Underlay C
Professional Grade Polymer Modified Portland Cement Mortar Bed Underlayment

2. Manufacturer
Parex USA, Inc.
4125 E. La Palma Ave, Suite 250
Anaheim, CA 92807
866-516-0061
www.merkrete.com

3. Product Description
**BASIC USE:** Merkrete Underlay C was developed to provide a solid foundation substrate prior to the installation of tile and stone.

**Uses:** Underlay C provides an acceptable surface for floor coverings such as vinyl, resilient tile, carpet, stone, ceramic and quarry tile. It is also used to repair concrete surfaces. Underlay C is ideal for achieving a slope base foundation for drainage such as showers, drainage under exterior elastomeric deck coatings, or any floor requiring slope for drainage purposes.

**Advantages**
- Easy to install by screed or trowel
- Excellent bond to concrete, wood and metal with minimal preparation
- Trowels to a smooth and uniform finish
- Cures in 6 – 8 hours
- Crack resistant and fire retardant
- Good thermal and acoustical insulating properties
- May be installed from 1/8” to 3”. Consult manufacturer for elevations over 3” thick

**Suitable Substrates**
- Cement mortar beds
- Ceramic tile and stone
- Concrete
- Concrete masonry
- Exterior grade plywood

1 Consult Merkrete for technical assistance
2 Requires 2.5 metal lath

4. Technical Data

<table>
<thead>
<tr>
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<th>Underlay C</th>
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<tbody>
<tr>
<td>Weight</td>
<td>1.2 lb. s/f at 1/8&quot;</td>
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<tr>
<td>Indentation: (MIL-D-3135d)</td>
<td>&lt; 3%</td>
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<tr>
<td>Shear to Concrete</td>
<td>&gt; 550 psi</td>
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<tr>
<td>Compressive Strength 28 day</td>
<td>6,000 psi</td>
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**Packaging:** 50 lb. bag (22.7 kg.) 48 bags per pallet | Color: Gray

**Shelf Life:** Reference Parex USA Expiration Date of Products Technical Bulletin.
5. Installation

Surface Preparation: All surfaces must be between 40° F (4° C) to 95° F (35° C) and structurally sound (deflection not to exceed 1/360 of the span), dry, clean and free from oil, grease, wax, paint, old adhesives, sealers and curing compounds. Any contaminates which inhibit proper bond must be removed.

Substrates
Concrete Substrates: Concrete substrate should be cured a minimum of 28 days. Smooth steel troweled floors should be roughed up using mechanical chipping, scraping or shot blasting. Dampen porous or dry concrete prior to installation.

Note: If the substrate has uneven suction or is questionable, it is recommended that a preparation coat of Merkrete’s 626 Primer be applied prior to the insulation of Underlay C. If 626 Primer is used; a slurry (key) coat is not necessary.

Mixing

Slurry (Key) Coat: In a clean container, mix a small amount of Underlay C and enough water to achieve a thick soup-like consistency.

Dry Pack Floor Mud Bed: In a clean container, add approximately 4 quarts (3.8 liters) of clean potable water. Then add the contents of the 50 lb. (22.7 kg) Underlay C mortar. Mix by hand until powder is thoroughly moist.

Patching and Thicknesses up to 1/8": In a clean container, add approximately 5 quarts (4.7 liters) of clean potable water. Then add the contents of the 50 lb. (22.7 kg) Underlay C mortar. Mix thoroughly by hand or with a slow speed mixer to a smooth, thick, trowelable consistency. Do not temper with additional water.

Application: Spread by brush or trowel a thin layer preparation coat of Merkrete 626 Primer, or the slurry mixture on to the substrate. If 626 Primer is used; wait until primer has dried before applying mortar. If a slurry coat is used; immediately apply mortar with a steel trowel, with enough pressure to firmly work into the concrete surface. Underlayment can then be installed from the “needed thickness” down to an 1/8” edge. It can be installed over most clean, dry sub-surfaces, and can normally be covered or used within 6 – 8 hours.

Limitations: Do not use Underlay C below 40° F (4° C) or above 95° F (35° C). Use caution; do not allow mortar to freeze for the first 72 hours. Hot weather caution: evaporation of moisture in portland cement mortars is increased in hot, windy and dry conditions. Dampen surfaces and protect fresh mortar from rapid dehydration. Underlay C is not intended as a finish surface. When used over 1-1/2” thick, hairline cracks may occur. This will not affect the performance of the product. Underlay C must not be applied over asphalt sheeting, vinyl covered wall board, Masonite®, cement asbestos board, metal, glass, plastic, gypsum mortar beds or other unstable substrates. Improperly cured or wet plywood, particle board or strip wood are not suitable substrates.

Cleaning: Water is all that is needed to remove any uncured mortar from tiles, tools and equipment.

Coverage: 50 lb. bag will cover 50 sf at 1/8” thickness, 25 sf at 1/4” thickness.
6. Availability
   Merkrete Underlay C is available at leading tile houses and construction distributors. Contact Merkrete or visit our web site for the name of the nearest dealer at www.merkrete.com.

7. Warranty
   5 year, 10 year and Limited Lifetime warranties are available. Contact Merkrete Technical Services or visit our web site for specific warranty information. Merkrete Systems warrants that this product meets applicable ANSI standards in force at the time of manufacture.

8. Maintenance
   None required, but installation performance and durability may depend on properly maintaining products supplied by other manufacturers.

9. Technical Services
   Merkrete Systems maintains technical field representatives available throughout the country. Call Technical Services at 800-226-2424 for the nearest representative.

10. Filing Systems
    Merkrete architectural product information available either in catalog form, or electronically on our website at www.merkrete.com.