



National Standards Authority of Ireland

IRISH STANDARD

I.S. EN 14934:2007

ICS 83.100  
93.010

**THERMAL INSULATION AND LIGHT WEIGHT**

**FILL PRODUCTS FOR CIVIL ENGINEERING**

**APPLICATIONS - FACTORY MADE**

**PRODUCTS OF EXTRUDED POLYSTYRENE**

**FOAM (XPS) - SPECIFICATION**

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**EUROPEAN STANDARD**  
**NORME EUROPÉENNE**  
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**EN 14934**

September 2007

ICS 83.100; 93.010

English Version

**Thermal insulation and light weight fill products for civil  
engineering applications - Factory made products of extruded  
polystyrene foam (XPS) - Specification**

Produits isolants thermiques et de remblayage pour les  
applications de génie civil - Produits manufacturés en  
mousse de polystyrène extrudé (XPS) - Spécifications

Wärmedämmung und leichte Füllprodukte für  
Anwendungen im Tiefbau - Werkmäßig hergestellte  
Produkte aus extrudiertem Polystyrolschaum (XPS) -  
Spezifikation

This European Standard was approved by CEN on 13 July 2007.

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## **EN 14934:2007 (E)**

### **Foreword**

This document (EN 14934:2007) has been prepared by Technical Committee CEN/TC 88 "Thermal insulating materials and products", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2008, and conflicting national standards shall be withdrawn at the latest by March 2008.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

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According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

## 1 Scope

This European Standard specifies the requirements for factory made products of extruded polystyrene foam which are used for frost insulation of roads, railways, trafficked areas, light weight fill for reduction of horizontal and vertical earth pressure and other civil engineering applications.

The products are manufactured in the form of boards, which are also available with special edge and surface treatment (tongue & grooves, shiplap etc.). The standard also covers multilayered insulation boards.

This standard describes product characteristics and includes procedures for testing, evaluation of conformity, marking and labelling.

The standard does not specify the required level of a given property to be achieved by a product to demonstrate fitness for purpose in a particular application. The classes and levels required for a given application are to be found in regulations or non-conflicting standards.

For applications where thermal resistance is required, products with a declared thermal resistance lower than 0,25 m<sup>2</sup>·K/W or a declared thermal conductivity greater than 0,060 W/(m· K) are not covered by this standard. This standard does not cover in situ insulation products and products intended to be used for insulation of buildings, of building equipment and industrial installations or products intended for acoustic insulation.

## 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 822, *Thermal insulating products for building applications — Determination of length and width*

EN 823, *Thermal insulating products for building applications — Determination of thickness*

EN 824, *Thermal insulating products for building applications — Determination of squareness*

EN 825, *Thermal insulating products for building applications — Determination of flatness*

EN 826, *Thermal insulating products for building applications — Determination of compression behaviour*

EN 1604, *Thermal insulating products for building applications — Determination of dimensional stability under specified temperature and humidity conditions*

EN 1605, *Thermal insulating products for building applications — Determination of deformation under specified compressive load and temperature conditions*

EN 1606, *Thermal insulating products for building applications — Determination of compressive creep*

EN 12086:1997, *Thermal insulating products for building applications — Determination of water vapour transmission properties*

EN 12087, *Thermal insulating products for building applications — Determination of long term water absorption by immersion*

EN 12088, *Thermal insulating products for building applications — Determination of long term water absorption by diffusion*

EN 12089, *Thermal insulating products for building applications — Determination of bending behaviour*



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