



# ARIETE 825 CE

**PRE-MIXED, CE CERTIFIED, LIGHTWEIGHT  
AND THERMAL INSULATING SCREED**

ARIETE 825 CE Pre-mixed, CE certified, lightweight and thermal insulating screed	
COMPOSITION	Special hydraulic binders and selected aggregates, pre-mixed at 825 kg/m <sup>3</sup> , virgin expanded polystyrene beads perfectly spherical with high thermal insulation properties (Ø 2 mm), coated by the special E.I.A. additive, which ensures a perfect mixing, optimal pumpability, and homogeneous distribution of the beads within the mixture, and special additives.
PACKAGING AND STORAGE	<ul style="list-style-type: none"> <li>· Bags of 45 L yield.</li> <li>· Pallets of 40 bags.</li> <li>· It is recommended the use within 6 months from the packaging. The product maintains the technical characteristics for over 12 months if conveniently stored (in a dry and fresh place, protected from frost, water and direct sunlight). It is recommended to use suitable protection devices.</li> </ul>
FIELDS OF APPLICATION	<ul style="list-style-type: none"> <li>· Single-layer lightweight thermal insulating screeds for floor coverings laid with glue (<i>see notes in section 2° page</i>). Not suitable for direct laying of resilient floor coverings.</li> <li>· Lightweight and thermal insulating leveling subfloor (with or without falls).</li> <li>· Lightening and filling castings.</li> <li>· Roof thermal insulation (pitched or flat roofs with or without falls). Suitable for direct laying of prefabricated waterproofing membranes (hot bituminous, cold bituminous, cold synthetic) or solvent-free liquid sheaths.</li> </ul>
CONSUMPTION / YIELD	Approx. 0.22 bags/m <sup>2</sup> for a thickness of 1 cm.
SURFACE PREPARATION	<ul style="list-style-type: none"> <li>· Thoroughly clean the laying surface removing residues and dust.</li> <li>· Lay Piano Zero Profiles (single-layer screeds) or prepare the level points (intermediate levelling subfloor).</li> <li>· Moisten the laying surface (if absorbent) taking care not to create puddles.</li> <li>· Highly absorbent surfaces (such as hollow brick, etc.): proceed to the perfect cleaning and dusting removal from the laying surface. Apply an adhesion promoter grout and an absorbing reductor composed of cement / Edilstik / clean water (Edilstik / water ratio 1:1). After drying, wet the laying surface and proceed to lay the lightweight screed. Wet the surface as you proceed with the application of the lightweight screed.</li> </ul>
APPLICATION	<p><b>It can be mixed with:</b></p> <ul style="list-style-type: none"> <li>· Mixer drill.</li> <li>· Cement mixer.</li> <li>· Mixer like "Turbomalt".</li> </ul> <p><b>It can be mixed and pumped on site with:</b></p> <ul style="list-style-type: none"> <li>· Politerm® Machine (<i>see Edilteco equipment</i>).</li> <li>· Isolcap Machine (<i>see Edilteco equipment</i>).</li> <li>· Plastering machine (<i>see notes on page 2</i>).</li> <li>· Truck mixer and concrete pump.</li> <li>· Pump type "Turbosol".</li> </ul> <p>Hydrate with clean water in proportion of 7 - 8 L per bag. Mix for at least 5 minutes and no more than 10 minutes (<i>excluding when using a plastering machine</i>).</p>
WARNINGS	<ul style="list-style-type: none"> <li>· Do not apply with temperatures under +5 °C or over +35 °C, or under the direct sunlight. If the application is made under the direct sunlight, necessary precautions must be taken (e.g. mesh or similar that cover the scaffolding).</li> <li>· It is recommended to lay edge strips of acoustic insulation higher than the floor covering.</li> </ul>

WARNINGS	<ul style="list-style-type: none"> <li>· <b>Minimum thicknesses:</b> <ul style="list-style-type: none"> <li>a) <i>Absorbent surfaces:</i> 5 cm. In case of sub-thicknesses, refer to the relevant "Installation Manual - Ariete" or contact the <i>Edilteco Technical Department</i>.</li> <li>b) <i>Non-absorbent surfaces:</i> refer to the relevant "Installation Manual - Ariete" or contact the <i>Edilteco Technical Department</i>.</li> </ul> </li> <li>· For detailed application methods consult, refer to the relevant "Installation Manual - Ariete".</li> </ul>		
TECHNICAL CHARACTERISTICS	Dry density:	825 kg/m <sup>3</sup>	-
	Specific weight (dry mortar):	approx. 815 kg/m <sup>3</sup>	-
	Thermal conductivity $\lambda_d$ :	0,176 W/mK	UNI EN 12667
	Compressive strength:	≥ 5,0 N/mm <sup>2</sup> (C5)	UNI EN 13813
	Flexural strength:	≥ 1,0 N/mm <sup>2</sup> (F1)	UNI EN 13813
	Permeability to water vapour $\mu$ :	14,0	UNI EN ISO 12572
	Specific heat capacity kJ/kgK:	1,0	UNI EN 1745
	Acoustic performance $\Delta L_w$ :	19 dB *	UNI EN 12354-2
	Moisture resistance:	rotproof	-
	Fire reaction class:	A2-s1,d0	EN 13501-1
	<p><b>Drying time for direct laying of floor coverings (screed thickness 5 cm, absorbent surface and ambient conditions +20 °C - H.R. 50%), according to the laying surface, the environmental and weather conditions.</b></p> <ul style="list-style-type: none"> <li>· Ceramic, gres, clinker: approximately after 6 days.</li> <li>· Floating parquet: approximately after 12 days.</li> </ul>		
SPECIAL PROCESSING AND APPLICATIONS	<p><b>Mixing and pumping with plastering machine 220 V and 380 V:</b></p> <ul style="list-style-type: none"> <li>· Fit the plastering machine with an expansion tank, a screw and a mixer specific for pre-mixed products based on polystyrene beads.</li> <li>· Keep the loading hopper always full.</li> <li>· It is suggested to use the hopper extension.</li> <li>· Do not use a compressor.</li> <li>· Remove the end nozzle from the material pipe.</li> <li>· Adjust the flow meter to obtain a mortar with a creamy and homogeneous consistency.</li> </ul>		
	<b>Single-layer screed for direct laying of floor covering (specific operations):</b>		
	<b>OPERATION</b>	<b>LAYING / FLOOR COVERING:</b>	
		<b>Laying with glue of:</b> ceramic / stoneware / clinker / terracotta <b>Floating laying of:</b> parquet	<b>Laying with glue of:</b> parquet
	Application of <b>Piano Zero Profiles</b> :	yes	yes
	Floating with "blade" float:	yes	yes
	Surface sanding with electrical brush fitted with sandpaper disks:	recommended	recommended
	Thin-bed surface smoothing with mix based on cement and glue:	recommended <i>when there is heavy foot traffic before laying the floor covering</i>	no
<p>All the indications provided in this technical data sheet are purely approximate and not binding for legal purpose. The data listed has been gathered from laboratory tests and it hence follows that in practical applications on building sites the final characteristics of the products may be subject to substantial variations depending on the meteorological conditions and the installation. The user must always check suitability of the product for its specific use, undertaking all liability implicit in and deriving from use of the product, as well as comply with all methods and instructions for use generally referable to "workmanlike" execution. Edilteco S.p.A. reserves the right to change the contents of this mechanical data sheet on its final judgements. The spreading of this data sheet through any media, supersedes and cancels the validity of any other technical data sheet previously published.</p>			

\* Value calculated with 5 cm of Ariete 825 CE and Fonotech S.