

Tentative Specifications for

PHENOLIC LAMINATED SHEET FOR RADIO APPLICATIONS¹



A.S.T.M. Designation: D 467 - 44 T

ISSUED, 1937; REVISED, 1940, 1944.²

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 phenolic laminated sheet of the following five grades for radio or similar applications where high frequencies are involved.

Grade No. 1.—A paper base punching stock for use where dielectric losses are of minor importance,

Grade No. 2.—A paper base punching stock having medium dielectric loss,

Grade No. 3.—A paper base punching stock having low dielectric loss,

Grade No. 4.—A hard paper base stock having low dielectric loss, and

Grade No. 5.—A fabric base stock having medium dielectric loss.

NOTE.—Usual applications for the various grades are given in the Appendix.

Material

2. The material shall consist of layers of paper or cotton fabric as required. These layers shall be suitably impregnated with a phenolic type resinous compound and consolidated into hard

dense sheets under the action of heat and pressure.

Punching Quality

3. (a) The grades of material differ in their suitability for punching but any of the grades may be punched in simple shapes and thin sizes provided good punching practice is used, including sharp, close clearance dies, proper strip-per plates, and proper heating conditions. When using good punching practice as outlined in Paragraph (c), the various grades shall punch satisfactorily in thicknesses up to and including the maximum limits given in Table I.

(b) Where punching properties better than those listed in Table I are required for particular parts, this shall be subject to agreement between the manufacturer and the purchaser.

(c) In good punching practice, the edges of the piece shall be not closer to the edge of the strip than twice the thickness of the sheet; the holes shall be not smaller in diameter than the thickness of the sheet nor have square corners; the distance between holes or between holes and edge of piece shall be not less

¹ Under the standardization procedure of the Society, these specifications are under the jurisdiction of the A.S.T.M. Committee D-9 on Electrical Insulating Materials.

² Latest revision accepted by the Society at annual meeting, June, 1944.