Conspro Corp.
Road 175 Km. 0.2 Rio Cañas
Industrial Park Lot #35
Caguas, PR 00725
Tel: 787-653-4900
Fax: 787-653-4949
email: info@conspro.com
www.bullbond.com

Since 1967

# Technical Data Sheet

# MICRO-TOPPING™

## FINE RESURFACING 2K POLYMER CEMENT FINISH

### PART 1: GENERAL INFORMATION

#### 1.1 PRODUCT DESCRIPTION

BULL-BOND® MICRO-TOPPING™ is a blend of cement, fine graded sand and special additives designed to work as a 2-Component (2K) polymer modified cementitious coating for concrete renewal or refinishing. BULL-BOND® MICRO-TOPPING™ is formulated for mixing with Bull-Bond® waterproof liquid polymer additives developing excellent consistency, placing, finishing properties and a 100% waterproof finish. MICRO-TOPPING™ is designed to be mixed with one of the BULL-BOND® latex admixtures; SABAKRETE™ or CONCRYL™. This polymer-modified MICRO-TOPPING™ mix is ideal for concrete roof resurfacing since it is 100% water resistant. BULL-BOND® MICRO-TOPPING™ ensures proper concrete surface preparation prior to roof sealing/coating applications. It is recommended to repair irregular, deteriorated and delaminated concrete surfaces and for water-tight plastering of submerged concrete structures. The product is environmentally friendly promoting the use of locally sourced materials.

#### 1.2 BASIC USES:

- Surface Profile Resurfacing for:
  - Concrete floors and walls
  - Concrete roofs
  - Asphaltic granulated roofing membranes
  - BUR surface recoveries
  - EPS foam board
  - Lightweight concrete insulation
- Cementitious Waterproof Coating for:
  - Water storage tanks
  - Pools
  - Fountains
  - Concrete roofs
  - Exterior walls
  - Basements
  - Tunnels
- Base Coat Component for BULL-BOND® STUCCO-PRO™ EIFS

BULL-BOND® MICRO-TOPPING™ is suitable for interior, exterior and submerged conditions on vertical and horizontal surfaces for the previously mentioned applications.

#### 1.3 SUITABLE SUBSTRATES:

- Concrete
  - Smooth
  - Porous
- CMU Blocks
- Cement Board
- Plaster
- EPS/XPS Foam Boards
- Gravel Embedded Tar
- Asphalt/Bitumen Residuals
- Urethane Foam Residuals

#### 1.4 ADVANTAGES:

- Produces a smooth concrete roof profile, necessary for the optimum performance of liquid applied elastomeric roof coatings.
- Ensures total and permanent adhesion to difficult substrates.
- Improves surface runoff and drainage.
- Provides an initial watertight cement based 2-K coating for the subsequent installation of liquid waterproffing systems.

#### 1.5 LIMITATIONS:

- Excessive sun exposure and direct wind should be avoided during application and for a minimum of 1 hour immediately after application.
- Avoid walking on installed surface for at least 24 hours after installation, depending upon temperature and humidity conditions.
- Never install over non-dimensionally stable materials.
- Overwatering can cause mixture to segregate resulting in uneven surface strengths. Surfaces with reduced strength must be removed mechanically and repaired with more 2K Micro-Topping polymer cement.

### PART 2: TECHNICAL DATA

#### 2.1 PRODUCT CHARACTERISTICS:

| PRODUCT CHARACTERISTICS | | |
|---|---|---|
| **BULL-BOND® MICRO-TOPPING™** | | |
| Mixing Ratio | 1.5-2.0 gal of mixing liquid per 50 lb. bag of MICRO-TOPPING Cementitious powder. | |
| Recommended Polymer | BULL-BOND® SABAKRETE™ | BULL-BOND® CONCRYL™ |
| Bulk Density | 115 lbs/ft³ | |
| Application Temp. Range | 58°F to 95°F | |
| Workable Time | 15-45 minutes | |
| Packaging | 50 lb. bag | |
| Storage | Cool, dry place and free of excessive humidity. Don't leave exposed to sun or rain. | |
| Shelf Life | Powder - 6 months if unopened | |

## 2.3 SUGGESTED MIXES:

| SABAKRETE™ MICRO-TOPPING MIX | | | |
|---|---|---|---|
| **COMPONENT** | **QUANTITY** | **DILUTION PROPORTION** | **MAXIMUM MIXING LIQUID** |
| SABAKRETE™ | 0.75 - 1.0 gal | 1 | 2.0 gals |
| Water | 1.25 - 1.0 gal | 1 | |
| Micro-Topping Powder | 50 lb | | |
| **APPLICATION THICKNESS RANGE** | **MIX YIELD** | | |
| 1/32" - 1/8" | 0.45 ft³ / mix | | |
| **Liquid dosage quantity depends on mix flow preference and ambient temperature* | | | |

| CONCRYL™ MICRO-TOPPING MIX | | | |
|---|---|---|---|
| **COMPONENT** | **QUANTITY** | **DILUTION PROPORTION** | **DILUTION MAXIMUM MIXING LIQUID** |
| CONCRYL™ | 1 - 1.25 gal | 1 - 2 | 2.0 gals |
| Water | 0.75 - 1.0 gal | 1 | |
| Micro-Topping Powder | 50 lb | | |
| **APPLICATION THICKNESS RANGE** | **MIX YIELD** | | |
| 1/32" - 1/8" | 0.45 ft³ / mix | | |
| **Liquid dosage quantity depends on mix flow preference and ambient temperature* | | | |

| CONCRYL™ MICRO-TOPPING MIX FOR BULL-BOND® STUCCO-PRO™ EIFS | |
|---|---|
| **COMPONENT** | **QUANTITY** |
| CONCRYL™ | 1.25 gal |
| Water | 0.25 - 0.50 gal |
| Micro-Topping Powder | 50 lb |
| **APPLICATION THICKNESS RANGE** | **MIX YIELD** |
| 1/32" - 1/4" | 0.45 ft³ / mix |
| **Liquid dosage quantity depends on mix flow preference and ambient temperature* | |

| | BULL-BOND® MICRO-TOPPING™ MIX WITH | |
|---|---|---|
| | **CONCRYL™** | **SABAKRETE ™** |
| **Recommended Applications** | ACRYLIC LATEX ADDITIVE & BONDING ADHESIVE | SYNTHETIC RUBBER LATEX ADMIXTURE |
| **CONDITIONS** | | |
| Vertical Interior | ● | ● |
| Horizontal Interior | ● | ● |
| Vertical Exterior | ● | ● |
| Horizontal Exterior | ● | ● |
| Submerged | ● | ● |
| **APPLICATIONS** | | |
| Resurfacing Micro-Toppings | ● | ● |
| Water-Tight Plasters | ● | ● |
| Concrete Roof Leveling | ● | ● |
| Tank, Pool & Fountain Plastering | ○ | ● |
| Aesthetic Resurfacing Mortars | ● | |
| **SUITABLE SUBSTRATES** | | |
| Smooth Concrete | ● | ● |
| Porous Concrete | ● | ● |
| Brick | ● | ● |
| CMU Block | ● | ● |
| Cement Board | ● | ● |
| Plaster | ● | ● |
| EPS / XPS Foam Boards | ○ | ● |
| Steel and Galvanized Metal | ○ | ● |
| Gravel Embeded Tar | X | ● |
| Asphalt/Bitumen Residual | X | ● |
| Elastomeric Sealer Roofs Residuals | X | X |

● Best ◦ Good

○ Better X Not recommended

## 2.4 MATERIAL PHYSICAL PROPERTIES:

| MATERIAL PHYSICAL PROPERTIES | | | |
|---|---|---|---|
| PROPERTY | | METHOD | BULL-BOND® SABAKRETE™ MICRO-TOPPING™ |
| Compressive Strength | | (ASTM C109) | 3,500 psi at 28 days |
| Flexural Strength | | (ASTM C348) | 860 psi at 28 days |
| MIX YIELD | | | |
| 0.45 ft³ per bag | | | |
| Application Thickness | | Area Coverage | |
| inches | mm | ft² | m² |
| 1/32" ≈ 31 mils | 0.8 | 172 | 16.0 |
| 1/16" ≈ 62 mils | 1.6 | 86 | 8.0 |
| 1/8" ≈ 125 mils | 3.2 | 43 | 4.0 |

# PART 3: INSTRUCTIONS

## 3.1 SURFACE PREPARATION

• All substrates must be structurally sound, thoroughly clean and free of oil, wax, grease, dust, asphalt, existing patching materials or any other contaminant that might act as a bond breaker.
• Remove any loose material, delamination, deteriorated concrete, paint, sealer, mold, release agents or water-soluble materials. Clean the surface with high pressure water blasting.
• Test by sprinkling water on various areas of the substrate. If water penetrates, then a good bond can be achieved; if water beads, surface contaminants are present, and loss of adhesion may occur. Stubborn contaminants should be mechanically removed before installation. Concrete must be free of efflorescence and not subject to hydrostatic pressure.
• Smooth concrete surfaces must be mechanically abraded to ensure a good bond. Surface preparation work can be done by grinding, scrabble, or other appropriate mechanical methods to obtain a CSP profile of 1-4.
• Saturate surface with clean water and remove all standing water. Substrate should be saturated surface dry (SSD) before applying MICRO-TOPPING™.
• Ambient temperature, surfaces and materials should be below 90°F. It is recommended to install the material during the freshest moments of the day, be it during the morning or afternoon. It is also recommended to use cold mixing water to reduce heat in the cementitious mix.

## 3.2 MIXING

1. Verify that mixing tools and containers are clean before use.
2. Always premix the BULL-BOND® latex admixture (SABAKRETE™ or CONCRYL™) concentrate to ensure that any material that may have settled during extended storage is well dispersed. Once the concentrate is homogenous, proceed with proportioning or dilution with water.
3. Dilute SABAKRETE™ or CONCRYL™ according to the desired application as designated on their respective dilution ratio table or suggested mix table (section 2.3) to create properly proportioned admixtures.
**An increase in latex content and in application thickness demands more precautions to ensure proper application and curing.*
4. First pour 3/4 of the required amount of the liquid component of the mix (dilution of latex admixture and water) on the mixing container.
5. Slowly add the MICRO-TOPPING powder to the poured liquids, while mixing with a heavy-duty electric drill and mixing paddle at 800 rpm.
6. Next add the remaining 1/4 of liquid component to achieve the desired consistency of the mix.
7. Thoroughly mix for 2 minutes to a lump free, homogenous consistency. Do not overmix. Overmixing can cause excessive air entrapment. Do not add more mixing liquid than the recommended maximum.
8. Let it rest for 1 minute and then mix for an additional minute.
**It is important to prepare enough material for the complete application to avoid the formation of cold joints or pour joints.*

## 3.3 APPLICATION

3.3.1 APPLICATION FOR ROOF AND FLOOR:

1. Saturate surface with clean water and remove all standing water. Substrate should be saturated surface dry (SSD) before applying BULL-BOND® MICRO-TOPPING™ mix.
When working over a difficult substrate like gravel embedded tar, asphalt/bitumen residuals or urethane foam residuals it is strongly recommended to apply a scrub-coat of a BONDING SLURRY, mix onto the saturated surface-dry (SSD) and properly prepared surface. As an alternative an aplicaction of NEAT polymer additive at 150-200 ft²/gal is suggested to improve adhesion on difficult subtrates. Follow the instructions for use on the CONCRYL™ or SABAKRETE™ Thechnical Data Sheets.
2. While the substrate is still saturated surface-dry (SSD) or the scrub-coat is still wet/tacky, apply the MICRO-TOPPING Mix using a brush or squeegee at a thickness of 1/32"-1/8". Coat the substrate with the MICRO-TOPPING Mix leveling the surface profile and leaving a smooth finish. Do not apply over a dry substrate since it will absorb the liquid components from the cementitious mixture and consequently hinder the mix performance because of improper cement hydration and curing.

3.3.2 APPLICATION FOR BULL-BOND® STUCCO-PRO™ EIFS:

1. Apply the MICRO-TOPPING Mix using flat side of trowel at a thickness of 1/32"-1/8" over insulation board. Immediately after, pass the notched side of trowel over applied micro topping leaving vertical ridges.
2. Place the approved mesh over the applied MICRO-TOPPING and using the flat side of trowel apply pressure over mesh until it is full embedded with the MICRO-TOPPING. Leave the MICRO-TOPPING with a flat finish.
3. Let cure for 10 minutes and float the MICRO-TOPPING for smooth finish.

## 3.4 CURING

1. Protect from excessive heat and wind during the first 24 to 72 hours of curing. Alternatively use damp burlap, polyethylene sheeting or water-based curing compound with the purpose of retaining moisture. Excessive heat and/or wind could cause premature surface drying and result in mud cracking. Do not use solvent-based curing compounds.
2. Air cure cementitious mixes modified with SABAKRETE™ or CONCRYL™ for at least 5 to 7 days before total water immersion. Wait 3 to 5 days before the application of waterproofing coatings over SABAKRETE™ or CONCRYL™ modified cementitious surfaces.

## 3.5 CLEANUP

Immediately wash hands and tools promptly with water before material hardens. Cured material must be mechanically removed.

# PART 4: PRECAUTIONS

MICRO-TOPPING™ contains Portland cement, sand aggregates and special additives. Avoid eye and skin contact. Mix in a well-ventilated area and avoid breathing powder or dust. KEEP OUT OF REACH OF CHILDREN. Carefully read and follow all cautions and warnings on product label and SDS.

Edition Date: July, 2023

Check our website for the latest version of the Technical Data Sheet

Distributed by: CONSPRO.com Construction & Waterproofing Products

BULL-BOND® Since 1967

Road 175 Km. 0.2 Rio Cañas
Industrial Park Lot #35
Caguas, PR 00725
Tel: 787-653-4900

Fax: 787-653-4949
email: info@conspro.com
www.bullbond.com
www.conspro.com