

# MASTERWORKS™ M1

## Introduction

Master Works™ M1 is a water based resinous material for use in the composites, construction and reproduction industries. It is a two component, acrylic polymer/mineral system that can be hand and spray laminated, cast and injected.

Primary uses include decorative architectural components, building systems, reproduction castings, foam coatings, tooling and prototyping. Master Works™ M1 can replace conventional resins, GRC and other cementitious products due to the significant advantages offered by the system.

## Features / Benefits

- Easy to use with simple mix ratios
- Water based with water clean up
- Low toxicity
- Non combustible
- Low odor
- Dimensionally stable
- Low exotherm on set (30°C)
- No limit to casting mass
- Good adhesion to a variety of substrates
- Non-hazardous waste
- Versatile – can be filled and pigmented
- Can be continuously processed

## Processing

The material is supplied as two liquid components A and B that must be mixed together in a simple volume ratio of 2 parts Component A and 1 part Component B.

The set time and rheology of Master Works™ M1 can be controlled with the use of Master Works™ Control Additives.

Master Works™ M1 can be mass pigmented using the Master Works™ series water based pigment dispersions.

It is recommended that laminates are constructed using the Master Works™ Multi Axial Reinforcement fabric.

## Application Areas

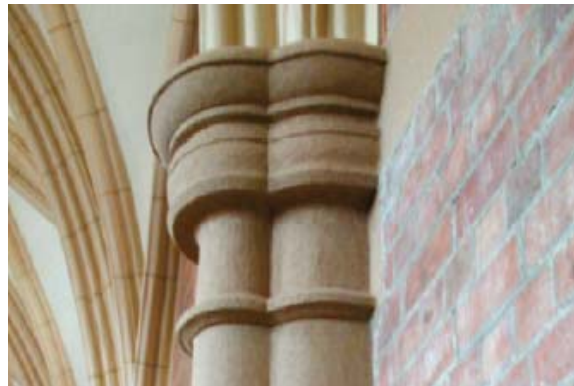
- Decorative building panels/modular systems
- Cast objects
- Tooling for advanced composites
- RTV2 silicone rubber mold supports
- Architectural Complements
- Internal ship building components

Master Works™ M1 has good water resistance. If used externally a sealer coat is recommended. Master Works™ Sealer is available for improved water resistance properties, other recommendations available on request.

Master Works™ M1 has been formulated to be non-combustible and will meet most local standards. Local building regulations should be checked if used to meet these requirements.

## Technical Information

<b>Density (wet)</b>	<b>116lbs per ft<sup>3</sup> / 1.87 kg/lt</b>
<b>Density (dry)</b>	<b>109lbs per ft<sup>3</sup> / 1.75 kg/lt</b>
<b>Pot life (no retarder)</b>	<b>Circa 15 Minutes</b>
<b>Pot life (with retarder)</b>	<b>Up to 1 hour</b>
<b>Compressive strength</b>	<b>circa 10 MPA 4,350 lb per inch<sup>2</sup></b>
<b>Ultimate hardness</b>	<b>80+ shore D</b>
<b>Final expansion</b>	<b>0.15%</b>
<b>CT</b>	<b>23x10<sup>-6</sup> (1/oc)</b>



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