



Standard Specification for Mixing Plants for Hot-Mixed, Hot-Laid Bituminous Paving Mixtures¹

This standard is issued under the fixed designation D 995; 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. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

This standard has been approved for use by agencies of the Department of Defense.

1. Scope

1.1 This specification covers requirements for plants suitable for producing hot-mixed, hot-laid bituminous paving mixtures.

1.2 The values stated in inch-pound units are to be regarded as the standard.

2. Referenced Documents

2.1 ASTM Standards:

C 136 Test Method for Sieve Analysis of Fine and Coarse Aggregates²

D 8 Terminology Relating to Materials for Roads and Pavements³

D 140 Practice for Sampling Bituminous Materials³

3. Terminology

3.1 For definitions of terms see Terminology D 8.

3.2 *Definitions of Terms Specific to This Standard:*

3.2.1 *batch plant, n*—a manufacturing facility for producing bituminous paving mixtures that proportions the aggregate and bituminous constituents into the mix by weighed batches, adds bituminous material by either weight or volume, and mixes the blend.

3.2.2 *continuous mix plant, n*—a manufacturing facility for producing bituminous paving mixtures that continuously proportions the aggregate and bituminous constituents into the mix by a continuous volumetric proportioning system without definite batch intervals.

3.2.3 *drum mix plant, n*—a manufacturing facility for producing bituminous paving mixtures that continuously proportions aggregates, heats and dries them in a rotating drum, and simultaneously mixes them with a controlled amount of bituminous material. The same plant may produce cold-mixed bituminous paving mixtures without heating and drying the aggregates.

4. Requirements for All Plants

4.1 *Uniformity*—The plant shall be capable of uniformly combining and mixing various sizes of aggregate from stockpiles, reclaimed asphalt pavement, if required, and bituminous material.

4.2 *Equipment for Preparation of Bituminous Material:*

4.2.1 Tanks for storage of bituminous material shall be equipped for heating the material, under effective and positive control at all times, to the temperature required in the paving mixture specifications. Heating shall be by steam or oil coils, electricity, or other means such that no flame shall contact the heating tank.

4.2.2 The circulating system for the bituminous material shall be of adequate capacity to provide proper and continuous circulation between storage tank and proportioning units during the entire operating period.

4.2.2.1 The discharge end of the bituminous material circulating pipe shall be kept below the surface of the bituminous material in the storage tank to prevent discharging the hot bituminous material into the open air.

4.2.2.2 All pipe lines and fittings shall be steam or oil-jacketed or otherwise properly insulated to prevent heat loss. When the bituminous material is emulsified asphalt, provisions should be made in the bitumen transfer system that will enable the operator to turn off or reduce the heat media from all lines, pumps, and jacketed bituminous material buckets as soon as the system is open and circulating properly.

4.2.3 Storage tank capacity shall be such as to ensure continuous operation of the plant and uniform temperature of the bituminous material when it is introduced into the aggregate. Tanks shall be calibrated accurately to 100-gal (378.5-L) intervals and shall be accessible for measuring the volume of bituminous material at any time.

4.2.4 A sampling tap, complying with the requirements of Practice D 140, shall be provided in the bituminous material feed lines connecting the storage tanks to the bituminous control unit.

4.2.5 When filled or native bituminous materials are used, means shall be provided for agitation to maintain a uniform product.

¹ This specification is under the jurisdiction of ASTM Committee D04 on Road and Paving Materials and is the direct responsibility of Subcommittee D04.23 on Plant-Mixed Bituminous Surfaces and Bases.

Current edition approved Sept. 10, 1995. Published November 1995. Originally published as D 995 – 48 T. Last previous edition D 995 – 95a.

² *Annual Book of ASTM Standards*, Vol 04.02.

³ *Annual Book of ASTM Standards*, Vol 04.03.