

## Product Description

Mighty Bond™ is a high solids acrylic liquid bonding agent that substantially improves adhesion, impact, shear bond, tensile, flexural and compressive strength of unmodified concrete, mortars, patches and grouts.

## Specifications

Mighty Bond exceeds the physical property requirements stated in ASTM C1059 "Standard Specification for Latex Agents for Bonding Fresh to Hardened Concrete". Mighty Bond is on the MN DOT "Special Surface Finish System" approval list.

## When/Where to Use

Mighty Bond is a versatile bonding agent intended for a broad range of applications. Use with mortars, patches, grouts and underlayment's when Improved bond strength, freeze-thaw and salt resistance, and reduced water permeability is desired. Mighty Bond is concentrated so it can be diluted at the job site for extra convenience and savings.

## Advantages

- Substantially improves bond strength and adhesion
- Versatile when using with mortars, patches, grouts and underlayment's
- Adds excellent freeze/thaw and salt resistance properties
- Extends board life/open time in mortars
- Creates more durable cement based materials
- Easy to use -simply dilute with water
- Polymer has excellent UV resistance

### PROTECT FROM FREEZING

#### Helpful Items:



## Typical Yield

See General Mixing Ratio Chart for more information. Coverage will vary based on use of product.

## Packaging

1 gallon and 5 gallon

## Surface Preparation

All surfaces must be structurally sound and non-flexing. Remove all dust, waxes and sealers, old adhesive residues, curing compounds, oils or other foreign materials prior to application. Existing concrete surfaces should be fully cured, free of hydrostatic pressures and efflorescence. Sandblast, hammer or chip out loose, poorly bonded substrates prior to making repairs. Always follow the preparation steps for the product being modified with Mighty Bond.

## Mixing and Application

Slowly stir Mighty Bond before use. Do not create bubbles or foaming by shaking the product. Depending on the project or product needs, dilute Mighty Bond according to the guidelines below. Protect new surfaces from use until material is completely hard and set.

## Curing

- Refrain from using curing/sealing compounds over patching materials for a minimum of two weeks.
- Protect patches from rapid drying on hot, windy days.

## Product Tips

Do not use Mighty Bond modified mixes when the ambient air or surface temp. is below 40° F (4°C) within 24 hours. High relative humidity, excessive moisture and low temperatures will retard the curing of Mighty Bond modified mixes.

- Do not use air-entrained cement mixes or with air entraining admixtures
- Do not over mix or aerate mixes
- Use with proper ventilation
- Shade and protect patch in windy and/or hot weather conditions
- Clean trowel frequently during product application. Do not over trowel areas.

## General Mixing Ratios For Mighty Bond™

Typical Mix Ratios	Mix Ratio		Total Liquid
	Water	Mighty Bond®	
<i>Product</i>	<i>Typical Quarts of Liquid</i>		
80 lb Preblended Mortar	3¾	1¼	≈ 5
60 lb Preblended Mortar	3	1	≈ 4
60 lb Concrete Mix	1 ¾	1 ¾	≈ 3 ½
60 lb Sand Mix	2 ¼	2 ¼	≈ 4 ½

<b>Shelf Life</b>	One year - unopened
<b>Storage Conditions</b>	Store dry at 40-95°F. Protect from freezing
<b>Color</b>	White, when wet

**Note:** When higher physical performance is required, the ratio of Mighty Bond may be increased to meet project requirements. A ratio of 1 part Mighty Bond to 3 parts clean, potable water (1:3); up to 1 part Mighty Bond to 1 part clean, potable water (1:1) is acceptable.

Job site factors such as substrate, horizontal or vertical application, weather conditions, etc. should be taken into consideration.

**WARNING: INJURIOUS TO EYES!**

**KEEP OUT OF REACH OF CHILDREN!**

## Clean Up

Typically water will satisfactorily clean tools after using Mighty Bond. If the material has begun to harden, warm soapy water may be helpful for cleaning hands and tools.



## Technical Data

Tests	Base Mix 3 to 1 - sand/cement ratio (102127)	Base Mix 2 to 1 - sand/cement ratio (100521)
<b>Compressive Strength, psi (ASTM C39)</b>		
1 day avg.	1,830	3,110
3 day avg.	2,700	4,680
7 day avg.	3,860	6,170
28 day avg.	4,750	7,360
<b>Tensile Strength, psi (ASTM C190)</b>		
28 day avg.	202	364
<b>Bond Strength, psi (ASTM C1042)</b>		
28 day avg. (air cured)	750	1,030
28 day avg. (water cured)	1,400	1,910

PROTECT FROM FREEZING

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## WARNING

Do not ingest. Causes skin and eye irritation. Harmful to aquatic life. This product has been evaluated according to GHS and 29CFR1910.1200, Appendix A. It is categorized as a Health Hazard - Skin Irritant Category 3 and Eye Irritant Category 2B. It is classified as Hazardous to the Aquatic Environment Category 3. Keep out of reach of children. Need to protect from freezing. If frozen thaw out slowly. Stir material to remix. If liquid is not smooth, DO NOT USE.

## HAZARD IDENTIFICATION

Contains acrylic polymer. Product poses little hazard in ordinary use. Eye and skin irritation may occur from direct contact.

## FIRST AID MEASURES

Inhalation: Unlikely to be an inhalation hazard.

Eye Contact: Hold eyelids apart and flush with plenty of water for at least 15 minutes. If Irritation persists, seek medical attention.

Skin Contact: Wash off with soap & water.

Ingestion: Check with Poison Control Center or a doctor. Do not induce vomiting.

Symptoms of Overexposure: Direct contact can cause eye irritation. Repeated or extensive contact can cause skin irritation. May cause nose and throat irritation if misted, but not a likely route of exposure.

Note to Physician: Treat according to symptoms. No known specific antidote.

HEALTH	0
FLAMMABILITY	0
REACTIVITY	0

PERSONAL PROTECTION