

802 BITUMINOUS MATERIALS

802.01 GENERAL

Each delivery of bituminous material shall be accompanied by a copy of recently (not more than 4 weeks) certified results of test on the material being delivered and a statement as to the type and amount of material contained in each carrier and the identification of the storage tanks from which the material is being delivered. This statement shall be presented to the Engineer or his representative upon delivery.

802.02 ASPHALT CEMENT

(A) VISCOSITY GRADED ASPHALT CEMENT. Unless otherwise specified, asphalt cement shall conform to the requirements of AASHTO M 226, Table 2 for Grade AC-20 and a maximum penetration of 105 at 77°F shall be required.

(B) ASPHALT CEMENT FOR LIGHT COVER. Asphalt cement for Asphalt Surface Course (Light Cover) shall conform to the requirements of AASHTO M 226, Table 2 for Grade AC-5.

Each delivery of asphalt cement from the refinery shall be accompanied by a copy of recently (not more than 4 weeks) certified results of tests on the material being delivered and a statement as to the type and amount of material contained in each carrier and the identification of the storage tanks from which the material is being delivered. This statement shall be presented to the Engineer or his representative upon delivery.

(C) ASPHALT CEMENT FOR PARTIAL RECYCLING. As specified by the Engineer.

802.03 TAR

Tars for use in road construction shall meet the requirements of ASTM D 490.

802.04 CUT-BACK ASPHALT

Unless otherwise specified, cut-back asphalt shall meet the requirements of AASHTO M 82 for the Type and Grade specified.

Cut-back asphalt to be used as prime coat shall meet the requirements of AASHTO M 82, Grade MC-30.

802.05 EMULSIFIED ASPHALT

Emulsified asphalt for securing mulch shall meet the requirements of AASHTO M 140, SS-1 or AASHTO M 208 for the Type and Grade specified.

Emulsified asphalt to be used as tack coat shall meet the requirements of AASHTO M 140, Grades SS-1, SS-1h, RS-1, or as specified.

802.06 BITUMINOUS MATERIALS FOR WATERPROOFING

(A) ASPHALT PRIMER FOR WATERPROOFING. Asphalt primer for waterproofing shall meet the

requirements of ASTM D-41.

(B) ASPHALT SEAL FOR WATERPROOFING. Asphalt seal for waterproofing shall meet the requirements of ASTM D-449.

(C) TAR PRIMER FOR WATERPROOFING. Tar primer for waterproofing shall meet the requirements of AASHTO M 121.

For 2-ply waterproofing, Tar Primer shall be a liquid water gas tar or coal tar conforming to the following requirements:

Specific Gravity, 25/25° C (77/77° F)	1.03 to 1.12
Engier Viscosity, 40° C (104° F)	3 max.
Total Distillate, to 300° C (572° F)	50 max. by wt.
Bitumen Soluble in Carbon Disulphide	95% min.
Water	3.0 max. by total wt.

(D) COAL-TAR PITCH SEAL FOR WATERPROOFING. Coal-tar pitch seal for waterproofing shall meet the requirements of AASHTO M 118 for the type specified.

(E) BITUMINOUS SATURATED COTTON FABRIC. Bituminous saturated cotton fabric used in waterproofing shall meet the requirements of AASHTO M 117.

802.07 SOFTENING AGENT

Softening agents used to reconstitute the bitumen of recycled asphaltic concrete shall be asphalt cement or a modifying agent and shall conform to these specification requirements.

Final acceptance of softening agents meeting this specification is subject to the compliance of the reconstituted blend of bitumen from the recycled asphaltic concrete, asphalt cement (if any), and modifying agent (if any), with the requirements of 802.02(A), except the requirements for penetration and/or viscosity may apply.

(A) ASPHALT CEMENT. Asphalt cement used as a softening agent shall conform to the specification requirements of AASHTO M 226, Table 2, for the grade required by the approved job mix formula.

(B) MODIFYING AGENT. Modifying agent shall conform to the following:

Viscosity @ 140° F, cSt	200 minimum
COC Flash Point, F	400 minimum
Solubility, percent	97.5 minimum
Weight Change, after TFOT, percent	5.0 maximum
Ratio of TFOT Viscosity @ 140° F, cSt to Original Viscosity @ 140° F, cSt	3 maximum
Smoke Point, F	260 minimum

802.08 LIQUID ANTI STRIP ADDITIVE

The Engineer shall determine the compatibility of the asphalt, aggregates, and liquid anti strip additive proposed for use in accordance with 818.02. Liquid anti strip additives shall be introduced at the refinery or at the plant by line blending, metering or other measuring to assure accurate proportioning and thorough mixing.

802.09 EMULSIFIED ASPHALT FOR CONCRETE VAULTS

Emulsified asphalt used as a protective coating and moisture barrier for cast-in-place and precast concrete vaults, shall meet the requirements of ASTM D1227, Type I.