



technical bulletin

Asphalt Roofing
Manufacturers Association

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Handling Recommendations for Coal Tar Roofing Bitumens

These handling recommendations refer to roofing bitumen complying with the physical property requirements of the American Society for Testing Materials (ASTM) standard D 450 "Specification for Coal Tar Pitch Used in Roofing, Dampproofing, and Waterproofing" (Types I and III coal tar). The bitumen should be homogenous and free of water and debris.

Storage Recommendations

- [1] Store all containers in an upright position, do not double stack the containers, and do not puncture them.
- [2] Protect materials from prolonged sunlight exposure, and moisture exposure. Protect materials from contamination and debris.
- [3] The maximum prolonged storage temperature for coal tar is 250°F.
- [4] For maximum control of temperature, use a closed vessel with an automatically controlled heating mechanism.

Safety

*Refer to the Material Safety Data Sheet for health and safety information.

Heating Recommendations

Excessive heating may damage and change the physical properties of bitumens. To avoid problems, the following guidelines should be considered:

Coal Tar Specifications	Type I	Type III
• Maximum heating temperature.....	400°F	425°F
• Do not exceed °F when storing for period of 4 hours or more without material replenishment.....	385°F	400°F
• Maximum prolonged storage temperature.....	250°F	250°F

Note: These recommendations were prepared by and have the approval of the Asphalt Roofing Manufacturers Association for informational purposes only. They are not intended to revoke or change the requirements or specifications of the individual roofing material manufacturers or local, state and federal building officials that have jurisdiction in your area. Any question, or inquiry, as to the requirements, or specifications of a manufacturer, should be directed to the roofing manufacturer concerned.

The recommended temperature at the point of application — either by mop bucket or by mechanical applicator — is the equiviscous temperature (EVT) plus or minus 25°F. Wind and/or other adverse weather conditions, during application, may necessitate adjustment of the heating equipment to maintain the EVT range at the point of application. Always be sure not to exceed the maximum heating temperatures. Insulated equipment should be used to reduce temperature fallback. Bitumen temperature affects flow rate, application uniformity, and felt embedment. Thermometers or other temperature sensing devices are required to check bitumen temperature at the heating equipment and at the point of application. These devices must be periodically checked for accuracy.

Important Information to Look for . . .

The following technical information should be printed on each container and/or bill of lading for bulk shipments:

- ASTM D-450 and Coal Tar Type I or Type III
- Equiviscous Temperature (EVT x°F)
- Package regulation requirements