

# ULTRALAYER<sup>®</sup>



MULTI-PURPOSE FLOORING UNDERLAYMENT THAT INSULATES, DEADENS SOUND & SUPPRESSES LATERAL CRACKS

UltraLayer<sup>™</sup> is a unique, earth-friendly, insulating underlayment that helps absorb impact sound so it won't transfer to lower level rooms; suppresses the effect of concrete sub-floor cracking to protect ceramic tile from potential damage; and insulates floors to help keep them warm in the winter and cool in the summer. The 0.10" thickness of UltraLayer also helps smooth out imperfections in substrates prior to the installation of a hard-surface floor covering.



## ADVANTAGES

- **Sound absorption.**

UltraLayer's filaments are randomly air-laid creating a capillary affect to cushion the floor, absorb sound.

Field Impact Insulation Class (F-IIC) = 60

Tile Impact Insulation Class (IIC) = 52

Sound Transmission Class (STC) = 53

- **Smoothing out minor sub-floor imperfections.**

UltraLayer is firm enough (density = 25.5 lbs/ft<sup>3</sup>; compression resistance @ 25% = 145.4 psi) to support the overlying floor, but flexible enough to form around sub-floor surface roughness that may otherwise cause laminate panels to "rock" or lay unevenly.

- **Adding insulation value.**

UltraLayer will add a thermal "break" to the flooring assembly with an r-value of approximately 0.42.

- **Lateral Crack Suppression.**

UltraLayer is warranted for a period of 15 years to suppress the transfer of lateral cracking of up to 1/4" from concrete sub-floors to the covered flooring material.

- **Multipurpose.**

UltraLayer can be used under a variety of hard-surface floors, which includes: ceramic, porcelain, or natural stone tiles and glued-down or nailed down engineered wood floors.

## ENVIRONMENTAL ATTRIBUTES

- UltraLayer is certified by Scientific Certifications Systems (SCS) to contain **100%** post industrial/pre-consumer fibers. UltraLayer is LEED<sup>™</sup> compliant and will contribute to MRc4.1-4.2 credits.
- Passed Section 01350 for CHPS and Standard Office
- CHPS-listed product
- Can contribute to LEED MR Credit 4.1-4.2

## LIMITATIONS

- All sub-floor assemblies should be tested for moisture vapor emission rates by utilizing anhydrous calcium chloride test kits for concrete or a certified moisture meter for ceramic. Do not install flooring material when in excess of flooring manufacturers recommendations for moisture vapor emissions.
- UltraLayer is recommended for Type II ceramic installations only. Do not use in shower pan applications or areas exposed to excessive moisture.



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## APPROVED SUBSTRATES

- Dry, completely cured concrete (at least 28 days old)
- Concrete and masonry blocks
- Cement backer units (CBU)
- Cementitious screeds, leveling coats and mortar beds
- Waterproofing and crack-isolation membranes
- Double layered exterior-grade plywood 1 1/4" (32 mm) total thickness, for residential floors and in dry areas only.
- Cement terrazzo floors
- Vinyl composition tile (VCT) or non-cushioned sheet vinyl provided the existing floor covering is still adhered tightly to a level, even and structurally solid subfloor, and is free from excessive wax, grease or sealants

## INSTALLATION

Refer to the UltraLayer Installation Guidelines document for complete installation details.



## TECHNICAL DATA

### Physical Properties

Blended synthetic fibers. Certified 95% post-industrial recycled content.

Weight ..... 30.15 oz / sq yd (3.35 oz / sq ft)

Thickness ..... 0.10"

Density ..... 25.5 lbs / ft³

Compression Resistance @ 25% ..... 145.4 psi

Compression Resistance @ 50% ..... exceeds machine limit

Breaking Strength ..... Length 78.4 lbs; Width 63.3 lbs

Compression Set @ 25% ..... 20.7%

R-Value (@0.10") ..... 0.42 hr-ft²-degF/Btu (4.2/ inch)

### Flammability

Meets or exceeds Federal Flammability Standard:

1-70 (Pill Test) and MVSS 302.

### Volatile Organic Compounds (VOC)

Tested for 81 different off-gas compounds in accordance with CA 01350.

Passed to the level of Collaborative for High Performance Schools (CHPS) and Office Spaces.

### Performance Level

Robinson floor test over 3/4" plywood subfloor with residential porcelain tile, latex modified thinset mortar, and latex modified grout resulted in "Light Commercial" rating for use in "Office space, reception areas, kitchens and bathrooms".

### Sound Properties

**Impact Sound Transmission.** The method is designed to measure the impact sound transmission performance of a floor-ceiling assembly in a controlled laboratory environment.

IIC	Flooring	Sub-floor
60 (Field IIC)	3/8" Engineered Wood over UltraLayer	8" concrete (no ceiling assembly)
60 (Field IIC)	Ceramic Tile, thin-set and grout over UltraLayer	8" concrete (no ceiling assembly)
52	Ceramic Tile, thin-set and grout over UltraLayer	Wood frame and gypcrete

**Sound Transmission Loss.** The sound-insulating property of a partition element is expressed in terms of the sound transmission loss.

STC	Flooring	Sub-floor
53	Ceramic Tile, thin-set and grout over UltraLayer	Wood frame and gypcrete

### Packaging

UltraLayer is available in 3' x 33.4' (100 sq ft) do-it-yourself size rolls and 6' x 60' (360 sq ft) contractor size rolls.

