

### Cementitious Underlayment

**The Ultimate in poured gypsum floor underlayment products.**

- Fast setting, quick application, light trade traffic within hours
- Industry’s most workable, versatile, durable and highest compressive strength floor underlayment system
- Ideal for multi-family wood frame and concrete construction
- UL Designs for 1 and 2-hour fire rated assemblies
- Smooth, dense surface
- Excellent for sound attenuation between floors and units
- Installed by experienced licensed contractors

**System Description**

AccuCrete® Floor Underlayment Systems are fast applied, quick-setting gypsum cements formulated and manufactured by Allied Custom Gypsum Plasterworks™ LLC. Designed for a wide variety of applications including wood frame multi-family and light commercial construction, as well as poured in place and precast concrete construction in commercial buildings. These high strength underlayments can be poured after drywall is installed or when needed prior to drywall installation (consult your licensed AccuCrete® contractor). AccuCrete® is formulated to provide compressive strengths from 1,400 – 3,500 PSI, depending upon the mix design. Consult your local AccuCrete® contractor on how to best achieve the compressive strength required for your project.

### Product Description

AccuCrete® Floor Underlayment Systems are batch mixed on the jobsite with sand and water providing a monolithic, smooth, lightweight floor. At a depth of ¾” a typical gypsum underlayment weighs 7.2 pounds per square foot and has a density of approximately 115 pounds per cubic foot.

### System Benefits

AccuCrete® Floor Underlayment Systems provide a cost effective underlayment for residential, multi-family, and commercial, whether new or renovation type construction. Typical applications are designed to provide a 1 or 2-hour fire rated assembly and significantly improve sound ratings. Enhanced STC and IIC ratings can be achieved when AccuCrete® used in conjunction with AccuQuiet® Sound Control Systems.

### Physical Properties

AccuCrete®	
Color	Gray Powder
Flow Properties	Medium Flow w/ Self-Leveling Properties
Water Per Bag	4.5 to 6.0 US Gal. per 80 lb. bag
Sand Per Bag	1.0 to 2.1 ft³ of washed mason or concrete sands meeting Acculevel / Accucrete Min. Gradation Criteria
Compressive Strength	ASTM C472 1400 - 3500 PSI Depending on mix design, sand gradation and water content
Dry Density	110 - 120 lb. / ft³
Recommended Thickness	3/8 in. to 3 in. in a single lift
Surface Burning Characteristics	ASTM E84 - Flame spread: 0, Fuel Contribution: 0, Smoke Density: 0

Fire testing of construction products and materials ASTM E119: Pass



### Limitations

- No single application of AccuCrete® Floor Underlayment should exceed 3” in depth. Consult your AccuCrete® contractors on how to achieve depths greater than 3”.
- Any material poured above a crawl space must be protected by a vapor barrier.
- After installation of the AccuCrete® Floor Underlayment and prior to the resumption of construction, place temporary wood planking over underlayment where heavy wheeled or concentrated loads will occur.
- AccuCrete® Floor Underlayment Systems are not designed to be installed on or below grade, except over well-drained structural substrates.
- The structural floor should be designed to withstand designed loads with a minimum deflection criteria of L/360.
- Unless otherwise stated, AccuCrete® Floor Underlayment Systems should not be used as a wearing surface.
- Unless otherwise stated, AccuCrete® Floor Underlayment Systems should not be used for exterior applications or where they will come in prolonged contact with water.
- AccuCrete® Floor Underlayment Systems are only one component of an effective floor-ceiling fire rated and sound rated assembly. Care must be taken in the installation of all construction components to assure the ultimate in design performance.

### Installation

The building must be fully enclosed, and a minimum temperature of 50°F must be maintained during the installation and for a period of five to seven days after the installation of the AccuCrete® Floor Underlayment System. The subfloor must be fine broom cleaned and free of all contaminants. Prior to pouring the AccuCrete® Floor Underlayment, an AccuCrete® Priming System must be used. Adequate ventilation must be provided for a period of five to seven days after installation of the underlayment to ensure drying of the underlayment. For thicker applications, a longer drying time may be necessary. The structural subfloor should be adequate to withstand designed loads with a minimum deflection criteria of L/360. Installations over concrete slabs require the concrete to be properly cured (typically 28 days) prior to the installation of the AccuCrete® Floor Underlayment. For any glue down floor covering, including vinyl or resilient flooring, apply an approved AccuCrete® surface sealer prior to the installation of the floor goods.

### Specifications Section 035413

#### Note to Architect

The following are specifications for AccuCrete® Floor Underlayment Systems covering a typical installation. For special conditions and unique applications please consult with your local AccuCrete® representative.

<b>Part 1: General</b>	<b>1.1 Scope</b>	Specify to meet project requirements.
	<b>1.2 Qualifications</b>	All materials, unless otherwise indicated, shall be manufactured by Allied Custom Gypsum Plasterworks® LLC and shall be installed in accordance with its current printed procedures by a licensed AccuCrete® contractor.
	<b>1.3 Delivery / Storage of Materials</b>	All materials shall be delivered in their original unopened packages and stored in an enclosed shelter providing protection from damage and exposure to the elements. Damaged or deteriorated materials shall be removed from the project.
	<b>1.4 Building Conditions</b>	The building shall be enclosed and maintained at a temperature above 50°F (10°C) with adequate ventilation before, during and after the installation of the AccuCrete® Floor Underlayment. Mechanical ventilation should be used in areas with poor ventilation.
<b>Part 2: Materials</b>	<b>2.1 Products</b>	<p><b>A. Gypsum Cement:</b> AccuCrete® Brand Floor Underlayment. Minimum compressive strength: _____ PSI</p> <p><b>B. Primer:</b> Use an approved AccuCrete® Primer.</p> <p><b>C. Sand:</b> Clean, washed sand as per specifications in the AccuCrete® Installation Manual.</p> <p><b>D. Water:</b> Potable water, free of contaminants.</p> <p><b>E. Sealer:</b> Use an approved AccuCrete® surface sealer over newly poured gypsum underlayment.</p>
	<b>2.2 Mixing</b>	For each 80 lb. bag of AccuCrete® Floor Underlayment add up to a maximum of 2.1 cubic feet of sand, depending upon the compressive strength specified.
<b>Part 3: Execution</b>	<b>3.1 Preparation</b>	Subfloor should be structurally sound. Subfloor must be clean and free of all mud, oil, grease and any other contaminants prior to pouring the underlayment. Fill any cracks or voids in substrate to prevent material leakage.
	<b>3.2 Application of Gypsum Underlayment</b>	<p><b>A.</b> Prior to the application of the AccuCrete® Floor Underlayment System, the building envelope must be enclosed (all windows, doors, roofing and other openings). AccuCrete® Floor Underlayment Systems can be poured prior to or after the installation of drywall. Please consult with your AccuCrete® contractor on the appropriate mix design for application prior to the installation of drywall.</p> <p><b>B.</b> Prime all subfloors prior to the installation of the AccuCrete® Floor Underlayment System. For concrete substrates use AccuCrete® Acrylic Primer / Sealer, and for wood substrates use AccuCrete® Primer in powder or liquid form.</p>



**ALLIED CUSTOM GYPSUM**  
**Submittal Sheet**

**AccuCrete®**  
**Floor Underlayment**

**Part 3:**  
**Execution**  
**Continues**

**3.2**  
**Application**  
**of Gypsum**  
**Underlayment**  
**...Continued**

- C.** Pour the AccuCrete® Floor Underlayment to a minimum thickness of 3/8" over a concrete or precast substrate and a minimum of 3/4" over a wood substrate, while spreading and finishing to a smooth surface. Under the appropriate conditions AccuCrete® Floor Underlayment can be featheredged over a concrete substrate. Excluding authorized joints, spread product in a continuous, monolithic application taking caution to not pour any wet slurry against any that has already achieved an initial set.
- D.** General contractor shall provide continuous ventilation and adequate heat as indicated in section 1.4 above in order to rapidly remove excess moisture from the area of the installation until such time as the underlayment is dry.

**3.3**  
**Preparation**  
**for Installation**  
**of Glue Down**  
**Floor Coverings**

After the underlayment has fully dried, spray or roll on an approved AccuCrete surface sealer prior to the installation of a glue down floor covering.

If the surface of the AccuCrete® Floor Underlayment has been damaged, it is recommended that the area to be repaired is sealed with an approved AccuCrete® surface sealer. After the repair material has dried, spray or roll on an approved AccuCrete® surface sealer prior to the installation of a glue down floor covering.

In applications where the floor goods manufacturer requires a special adhesive, sealer or installation system, the floor goods manufacturers' recommendations will supersede all others.

**UL Designs**

G577	G578	G579	G580	G581	G582	J917	J919	J920
J924	J927	J931	J957	J958	J966	J991	J994	K906
L004	L005	L006	L201	L202	L206	L208	L209	L210
L211	L212	L501	L502	L503	L504	L505	L506	L507
L508	L509	L510	L511	L512	L513	L514	L515	L516
L517	L518	L519	L520	L522	L523	L524	L525	L526
L527	L528	L529	L530	L533	L534	L535	L536	L537
L538	L539	L540	L541	L542	L543	L546	L547	L549
L550	L551	L552	L555	L556	L558	L560	L562	L563
L570	L573	L574	L576	L583	L585	L590	L592	L593
L599	M502	M503	M504	M506	M508			

More designs may be obtained. Contact us at [info@accucrete.com](mailto:info@accucrete.com)

**Submittal**  
**Approvals**

Project Name: \_\_\_\_\_

Architect: \_\_\_\_\_

Contractor: \_\_\_\_\_

Date: \_\_\_\_\_

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