

## § 178.985

in no case may the maximum deflection exceed one inch.

[75 FR 5400, Feb. 2, 2010, as amended at 75 FR 60339, Sept. 30, 2010; 78 FR 1097, Jan. 7, 2013]

### § 178.985 Vibration test.

(a) *General.* All rigid Large Packaging and flexible Large Packaging design types must be capable of withstanding the vibration test.

(b) *Test method.* (1) A sample Large Packaging, selected at random, must be filled and closed as for shipment. Large Packagings intended for liquids may be tested using water as the filling material for the vibration test.

(2) The sample Large Packaging must be placed on a vibrating platform that has a vertical or rotary double-amplitude (peak-to-peak displacement) of one inch. The Large Packaging must be constrained horizontally to prevent it from falling off the platform, but must be left free to move vertically and bounce.

(3) The sample Large Packaging must be placed on a vibrating platform that has a vertical double-amplitude (peak-to-peak displacement) of one inch. The Large Packaging must be constrained horizontally to prevent it from falling off the platform, but must be left free to move vertically and bounce.

(4) The test must be performed for one hour at a frequency that causes the package to be raised from the vibrating platform to such a degree that a piece of material of approximately 1.6-mm (0.063-inch) in thickness (such as steel strapping or paperboard) can be passed between the bottom of the Large Packaging and the platform. Other methods at least equally effective may be used (see § 178.801(i)).

(c) *Criterion for passing the test.* A Large Packaging passes the vibration test if there is no rupture or leakage.

[75 FR 5400, Feb. 2, 2010, as amended at 75 FR 60339, Sept. 30, 2010]

## Subpart R—Flexible Bulk Container Standards

SOURCE: 78 FR 1097, Jan. 7, 2013, unless otherwise noted.

## 49 CFR Ch. I (10–1–14 Edition)

### § 178.1000 Purpose and scope.

(a) This subpart prescribes requirements for Flexible Bulk Containers (FBCs) intended for the transportation of hazardous materials. FBC standards in this subpart are based on the UN Model Regulations.

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

### § 178.1005 Flexible Bulk Container identification code.

The Flexible Bulk Container code designation is BK3.

### § 178.1010 Marking of Flexible Bulk Containers.

(a) The manufacturer must:

(1) Mark every Flexible Bulk Container 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. 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).

(ii) The code number designating the Flexible Bulk Container design type according to § 178.1005. The letter “W” must follow the Flexible Bulk Container design type identification code on a Flexible Bulk Container when the Flexible Bulk Container differs from the requirements in subpart R 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 § 178.1035;

(iii) The capital letter Z identifying that the Flexible Bulk Container meets Packing Group III performance standard under which the design type has been successfully tested.

(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 Flexible Bulk Container 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