

Rigid polyurethane (PUR) foam in slab form —

**Part 1: Specification for PUR foam for
use in transport containers and
insulated vehicle bodies**

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- Brick Development Association
- British Board of Agrément
- British Plastics Federation
- British Rigid Urethane Foam Manufacturers' Association
- British Urethane Foam Contractors' Association (BUFCA)
- Chief and Assistant Chief Fire Officers' Association
- Department of the Environment (Building Research Establishment)
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- Structural Insulation Association

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The following bodies were also represented in the drafting of the standard, through subcommittees and panels:

- Bituminous Roofing Council
- Rubber and Plastics Research Association of Great Britain

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Foreword

This Part of BS 4840 has been prepared under the direction of the Plastics Standards Committee and, together with Part 2, it supersedes BS 4840:1973 which is withdrawn. The separation of the standard into two Parts more accurately reflects the current technology and use of rigid polyurethane (PUR) foam in slab form.

Materials covered in this Part are designated type 1 (LD) and type 1 (HD). Type 1 (LD) covers those materials previously designated type 1 in BS 4840:1973 and in addition includes materials for use in insulated vehicle bodies. Type 1 (HD) covers materials of high density for high compressive load-bearing applications, such as load-bearing beams in transport containers.

Other principal changes from BS 4840:1973 are as follows.

- a) For type 1 (LD) material, the requirement for shear strength parallel to the major plane of the slab is 150 kPa whereas previously it was 175 kPa.
- b) For both type 1 (LD) and type 1 (HD) materials, requirements are now included for water vapour permeability and apparent water absorption.

Requirements for rigid (PUR) foam in slab form for refrigerator cabinets, cold rooms and stores, which is designated type 2, are specified in BS 4840-2.

Although this Part is intended primarily for quality assurance uses, guidance has been included for those involved in design work (Appendix A).

This Part also contains guidelines (Appendix B and Appendix C) on burning properties and fire hazards. These guidelines are in accordance with the principles recommended in BS 6336.

Attention is drawn to BS 6586-1 which specifies requirements for rigid polyurethane foam produced by the press injection method for use in transport containers and insulated vehicle bodies.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 6, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.