Dynastone Color



Coloured cementitious aggregates used for decorating floors and for elements used in urban design

WHERE TO USE

Dynastone Color artificial aggregates are particularly suitable for decorative purposes in the building sector, and for decorative architectural applications.

When mixed with a suitable binder, **Dynastone Color** aggregates may be used to create floors, coating panels or pre-cast elements.

After the dry-polishing operation, the attractive appearance of their rounded shape, their assorted grain sizes and the variety of colours is particularly evident. The individual creativity of designers may be employed to the full in creating and personalising a wide variety of both civil and industrial environments.

Even if a binder is not used, **Dynastone Color** aggregates are a valid ornamental element when decorating internal and external environments, especially if sprinkled on loose to decorate flower beds and pedestrian areas.

Some application examples

- To create new, polished floors, such as “terrazzo alla veneziana” floors, in homes, offices, shops, showrooms, museums, theatres, etc.
- To create pre-cast, decorative wall panels.
- To create external pedestrian areas and flower beds.

TECHNICAL CHARACTERISTICS

Thanks to the use of “nano-structural” acrylic super-plasticizers used for the production of the **Dynamon** range which considerably reduce the amount of mixing water required, and an exclusive production process developed in the MAPEI R&D laboratories, the mechanical properties of **Dynastone Color** are similar to those of natural stone.

Since the products are manufactured from raw materials which are selected according to a precise, well-controlled industrial production process, their mechanical and aesthetic characteristics are accurately defined according to the ratio between the various colours which make up the product.

Therefore, unlike natural stones which are characterised by a considerable difference in quality due to the various geological origins of the mined raw materials, the artificial **Dynastone Color** aggregates possess the advantage of having properties and qualitative characteristics which are well defined and which remain stable over many years.

Thanks to their special composition, **Dynastone Color** aggregates have a considerable chemical affinity with the binders used to make manufactured components, whether they are aerial products such as with lime, or hydraulic products made from

TECHNICAL DATA (typical values)	
PRODUCT IDENTITY	
Appearance:	rounded, coloured aggregates available in mixed grain sizes from 4 to 15 mm
Colour:	white, yellow, red, orange, brown, green and blue
Density of the aggregates according to UNI EN 1097-6:2002 (g/cm^3):	2.34
FINAL PERFORMANCES	
Water absorption according to EN 1097-6:2002:	4.5
Fragmentation resistance according to EN 1097-2:1999 (Los Angeles test):	22
Wear resistance according to EN 1097-1:2004 (Micro Deval):	13
Compressive strength according to EN 1015-11:2001 (test carried out on Dynastone Color mix in test samples of 40 x 40 x 160 mm) (N/mm^2):	> 100

Portland cement, aluminous cement, hydraulic lime or mixtures of such products.

In spite of their rounded shape, **Dynastone Color** artificial aggregates are different from natural stones as they bond better to the binder matrix. As a result, they are characterised by their excellent physical compatibility with the various ingredients of the manufactured piece, with a positive effect on its durability.

The variety of colours and their rounded shape with no sharp corners, not easy to find with natural materials, represent an important element for their novelty value and for their qualification from an aesthetic point of view. New solutions may be created when developing designs, solutions which are not always possible when natural stones are used.
Dynastone Color aggregates are suitable for use with self-levelling systems such as **Ultratop** when making “terrazzo alla veneziana” type flooring.

CREATION OF “TERRAZZO ALLA VENEZIANA” TYPE FLOORS

Preparation of the substrate

The substrate must be dry, sound and free of dust, loose and detached parts, paint, waxes, oil or any other contaminant which could affect the bond.

Concrete and/or ceramic or natural stone surfaces must be prepared mechanically by shot-blasting or grinding, primed with **Primer SN** and, where required, reinforced with **Mesh 320** (glass fibre mesh) dusted with **Quartz 1.2**.
After application, leave the **Primer SN** to dry for 12-24 hours, according to the surrounding temperature.
Remove excess sand with a vacuum cleaner.

Cracks in the substrate must be repaired beforehand with **Eporip**.

Preparing and laying the Dynastone Color and Ultratop mix

Apply a coat of **Mapefloor I 910** (two-component epoxy binder) on the primed substrate with a short-haired roller to promote adhesion while preparing a mix made from **Mapefloor I 910** and **Dynastone Color** aggregates at a ratio of 1:20 in a cement mixer.
Blend the components together for a few minutes and pour the mix onto the surface just after applying the **Mapefloor I 910** (spread on the mix while the **Mapefloor I 910** is still fresh).

Compact the mix immediately after spreading with a flat trowel or a vibro-compactor.
Leave it to harden for at least 24 hours (at +20-23°C). Lower temperatures lead to longer hardening times.
Prepare a blend of **Ultratop** mortar and spread it on the surface of the hardened **Dynastone Color**, making sure that all the gaps between the aggregates are completely filled. Use a rubber trowel or spreader to help the mortar penetrate into the gaps around the **Dynastone Color**.
Dry-polishing may be carried out 2-3 days after applying the mix, until a perfectly flat, smooth and shiny surface which reflects the light is obtained, very similar to "terrazzo alla veneziana" floors.
After the first "roughing" operation, and since micro-porosity will be formed in the surface, the floor must be grouted using **Ultratop Stucco**, which is specially blended in the same colours as **Ultratop** (white, beige, light grey, red, anthracite and standard).
After polishing the surface, finish the flooring by applying one or two coats of **Mapecrete Stain Protection** oil-water repellent protective finish.
To make cleaning and maintenance operations easier, apply an even coat of **Mapelux Lucida** or **Mapelux Opaca** metallic wax over the entire surface of the flooring.

Note
For more information regarding tools required for the dry-polishing process, please contact MAPEI Technical Services Department.

CONSUMPTION
Used for the "Terrazzo alla Veneziana" system: 10 kg/m^2 per cm of thickness.

PACKAGING
Dynastone Color is available in 25 kg sacks.

STORAGE
Dynastone Color remains stable for 24 months if stored in a dry, covered place.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION
Dynastone Color is not considered as dangerous according to the current regulation regarding the classification of mixtures. We recommend the use of protective gloves and goggles and to take the usual precautions for handling chemical products.
For further and complete information about the safe use of our product please refer to the latest version of our Material Safety Data Sheet.

PRODUCT FOR PROFESSIONAL USE.

WARNING
Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application; for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application. In every case, the user alone is fully responsible for any consequences deriving from the use of the product.

Please refer to the current version of the Technical Data Sheet, available from our website www.mapei.com

All relevant references for the product are available upon request and from www.mapei.com

COLOUR CHART - Dynastone Color
Coloured cementitious aggregates for decorating cementitious floors and urban architectural features.

Note: since colours may not always be uniform due to the cementitious nature of the product, the colours for **Dynastone Color** aggregates do not refer to any colour chart.

White | Yellow | Orange | Red | Brown | Blue | Green

Notes: *the colours illustrated are for demonstration purposes only and may vary due to printing limitations*



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