

# CG ARCH/CAST

## HIGH STRENGTH POURABLE CASTING MIX

### QUICK FACTS

PRODUCT NAME	CG Arch/Cast
PACKAGING	50 lb. Bag (22.7 kg)
DENSITY	126.1 pounds/ft <sup>2</sup> (2018 kg/m <sup>2</sup> )
COVERAGE	1/2" Thickness = approx. 9.8 ft <sup>2</sup> (0.9 m <sup>2</sup> – 12.7 mm) 3/4" Thickness = approx. 7.2 ft <sup>2</sup> (0.64 m <sup>2</sup> – 19 mm) OR 0.43 ft <sup>2</sup> (0.01 m <sup>2</sup> )
MIX RATIO / WATER DEMAND	1 gal (3.8 L) modifier to 1-50 lb. bag (22.7 kg) bag mix + up to 16 oz. (0.5 L) water
SHELF LIFE	12 months in unopened containers under normal conditions when kept dry and moisture free, and out of direct sunlight
CURE / SET TIME **	Full Cure: approx. 30 days
MANUFACTURER PART #	<b>SKU #</b> / Standard Formula / 50 lb. Bag (22.7 kg) <b>SKU #</b> / Summer Formula / 50 lb. Bag (22.7 kg)

*\*\*Fabrication should take place inside a shop, with temperatures maintained between 50°F (10°C) and 90°F(32°C) throughout fabrication and curing. Product will dry and cure slower at cool temperatures, and conversely faster at warm temperatures.*

### DESCRIPTION

CG ARCH/CAST is a dual component precast concrete bag mix that greatly reduces the materials and labor required to construct traditional precast concrete. No reinforcement steel is required, thinner precast pieces are routine, and quicker production times are accomplished. A stronger, denser and more flexible cementitious composite is created by combining cutting-edge technology with modern fiber advancements. With a wide range of coloring and texture selections along with the addition of optional aggregate loading (up to 10 lbs. per bag) design considerations are nearly limitless. CG ARCH/CAST produces concrete countertops, fireplace mantles and facades, shower surrounds, wall panels, furniture and many other architectural elements. XS Precast is the perfect medium for residential, commercial, and industrial applications.

#### MIXING

##### Single bag batches

1. Utilize a handheld concrete mixer with a helical (spiral) mixer blade, such as an Eibenstock model #EHR 20R or similar.
2. Thoroughly mix modifier.
3. Add 1 gal (3.8 L) modifier to a clean 5 gal (18.9 L) pail or similar mixing vessel
4. Add color pack to modifier (if desired) and mix.
5. While mixing add approximately ¾ of the dry bag mix.
6. Continue mixing until a loose, flowable consistency is achieved.
7. Scrape sides of pail with margin trowel to prevent dry fiber pockets from forming.
8. Add remaining dry bag mix and continue to mix for 2 – 3 minutes.
9. Up to an additional 16 oz. (0.5 L) water may be added for a more fluid mix.



10. With multiple single bag mixes, where color match is of concern, box multiple pails.

#### Multiple bag batches

1. Utilize a mortar mixer (preferred with a horizontal helical [spiral] shaft) or a concrete mixer of sufficient size to allow the free vertical fall of product while mixing.
2. Maintain the ratio of 1 gal (3.8 L) modifier to 1 – 50 lb. (22.7 kg) dry bag mix.
3. Thoroughly mix modifier.
4. Place total amount of modifier for the entire mix into the mixer.
5. Add color pack to modifier (if desired) and start mixer.
6. Slowly add one bag of dry bag mix at a time to the mixer to prevent material from forming dry fiber pockets.
7. Additional water may be added, not to exceed 16 oz. (0.5 L) per bag of dry mix.
8. After last bag is added, allow all material to thoroughly mix for 2 – 3 minutes. Visually inspect entire load to ensure that all fiber is blended.

#### APPLICATION

Although not limited to it, the most common method of placement simply involves pouring CG ARCH/CAST directly from the pail or mixing vessel into the form or mold.

#### DEMOLD

In warm weather 4-6 hours may be appropriate to de-mold. Cool temperature or pieces with extreme texture will require overnight drying. CG ARCH/CAST should not be left in the mold past a 24 hour period, as curling of the piece is likely. A freshly de-molded sample should be handled similar to granite or natural stone and should be well supported above the work surface to allow the free flow of air around the piece.

#### CLEANING

All CG ARCH/CAST samples require cleaning, except those that are to be polished. SCR diluted with water 3:1 (3 parts water to 1 part SCR) is recommended.

#### GRIND/POLISH

If additional decorative aggregate was added to the CG ARCH/CAST or if the desired appearance demands it, the product may successfully be polished.

1. Grind precast sample as soon as practical. Allow a minimum of 8 hours cure time.
2. When decorative aggregate is added, begin wet grinding with 50 grit diamond pad to expose aggregate. This step may be skipped if no decorative aggregate was added.
3. Proceed to wet grind with 100 grit diamond pad.
4. Liquid concrete hardener may be utilized with wet 100 grit grind to densify and fill pinholes with resultant color match slurry.
5. Allow liquid concrete hardener and slurry to dry. Proceed with 200 grit and if any pinholes are still present add more liquid hardener and continue grinding.
6. Remove any excess dried slurry with the 200 grit.
7. Proceed through 400 grit polish. If stain and / or sealer is to be used do not polish past 400 grit, as a measure of profile must be maintained for stain penetration and sealer adhesion.
8. If desired and sealer is not used, one can continue polishing through 800 grit and beyond, however, such a piece is subject to staining.

#### STAINING

CG ARCH/CAST accepts most concrete stains. Staining customarily follows slurry.

#### SEALING

CG ARCH/CAST pieces are completed by sealing.

#### CLEAN-UP

Before STAMPABLE CONCRETE OVERLAY dries, spills and tools can be cleaned up with water.

#### WARNING

**KEEP OUT OF REACH OF CHILDREN.** Inhalation: Avoid prolonged breathing of airborne dust, particularly present during mixing. Use NIOSH approved respirator for nuisance if

threshold limit values are unsafe. **Skin Contact:** Skin contact may cause irritation. Remove contaminated clothing and wash affected skin with soap and water. Launder clothing before reuse. If symptoms persist, seek medical attention. **Eyes:** Wear safety eye protection when applying. Contact with eyes may cause irritation. Flush eyes with water for 15 minutes. If symptoms persist, seek medical attention.

## WARRANTY

Warranty of this product, when used according to the directions, is limited to refund of purchase price, or replacement of product (if defective), at manufacturer's/seller's option. Manufacturer shall not be liable for cost of labor or direct and/or incidental consequential damages.