



# POLITERM BLU

**superlight fine-bead aggregate to prepare  
lightweight thermal insulating cement mixes**

<p><b>product:</b></p>	<p>expanded polystyrene beads treated with special additive.</p>
<p><b>packaging:</b></p>	<ul style="list-style-type: none"> <li>➤ bag of 420 l (2 bags = 1 m<sup>3</sup> of finished mortar)</li> <li>➤ bag of 170 l (5 bags = 1 m<sup>3</sup> of finished mortar)</li> </ul>
<p><b>composition:</b></p>	<p>closed-cell virgin expanded polystyrene beads with uniform grain in curve (∅ 3-6 mm), perfectly spherical, controlled density, non-toxic, non-absorbent, rotproof, dimensionally stable over time, chlorofluorocarbon <b>free</b> production (CFC, HCFC and HFC), free of nutritional values able to sustain growth of fungi and bacteria. During production the beads are mixed with a specific <b>E.I.A.® additive</b> which allows perfect mixing with the water binder, eliminates the bead floating phenomenon and guarantees their homogeneous distribution in the mix.</p>
<p><b>fields of application:</b></p>	<ul style="list-style-type: none"> <li>➤ <b>substrates</b> for basements and pilot floors, space between floors, roofs and wooden floors;</li> <li>➤ <b>single-layer screeds</b> for direct gluing of floor coverings, basements and pilot floors, space between floors, and roofs and wooden floors (<i>consult the "Politerm Blu - Piano Zero" Application Manual</i>);</li> <li>➤ <b>formation of gradients</b> on terraces and flat roofs, <i>also with subsequent direct laying of waterproofing mantles (prefabricated: hot or cold bituminous and synthetic - liquids: provided that solvent-free)</i>;</li> <li>➤ <b>insulation of unwalkable attics</b>;</li> <li>➤ <b>insulation of pitched roofs</b>, <i>also with subsequent direct laying of waterproofing mantles (prefabricated: hot or cold bituminous and synthetic - liquids: provided that solvent-free)</i>;</li> <li>➤ <b>filling of vaults</b>, also very thick;</li> <li>➤ <b>confinement of roofs</b> in asbestos cement fibre sheets, <i>also with subsequent direct laying of waterproofing mantles (prefabricated: hot or cold bituminous and synthetic - liquids: provided that solvent-free)</i>;</li> <li>➤ filling of <b>asphalt under mantle</b>;</li> <li>➤ substrates for <b>industrial flooring</b>.</li> </ul>
<p><b>consumption/yield:</b></p>	<p>to obtain 1 m<sup>3</sup> of finished mortar the following is required:</p> <ul style="list-style-type: none"> <li>➤ Two 420-litre bags of Politerm Blu + water + cement<sup>(*)</sup></li> <li>➤ Five 170-litre bags of Politerm Blu + water + cement<sup>(*)</sup></li> </ul> <p><sup>(*)</sup>: see prescribed dosages.</p>
<p><b>preparing the laying surface:</b></p>	<p>The laying surface must always be clean and free of dust and fragments of any kind.</p> <ul style="list-style-type: none"> <li>➤ <b>cement and brick-cement laying surfaces or in any case absorbent</b>: abundantly wet the surface, but do not leave puddles.</li> <li>➤ <b>poorly absorbent laying surfaces</b> (very dense cement surfaces, etc.): treat the laying surface with adhesion promoter (type <b>Edilstik</b>) before casting the mortar prepared with Politerm Blu and work fresh on fresh, or make an adhesion bridge with cement grout hydrated with water and <b>Edilstik</b>.</li> </ul>

- **non-absorbent laying surfaces** (sheaths, metal, ceramic, insulating sheets, etc.): Before casting the mortar prepared with Politerm Blu, lay an electrowelded lath at a due distance from the laying surface (positioned at least at a third of the final thickness of the casting to be carried out).
- **single-layer screeds for direct gluing of floor coverings:** it is recommended to lay some special PVC guides called **Piano Zero** beforehand.

Use only good-quality Portland 32.5R cement for the mixes according to the law UNI and in perfect conservation conditions. Different types of cement or of poor quality may invalidate the function of the **E.I.A.® additive** with which the Politerm Blu beads are treated, making mixing difficult and the final properties of the mortar not conform.

*Dosages to obtain 1 m<sup>3</sup> of lightweight thermal insulating mortar:*

density kg/m <sup>3</sup>	Bags Politerm Blu	Water	Cement	Sand (*)
200	2 of 420 l or 5 of 170 l	about 80-100 l	200 kg	not necessary
250		about 100-125 l	250 kg.	
300		about 120-150 l	300 kg.	
350		about 140-175 l	350 kg.	

*Dosages to obtain 200 l of lightweight thermal insulating mortar (e.g.: mixing in cement mixer):*

density kg/m <sup>3</sup>	Bags Politerm Blu	Water	Cement	Sand (*)
200	1 of 170 l	about 16-20 l	40 kg.	not necessary
250		about 20-25 l	50 kg.	
300		about 24-30 l	60 kg.	
350		about 28-35 l	70 kg.	

**Mixing and application:**

(\*): sand is not required because of the mixing properties of Politerm Blu. Sand may however be used being aware of the fact that it reduces performance in terms of lightening, thermal insulation and water retention. If using sand the water dosages will vary depending on the amount of sand and its residual moisture. Sand may have to be used when utilizing pump trucks equipped with **blade exchangers** (see "Politerm Blu Application Manual- Batch Plants") or pumps type "Turbosol" for sand and cement screeds.

- **Mixing:** the mortars prepared with Politerm Blu can be mixed with:
  - cement mixer;
  - Horizontal mixers.
- **Mixing and pumping:** the mortars prepared with Politerm Blu can be mixed and pumped on site with:
  - specific equipment type **Politerm Machine** (see Edilteco equipment);
  - batch plant pump trucks (see "Politerm Blu Application Manual- Batch Plants");
  - pumps type "Turbosol" for sand and cement screeds (adding sand to the mix).
- **Order of component infeed with Politerm Machine:**
  - water;

