

UNDERGROUND ART: THE ROME METRO

by *Natasha Calandrino and Sandro Sigismondi*

When in Rome, as the saying goes, do as the Romans do: take the Metro, and while you're down there, take in the Rome Metro Art project. You'll not only beat the traffic, you'll be treating yourself to a permanent exhibition of very modern art expressed in a very ancient medium: mosaic. During the Jubilee of the Year 2000, two million modern pilgrims are expected to pass through this underground "museum", in addition to the Metro's normal ridership.

The project

The Rome Metro Art project was sponsored by the Nestlé Corporation to create original works of art for 13 stations of the capital's Metro system rather than merely "beautifying" them with ordinary decorations. Piero Dorazio, who conceived the project and was its artistic director, chose mosaic as the medium, taking his cue from Gino Severini, the futurist artist who used the technique of the mosaic to interpret the language of modern painting. 70 internationally known artists took part in the project including Kenneth Noland, Emil Schumacher, Enrico Castellani, Beverly Pepper, Shu Takahashi, Joe Tilson, Bruno Ceccobelli, Rupprecht Geiger, Lucio Del Pezzo, Gottfried

Honneger, Luigi Veronesi, Mikhail Koulakov, Antonio Passa, Lossonczy Tamas, Paolo D'Orazio, Lee Doo Shik, Vittorio Martino, Karl Gerstner, Ulrich Urban, Giuseppe Uncini, Giulia Napoleone, Nicola Carrino, Heinz Mack, Graziano Marini, Francois Morellet, and Carla Accardi.

The mosaic travels full circle

The ancient Greeks called the art of the mosaic, "musaic"

(μουσαϊκον), because they considered it "the patient art, worthy of the Muses". It takes a lot of patience indeed to create a picture out of thousands of tiny pieces of natural stone, terracotta or glass cemented to a solid surface. The Romans later adopted this art form and the mosaic tradition continued, along with the Roman Empire, for hundreds of years. In the 4th century A.D. the Emperor Constantine made his new capital at Byzantium in the East

(later Constantinople, modern Istanbul), while the capital in the West was moved from Rome to Milan (short for Mediolanum, where then, as now, adhesives for setting mosaics were manufactured). In the 6th century, a hundred years after the West had fallen to the barbarians, the Byzantines attempted to reconquer Italy. They established a beachhead at Ravenna, where they brought artists who created what are arguably the world's most famous and spectacular mosaics.

They can still be seen there today, and it was in Ravenna that the mosaics for the Rome Metro Art Project were fashioned in the workshops of the Sicis company. The mosaic tradition had traveled full circle.

The expert artisans at Sicis handcrafted the artworks with a material originally developed by the Venetians, who took Byzantine artistry one step further. They invented a new process for making glass (known, logically enough, as Venetian or

PHOTO 1



PHOTO 2



PHOTO 3



PHOTO 4



PHOTO 5



adhesive system that is particularly flexible and resistant. In 24 to 48 hours it forms a flexible film without shrinkage that is watertight and resistant to aging. (Photos 3 and 4). The tiles were then grouted with a system that met the requirements of the project by making the joints flexible yet watertight, using KERACOLOR cement based grout

Murano glass) and started using it for mosaics. Sicis created a glass-body mosaic called "Murano enamel mosaic" for the Rome Metro as the material of choice, rather than using small ceramic tiles or vitreous mosaic, because of its strength and durability.

Installing the mosaic on panels

Bringing modern art to the Rome Metro was made possible by modern technology. The purpose of this architectural installation (for the project was structural and not just decorative) was to let great artists express themselves through the use of innovative materials. Setting the mosaics in the workshops and mounting them on panels, along with installing mosaic backgrounds directly onto the walls in the 13 Metro stations, all required the use of setting systems and techniques that were particularly strong, safe and fast.

The mosaics were first executed by the artists in Ravenna (Photo 1), then separated into sheets of various sizes and transported to Rome, where they were assembled and mounted on sandwich panels of aluminum alloy and extruded polystyrene. After mechanically fixing the metal panels to the station walls (Photo 2) the Murano enamel mosaic sheets were bonded to them with adhesives. The size of the sheets and the strong vibrations in the Metro system required the use of an especially flexible adhesive that could absorb small movements in the structure. KERALASTIC was used, a polyurethane



PHOTO 6

modified with FUGOLASTIC additive (Photo 5). The art was then given added shine with KERANET (Photo 6), an acid cleaner for ceramic tiles that eliminates stains and efflorescence as effectively as much stronger acids (like muriatic, hydrochloric, sulfuric acid, etc.) without emitting dangerous fumes.

Installing the mosaic backgrounds

The Murano enamel mosaic backgrounds were applied in 30x30 cm (12"x12") grids on gypsum, plaster and



PHOTO 7



PHOTO 8



Photos 12, 13 and 14 show a few of the finished stations

PHOTO 9



PHOTO 10



cement backerboards in all of the 13 stations (1,675,080 tiles were used for the backgrounds in the Coliseum station alone). After thoroughly removing old paint, the surfaces were treated with PRIMER G, a synthetic resin based primer used for surface preparation to improve the adhesion of the mosaic tiles.

The background tiles were set with GRANIRAPID, the adhesive system with fast setting and hydration, the product of advanced Mapei technology (Photos 7 and 8). GRANIRAPID is a two-part adhesive system whose extraordinary bond strength and fast drying action deliver finished results almost instantly (Photo 9). Using GRANIRAPID made it possible to complete the job quickly without inconveniencing the daily comings and goings of thousands of passengers. Here, too, the joints were grouted with KERACOLOR admixed with FUGOLASTIC elasticizing admixture (Photos 10 and 11) and cleaned up with KERANET.

PHOTO 11



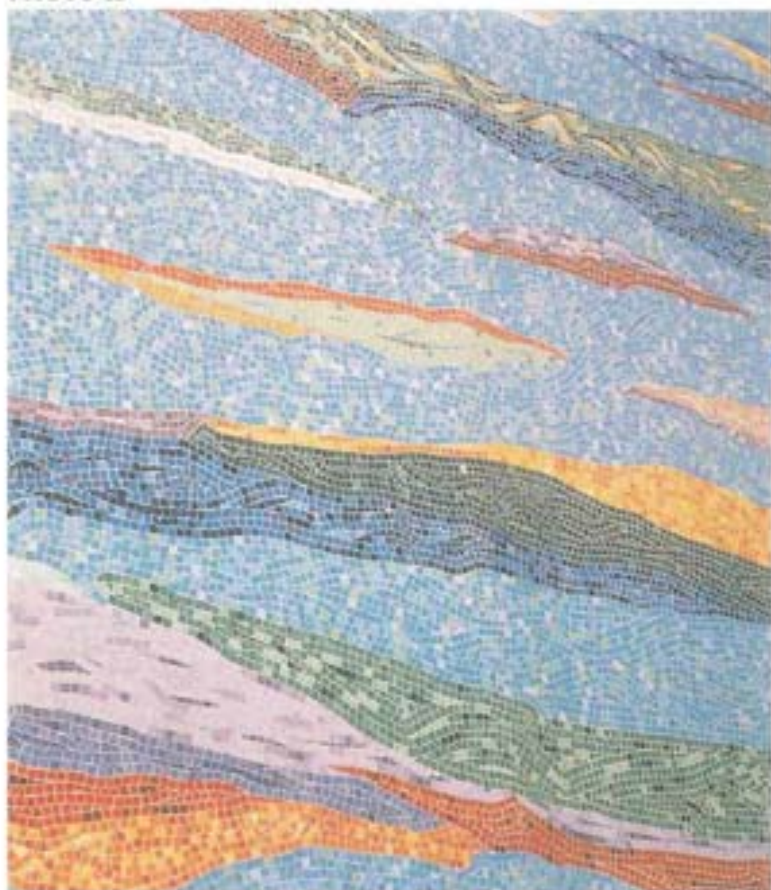
Craftsmanship and technology

With the avantgarde products furnished by Mapei, the artists and their

PHOTO 12



PHOTO 13



materials were shown to best advantage and almost 2,200 square meters (23,500 sq. ft) of mosaic were installed in record time. The challenge of combining an ancient art with modern technology was successfully met to the benefit of the entire community, thanks to the commitment and the cultural sensitivity of the companies that took part in the project.

A project worthy of the Muses! □

The Technical Data Sheets for the products mentioned in this article are contained in Mapei Binder No. 1, "Ceramic Tile Installation Products"



TECHNICAL DATA

Project: ROME METRO

13 stations, sponsored by The Nestlé Corporation:
Colosseo, Piramide, Ottaviano, Eur Fermi, Anagnina, Magliana, Bologna, Flaminio, Vittorio Emanuele, Barberini, Re di Roma, Spagna, Numidio Quadrato

Design: Arte Metro Roma

Commissioned by:

The City of Rome
ATAK CONTRAL (Rome Public Transport)
The Nestlé Corporation

Year of execution: 1996 to 1997

Designer and Artistic Manager: Piero Dorazio

Asst. Director and Co-ordinator: Paolo D'Orazio

Execution of mosaics: Sisis, Ravenna

Installers: Edil Pav di Sandro Sigismondi, Monte S. Giovanni Campano (FR)

Coordinators: Pino Mancini and Renato Soffi, Mapei S.p.A.

Materials: Murano enamel mosaic – Sisis

Mapei products used to mount the mosaics on metal panels: *

KERALASTIC
KERACOLOR + FUGOLASTIC
KERANET

Mapei products used for setting the mosaic backgrounds: *

PRIMER G
GRANIRAPID
KERACOLOR + FUGOLASTIC
KERANET

*These materials are part of Mapei's European product lines.

PHOTO 14

