Advanced Building System

EMMEDUE®: Green Culture for a Future to build.

The reasons for energy saving

Safeguarding the environment for future generations is the objective which the Kyoto Protocol has set by imposing a gradual but constant reduction in energy consumption.

Buildings are large energy consumers and the greatest waste comes from their heating and cooling systems.

Uncontrolled use of fossil fuels puts energy supplies and the quality of our lives at risk, increasing air pollution and greenhouse gas emissions.

Energy saving is the answer in order to bring down the rising costs of energy and reduce CO_2 emissions into the atmosphere.

With EMMEDUE® towards sustainable design
Comfort for humans and compatibility for the environment

The architectural organism must be evaluated over its complete life cycle. EMMEDUE® constructions, demonstrate all the evident eco-efficient and economic advantages if evaluated over their complete life cycle.
The polystyrene inside the EMMEDUE® panels, in fact, must be evaluated over the whole of its life cycle and it will then be noted that it affects the environment less than other more biological insulators.

EPS SUSTAINABILITY
Expanded polystyrene (also known as EPS) is a leader as regards respect for the environment:
- it is **SAFE**: it does not release toxic or harmful substances and it is totally inert. It does not contain chlorofluorocarbons (CFCs) or hydrochlorofluorocarbons (HCFCs). Furthermore, as it contains no organic material, it inhibits the growth of microorganisms and mould. The mechanical and thermal characteristics are supplied for the whole life of the building in which it is installed. It does not suffer permanent damage if exposed to vapour or humidity.
- it is **RECYCLABLE**: no waste materials are produced during production and the production process for the EMMEDUE® panel aims to optimise its cut, reducing waste to a minimum. Any leftover EPS is recycled directly in the production plant itself.
- it is **NON-TOXIC**: it does not create allergies and it does not damage the health of those producing or installing it.
- it is **SELF-EXTINGUISHING**: the EPS used for the EMMEDUE® panels is self-extinguishing so, once the striking cause has been eliminated, the material does not produce flames, nor does it continue to burn.

The environmental cost of producing expanded polystyrene is minimal if compared to how much energy is saved during the entire life of a building which has been correctly insulated with EMMEDUE® panels.

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With EMMEDUE® the evolution of the building industry characterised by energy efficiency and construction quality

EMMEDUE® is an innovative, ingenious construction system composed of walls, floors and roofs made of reinforced concrete with a polystyrene core which insulates the whole of the building shell.
The complete range of EMMEDUE® building elements guarantees complete creation of the building using the system: load-bearing walls, floors, roofs, staircases, partitions, curtain walls and insulation panels.

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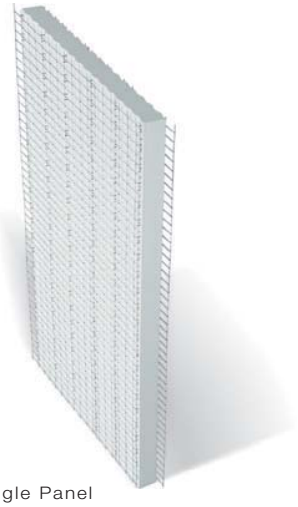
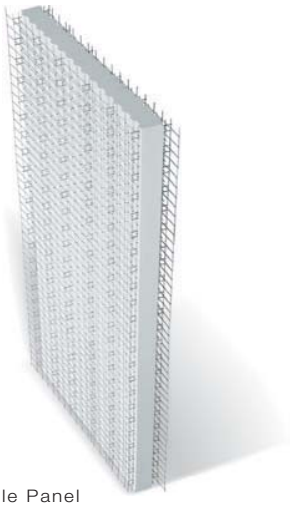
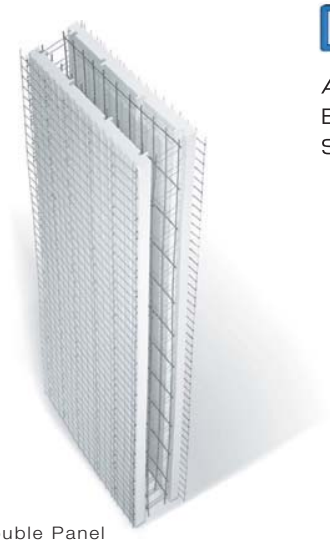


Single Panel

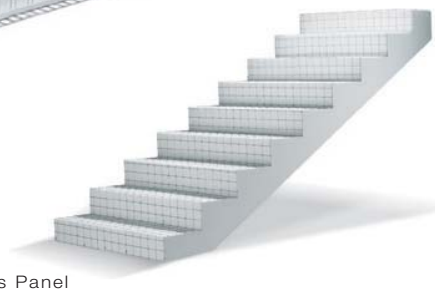


HP Single Panel

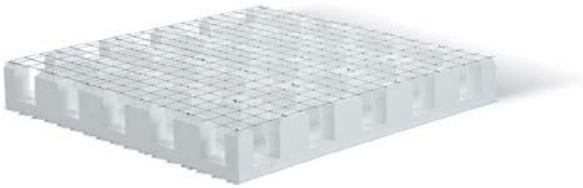


Double Panel

Floor Panel



Stairs Panel



Landing Panel

The cleanest energy is the energy which is not consumed.
EMMEDUE® panels guarantee:

- structures which are thermally insulated from the foundations
- continuous walls without discontinuities in construction
- total elimination of thermal bridges
- floors and roofs with continuous insulation on the intrados
- load-bearing walls, also with a double layer of insulation
- insulated ducts inside the panels

A good thermal insulation allows to halve the energy usage and the polluting emissions due to heating systems and/or air conditioning.

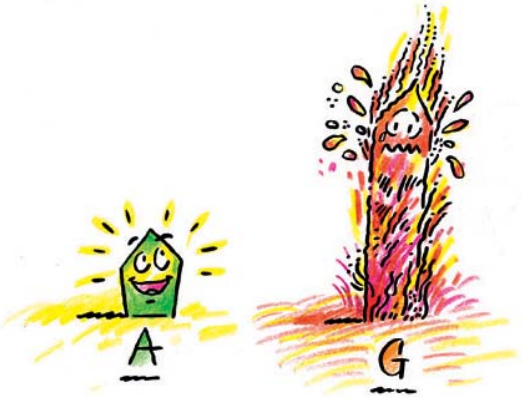
The EMMEDUE® system achieves:

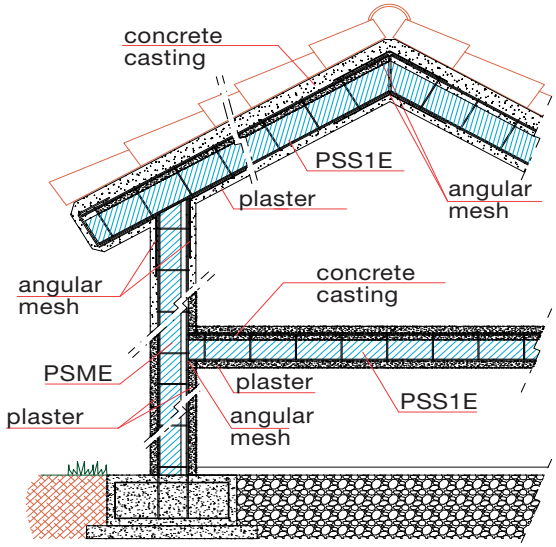
- heat exchange with the outside reduced to the minimum
- energy saving
- CO_2 emissions and environmental and atmospheric pollution reduction
- benefits for the environment
- economic saving

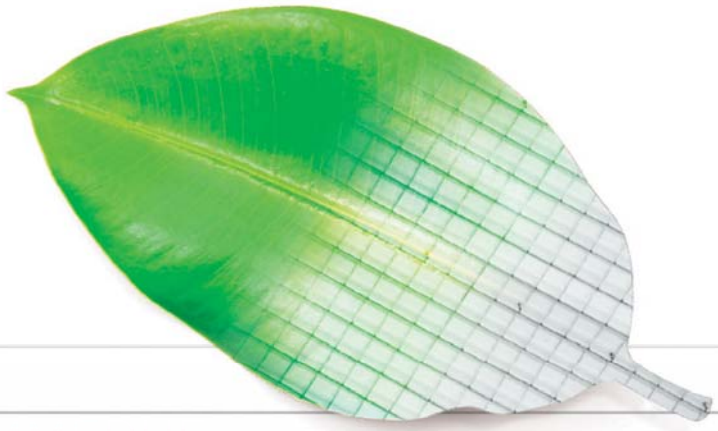
EMMEDUE® considerably improves heating comfort inside house and limits energy consumption, thanks to the widespread presence of polystyrene and its extremely low level of thermal conductivity.
EMMEDUE® panels allow to achieve high levels of thermal insulation to be achieved, even with minimum thicknesses and at truly competitive prices.
The building volume/living space ratio is thereby improved and labour, transportation and storage expenses are reduced, ensuring a lower environmental impact in the long term.

In traditional building systems, in order to reach the highest energy classes, it is necessary to add various thicknesses of insulating sheets to the building shell.

The EMMEDUE® building system is completely integrated: in a single phase, it is possible to obtain excellent thermal insulation which conforms to the strictest energy classes in addition to the load-bearing structure.







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Building using EMMEDUE® panels means creating homes which are less energy-demanding and have a high level of energy efficiency, thereby saving up to 80% of energy for as long as the building remains standing.

By multiplying the annual energy saving achieved with a perfectly insulated house for the whole life cycle of the building and comparing it with the cost of production, the considerable economic saving is also evident.
A building can last 100 years or more and often, for many people, it represents the biggest investment they make in their lifetime.

EMMEDUE®: the future is already here.

"What we have to construct is a common value with strong roots. Its foundations will be seriousness, professionalism, an optimistic and better vision of the future. Always respecting humanity, diversity, and the cultural world to which individuals belong and in which they originated."

Angelo Candiracci

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