# **FREQUENTLY ASKED QUESTIONS**



# How thick are the panels in slabs?

The Epsom salt board has a thickness of 8 mm, and we increase the thickness of the XPS insulation to the millimetre, from 14 mm to whatever is required.

The thickness will be determined by the transmittance that the project management has ordered in your project.

We manufacture the XPS thickness to measure, millimetre by millimetre.

The exception here is our tongue and groove panel, PF, which has a fixed thickness of 66 mm.

# What is the load bearing capacity of the TABIHAUS® floor slab system?

Please read our TABIHAUS® slabs document, which contains the load bearing tables according to the expected weight of the building and the distance between profiles. These tables already take into account the coefficients for permanent and overload loads.

Remember that we manufacture the XPS thickness to measure, millimetre by millimetre, so we will always offer you the panel you need.

They allow bending loads of up to 10,500 Kg, but with a weight of only 14 Kg/m^2. weight.

# Do you recommend the panel with a single-sided or double-sided board?

If the panels are supported on a continuous surface, even if it is irregular, such as concrete, the ideal panel is the TABIHAUS® 1-sided panel. In this case TABIHAUS® would be an industrialised floor, avoiding the use of XPS and self-levelling mortars. TABIHAUS® will adapt to the irregularities of the concrete and create a smooth surface.

If they are supported on profiles or purlins, the panel will be installed on both sides.

#### What size are the panels?

We have two sizes, 3,000 mm x 1,200 mm, and 2,600 mm x 1,200 mm. They can be placed vertically or horizontally, as they maintain their properties regardless of their position.

## Can they be made larger?

No, it is not possible. In addition, their maximum size is also calculated according to the maximum weight that workers can carry according to occupational hazard legislation.



#### And smaller?

Of course, they cut perfectly, with a clean cut. We recommend a circular saw, although a jigsaw, radial saw, drill with drill bit, crown cutter, etc. can be used. We recommend a Widia disc. The wood disc is also valid, although it blunts at a higher speed, due to the ceramic nature of the material.

# What are the economic advantages?

With the TABIHAUS® system we do away with the use of steel sheeting, corrugated profiles and concrete pouring. We therefore also eliminate the setting times. With TABIHAUS®, when a panel is installed, it is ready to walk on.

We reinforce the structure with the installation of our panels, and their corresponding polymer and screws, but lowering the weight to 14 Kg/m^2. In other words, we protect the structure in terms of compressive stresses due to its own weight.

But not only that. When the panels are installed, the planimetry is perfect, eliminating the use of XPS and compression layers or self-levelling mortars, with their subsequent drying times and material costs. In other words, TABIHAUS® forged is the SLAB AND THE FLOOR.

We avoid the use of wood, OSB, cement, gypsum, wood cement, providing an extraordinary solution especially in terms of humidity and fire resistance.

#### Are they fire resistant?

Yes, they provide a 2-hour fire resistance from both sides.

# How do they perform acoustically?

TABIHAUS® panels are certified for airborne sound insulation of -22 dB. That is to say, the absence of noise between floor and floor. Its value can be even higher with the implementation of mineral wool in the false ceiling.

#### What about vibrations?

In terms of acoustic attenuation, the most commonly used material is XPS. Our XPS is already incorporated inside the panel. But, in addition, our XPS is of industrial series, not the one usually used in construction. Our closed-cell XPS has air cavities inside, which dissipates the noise of knocks or footsteps.

Moreover, our system implements the bonding of our panels to the structure by means of our hybrid polymer. This polymer, after 24 hours, reaches its maximum properties, creating a welding effect to the structure, creating a whole.

This braces the structure, and when all the panels have been installed, vibration in the structure is completely avoided, without the need for acoustic strips on the profile.



# Is anything else needed, any dry screed?

No, the self-weight of TABIHAUS® panels is calculated to be the only material required.

#### What finish can I do?

Any finish. Any covering is possible. It can be vinyl flooring, ceramic flooring, parquet, raised floor with plots, magnetic ceramic with our TABIHAUS® Magnetic panel, etc.

# And if I want to install underfloor heating?

That's perfect. Remember that our panels have a refractoriness of 4 hours, which means that they do not absorb the heat generated but will conduct it into the room.

# Can TABIHAUS® panels be passed through pipes or installations?

Yes, it can be cut with crown cutters, jigsaws, drills, etc.

# Are TABIHAUS® panels supplied tongue and groove?

Our installation system is head-to-head, joined with our TABIHAUS® polymer. If you want tongue and groove panels, the ideal panel is TABIHAUS® PF.

## How are the panels installed?

With frontal screwing and chemical bonding with TABIHAUS® polymer applied with a silicone gun. In other words, chemical bonding and mechanical fixing. Simple and efficient installation.

#### What is TABIHAUS® Polymer like?

It is a high bond strength polymer, but very elastic, with an elongation at break of 750%.

It is absolutely waterproof and is El 240 tested.

With service temperatures from -40°C to 90°C, it is also highly resistant to UV rays, weathering and ageing.

## Do you supply the accessories?

Of course, we supply everything you need to install our panels. The panel itself, the screws and the polymer.

#### Can they be supplied in the Magnetic version?

Of course, they can be supplied in the TABIHAUS® Magnetic option.



# Is it easy to assemble TABIHAUS®?

Of course, it's one of the basics of the system. But be careful, sometimes too much ease makes mistakes. There are 4 key points in the system that must be checked and executed correctly.

# Do expansion joints have to be left?

The linear thermal coefficient of TABIHAUS® is only 0.047%, but it is not zero. The system includes expansion joints where the façade meets the pitched roof and where it meets the parapets.

#### Is a floor slab waterproof?

TABIHAUS® panels are absolutely waterproof.

At the joint between panels, a hybrid polymer sealant is applied, guaranteeing waterproofing between panels. However, at this point, the system depends on the workmanship. The absence of polymer at any point on the roof will have dire consequences.

Therefore, a waterproofing system will be applied on top of the TABIHAUS® panels, leaving the TABIHAUS® panels as a second protection.

TABIHAUS® panels act as a roofing slab, providing fire resistance, thermal and acoustic insulation, refractoriness and also providing a second waterproofing barrier.

#### What type of waterproofing can be applied to the roof slab?

Waterproofing can be done by using bituminous self-adhesive strips at the joint between panels. It also accepts waterproof membranes, EPDM sheets, butyl strips - remember that the TABIHAUS® system can withstand the blowtorch -, Epoxy, etc.

#### Is it a good system for wet rooms?

Another great advantage of TABIHAUS® is that they are made of a salt, and therefore have zero bacterial life growth. It is impossible for life to survive on salt.

It is also an ideal material against insect attack, such as mites or termites, and against rodents.

They are chemically stable against ammonia, bleach, vinegar and even sulphuric acid. For this reason, they are very suitable for technical rooms, clean rooms, purification plants, factories, etc.

CONTACT US, WE WILL BE PLEASED TO HELP YOU!