



Designation: D7865 – 13 (Reapproved 2021)

Standard Guide for Identification, Packaging, Handling, Storage, and Deployment of Fabricated Geomembrane Panels¹

This standard is issued under the fixed designation D7865; 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 covers guidelines for the identification, packaging, handling, storage, and deployment of fabricated geomembrane panels. This guide is not to be considered as all encompassing since each project involving fabricated panels presents its own challenges and special conditions.

1.2 This guide is intended to aid fabricators, suppliers, purchasers, and users of fabricated panels in the identification, packaging, handling, storage, and deployment of fabricated geomembrane panels.

1.3 This guide is written for factory-fabricated geomembrane panels only. Other geosynthetics use Guide [D4873/D4873M](#) as their guide.

1.4 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.

1.5 *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.*

1.6 *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 Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*²

[D4439 Terminology for Geosynthetics](#)

[D4873/D4873M Guide for Identification, Storage, and Handling of Geosynthetic Rolls and Samples](#)

3. Terminology

3.1 Definitions:

3.1.1 Some terms applying to this guide appear in Terminology [D4439](#).

3.1.2 *accordion-folded and rolled panel, n*—refers to an accordion-folded fabricated panel that is first accordion-folded to the desired width and then rolled to form a finished, rolled bundle for transport.

3.1.3 *accordion-folded panel, n*—refers to a fabricated panel where the material is folded back and forth in a “Z” formation in the same principal direction as the seams. This folding takes a wider panel of material and makes it into a narrow stack. For example, a 30 m by 30 m prefabricated panel could be accordion-folded into a 3 m wide stack of material ten layers deep and 30 m long.

3.1.4 *double accordion-folded panel, n*—refers to an accordion-folded fabricated panel that is accordion-folded to the desired width and then accordion-folded in the length direction onto a pallet (or into a container). Double accordion-folded panels typically appear as a “cube” of material with square corners.

3.1.5 *fabricated panel, n*—refers to a geomembrane panel seamed at a fabrication facility into a larger panel than the original roll stock material. A fabricated panel may be a larger rectangular panel of geomembrane or may be a specific fabricated shape or may contain special job-specific detail work.

3.1.6 *rolled panel, n*—refers to a fabricated panel that is rolled from one end or in some cases from both ends to the middle.

3.2 Definitions of Terms Specific to This Standard:

3.2.1 *fabricator, n*—the person or organization by whom the geomembrane material is fabricated into a fabricated panel.

4. Significance and Use

4.1 For a fabricated panel to be properly used, it must be adequately identified and packaged. It must be handled and stored in such a way that its physical property values are not

¹ This guide is under the jurisdiction of ASTM Committee [D35](#) on Geosynthetics and is the direct responsibility of Subcommittee [D35.10](#) on Geomembranes.

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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.