

## *Tentative Specifications for*

# SERVICING UNITS FOR TESTS AT SUBNORMAL AND SUPERNORMAL TEMPERATURES OF ELECTRICAL INSULATING MATERIALS AND PLASTICS<sup>1</sup>



A.S.T.M. Designation: D 761 - 44 T

ISSUED, 1944.<sup>2</sup>

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 servicing units for maintaining atmospheres in suitable enclosures to which they are attached, for tests of electrical insulating materials and plastics at subnormal and supernormal temperatures, at any desired temperature within the range from -70 F. to +170 F.

NOTE.—These servicing units and associated chambers are not preferred to a room of the walk-in type, but have been found satisfactory for high-temperature and low-temperature tests of electrical insulating materials and plastics where the expense, mechanical problems, and other known disadvantages of a complete room are not justified.

### Requirements

2. The individual servicing units shall be of a size and shape which will make them easily portable, and means shall be available for connecting the units to test enclosures. They shall conform to the detailed requirements specified in Sections 3 to 7.

### Housing

3. The servicing unit shall be housed in a suitable double-walled insulated box, having a layer of insulation composed of a minimum of 2 in. of asbestos, glass wool, or equivalent, between the two walls. Both inner and outer walls shall be coated with a suitable moisture-resistant and rust-resistant paint, enamel, or lacquer.

### Blower and Duct System

4. A blower system shall provide a minimum of 40 cu. ft. per min. of air. It shall be provided with a by-pass damper which shall function to maintain the temperature at any given point by means of a control located within the attached enclosure.

### Heating Capacity

5. Each servicing unit shall be equipped with fin-type electric heaters having a minimum rating of 1600 w.

### Refrigeration

6. Cooling of the unit shall be accomplished either by means of mechanical

<sup>1</sup>Under the standardization procedure of the Society, these specifications are under the joint jurisdiction of A.S.T.M. Committee D-9 on Electrical Insulating Materials and Committee D-20 on Plastics.

<sup>2</sup>Accepted by Committee E-10 on Standards, February 8, 1944.