

350 INDUSTRIAL TOPPING

HIGH EARLY-STRENGTH, EXTENDED WORK-TIME

PRODUCT DESCRIPTION

Edoco 350 Industrial Topping is a specially designed patching and structural repair product for any maintenance and new construction projects where prolonged working time up to 40 minutes and fast strength in two to three hours is required.

USE

For all structural and general horizontal concrete repairs (interior, exterior, above and below grade) where sufficient working time during placement and high early strength is required.

BENEFITS

- Flowable/self consolidating
- Easy to apply
- Up to 40 minutes working time
- Hardens for traffic or structural use in two to three hours
- High strength
- Ideal for horizontal applications
- Self-curing

APPLICABLE STANDARDS

ASTM C-928. Very rapid-hardening patching material.

PROPERTIES, TEST DATA

(Compiled per ICRI Guideline 03740)

Initial Setting Time (ASTM C-266) 30-40 min.

Final Setting Time (ASTM C-266) 45-55 min.

Compressive Strength ASTM C-109

3 hours >1000 psi(6.89 MPa)

1 day >2500 psi(17.24 MPa)

7 days >6000 psi(41.37 MPa)

28 days >8500 psi(58.62 MPa)

Flexural Strength ASTM C-78

7 days 1000psi

28 days 1100 psi

Splitting Tensile ASTM C496

1 day 200 psi

7 days 600 psi

28 days 725 psi

Direct Tensile CRD C 164

1 day 125 psi

7 days 150 psi

28 days 190 psi

Modulus of Elasticity ASTM C469

28 days 4.1 x 10⁶ psi

Bond Strength ACI 503R

1 day 150 psi

7 days 175 psi

28 days 250 psi

Coefficient of thermal expansion CRD C39 modified

4.1 x 10⁻⁶ in/in/degf

Freeze/thaw resistance ASTM C666 procedure A

300 cycles >95%

Scaling resistance ASTM C672

50 cycles 0 rating

Rapid chloride permeability ASTM C1202

28 days 770 coulombs

Shrinkage and expansion ASTM C157

28 Days Shrinkage, ambient 0.05%

28 Days Expansion, in water 0.05%

TEST DATA at 75° F (23.9°C)

The data shown is based on controlled laboratory testing. Reasonable variation from results shown can be expected.

APPLICATION

Surface Preparation

The concrete must be sound and be free of all foreign material, including grease, oil, dust laitance or other surface contaminants. Saw cut the perimeter of the repair to a minimum depth of 1/2" (1.3 cm) without cutting steel reinforcement. Best results will be obtained by abrasive blasting the area to be repaired, providing uniform depth, a high surface profile and a firm bonding area. All surfaces to be repaired should be in a saturated-surface-dry (SSD) condition with no standing water on the surface.

Scrub Coat: Using freshly mixed Edoco 350 Industrial Topping (do not dilute), scrub a thin layer into the SSD substrate with a stiff brush and place the Edoco 350 Industrial Topping before the scrub coat dries. In certain conditions the use of an approved surface bonding agent, i.e. Acrylic Bondcrete CI or BurkEpoxy MV, may be required. Note: acrylic bonding agents i.e. Strong Bond CI require material to be applied when they are still wet. Contact technical services for further information.

Mixing

Water Requirements

Standard Mix: Add 7 pints (3.29 L) of clean potable water per 50-lb. (22.7 kg) bag.

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 7777 Washington Village Dr., Suite 130, Dayton OH 45459
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Acrylic Admix: Add 7 pints (3.29L) of diluted Strong Bond CI ratio 1:1 with clean potable water per 50-lb. (22.7kg) bag.
Corrosion Inhibitor: Add 7 pints (3.29L) of Strong Bond CI neat per 50-lb. (22.7 kg) bag.

Extending for Volume Placement: For patches over 2" (5 cm) in depth add 30-60% by weight (15-30-lbs) clean, SSD, 3/8" pea gravel. Extension will depend on depth and finish desired.

Mixing

Mix with a low speed drill or, for larger projects, a mortar mixer. Add recommended amount of mixing liquid above into the container followed by Edoco 350 Industrial Topping powder. Do not mix more than 3 minutes.

Placement

Pour or Pump: Use only enough material that can be placed within 40-minute period. DO NO RETEMPER. Care should be taken to confirm pump and hose diameters would accept material with pump manufacturer

Vertical: Apply Edoco 350 Industrial Topping by pour or pump into a formed vertical surface, place material with a minimum thickness of 1/8" (0.3 cm) up to a maximum thickness of 2" (5 cm) in depth. For repairs greater than 2" (5 cm) in depth material should be extended 30-60% by weight (15-30-lbs) with clean, SSD, 3/8" (1 cm) pea gravel. Pour or pump material into formed areas.

Horizontal: Apply Edoco 350 Industrial Topping neat mixtures a minimum of 1/2" (1.3 cm) up to a maximum depth of 2" (5 cm). For repairs over 2" (5 cm) deep, the Edoco 350 Industrial Topping should be extended 30-60% by weight (15-30-lbs) with clean, SSD, 3/8" pea gravel. Pour or pump material into curbed areas. DO NOT FEATHER EDGE.

Curing

Edoco 350 Industrial Topping is self-curing under most conditions.

Thin vertical applications will require actions for curing. Horizontal applications are to be cured with water for a minimum of one hour or apply ASTM C-309 EDOCO water based curing membrane. To assure maximum durability under severe drying conditions (high wind and temperature, low humidity), moist cure or use approved ASTM C-309 EDOCO water based curing compound.

CLEAN UP

Use water when material is wet. Hardened material requires abrasive methods.

WASTE DISPOSAL

Dispose of waste material and empty packaging in accordance with all Federal, State and Local requirements. Refer to product's MSDS for further information.

ESTIMATED YIELD

0.38 ft³ per 50 lb. (22.7 kg) bag

PACKAGING

ITEM #	Package	Size	
		lb.	kg
302455	Bags	50	22.7

STORAGE

Shelf life of unopened bags, when stored in a dry facility, is 12 months. Excessive temperature differential and/or high humidity can shorten the shelf life expectancy. Store in a cool, dry area free of direct sunlight.

LIMITATIONS

Do not place at temperatures below 40°F(5°C) or if the temperature is expected to drop below 40°F(5°C) in the next 24 hours. In hot weather follow ACI Committee 305 recommended procedures.

Supported repairs deeper than 2" (5.08 cm) may require reinforcement or anchorage. Please consult the engineer of record for the project for special requirements. Placement of 6-50 lb (22.7 kg) bags is the maximum amount for any one application. For larger applications, contact Technical Services.

PRECAUTIONS

Contains Portland Cement and sand. Cement will cause irritation. Avoid contact. Use of a dust respirator, safety goggles and rubber gloves are recommended. Avoid prolonged contact with clothing. In case of contact with eyes, immediately flush with water for at least 15 minutes. Get prompt medical attention. DO NOT wear contact lenses when working with this product. DO NOT take internally. Keep out of reach of children. Avoid hazards by following all precautions found in the Material Safety Data Sheet (MSDS), product labels and technical literature. Please read this information prior to using the product. Prepackaged material segregates while in the bag, thus when mixing less than a full bag it is recommended to first agitate the bag to assure it is blended prior to sampling.



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CONTINUED

MANUFACTURER

Dayton Superior Corporation
7777 Washington Village Dr., Ste. 130
Dayton, OH 45459
Customer Service: 877-977-9600
Technical Services: 866-329-8724
Website: www.daytonsuperior.com

WARRANTY

Dayton Superior Corporation ("Dayton") warrants for 12 months from the date of manufacture or for the duration of the published product shelf life, whichever is less, that at the time of shipment by Dayton, the product is free of manufacturing defects and conforms to Dayton's product properties in force on the date of acceptance by Dayton of the order. Dayton shall only be liable under this warranty if the product has been applied, used, and stored in accordance with Dayton's instructions, especially surface preparation and installation, in force on the date of acceptance by Dayton of the order. The purchaser must examine the product when received and promptly notify Dayton in writing of any non-conformity before the product is used and no later than 30 days after such non-conformity is first discovered. If Dayton, in its sole discretion, determines that the product breached the above warranty, it will, in its sole discretion, replace the non-conforming product, refund the purchase price or issue a credit in the amount of the purchase price. This is the sole and exclusive remedy for breach of this warranty. Only a Dayton officer is authorized to modify this warranty. The information in this data sheet supersedes all other sales information received by the customer during the sales process. THE FOREGOING WARRANTY SHALL BE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND ALL OTHER WARRANTIES OTHERWISE ARISING BY OPERATION OF LAW, COURSE OF DEALING, CUSTOM, TRADE OR OTHERWISE.

LIMITATION OF LIABILITY

Dayton shall not be liable in contract or in tort (including, without limitation, negligence, strict liability or otherwise) for loss of sales, revenues or profits; cost of capital or funds; business interruption or cost of downtime, loss of use, damage to or loss of use of other property (real or personal); failure to realize expected savings; frustration of economic or business expectations; claims by third parties (other than for bodily injury), or economic losses of any kind; or for any special, incidental, indirect, consequential, punitive or exemplary damages arising in any way out of the performance of, or failure to perform, its obligations under any contract for sale of product, even if Dayton could foresee or has been advised of the possibility of such damages. The Parties expressly agree that these limitations on damages are allocations of risk constituting, in part, the consideration for this contract, and also that such limitations shall survive the determination of any court of competent jurisdiction that any remedy provided in these terms or available at law fails of its essential purpose.

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