Standard Specifications for

ASBESTOS THERMAL INSULATING AND FINISHING CEMENT[1]

ASTM Designation: C 194 – 64

ADOPTED, 1964

This Standard of the American Society for Testing and Materials is issued under the fixed designation C 194; 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.

NOTE—Metric equivalents and decimal numbering were added in August, 1966.

1. Scope

1.1 These specifications cover finishing and thermal insulating material composed of asbestos fiber in the form of dry cement or plaster, which, when mixed with a suitable proportion of water, applied as a plastic mass, and dried in place, provides a smooth surface and resistance to heat transmission on surfaces operating at temperatures between 100 and 1000 F (about 40 and 540 C).

2. Composition

2.1 The cement shall be composed of asbestos fiber, with or without a heat-resistant binder.

3. Physical Properties

3.1 The cement shall conform to the following requirements as to physical properties:

	U.S. Customary Units	Metric Units
Consistency:		
Method A, per cent	35 to 45	35 to 45
or		
Method B, in. (mm)	7 to 9	178 to 229
Dry covering capacity, min, ft^2, 1 in. in thickness per 100 lb of dry cement (m^2, 1 cm in thickness per 100 kg of dry cement)	16	8.3
Volume change (shrinkage) upon drying, max, per cent	45	45
Compressive strength at 5 per cent deformation, min, psi (kg/cm^2)	75	5.27
Linear shrinkage (length) after 24 hr at 1000 F, max, per cent	1.0	1.0
Thermal conductivity, max, Btu in./hr ft^2 deg Fahr (kg cal/hr m deg C) (Note):		
At mean temperature of 200 F (95 C)	2.20	0.27
At mean temperature of 300 F (150 C)	2.30	0.28
At mean temperature of 400 F (200 C)	2.40	0.30

NOTE—In some instances the preferred or measured value for conductivity is millivolts/

[1] Under the standardization procedure of the Society, these specifications are under the jurisdiction of the ASTM Committee C-16 on Thermal Insulating Materials and are the direct responsibility of Subcommittee S-III on Thermal Insulating Cement. A list of committee members may be found in the ASTM Year Book.