



Designation: F2419 – 05

Standard Practice for Installation of Thick Poured Gypsum Concrete Underlayments and Preparation of the Surface to Receive Resilient Flooring¹

This standard is issued under the fixed designation F2419; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This practice covers the installation and preparation of the thick poured gypsum concrete underlayments over wood structural panel subfloors in commercial structures or over concrete floors in commercial structures and the preparation of the thick poured gypsum concrete underlayment surface prior to the installation of resilient flooring in commercial buildings.

1.2 This practice covers the factors that are required to be controlled while installing thick poured gypsum concrete underlayment as a base for resilient flooring.

1.3 This practice does not cover the structural adequacy of the wood structural panel subfloor or concrete subfloor. The structural integrity of assemblies is governed by local building codes.

1.4 This practice does not supersede in any manner the thick poured gypsum concrete underlayment manufacturers, adhesive manufacturer's or resilient flooring manufacturer's written instructions. Consult the individual manufacturer for specific recommendations.

1.5 Thick poured gypsum concrete underlayments are not suitable for use on concrete slabs on ground due to potential moisture problems arising from moisture intrusion, unless an adequate vapor retarder or vapor barrier is present directly beneath the concrete subfloor.

1.6 The values stated in inch-pound units are to be regarded as standard. The values stated in parentheses are approximate mathematical conversions to SI units, which are provided for information only.

1.7 *This practice may involve hazardous materials, operations, and equipment. This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

¹ This practice is under the jurisdiction of ASTM Committee F06 on Resilient Floor Coverings and is the direct responsibility of Subcommittee F06.40 on Practices.

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2. Referenced Documents

2.1 ASTM Standards:²

C472 Test Methods for Physical Testing of Gypsum, Gypsum Plasters and Gypsum Concrete

D4263 Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method

F141 Terminology Relating to Resilient Floor Coverings

F1482 Practice for Installation and Preparation of Panel Type Underlayments to Receive Resilient Flooring

3. Terminology

3.1 *Definitions*—Definitions used in this practice shall be in accordance with Terminology F141.

3.2 Definitions of Terms Specific to This Standard:

3.2.1 *fully adhered flooring, n*—resilient flooring which has adhesive under the entire product, bonding it to the underlayment surface. **F1482**

3.2.2 *non-fully adhered flooring, n*—resilient flooring that may be loose laid, in which no adhesive is utilized, or partially bonded to the surface of the underlayment, typically at seams and the surrounding perimeter of the product. **F1482**

3.2.3 *subfloor, n*—that wood or concrete structural layer intended to provide support for design loads which may receive resilient floor coverings directly if the surface is appropriate or indirectly via an underlayment if its surface is not suitable or if underlayment is required by appropriate code authorities.

3.2.4 *gypsum concrete underlayment, n*—that layer of material, with binder content composed primarily of gypsum cement and Portland cement that is mixed with sand and water, then pumped and poured in a liquid state to be installed on or over a subfloor to provide a monolithic surface suitable to receive resilient floor coverings.

3.2.5 *thick poured gypsum concrete underlayment, n*—products which are installed in a liquid state over a structurally sound concrete or precast subfloor at a minimum of

² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.