

BMW Italy

The brainchild of Kenzo Tange, the new headquarters of the German car manufacturer stands at the gates of Milan.

The new headquarters of BMW, conceived by the world-renowned architect Kenzo Tange, is situated in San Donato, at the gates of the city of Milan. Facing out into the Milanese hinterland, the impressive, distinctive structure is flanked by a wall which separates it from the via Emilia. Here it nestles in a small wedge of land delimited to the South by a curving motorway crossing which forms almost a template for the Tange-designed structure. The startling but simple façade is certainly destined to become an unmistakeable landmark for commuters arriving in Milan from the South-East. So simple is it, indeed, that the design of the building may seem elementary, like a white sheet scored with black horizontal stripes, peculiarly flexed and tugged. In the spirit of such an innovative project, continuity of styles could be sacrificed, and this explains the large areas of transparent glass panelling on the exterior. At the rear of the building, looking out over the suburb, the building bares a different appearance, with a landscaped area

which is part-look-out part-piazza. Not just simple, the shape of the edifice is artistically original, too, evoking a sail buffeted in the wind. The remarkable aesthetics also conceal an excellent tenso-structural solution, used to install the glass panels in the showroom section. The high facade is eleven metres tall and required a system of three suspended perpendicular panels, inter-connected and again in glass, held together by

stainless steel link pieces affixed to the 12/15 mm glass purposely tempered to be drilled and appended. Mapei products were used inside the showroom for the preparation of the cement substrate and for the fitting of the 60x60 cm porcelain floor tiles. To satisfy the demands expressed by the client, who requested and insisted on a technical solution making use of products conforming to

The above photo is published with the kind permission of "L'Arca" magazine, having first appeared in issue number 134 of that publication in February 1999.

Photo 1: Roller-application of PRIMER G*

Photo 2: preparation of the ADESILEX P4* levelling compound.





Photo 3: straight-edging of the ADESILEX P4* levelling compound.

Photo 4: spreading of the KERABOND+ISOLASTIC* adhesive compound.

Photo 5: positioning and tamping of the ceramic tiles.

Photo 6: checking the back of the tile for moisture.



DIN regulations, the following products were utilised: ADESILEX P4*, for the levelling of the substrate, and KERABOND+ISOLASTIC* for the installation of the porcelain tiles. The underlayment, on which the tiles were to be laid, was a cement-based screed with added fluidifier in which the heating pipes were embedded.



The compactness of a mortar-bed of this nature meant that adequate scarification through sand-papery was necessary before installation work could begin. This would ensure that the superficial pores on the screed could open. Once the scarified areas had been cleaned, the PRIMER G*, diluted to one part product, one part water, could be pasted on with a roller. The expansion joints in the screed were recreated according to the number of tiles to be laid, while those which could not be used were sealed with EPORIP*.

The executing company then proceeded to the levelling with ADESILEX P4*, whose excellent workability and plasticity properties permit the tile fitter to work with product widths of 2 to 20 mm with a single hand; this product can also be used beneath shafts (of up to 4-5 metres) without disturbing the coverage, and hence yielding a perfectly smooth, compact, resistant and quick-drying substrate.

The laying of the tiles was effectuated with KERABOND+ISOLASTIC*, a highly deformable adhesive product, with 10 mm joints grouted with KERACOLOR GG*. As in the showroom, KERABOND+ISOLASTIC* was again the preferred formula in the workshop, albeit here with a more resistant 20x20 deep-section porcelain tile for the flooring material.





"The technical Data Sheets of the products mentioned in this article are contained in Mapei binder No. 1 "Ceramic Line".

The adhesives and the Mapei grouts conform to the EN 12004 and prEN 13888 regulations.

Kerabond + Isolastic

(C2): Cement based powder for ceramic tiles (thicknesses of adhesive up to 5 mm) enhanced with flexible latex adhesive.

Adesilex P4: Rapid-setting self-backbuttering adhesive with medium deformability for ceramic tiles.

Primer G: Synthetic-resin-based water dispersion primer.

Eporip: Two-component epoxy adhesive for bonding new on old concrete and for monolithic sealing of cracks in screeds.

Keracolor GG (CG2): Cement-based grout for 4 mm to 15 mm joints.



TECHNICAL DATA

BMW Italia Headquarters - San Donato Milanese, Milan - Italy

Project: Kenzo Tange Associates, Tokyo

Year of construction: 1998

Installation contractor: Privedit Srl

Director of works: Mario Bonvicini

Material fitted: porcelain tiles (60x60) and deep-section porcelain tiles (20x20) by Mirage

Mapei products used: ADESILEX P4, KERABOND+ISOLASTIC, PRIMER G, EPORIP, KERACOLOR GG

Mapei co-ordinator: Paolo Giglio