CONCRETE MIX - HIGH STRENGTH

25 MPa, 30 MPa, 35 MPa or 40 MPa

DESCRIPTION: CONCRETE MIX is a pre-blended mix of sand, aggregate and Portland cement packaged in a 30kg bag and in a one cubic yard Bulk Bag. It is a quality preblended concrete suitable for any concrete repair or new concrete construction. It is available in 25MPa, 30MPa, 35MPa, and 40MPa compressive strength. CONCRETE MIX is designed to meet the Air Content Category 1 of CSA A23.1-19.

USES: CONCRETE MIX is designed for difficult to reach projects (such as underground parking, high rises, remote locations) and for small scale projects where ready-mix supply is not feasible. It is recommended for the construction or repair of foundations, floors, retaining walls and sidewalks where a quality pre-blended air entrained material is required.

ADVANTAGES: CONCRETE MIX is a quick, efficient and economical method of supplying large quantities of concrete to any commercial project. Other advantages include:

⇒ no site pre-blending required (water is the only additive)
⇒ quality controlled
⇒ consistent performance
⇒ increased productivity
⇒ no admixtures required

PROCEDURES: Preparation: For best results, CONCRETE MIX should be mixed with a clean concrete mixer with good fins. Use only potable water.

Mixing: Add ¾th of the required water into a concrete mixer then add dry concrete from bag into the mixer. Slowly add the remaining water as required if the concrete mix is too stiff; mix thoroughly to get the desired consistency and slump. Do not exceed the maximum recommended water. Mix until the material has been thoroughly blended and the required consistency obtained. Slump and air may vary due to mixing equipment and site conditions.

Placing: The ideal mix temperature for placing is between 10°C-20°C (50-68°F). The temperature of the substrate should be between 5°C-30°C (41-85°F). Adjusting mix water temperature will help achieve optimum mix temperatures in extreme weather conditions. Use conventional, well-planned placing, consolidating and finishing concrete practices.

Curing: Account for local environmental conditions when selecting the curing method. High heat, low humidity or wind will increase the evaporation of water. Fresh concrete should be shaded from direct sunlight or excessive wind from the time of placement until initial set. Keep the surface damp using a sprinkler, wet burlap or cover and with plastic for several days as needed, curing water should not be used until the patch material is hard to the touch. In cold weather adequately cover and keep from freezing for a minimum of 24 hours.
Refer to ACI308 Guide to Curing Concrete.

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.

	Test Method	25MPa	30MPa	35MPa	40MPa
*Slump: (mm)	CSA A23.2-5C/ ASTM C143	75±25	75±25	75±25	75±25
Set Time: hours (Initial/Final)	CSA A3004-B3/ ASTM C266	Initial: 4 Final: 8	Initial: 4 Final: 8	Initial: 3 ½ Final: 7 ¾	Initial: 3¼ Final: 7 ½
Approximate Density: kg/m^3 (lb/ft^3)	CSA A23.2-6C/ ASTM C138	2350 (146.7)	2400 (149.8)	2405 (150.1)	2410 (150.5)
Compressive Strength: (min)		MPa (psi)	MPa (psi)	MPa (psi)	MPa (psi)
1d		4 (580)	5 (725)	7 (1015)	8 (1160)
7d	CSA A 23.2-9C/ ASTM C39	17 (2465)	20 (2900)	24 (3480)	30 (4350)
28d		25 (3625)	30 (4350)	35 (5075)	40 (5800)

*Slump and Air may vary at site due to the quality and condition of mixer used, mixing time and other environmental factors such as ambient temperature, water temperature etc.

YIELD: One 30kg (66lbs) sack yields 0.014m^3 (0.018 yard^3). One BULK BAG yields 0.76 m^3 (1.0 yard^3).

LIMITATIONS: Exceeding the maximum recommended water content per sack will result in inferior physical properties. Liability for damages or defective goods shall be limited to the refund of the purchase price or product replacement.

PACKAGING: CONCRETE MIX is packaged in 30kg sack and in one yard^3 (0.76m^3) bulk bags. All Basalite Dry Mix can be custom packaged to meet specific project requirements.

SAFETY PRECAUTIONS: CONCRETE MIX 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. Safety Data Sheet is available at www.basalite.ca.

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