



FORTON® MG (Modified Gypsum)

FORTON® MG (FMG) was introduced into the global market over 20 years ago for the architectural restoration industry. FMG is the first technology to make alpha hemi-hydrate gypsum an exterior product. Independent testing, which included accelerated aging to 30 years, has supported exterior durability. FMG is an ultra strong, light weight, weather-proof, odorless, and most importantly, nontoxic and nonporous material casting system that can be sculpted like plaster.

FORTON® MG consists of a gypsum plaster modified by the addition of fiber-glass. The system involves mixing precise amounts of several products, including: Hydrocal FGR-95 from US Gypsum (gypsum-based cements), dry melamine resin powder, a hardener, a liquid polymer called Forton® VF-812 and fiberglass. These various ingredients are the base to which aggregates, colorants and metallic powders may be added giving us the ability to create the look of any material, such as sandstone, limestone, marble and metal.

FORTON® MG has a Class A fire rating according to ASTM-84. Applications for HybriCast™ FMG include hollow casting of architectural ornaments, replication of natural materials for restoration, custom decorative art and cold casting.



*Project: Private Residence
Location: California USA
Material: FORTON® MG*



FORTON® MG vs Precast Concrete

Below you will find a few of the many advantages of our product vs. Cast Stone.

FORTON® MG:

- is a non-porous, polymer based material with almost zero water absorption which prevents mold and mildew discoloration.
- is much more stable in regards to flexibility, direct impact, and has minimal expanding and contracting.
- has greater resistance to harmful UVA/UVB rays.
- is cast as a shell **3/8" (10mm)** thick and is installed with accelerated methods of construction. Installation is faster and cheaper.
- with a compressive strength of up to **9000 psi**, it is approximately 3 times harder than regular concrete.
- is 6 times lighter than concrete, which reduces the extra costs associated with fortifying substrates, transportation and installation.
- is a light weight precast. FORTON® MG weighs **5-6 lbs per sq/ft (30 Kg/m2)**.
- production time is 4 times faster than concrete, therefore significantly reducing a project's construction time and financing.
- can be cast into molds with integral color. You can create any look imaginable.
- is a Class A - Fire rated material and has been approved as architectural elements to be used in construction by the City of Los Angeles.



Uses no water, less material to produce, less trucks to transport and less machinery to install. Therefore FORTON® MG has a much smaller carbon foot print and less impact on the environment than regular cast stone.

Creating Realistic Wood

One of the great aspects of FORTON® MG is its ability to be casted into rubber moulds. This material gives Zoho Stone the capability to produce architectural elements with extraordinary fine details.

