

TECHNICAL DATA SHEET
DESCRIPTION

Recrete 20 Minute is a general purpose cement based concrete repair and patching material. Recrete 20 Minute is specially formulated to provide a fast setting repair mortar with excellent workability. Recrete 20 Minute can be used for repair and patching of vertical, overhead and horizontal areas subject to light traffic both interior and exterior.

USE

Recrete 20 Minute is a general purpose concrete patching product which can be used to repair concrete pipe, precast concrete products, large floor cracks, concrete steps, walls, columns, concrete blocks, sidewalks, driveways, etc. The Recrete 20 Minute is ideal for vertical and overhead applications because of its “putty-like” consistency and its ability to be shaped, molded and sanded.

FEATURES

- Suitable for horizontal, vertical and overhead applications
- Meets ASTM C928 R2; Specification for Very Rapid Hardening Cementitious Repair Materials
- Twice the strength of typical concrete
- Can be shaped and molded
- Shrinkage compensated
- Fast setting
- Rapid strength gain, 3500 psi (20.7 MPa) in 24 hours

PROPERTIES

Compressive Strength (ASTM C-109)

3 hour >2,900 psi (19.9 MPa)

1 day >3,500 psi (24.1 MPa)

7 days >8,000 psi (55.1 MPa)

28 days >10,000 psi (68.9 MPa)

Bond Strength – ASTM C-882 Modified per ASTM C928

1 day >1,200 psi (8.2 MPa)

7 Days >2,400 psi (16.5 MPa)

Scaling - ASTM C672

Mass Loss @ 25 cycles 0.0 lbs/sq. ft.

Set Time (ASTM C-266)

Initial: 20 minutes

Final: 30 minutes

Note:

The data shown is typical for controlled laboratory conditions. Reasonable variation from these results can be expected due to interlaboratory precision and bias. When testing the field mixed material, other factors such as variations in mixing, water content, temperature and curing conditions should be considered.

Estimating Guide

Yield: 0.45 to 0.48 cu. ft./50 lb. (0.0126 - 0.0134 cu. m/22.7 kg) bag or pail.

Packaging

PRODUCT CODE	PACKAGE	SIZE	
		lbs.	kg
67310	Bag	50	22.7
67315	Pail	50	22.7

STORAGE

Shelf life of unopened bags, when stored in a dry facility, is 12 months. Shelf life of unopened pails, when stored in a dry facility, is 18 months.

Excessive temperature differential and /or high humidity can shorten the shelf life expectancy. Store in a cool, dry area free of direct sunlight.

Surface Preparation:

Remove all dirt, grease, oil and surface coatings that will come in contact with the repair material. All loose concrete must be removed until firm substrate is exposed. The edges of the patches should be saw-cut perpendicular to the surface to no more than a depth of 1/2 in. (13 mm) to avoid feather edging the repair material. All surfaces to be repaired should be in a saturated surface dry (SSD) condition with no standing water on the surface. Using freshly mixed Recrete 20 Minute, scrub a thin layer onto the SSD substrate with a stiff fiber brush and place the Recrete 20 Minute before this bond coat dries.

Water Requirements:

Mix with water at the rate of 4 – 5 quarts /50 lb. (3.8 – 4.8 L /22.7 kg) bag. For improved performance and greater adhesion, use Dayton Superior Acrylic Bonding Agent J40 for part of the mix water. Dilute the Acrylic Bonding Agent J40 with up to 3 parts water and use the diluted mixture for mixing of the Recrete™ 20 Minute.

Acrylic Bonding Agent J40 is recommended as an admixture for the Recrete™ 20 Minute for all applications subject to frequent freezing and thawing cycles or for projects where enhanced physical properties are desired.

TECHNICAL DATA SHEET**Mixing**

Recrete 20 Minute sets initially in approximately 15 minutes depending upon temperature therefore only mix what can be applied within that time. Always add Recrete 20 Minute to the water, thoroughly mixing to a putty like consistency for at least 2 – 3 minutes. For mixing, Dayton Superior recommends a low RPM drill with a mud paddle. When mixing less than a full unit, always first agitate the bag/pail so that a representative sample is obtained.

Placement:

Following proper bond coat application, pack the material firmly into the prepared area, ensuring intimate contact with the bonding surface. Use slightly more material than is needed and roughly shape during placement. After the initial set, when Recrete 20 Minute is surface hard, shave the material to the desired final shape using a steel trowel.

Maximum depth of neat repair mortar is 2 in. (5.1 cm) for each lift. For large repairs over 2 in. (5.1 cm) thick, up to 25 lbs. (11.34 kg) of clean, SSD pea gravel should be added per 50 lbs. (22.7 kg.) of Recrete 20 Minute. **THE LESS RECRETE 20 MINUTE IS HANDLED THE BETTER. DO NOT ADD EXCESS WATER OR RETEMPER.** Never leave excess material lapping over edges of repair. Finished patch should be smooth and level with the surrounding concrete. After leveling, Recrete 20 Minute can be rubbed with a wet sponge and textured, if desired.

CURING

Adequate curing is important, especially during windy, hot and dry conditions. A wet burlap cure or a Dayton Superior water based curing compound or cure & seal is recommended.

CLEAN UP

Use water prior to material setting hard. Hardened material requires abrasive removal methods.

LIMITATIONS**FOR PROFESSIONAL USE ONLY**

Minimum thickness for repair is 1/8 in (0.3 cm). DO NOT feather edge.

DO NOT use for resurfacing or topping large floor areas.

Not for use as a parge coating or stucco type application.

Do not add other cements or additives to this product. Mixing equipment should be cleaned with water frequently and prior to material hardening.

Cold weather will slow down the set time of Recrete™ 20 Minute and hot weather will accelerate it. The minimum application temperature is 40°F (4°C).

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.

PRECAUTIONS**READ SDS PRIOR TO USING PRODUCT**

- Product contains Crystalline Silica and Portland Cement – Avoid breathing dust – Silica may cause serious lung problems
- Use with adequate ventilation
- Wear protective clothing, gloves and eye protection (goggles, safety glasses and/or face shield)
- Keep out of the reach of children
- Do not take internally
- In case of ingestion, seek medical help immediately
- May cause skin irritation upon contact, especially prolonged or repeated. If skin contact occurs, wash immediately with soap and water and seek medical help as needed.
- If eye contact occurs, flush immediately with clean water and seek medical help as needed
- Dispose of waste material in accordance with federal, state and local requirements

MANUFACTURER

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TECHNICAL DATA SHEET**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.

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.