

## INSTALLATION MANUAL

# MonoConfalt®

Industrial Flooring



### GENERAL

MonoConfalt® is the first material of its kind. It is a semi-flexible topping system for base of concrete or lean concrete. It can be installed as new build or refurbishment layer in thickness from 20 mm. MonoConfalt® requires no joints unless movements in sub base are expected.

### PREPARATION

MonoConfalt® does not require specific bonding properties but we do recommend following:

#### Base of Lean Concrete:

By placing MonoConfalt® on a new laid lean concrete it is recommended to keep the Lean concrete clean and humid with a folio. When base is used as a working platform before MonoConfalt installation, do make sure that surface is cleaned prior to installation of MonoConfalt®.

#### Base of Concrete:

By placing MonoConfalt® on existing base of smooth floated concrete it is recommended to scabble, grind, shot blast or roughly treat the surface in order to remove the concrete film on top and to get a clean surface. Completely exposure of aggregates as required for our Contop systems is not necessary. Primer is not required.

Installation wet in wet is possible but only with vibration beam.

Cracks in lean concrete sub base (indoor) can be reinforcing with various type of meshes. Please contact Contec Aps for more information.

Attention must be drawn to day joints. Best way is to fix an L profile or similar to achieve a clean cut. When proceeding, the profile is removed and the vertical edge must carefully be painted with water based epoxy.

### MIXING

There are more ways to mix the MonoConfalt®

- 1: Efficient paddle pan mixer of min. 300 litre.
- 2: Concrete truck filled with big bags
- 3: Mobil or local mixing plant for large amounts.

MonoConfalt® is supplied in three ways:

- 1: as a ready mix
- 2: as two components
- 3: as three components

Water can be added in one step but must be measured precisely beforehand. Continue mixing for minimum 5 minutes until the material has a uniform consistency. When mixing in concrete truck material will be delivered in big bags in exact mixing proportions.

For large jobs we recommend to mix on mobile or local mixing plant and material should be delivered bulk in silo.

### STEEL FIBRE REINFORCEMENT:

Can be used when higher impact strength and/ or bending tensile strength are needed. Add steel fibres 2 minutes after water is added.

### STEEL MESH REINFORCEMENT:

For certain problematic installations it can be highly profitable to install the MonoConfalt® with a reinforcement mesh. Poor sub base, large movements, joint overlapping or bridges are some areas that call for extra attention on bearing capacity.

### LAYING

MonoConfalt® must be compacted and levelled. With vibration beam and guiding rails or by semi automatic levelling machines. For large surfaces we recommend laser screed installation.

In places which are too difficult to reach with the screed a small vibration float can be used. When guiding rails (used together with vibration beam) are removed the grooves must be refilled with mortar.

### FINISHING:

After having obtained a well compacted and even top layer, a very important part of the installation take part. PATIENCE!!

It has to be stressed that MonoConfalt® must set and stabilize before floating. It can seem dry in the surface with a skin and mat colour, but it will still be too early to float if the layer is still soft in the bottom. In other terms, if you make a 2 mm foot print it will still be early to float. If the power floater

(with disc initially) will move around material or even sink into the material, it will be too early. In best case the result is another several hours of waiting because the material was woken up again. Worse case is when plastic cracks occur due to drying out in surface but still wet in bottom and again leading to risk of de-bonding.

By waiting with the initial floating (with the disc) you secure that curing will start from bottom and upwards. The final floating (with the wings) will be easier and bonding is optimal.

After initial floating (with disc) the surface is "closed" and the next step will be floating with wings – but again after waiting. Now until the surface has a dry and almost crispy condition.

A second time finishing with the wings will give a smooth and almost shiny surface.

Waiting time can vary several hours depending on mixing water, sub base and temperatures etc. Please notice if accelerator is used

#### **CURING**

To avoid evaporation it is necessary to protect the surface with Contec AC curing immediately after finishing the surface and before 12 hours maximum by 20° C. An equal layer of Contec AC Curing (minimum 200 gr/m<sup>2</sup>) should be sprayed with a Gloria spray or similar. Alternative protection by

covering the surface with a plastic sheet – however the risk increases for white spots due to calcium efflorescence. If the MonoConfalt® will be coated or sand saturated then we recommend the use of plastic sheets.

#### **JOINTS**

If necessary that the joints in the base concrete have to be reflected in the topping this must be done within 24 hour after placing the MonoConfalt® topping. The use of joint filler and the type of joint filler will depend on the mechanical-, chemical- and thermal loads and other requirements in reference to for example the fluid tightness of the topping. By refurbishment of old existing concrete indoor floors joints are often not necessary to respect.

#### **CLEANING**

Tools and equipment must be cleaned with water before setting commences.

#### **HEALTH AND SAFETY**

MonoConfalt® are like all Contec flooring systems non-toxic and safe to use, however, powder in contact with water or moisture produce a strong alkaline solution. Protective gloves, clothing and a dust mask should be worn when mixing and applying the material.

**MIXING INSTRUCTIONS:** The following mixes can be considered as standard. Any variations must be carefully considered and discussed with your local Contop agent or our office.

#### **MONOCONFALT®:**

Material	Mix – ready mix	Mix – 2 components	Mix – 3 components
	Viscous/stiff mix: 15-50 mm Thickness		
MonoConfalt ready mix Delivered in 25 kg buckets	25 kg		
Contop 105-2		25 kg	
Contop Binder MC			25 kg
Contec B9 sand 0.1-1.5 mm			40 kg
Contec MC aggregates		30 kg	75 kg
Water	1,6 Litre	3.5 Litre	8.5 Litre
Amount of material:	10,4 litre	22,9 Litre	58.3 Litre

**ADDITIONAL INFORMATION:** All technical information contained in our literature or otherwise transmitted, is given in good faith, based on test data and experience. Whilst normal handling and application techniques associated with cementitious materials should be observed, we are pleased to give advice on particular applications and site conditions. however we can not be responsible for any loss or damage arising from individual site conditions or methods of application beyond our control. PBU/BS 14.08.2000