



# ATLAS TECH-TOP

Self-Leveling Heavy-Duty Floor Topping for Interior Applications

## Description

Atlas Tech-Top is a heavy-duty, cement-based, stainable, self-leveling floor topping designed to produce a durable, traffic-bearing surface for interior applications. Tech-Top is a blend of portland cement, high performance polymers, select aggregates and proprietary admixtures to provide a free-flowing pumpable material that is easy to apply and requires minimal labor and installation time. Tech-Top provides a walkable surface within 6 hours of application and will accept light wheel traffic after 24 hours.

## Uses

- Produce a level traffic-bearing floor topping over new or existing concrete surfaces.
- Level concrete floors, ceramic tile, terrazzo and wooden floors.
- Resurface rough, old, unlevel or poorly finished concrete surfaces.
- Interior applications.
- New or old concrete surfaces.
- Ideal for offices, schools, hospitals, light industrial floors, restaurants, retail and residential floor surfaces that will be exposed to walking or light vehicle traffic.
- Applications from 1/4" - 1/2" neat; up to 2" per lift extended with aggregate.

## Features

- Self-leveling topping produces a level, hard and traffic-bearing surface with minimal labor and installation time.
- Heavy-duty topping holds up to heavy walking traffic and light vehicle traffic.
- Hardens quickly to provide a walkable surface within 6 hours and light wheel traffic after 24 hours.
- Excellent bond strength to properly prepared surfaces.
- Easy to mix and place; pumpable.
- Cures to a light gray color; excellent stainable surface.
- Non-shrinking, non-dusting; does not contain gypsum.

## Technical Data & Specifications

Compressive Strength (ASTM C-109):

- 1 day.....2,800 psi (19.3 MPa)
- 7 days.....3,200 psi (22.0 MPa)
- 28 days.....5,400 psi (37.2 MPa)

Flexural Strength (ASTM C-348):

- 7 days.....1,100 psi (7.5 MPa)
- 28 days.....1,300 psi (8.9 MPa)

Shear Bond Strength (ASTM C-882):

- 14 days.....1,600 psi (10.9 MPa)

- Working Time.....15 - 25 minutes
- Initial Set.....30 - 45 minutes
- Final Set.....1.5 - 2 hours
- Walking Traffic..... 5 - 6 hours
- Light Vehicle Traffic..... 24 hours

## Yield

Approximately 0.43 ft<sup>3</sup> per 50 lb. bag when mixed with 4.5 quarts of water.

At 1/4" thickness, one 50 lb. bag will cover approximately 21 ft<sup>2</sup>.

Extended: Approximately 0.55 ft<sup>3</sup> per unit extended with 15 lbs. 3/8" pea gravel. At 1" thickness, one extended unit will cover approximately 6.5 ft<sup>2</sup>.

## Application Procedures

### Preparation

Remove all dirt, oil, curing and sealing compounds and loose or foreign material from the surfaces to be covered. Atlas Citrus Cleaner is an excellent cleaning material to remove oil, grease & curing & sealing compounds. Existing concrete surfaces should be strong and sound, and must be a minimum of 28 days old. To provide maximum bond of topping to the substrate, roughen the substrate prior to application to provide a minimum 1/8" profile. Large non-moving cracks or voids should be patched with Atlas Tech Patch 20 one day prior to placing Tech-Top.

### Priming

Prior to placing the topping, prime the surface with Atlas Tech-Bond. Apply the bonder at diluted ratio of 2:1 with water to a dry surface using a brush or broom at 500 - 600 ft<sup>2</sup> per gallon. Coverage will vary depending on the porosity of the surface. Very porous surfaces will require two applications of Tech-Bond. If two applications are required, apply the first coat at 3:1 dilution ratio, and allow 2 - 4 hours to dry to the touch before applying the second coat at the normal 2:1 ratio. Tech-Bond should be applied to leave a continuous film over the surface. Do not leave any puddles of Tech-Bond. Allow the bonder to dry (normally 3 hours at 70° F; do not wait longer than 7 days). Protect the primed substrate from foot traffic prior to installation of topping. If applying multiple lifts, prime each lift with Tech-Bond. When applying over wood floors, the floor must be stable and non-flexible, and place metal lathe on the floor after the primer application and prior to placing the topping.

### Mixing

Mix only enough material that can be properly placed within 15 - 25 minutes. Mix 4.5 quarts of water per 50lb. bag of Tech-Top. Do not overwater. Generally, a large pail or small trash can may be used as a suitable mixing container. A heavy-duty, low speed drill mixer or a mechanical mixer with rotating blades should be used to blend the material to a uniform consistency. Typically two bag batches are mixed at one time using mechanical mixers. Add water to the mixing container first, then slowly add the Tech-Top powder. Mix thoroughly for approximately 3 minutes until a uniform consistency is achieved.



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## Mixing (cont.)

For applications greater than 1/2" in depth, Tech-Top may be extended up to 30% by weight (15 lbs. aggregate per 50 lb. bag Tech-Top) with a clean, 3/8" pea gravel or aggregate. Aggregate must be well-graded, saturated-surface-dry, and added during the last minute of mixing. When ambient temperature is greater than 85° F (29° C), mix topping with cooler water that is approximately 40° F (4° C). When ambient temperature is below 50° F (10° C), mix topping with warmer water that is approximately 80° F (32° C).

## Application

Before application, close doors and windows to minimize air flow in the application area and protect the surface from direct sunlight. After Tech-Top is properly mixed, immediately pour or pump the material over the surface. Appropriately sized grout pumps may be used and may provide for high productivity and a consistent finish through the application. Place material from side to side in a continuous manner. Apply enough material to cover high spots and fill low areas. A long-handled spreader, gauge rake or spiked roller may be used to help spread the material over the surface and into the corners. Best results are achieved by immediately using a "smoother" to smooth out the material. Tech-Top will self-level within 25 minutes, troweling is not necessary. Wearing spiked shoes is recommended for application to avoid leaving marks in the new surface. Apply Tech-Top from 1/4" - 1/2" thick neat; up to 2" thick when extended with aggregate. If extending with aggregate, the workability of Tech-Top may be affected, and a finish layer may be necessary. The finish layer should be applied as soon as the first layer is hard enough to walk on, and should be primed, mixed and placed as if on the original substrate. Score or scratch the first layer prior to set for best adhesion of finish layer. All material should be placed before the initial set.

## Stains & Sealers

Most concrete stains require that the substrate be cured for 28 days prior to stain application. Please follow the application instructions from the manufacturers of the stain materials.

Sealers are typically applied 24 hours after placement of topping. Please contact your Atlas representative to determine the most appropriate sealer for the intended use of the floor.

## Cleaning

Clean tools and equipment with clean water. Uncured material may be removed with water. Cured material may be removed mechanically.

## Packaging

50 lb. (22.7 kg) bags

## Storage

Store in a cool and dry area, out of direct sunlight.

## Limitations

- Do not apply when ambient or surface temperature is below 50° F (10° C) or expected to fall below 50° F (10° C) within 24 hours of application.
- New concrete surfaces should be allowed to cure for 28 days prior to covering with topping.
- For interior use only. Use Atlas Tech-Top EXT for exterior applications.
- Do not use on streets, highways, or heavy industrial floors that will be exposed to metal-wheeled traffic.
- Do not apply over active cracks without addressing movement first. Even if cracks are filled, there is no guarantee that cracks will not telegraph through the topping after application.
- Re-saw cut control joints after placement, and carry expansion joints through the topping.
- Do not add sand, cement, additives or admixtures.
- Prior to application of stains & colors, it is recommended to perform a small test or mock-up first.

## Caution

Contains portland cement and sand. Freshly mixed mortar may cause skin irritation and possible cement burns. Avoid direct contact where possible, and wash exposed skin area promptly with water. If any of the cementitious material gets into the eyes, rinse immediately and repeatedly with water and then call a physician. The manufacturer recommends using an approved mask or respirator when working with cementitious material. Do not take internally. Harmful if ingested. Keep out of the reach of children.

Additional precautions and safety information are contained in the Material Safety Data Sheet.

## Technical Services

For assistance, contact an Atlas Tech representative at:  
858-277-2100 or 1-877-588-2100  
Fax: 858-277-0585  
Email: [info@atlastechproducts.com](mailto:info@atlastechproducts.com)  
Website: [www.atlastechproducts.com](http://www.atlastechproducts.com)

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Made in USA.

For professional use only.

Consult Material Safety Data Sheet for more information.

Disclaimer of Warranties: Neither manufacturer nor seller have any knowledge or control concerning the purchaser's use of the product. No expressed warranty is made by manufacturer or seller with respect to the results of any use of the product or container that the product comes in. No implied warranties including, but not limited to, an implied warranty of fitness for a particular purpose are made with respect to the product. Neither manufacturer nor seller assume any liability for personal injury, loss or damage resulting from the use of the product. In the event that the product shall prove defective, buyer's exclusive remedy shall be as follows: Seller or manufacturer shall, upon request of buyer, replace any quantity of the product which is proven to be defective or shall, at its option, refund the purchase price of the product upon return of the product. Manufacturer shall not be responsible for use of this product in a manner to infringe on any patent held by others.



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