**Structural Skin®**

Trowel or spray applied, fiber reinforced, cement based structural coating. Refer to Conproco Exterior Wall Systems.

**WHERE TO USE**

Base coating for exterior wall systems over block, concrete, brick, exterior sheathing and plywood.

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**Performance Characteristics**

- **Waterproof barrier**
  - Passes ASTM E514.
  - Anti-carbonation barrier
- **Durable**
  - Resistant to weathering action, excellent freeze/thaw stability and abrasion resistance.
- **Breathability**
  - Allows moisture to diffuse, preventing damage from moisture build-up in wall system.
- **Structural**
  - When applied to both sides of dry stacked concrete block, forms a structural wall system. IBC approved.
- **Smooth finish**
  - Ready for roller, spray and trowel applied decorative coatings such as Conpro Lastic or Conpro Color Coat.

**Surface Preparation**

- Remove loose and deteriorated material, laitance, dirt, dust, oil and any surface contaminants that will inhibit proper bond.
- Repair spalled areas, static cracks and voids with Conpro Set or Structural Skin.
- Substrate should have open-pored and textured surface.
- Apply Conpro Start where a consolidant is of benefit.
- Saturate substrate with clean water, (saturated surface dry/SSD). Wall should be wet when Structural Skin is applied.
- For best results on concrete grind or abrasive blast (CSP 3).
- Refer to ICRI Surface Preparation Guide 03732 for information about Concrete Surface Preparation (CSP).
- Refer to Conproco Exterior Wall Systems literature for preparation over substrates other than concrete and concrete block.

**Priming**

- No priming is required under normal circumstances.

**Mixing**

- Mechanically mix using a low speed drill (400 - 600 rpm) and mixing paddle or mortar mixer.
- Mix continuously for 3 minutes to a uniform, lump-free consistency.
- Add up to 1 pint of additional water if needed.
- Allow to “breathe” for 1 minute and remix for 1 minute. This will improve workability and open time.
- Do not over mix, as this will entrain air and cause damage to the glass fibers.

**Application**

- **Mortarless concrete block wall system**
  - At the time of application, surfaces should be saturated surface dry (SSD) but hold no standing water. Concrete block must be butt tight and wall plumb and level.
  - Trowel or spray apply material to a uniform minimum of 1/8 inch.
  - Apply with a vertical motion and finish with a horizontal motion.
  - Material must be applied so that both sides of the wall have a uniform, continuous 1/8 inch coating.

**Conproco Impact Wall System (existing block, brick and concrete)**

At the time of application, surfaces should be saturated surface dry (SSD) but hold no standing water. Add 1 quart of K-88 Admix (replacing 1 quart water) per bag of material.

- The proper mix ratio is 5 parts powder to ¾ parts water to ½ parts K-88 Admix.
- Trowel or spray apply material to a uniform minimum of 1/8 inch.
- Apply additional coat at 1/16 - 1/8 inch to completely cover mesh and achieve a level plane.

**Conproco Impact RF Wall System (reinforced fabric on approved sheathing)**

Board must comply with applicable standards (ASTM C79, and ASTM C1177) and be firmly attached to substrate in accordance with applicable building codes.

- Place trim accessories (expansion joints, corner bead, etc.) as specified. Mechanically fasten the specified reinforcing mesh to the substrate and within the confines of the panels created by the trim accessories. Make sure to overlap the flanges of the trim accessories.
- Add 2 quarts of K-88 Admix (replacing 2 quarts water) per bag of material.

The proper mix ratio is 5 parts powder to ¾ parts water to ½ parts K-88 Admix.

- Trowel or spray apply material to a uniform minimum of 1/8 inch.
- Embed specified mesh fabric into material.
- Apply additional coat at 1/16 - 1/8 inch to completely cover mesh and achieve a level plane.

**Conproco Impact RM Wall System (reinforced metal lath)**

Plywood and OSB must be APA Exterior rated and be firmly attached to substrate in accordance with applicable building codes.

- Masonry and concrete walls must be structurally sound.
- Place trim accessories (expansion joints, corner bead, etc.) as specified. Mechanically fasten self-furring diamond mesh metal lath (complying with ASTM C841 and ASTM C847) within the confines of the panels created by the trim accessories. Make sure to overlap the flanges of the trim accessories.
- Add 2 quarts of K-88 Admix (replacing 2 quarts water) per bag of material.
- Trowel or spray apply material to a uniform minimum of 3/16 inch, to completely cover the lath.
Curing
Keep damp with a fine mist of water for 24 hours.
Protect from direct sunlight, wind, rain and frost during curing period.

Clean Up
Clean tools and equipment with water immediately after use.
Cured material must be removed mechanically.

Coverage/Yield
45 ft.²/50 lbs. @ 1/8 inch.

Product Handling
Packaging
50 lbs. paper bags.

Shelf Life
12 months when properly stored.

Storage
Transport and store in cool, clean, dry conditions in unopened containers.
High temperature or high humidity will reduce shelf life.

Technical Data

<table>
<thead>
<tr>
<th>Physical state and appearance</th>
<th>Gray or white powder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base</td>
<td>Portland cement</td>
</tr>
<tr>
<td>pH</td>
<td>Wet mix</td>
</tr>
<tr>
<td>Water/cement ratio</td>
<td>0.6 – 0.49 with 2 quarts K-88 Admix</td>
</tr>
<tr>
<td>Standard Specification for Packaged, Dry, Combined Materials for Surface Bonding Mortar</td>
<td>ASTM C887 Complies</td>
</tr>
<tr>
<td>Setting time by vicat needle</td>
<td>Initial 60 minutes – Final 270 minutes</td>
</tr>
<tr>
<td>Durometer hardness</td>
<td>ASTM D2240 60 - 70</td>
</tr>
<tr>
<td>Water penetration and leakage</td>
<td>ASTM E514 100% reduction in leakage</td>
</tr>
<tr>
<td>Carbon-arc weathering</td>
<td>ASTM G152 2000 hours – no effect</td>
</tr>
<tr>
<td>Length change</td>
<td>ASTM C157 300 µstrains @ 28 days</td>
</tr>
</tbody>
</table>

| Compressive strength – psi   | 4150 | 4400 | 5100 |
| With 2 quarts of K-88 Admix  | 5000 | 5290 | 6300 |
| Flexural strength – 3 point loading – psi | 1100 |
| Tensile strength – psi       | 400  | 430  | 430  |
| With 2 quarts of K-88 Admix  | 600  | 600  | 635  |

Allowable design stress based on gross area of the CMU (IBC) for mortar-less wall construction

Compressive stress – psi
Standard block 45
Ground block 85
Shear Stress 10

Tensile stress in flexure, vertical span - psi 18

FOR PROFESSIONAL USE ONLY
Conproco warrants this product for one year from the date of manufacture to be free from manufacturing defects and to meet the technical properties on the current technical data sheet if used as directed within shelf life. User determines suitability of product for use and assumes all risks. Buyer’s sole remedy shall be limited to the purchase price or replacement of product, exclusive of labor or cost of labor. June 25, 2020.

NO OTHER WARRANTIES EXPRESSED OR IMPLIED SHALL APPLY, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. CONPROCO CORP SHALL NOT BE LIABLE UPON ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES.

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