

FusionTEC™ Integrated Floor Systems

Specifications:

Section 03540

Gypsum Underlayments

Cementitious Toppings

Note To Architect:

The following are specifications for FusionTEC™ Floor Systems for a variety of applications. Delete the sections not relevant to the scope of the project. AccuQuiet® products are only required for acoustical treatment of floor-ceiling assemblies. Consult an AccuCrete® representative for special conditions, unique applications or technical details.

Part 1: General

1.1 Scope: Specify to meet project requirements.

1.2 Qualifications: All materials, unless otherwise stated, shall be manufactured or distributed by Allied Custom Gypsum Plasterworks, LLC and/or MAPEI Corporation and shall be installed in strict accordance with the current installation instructions.

1.3 Delivery/Storage of Materials: 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 and disposed in accordance with local regulations. Protect polymers and liquid products from freezing.

1.4 Building Conditions: The building shall be enclosed and maintained at a temperature of 50° F (10° C) with adequate ventilation before, during and after the installation of the AccuCrete®. Mechanical ventilation should be used in areas with poor ventilation. Prior to proceeding with installation of UltraPlan® M20 Plus, the building temperature should be maintained at the above stated minimum, but free from drafts and exterior ventilation to prevent uneven curing of the topping.

Part 2: Products

2.1 Manufacturers

A. Acceptable Manufacturer: MAPEI Corp. U.S.A., located at: 1144 Newport Center Dr., Deerfield Beach, FL 33442; Phone: (800)-42-MAPEI; e-mail: bburton@mapei.com; web: www.mapei.com

B: Acceptable Manufacturer: Allied Custom Gypsum Plasterworks, LLC., Located at: 708 24th Ave NW, Norman, OK 73069 Phone: 800-624-5963; e-mail: info@accucrete.com; web: www.accucrete.com

C: Substitutions: Not Permitted.

2.2 Applications

- a. leveling of old/new concrete with cement wear surface
- b. pourable thermal underlayment for radiant heat floor systems with cement wear surface
- c. acoustical treatment of subfloors with cement wear surface
- d. fire-rated underlayments with cement wear surface
- e. acoustical treatment of fire-rated floor-ceiling assembly with cement wear surface.

2.3 Products

- a. Gypsum Cement: AccuCrete® Brand Floor Underlayment or AccuRadiant® Pourable Thermal Underlayment, 3,000 p.s.i minimum compressive strength.
- b. Primer: Use an approved AccuCrete® Primer
- c. Sand: Clean, washed mason sand as per specifications in the AccuCrete® Application Manual.
- d. Water: Potable water, free from contaminants.
- e. Epoxy Primer: FusionTEC™ Floor Priming System
- f. Cementitious Topping: Ultraplan® M20 Plus
- g. (Optional) AccuQuiet® Sound Mat

Part 3: Execution

3.1 Preparation

- a. Structurally sound wood subfloors with minimum deflection criteria of L/360, free of dirt, grease or other contaminants. New plywood or oriented strand board panels.
- b. Where moisture conditions may exist, substrates must be checked for moisture vapor emissions, not exceeding 5 lb/1000sf/24hours when tested by the calcium chloride method (ASTM 1869)
- c. Unbonded systems require 1.5” minimum thickness of AccuCrete. Unbonded system less than 1.5” require reinforcing lath.
- d. Old wood substrates must be protected by a waterproof membrane, and are subject to the thickness and reinforcement requirements in 3.1.c
- e. When used with AccuQuiet® RSM Sound Control Mats, minimum AccuCrete® thickness of 1.5” is required.
- f. When applied over wood substrates, a minimum AccuCrete® thickness of 1” is required.
- g. Concrete substrates must be structurally sound and free of dirt, grease or other contaminants.
- h. Prepare surfaces using recommended methods by manufacturers.
- i. Building must be enclosed and maintained at a minimum temperature of 50° F before during and after the installation.

3.2 Installation

- a. Install all products in accordance with current written installation instruction issued by the manufacturer.
- b. AccuCrete® must be allowed to thoroughly dry before applying FusionTEC™ Priming System or Ultraplan® M20 Plus. Typical drying times are 10 days for

1” and 14-20 days for 1.5” thicknesses, depending on ventilation, humidity and temperature. Consult an AccuCrete® representative for recommendations on determining if the product is dry.

3.3 Scheduling

- a. AccuCrete® may be installed before or after drywall, and early enough to allow drying.
- b. FusionTEC™ Priming System and Ultraplan® M20 may be installed after the AccuCrete® is dry.

3.4 Protection

- a. The area must be protected from direct sunlight and wind during installation of FusionTEC™ Priming System and Ultraplan® M20 Plus to prevent abnormalities in surface appearance.
- b. Protect installed Ultraplan® M20 Plus from trade traffic until completion of project.