

CPD® RAPIDCRETE



DESCRIPTION

CPD® Rapidcrete is a ready-to-use, fast setting, high strength patching material. It is non-metallic, non-staining, and non-toxic. CPD® Rapidcrete can be used for both interior and exterior applications.

WHERE TO USE

CPD® Rapidcrete is particularly useful when down time is at a premium and where low temperatures do not allow ordinary cement based patching compounds to properly cure. The rapid hydration of this product allows moisture sensitive coatings such as polyurethanes to be applied to the patched area in 24 hours under normal conditions. Applications include repairing concrete floors in factories, warehouses, parking decks and ramps, loading dock areas and cold storage rooms, concrete bridge deck repairs, concrete runway repairs and concrete curb construction. Also, when extended 100% by weight with clean, washed pea gravel, Rapidcrete can be used as a high strength concrete.

BENEFITS

- fast setting
- high strength
- excellent freeze-thaw resistance
- very low permeability
- high resistance to sulphate attack
- non-toxic
- chloride free

PROPERTIES @ 23°C (73°F)

Work time.....	20-25 min.
Initial set.....	30-45min.
Cure (Wet).....	1-2hours minimum
Compressive Strength (ASTM C109-77)	
3 hour.....	31.1MPa (4,510psi)
7 days.....	46.9MPa (6,801psi)
28 days.....	52.4MPa (7,598psi)
Flexural Strength (ASTM C348).....	6.4MPa (928psi)
Bond Strength (ASTM C882)	
1 day.....	8.3MPa (1,204psi)
7 days.....	10.6MPa (1,537psi)
Absorption (ASTM C642)	
28 days.....	4.4%

Length change (ASTM C157)

28 days (in water).....	+0.026%
28 days (in air).....	-0.040%
Surface Scaling (BNQ 2621-905)	
56 cycles.....	0.05kg/m ² (0.0102lbs/sqft)
Freeze/Thaw Cycling Modulus of Elasticity (ASTM C666)	
300 cycles.....	100%
Acid soluble Chloride (ASTM C1152)	
7 days.....	0.26kg/m ³ (0.016lbs/sqft)
Rapid Chloride Permeability (ASTM 1202)	
28 days.....	911 coulombs

The above information is representative of typical values obtained under our laboratory conditions. Variations can be expected due to on site conditions and/or other testing methods.

APPLICATION

Surface Preparation

The concrete substrate to receive the patching compound must be clean and sound. Square out the patch area minimum 12 mm (½") and chip out all contaminated concrete. Soak patch area with water so that the concrete is thoroughly damp (no free standing water should be present). For substrate temperatures below 10°C (50°F) use a slurry bond coat of CPD® Rapidcrete and water. For substrate temperatures above 10°C (50°F) CPD® Concentrated Latex Adhesive, diluted 1:1 with water, can be mixed with CPD® Rapidcrete powder to form a slurry bond coat mix. Scrub into the concrete then apply the mixed material as soon as possible. The mixed CPD® Rapidcrete must be applied before the slurry bond coat sets.

MIXING

CPD® Rapidcrete can be mixed with different quantities of water to yield a wide range of consistencies from trowel grade to pourable. This product can also be mixed with a dilute latex solution to improve certain physical properties if desired. As with all cementitious products, use only enough water to achieve the desired consistency. **Do not exceed 4.25L (1.12US gal) of water per 25 kg (55 lb) bag.**

CPD® recommends extending CPD® Rapidcrete with an equal weight (or loose volume) of clean 10mm (3/8") pea gravel for all patching over 32 mm (1 1/4") in depth.

CURING

Wet curing of all patches and exposed grout areas is required as specified below. Curing by application of a film forming curing compound is not recommended as a direct substitute for wet curing. Once the CPD® Rapidcrete has set (the material has a patchy-like finish) which is usually 30-45 minutes after placing @ 20°C (70°F), the product must now be wet cured for a minimum of 1-2 hours. This can be achieved by keeping the applied product wet covered with a layer of water, or using burlap that is continually kept saturated with water. If neither of these curing methods are possible, contact your CPD technical representative.

LIMITATIONS

- not for use on substrates below 0°C (32°F)
- not recommended for machine base grouting
- not suitable for acid exposure
- maximum service temperature 176°C (350°F)
- minimum thickness 13mm (1/2")

COVERAGE

0.014m³ (0.50 ft³) per 25 kg (55 lb) bag.

STANDARDS

Approved for use on all MTO (Ministry of Transportation, Ontario) projects.

PACKAGING

CPD® Rapidcrete is available in 25 kg (55 lbs.) multi wall bags.

CPD® Concentrated Latex Adhesive is available in: 3.79L (1 U.S. gal), 18.9L (5 U.S. gal) and 208L (55 U.S. gal) containers.

CLEAN UP

Clean all mixers and tools with water before product hardens.

STORAGE

May be stored short term anywhere under tarp on pallets as long as the product is kept dry. Dry heated warehouse storage is recommended for extended storage.

SHELF LIFE

One year when stored in dry warehouse on pallets in original bags. Protect from moisture.

SAFETY PRECAUTIONS

Consult Safety Data Sheet for specific instructions. SDS # 216.

WARRANTY

The recommendations made and the information herein is based on our own laboratory experience, and is believed to be accurate under controlled conditions. However, no warranty or guarantee of accuracy is made because we cannot cover every possible application of product nor anticipate every variation encountered in weather conditions, job-conditions, methods used and types of surfaces on which the product is applied. The users shall make their own tests to determine the suitability of such products for any particular purpose.

CPD® makes no warranties with respect to this product, expressed or implied, without limitation, the implied warranties of merchantability or fitness for a particular purpose.

CPD®'s liability shall be limited in all events to supplying sufficient product to re-treat and/or repair the specific area to which CPD® product has been applied.

CPD® reserves the right to have the true cause of any difficulty determined by accepted test methods. CPD® shall have no other liability, including liability for incidental, consequential or resultant damages, however caused, whether due to breach of warranty, negligence, or strict liability.

THIS WARRANTY MAY NOT BE MODIFIED OR EXTENDED BY REPRESENTATIVES OF CPD®, ITS DISTRIBUTORS OR DEALERS.