



Designation: C 475 – 01

Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board¹

This standard is issued under the fixed designation C 475; 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 Department of Defense.

1. Scope

1.1 This specification covers all-purpose, taping and finishing joint compounds, and paper joint tape.

1.2 This specification also covers the minimum requirements for an assembly of taping and all-purpose compound and joint tape.

1.3 The text of this specification references notes and footnotes which provide explanatory material. These notes and footnotes (excluding those in tables and figures) shall not be considered as requirements of the specification.

1.4 The values stated in inch-pound units are to be regarded as the standard.

2. Referenced Documents

2.1 ASTM Standards:

C 11 Terminology Relating to Gypsum and Related Building Materials and Systems²

C 474 Test Methods for Joint Treatment Materials for Gypsum Board Construction²

3. Terminology

3.1 *Definitions*—Definitions shall be in accordance with Terminology C 11.

3.2 Definitions of Terms Specific to This Standard:

3.2.1 *joint-tape, n*—a strip of paper reinforcing material designed to be embedded in the joint compound.

4. Physical Properties

4.1 *General*—The physical properties shall be determined in accordance with Test Methods C 474.

4.2 Joint Compounds.

4.2.1 *Check Cracking*—No cracks in the thinner half of the wedge and no deep fissure cracks in the thicker half of the wedge.

4.2.2 *Putrefaction*—No putrefaction in less than 4 days.

4.2.3 *Shrinkage*—Not more than 35 % by volume.

4.3 Joint Tape:

4.3.1 *Width*—Shall be not less than 1 $\frac{7}{8}$ in. (47.6 mm) nor more than 2 $\frac{1}{4}$ in. (57.2 mm). The width of an individual roll shall vary not more than $\pm\frac{1}{32}$ in. (0.8 mm).

4.3.2 *Thickness*—Shall be not more than 0.012 in. (0.30 mm).

4.3.3 *Tensile Strength*—Shall be not less than 30 lbf/in. (524 N/mm) in the cross direction.

4.3.4 *Dimensional Stability*—Shall expand not more than 0.4 % lengthwise and not more than 2.5 % crosswise.

4.4 Assembly of Taping or All-Purpose Compound and Joint Tape:

4.4.1 *Bond* between the joint tape and the joint compound shall be not less than 90 %.

4.4.2 *Edge Cracking* shall be not more than 10 % along the edges of the tape specimen.

5. Sampling

5.1 *Sampling of Joint Compound*—At least 1 %, but not less than one package or container shall be sampled and shall be so selected as to be representative of the shipment. The material so obtained shall be thoroughly blended and divided. Provide not less than one 6-lb (2.72-kg) sample for the test.

5.2 *Sampling of Joint Tape*—At least one roll for every ten cases or a fraction thereof, but not more than ten rolls per shipment shall constitute a sample.

6. Inspection

6.1 Inspection of the joint compound and joint tape shall be agreed upon between the purchaser and the supplier as part of the purchase agreement.

7. Rejection

7.1 Rejection of joint compound and joint tape that fails to conform to requirements of this specification shall be reported to the producer or supplier promptly and in writing. The notice of rejection shall contain a statement documenting how the joint compound or joint tape has failed to conform to the requirements of this specification.

8. Certification

8.1 When specified in the purchase agreement, a producer's or supplier's report shall be furnished at the time of shipment

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² *Annual Book of ASTM Standards*, Vol 04.01.



certifying that the product is in compliance with this specification.

9. Packaging and Package Marking

9.1 Joint compound and joint tape shall be marked on each item or package with the name, brand or trademark of the manufacturer or seller, size, and volume or net weight of contents.

9.2 Joint compound packaged in 3-½ through 6-½ gal (U.S. liquid) (13 through 25 L) straight-sided, open-head pails not less than 10 in. (250 mm) nor more than 19 in. (480 mm) in overall height and having a full diameter unrestricted opening at the top, shall be labeled with a cautionary label meeting the requirements of 9.2.1-9.2.5.

9.2.1 The cautionary label shall be placed on the side of the container between the upper rim and the container base.

9.2.2 The cautionary label shall be not less than 10 in.² (65 000 mm²) in area with no single dimension less than 1¾ in. (45 mm) and with a perimeter of not less than 12¾ in. (325 mm).

9.2.2.1 Alternatively, two cautionary labels shall be permitted to be used. Each of the two labels shall be not less than 6 in.² (40 000 mm²) in area with no single dimension less than 1¾ in. (45 mm) and with a perimeter of not less than 9 in. (225 mm). At least one of the labels shall be in English and the letter sizes of both labels shall conform to 9.2.4.1 and 9.2.4.3.

9.2.3 The cautionary label shall have a border or another form of contrast which delineates it from any other information on the container.

9.2.4 The cautionary label shall be in a noticeable layout and shall contain a signal word panel, a pictorial and a message as specified in 9.2.4.1-9.2.4.3 and shall be printed in colors that contrast with the background of the label.

9.2.4.1 The signal word panel shall contain the word “WARNING” in upper case letters, preceded by a safety alert symbol consisting of an exclamation mark inside an equilateral triangle with the apex of the triangle oriented upward. The word “WARNING” shall be on one line and shall be in letters not less than 5/16 in. (7.9 mm) high. Where two cautionary labels are used they shall conform to 9.2.2.1 and the word “WARNING” shall be in letters not less than ¼ in. (6.4 mm) high.

9.2.4.2 The pictorial shall depict a child looking or falling into a bucket. The pictorial shall have an overall height of not less than 1½ in. (38 mm). Additional cautionary symbols shall be allowed.

9.2.4.3 The message shall contain the words “Children can fall into bucket and drown” followed by the words “Keep children away from bucket with even a small amount of liquid”; additional cautionary statements shall be allowed. The lettering of the cautionary message shall be in sans serif letters in combinations of upper and lower case letters. The upper case letters shall be not less than 1/8 in. (3.2 mm) high. Where two cautionary labels are used they shall conform to 9.2.2.1 and the upper case letters shall be not less than 5/64 in. (2 mm) high.

9.2.5 The label shall be not easily removed, other than by the use of tools or solvents. If removable labels are used for container recycling purposes, the label shall bear the words “DO NOT REMOVE THIS LABEL.”

10. Keywords

10.1 all-purpose compound; bond; check cracking; dimensional stability; edge cracking; finishing compound; joint compound; joint tape; putrefaction; shrinkage; taping compound; tensile strength; topping compound

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