.K2	Mortar should rise ≥10 mm above the underside of the top plate at all positions, without signs of segregation, bleeding, effervescence or air inclusions	Satisfied
Flow between glass plates at 20°C			Satisfied
28 day compressive strength at 20°C	EN 12190	≥50.0 MPa	58.0 MPa
Expansion test	ASTM C827	≥0.25 ≤2.5%	2.1%
Elastic stability		≤1.0%	0.84%

ASTM C 1107-17	All tests carried out at max. water addition of 5 litres at 23°C		
Performance characteristic	**Method**	**Requirement**	**Typical result***
Change in height at early ages of cylindrical specimens of cementitious mixtures	ASTM C827	≥0.0 - ≤4%	2.11%
Changes in height of cylindrical specimens of hydraulic cement grout	ASTM C1090	≥0.0 - ≤+0.3%	0.03%
1 day compressive strength of hydraulic cement mortars (using 50 mm cube specimens)	ASTM C109	7.0 MPa	30.5 MPa
3 day compressive strength of hydraulic cement mortars (using 50 mm cube specimens)	ASTM C109	17.0 MPa	48.3 MPa
7 day compressive strength of hydraulic cement mortars (using 50 mm cube specimens)	ASTM C109	24.0 MPa	51.4 MPa
28 day compressive strength of hydraulic cement mortars (using 50 mm cube specimens)	ASTM C109	34.0 MPa	57.6 MPa

*These results were determined through laboratory testing. Batch to batch results may fluctuate due to common cause variation. Field results may vary due to circumstances outside our control

webercem advanced
precision grout

Technical data

Additional test data	All tests carried out at max. water addition of 5 litres at 20°C	
Performance characteristic	**Method**	**Typical result***
14 day drying shrinkage	BS 1920-8	795 microstrain
21 day drying shrinkage		1025 microstrain
28 day drying shrinkage		1165 microstrain

Indicative strength gain*	All tests carried out at max. water addition of 5 litres in laboratory conditions			
Temperature	**24 hours**	**3 Days**	**7 Days**	**28 Days**
Compressive strength @ 5°C	2.80 MPa	25.33 MPa	44.95 MPa	60.92 MPa
Compressive strength @ 10°C	6.90 MPa	35.75 MPa	48.47 MPa	56.63 MPa
Compressive strength @ 20°C	28.15 MPa	40.53 MPa	48.10 MPa	60.25 MPa

*These results were determined through laboratory testing. Batch to batch results may fluctuate due to common cause variation. Field results may vary due to circumstances outside our control

Saint-Gobain Weber
Dickens House, Enterprise Way,
Maulden Road, Flitwick,
Bedford, MK45 5BY

+44 (0) 1525 718877
technical@netweber.co.uk
www.uk.weber
@SGWeberUK

REV. 04/12/25