



Designation: C1881 – 20

Standard Guide for Closed-Loop Recycling of Scrap Gypsum Panel Products¹

This standard is issued under the fixed designation C1881; 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 guide provides guidance for the handling, physical condition and compositional considerations for selecting scrap gypsum panel products and the recycled gypsum derived from that scrap for recycling into new gypsum panel products.

1.2 This guide applies to material derived from gypsum panel products manufactured in accordance with Specifications C1177/C1177M, C1178/C1178M, C1278/C1278M, C1396/C1396M, and C1658/C1658M.

1.3 This guide does not dictate the minimum amount of recycled gypsum a gypsum panel product manufacturer is required for use in producing new gypsum panel products.

1.4 This guide does not address recycling of gypsum panel products from demolition or renovation projects.

NOTE 1—While these sources are outside the scope, they are not precluded from being recycled. This guide may be used as a basis for determination of basic criteria for any stream, as agreed upon between the contractor, recycler, and the gypsum panel product manufacturer.

1.5 This guide does not address the suitability of recycled gypsum for other uses such as an agricultural amendment, for use in gypsum-based joint compounds or gypsum plaster, as an admixture or other uses of gypsum aside from gypsum panel products.

1.6 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.7 *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, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.8 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recom-*

mendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.

2. Referenced Documents

2.1 *ASTM Standards:*²

C11 Terminology Relating to Gypsum and Related Building Materials and Systems

C22/C22M Specification for Gypsum

C1177/C1177M Specification for Glass Mat Gypsum Substrate for Use as Sheathing

C1178/C1178M Specification for Coated Glass Mat Water-Resistant Gypsum Backing Panel

C1278/C1278M Specification for Fiber-Reinforced Gypsum Panel

C1396/C1396M Specification for Gypsum Board

C1658/C1658M Specification for Glass Mat Gypsum Panels

E2114 Terminology for Sustainability Relative to the Performance of Buildings

2.2 *EPA Standard:*³

EPA/600/R-93/116 Method of Determination of Asbestos in Bulk Building Materials

3. Terminology

3.1 *Definitions:*

3.1.1 For definitions relating to gypsum and related building materials and systems, see Terminology C11.

3.1.2 For terms and definitions relating to sustainability and sustainable development relative to the performance of buildings, see Terminology E2114.

3.2 *Definitions of Terms Specific to This Standard:*

3.2.1 *closed loop system, n*—system in which materials are recovered or reused by a company or a cooperating group of companies.

3.2.2 *recycled gypsum, n*—the gypsum generated by processing scrap gypsum panel products.

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.

³ Available from United States Environmental Protection Agency (EPA), William Jefferson Clinton Bldg., 1200 Pennsylvania Ave., NW, Washington, DC 20460, <http://www.epa.gov>.

¹ This guide is under the jurisdiction of ASTM Committee C11 on Gypsum and Related Building Materials and Systems and is the direct responsibility of Subcommittee C11.01 on Specifications and Test Methods for Gypsum Products.

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