

## CRYST METAL<sup>®</sup>

Article-No. 04600

### CRYSTALLINE METAL WATERSTOP FOR JOINT STRUCTURAL

#### DESCRIPTION

CRYST METAL<sup>®</sup> is a crystalline metal water stop consisting of a special metal plate encapsulated in an active coating that reacts with water when embedded in the fresh concrete to provide a waterproof construction joint.

CRYST METAL<sup>®</sup> creates a physical barrier whilst active coating reacts with water in the concrete to form non-soluble crystals which support the natural self-healing process of the concrete to seal cracks and eliminate water ingress. Only 5 cm of concrete cover on both sides are necessary to seal cold joints up to 10 bars. The connection of the special coating to the concrete prevents any water flow through the concrete construction joint. This process is reactive every time water or moisture comes into contact with the coating during the lifetime of the structure and repeats the sealing process.

#### FEATURE AND BENEFITS

- Environmentally friendly
- CRYST METAL<sup>®</sup> water stop encapsulated in a 1.25 mm thick on both sides with crystallization properties, which seals cracks in the concrete.
- Resist high water pressure up to 10 bars.
- Good bonding to the concrete.
- Non-toxic – ideal for potable water tanks.
- Can be used for both vertical and horizontal applications.
- Permanently waterproof and active throughout the lifetime of the structure
- Saving time over traditional water stops.
- Can be installed during pre and post-pour.
- Protects against water, chloride, sulfate ingress, and chemical attack.
- No collapse or displacement of the water stop when subjected to the weight of concrete poured from above
- No special installation tools are required.
- No welding is required.
- Easy handling and time-saving.

#### FIELD OF APPLICATION

CRYST METAL<sup>®</sup> apply to waterproof structural joints either vertical or horizontal:

- Building foundations, slabs, retaining walls, basements, precast panels, tunnels, and lift pits.
- Storage water tanks, swimming pools, water treatment tanks, sewage, and manholes.
- Other similar construction joints.

#### MATERIAL PROPERTIES

Form:	metal plate
Appearance:	dark gray
Dimension:	2m lengths, 180mm high and 1.25 mm thick
Resistance to hydrostatic pressure:	up to 10 bar
Application temperature:	+8°C up to +40°C

#### DIRECTION FOR USE

CRYST METAL<sup>®</sup> is cast centrally along and perpendicular to the construction joint.

CRYST METAL<sup>®</sup> Water stop can be installed in two simple methods: either by fixing it to the steel reinforcement pre-pour by pushing the plate into the first pour of concrete to a depth of at least 30 mm, allowing the remainder of the

plate to be covered by the next pour of concrete. To connect elements simply overlap the plates by 5 cm and secure with a clips.

CRYST METAL® Water stop can be installed both horizontally and vertically. The elements are strong yet malleable so angles/corners can be formed by hand without damage to the CRYST METAL® coating.

#### NOTE:

- For more detailed instructions, or information concerning the compatibility of the CRYSTARM® application contact the CRYSTARM® Technical Department or your local CRYSTARM® representative.

#### PACKAGING

Delivery form 10 meters (5 plates, 2 m × 18 cm).

#### 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). 2 years is the maximum shelf life when stored under proper conditions in original unopened packaging.

#### SAFETY HANDLING

Take adequate precautions, such as wearing protective gloves. For further information please refer to Safety Data Sheet. KEEP OUT OF REACH OF CHILDREN.

#### CRYSTARM®

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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.