

# TESTING APPLICATION STANDARD (TAS) 142-95

## STANDARD REQUIREMENTS FOR COAL TAR ROOF CEMENT, ASBESTOS FREE

**1. Scope:**

- 1.1 This Protocol covers coal tar roof cement suitable for trowel application in coal tar roofing and flashing systems.
- 1.2 All testing shall be conducted by an approved testing agency and all test reports shall be signed by an authorized signer of the testing agency and/or Professional Engineer.

**2. Referenced Documents:**

- 2.1 *ASTM Standards*
  - D 4 Test Method for Bitumen Content
  - D 16 Terminology Relating to Paint, Varnish, Lacquer and Related Products
  - D 95 Test Method for Water in Petroleum Products and Bituminous Materials by Distillation
  - D 140 Practice for Sampling Bituminous Materials
  - D 1079 Definition of Terms Relating to Roofing, Waterproofing, and Bituminous Materials
  - D 3143 Test Method for Flash Point of Cutback Asphalt with Tar Open-Cup Apparatus
  - D 3409 Test Method for Adhesion of Asphalt-Roof Cement to Damp, Wet, or Underwater Surfaces
  - D 4586 Standard Specification for Asphalt Roof Cement, Asbestos Free
  - E 380 Use of the International System of Units (SI) (The Modernized Metric System)

2.2 *The Florida Building Code, Building*

2.3 *Roof Consultants Institute Glossary of Terms*

**3. Terminology & Units:**

- 3.1 Definitions - For definitions of terms used in this Protocol, refer to ASTM D 16; and/or ASTM D 1079; and/or Chapter 2 of the *Florida Building Code, Building* and/or the RCI Glossary of Terms. Definitions from the *Florida Building Code, Building* shall take precedence.
- 3.2 Units - For conversion of U.S. customary units to SI units, refer to ASTM E 380.

**4. Limitations and Precautions:**

4.1 This Protocol may involve hazardous materials, operations and equipment. This Protocol does not purport to address all of the safety problems associated with its use. It is the responsibility of whomever uses this Protocol to consult and establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

**5. Materials and Manufacture:**

- 5.1 Coal tar roof cement shall consist of a processed coal tar base, volatile solvents, and mineral stabilizer, excluding asbestos, mixed to a smooth uniform consistency suitable for trowel applications.
- 5.2 *Composition* - The coal tar roof cement product shall conform to composition requirements as follows:

Component Property	Test Standard	Requirements
Water Content	D 95	max. 2% volume
Nonvolatile Matter ( <i>Heat Dish and Contents in Oven at 221 to 230°F</i> )	D 2822	min. 65% mass
Insoluble Matter	D 4 Procedure #2	15-40% mass

**6. Performance Requirements:**

6.1 Physical Properties - The coal tar roof cement product shall conform to physical property requirements as follows:

Physical Property	Test Standard	Requirement
Behavior at 140°F (60°C)	D 4586 Section 8.4	no evidence of blistering and sag or sides shall be no greater than 1/4 in. (6 mm)
Flashpoint	D 3143	min. 100°F (38°C)
Adhesion to Wet Surfaces	D 3409	min. avg. 75%

6.2 *Uniformity* - A thoroughly stirred sample shall show no separation of solvent or settling that cannot be overcome by moderate stirring after standing for 72 hours at room temperature (77°F ± 3.6°F, 25°C ± 1.1°C) in a closed container.

6.3 *Workability* - The cement shall be of such a consistency that it will spread readily and permit troweling smooth coatings 1/16 in. to 1/8 in. (1.6 to 3.2 mm) thick on vertical surfaces.

**7. Sampling:**

7.1 Sample the material from the original container immediately after stirring to a uniform consistency, in accordance with Practice D 140.

7.2 Restir samples to obtain uniformity immediately before withdrawing portions for individual tests.

**8. Package and Package Marking:**

8.1 Packaged material shall be certified by the manufacturer to be in compliance with this specification and shall be labeled in compliance with Section 1517 of the *Florida Building Code, Building*. Product Approval documents shall be provided to the purchaser or end user upon request.

8.2 Shipping containers shall be marked with the name of the material, stock number, lot number, year of issue and quantity

therein and the name of the manufacturer or supplier.

**9. Rejection and Reinspection:**

9.1 The Authority Having Jurisdiction may periodically purchase commercial quantities of the approved product for testing at Approved Testing Agencies to confirm compliance with the provisions of this Protocol. Failure to meet the minimum requirements set forth in Sections 5 and 6 shall constitute grounds for rejection of the lots and suspension of the Product Approval. In cases of rejection the Authority Having Jurisdiction shall request removal of the rejected lot number(s) from commercial sale.

9.2 The Authority Having Jurisdiction may, after rejection of one or more lots, require third party quality control inspection as a provision to lifting of Approval suspension.

9.3 Shipping containers shall be marked with the name of the material, the stock number, lot number, quantity therein, and the name of the manufacturer or supplier.