



# METCRETE

***One Component, Micro Silica  
Modified Mortar For Concrete Repairs***

## 1. Product Description

**a. Basic Use:** Metcrete is a concrete repair mortar for patching or resurfacing horizontal surfaces. It is used as a trowel-down or screedable material and is suitable for both indoor and outdoor applications. Metcrete can be used from a thickness of 1/2 in. (12.7 mm) to 6 in. (152 mm).

### b. Features/Benefits:

- Micro-silica enhanced mortar provides high ultimate strengths.
- Excellent for small patches or as an overlay material.
- Tough, strong, durable - compressive and flexural strength more than twice that of ordinary concrete.
- Universal - may be used indoors or out, above or below grade, under wet or dry exposure.
- Non-dusting - does not release abrasive dust under traffic.
- Skidproof - can be float-finished to provide positive traction for trucks or safe footing for pedestrians.
- Can be applied from 1/2 in. (12.7 mm) to 6 in. (152 mm) thick.
- Micro-silica adds resilience - improves impact resistance and prevents shattering and dusting.
- High density resists penetration of salt solutions and other liquid chemicals that attack and corrode concrete.
- Excellent freeze/thaw resistance.
- Concrete gray color. May be painted over if desired.

**c. Typical Applications:** Parking decks, docks, ramps, steps, curbs, gutters, walkways, floors, marine structures. Metcrete is excellent for all horizontal concrete surfaces.

**d. Limitations:** Metcrete should not be used at temperatures below 40°F (4°C).

**e. Composition:** Metcrete is a one-part system consisting of a special blend of a cement/aggregate powder with specialty chemical and micro-silica additives.

**f. Color/Appearance:** Metcrete is formulated to a concrete gray color and looks similar to plain concrete after curing.

## 2. Packaging

Metcrete is packaged in 50-lb. (22.7 Kg) bags.

## 3. Estimating/Yield

One unit of Metcrete yields 0.45 cu. ft.(0.013 cu. m). It will cover approximately 11 sq. ft. (1.0 sq. m) at 1/2 in. (12.7 mm) thick. For extra deep patches or filler applications, Metcrete may be extended with up to 20 lbs. (9.1 Kg) of clean, washed 3/8 in. (10 mm) pea gravel.

## 4. Technical Data

**a. Applicable Standards:** ASTM C 1059, Standard Specification for Latex Agents for Bonding Fresh to Hardened Concrete (Type II, non-re-emulsifiable).

**b. Compressive Strength:** ASTM C 109, 2 in. (50 mm) cubes.

Age	Strength
1 day	4,500 psi (31 MPa)
3 days	5,500 psi (38 MPa)
7 days	7,000 psi (48 MPa)
28 days	9,000 psi (62 MPa)

**c. Flexural Strength:** ASTM C 78, 28 Days; 1,600 psi (11 MPa).

**d. Bond Strength:** ASTM C 1042, 28 Days; 1,400 psi (10 MPa).

## 5. Directions for Use

**a. Preparation:** Base concrete must be sound and clean. Chip, bushhammer, scabble, chisel, shotblast, or mill damaged surface down to sound concrete. Any oil soaked concrete must be removed. Blow off any loose dust, dirt, and debris. Provide a clean, textured surface free of paint, coatings, or curing compounds. Avoid application over extremely hard troweled concrete.

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**b. Bonding:** The base concrete surface must be pre-wetted to the extent that moisture is not rapidly removed from the Metcrete mortar. Remove any free-standing water. Brush in a loose mixture of Metcrete and Acrylpave as a bonding agent or use Acrylpave directly. Do not allow bond coat to dry out prior to mortar application.

**c. Mixing:** For small jobs, mix one unit at a time using a mechanical drill and Metco Jiffy mixing blade along with a 5-gal. (18.9 liter) pail. Pour water into pail first and then add the dry powder. Mix for 2 to 3 minutes to achieve a uniform consistency. Workability can be adjusted by varying the water. On large jobs, mix 2 or 3 units per batch using a mortar mixer. (Note: For deep or filler repairs, up to 20 lbs. (9 Kg) of clean, washed 3/8 in. (10 mm) pea gravel should be added per unit).

**d. Placement:** Deposit mixed mortar onto repair area. Screed or trowel to desired thickness.

**e. Finishing:** With proper timing, virtually any surface texture can be achieved - trowel, broom or float. The finish chosen should reflect probable use in service.

**f. Protection:** On hot or windy days, Metcrete can dry quickly. Protect the area with wet burlap, polyethylene, or a mist of water to prevent cosmetic plastic shrinkage cracking on the surface.

**g. Curing:** Metcrete should be cured with two coats of Seal N Kure 30 or Metcure 30. However, on hot or windy days, hold the moisture in the patch for 4 to 6 hours using wet burlap or polyethylene for best results.

**h. Maintenance:** Metcrete is intended to be free of maintenance once properly installed. Standard concrete sealers and coatings may be applied, if desired.

## 6. Availability

Metcrete is normally available immediately from your local distributor or it will be shipped within 5 working days upon receipt of order. Please contact your local Metalcrete representative or call Metalcrete directly for more information.

## 7. Warranty

Metcrete is manufactured in strict accordance with the quality control standards of Metalcrete Industries. It is guaranteed to perform as indicated on this data sheet when applied by competent applicators.

## 8. Technical Service

Metalcrete technical service representatives are available to provide on-site assistance with a minimum three day notice.



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