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LIGHTWEIGHT INSULATING SUBFLOORS COMPLIANT WITH ITALIAN UNI STANDARDS: THE ADVANTAGES OF POLITERM BLU

With the new Italian standards UNI 11944 and UNI 11493-1:2025, subfloors take centre stage in the quality and durability of floors. **Politerm Blu** by Edilteco, based on virgin EPS, is a super-lightweight, high-performance solution that fully meets their requirements, ensuring thermal insulation, flatness and no shrinkage.

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Subfloors: what changes with UNI 11944 and UNI 11493-1

The publication of the new Italian standard **UNI 11944** and the update of the Italian standard **UNI 11493-1** have significantly changed the approach to floor design and installation in Italy.

UNI 11944, Screeds for floors – Design criteria, installation and verification methods, clearly defines design criteria, installation methods and control procedures for screeds intended to receive floor finishes or coverings. It also refers to thermal and acoustic properties, to be evaluated according to the specific applicable standards.

At the same time, UNI 11493-1, Ceramic tiling – Part 1: Instructions for design, installation and maintenance, establishes quality and performance requirements for ceramic tiling, providing precise guidance on material selection, design, installation and maintenance. It also outlines proven, compliant solutions capable of ensuring the expected performance over time according to the intended use.

It is important to note that within the **floor system** – a concept introduced by UNI 11944 – not only screeds and ceramic finishes are considered, but also the **subfloor layer**, now finally recognised as a **fully fledged functional and performance component**: a key element for ensuring the **durability, efficiency and overall performance** of the entire floor build-up.

Politerm Blu: the super-lightweight aggregate for screeds and subfloors

In this context, **Politerm® Blu by Edilteco**, a super-lightweight aggregate based on virgin **EPS** with controlled particle size, is able to **fully meet the requirements of both standards**, offering designers and contractors a **certified, stable, insulating and versatile** material, ideal for subfloors in next-generation floor systems.

Thermal insulating subfloor made with Politerm Blu, the super-lightweight aggregate based on virgin EPS w

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Why choose Politerm Blu: the technical advantages

- no drying shrinkage;
- fast drying (1 cm/day);
- certified thermal conductivity (?D = 0.049 W/mK);
- guaranteed stability and flatness;
- compatibility with underfloor heating systems.

From **lightness** (density starting from 150 kg/m^3) to certified thermal conductivity, as well as **moisture resistance** and rot-proof properties, Politerm Blu is an **advanced technical material for subfloors** subjected to mechanical and environmental stresses.

Politerm Blu, pre-coated super-lightweight aggregates for the production of lightweight thermal insulating m

Politerm Blu, pre-coated super-lightweight aggregates for the production of lightweight thermal insulating mortars

UNI 11944: the subfloor becomes an integral part of the “floor system”

Published in 2024, UNI 11944 redefines the floor as a system composed of multiple functional layers – covering, screed, adhesive and subfloor – assigning the latter a decisive role in the durability and performance of the entire system.

“The subfloor can no longer be considered merely a levelling layer. Today it is an integral part of the technical design of the floor” – Camillo Signani, Sales Director, Edilteco

Dimensional stability and no drying shrinkage: essential requirements for subfloors

Compared to traditional cement-based subfloors, Politerm Blu – thanks to its formulation based on virgin EPS with controlled particle size and the E.I.A. additive – ensures superior dimensional stability, no drying shrinkage, optimal load distribution and a drying time of 1 day per cm of thickness: key features to prevent cracking, deformation and loss of performance over time.

UNI 11493-1:2025 and tile installation: everything starts from the base

The 2025 update of UNI 11493-1 introduces **stricter requirements for ceramic tile installation**, particularly regarding **substrate flatness**, proper **adhesive distribution** and **joint management**.

Politerm Blu fully meets these requirements, providing a **flat, strong and shrinkage-free** subfloor. It is also **compatible with underfloor heating systems** and allows the **direct application of screeds and finishes**, avoiding interruptions and issues related to percolation or deformation.

The **subfloor must not be confused with the screed**: it performs structural, insulating and lightening functions and, under the Italian standards, must now meet **clearly defined performance requirements**. Choosing a certified aggregate such as Politerm Blu means starting from a base that complies with the standards.

Politerm Blu: the solution for compliant, safe and durable projects

Politerm Blu has already been used successfully in **hundreds of building projects**, both residential and commercial, as a reliable solution to ensure **quality, efficiency and compliance with**

standards.

Discover Politerm Blu