Property	**Warehouse of Paidi Möbel GmbH**
Date	2013
Location	Hafenlohr
Implementation date	2013
The task	Floor restoration: Creating a tough substrate
Property size	3,500 m²
Products used	PCI Apoten PU, PCI Epoxigrund 390, PCI Finopur
Client	Paidi Möbel GmbH, Hafenlohr
Processor	Peter Schuck, Masonry: Peter Schuck, Managing Director Bernhard Müller, Shot Blasting Technology
Technical consulting	PCI application engineer Richard Rast PCI technical consultant Peter Scharf PCI head of development Markus Schackmann

Robust warehouse for intelligent children's furniture

Restructuring, renovating, maintaining quality

Roughly 3,500 square metres were converted in the facility of furniture manufacturer Paidi Möbel GmbH; the production hall was turned into a warehouse with a tough substrate The first construction phase was particularly difficult: This was due to the fact that the substrate consisted of cracked, partially raised mastic asphalt with cement-based repairs. Based on the complicated situation, the team used different primers, though they all required the same preparatory work. For this reason, the 700 square metre area covered with mastic asphalt, and the 2800 square metre area covered with cement screed were pretreated using shot blasting technology. This provided the floor with a rough surface, ensuring optimal adhesion of the new primers and coatings. Following the preparation, Peter Schuck's team worked on priming, coating and sealing. Due to the various starting materials, different primers were applied: In areas with mastic asphalt, the processors used PUR coating PCI Apoten PU as primer coating. On the

remaining area consisting of cement screed, PCI Epoxigrund 390 was applied. The construction pros used both materials as scratch coat. They mixed the reaction resins with 30 percent oven-dried silica sand and, using floor brushes, evenly applied the easy-to-spread mixture. On the following day, the processors covered the primed area in the Paidi facility with a two millimetre thick PCI Apoten PU layer. During the final step, a matt top coat was applied onto the layer. The two-component transparent and light-resistant PUR sealing PCI Finopur produced a mat, wear-resistant and chemical-resistant surface. Micro glass beads mixed into the material ensure a non-slip surface. Meanwhile, the new warehouse is home to finished parts and furniture panels. Daily routine has been established - on a durable basis.

Photos

Preparation is the first step. To achieve an optimal result, the construction pros used shot blasting technology to clean the floor of the new warehouse of Paidi Möbel GmbH.

Another effect of shot blasting: The surface is roughened. This enhances the adhesion of the subsequent layers.

However, a shot blaster cannot always reach all the spaces to be processed. Hence, the pros used a grinder to assist with the job: Every square centimetre was accessed.

Steel balls smash small material structures that can then be removed. Shot blasting is an effective method for cleaning and preparing the surface for subsequent work.

To ensure ideal adhesion of the next coating, the surface is vacuumed after shot blasting. In doing so, the construction pros in Hafenlohr removed all particles from the floor that could have hindered the application of primer and components.

The primer is mixed: The construction chemicals specialist PCI Augsburg GmbH delivers the primer PCI Epoxigrund 390 in the proper mixing ratio. The processors mixed both components ...

... and added oven-dried silica sand in another step; in this way, it was possible to use the material as scratch coat.

When thoroughly mixed, the two components of PCI Epoxigrund 390 and the silica sand turn into a fluid mass that can easily be spread on the surface to be processed.

The processors primed more than 2,800 square metres of the floor with the special primer PCI Epoxigrund 390. The low-viscosity product was applied to the surface by means of floor brushes.

The proper mixing ratio: PCI Apoten PU consists of two components that, when combined, result in a mass with good flow properties. For the new warehouse of Paidi Möbel GmbH …

… the construction pros added silica sand. In this way they created ...

... a self-levelling floor coating that was spread over the entire area by means of notched trowels.

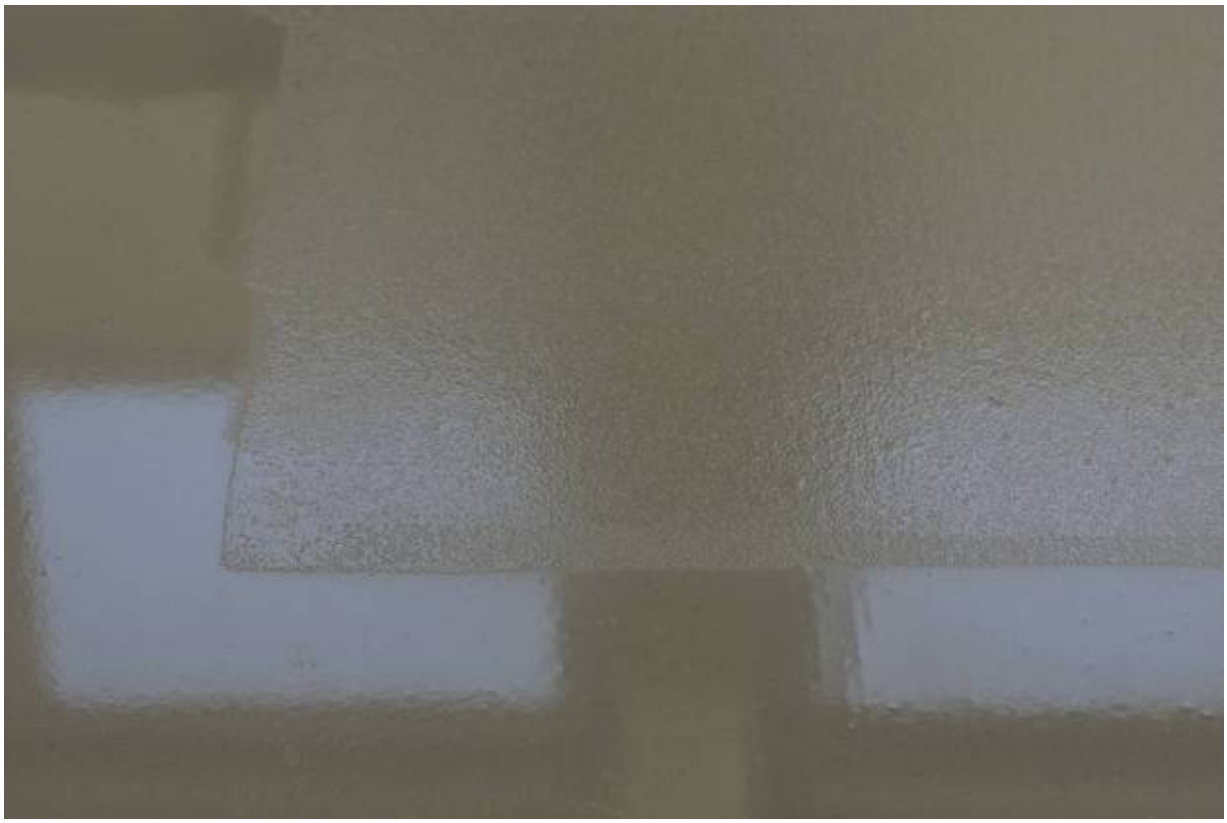
To level and vent the coating, the construction pros treated the applied product with a spiked roller.

During the final step of the renovation work, the floor of the Paidi warehouse was sealed. For this purpose, the processors used the 2K PUR sealing PCI Finopur.

Peter Schuck's team added micro glass beads to the two components of the sealant. They ensure a non-slip surface.

The transparent top coat was spread on the floor of the new warehouse with short pile rollers. Thanks to the very good flow properties, the product is easy to process.

By applying the final layer, the construction pros created a wear-resistant surface. The sealing is resistant to light and medium dragging and rolling loads - ideal for the demands made on the new warehouse.



Smooth and matt: PCI Finopur provides a beautiful surface that is also durable.