

# SUPER FLOW COUNTER-CRETE

## **DESCRIPTION:**

Con-Spec's Super Flow Counter-Crete is a unique combination of preblended cementitious materials for casting concrete countertops. Super Flow Counter-Crete is versatile and allows for creative blends. It can be used neat or with plain/coloured stones or objects. It is compatible with all concrete colours and staining methods. Super Flow Counter-Crete requires only potable water for mixing. Super Flow Counter-Crete requires a proper curing of 24 to 72 hours depending upon conditions. The countertop can be removed from the form after curing. The countertop can be polished, but keep in mind the concrete is green and easily gouged by bits of grit or aggregate that may break loose during the grinding/polishing process. If the countertop is cast over 3 inches in depth, it is recommended that aggregate be included in the mix. Working time of the Super Flow Counter-Crete is 45 - 60 minutes. If the countertop will have a sealer/coating, it is recommended that a light cleaning be performed to remove any surface laitance of cement dust that may be on the surface.

#### COVERAGE:

Con-Spec's Super Flow Counter-Crete is packaged in 25 kg (55 lb) bags and will yield approximately 0.5 cubic feet or 0.014 cubic meters per bag at 3.5L of water per bag. A 25 kg bag of Super Flow Counter-Crete at 1.5" deep will provide roughly 4 square feet of concrete countertop area.

#### FORMING:

Cabinet Preparation for Cast-in-Place: •Use concrete backer board for cabinet sub-top or plywood with a moisture barrier. (The application of 2 coats of Con-Spec Latex Bonding Admixture then allowing to dry between coats will protect the plywood). Protect the cabinet facing and floor from concrete spills with a drop cloth. •Edge Forms: Use a chop saw to mitre inside and outside corners. Clamp, screw or build a temporary wood support and attach the edge forms to the cabinets. Place the edge forms below the substrate surface to hide the exposed edge. Seal all joints.

•Reinforcement: Use ladder wire  $\frac{1}{2}$ " from the tension surface of the slab. (Typically bottom of countertop). Wire mesh is not strong enough and rebar in general is too thick for countertops.

Super Flow Counter-Crete is extremely flowable. Ensure that all seams are properly sealed to prevent leakage of the material from the forms.

## **MIXING INSTRUCTIONS:**

It is highly recommended that a test casting be done to become familiar with the characteristics of Super Flow Counter-Crete. This will also provide and opportunity to determine the suitability of the casting method, colours and sealers.

Con-Spec's Super Flow Counter-Crete will require 3.0 to 3.5 litres of potable water per 25 kg (55 lb) bag, to achieve the proper mix consistency. Add the Super Flow Counter-Crete to the water and thoroughly mix to the proper consistency, mix for 3 minutes minimum but no more than 5 minutes in total. Allow mixture to sit for 2-3 minutes, then re-mix before using.

If adding colour, carefully measure each colour to ensure uniform amount is incorporated into each batch of Counter-Crete. Even small variations in colour volume may cause noticeable colour variations in the finished product. Each 100 grams of colour is equal to a 1% loading, so to achieve a 3% colour loading, add 300 grams of colour to each bag.

## WORKING CHARACTERISTICS:

Con-Spec's Super Flow Counter-Crete has a 45-60 minute working time. The countertop can be removed from the form 24-48 hours after casting. The mixed material is highly flowable; it has an easily workable consistency at all water contents.

# **APPLICATION TECHNIQUES:**

Con-Spec's Super Flow Counter-Crete has a 45-60 minute working time. It is also very flowable. On large areas, use a screed to obtain a uniform level before trowelling. Consolidate the edges with a palm sander or pencil vibrator. Re-float the surface. Allow the concrete to take an initial set before steel trowelling. Avoid burning the surface with a magnesium float or steel trowel. To avoid ghosting do not pour material directly on the steel reinforcement. Any vibration or movement can cause ladder wire imaging (ghosting) to appear in finished product.

Notice to User - Con-Spec Industries Ltd. warrants that the product described on the face hereof has been manufactured of selected raw materials by skilled technicians. Con-Spec Industries Ltd. shall not be responsible for any claims resulting from the failure to utilize the product in the manner in which it was intended and in accordance with instructions provided for use of product. The only obligation of Con-Spec Industries Ltd. shall be to replace any quantity of this product which proved to be defective. Con-Spec Industries Ltd. assumes no liability, loss, or damage resulting from use of this product. Your use of this product constitutes your acknowledgment and acceptance of these terms and limitations.

## GFRC:

Glass fibre reinforcement can be used to make Super Flow Counter-Crete even stronger while reducing any possible plastic shrinkage cracking. Fibres will also increase the flexural strength of the countertop dramatically. With out any preplanning, these fibres will be visible on the surface of the countertop if a diamond grind and/or polish is done.

GFRC (Glass Fibre Reinforced Concrete) is normally cast around 1/2 inch to 3/4 inch in thickness. Due to the thin nature of the concrete it loses moisture much more rapidly than a thicker section. This then requires the use of polymers to help hold moisture in the concrete mix. Super Flow Counter-Crete requires approximately 600g of polymer solids.

The glass fibres are inert, non-corrosive and alkali resistant. They are designed to reinforce the Counter-Crete, and are available in 500 gram and 20 kg bags.

The fibres are added to the mixed Counter-Crete and thoroughly blended for 2-3 minutes before placement of the Counter-Crete in the form. Do not over mix the fibre mixture. The addition of the fibres will reduce the flowablity of the Super Flow Counter-Crete. Fibres may stick up in the finished top surface.

## **GFRC FORMULATION:**

For each 25 Kg bag of Con-Spec Super Flow Counter-Crete use: 775 grams AR Glass Fibre 1.25 Litres PolyPlex Polymer 2.75 Litres Water

## **CURING TECHNIQUES:**

**Con-Spec's Super Flow Counter-Crete must be cured.** Proper curing increases the strength and durability of concrete. Curing should be started as soon as possible and should continue until removed from the form at 24 hours or later. Counter-Crete should be moist-cured by tenting with plastic sheeting– exercise caution to prevent the tent from contacting the fresh concrete as it will leave surface imperfections. Properly cured concrete countertops may usually be removed from their form in 24 hours. Use extreme caution when removing inserts or knock-outs. The finished countertop may be sanded or polished as desired.

## **CLEAN UP:**

Clean application tools and mixing equipment with water immediately following use.

## SAFETY PRECAUTIONS:

Product contains cement and is alkaline on contact with water. Wear dust, skin, and eye protection. Irritating to eyes and skin. Avoid splashing into eyes or contact with skin. In case of eye contact, flood eyes repeatedly with water and call a physician immediately. DO NOT RUB EYES! Wash hands thoroughly with soap and clean water after handling. Do not take internally. Keep out of reach of children. Consult Safety Data Sheet for further information.

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