

### 1. PRODUCT NAME

Conproco® Structural Skin

### 2. MANUFACTURER

TCC Materials®  
2025 Centre Pointe Blvd.  
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### 3. PRODUCT DESCRIPTION

Conproco Structural Skin is a base coating for exterior wall systems over block, concrete, brick, exterior sheathing and plywood. It can be trowel or spray applied. It is fiber reinforced and cement-based. Refer to Conproco Exterior Wall Systems for more information.

#### Features and Benefits

- Waterproof barrier - Passes ASTM E514.
- Anti-carbonation barrier - mitigates carbonation of concrete.
- Resistant to weathering action, excellent freeze/thaw stability and abrasion resistance.
- Breathability - allows moisture to diffuse, preventing damage from moisture build-up in a 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 Stucco or Conpro Lastic.

#### When/Where to Use

- Block
- Concrete
- Brick
- Sheathing
- Plywood

### 4. TECHNICAL DATA

Typical Values • Structural Skin	
Physical state & appearance	Gray or white powder
Base	Portland cement
pH	> 12
Standard Specification for Packaged, Dry, Combined Materials for Surface Bonding Mortar (ASTM C887)	Complies
Setting time by vicat needle (ASTM C191)	Initial 60 minutes Final 270 minutes
Durometer hardness (ASTM D2240)	60-70
Water penetration and leakage (ASTM E514)	100% reduction in leakage
Carbon-arc weathering (ASTM G152)	2000 hours – no effect
Length change (ASTM C157)	300 µstrains @ 28 days
Compressive strength – psi (ASTM C109)	7 days-4,150 14 days– 4,400 28 days– 5,100

### Typical Values • Structural Skin cont.

Length change (ASTM C157)	300 µstrains @ 28 days
Compressive strength – psi (ASTM C109)	7 days-4,150 14 days– 4,400 28 days– 5,100
Compressive strength – psi with 2 quarts of K-88 Admix (ASTM C109)	7 days-5,000 14 days– 5,290 28 days– 6,300
Flexural strength – 3 point loading –	28 days– 1,100
Tensile strength – psi (ASTM C307)	7 days-400 14 days– 430 28 days– 430
Tensile strength – psi with 2 quarts of K-88 Admix (ASTM C307)	7 days-600 14 days– 600 28 days– 635
Tensile stress in flexure, vertical span - psi	18
<b>Allowable design stress based on gross area of the CMU (IBC) for mortar-less wall construction (Compressive stress – psi )</b>	
Standard block	45
Ground Block	85
Shear Stress	10

#### Available Sizes

- 50 pound bag (BOM 115230)

#### Coverage

- 45 ft.<sup>2</sup>/50 lbs. @ 1/8 inch.

### 5. INSTALLATION

#### Preparation

1. Read all directions before starting work. Proper surface preparation is crucial to achieving a successful application.
2. Repair spalled areas, static cracks and voids with Conpro Set or Structural Skin .
3. Substrate should have open- pored and textured surface.
4. Apply Conpro Start where a consolidant is of benefit.
5. Saturate substrate with clean water, (saturated surface dry/SSD). Wall should be wet when Structural Skin is applied.
6. 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).
7. Refer to Conproco Exterior Wall Systems literature for preparation over substrates other than concrete and concrete block.

**Note:** It is the responsibility of the installer/applicator to ensure the suitability of the product for its intended use.

# STRUCTURAL SKIN

## Mixing

1. Mechanically mix using a low speed drill (400 - 600 rpm) and mixing paddle or mortar mixer. Pour 5 quarts of potable water into a clean mixing vessel and slowly add all of the powder. Mix continuously for 3 minutes to a uniform, lump-free consistency.
2. Add up to 1 pint of additional water if needed. Do not add more water than specified.
3. Allow to "breathe" for 1 minute and remix for 1 minute. This will improve workability and open time. Avoid overworking material during placement.
4. Do not over mix, as this will entrain air and cause damage to the glass fibers.

## Application

### Mortarless Concrete Block Wall System

1. At the time of application, surfaces should be saturated surface dry (SSD) but hold no standing water.
2. Add up to 1 pint of additional water if needed. Do not add more water than specified.
3. Concrete block must be butt tight and wall plumb and level.
4. Trowel or spray apply material to a uniform minimum of  $\frac{1}{8}$  inch.
5. Apply with a vertical motion and finish with a horizontal motion.
6. Material must be applied so that both sides of the wall have a uniform, continuous  $\frac{1}{8}$  inch coating.

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

1. At the time of application, surfaces should be saturated surface dry (SSD) but hold no standing water.
2. Add up to 1 pint of additional water if needed. Do not add more water than specified.
3. The proper mix ratio is 5 parts powder to 1 part water to  $\frac{1}{4}$  parts K-88 Admix.
4. Trowel or spray apply material to a uniform minimum of  $\frac{1}{8}$  inch.
5. Apply additional coat at  $\frac{1}{16}$  -  $\frac{1}{8}$  inch to achieve a level plane where desirable.
6. Trowel on with a vertical motion and finish with a horizontal motion.

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

1. Plywood and OSB must be APA Exterior rated and be firmly attached to substrate in accordance with applicable building codes.
2. Masonry and concrete walls must be structurally sound.
3. Place trim accessories (expansion joints, corner bead, etc.) as specified.
4. 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.
5. Add 2 quarts of K-88 Admix (replacing 2 quarts water) per bag of material.
6. Trowel or spray apply material to a uniform minimum of  $\frac{3}{16}$  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 immediately with water after use. Cured material must be removed mechanically.

## Limitations

1. Do not apply unless substrate and ambient temperature can be maintained at a minimum of 40°F for 24 hours. Refer to ACI Cold Weather Application Guidelines.
2. Cold mixing water and low temperature will retard set. Hot water and high temperature will accelerate set.
3. Protect application from precipitation and high wind for at least 8 hours.
4. Do not add more water than specified.
5. Do not re-temper, this will affect color.
6. Avoid overworking material during placement.
7. Substrate conditions, weather, and rate of hydration will affect final color.

## Safety

READ THE SAFETY DATA SHEET (SDS) BEFORE USING THIS PRODUCT. SDS information is available on our website: [tccmaterials.com](http://tccmaterials.com)

## Cautions

Read complete cautionary information printed on product container prior to use. This Product Data Sheet has been prepared in good faith on the basis of information available at the time of publication. It is intended to provide users with information about and guidelines for the proper use and application of the covered Conproco brand product(s) under normal environmental and working conditions. Because each project is different, TCC Materials cannot be responsible for the consequences of variations in such conditions, or for unforeseen conditions.

## 6. AVAILABILITY

To locate Conproco products in your area, please contact:

Phone: 1.651.688.9116  
Email: [info@tccmaterials.com](mailto:info@tccmaterials.com)

## 7. WARRANTY

Seller warrants that its product will conform to and perform in accordance with the product specifications. The foregoing warranty is in lieu of all other warranties, expressed or implied, including, but not limited to those concerning merchantability and fitness for a particular purpose. Because of the difficulty in ascertaining and measuring damages hereunder, it is agreed that Seller's liability to the Buyer shall not exceed the total amount billed and billable to the Buyer for the product hereunder.

Shelf Life	12 months in unopened containers.
Storage Conditions	Store dry, cool (40°F-<90°F/4°C-<32°C), out of direct sunlight.
Color	Gray
KEEP PRODUCT IN CONTAINER FROM FREEZING	
WARNING: INJURIOUS TO EYES	
KEEP OUT OF REACH OF CHILDREN	



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REV 03/25

TDS.CP.115230