

# 210™

# XL Brands®

**CMP** FORMULATED TECHNOLOGY



## PREMIUM CEMENT-BASED SELF-LEVELING UNDERLAYMENT & TOPPING

**210™** is a premium, calcium aluminate-based, interior, self-leveling underlayment that can be used to create a smooth, flat or level surface prior to the installation of floor coverings. Its long working time, low shrinkage and superior leveling properties make it the ideal product for demanding applications on, above, or below grade. Sealed with a suitable coating, **210™** is also the perfect decorative topping when a natural concrete look is desired. Topical stains, dyes and surface treatments further expand the decorative possibilities.

### KEY FEATURES

- Ideal for barrel-mixing or pumping applications
- Can be used as an underlayment or decorative topping
- Maintains healing properties for up to 20 minutes

### PRODUCT FEATURES

- Can be installed from 1/8" - 2" (.3 to 5.1 cm) neat and to 5" (12.7 cm) properly extended
- Fast return to service - walkable in just 1 hour
- Accepts tile and stone floor coverings in as little as 4 hours
- Accepts hardwood and resilient floor coverings, and crack isolation membranes in as little as 12 hours
- Can be left open to normal construction traffic
- Contributes points to LEED® certified projects
- Can be installed over green concrete for early construction phase applications
- Can be featheredged to meet existing elevations

### SUBSTRATE PREPARATION, MIXING AND PRIMING BY SUBSTRATE

**GENERAL NOTE:** 210™ is not a vapor barrier, but is insensitive to moisture from unabsorbed water of convenience in cured concrete. Moisture testing should be completed using test methods ASTM F1869 (for MVER) and ASTM F2170 (for RH). If levels exceed the maximum allowed by the coating, adhesive or flooring manufacturer's product that will be installed, a LockDown™ application may be required.

All surfaces must be clean, sound, dry, above 50°F (10°C) and free of oil, gypsum compounds, wax, grease, sealers and curing compounds, urethane, paint, asphalt, loose surface material or any contaminant that will act as a bond breaker. Never use acid or mastic removers on any surface to which an XL Brands product will be applied. Substrate must have a minimum direct tensile bond test reading of at least 72 psi (per ASTM C1583). If sealers and curing compounds are present, they must be removed by mechanical means prior to application.

### CONCRETE: (ROUGH, OPEN AND POROUS)

Preparation: Weak or contaminated surfaces must be cleaned down to solid, sound concrete by mechanical means such as chipping, shot-blasting, grinding or scarifying.

Priming: Apply one coat of AS-100™ diluted 50/50 (1 part water: 1 part AS-100™) using a split-tip broom. Pour out and work into surface, leave no puddles or bare spots. Apply 210™ once AS-100™ is dry (minimum 1 hour) and up to 24 hours. If primer has dried longer than 24 hours, a second coat of AS-100™ may be required.

Thickness: 1/8" (3.2 mm) over the highest point. 1/4" up to 2" (.6 to 5.1 cm) neat, 5" (12.7 cm) extended.

### NON-POROUS: (BURNISHED CONCRETE, EPOXY, TERRAZZO, CERAMIC AND QUARRY TILE)

Preparation: Mechanically abrade substrate to a dull finish by shot-blasting or grinding. Vacuum or mop to remove dust.

Priming: Apply one thin coat of AS-100™ (undiluted) using a 1/4" nap roller. Apply 210™ once AS-100™ is dry (minimum 1 hour) and up to 24 hours. If AS-100™ has dried longer than 24 hours, a second coat of AS-100™ may be required.

Thickness: 1/8" (3.2 mm) over the highest point. 1/4" up to 2" (.6 to 5.1 cm) neat, 5" (12.7 cm) extended.

### WOOD: (REQUIRES MEDIMAT™ OR LATH INSTALLATION)

**NOTE:** Wood must be a minimum 3/4" (1.9 cm), L/360, untreated, APA-Rated, Type-1, exterior-grade, plywood, OSB or equal. The subfloor must be free of deflection (minimum L/360), considering both live and dead loads. Use an approved anti-fracture membrane over 210™ where ceramic tile or stone are being installed. Preparation: Prepare by sanding down to clean, bare wood. Secure loose boards with deck screws and fill open seams with PrepStar™. Replace any weak or water damaged wood. Priming: Apply one thin coat of AS-100™ (undiluted) using a 3/8" nap roller. Apply lath and 210™ once AS-100™ is dry (minimum 2 hours) and up to 24 hours. If AS-100™ has dried longer than 24 hours, a second coat of AS-100™ may be required.

Thickness: 1/4" to 2" (.6 to 5.1 cm), and up to 1" (2.5 cm) per layer of MediMat™.

**ADHESIVE RESIDUE:** (THIN, TRANSLUCENT, NON-WATER-SOLUBLE, FREE OF TACK AND WELL BONDED)

Preparation: 210™ can be installed over thin (translucent) sound, non-water-soluble adhesive residues that are free of tack and well bonded to the substrate. The adhesive cutback needs to be prepared using the wet scrape method as outlined in the Resilient Floor Covering Institute booklet "Recommended Work Practices for the Removal of Resilient Floor Coverings". Remove all patching materials below the adhesive and avoid applications where heat or excessive moisture will soften or degrade the adhesive.

**NOTE:** If unsure of the suitability or deflection or heavy loads are expected, use application listed below for very distressed subfloors.

Priming: Apply one thin coat of AS-100™ (undiluted) using a 3/8" nap roller. Apply 210™ once AS-100™ is dry (minimum 2 hours and up to 24 hours). If AS-100™ has dried longer than 24 hours, a second coat of AS-100™ may be required.

Thickness: 1/8" (3.2 mm) over the highest point. 1/4" up to 2" (.6 to 5.1 cm) neat, 5" (12.7 cm) extended.

**VERY DISTRESSED SUBFLOORS:** (REQUIRES MEDIMAT™ INSTALLATION); HEAVY MASTIC, THICK CUTBACK, MUD BEDS, LIGHTWEIGHT CONCRETE, OVERWATERED CONCRETE)

Preparation: Remove all loose debris from subfloor. Sweep and vacuum substrate thoroughly.

Priming: Apply one coat of AS-100™ diluted 50/50 (1 part water: 1 part AS-100™) using a split-tip broom. Pour out and work into surface, leave no puddles or bare spots. Apply MediMat™ and 210™ once AS-100™ is dry (minimum 2 hours and up to 24 hours). If primer has dried longer than 24 hours, a second coat of AS-100™ may be required.

Thickness: 1/8" (3.2 mm) over the highest point. 1/4" up to 2" (.6 to 5.1 cm) neat, 5" (12.7 cm) extended.

**GYP SUM SUBSTRATES – GYPCRETE:** (REQUIRES MEDIMAT™ INSTALLATION)

Preparation: Remove all loose debris from subfloor. Sweep and vacuum.

Priming: (Requires two coats) The first coat should be diluted and applied at 1 part AS-100™ : 3 parts water using a split-tip broom. Pour out and work into surface, leave no puddles or bare spots. After initial coat is dry (minimum 1 hour), apply the second coat of AS-100™ diluted 50/50 (1 part water : 1 part AS-100™) using a split-tip broom. Pour out and work into surface, leave no puddles or bare spots. Install MediMat™ as per TDS once AS-100™ is completely dry (minimum 2 hours and up to 24 hours). If primer has dried longer than 24 hours, an additional coat of AS-100™ may be required.

Thickness: 1/4" (6.4 mm) over the highest point and up to 1" (2.5 cm) per layer of MediMat™.

## MIXING

Mix 2-bag batches of 210™. For each bag add a maximum 5.5 quarts (5.2 L) of clean cold water into a mixing drum. Then, add bags of 210™ while mixing at full speed with a mixing wand attached to a heavy duty 1/2" drill (min. 650 rpm). Mix for 2 minutes or until lump-free. Add no additional water and keep the mixing wand immersed in the material to avoid entraining excess air.

## PHYSICAL PROPERTIES

<b>Packaging</b>	50 lb. bag, 48 bags per pallet
<b>Color</b>	Grey
<b>Shelf Life</b>	12 months
<b>Water Requirements</b>	5.5 quarts (5.2 L) per 50 lb. bag
<b>Required Application Tools</b>	Mixing Drum
	Mixing Paddle
	Gauge Rake
	Smoothing Paddle
	Measuring pail
	Split-tip broom
	3/8" Nap Roller; 1/4" Nap Roller for non-porous substrates
<b>Approx. Coverage: 50 lb. Bag</b>	1/4" (6.4 mm) covers 25 ft <sup>2</sup>
	1/2" (12.7 mm) covers 12.5 ft <sup>2</sup>
	1/4" - 2" (.6 to 5.1 cm) neat
<b>Installation Thickness</b>	5" (12.7 cm) extended with stone
<b>Installed Weight (Per Sq. Ft.)</b>	2.2 lb. @ 1/4" (6.4 mm)
<b>Application Temperature Range</b>	50°F to 95°F (10°C to 35°C)
<b>Set: ASTM C191 (70°F [21°C] @ 50% RH)</b>	Flow Time: 20 Minutes
	Final Set: 60 Minutes
<b>Accepts Coverings: (70°F [21°C] @ 50% RH)</b>	Thinset Ceramic Tile: 4 Hours at 1/4" (6.4 mm)
	Water Based Adhesives: 12 Hours at 1/4" (6.4 mm)
	Epoxy/Urethane Adhesives: 16 Hours at 1/4" (6.4 mm)
	Epoxy Coatings < 20 mils: 24 Hours
	Epoxy coatings > 20 Mil: 3-5 Days

**NOTE:** Cooler Temperatures, Inadequate Ventilation And Higher Humidity Can Extend Drying Times.

<b>Compressive Strength: (ASTM C109)</b>	4 Hours	2000 psi	13.8 MPa
	1 Day	4000 psi	27.6 MPa
	28 Days	5500 psi	37.9 MPa
<b>Flexural Strength: (ASTM C348)</b>	28 Days	>1100 psi	7.5 MPa
<b>Tensile Strength: (ASTM C307)</b>	28 Days	>570 psi	4.0 MPa
<b>Bond Strength: (ASTM C1583)</b>	28 Days	>400 psi	2.7 MPa
<b>Pull Bond: (ASTM D4541)</b>	28 Days	>375 psi	2.6 MPa

## COVERAGE CHART (MAY VARY DEPENDING ON SUBSTRATE CONDITIONS)

Square Footage	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"	1-1/2"	2"
100	4	6	8	10	12	14	16	24	32
500	20	30	40	50	60	70	80	120	160
1000	40	60	80	100	120	140	160	240	320
2000	80	120	160	200	240	280	320	480	640
3000	120	180	240	300	360	420	480	720	960
4000	160	240	320	400	480	560	640	960	1280
5000	200	300	400	500	600	700	800	1200	1600
10,000	400	600	800	1000	1200	1400	1600	2400	3200

### INSTALLATION

Barrel Mixing: Pour the blended 210™ on the floor immediately and disperse with a gauge rake followed by finishing with a smoothing paddle. Plastic athletic cleats should be worn when using the smoothing paddle to avoid leaving marks. 210™ will maintain its workability and healing for up to 20 minutes.

Pumping: Deep placements and large projects are more efficiently installed with the use of a pump. Contact XL Brands for instructions, recommended pumping procedures and approved equipment.

**NOTE:** During application, and for first 24 hours, prevent excessive air movement but maintain adequate ventilation and protect material from direct sunlight. These variables can cause uneven curing patterns, a false set, or cracking.

### EXTENSION

Please contact the Technical Department for specific extension procedures.

### IMPORTANT APPLICATION NOTES & LIMITATIONS

It is the responsibility of the contractor to review the complete technical datasheets of XL Brands products referenced above as more detailed information may be required. The information provided above acts only as a general guideline and may vary based on jobsite conditions.

- Expansion or isolation joints and working cracks must be reflected through 210™.
- 210™ is self-curing. No wet curing methods or sealers and curing compounds should be used.
- On new concrete, always test for sealers and curing compounds which inhibit bond. If sealers and curing compounds are present, they must be removed by mechanical means prior to applying 210™.
- Do not use over materials containing asbestos.
- Cooler temperatures, inadequate ventilation and higher humidity can extend drying times. It is the responsibility of the contractor to determine the suitability of this product for the desired application.
- While a 650 rpm drill does work, we do recommend a drill that is 850 rpm. This higher rpm will allow for faster, more uniform mixes

### ELIGIBLE LEED® CREDITS

Regional Materials

Low Emitting Materials

### STORAGE

Shelf life is one year from manufacturing date in unopened, original packaging. Must be stored in a cool, dry location, elevated (off the ground or floor) at temperatures between 40°F and 90°F (5°C and 32°C). Protect from moisture and excessive humidity. Do not expose to direct sunlight during storage.

### VOLATILE ORGANIC COMPOUNDS

0 g/L (as calculated per SCAQMD 1168)

### CLEAN UP

Clean tools with water immediately after use or by mechanical means once dry.

### HEALTH AND SAFETY

Always refer to the Safety Data Sheet (SDS) prior to use for proper handling, clean up and spill containment. SDS may be obtained by calling 706-508-5907.

### FOR PROFESSIONAL USE ONLY

### NOT LABELED FOR CONSUMER USE

### KEEP OUT OF REACH OF CHILDREN

## LIMITED WARRANTY

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