

THOROCRETE® LIGHT DUTY PATCH

Light-duty cement-based horizontal repair mortar

PRODUCT DATA

3 03930

**Concrete
Rehabilitation**

Description

Thorocrete® Light Duty Patch is a one-component Portland-cement-based repair mortar for small to medium size repairs on horizontal surfaces.

Yield

Approximately 10 ft²/40 lb bag (1.0 m²/18 kg bag) at 1/2" (13 mm) depth, depending on job-site conditions.

Packaging

40 lb (18 kg) bags

Color

Concrete gray

Shelf Life

1 year when properly stored

Storage

Store in original, unopened containers in cool, clean, dry, low moisture environment between 45 and 90° F (7 and 32° C) Keep Thorocrete® Light Duty Patch away from acids and other oxidizers.

Features

- Excellent bond strength
- Cost effective
- Versatile
- Gypsum free
- One component

Benefits

- Provides durable repairs
- Offers excellent performance at an economical cost
- Use for multiple applications
- More stable under wet conditions.
- Mixes easily with water

Where to Use

APPLICATION

- Repairing spalled horizontal concrete
- Leveling low spots in concrete slabs
- Patching concrete curbs and decks
- Concrete floors
- Sidewalks, steps, patios

LOCATION

- Interior or exterior
- Horizontal
- Above or below grade

SUBSTRATE

- Concrete
- Masonry

How to Apply

Surface Preparation

1. Surfaces must be clean, sound, free of laitance, oils, grease, dust, dirt, salt deposits, and other surface contaminants. All new concrete should be fully cured for at least 28 days.
2. Chip out all loose materials and disintegrated concrete. Use hand-held tools with pointed, not chisel, edges. For best adhesion, concrete must have an exposed-aggregate profile, with large aggregates protruding.
3. If possible, sawcut the perimeter of the area to be patched to a depth of 1/8 – 1/4" (3 – 6 mm) for best results.
4. Flush area with plenty of clean water.

Mixing

1. Elevated material and mixing water temperatures will shorten open time. Precondition Thorocrete® Light Duty Patch to 70° F ±5° (21° C ±3°) before mixing.
2. Mix only a quantity of mortar that can be placed in 30 minutes
3. Add 2.5 quarts (2.3 L) of potable water to a clean mixing container, then slowly add the powder. Mechanically mix with slow-speed 1/2" drill and mixing paddle at 400 – 600 rpm or use an appropriate size mortar mixer.



Technical Data

Composition

Thorocrete® Light Duty Patch is a proprietary mix composed of cement, graded silica, fillers, calcium sulfate, and additives.

Test Data

Thorocrete® Light Duty Patch mixed with water at 3 quarts (2.8 L) per 40 lb (18 kg) bag.

PROPERTY	RESULTS	TEST METHODS
Compressive strength , psi (MPa)		ASTM C 109
7 days	3,260 (22)	
28 days	4,030 (28)	
Flexural strength , psi (MPa)		ASTM C 348
7 days	600 (4.1)	
28 days	800 (5.5)	
Tensile strength , psi (MPa)		ASTM C 190
7 days	300 (2.1)	
28 days	420 (2.9)	
Adhesion in shear , psi (MPa)		Lab Method
7 days	250 (1.7)	
28 days	300 (2.1)	

Test results are averages obtained under laboratory conditions at 70° F (21° C) and 50% rh. Reasonable variations can be expected.

4. Mix for 2 – 3 minutes to obtain a uniform, lump-free consistency. Do not overmix. Add up to 0.5 quarts (0.47 L) more water as needed to achieve a stiff workable mortar. Use the least amount of water possible.

Application

1. Dampen surface with clean water. Remove excess water.
2. Apply a scrub coat of neat Thorocrete® Light Duty Patch using a stiff tampico fiber brush and work it into the area to be patched. Never dilute the scrub coat.
3. Apply material by trowel while scrub coat is still wet. Force material into area to be repaired and finish as desired, but do not over trowel.
4. Apply to a maximum depth of 1/4" (6 mm) per lift and a maximum total thickness of 1/2" (13 mm).
5. Apply first layer and scratch surface with trowel to promote adhesion. Allow to harden, then place next lift. Place up to 1 bag per patch. Maintain all expansion, control, or construction joints. Do not fill in joints.

6 Thorocrete® Light Duty Patch will not bridge dynamic cracks. When used to patch floors, do not apply floor coverings, paint films, or coatings until the mortar has fully cured.

Curing

In normal conditions, keep patch moist by water mist or fog spray until final set. Refer to ACI 308 Practice for Curing Concrete. In hot, dry, windy conditions longer periods of moist curing may be necessary, or use an ASTM C 309 compliant curing compound.

Clean Up

Clean tools and equipment immediately with water. Cured material must be removed mechanically.

For Best Performance

- Do not apply to frozen or frost-covered substrates or when surface and air temperatures are below 40° F (4° C) or expected to fall below 40° F (4° C) within 24 hours after application.
- Do not extend.
- Do not use as an overlay or to completely resurface large monolithic slabs.
- Make certain the most current versions of product data sheet and MSDS are being used; call Customer Service (1-800-433-9517) to verify the most current version.
- Proper application is the responsibility of the user. Field visits by Degussa personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

Health and Safety

THOROCRETE® LIGHT DUTY PATCH

Caution

Thorocrete® Light Duty Patch contains crystalline silica, Portland cement, and calcium sulfate.

Risks

Product is alkaline on contact with water and may cause injury to skin or eyes. Ingestion or inhalation of dust may cause irritation. Contains a small amount of free respirable quartz, which has been listed as a suspected human carcinogen by NTP and IARC. Repeated or prolonged overexposure to free respirable quartz may cause silicosis or other serious and delayed lung injury.

Precautions

KEEP OUT OF THE REACH OF CHILDREN. Avoid contact with skin, eyes and clothing. Prevent inhalation of dust. Wash thoroughly after handling. Keep container closed when not in use. DO NOT take internally. Use only with adequate ventilation. Use impervious gloves, eye protection and if the TLV is exceeded or used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable federal, state and local regulations.

First Aid

In case of eye contact, flush thoroughly with water for at least 15 minutes. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. Remove and wash contaminated clothing. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs or if swallowed, SEEK IMMEDIATE MEDICAL ATTENTION.

Refer to Material Safety Data Sheet (MSDS) for further information.

Proposition 65

This product contains material listed by the state of California as known to cause cancer, birth defects, or other reproductive harm.

VOC Content

0 lbs/gal or 0 g/L, less water and exempt solvents.

**For medical emergencies only,
call ChemTrec (1-800-424-9300).**

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