14 ADVANTAGES OF THE SISMO BUILDING TECHNOLOGY

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1. UNIVERSAL

Sismo is universally applicable and not culture bound.
The Sismo building technology can be adapted to every project, from foundations and cellars up to the roof structure.
It’s high productivity, it’s brilliant simplicity and modest demand of materials and labour make the Sismo concept suitable for every socio-economic environment.
It increases productivity in industrialized countries and generates a new evolution in economy and industry.
To developing countries, the Sismo concept offers unlimited possibilities for the optimal use of local skills, labour and raw materials.

2. FIRE RESISTANT

The assembled SISMO system is a continuous monolithic concrete system without fire leakage through the assembled system.
This is specified in the European Technical Assessment.
The polystyrene used is self-extinguishing in compliance with the DIN 4102 rules.

Self-extinguishing means materials that flame in fire and extinguish by themselves when fire is removed. "Fireproof" means the materials that flame in fire, but do not spread at least.

SISMO building technology allows the use of alternative infill materials.
Fibre cement board, for example, can be used on the inside of a lift shaft.
Fire resistant tests carried out on different types of SISMO modules have given very satisfactory results.`

3. FAST BUILDING PROCESS

The experiences, in different countries have shown that the time required to realise buildings using the SISMO building technology is significantly shorter compared to conventional building methods.

The key word for SISMO is the industrial character of the system.

The rationalised concept allows precise planning and prevents unnecessary delays.

A very fast construction process completes the efficiency of the SISMO concept.

SISMO is quick to put into action; in emergencies a SISMO Production Station can be operational in a matter of weeks.

4. DURABLE

The superior design of the SISMO module provides maximum strength during concrete placement.
Once complete, SISMO structures attain a high structural integrity.
Tests and experience have shown that the strength of a SISMO structure is far greater than a comparable traditional structure.
Insulated formwork improves the concrete cure quality.
If correctly placed concrete and polystyrene will not rot or decay, making a SISMO structure virtually maintenance free for many years to come.

5. EFFICIENT INSULATION

Energy efficient building has become a priority in the building industry.
Thermal protection in buildings directly influences the use of energy for heating and cooling, as well as the ability to control the room climate.
Good insulation makes an enormous difference in cold and in hot climates.
SISMO gives the builder the opportunity to choose between a variety of insulating materials and thermal performances.
With insulating infill panels, the SISMO buildings are completely and permanently insulated.

5. EFFICIENT INSULATION

When using SISMO it is possible to provide an airtight building envelope with minimal ’uncontrolled’ air changes.
As a consequence the volume and quality of ventilation air can be easily and accurately controlled in a SISMO building, thus providing a comfortable, economical and healthy environment.
The SISMO building technology also guarantees efficient acoustic insulation.
Building with SISMO results in a continuous monolithic structure which forms an effective sound barrier.
For specific applications, the SISMO module can be tailored to satisfy all acoustic requirements.

6. CERTIFIED QUALITY

In 2001 Sismo® was the first company in the construction sector that received the European Technical Approval (ETA 01/0001).

Over the years, several tests at universities and building authorities in different countries have proven the SISMO building technology's exceptional capacities.

7. ENVIRONMENTALLY FRIENDLY

Thinking Green is becoming more and more important in the construction industry as contractors, developers and home builders look for materials that are eco-friendly.

The SISMO building technology is addressing these environmental concerns on several levels.

The production process is non-polluting.

Recycled materials can be used for the infill panels and using concrete walls instead of wood products helps to cut down on the worldwide problem of deforestation.

Using the SISMO building technology significantly reduces jobsite waste.

The building constructed will be energy efficient and will have a minimal impact on the environment.

8. SUITABLE FOR EARTHQUAKE ZONES

Calculations and reports made by the University of Leuven (Belgium) according to the Mexican standard and the Istanbul Kültür University (Turkey) have shown that a SISMO structure is very resistant to earthquakes.

These results represent the scientific evidence of what experience has shown.

SISMO buildings in countries such as South Korea and Turkey have proven their anti-seismic characteristics.

9. HURRICANE PROOF

SISMO buildings, built in areas at high risk of cyclones, have demonstrated their ability to withstand the most devastating weather conditions.

A monolithic SISMO building is extremely resistant to complex strains and thrusts due to the force emitted by cyclones.

10. VERSATILE

The infinite variability of the SISMO concept provides a construction method with virtually unlimited possibilities.

The SISMO module can be used for the construction of loadbearing vertical elements, partitions, curtain walls, floors and roofs.

Different geometrical or curved shapes can easily be obtained in the module surface as well as in the pre-located window and door openings.

10. VERSATILE

The SISMO building system is suitable for all kinds of projects, whether it’s a house or a village, apartments, offices or industrial buildings, high or low-rise buildings.

SISMO gives unlimited design possibilities. The shape, the type of infill panels and finishing materials can be chosen freely. However simple or fantastic the design, however traditional or daring, any project can be realised with the SISMO Building Technology.

11. COST EFFICIENT

The SISMO building system is a cost efficient building method for all parties involved in the building process.

For the contractor the system is easy to install, the need for specialised labour is heavily reduced.

The industrialised process allows efficient planning and an accelerated construction time.

There is no need for investing in expensive formwork as the modules arrive on site with the window and door openings already pre-located and every special shape or form already included.

The SISMO modules are lightweight, there is no need for heavy machinery on site.

11. COST EFFICIENT

SISMO significantly shortens the construction time allowing a faster commissioning of the building.
This results in lower pre-financing costs for the developer and for the owner of the project.
The end user of a SISMO building will be astonished by his low energy bill.
Building with SISMO guarantees a complete and permanent insulation, which produces energy savings in cold and in hot climates.

More than any other kind of building system SISMO creates enormous economies of scale, especially in larger projects with repetitive aspects.

12. COMPATIBLE

The SISMO building technology is compatible with virtually any other method of construction.

The SISMO module can be used for entire buildings.

Depending on locally available products or customs, the SISMO system can be integrated in the construction process in combination with any type of floor, partition, roof material or system.

13. LIGHT WEIGHT

The SISMO modules are easy to handle, to transport and to assemble thanks to a very low weight that permits their use in any conditions.

Thanks to the lightness of the modules no heavy or expensive site materials are needed.

Modules can easily be handled and assembled manually by one or two workers.

The light weight makes the SISMO modules safer to work with compared to other prefabricated systems.

14. INERTIA

The concrete used in a SISMO building has a high potential thermal inertia and may affect several properties that are essential for today's construction, such as indoor climate, energy consumption and power peaks.

It is considered an essential component in future smart buildings.

In addition to the insulating values it is important to take into account comfort and well-being within a building.

During periods of intense heat or solar radiation, a well-insulated building with good thermal inertia will remain pleasantly cool during the day and will retain a sufficient temperature at night..

THANKS

QUESTIONS ?