

Densit® product preparation:

Compounds need to be mix during preparation. This mixing and adding water are key for the best lifetime of Densit® product.

Placing the mixer:

The mixer must be placed as close to the installation site as possible.

There must be access to power supply and clean water.

Avoid long distances between the mixer and the water taps as a large amount of water is normally needed for an installation.

It is recommended that one man should stand by the mixer all the time so he can ensure the uniform consistency of the compound.

The necessary mixing equipment must be available:

- Paddle pan mixer
- Bucket with litre marking for dosage of water
- Litre measure for dosage of extra water
- Scales to weigh steel fibres
- Stopwatch to monitor mixing time
- Wheelbarrow/buckets for transporting compound

Those may be moistened before filling with compound.

Mixing procedure

Follow the instructions on the bag.

- Mix dry powder
- Add the minimum amount of water to the dry powder.
- Mix Densit® WearFlex HT with the minimum amount of water for min. 8 minutes. Within 3 minutes the mixture should change from a dry powder to a wet and sticky compound.
- Check the consistency

If the material is too dry, add 70 g extra water and mix for an extra 2 minutes. Repeat this if necessary.

- The total mixing time must be at least 8 minutes before the addition of the steel fibres.
- If the consistency is right, add 1.1 kg steel fibres per 25 kg Densit® WearCast HT.

rec. steel fibre type:

Service temperature max.: 1100°C ISO 4955

800°C ISO 3581

400°C ISO 4995

- Mix for an additional 2 minutes
- The total mixing time must be at least 15 minutes

When mixing is completed, check the workability of the compound again. If the compound can be shaped into a “wet ball”, then it has good workability and can be applied without difficulty.



*The compound is too dry
Add more water*

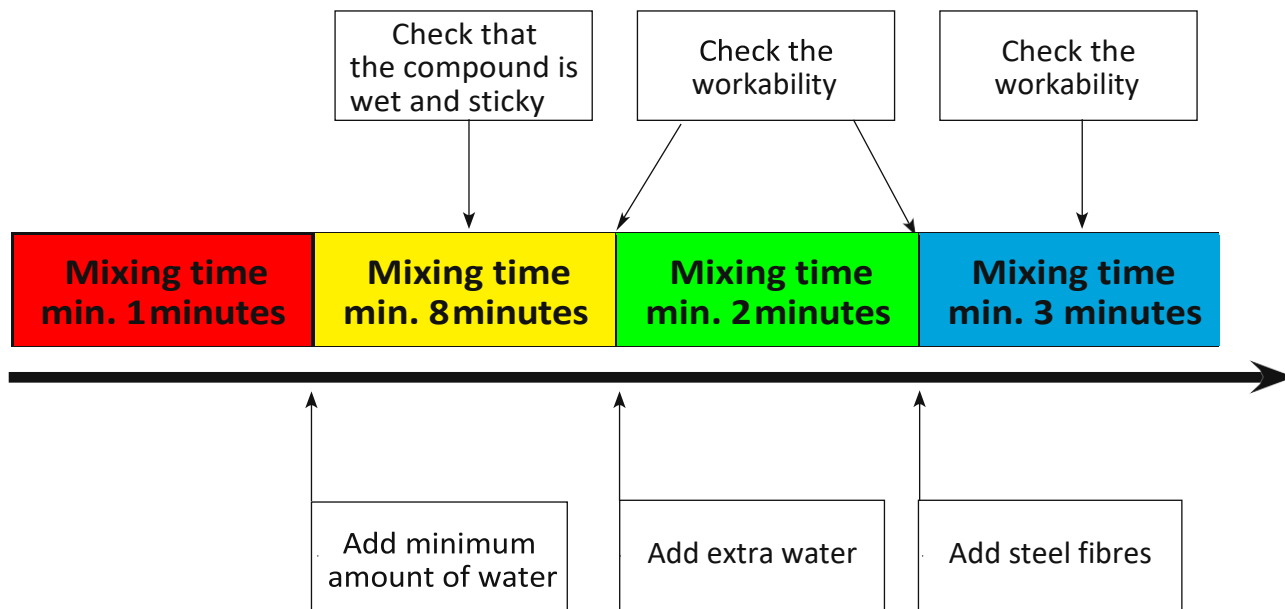


*The compound is OK
Ready to install*



*The compound is too wet.
Discard the compound*

Mixing procedure



Notes :

1. If compound is applied overhead (roof application), it's highly recommended to add 3 min on the last mixing time in order to have stickier compound.
2. Once the first mixes with the correct consistency have been prepared, the amount of water used can provide the guideline for following mixes. As the product may vary, however, it is recommended to reduce the minimum amount of water used for the following mixtures from 1 to 2 portions of water (70-140 ml). Then add the rest of the water as needed.
3. If the compound does not become a wet, sticky mass during the first 3 minutes, additional water should be added. The compound should be mixed after each addition of water. When it becomes a wet and sticky compound, the compound should be mixed before adding more water.
Check the effectiveness of the mixer if the compound still does not turn into a wet, sticky compound.
4. If the mixing time is longer than expected, the compound may lose workability. This can be checked by keeping an eye on the temperature of the compound. If the temperature starts to rise, the mixing time is too long.
5. If proper workability cannot be obtained, the compound should not be used.
6. If the compound cannot be used as soon as mixing is complete, it should be mixed again just before use. If the compound begins to set in the mixer, it should be discarded.

DENSIT application:

The following tools are needed for correct installation:

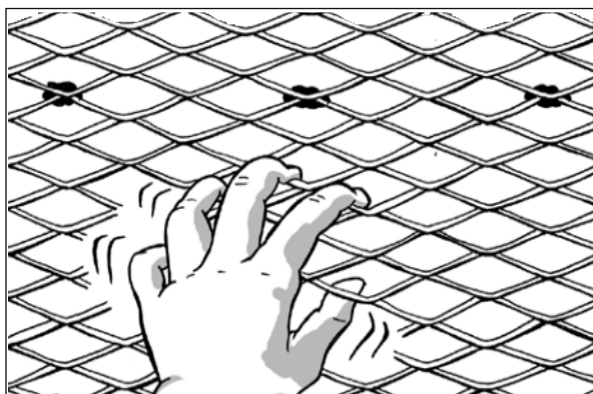
- A compound board and trowel to apply Densit® WearFlex.
- A ruler to check the thickness of the layer.
- Buckets/wheelbarrow to carry the compound.
- Curing spray to apply Densit® Curing Compound.
- If needed, lifting gear or the like to transport the compound.
- If needed, insulating blankets to cover Densit® WearFlex after application.

Before Densit® WearFlex application, please check steel mesh attached.

Checking the stiffness of the anchoring

Then anchoring must be so firmly attached to the fabrication that the mesh does not move when the compound is applied. Make certain the anchoring is properly welded onto the fabrication by pulling on it.

The anchoring must not be loose, and it must not be possible to pull it away from the fabrication.



Application on horizontal surfaces:

The best way to apply Densit® WearFlex compound on horizontal surfaces is by laying a large amount of Densit® WearFlex compound, about 10 litres, on the fabrication.

Then distribute this compound to all sides with a mortar board.

Work with the compound until the desired thickness is obtained.

Check the thickness of the layer regularly.

Check at regular intervals to see that the Densit® WearFlex compound has been pressed all the way behind the anchoring.

The finished surface should be level without unevenness and have the correct thickness.



Application on vertical surfaces:

Take the freshly mixed Densit® WearFlex compound from the bucket and place it on the mortar board. Take the mortar board to the surface with the anchoring and press the compound in between the anchoring and the fabrication. Draw the mortar board upwards while, at the same time, moving it quickly from side to side with small movements. Using this method, Densit® WearFlex compound is easy to work with, and it is possible to work the compound well in between the fabrication and the anchoring. The correct thickness must be achieved while the compound is “wet”. This means that Densit® WearFlex compound must not be applied on top of compound which has lost its workability/form skin.

Check at regular intervals to see that the Densit® WearFlex compound has been pressed all the way behind the anchoring.

The finished surface should be level without unevenness and have the correct thickness.



Thickness checking of Densit®:

Ruler checking:

Check regularly to see that the correct thickness of the Densit® WearFlex compound has been applied.

Check regularly with a ruler or the like to see that the application has the correct thickness. Make sure that the measuring tool is pressed all the way down to the fabrication.

Check for air pocket:

Check regularly during application of the fresh compound to ensure that the Densit® WearFlex compound is pressed in behind the anchoring so no air pockets occur in the lining, as this can cause dislodging of the Densit® WearFlex lining.

Use a trowel to scrape some Densit® WearFlex compound off to reveal the anchoring (about 10x10cm). Check to see whether there are any air pockets. If there are air bubbles, more Densit® WearFlex compound must be pressed in behind the anchoring during application. After completing the check, apply Densit® WearFlex again on the area and smooth off with the mortar board.

If the check reveals air pockets, the compound that has already been applied must be removed and discarded. New Densit® WearFlex compound must be applied to areas where air pockets are found.



Curing compound application:

Immediately after the surface is finished, it must be protected against drying out. This is normally done by spraying with Densit® Curing Compound.

Densit® Curing Compound is a surface sealer which is sprayed onto the Densit® WearFlex lining to retain the water in the Densit® WearFlex after installation.

Densit® Curing Compound must always be sprayed on immediately after finishing the Densit® WearFlex lining.

