



Designation: D6039/D6039M – 18

Standard Specification for Open and Covered Wood Crates¹

This standard is issued under the fixed designation D6039/D6039M; 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.

This standard has been approved for use by agencies of the U.S. Department of Defense.

1. Scope

1.1 This specification covers five types and two styles of open and one type, and one style of covered wood crates designed for net loads not exceeding 4000 lb [1814 kg]. Open crates are suitable for shipment of items, which are not readily susceptible to damage from outside forces, and which require only limited protection against the elements.

1.2 If environmental protection is necessary, use of a shroud or a covered crate should be considered. With the exception of Type III, Style B crates, the crates included in this specification are for use in domestic and overseas shipment of net loads not over 4000 lb [1814 kg]. Use shall be confined to items falling within the dimensions and weight limitations of the types and grades specified in [Table 1](#).

1.3 In general, Style A crates have heavier components and are to withstand rather severe handling and multiple shipments (heavy-duty), while Style B crates should be confined to handling and shipping that impose only light to moderate hazards on the container (light-duty). Types I, IV, and V crates are general purpose types; Type II crates are designed for items such as ladders, tubing, extrusions, or wallboard which do not require blocking, bracing, or cushioning; and Type III, Style B crates are designed for such self-supporting material as channels, angles, or other structural members where the container serves only as a means for more convenient stacking and handling.

1.4 If the use of other construction methods or techniques is acceptable and permitted (see [5.1.13](#)), the resulting packaging systems shall be of equal or better performance than would result from the use of these specified materials and procedures. The appropriate distribution cycle specified in Practice [D4169](#) can be used to develop comparative procedures and criteria.

1.5 The values stated in either SI units or inch-pound units are to be regarded separately as standard. The values stated in each system may not be exact equivalents; therefore, each

system shall be used independently of the other. Combining values from the two systems may result in non-conformance with the standard.

1.6 *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.*

1.7 *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

[D996](#) Terminology of Packaging and Distribution Environments

[D1990](#) Practice for Establishing Allowable Properties for Visually-Graded Dimension Lumber from In-Grade Tests of Full-Size Specimens

[D3953](#) Specification for Strapping, Flat Steel and Seals

[D4169](#) Practice for Performance Testing of Shipping Containers and Systems

[D4675](#) Guide for Selection and Use of Flat Strapping Materials¹

[D6199](#) Practice for Quality of Wood Members of Containers and Pallets

[D6253](#) Practice for Treatment and/or Marking of Wood Packaging Materials

[F1667](#) Specification for Driven Fasteners: Nails, Spikes, and Staples

IEEE/ASTM SI 10 Standard for Use of International System of Units (SI): The Modern Metric System

¹ This specification is under the jurisdiction of ASTM Committee [D10](#) on Packaging and is the direct responsibility of Subcommittee [D10.12](#) on Shipping Containers, Crates, Pallets, Skids and Related Structures.

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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.