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<u>Professional tile laying in the F/LIST company restaurant with PCI</u> products and tile laying crane

High-precision laying of large-format tiles

Perfection is the trademark of F. LIST GMBH: the internationally active company from Thomasberg in Austria that plans and produces high-quality interiors for private jets, yachts and luxury homes. For his own company, Chairman Franz List also sets the highest standards in terms of style, high-grade materials and a modern atmosphere. The newly constructed company restaurant "franz", with its futuristic design, bears witness to these standards. The bright, open room with large glass areas offers space for 220 people in exclusive surroundings. The floor covering in the 1,400 square metres of the restaurant is formed by 240 x 120 centimetre slabs which are only six millimetres thick.

List awarded the contract for this demanding floor covering to the tiling department (Keramik Bau Weiz) of building company Lieb Bau Weiz GmbH. For Department Manager Hansjürgen Kulmer, the main focus was not only on proper tile laying but also on the planning of the project. To ensure that the team could lay the tiles, weighing some 60 kilograms each, without any risk to their health, a special laying crane was used. As regards tile fixing materials, Keramik Bau Weiz has

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already opted for PCI products for many years. Especially when laying large-format tiles, reliable, high-quality products are essential for the safe completion of the project. "In order to lay these large formats reliably, with full-area bedding, and create a durable floor covering for F/LIST, we needed a tile adhesive combining a long working time with fast setting," Hansjürgen Kulmer explains.

The foundation: a very smooth, very level substrate

The only substrate preparation needed in the company restaurant was priming; levelling was not necessary. The product selected was PCI Gisogrund 404, a solvent-free, very low-emission special primer with a violet signal colour ensuring even application. The high adhesive tensile strength of the primer ensures firm bonding to the substrate. The primer also protects the tile adhesive applied later against excessively rapid drying on absorbent substrates and prevents the formation of shrinkage cracks.

The challenge: laying large tiles with full-area bedding

The tilers used PCI Carrament grey tile adhesive with PCI Lastoflex polymer-modified additive to lay the large fully vitrified slabs. The medium-bed mortar, which is deformable and has a creamy, plastic consistency, is easy to spread with a large notched trowel. The buttering-floating procedure was used to lay the large-format tiles without air inclusions and cavities. PCI Carrament was combed onto the substrate using a 15-millimetre notched trowel and the slabs were back-buttered with a smooth layer of adhesive. As PCI Carrament effectively binds water into the crystal structure, it is especially-well-

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suited for large formats. The fast setting of the adhesive ensures rapid progress with laying: the floor covering can already be walked on and grouted after six hours and subjected to full loading after about one day.

The laying crane meant that work in the company restaurant could be completed faster and more easily. Especially the lifting, carrying and positioning of large-format tiles pose a health risk for tilers. Using machinery, the work involved in the buttering-floating procedure can also be shortened. The craftsmen do not need to turn the slabs over with considerable manual effort for back-buttering and it is also not necessary to apply vacuum lifting devices to the front of the tiles. The position of tiles that have already been inserted into the adhesive bed can also be corrected easily without any strain on the craftsmen's backs. Working and waiting times are shortened, with significantly lower physical stress.

The icing on the cake: grouting with premium mortar

Despite their low share in the overall surface area, the joints also play a key role in the appearance of a floor covering, even if large-format tiles are used. The project owner and tiling contractor selected PCI Nanofug Premium, a joint grout that features a fine surface and brilliant colours. Furthermore, a floor covering in a company restaurant is subject to considerable stress and must withstand frequent cleaning. PCI Nanofug Premium features the "easy-to-clean" effect and is also extremely resistant to attack by acidic household cleaning products. There was a feature that was especially

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appreciated by the team headed by master tiler Hansjürgen Kulmer: "Thanks to a working time of about 40 minutes, PCI Nanofug Premium is very convenient to use. Nevertheless, it sets rapidly without hardening on the tile surface," Kulmer reports. "We were extremely satisfied with the tile fixing products we had selected. The tile adhesive and joint grout set rapidly at the same time as allowing an unusually long working time. They are also in line with the high standards of the building owner and are very-low-emission products that take into account requirements for a healthy living environment."

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Project data

Project title:	High-precision laying of large-format tiles
Subtitle:	Professional tile laying in the F/LIST company restaurant
	with PCI products and tile laying crane
Location:	Thomasberg, Austria
Completion year:	2017
Objective:	Laying large-format floor tiles using machinery
Project size:	1,400 m²
Products used:	PCI Gisogrund 404, PCI Carrament grey, PCI Lastoflex,
	PCI Nanofug Premium, PCI Silcofug E
Architect:	kaltenbacher ARCHITEKTUR zt-gmbh
Project owner:	F. LIST GMBH
Tiling contractor:	Keramik Bau Weiz (specialist tiling department of Lieb
	Bau Weiz GmbH & Co KG)
PCI applications	Markus Balleisen, Peter Scharping
technicians:	
PCI adviser:	Herbert Eibel
Contact:	PCI Augsburg GmbH
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Photos:

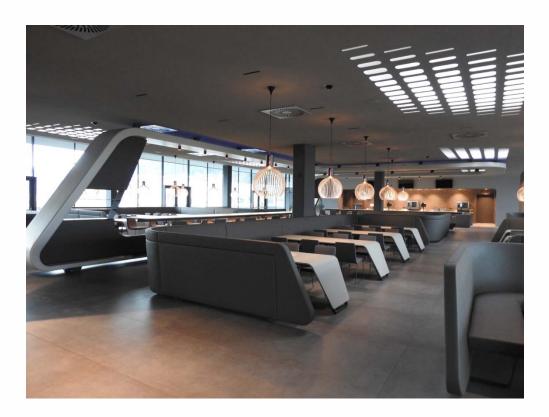


Fig. 1: F. LIST GMBH in Thomasberg produces exclusive interiors for private jets, yachts and luxury homes. Chairman Franz List also places considerable emphasis on design and high-quality workmanship in the interior of his newly constructed company restaurant.

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augsburg.com:443/php/index.php?database=1&downloadimage=54438&size=4608 x3456&format=&check=06d602ef408d84a9375f5f7abef57ca1

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Fig. 2: For the floor, the building owner selected large-format fully vitrified slabs and awarded the contract for tiling to Keramik Bau Weiz (the specialist tiling department of Lieb Bau Weiz GmbH & Co KG), which has used PCI products for many years. The substrate was first primed using PCI Gisogrund 404.

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Fig. 3: The tilers laid the 240 x 120 centimetre slabs by the buttering-floating procedure using PCI Carrament grey medium-bed mortar, with PCI Lastoflex polymer-modified additive, especially for laying fully vitrified tiles.

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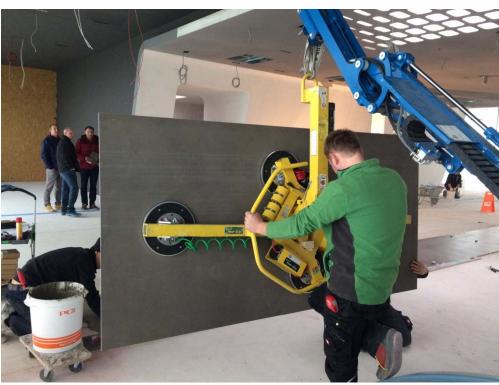


Fig. 4: To protect the health of his team and to ensure high-quality tile laying, master tiler Hansjürgen Kulmer used a tile laying crane.

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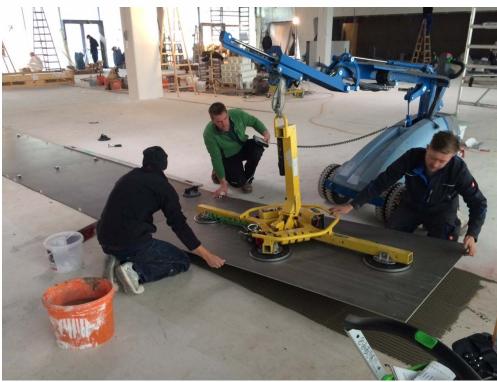


Fig. 5: High-precision work: the large-format tiles are fitted precisely into place. Any corrections that may be needed are easier to make thanks to the use of the crane.

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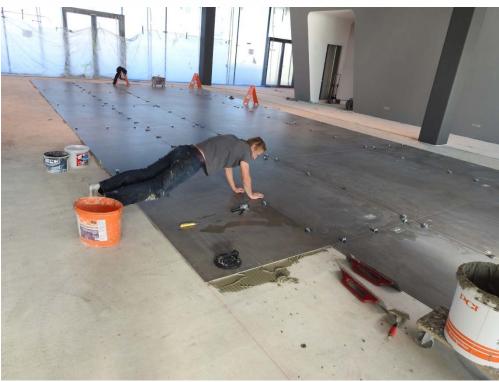


Fig. 6: Extremely precise working is essential for laying these tiles. The joints were then grouted using PCI Nanofug Premium. This joint grout features a fine surface that is easy to clean, with high resilience and brilliant colouring.

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About F/LIST

F. LIST GMBH from Thomasberg (Austria) is a globally active producer of high-quality interiors for private jets, yachts and luxury homes with more than 750 employees at six locations worldwide. Passion and reliability determine every step of the trend-setting Austrian family business.

About PCI

PCI Augsburg GmbH is part of the business unit Construction Chemicals of BASF and leader in the tile laying materials sector for specialist firms in Germany, Austria and Switzerland. In addition, the company supplies product systems for waterproofing, concrete protection and repair, as well as a complete product range for the flooring sector. The PCI Group employs a staff of more than 1,200 in Europe and generated sales of over €314 million net in 2017. Further information about PCI on the Internet under www.pci-augsburg.de.

About BASF

At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. The approximately 115,000 employees in the BASF Group work on contributing to the success of our customers in nearly all sectors and almost every country in the world. Our portfolio is organized into five segments: Chemicals, Performance Products, Functional Materials & Solutions, Agricultural Solutions and Oil & Gas. BASF generated sales of more than €64.5 billion in 2017. BASF shares are traded on the stock exchanges in Frankfurt (BAS), London (BFA) and Zurich (AN). Further information at www.basf.com.

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