

Tentative Specifications for INSULATED WIRE AND CABLE: POLYVINYL INSULATING COMPOUND¹



A.S.T.M. Designation: D 734 - 43 T

ISSUED, 1943.²

These Tentative Specifications have been approved by the sponsoring committee and accepted by the Society in accordance with established procedures, for use pending adoption as standard. Suggestions for revisions should be addressed to the Society at 1916 Race St., Philadelphia 3, Pa.

Scope

1. These specifications cover wire and cable insulated with a thermoplastic synthetic insulating compound made from polyvinyl chloride or its copolymer with vinyl acetate. The suitability of the insulation shall be determined solely by physical and electrical tests. This insulation is ordinarily recommended for use at conductor temperatures not in excess of 60 C. It is further ordinarily recommended that the minimum temperature at which the insulation shall be installed shall be not less than -10 C. (14 F). When the temperatures of operation and installation are in excess of these limits, and for voltages in excess of 600 v. the manufacturer shall be consulted for proper recommendations.

Material

2. (a) The conductor shall be soft,

annealed copper and shall be uncoated unless otherwise specified. If a coating is specified, it shall conform to the Standard Specifications for Tinned Soft or Annealed Copper Wire for Electrical Purposes (A.S.T.M. Designation: B 33)³ for tinned coating, or the Tentative Specifications for Lead-Coated and Lead-Alloy-Coated Soft Copper Wire for Electrical Purposes (A.S.T.M. Designation: B 189)³ of the American Society for Testing Materials, for lead or lead alloy coating.

(b) Conductors of No. 6 A.w.g. and smaller shall be solid unless otherwise specified and shall conform to the Standard Specifications for Soft or Annealed Copper Wire (A.S.T.M. Designation: B 3) of the American Society for Testing Materials.³

Strand

3. Each individual wire of a stranded conductor shall be considered separately and shall be designated as a strand.

Shape

4. Each solid conductor and each

¹ Under the standardization procedure of the Society, these specifications are under the jurisdiction of the A.S.T.M. Committee D-11 on Rubber and Rubber-Like Materials.

By publication of these specifications, the American Society for Testing Materials does not undertake to insure anyone utilizing the specifications against liability for infringement of Letters Patent nor to assume any such liability, and such publication should not be construed as a recommendation of any patented or proprietary application that may be involved.

² Accepted by the Society at annual meeting, June, 1943.

³ 1946 Book of A.S.T.M. Standards, Part I-B.