

# HIGH TECH FOR A NEW HEADQUARTERS

Boehringer could count on highly specialized partners and technology to ensure the best outcome possible on this project.

by Paolo Giglio



Resilient flooring is ideal for large spaces such as offices, clinics and schools. In Monza, a suburb of Milan, the new headquarters of Boehringer Mannheim Italy, the well-known pharmaceutical corporation and leader in its field, was recently completed. The company took advantage of highly specialized partners and technology to guarantee optimal results. Let's take a closer look at the installation of approximately 14,000 square meters of resilient flooring in their new offices.

PHOTO 1



## Preparation of the substrate

Contoured galvanized sheeting was installed and anchored to the finished reinforced concrete slab. This technical solution gave great flexibility for installing the electric system on each floor. We can see in Drawing 1 how the project design found a way of avoiding interference between electric, telephone and computer cables.

An anhydrite screed approximately 4 cm thick was poured over the galvanized sheeting as a substrate for the resilient flooring. The proper installation of materials resulted in a substrate without cracks that features very high mechanical strength. Before preparing the underlayment, a test had to be made with

DRAWING 1



*Drawing 1*  
Special design features avoided interference between electric, telephone and computer cables. Contoured sheeting was anchored to the reinforced concrete slab and then embedded in an anhydrite screed

PHOTO 2



PHOTO 3



PHOTO 4



a carbide hygrometer to make sure that the moisture present in the substrate did not exceed the 0.5% required by present standards.

The underlayment was prepared by abrading the surface of the anhydrite with a sanding machine (Photo 2). This operation opened the surface pores of the substrate to allow the primer to penetrate into the structure of the screed. Thorough vacuuming followed (Photo 3). This step is very simple yet all-important because the underlayment must be free of loose material, dust or laitance.

Then PRIMER G insulating primer was applied with a roller, taking care to spread the product evenly.

This surface treatment between the gypsum substrate and the cementitious leveling compound is indispensable because it prevents a chemical reaction between the sulphates in the gypsum and the alluminates in the cement that can cause the formation of a salt called "ethringite" if moisture is present. One day later PIANODUR R was installed, a fine grain self-leveling cement smoothing compound that hardens in ultra-fast time, ideal for dry areas subject to heavy traffic (Photo 4).

PHOTO 5



PHOTO 6



PHOTO 7



#### Installing the flocked flooring

Once the substrate was prepared, Flotex flocked flooring was installed. This



PHOTO 8



PHOTO 9



hi-tech flooring has a nylon fiber surface heat-anchored to a layer of PVC by means of high-speed electrostatic flocking (that makes the pattern on this type of carpet), with an intermediate

stabilizing layer in fiber glass and an sound deadening under-layer of closed cell PVC foam. ROLLCOLL, a fast-setting synthetic polymer based adhesive in water dispersion, was used to install the Flotex (Photo 5).

Photos 6, 7, 8, and 9 show the beautiful finished job which left the customer fully satisfied. □

*Technical data sheets for the products mentioned in this article are contained in Mapei Binder N° 2 "Resilient flooring"*



#### TECHNICAL DATA

**Project:** Boehringer Mannheim Italia S. p.A., Monza, (MI) Italy

**Year of Project:** 1995

**Construction firm:** Minotti

**Project Manager:** Ing. Minotti

**Flooring:** Flocked Flotex from Bonar & Flotex LTD (UK)

**Gen. Agent for Italy:** Linoleum Italia Srl, Milan

**Flooring installed by:** Self Cart, Monza

**Total area:** 14,000 sq. m.

**Mapei installation products:**  
PRIMER G  
PLANODUR R  
ROLLCOLL

The Mapei products mentioned are part of Mapei's European product lines