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*Milan*

# APPLE STORE

WATER, GLASS AND STONE:  
THE DISTINCTIVE FEATURES OF  
THE NEW APPLE STORE RECENTLY  
INAUGURATED IN MILAN

The new Apple Store in Milan is just a short walk from Corso Vittorio Emanuele, one of the busiest pedestrian zone in the city. Visitors passing through Piazza Liberty can now see a spectacular fountain – a large, parallelepiped structure invested by eight-metre-high jets of water - characterised by the famous logo of an apple that forms the entrance to the store and the backdrop for a large, open-air amphitheatre.

The visual impact is in line with the design concept that has always characterised the famous Californian brand. Glass has always been one of the characteristic features of Apple stores around the world. The showroom itself, on the other hand, was inspired by the store on Fifth Avenue in New York and is situated below street level. The store is the 17<sup>th</sup> to be opened in Italy and the 112<sup>th</sup> in Europe.

The new Apple store was designed by the architect Stefan Behling from the Foster + Partners design studio, like many other Apple stores around the world. The company's policy has always been to create stores which, although different from each other, are immediately recognisable for their use of particular materials, special design features and the uniqueness of the places where they are located, in this case an almost hidden piazza in the city centre. The architect underlined how the store in Piazza Liberty, a central but somewhat overlooked part of the centre, is now a space that has been handed back to the city. It took Apple head office around ten years to find the perfect location and then to finalise the deal with the owners. This was followed by another four years to design and discuss the project with the local council and then another year to actually carry out the work.

## **WATER AND GREY STONE FOR THE EXTERIOR**

"We combined two fundamental elements of an Italian piazza: water and stone. We also added a glass door to create a multi-sensorial experience for visitors as they walk into the store through a tumbling fountain, as if they are enveloped by water" declared Jony Ive, Chief Design Officer for Apple.

The two entrances to the store are a perfect representation of Apple's design concept. The first one, on the same level as the piazza, is almost like walking inside a parallelepiped



between two walls of water; the designer was inspired by the fountains in a number of Italian piazzas. The second entrance is below ground level and is reached by going down the large steps covering the entire piazza. After going down a stone and metal cantilever stairway sitting against a wall covered with grey granite, you enter the store below.

The access stairway was designed to look like a large, modern amphitheatre where passers-by and clients can sit, wait for friends, relax or connect to Wi-Fi and work. The piazza, which is also covered with grey granite is open to the public 24 hours a day and will be used to host special events all year round.

#### MINIMALIST AND WELCOMING INTERIOR

The inside of the shop is in the typical rigorous, minimalist Apple style with a play on neutral colours. This style is reflected in the materials chosen by the client and the designer, favouring the use of natural oak for the display tables of the computers and phones and a floor covered with light-grey granite. The stone was cut in horizontal sections to cover the floor and some vertical sections of the walls. The display cases for the items on sale are attached to the walls and are made from glass and wood.

The entire store was designed and created with the aim of transmitting an idea of technology which is elegant, easy to

**WORKING IN A HISTORIC ITALIAN PIAZZA IS A GREAT RESPONSIBILITY AND, AT THE SAME TIME, A WONDERFUL CHALLENGE”, DECLARED JONY IVE, CHIEF DESIGN OFFICER FOR APPLE**



## THIS PROJECT WAS INDEED A REFERENCE PROJECT FOR THE WHOLE MAPEI GROUP

use, eco-friendly and welcoming. To underline even further the concept of being a welcoming place there are also real trees planted in large containers dressed with leather surrounded by stools where clients sit and wait their turn.

### MAPEI PRODUCTS FOR THE NEW STORE

Mapei Technical Services was involved in the project, providing support for the main contractor to solve any problems encountered on site and recommending the best products to use.

Work below ground level. MAPEPROOF LW bentonite sheets were applied to waterproof the foundation slab, a product used for structures below ground level with a water table less than 5 m. MAPEPROOF LW is available in two different lengths and widths and, in this particular case, the 2.50 x 22.50 m size was used. To waterproof the foundations, on the other hand, it was recommended to use a double layer of 4 mm thick FLEXO S6 bitumen membrane with a plain finish supplied by Polyglass, a subsidiary of the Mapei Group. MAPEFIX EP 385 pure epoxy, resin-based adhesive was used to anchor the vertical bearing structures. During construction works, CALCESTRUZZO Rck 40 by Vaga (Mapei Group) was used to make special pours of concrete which could not be carried out with concrete mixers.

Installation of ceramic tiles and stone. On the external access stairway, the granite slabs were installed with KERAQUICK S1 high performance, fast-setting cementitious adhesive with very low emission of volatile organic compounds.

To install the ceramic tiles inside the store, it was recommended to use KERAFLEX MAXI S1 high-performance, deformable, cementitious adhesive with extended open time and no vertical slip, class C2TE S1 according to EN 12004 standards.

The joints were then sealed with MAPEFLEX PU 45 FT polyurethane sealant and MAPESIL LM neutral, mould-resistant silicone sealant. MAPEFLEX MS CRYSTAL was also used in the store. This is an elastic, hybrid sealant and adhesive with high modulus of elasticity, also suitable for damp substrates.



### IN THE SPOTLIGHT

#### MAPEFLEX MS CRYSTAL

Elastic high modulus, flexible, crystal clear, paintable, hybrid sealant and adhesive. Also suitable for damp surfaces. MAPEFLEX MS CRYSTAL is specifically formulated to form a highly transparent sealant and adhesive with the capacity to seal and bond without affecting the appearance of elements on which it is used.

Cementitious floorings. ULTRATOP LIVING was the system proposed by Mapei Technical Services to cover part of the flooring in the store, a product created especially for civil use inside large showrooms, supermarkets, shopping centres and apartments which is particularly resistant to abrasion and pedestrian use.

Once the screeds were cured and dry, they were treated with PRIMER SN, two-component fillerized epoxy primer, prepared by adding about 20% by weight of QUARTZ 0.5 quartz sand. While the primer was still wet, it was fully broadcast with QUARTZ 1.2 to create a surface with better grip to enable the ULTRATOP LIVING system to adhere perfectly. This type of cementitious flooring system, which is applied in thicknesses between 5 and 15 mm, gives even large surface areas a natural look, typical of the cement-based materials, and a visual continuity.

The floor was then treated with MAPEFLOOR FINISH 52 W, polyurethane anti-dust and anti-oil protective finish used as a primer, followed by the application of MAPEFLOOR FINISH 58 W, aliphatic polyurethane finish with an aesthetic matt effect.

Beside this one in Milan, the floors of over 40 Apple stores all over the world were made by using Mapei solutions such as MAPEFLOOR 35 F, a system used to create polished floors with a finish similar to the "Terrazzo alla veneziana" and high durability.

This project was indeed a reference project for the whole Mapei Group as products from Mapei SpA, Vaga and Polyglass all came into use.

### TECHNICAL DATA

**Apple Store,** Milan (Italy)

**Period of construction:** 2017-2018

**Period of intervention:** 2017-2018

#### Intervention by Mapei:

supplying products for underground waterproofing, installing ceramic tiles, building cementitious floors, sealing joints

**Design:** Stefan Behling, Foster

+ Partners

**Client:** Apple SpA

**Main contractor:** Sice Previt

**Mapei coordinator:** Ivan Ceriani, Mapei SpA (Italy)

### MAPEI PRODUCTS

Waterproofing underground structures: Mapeproof LW

Chemical anchoring:

Mapefix EP 385

Bonding ceramics: Keraflex

Maxi S1

Sealing joints: Mapeflex PU

45 FT, Mapeflex MS Crystal,

Mapesil LM

Laying cementitious floorings:

Mapefloor Finish 52 W,

Mapefloor Finish 58 W, Primer

SN, Ultratop Living, Quartz 1.2,

Quartz 0.5

### POLYGLASS PRODUCTS

Waterproofing underground structures: Flexo S6

### VAGA PRODUCTS

Preparing the screeds:

Calcestruzzo Rck 40

For further information on products visit [www.mapei.com](http://www.mapei.com), [www.polyglass.com](http://www.polyglass.com), and [www.vagaedilizia.it](http://www.vagaedilizia.it)