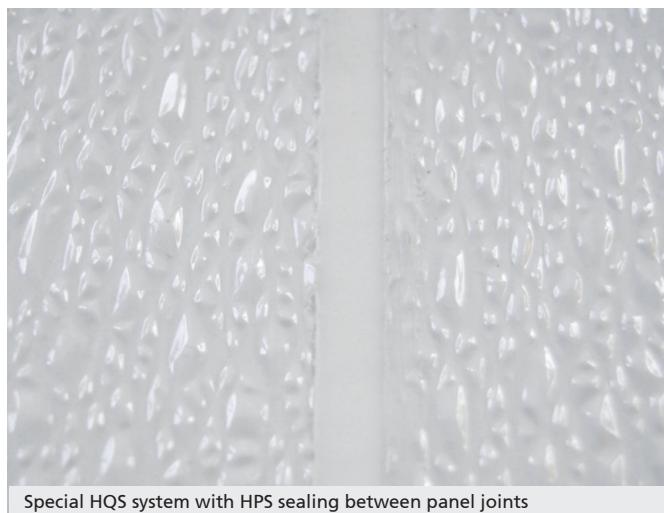


# Ferbox: solutions for cold storage



Founded in the 1960s, Ferbox soon became established on the international market for insulated panels. Ferbox panels are used in cold storage units in many product sectors of the food industry: meat, ham and cheese makers, delicatessen production, pasta manufacturers, fish, fruit, vegetables and confectionery). Ferbox now designs and builds environments which are easy to clean and highly efficient to sanitise. Some examples from the product range are: prefabricated cold storage units with preinstalled racking, low-temperature units, maturing and drying units, cooking rooms, chill rooms, clean rooms, refrigerated warehouses, logistics platforms, EI 120-rated facilities and various types of cold storage doors. Andrea Signorelli, the company's head of technical sales, explains: "our mission is produce supplies of consistent high quality, not forgetting attractive design, and install them correctly to ensure high performance. Many factors have made Ferbox a reliable partner today. Drawing on years of experience and using specialist staff, the company devises custom solutions to meet any requirement on the food market. Ferbox products are quick and easy to install. They guarantee optimum success (I mean efficient insulation) by using materials of the very highest quality. Ferbox offers a prompt response to call-outs or for repairs."



Special HQS system with HPS sealing between panel joints

## The advantages of Glasbord

The company's main panelling material is Glasbord (registered trademark). As Ferbox personnel explain, this is a fibre-reinforced plastic (FRP) laminate with Surfaseal protective coating. Glasbord is used in polyurethane sandwich panels, insulated freezer door leaves and as lining for plastered, painted or tiled walls (a simple stick-on sheet). It is also ideal for old, damp facilities in need of redevelopment or upgrading, for the production, handling, processing or storage of food products. Not only is Glasbord extremely easy to clean; it is also very tough, making it the material of choice for food manufacturers (resistant to impacts, abrasions and corrosive chemicals). It develops no bacterial load and is safe and durable. "This is a unique hygienic lining for walls and ceilings, unrivalled in every way. Glasbord is ten times easier to clean than ordinary panels, six times more resistant to

corrosive chemicals and abrasions and offers excellent impact strength. It also inhibits the spread of mould and bacterial load. The material's high quality and reliability save energy and reduce washing times. The Surfseal finish makes this a visually attractive product which preserves its shine and colour unaltered with the passage of time," emphasises Andrea Signorelli. And that is not all. "International HACCP certification confirms that our products conform to Directive 93/43/EEC in terms of the method used for HACCP products for use in food processing. The HACCP certificate guarantees the quality of our products for use in the hygienic conditions necessary in any food processing laboratory. Glasbord has also achieved Greenguard certification, an important statement which identifies products with low emissions, and more recently also Greenguard Gold, which has even stricter requirements. "Products certified to the Greenguard standard must meet rigorous requirements for organic volatile compound (VOC) emissions and toxicity. They are checked for a wide range of chemicals," explains Signorelli. "The maximum acceptable emission levels of air concentrations conform to WHO recommendations, as well as to the German Blue Angel eco-label and the LEED sustainability certification. Greenguard Gold is even harder to attain, but the materials tested to this standard can be used in sensitive environments such as schools and healthcare facilities."

High-quality supplies, fine materials, tailor-made designs and specialist know-how.

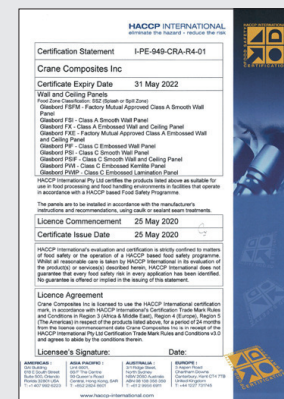
On these principles the company creates sanitisable environments which assure the highest safety and hygiene levels.

are highly functional in terms of cleanliness and hygiene. People can spend their working day in a clean, safe, modern environment, working by daylight from the large windows of the processing rooms, which we always designed jointly with Ferbox."

## HQS performance levels

To meet increasingly high standards, Ferbox has also introduced HQS with HPS gaskets between the joints of its panels. The system further improves the performance ratings of environments in terms of cleanliness and sanitisation, hygiene and appearance. "HQS with HPS sealing yields extremely high performance, because it ensures high resistance to mould and the same ease of cleaning as the Glasbord panel with Surfaseal. Furthermore, the HPS elastomer is solvent-free, odourless, has a wide bonding spectrum and is isocyanate- and silicone-free. It is used in gaskets for joints in absolute clean rooms, because it allows a

total planar fit between panels. The in-depth sealing is provided in the space between the panels, avoiding ridges and/or thick components on walls and ceilings. HPS sealing can also be defined as "maintenance-free."



  
**Danish Crown**

## CASE STUDY - CLAI OPTS FOR FERBOX

Over the years, Ferbox has received highly positive feedback from its customers, endorsing the excellent performance of the systems it designs. For example, over 2 million square metres of Glasbord panels are now installed, Europe-wide.

A prime example of the businesses relying on Ferbox's experience and solutions is CLAI, a historic producer of continental meats based in Imola, Italy. The cooperative farm is present throughout the supply chain, from fields of crops and members' livestock farms to slaughter, processing and the points of sale where it sells its own meats, cold cuts and cheeses direct to the public. In support of its supply chain, CLAI boasts a modern biogas-fired plant which converts by-products into the necessary electricity for the processing. CLAI operates four factories: continental meats at Sasso Morelli di Imola (Bologna), cheese at Palazzuolo sul Senio (Florence), ham at Zuarina a Langhirano (Parma) and the abattoir at Faenza (Ravenna), where the most advanced beef and pork cutting procedures are used, handling and processing the meat to high standards. "The Imola plant, which produces the CLAI range of continental meats, was built in the 1970s. Over the years

it has expanded in line with growth in the business, reaching the position it holds today, as one of the main salami production plants in Italy," explains Rudy Magnani, general manager at the Imola plant. "Having grown in the course of time, little by little, the factory reflected a patchwork of construction methods, from masonry to sheet metal and fibreglass panels." In 2015 the company decided to invest significantly in the upgrading and expansion of the Imola production site. "We looked for the best solutions available on the market which would give us facilities with high safety standards, where we could manufacture our products in the most hygienic conditions. After consulting all the suppliers, we picked Ferbox." What led CLAI in that direction? "Ferbox offered us attractive solutions, in terms both of materials and technology, as well as tailor-made alternatives. One strength which proved decisive was the know-how of its project managers, Andrea Signorelli and Roberto Vangarotti. They were willing and able to customise their proposals according to our requirements." The upgrade began in 2016 and will finish by summer 2020, with an investment of over 12 million euro. "This project enables us to work in leading-edge facilities now, which



Processing room at CLAI



The premises are illuminated by daylight through the large windows designed with Ferbox

## Insieme per un futuro alimentare più sostenibile

Con oltre 130 anni di tradizione e competenza alle spalle, siamo esperti nella produzione di carne di suino di alta qualità. Tutti gli allevatori della famiglia Danish Crown hanno sempre avuto un'attenzione particolare per il benessere degli animali e da molti anni si impegnano a svolgere la propria attività all'insegna di una maggiore sostenibilità. Stiamo dando il massimo per trasformare in realtà l'idea di un futuro più sostenibile per il cibo. Ulteriori informazioni sul nostro percorso per la sostenibilità sono disponibili sul sito

[www.sustainablefuture.danishcrown.com](http://www.sustainablefuture.danishcrown.com)