

Hot rolled asphalt for roads and other paved areas —

Part 2: Specification for the transport, laying and compaction of rolled asphalt

ICS 93.080.10; 93.080.20

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by Technical Committee B/510, Road materials, to Subcommittee B/510/1, Coated macadam and hot asphalt, upon which the following bodies were represented:

- British Aggregate Construction Materials Industries
- British Civil Engineering Test Equipment Manufacturers' Association
- County Surveyors' Society
- Department of the Environment (Property Services Agency)
- Department of Transport
- Department of Transport (Transport and Road Research Laboratory)
- Institute of Asphalt Technology
- Institute of Petroleum
- Institution of Civil Engineers
- Institution of Highways and Transportation
- Low Temperature Coal Distillers' Association of Great Britain Ltd.
- Mastic Asphalt Council and Employers' Federation
- Mastic Asphalt Producers' Association
- Refined Bitumen Association Ltd.
- Sand and Gravel Association Limited
- Society of Chemical Industry

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Foreword

This British Standard has been prepared under the direction of Technical Committee B/510, Road Materials. It is a revision of BS 594-2:1985, which is withdrawn.

BS 594 comprises two Parts:

- *Part 1: Specification for constituent materials and asphalt mixtures;*
- *Part 2: Specification for the transport, laying and compaction of rolled asphalt.*

This Part includes requirements and recommendations for transporting asphalt mixtures and for site work.

Requirements for asphalt mixtures and their constituent materials and for coated chippings applied to the surface of some asphalt wearing courses are given in Part 1.

Methods of test associated with the laying of asphalt, for example to determine the rate of spread of coated chippings, texture-depth of the finished surface and density of cores drilled from asphalt surfacing are specified in BS 598. Also included in BS 598 is a method for assessing the compaction performance of other rollers by comparison with the performance of a non-vibrating 8 t roller.

It has been assumed in the drafting of this Part of BS 594 that the execution of its provisions is entrusted to appropriately qualified and experienced people.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 8, an inside back cover and a back cover.

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1 Scope

This Part of BS 594 specifies requirements for the transport, laying and compaction of rolled asphalt mixtures, from the time they leave the mixing plant until they are placed on the road ready to receive a superimposed layer or traffic. It also covers preparatory work at the laying site needed to ensure the substrate is fit to receive the asphalt, and the procedure necessary to provide a rough-textured surface on the wearing course for skid-resistance. Notes are included where advice or guidance is considered appropriate.

2 References

2.1 Normative references

This Part of BS 594 incorporates, by reference, provisions from specific editions of other publications. These normative references are cited at the appropriate points in the text and the publications are listed on page 8. Subsequent amendments to, or revisions of, any of these publications apply to this Part of BS 594 only when incorporated in it by updating or revision.

2.2 Informative references

This Part of BS 594 refers to other publications that provide information or guidance. Editions of these publications current at the time of issue of this standard are listed on page 8, but reference should be made to the latest editions.

3 Definitions

For the purposes of this Part of BS 594 the definitions given in BS 6100 and BS 594-1:1992 apply.

4 Transport and delivery

4.1 Transport

Loading of asphalt shall be carried out such that segregation is minimized.

Asphalt shall be transported to site in vehicles insulated and sheeted to prevent an excessive drop in temperature and to protect against adverse weather conditions.

4.2 Delivery

The delivery of asphalt shall be co-ordinated with the rate of laying to avoid interruption to the laying process.

NOTE To ensure adequate time is available for compaction to be substantially completed before the temperature falls below the specified minimum for rolling (see 8.3.1), minimum delivery temperatures, taken within 30 min of arrival on site, of 140 °C for wearing course mixtures and 120 °C for other mixtures are recommended. However, some variation in these temperatures may be necessary to suit specific site conditions and mixes. Any alternative temperatures should be specified in the contract documents. Temperatures should be measured in accordance with BS 598-109.

4.3 Discharge

Diesel oil, kerosine or any other oils that are likely to cause softening or damage to the asphalt shall not be used on the body of the vehicle to facilitate discharge of the asphalt.

NOTE The use of dust or sand on the floor of the vehicle may facilitate discharge but the amount should be kept to a minimum by brushing.

5 Preparatory works at the laying site

5.1 General

The surface on which asphalt is to be laid shall be clean and free from mud, slurry or other deleterious material.

NOTE Trafficking prior to completion of the wearing course should be, as far as possible, restricted to plant and equipment used for laying and compaction of the materials.