

## Applications *Continued...*



### INSTRUCTIONS FOR EXISTING CONCRETE

It is not recommended that CETCO Formula be applied to existing concrete without first consulting with a qualified CETCO technical representative. Existing floors require entirely different procedures than freshly placed floors. It is for this reason that qualified technicians must be consulted before applying any CETCO Formula to an existing surface. In some instances the floor may need to be stripped. In other cases it may simply need to be thoroughly cleaned, in other cases neutralised. The proper regimen for floor preparation can only be undertaken by qualified personnel.

### INSTRUCTIONS FOR EXTERIOR CONCRETE

**Step 1** – Saturate the surface with CETCO Formula using a low pressure, high volume sprayer. Keep the entire surface glistening wet with CETCO Formula for 30 minutes.

**Step 2** – After the 30 minute application period, use a broom or mop to remove any puddles or concentrations of CETCO Formula residue from the slab. A wide, fine bristle broom works well to disperse CETCO Formula on textured surfaces.



### General Precautions For All CETCO Formula Applications

- Apply CETCO Formula with a low pressure, high volume sprayer, or other approved methods (consult with the CETCO Formula Product Manager on +44 (0)7760 173818). Do not use airless sprayers, as they atomize the material, allowing inhalation.
- May cause eye and mucous membrane damage. Avoid contact with eyes and mucous membranes. If contact occurs, flush with water for 15 minutes.
- If taken internally, do not induce vomiting. Drink large amounts of milk or water. CONSULT A DOCTOR IMMEDIATELY.
- Surfaces treated with CETCO Formula temporarily become slippery during application. Exercise care and caution to avoid falls.
- Avoid contact with glass, aluminium, or other glazed or finished surfaces. Where contact occurs, immediately wipe with a damp cloth or flush with water. When applying near windows, mask the glass.
- Protect from freezing. If frozen, thaw and agitate before using. Do not use on cinder block or other highly porous material which contains holes or air pockets.
- When used near blacktop, CETCO Formula must be flushed away with water to eliminate any white discolouration that may appear on the blacktop when surface is dry.



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# CETCO FORMULA

CURES | SEALS | BONDS | DUSTPROOFS | HARDENS

*A colourless, transparent liquid that penetrates concrete and masonry building materials, protecting, preserving, and strengthening them.*



# Information



**CETCO Formula is a colourless, transparent liquid that penetrates concrete and masonry building materials, protecting, preserving, and strengthening them.**

This is achieved by solidifying the components of the concrete into one solid mass. The effect is to increase density, toughen, harden, and seal out moisture for the life of the building material through the process of chemical densification. Unlike coatings or membranes that simply lie on top of the concrete, and eventually wear off, CETCO Formula penetrates the surface of the concrete and reacts chemically with it to produce a denser, harder, more stable surface. When used as a curing agent on new concrete, CETCO Formula chemically stabilises the floor surface and ensures that the concrete reaches its full strength. It also locks in the salts in the concrete, preventing the release of annoying dust. Results of CETCO Formula's densification process become apparent within hours after application. The process is complete after several months, and the results are permanent.



CETCO Formula's chemical reaction forces foreign matter, including oil, alkali and traffic scum to the surface, allowing them to be washed away. Unlike many other products, CETCO Formula, which is odourless (non-tainting), non-toxic, non-flammable, and non-combustible, accomplishes several important jobs: it cures, seals, hardens and dust proofs. CETCO Formula is effective on a wide variety of building materials: concrete, stucco, terrazzo, concrete block, OPC based screeds and similar materials.

CETCO Formula produces a densified concrete through a chemical reaction with the moisture and chemical agents found in concrete and masonry. The "fixed air" spaces are reduced to a size through which water molecules cannot pass. However, these spaces do permit the passage of air and water vapour, allowing the concrete to breathe. CETCO Formula's chemical reaction forces contaminants to the surface, allowing them to be removed when the floor is cleaned.



At the same time, the concrete or masonry becomes permanently sealed against moisture and the penetration of oils and other contaminants. Most chemicals are inhibited from penetrating and when properly applied, CETCO Formula will last the lifetime of the concrete.

The CETCO Formula is an effective curing agent when applied immediately after the finishing operation. It stabilises the surface, and minimises crazing. It also ensures that the concrete meets or exceeds its design strength.

CETCO Formula seals masonry, concrete, and other materials into a mass that is essentially solid, rather than porous. Its penetrating quality provides deep sealing that is effective for the life of the concrete. This means that the floor surface will be easy to clean and maintain.

CETCO Formula makes concrete almost 50% harder. The floor is resistant to wear and traffic and as the concrete is itself sealed from within, both tyre and foot traffic marks are dramatically decreased if not eliminated completely. The more it is used, the better it looks.

CETCO Formula combines with the concrete salts, locking them permanently in place. Since these salts are normally the cause of dust in concrete floors, the surface remains dust-free.

## Notes...

*In extreme or unusual weather conditions, hot, cold, windy or otherwise, please consult with the CETCO Formula Product Manager on mobile number +44 (0)7760 173818.*

*Saw cutting may be done before or after the CETCO Formula is applied, depending on the immediate need for curing. It is critical in either case that the dust or slurry from cutting be immediately and thoroughly removed from the slab.*

*On concrete that is abnormally porous or soft, additional applications of CETCO Formula may be required. This also applies to surfaces with open finishes, such as broom finished or scarified floors.*



# Applications Instructions for Freshly-Finished Concrete

## SURFACE PREPARATION:

Freshly finished concrete surfaces do not require surface preparation if CETCO Formula® is to be applied immediately after the finishing operation as a curing agent. On areas where forms are recently removed, all form oil and breaking compound residue must be removed, so the penetration of CETCO Formula into the surface is not inhibited.

## APPLICATION INSTRUCTIONS:

**Step 1** – Immediately after troweling, and as soon as the slab is safe to walk on, Saturate the surface with CETCO Formula at approximately 4 square meters per litre using a low pressure, high volume sprayer, or other approved methods (consult with the CETCO Formula Product Manager on +44 (0)7760 173818). CETCO Formula is a penetration, not a membrane. Enough material needs to be on the surface to allow the CETCO Formula to thoroughly soak in. As a guideline, there should be enough CETCO Formula on the floor to fill in a footprint within several seconds of taking a step. This is often referred to as a 'flood coat' or 'wet coat'. Once a 'wet coat' has been achieved, it is advisable to work the CETCO Formula into the concrete surface with soft-bristled brooms as this breaks surface tension and aids penetration.

Ensure the surface is kept wet with CETCO Formula for a minimum of 30 minutes, and wait for the CETCO Formula to become slippery and gel-like underfoot. In extremely cool, windless conditions, CETCO Formula can take up to an hour or longer to become slippery. In hot windy conditions, CETCO Formula may become slippery in as little as 15 minutes. No spot or area on the slab should be allowed to become dry during this period. It is best to avoid dry areas by either brooming excess CETCO Formula over the more absorbent spots, or by putting down more CETCO Formula. Pay particular attention to porous areas and slab edges, as these tend to dry out more quickly.

**Step 2** – When the CETCO Formula becomes slippery, lightly mist the surface with water. This can be done with a low pressure sprayer or with a hose and nozzle. This will re-solubilise the CETCO Formula so that it is no longer slippery or gel-like. Agitate with a broom to aid penetration of CETCO Formula. Wait for the CETCO Formula to become slippery or gel-like a second time.

**Step 3** – At this point, thoroughly flush the surface with water. During the flushing process, the floor should be agitated with brooms to help loosen and remove excess CETCO Formula from the surface.

**Step 4** – Thoroughly squeegee the slab dry by pushing the water ahead of you off the slab edge. At this point, the floor should look like bare concrete with nothing on it. NB: During the squeegee process, there may be some slippery patches. This is an indication that excess CETCO Formula is still on the surface. These areas should be re-flushed and squeegeed again until the entire surface is dry.

## Technical Data

### Uses:

Concrete, concrete block, mortar, plaster, stucco, terrazzo, exposed aggregate or any sand aggregate cement combination including most OPC based screeds. New surfaces or old, rough or smooth surfaces.

### Functions:

Cures, seals, dust proofs and hardens. Protects against dusting, pitting, spalling, efflorescence, and temperature cracking in concrete. Inhibits freeze/thaw deterioration. Removes excess internal alkali and free lime concrete.

**Packaging:** 200 litre drums or 25 litre pails.

### Surface Preparation:

**Freshly finished concrete:** None required.

### Existing concrete:

Sweep, scrub or strip concrete to remove any surface contamination or film.

### Coats Required:

One

### Coverage:

Approximately 4 square meters per litre. Coverage depends on the temperature and porosity of the concrete.

### Colour:

Clear

### Surface Appearance:

On smooth-troweled concrete, a sheen develops within approximately 4 to 12 months. All other surfaces retain their natural finish.

### Thinners:

None required.

### Primer:

None required.

### Application Methods:

Brush, roll or spray

### Clean up:

Soap and water

### Storage Life:

Indefinite. Agitate pail or drum before use.

### Curing Time:

Unlike surface coatings, CETCO Formula seals and cures the concrete by permanently locking the pores from within. This process is essentially complete within 90 days, but may continue at a much slower rate for up to one year.

### Drying Time:

1-3 hours. The surface may be used as soon as the application is complete and the surface is again dry to the touch. Newly laid surfaces require the normal hardening period.

### Temperature Limits:

Applicable in temperatures up to 59 C (135° F), or as low as 2 C (35° F) if the concrete is covered by plastic and completely protected from freezing for a period of 6 days.

### Tools Needed:

Low-pressure sprayer (power or garden type) roller, brush or fine/soft bristle broom.

### Painting:

Allow at least 7 drying days before applying a quality grade paint.

### Product Description:

Colourless, odourless, non-toxic, non-combustible, non-flammable. Complies with all VOC regulations.

### Limitations:

**Do not apply CETCO Formula to:**

Lightweight block or other extremely porous masonry which contains actual holes and air pockets.

Areas previously treated with curing or sealing agents, unless these coatings have completely worn off, or have been removed by chemical or mechanical means.

## Notes...

*Apply to coloured concrete only after the slab is fully cured.*

*Do not get on glass or other finished surface. If so, flush immediately with water.*

*Eliminate the product according to the local regulation.*