



Microsoft

Mapei technology keeps Microsoft platform dry.

Text by Diane Choate, photos by Carolyn Anne Ryan, Dave Hamilton and Mike Piazza, Mapei Corp.

Building 20 on the Microsoft campus in Redmond, Washington, currently houses hardware platforms. Lately, its foundation was causing a problem and needed a restoration work able to provide the whole of the structure with a solid base. The one-storey construction is built into a hillside and rainwater seeps into the foundation's concrete slab. The parking lot also has a slight grade, which causes water to drain toward the building. These circumstances led to high moisture-emission levels from the slab, which had been covered

with carpet tile and vinyl composition tile (VCT). Levels reached 2.72 to 3.63 kg per 92.9 m² per 24 hours in some areas, and over 5.44 kg in one particularly "wet" area, as shown by the calcium chloride tests. DeWalt Commercial, the general contractor in charge of remodelling Building 20, selected Division 9 Inc. of Redmond to solve the floor-covering problem. Division 9's Chuck Young took up the challenge and consulted with Dave Egge of the Systematic Company in Tukwila (Washington), which distributes Mapei products. Egge discus-



Photo 1. This one-storey structure was built into a hillside, which caused its floorings to be deeply damaged by humidity.

Photos 2 and 3. Once the old floorings were removed, Planiseal MRB was applied on the substrates to create a moisture-reduction barrier.



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Photo 4. Planipatch Plus System was applied on the substrates, which had been previously treated with Planiseal MRB.

Photos 5 and 6. Carpet tiles and vinyl composition tiles (VCT) were laid on the moisture-reduced substrates.

sed the use of PLANISEAL MRB* with Young, encouraging him to attend a Mapei seminar to learn more on this topic. After hearing Mapei representative Tom Lundgren speak on the subject at the seminar, Young approached him with his concerns about Building 20. The solution proposed by Mapei for this project proved to be the most suitable one. Dave Hamilton, Mapei regional manager, was present to oversee the work done with Mapei products. First, the workers covered all the surfaces in the offices and workspace with PLANISEAL MRB* moisture-reduction barrier. They even opened cracked spaces in the substrate and coated them with PLANISEAL MRB*.

Next, they patched voids and uneven areas with the PLANIPATCH PLUS SYSTEM*.

The second set of moisture level tests conducted in 3 different areas presenting the greatest problem showed encouraging values of 0.38 kg per 92.9 m² per 24 hours.

With the moisture levels well within the proper range (1,36 kg per 92,9 m² per 24 hours), Chuck Young's crew laid down the new floors: they used ULTRABOND ECO 711* to install the Mannington Essentials and Armstrong Imperial Textures VCT floorings in the computer offices and in the kitchens; the Flooring Systems Interface carpet tile was, on the other hand, laid down in the remaining areas with ULTRABOND ECO 800* pressure-sensitive flooring adhesive.

Young commented, "Everything is staying down well after the remodelling. This was our first time to use Mapei products and we were pleasantly surprised with the ease of application of the PLANISEAL MRB* and the greatly reduced moisture levels we achieved." Dave

Edge of Systematic was so pleased with the results attained at Microsoft Building 20 that he has recommended the use of PLANISEAL MRB* to other customers in the area who have similar problems. He hopes to report more successes soon.

The Microsoft platforms have been moved into Building 20 and at the last report were performing very well.

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TECHNICAL DATA

Building 20, Microsoft Campus, Redmond, Washington (USA)

Work: moisture-reduction treatment of the substrates and installation of carpet tile and vinyl composition tile (VCT) floorings

Year: 2004

Contractor: DeWalt Commercial

Installation Company: Division 9 Inc., Redmond

Materials: VCT tiles by Mannington Essentials and Armstrong Imperial Textures, carpet tiles by Flooring Systems Interface

Mapei Distributor: Systematic Company, Tukwila (Washington)

Mapei Co-ordinators: Tom Lundgren and Dave Hamilton, Mapei Corp.

*Mapei Products: Planiseal MRB, Planipatch Plus System, Ultrabond Eco 800, Ultrabond Eco 711.

The products referred to in this article are manufactured and distributed in America by Mapei Corp. (USA) and Mapei Inc. (CDN). For further information, see the web site: www.mapei.com.

