

# **CRYST SELF-LEVELING PLUS®**

Article-No.: 07900

# SELF-LEVELING FLOOR SURFACE FOR HIGH THICKNESS

# DESCRIPTION

CRYST SELF-LEVELING PLUS<sup>®</sup> is a high-strength, single component, fast setting, polymer modified cementitious floor self-leveling and repair mix for interior concrete, and cementitious substrates. CRYST SELF-LEVELING PLUS<sup>®</sup> specially design for thickness more than 2 cm up to 10 cm. Once mixed, it will form a trawlable screed mortar, with easy application, and good adhesion to the substrates. CRYST SELF-LEVELING PLUS<sup>®</sup> provides a smooth, level surface finish ready to receive a variety of floor coverings.

# FEATURE AND BENEFITS

- Environmentally friendly.
- Ready to use with addition of water.
- Easy application enabling high productivity & superior finishing.
- Excellent physical and mechanical properties.
- Good workability.
- Excellent bonding strength to the substrate.
- Crack and shrink resistant.
- High compressive strength.
- Reduced sound transmission.
- Moisture resistant.
- Safe for use both outdoors and in confined indoor spaces.

## FIELD OF APPLICATION

- Aisleways, manufacturing, storage and shipping.
- Screeding over hollow-core pre-cast concrete slabs.
- Distribution centers and warehouses.
- Distressed and worn concrete floors.
- Industrials floor slabs.
- Parking garage floors.
- Public utilities.
- Showrooms and convention hall floors.
- Leveling floors and slabs to slope to ensure proper flow to drains.
- Floors designed to meet a specific flatness.

# **PROPERTIES MATERIAL**

Form:	powder	
Apperance:	grey	
Bulk Density:	approx.1.8 g/cm <sup>3</sup>	
Application temperature:	+8°C up to +40°C	

## **TECHNICAL DATA**

Compressive strength:	28 days	48 N/mm2
Flexural Strength:	28 days	7 N/mm2
Tensile Bond Strength:	28 days	3.5N /mm2
Cracking:	NONE through 28-day test	
Application thickness:	20 mm - 100 mm	
Processing time:	approx. 45 minutes	

# SMART WATERPROOFING SYSTEM



# **DIRECTION FOR USE**

#### Surface preparation:

Concrete substrate must be cleaned immediately prior to primer and topping application should be free of dust, oil, curing compounds, paints, coatings and/or any other matter that may cause loss of bond. Remove any loose, frozen, broken, carbonated concrete. Shotblasting equipment is recommended for achieving mechanical removal of unsound concrete, coatings, curing compounds, sealers, etc. Joints, cracks and drilled or sawed holes should be filled or grouted to prevent seepage of primer and underlayment. Joints in substrate must be reflected (tooled or sawed) in applied topping.

#### Priming:

The substrate must be treated with CRYST BOND® to aid in bonding CRYST SELF-LEVELING PLUS® to substrate and to avoid "pinhole" caused by entrapped air in substrate. CRYST BOND® is a synthetic resin, high penetrating primer that can be applied by brush or roller on to the cleaned surface area, The primer should be left to achieve a tack-free condition before applying the top coat. Extremely porous concrete may require a second coat of primer if the substrate is excessively porous. CRYST BOND® may be applied up to 24 hours before application of topping.

#### Mixing:

Add 2 – 2.5 liters of clean water into a clean mixing bucket for 20 Kg bag of CRYST SELF-LEVELING PLUS<sup>®</sup>. Add the product to the water and mechanically stir drill mixer with a low-speed with a suitable paddle for 2 minutes scraping sides and bottom of the can, until a uniform, lump free, homogenous mass with either a slurry or sprayable consistency is achieved. Allow to stand for at least 3 minutes then briefly remix again for 30 seconds. If the mixture starts to set, do not add more water; simply re-stir to restore workability. Only mix as much material as can be used within 30 minutes.

#### Application:

Pour the mixed material onto the primed surface and apply by trowel or suitable tools to the required thickness. Roll thoroughly with a spiked roller in two directions to remove any entrapped air. Larger areas can be divided with wooden battens to control the pumping volume and determine the layer thickness to be applied. CRYST SELF-LEVELING PLUS® can be applied for thickness from 20 mm up to 100 mm.

#### Curing:

The curing as per standard concrete curing practices. Do not subject the applied area to vehicular traffic for 28 days till ensuring full cure and the system's ability to withstand designed traffic loads.

#### NOTES:

- This product is ready to use with the addition of water. DO NOT add any materials or additives to mixture other than those described above.
- During application, protect topping from direct sunlight, wind, rain, snow and other forms of moisture.
- Store in a dry environment.
- For more detailed instructions, or information concerning the compatibility of the CRYSTARM® application contact the CRYSTARM® technical department or your local CRYSTARM® representative.

#### **RECOMMENDED TOOLS**

Trowel, spatula, gloves, and safety glasses, stirring mixing machine.

#### PACKAGING

CRYST SELF-LEVELING PLUS® is available in 20 kg bags or pails.

#### **BASIS OF PRODUCT DATA**

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.



### **STORAGE & SHELF LIFE**

Keep CRYSTARM products must be stored dry and at a temperature of no less than 45°F (7°C). one year is the maximum shelf life when stored under proper conditions in original unopened packaging.

#### SAFETY HANDLING

CRYST SELF-LEVELING PLUS® is made of Portland cement and silica sand may irritate your eyes and skin. Take adequate precautions, such as wearing protective gloves and using breathing apparatus if applied in enclosed environments. If contact is made, flush areas with lots of water. For further information please refer to Safety Data Sheet. KEEP OUT OF REACH OF CHILDREN.

CRYSTARM® Drescherstraße 53, D-71277 Rutesheim EN 1504-3 CRYST SELF-LEVELING PLUS® for the structural and non-structural protection and repair of concrete structures EN 934-2:T9 Compressive strength Class R3 Chloride ion content ≤0,15% Restrained shrinkage/expansion NPD Elastic modulus: NPD Carbonation resistance NPD Thermal compatibility NPD Reaction to fire: NPD Release of dangerous substances NPD

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## **CRYSARM**<sup>®</sup>

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**WARRANTY:** The Manufacturer warrants that the products manufactured by it conform to the formulation standards contained in all components in their proper proportion and are free from material defects. If any of the products are found to be defective the subsequent liability to The Manufacturer shall be limited only to the replacement of the product proven to be defective and shall not be liable for any other claim or for incidental or any consequential damages that may arise directly or indirectly with the said defective product. The user shall determine the suitability of the product for its intended use and the user assumes all liability in connection therein and the manufacturer shall not be liable save for terms of this warranty.

# SMART WATERPROOFING SYSTEM