

DESCRIPTION: SULPHATE RESISTANT GROUT is a sanded, non-shrink grout containing type GU/20 Portland cement and pozzolanic admixtures giving it superior sulphate resistant properties over regular non-shrink grouts. This product is designed for use as a dry pack, plastic or flowable general purpose grout. It will exhibit slight expansion prior to initial set in normal working temperatures.

USES: SULPHATE RESISTANT GROUT is a sulphate resistant grout that can be used in many grouting applications such as:

1. Grouting under baseplates, columns and equipment not subjected to heavy impact or vibratory loads.
2. Grout jacking of concrete slabs.
3. Grouting of prestressed or post-tensioned tendons, anchor bolts or cables.
4. Underpinning of structures.
5. Grouting holes or cracks in concrete
6. Void backfilling in tunnels.
7. Grouting of post-tensioned structural sections.

ADVANTAGES:

1. Sulphate resistant.
2. Non-bleeding /non-segregating.
3. Non-corrosive/non-chloride/non-metallic.
4. Shrinkage compensating.
5. Usable over a wide range of consistencies from dry pack to flowable.
6. High strength.

PROCEDURES:

1. **SURFACE PREPARATION:** All surfaces to be in contact with SULPHATE RESISTANT GROUT must be entirely free of oil, grease, laitance or other foreign substances. Roughen exposed surfaces and clean thoroughly with potable water, leaving the concrete saturated but free of standing water.
2. **MIXING:** SULPHATE RESISTANT GROUT should be thoroughly mixed to the desired consistency by varying the amount of water used. For plastic or flowable consistencies, the grout is best mixed in a high speed shear mixer. For dry pack consistency, a mortar mixer or hand mixer may be used.

<u>CONSISTENCY</u>	<u>RECOMMENDED MAX. WATER/25 kg (55 lb)</u>
Dry Pack	2.9 litres (0.8 US gal)
Plastic	3.8 litres (1.0 US gal)
Flowable	4.75 litres (1.2 US gal)

3. **PLACING:** Place SULPHATE RESISTANT GROUT at the desired consistency using established grouting procedures.
4. **Curing:** Once SULPHATE RESISTANT GROUT has set, moist curing for at least one day is recommended.
5. **POT LIFE:** The pot life of the grout is approximately one hour.

SULPHATE RESISTANT GROUT

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TECHNICAL DATA:

The data outlined below is representative of typical values achievable under controlled laboratory conditions. Results obtained in the field may vary from those stated.

	<u>Test Method</u>	<u>Dry Pack</u>	<u>Plastic</u>	<u>Flowable</u>
Flow	ASTM C 1107	Forms Ball	127 %	20 - 30 sec
Plastic Expansion (%)	CSA A 23.2-1B	0 %	1 - 3 %	1 - 3 %
Hardened Expansion @	CRD C621			
3 Days		N/A	.031 %	N/A
7 Days		N/A	.03 3%	N/A
14 Days		N/A	.058 %	N/A
28 Days		N/A	.067 %	N/A
Time of set:	CRD C621			
Initial Set		1 hour	5 hours	6 hours
Final Set		2 hours	7 hours	8 hours
Bleeding (% vol)	CSA A 23.2-1B	Nil	Nil	Nil
Segregation	CSA A 23.2-1B	Nil	Nil	Nil
Compressive Strength:	ASTM C 1107			
MPa (psi):				
1 - Day		30 (4350)	20 (2900)	15 (2175)
3 - Day		43 (6235)	30 (4350)	28 (4060)
7 - Day		60 (8700)	50 (7250)	40 (5800)
28 - Day		75 (10875)	65 (9425)	55 (7975)
Density-kg/m ³ (lb./ft ³)		2322 (145)	2226 (139)	2135 (133)
Yield-m ³ /bag (ft ³ /bag)		.012 (.42)	.013 (.46)	.014 (.49)

LIMITATIONS:

- Adhering to recommended water additions is very important. Exceeding the maximum recommended water content per sack will result in inferior physical properties.
- The grout should not be used where it will be subjected to severe repetitive dynamic or cyclic loadings or vibrations.
- The grout performs best when fully restrained or confined on all surfaces.
- SULPHATE RESISTANT GROUT is not designed for use as a topping. Other Basalite products such as TOP 'N BOND are more appropriate for topping uses.
- The ideal temperature for grouting is between 5 - 24 °C (41 - 75 °F). Grouting in cooler temperatures will retard set and strength gain. Grouting in warmer temperatures will accelerate set and strength gain.
- For pours exceeding 50 mm (2 inch) thickness and .28 m² (3 ft²) in area, add 12.5 kg (28 lb.) of clean washed well graded 10 mm (3/8 inch) minus stone to each 25 kg (55 lb.) sack of SULPHATE RESISTANT GROUT to achieve adequate results.
- Liability for damages or defective goods shall be limited to the refund of the purchase price or product replacement.

PACKAGING:

SULPHATE RESISTANT GROUT is packaged in 25 kg (55 lb.) triple-lined paper bags. All Basalite Dry Mix can be custom packaged to suit specific project requirements.

SAFETY PRECAUTIONS:

SULPHATE RESISTANT GROUT contains Portland cement and other carefully selected additives. Normal safety wear such as rubber gloves, dust mask and safety glasses, used to handle conventional cement-based products, should be worn. Material Safety Data Sheets are available upon request.

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