



## REDUCED COSTS. EXTENDED LIFE.

By most estimates, L&M™ EMERYTOP 400™ can save a facility owner significant costs over time, both in reduced material costs and extended life expectancy. L&M EMERYTOP 400 will increase the service life expectancy of your floor up to 3 to 4 times that of traditional high strength concrete and double that of iron floor toppings.

### 1. BETTER YIELD AND COVERAGE RATE

When compared to traditional iron toppings, L&M EMERYTOP 400 requires 25% less material.

- **Iron Toppings:** 18.7 lbs per sq ft at 1" depth. (224 lbs/cu ft)
- **L&M™ EMERYTOP 400™:** Just 14 lbs per sq ft at 1" depth. (168 lbs/cu ft)

### 2. DOUBLE THE SERVICE LIFE

Abrasion testing indicates that L&M EMERYTOP 400 has approximately twice the service life as that of an iron topping. Chemical testing shows that it more effectively slows the rate of chemical penetration when compared with iron-topped floors. Impact testing proves that L&M EMERYTOP 400 is at least as impact resistant as an iron topping.

### 3. EASE OF APPLICATION

Iron toppings are prone to delamination caused by placement difficulties and its inherent drying shrinkage. Iron toppings are required to be anchored to hardened concrete with short nails (anchor pins) and must be glued to the concrete substrate using an epoxy bonding agent.

In contrast, whether L&M EMERYTOP 400 is being installed over freshly placed or hardened concrete, it utilizes a low cost, easy to follow bonding procedure which ensures proper and natural, stress-free bonding of the topping to the base slab. Installation contractors also find the placement of this flowable product easy. This means savings for the contractor and the owner.

**Abrasion, impact and chemicals don't stand a chance against L&M™ EMERYTOP 400™.**



# L&M™ EMERYTOP 400™



**Protect Your Floor From  
Impact, Abrasion And Chemicals  
With L&M™ EMERYTOP 400™.  
The World's Toughest Floor.**





**PROTECT YOUR FLOOR AGAINST ABRASION, IMPACT AND CHEMICALS WITH L&M™ EMERYTOP 400™. THE WORLD'S TOUGHEST FLOOR.**

**L&M™ EMERYTOP 400™** toughness comes from its proprietary blend of emery aggregates, natural corundum, and industry high amount (58%) of aluminum oxide. In addition, it contains a high percentage of ferric oxide as a stable polyhedral isostructural mineral, unique in that it is strong like iron but is naturally oxygenated and impervious to rusting. Combined they deliver superior protection against abrasion, impact, and chemical attack.

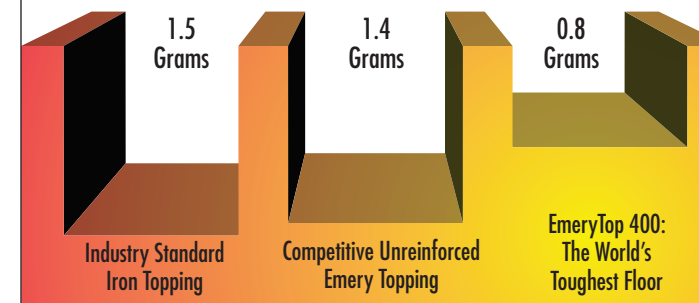
**L&M™ EMERYTOP 400™ is made of some of the toughest stuff on earth: Emery. It's the same material that is used to grind and sharpen steel.**

## ABRASION

Transfer stations and tipping floors experience constant scraping as waste and equipment are dragged across the surface, slowly wearing away the structural surface until only loose aggregate and cement paste is left. This weakened floor is vulnerable to further impact and contaminants such as leachate and can experience rapid surface deterioration leading to costly repairs, replacement, and risk of downtime and stoppages in operation.

**Under identical laboratory conditions, L&M EMERYTOP 400 proved to be nearly twice as resistant to abrasion as other competitive options.**

**Abrasion Testing: ASTM C 944 • Weight Loss in Grams**



## IMPACT

Constant blows and repetitive strikes from heavy machinery are a threat to crack even the hardest industrial floors. L&M™ EMERYTOP 400™ protects your floor from impact by creating a zone of protection dispersing any impact or point loads before it can reach the concrete substrate.

**IMPACT RESISTANCE ACI 544.2**

Test Age	L&M™ EMERYTOP 400™	Iron Topping
7 Days	No Cracking After 4,500 Blows	Virtually the Same as L&M™ EMERYTOP 400™
90 Days	No Cracking After 4,500 Blows	Virtually the Same as L&M EMERYTOP 400

## CHEMICAL ATTACK

The weakest point of most high-strength cement-based toppings is the cement paste which holds the topping together. When exposed to the aggressive organic acids created by leachate, the cement paste will weaken and erode, losing its grip on the high-strength aggregates within and creating a weakened condition called micropitting. L&M EMERYTOP 400 is uniquely protected against chemical attacks because it actually strengthens and densifies the cement paste, greatly slowing the rate of chemical penetration and extending the floor's life cycle.

### L&M™ EMERYTOP 400™: Proven Chemical Resistance

CHLORIDE ION PENETRATION Age of Sample 90 Days • ASTM C 1202		
	L&M EMERYTOP 400	Iron Topping
Coulombs Passed	220	2,787
Penetrability of Chloride Ions	Very Low	Moderate
Resistivity ohm-cm	93,780	10,600

**L&M EMERYTOP 400 is ready for whatever wants to eat away at your floor, your safety, and your investment.**

