

(0.063-inch) thickness (such as steel strapping or paperboard) can be passed between the bottom of the IBC and the platform. Other methods at least equally effective may be used (see § 178.801(i)).

(c) *Criteria for passing the test.* An IBC passes the vibration test if there is no rupture or leakage.

[Amdt. 178-103, 59 FR 38074, July 26, 1994, as amended by Amdt. 178-108, 60 FR 40038, Aug. 4, 1995; Amdt. 178-110, 60 FR 49111, Sept. 21, 1995; 66 FR 45386, Aug. 28, 2001; 75 FR 5397, Feb. 2, 2010]

Subpart P—Large Packagings Standards

SOURCE: 75 FR 5397, Feb. 2, 2010, unless otherwise noted.

§ 178.900 Purpose and scope.

(a) This subpart prescribes requirements for Large Packaging intended for the transportation of hazardous materials. Standards for these packagings are based on the UN Recommendations.

(b) Terms used in this subpart are defined in § 171.8 of this subchapter.

§ 178.905 Large Packaging identification codes.

Large packaging code designations consist of: two numerals specified in paragraph (a) of this section; followed by the capital letter(s) specified in paragraph (b) of this section.

(a) Large packaging code number designations are as follows: 50 for rigid Large Packagings; or 51 for flexible Large Packagings.

(b) Large Packagings code letter designations are as follows:

- (1) "A" means steel (all types and surface treatments).
- (2) "B" means aluminum.
- (3) "C" means natural wood.
- (4) "D" means plywood.
- (5) "F" means reconstituted wood.
- (6) "G" means fiberboard.
- (7) "H" means plastic.
- (8) "M" means paper, multiwall.
- (9) "N" means metal (other than steel or aluminum).

§ 178.910 Marking of Large Packagings.

(a) The manufacturer must:

(1) Mark every Large Packaging in a durable and clearly visible manner. The marking may be applied in a single line or in multiple lines provided the correct sequence is followed with the information required by this section, in letters, numerals, and symbols of at least 12 mm in height. This minimum marking size requirement applies only to large packages manufactured after January 1, 2014. The following information is required in the sequence presented:

(i) Except as provided in § 178.503(e)(1)(ii), the United Nations packaging symbol as illustrated in § 178.503(e)(1)(i). For metal Large Packagings on which the marking is stamped or embossed, the capital letters "UN" may be applied instead of the symbol;

(ii) *The code number designating the Large Packaging design type according to § 178.905.* The letters "T" or "W" may follow the Large Packaging design type identification code on a Large Packaging. Large Salvage Packagings conforming to the requirements of subpart P of this part must be marked with the letter "T". Large Packagings must be marked with the letter "W" when the Large Packaging differs from the requirements in subpart P of this part, or is tested using methods other than those specified in this subpart, and is approved by the Associate Administrator in accordance with the provisions in § 178.955;

(iii) A capital letter identifying the performance standard under which the design type has been successfully tested, as follows:

(A) X—for Large Packagings meeting Packing Groups I, II and III tests;

(B) Y—for Large Packagings meeting Packing Groups II and III tests; and

(C) Z—for Large Packagings meeting Packing Group III test.

(iv) The month (designated numerically) and year (last two digits) of manufacture;

(v) The country authorizing the allocation of the mark. The letters "USA" indicate that the Large Packaging is manufactured and marked in the United States in compliance with the provisions of this subchapter.

(vi) The name and address or symbol of the manufacturer or the approval

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agency certifying compliance with subpart P and subpart Q of this part. Symbols, if used, must be registered with the Associate Administrator.

(vii) The stacking test load in kilograms (kg). For Large Packagings not designed for stacking the figure “0” must be shown.

(viii) The maximum permissible gross mass or for flexible Large Packagings, the maximum net mass, in kg.

(2) The following are examples of symbols and required markings:

(i) For a steel Large Packaging suitable for stacking; stacking load: 2,500 kg; maximum gross mass: 1,000 kg.



50A/X/05 05/USA/M9399/2500/1000

(ii) For a plastic Large Packaging not suitable for stacking; maximum gross mass: 800 kg.



50H/Y/11 04/USA/M9399/0/800

(iii) For a Flexible Large Packaging not suitable for stacking; maximum gross mass: 500 kg.



51H/Z/06 04/USA/+ZT1235/0/500

(iv) For a steel Large Salvage Packaging suitable for stacking; stacking load: 2,500 kg; maximum gross mass: 1,000 kg.



50AT/Y/05 05/USA/M9399/2500/1000

(b) All Large Packagings manufactured, repaired or remanufactured after January 1, 2015 must be marked with

the symbol applicable to a Large Packaging designed for stacking or not designed for stacking, as appropriate. The symbol must be a square with each side being not less than 100 mm (3.9 inches) by 100 mm (3.9 inches) as meas-

ured from the corner printer marks shown on the following figures. Where dimensions are not specified, all features must be in approximate proportion to those shown.



(1) *Transitional exception*—A marking in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue to be applied to all Large Packagings manufactured, repaired or remanufactured between January 1, 2015 and December 31, 2016.

(2) For domestic transportation, a Large Packaging marked prior to January 1, 2017 and in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue in service until the end of its useful life.

[75 FR 5397, Feb. 2, 2010, as amended at 75 FR 60339, Sept. 30, 2010; 78 FR 1097, Jan. 7, 2013; 80 FR 1168, Jan. 8, 2015]

§ 178.915 General Large Packaging standards.

(a) Each Large Packaging must be resistant to, or protected from, deterioration due to exposure to the external environment. Large Packagings intended for solid hazardous materials must be sift-proof and water-resistant.

(b) All service equipment must be positioned or protected to minimize potential loss of contents resulting from damage during Large Packaging handling and transportation.

(c) Each Large Packaging, including attachments and service and structural equipment, must be designed to withstand, without loss of hazardous materials, the internal pressure of the contents and the stresses of normal han-

dling and transport. A Large Packaging intended for stacking must be designed for stacking. Any lifting or securing features of a Large Packaging must be sufficient strength to withstand the normal conditions of handling and transportation without gross distortion or failure and must be positioned so as to cause no undue stress in any part of the Large Packaging.

(d) A Large Packaging consisting of packagings within a framework must be so constructed that the packaging is not damaged by the framework and is retained within the framework at all times.

(e) Large Packaging design types must be constructed in such a way as to be bottom-lifted or top-lifted as specified in §§ 178.970 and 178.975.

[75 FR 5397, Feb. 2, 2010, as amended at 75 FR 60339, Sept. 30, 2010]

§ 178.920 Standards for metal Large Packagings.

(a) The provisions in this section apply to metal Large Packagings intended to contain liquids and solids. Metal Large Packaging types are designated:

- (1) 50A steel
- (2) 50B aluminum
- (3) 50N metal (other than steel or aluminum)

(b) Each Large Packaging must be made of suitable ductile metal materials. Welds must be made so as to