

L&M TRAP ROCK™

Trap Rock Aggregate, Dry Shake Surface Hardener

MANUFACTURER

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PRODUCT DESCRIPTION

L&M TRAP ROCK is a combination of 100% graded trap rock and portland cement. It is a polyhedral shaped, abrasion resistant, chemically inert, non-absorbent aggregate produced from igneous rock. This dense mineral aggregate is crushed into a polyhedral shape. It is carefully graded to assist ease of placement. This results in interlocking dense mass that produces high performance floors for abrasion resistance.

Properly placed, **L&M TRAP ROCK** reinforces the top 1/8-1/4 inch (3-5 mm) of high traffic floors with one of the densest, most abrasion resistant aggregates on the market today.

Basic Use: For heavy duty industrial floors subjected to severe traffic, high abrasion and wear. **L&M TRAP ROCK** floors are ideal for low maintenance floors in warehouses, meat processing plants, freezers, floors of grocery chains and distribution centers, heavy industrial and equipment plants, truck, tractor and automotive plants, foundries, and high traffic loading ramps.

FEATURES & BENEFITS

- 100% igneous rock aggregate. High resistance to abrasion.
- Heat-resistant. Recommended for factory use.
- Densifies floors due to unique polyhedral structure to resist the penetration and attack of oils and other contaminants.
- High resistance to friability by distributing single point loads to prevent fracturing, spalling and pitting.

ESTIMATING

L&M TRAP ROCK is premixed with portland cement and available in 55-pound (25-kilogram) polyethylene reinforced bags. The standard application rate of **L&M TRAP ROCK** dry shake surface hardener is 1-1½ lb/sq.ft (5-7 kg/square meter). Consult your local L&M representative for a specific recommendation to meet your individual needs.

INSTALLATION

The Standard ACI 302 Method

- This method can be used if the **L&M TRAP ROCK** is to be placed by hand or using a material spreader.
- Screeding and fill floating (bull floating) shall take place before the emergence of bleed water.
- After excess bleed water has evaporated or been removed, leaving sufficient moisture at the surface to hydrate cement binders in the **L&M TRAP ROCK**, evenly distribute approximately 2/3 of the hardener specified for the area. If the hardener breaks through the surface when being applied, the concrete is too plastic for product application.
- When the material darkens slightly from absorbed moisture, it should be floated, using wooden hand floats or power trowel machines with pan or float shoes (do not use combination float and trowel blades). Care should be taken not to tear through the surface of the hardener to the underlying concrete. Do not apply more hardener until moisture from the underlying concrete has been worked completely through the hardener.
- Immediately apply the remaining 1/3 of the specified amount of hardener at right angles to the first application. The moisture from the underlying concrete must be completely worked through the hardener. If this does not occur, the floor surface will delaminate.
- Allow to darken from moisture and float as before.
- After the concrete has further stiffened, it should be machine or hand troweled to a blemish free finish. Care should be taken not to trowel-burn the surface.
- Use **L&M E-CON** to prevent rapid evaporation of water from concrete while finishing.
- **SEAL HARD** is recommended as a finish sealer for **TRAP ROCK** floors to densify cement paste and to reduce long term floor maintenance costs.

CURING

Apply **DRESS & SEAL 30 WB**, protective membrane cure, in strict accordance with the label directions after final troweling and surface water glaze has disappeared. In areas where subsequent treatments, such as **SEAL HARD**, are scheduled, consult your local L&M representative for specific curing recommendations. **Do not wet cure L&M TRAP ROCK by ponding water for the first 18 hours.**



NOTE: Immediate water curing is not a suitable method for any dry shake hardener. If water is applied to the slab within the first 6 to 8 hours after placement delamination most likely will occur.

FOR BEST RESULTS:

Follow ACI recommended guidelines for concrete floors. Do not use where operating and service conditions dictate the use of **EMERYPLATE FF** or **FERROPLATE FF**. Do not use where resistance to struck sparks on the surface is desired, or on areas exposed to acids or other materials known to attack portland cement.

- The concrete used in the floor should have a slump of 4 to 5 inches and the total air content must not exceed 3 percent.
- Admixtures, aggregates, and mixing water that contain chlorides, shall not be used in concrete that is to receive **L&M TRAP ROCK**. If admixtures are used in the concrete caution should be exercised.
- The primary cause of concrete surface delamination and blisters is premature closing of the slab, resulting from poor finishing techniques. Caution must be exercised during all phases of the finishing operation to keep the slab surface open.
- If blisters form during the finishing operation they must be immediately ruptured before continuing the finishing operation. If blisters occur, the blades of the finishing equipment must be set at a flatter angle with respect to the surface of the concrete slab.
- Hold the slab open and delay the final troweling as long as possible to reduce delamination. Keep the angle of the blades of the finishing equipment as flat as possible during early stages of the finishing operation.
- The slab should be closed during the very last finishing operation and then only after all entrapped water vapor and large air voids have been purged from the concrete.
- Wood floats are preferred over magnesium hand floats. L&M is not responsible for diluted or mottled color. This normally results from careless or improper shake application, finishing, curing or failure to protect finished floor from damage by construction trades.
- Unvented flue and exhaust gasses from heaters and equipment will cause a carbonated floor surface. This results in weak and potentially dusting surfaces. Proper ventilation must be provided.
- Job conditions that influence surface drying and setting times of concrete may affect the timing of the hardener application and finishing procedures.
- **L&M TRAP ROCK** contains cement and is to be stored in a cool, dry place to avoid deterioration. Do not use if bag is damaged. Do not add cement, sand, aggregate or admixtures to **L&M TRAPROCK**.

PRECAUTIONS

L&M TRAP ROCK contains portland cement. Avoid creating and inhaling dust. Wear skin and eye protection. Dust mask recommended. Please refer to Product Material Safety Data Sheet (MSDS) before using.

STORAGE/SHELF LIFE

L&M TRAP ROCK bags are to be kept in dry storage to prevent water contamination. Shelf life is 18 months in unopened bags when properly stored.

TECHNICAL SERVICES

L&M recommends that the user request the service of the local representative for a pre-job conference to carefully plan each step of the installation. To the extent that job site services are provided, such services are in the nature of technical recommendations only and will not include supervision or quality control of application procedures or engineering details.

WEBSITE

L&M's convenient internet website offers instant access to Tech Data Sheets, Material Safety Data Sheets, product updates, and other useful information. Visit www.lmcc.com and follow the easy steps. L&M is ready to respond to your concrete information needs - anytime - anywhere!

SHORT SPEC

033000: Trap Rock Hardened Concrete Floor. Natural Trap Rock Aggregate, pre-mixed with cement, minimum 1.0 lbs./sq.ft. (5 kg/m²). Note to specifier: Up to 1.5 lbs./sq.ft (7 kg/m².) for heavy duty application. "**L&M TRAPROCK**" by L&M Construction Chemicals, Inc.

LIMITED WARRANTY

This product is warranted to be free of defects in material and workmanship, and conform to L&M Construction Chemicals ("L&M") quality control standards. All recommendations, statements and technical data herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty or guaranty of any kind, expressed or implied including but not limited to, an implied warranty of merchantability or an implied warranty of fitness for a particular purpose. Satisfactory results depend upon many factors beyond L&M's control. User shall rely on his or her own information and tests to determine suitability of the product for the intended use and user assumes all risk, loss, damage, expense and liability resulting from his or her direct use, indirect use or consequential to their use of the product. L&M shall not be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use or inability to use the product. L&M's sole responsibility shall be to replace that portion of the product which proves to be defective. Any warranty claim must be made within six (6) months from the date of the claimed breach. This limited warranty applies only if the product was properly installed and used according to all instructions and was properly stored prior to use.

For Professional Use Only.