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NEW



STILNEX

THE BEST THERMO-ACOUSTIC TECHNOLOGY



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What it is STILNEX



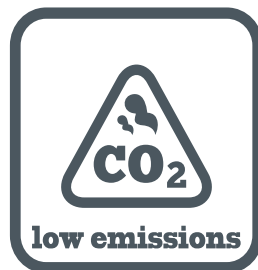
STILNEX is the first thermo-acoustic and eco-friendly nano-composite material in the world mainly composed of cellular glass.

STILNEX is a nano-composite plaster that offers high thermo-acoustic performances based on cellular glass and nano-binders. It is the new point of reference for acoustic performances on the no formed building claddings market. Moreover, **it is the only mixture in the world that can be modulated in its thermal and acoustic parameters** directly on the construction site in order to optimise the required characteristics.

The use of nano-structured compounds, pure and eco-friendly binders (Portland Cement free, low CO₂ emission binders) and recycled raw materials (cellular glass, inerted fly-hash) makes **STILNEX** a unique product in the world.

STILNEX is not only a highly **eco-friendly** material but it even allows to reach **thermal insulation parameters, acoustic absorption and insulation in only one product.**

Due to its extraordinary chemical and physical structure, **STILNEX** is able to reduce up to 82% of sound energy on an extremely wide range of frequency. At the same time, the usage of cellular glass (originating from glass bottles) allows to obtain high thermal insulation and low capillary absorption.

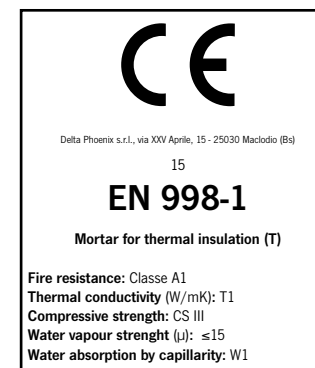


Benefits

- It is the only product whose **characteristics can be modulated directly on the construction site**. Thermal and acoustic parameters can be adjusted according to the characteristics of the project.
- Fire-resistant: A1 class.
- **The highest mechanical performances** on the thermo – acoustic plasters market.
- **The highest acoustic performances among no formed building materials**. Sound absorption up to 82% on wide ranges of frequency that can be modified according to the main sources of pollution.
- **Easy to apply** both by hand and by mechanical spraying.
- **It can be used in historical buildings** subjected to specific regulations of the Superintendence of Cultural Heritage (in Italy).
- **Highly resistant to physical and chemical deterioration** (runoff water, aerosol, frost/thawing cycles, salt attack, acidic and bacterial attack).
- **Promotional costs** for a revolutionary material made in Italy.



Research



STILNEX stems in 2001 from the experimental industrial research project financed by Lombardy Region and European Union. **STILNEX, judged as one of the best projects by MIUR selection board** (Ministry of Education, University and Scientific Research) is the result of the cooperation among the Delta Phoenix R&D department and the University of Brescia together with INSTM (Consorzio Interuniversitario Nazionale per la Scienza e la Tecnologia dei Materiali).

This material is certified as mortar for thermal insulation according to standard UNI EN 998-01.

STILNEX is the result of a scientific research that, in the last 5 years, has developed 127 different compounds, each of which has taken into account for the optimization of a specific technical parameter. **STILNEX** combines all these experiences in one and only product in order to obtain the best sound absorption, thermal and acoustic insulation values at the same time.

Respect for the environment is fundamental: using recycled raw materials such as cellular glass and unconventional binders characterized by low CO₂ emissions, makes the nano-composite material unique in the world.

STILNEX solves the typical problems of thermal and acoustic plasters: its great mechanical strength and resistance to deterioration allow for the first time to use a plaster characterized by very low density but with a high strength comparable with traditional civil plasters. Moreover, its setting time accelerates the application because the drying time between two layers is no longer needed.

Certifications

UNI-EN 1015-11:2007

Test methods for building mortars – PART 11: determination of flexural and compressive strength of hardened mortar.

UNI-EN 12664:2002

Determination of thermal strength by using the hot griddle method with a guard ring and the thermofluximeter method.

UNI-EN 1015-10:2007

Test methods for building mortars – PART 10: determination of the apparent volume mass of dried hardened mortar.

UNI-EN 12390-13:2013

Test on hardened concrete – PART 13: determination of compressive secant elastic modulus.

UNI-EN 15801:2010

Cultural and heritage conservation – test methods - determination of water absorption by capillarity.

UNI-EN 7699-2005

Test on hardened mortar – determination of water absorption at the atmospheric pressure.

UNI-EN 1745:2012

Masonry and masonry products: methods establishing thermal proprieties.

UNI EN ISO 354:2003

Acoustics – measure of acoustic absorption in a reverberation chamber.