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Section 4.45. Dry Measures

A. Application

A.1. General. – This code applies to rigid measures of capacity designed for general and repeated use in the measurement of solids, including the capacities of ½ bu or more.

A.2. Exceptions.

- (a) This code does not apply to "standard containers" used for the measurement of fruits and vegetables and as shipping containers thereof.
- (b) This code does not apply to berry baskets and boxes. (Also see Section 4.46. Code for Berry Baskets and Boxes.)(Added 1976)
- **A.3.** Additional Code Requirements. In addition to the requirements of this code, Dry Measures shall meet the requirements of Section 1.10. General Code.

S. Specifications

- **S.1.** Units. The capacity of a measure shall be 1 bu, a multiple of the bushel, or a binary submultiple of the bushel, and the measure shall not be subdivided or double-ended.
- **S.2. Material.** A dry measure shall be made of any suitable material that will retain its shape during normal usage.
- **S.3. Shape.** A measure, other than a basket, of a capacity of $^{1}/_{2}$ bu or less, shall be cylindrical or conical in shape. The top diameter shall in no case be less than the appropriate minimum diameter shown in Table 1. Minimum Top Diameters for Dry Measure other than Baskets. The bottom of a measure, other than a basket, shall be perpendicular to the vertical axis of the measure and shall be flat, except that a metal bottom may be slightly corrugated. The bottom of a measure shall not be adjustable or movable.

Table 1. Minimum Top Diameters for Dry Measures other than Baskets		
Nominal Capacity	Minimum Top Diameter Inches	
1 pint	4	
1 quart	53/8	
2 quarts	65/8	
¹ / ₂ peck	81/2	
1 peck	107/8	
¹ / ₂ bushel	13³/4	

- **S.3.1.** Conical Dry Measure. If conical, the top diameter shall exceed the bottom diameter by not more than 10 % of the bottom diameter.
- **S.4.** Capacity Point. The capacity of a measure shall be determined by the top edge of the measure.

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S.5. Top Reinforcement. – The top edge of a measure shall be reinforced. On a wooden measure other than a basket, of a capacity of 1 gt or more, this reinforcement shall be in the form of a firmly attached metal band.

- **S.6.** Marking Requirements. A measure shall be conspicuously marked on its side with a statement of its capacity. If the capacity is stated in terms of the pint or quart, the word "Dry" shall be included. The capacity statement shall be in letters of the following dimensions:
 - (a) At least ½ in high and ¼ in wide on a measure of any capacity between ½ pt and 1 pk.
 - (b) At least 1 in high and ½ in wide on a measure of a capacity of ½ bu or more.
 - (c) On a measure of a capacity of ¼ pt or less, the statement shall be as prominent as practicable, considering the size and design of such measure.

N. Notes

N.1. Testing Medium.

- **N.1.1.** Watertight Dry Measures. Water shall be used as the testing medium for watertight dry measures.
- **N.1.2. Non-Watertight Dry Measures.** A dry measure shall be tested either volumetrically using rapeseed as a testing medium or geometrically through inside measurement and calculation. (Amended 1988)

T. Tolerances

T.1. Tolerance Values. – Maintenance tolerances in excess and in deficiency shall be as shown in Table 2. Maintenance Tolerances, in Excess and in Deficiency, for Dry Measure. Acceptance tolerances shall be one-half the maintenance tolerances.

Table 2. Maintenance Tolerances, in Excess and in Deficiency, for Dry Measures			
Nominal Capacity	Tolerance		
	In Excess Cubic Inches	In Deficiency Cubic Inches	
¹ / ₃₂ pint or less	0.1	0.05	
¹ / ₁₆ pint	0.15	0.1	
¹ / ₈ pint	0.25	0.15	
¹ / ₄ pint	0.5	0.3	
¹ / ₂ pint	1.0	0.5	
1 pint	2.0	1.0	
1 quart	3.0	1.5	
2 quarts	5.0	2.5	
½ peck	10.0	5.0	
1 peck	16.0	8.0	

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Table 2. Maintenance Tolerances, in Excess and in Deficiency, for Dry Measures			
Nominal Capacity	Tolerance		
	In Excess Cubic Inches	In Deficiency Cubic Inches	
½ bushel	30.0	15.0	
1 bushel	50.0	25.0	