RECKLI artico® neo

Film for photo concrete

PROPERTIES AND APPLICATIONS

RECKLI artico neo is a film, printed with a concrete surface deactivator, by means of which designs, graphics, images or photos can be applied to concrete surfaces permanently and in detail. RECKLI artico neo films are inserted in the formwork at the precast factory and bring about time-delayed concrete setting at the printed locations. Washing-out the surface dissolves the cement skin and the underlying aggregate is exposed. The wash-out depth is 1.5 mm in the process. Suitable selection of additives allows light-dark effects to emerge as a result of the contrast between the washed-out and the smooth concrete surface. The intended design becomes visible on the facade.

RECKLI artico neo is delivered rolled-up in an outer packaging and can simply be placed in the formwork.

DESIGNS

Nearly any individual design, graphics, image or photo can be visualized two dimensionally on the concrete surface by using this procedure. Photos and images are screened in pixels. The size of the screen dots is dependent on the master image and the viewing distance and is developed specifically for the project. We optionally provide sample films at extra cost. The precast factory can thus correspondingly optimize the concrete mix.

DIMENSIONS

The maximum dimensions for an individual film are approx. 3.15 m × 25 m. For technical reasons, the maximum printed surface (print dimensions) is 3.10 m × 25 m. Of course, a number of films can be placed next to one another in the formwork to produce larger designs or photos. These can be set next to one another nearly seamlessly, because the printing can take place continuously.

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Film thickness:</td>
<td>approx. 0.2 mm</td>
</tr>
<tr>
<td>Thermal stability:</td>
<td>-20 °C to +50 °C</td>
</tr>
<tr>
<td>Flexibility (at 20° C):</td>
<td>can be rolled onto a roll of at least 10 cm in diameter.</td>
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</tbody>
</table>
These data are typical guide values. They are not intended for the generation of specifications.

**SUBSTRATE**

The formworks should be clean, free of dust and grease. Oil and dust residues on the formwork must be removed beforehand. Larger dust and dirt particles can press through the film and become visible on the concrete surface.

**Warning!**

Do not use a concrete release agent on the film. We recommend RECKLI Stripping Wax TL-W for lateral surfaces and formwork frames.

**PROCESSING**

**Test element**

Before applying RECKLI artico neo films, we strongly recommend testing these under practical conditions in the precast factory. Most diverse influences can affect the quality of the eventual concrete elements. The conditions in a concrete laboratory differ from those in practice and can correspondingly affect the concrete surface. For test purposes, we will gladly provide samples in dimensions of 50 cm × 50 cm.

**Concrete**

RECKLI artico neo films do not necessitate any special requirements for the concrete. Nevertheless, you should also always carry out testing in advance with the eventual concrete mix in order to check whether your concrete mix achieves the desired surface result. It is imperative to consider that the quality, size and colour of the aggregate affect the appearance of the concrete element. A preliminary test also helps in finding the desired composition here.

**Inserting the film in the formwork**

It can often be useful the remove any dust particles from the film in advance with a dry, clean cloth.

RECKLI artico neo films should be inserted in the formwork with clean, dry hands. If necessary, the films can be cut to desired dimensions with a cutting knife.

The film must be placed in the formwork such that the printed part is directed upward, respectively in the direction of the concrete. Make sure that the film is supported flat on the formwork and that no air pockets form under the film. These also have a direct effect on the eventual concrete finish.

The formwork frame should not lie directly up against the film, but should rather be laid around the film with a slight protrusion. Do not place the films on formworks
that have been exposed to sunshine for a longer period of time or are heated. Check for the correct position of the film before pouring the concrete.

If a number of films are laid together for a larger overall motif, check that the correct films are next to one another to yield the desired result. Also check the junctions between the individual films so that there are no overlaps or gaps in the motif.

For larger elements, processing is also possible on a vacuum table. In this case, the vacuum should also be applied during concreting.

Make sure that adequate concrete covering is assured and the reinforcement does not damage the film during application. We recommend suspending the reinforcement so that there is no damage to the film. The use of spacers may be recognizable in the eventual concrete element. Should spacers nevertheless be used, we absolutely recommend advance testing.

**CONCRETING**

The concrete should be cast into the formwork gently and the bulk height should not be more than 0.3 m. For possible concrete compression, an external vibrator should be used only once.

**DEMOLDING**

Shortly after the concrete is hardened, on the following day, the elements must be demoulded and washed-out. Numerous elements that are used for the same object should always be concreted and demoulded at the same time. If the elements remain in the formwork for variable lengths of time, this will affect the colouring and the wash-out results.

**WASHING-OUT**

During production planning make sure that the concrete elements are washed-out within two hours after the demoulding. Before washing-out, the plastic film must be pulled away from the concrete element.

The concrete surface is washed-out with a high pressure cleaner. We recommend a pressure of between 70 and 150 bar. The distance should be at least 30 cm. Always use clean water (tap water). While washing the elements, we recommend starting at the upper left, going to the right and then work down slowly at the same pace until the element is completely washed-out. Make sure that all areas treated with deactivator are washed-out properly. Otherwise, spots can result in the concrete.

For optimal results, let the concrete elements dry-out while being protected. We additionally recommend protecting surfaces by impregnating the elements with a water- and oil-proofing agent from our selection.
STORAGE

For longer storage, we recommend taking the films from the packaging, unrolling them and storing them flat at a dry, clean, dust-free location protected from sunlight. To avoid deformations, store the films on a smooth substrate and avoid placing objects on them. RECKLI artico neo films can be stored for six months if stored properly.

DISPOSAL

RECKLI artico neo films are not classified as hazardous waste. Check with local authorities and disposal companies to dispose of the films.

PROTECTIVE NOTES

Our products have been tested successfully in practice under varying conditions. All information and recommendations in this document result from the best of our knowledge and the latest state of the art. Nevertheless, varying conditions can also have varying influences on the films. This document can therefore provide recommendations, but cannot serve as a guarantee. To carry out your project, please contact our technical sales department.

This issue replaces all previously published pamphlets concerning RECKLI artico neo, stating them as no longer being valid.