

# Underlayment - High Build

## High Depth Patching & Underlayment Compound

**PRODUCT DESCRIPTION**

Underlayment - High Build is a high-strength, trowel grade, two-component, polymer reinforced, cementitious underlayment formulated to provide a durable, uniform sub-surface for applications requiring high depth underlayment or thick bed mortars. It offers exceptional bond strength and is packaged for easy on-site mixing with Mer-Ko's High Build Emulsion. This fire retardant material also provides good thermal and acoustical insulation making it suitable for use over many occupied space environments.

Underlayment - High Build is an easy-to-use, versatile material that can be used as a traditional underlayment, a base mortar, or as a repair and patching material for concrete surfaces significant slope or thick bed mortars for drainage and elevation needs. The incorporation of high-performance fungicides help inhibit the growth of mold and mildew, contributing to the longevity of the overall installation.

Underlayment - High Build can be installed from 1 to 3.5 inches (25.4mm to 88.9mm) finished thickness and is designed for use over properly prepared plywood or concrete substrates. It can also be installed over properly prepared existing surfaces like quarry tile, flagstone, etc. Mortar layers can be sloped for additional protection against water pooling and penetration and to prevent elevation problems at doorways, landings, steps, etc.

**COLORS**

Gray

**INSTALLATION CONDITIONS**

Mer-Ko underlayments must not be installed if the surface or ambient temperature is below 40°F (4.4°C) or above 120°F (48.8°C), or when precipitation is expected or occurring.

**SUBSTRATE PREPARATION**

Before using Mer-Ko underlayments, ensure proper preparation of the substrate. Clean the application area using a power sprayer, grinder, shot blaster or scarifier as required to produce a clean, sound substrate. The substrate surface must be clean, dry and free of dust and any other contaminants at the time of material application. When applicable: Use No. 26 gage bonderized steel or equivalent flashing around the perimeter; Do not use copper perimeter flashings.

**APPLICATION INSTRUCTIONS**

**Primer Coat**

For direct bond applications: For direct bond applications: Apply a primer coat of 626 Ultrabond Primer. Brush apply to all perimeter flashing and trowel apply to horizontal surface areas. Allow the primed area to dry for a minimum of 2 to 4 hours at 70°F (21°C) 50% RH, before proceeding the finished overlayment application.

**Underlayment - High Build**

Mix one 50 lb. (22.7 kg) bag of Underlayment - High Build Filler with 1 gallon (3.79 L) of High Build Emulsion.

Screed and/or float as necessary to ensure complete coverage. Allow the material to dry for 6 to 8 hours for foot traffic; 24 hours at 70°F (21°C) 50% RH, for full service and heavy loads.

**Metal Lath Reinforcement**

When applicable, install a minimum No.17, 1.5 x 1.5 inch self furred welded wire mesh (Structalath™) or optionally, 2.5 self furred galvanized expanded metal lath. For larger areas, the lath is placed as the underlayment is installed to avoid crushing/loss of the furring when walked on. Over lap wire lath a minimum 1.5 inch (one opening/square), over lap metal lath a minimum 1 inch. Do not mechanically fasten lath when used with Mer-Ko's Dual Pro 380 system. Lath overlaps are tied together at 1 ft intervals using a minimum 18 ga. galvanized annealed steel wire.

**CAUTIONS & LIMITATIONS**

- The substrate surface must be structurally sound, clean, dry and free of dirt, dust, oil, grease, paint or other contaminants at the time of material application.
- Concrete substrates must have a minimum compressive strength of 3,000 psi tested by "point loading" technique.
- No unapproved additives should be added to Underlayment, including additional sand or aggregate as it will affect product performance.
- Do not install during inclement weather.
- When contemplating a deck installation over an unheated enclosed space (e.g., garage, etc.) provisions must be made to vent the space.

**CARE & MAINTENANCE**

Proper protection of the Underlayment should be provided if there will be a delay in application of the finish materials.

**STORAGE & HANDLING**

Store Mer-Ko High Build Underlayment material off the ground in a dry environment during storage and transport. All materials should be stored in compliance with local fire and safety requirements. Always wear proper safety equipment, including particle mask, eye protection and gloves when mixing and/or applying these products.

**SHELF LIFE**

The shelf life is six (6) months from the date of manufacture in the original, unopened container when the material is properly stored.

**WARRANTY**

Limited manufacturer's defect warranty. Contact Mer-Ko Technical Service Department for specific warranty information or [www.parexmer-ko.com](http://www.parexmer-ko.com)

**PHYSICAL CHARACTERISTICS**

<b>Adhesion</b> .....	> 550 psi (ASTM C794)
<b>Compressive Strength</b> .....	> 5,500 psi (ASTM C109) 28 Day cure
<b>Fire Rating</b> .....	Fire Retardant (FTMS 105a, Method 6411)
<b>Indentation Characteristics</b> .....	< 3% (MIL-D-3135)
<b>Thickness</b> .....	1 to 3.5" (25.4 to 88.9mm)
<b>Water Absorption</b> .....	< 2.5% (FTMS 501a, Method 7511)
<b>Weight</b> .....	1.2 lbs./ft <sup>2</sup> at 1/8" (3.2mm)

# Product Data Sheet

## Underlayment - High Build

### COVERAGES

Coverage rates are approximate only and can vary greatly due to surface conditions, humidity, temperature and installation techniques.

#### Primer Coat

Base Flashing..... 200 ft<sup>2</sup> (18.6 m<sup>2</sup>)/40lb. bag mix  
Yield: 1/32" (0.8mm)  
Horizontal Surface ..... 160-180 ft<sup>2</sup> (15-17 m<sup>2</sup>)/40lb.  
bag mix at 1/32" (0.8mm)

#### Underlayment

High Build ..... 6.25 ft<sup>2</sup> (.58 m<sup>2</sup>) at 1 in. (25.4mm)/50 lb bag

### PACKAGING

#### Underlayments

High Build Emulsion ..... 5 gallon pail.....18.9 liter pail  
High Build Filler .....50 lb bag.....22.7 kg bag

#### Primers

626 Ultrabond Primer ..... 5 gallon pail.....18.9 liter pail  
626 Ultrabond Primer Filler.....40 lb. bag..... 18.1 kg bag  
626 Ultrabond Primer Filler Kit.....1 gal can & 15 lb bag...3.8L can & 6.8 kg bag

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