

ADCOR™ ES

Engineered swell hydrophilic waterstop strip

Description

Grace Adcor™ ES is a specially engineered, swellable, conformable synthetic waterstop strip that expands when in contact with water. The engineered swell design of Adcor ES minimizes the potential for concrete spalling and cracking versus traditional hydrophilic waterstops. When fully encapsulated by poured concrete, the expansive forces form a seal against concrete faces. The seal resists hydrostatic pressure, stopping water from entering sub-structures. Adcor ES is a unique product that has been specifically developed

to provide better performance than bentonite or conventional swellable rubber waterstops. Superior performance arises from:

- controlled, reproducible, volumetric expansion.
- cohesive strength maintained after volumetric expansion and during wet-dry cycling.
- malleable and plastic, enabling easy application to a variety of concrete profiles.

Applications

- Horizontal and vertical construction joints in concrete structures.
- Casting new concrete against existing.
- Pipe penetrations through floors and walls.

System Components

Adcor ES

1.0 in. x ½ in. (25.4 mm x 12.7 mm) waterstop strip, supplied in 16 ft (4.9 m) rolls.

Adcor ES Adhesive

A butyl based adhesive for securing Adcor ES to concrete, steel and plastic substrates. Supplied in 29 fl oz (0.85 L) tubes.

Design

Grace recommends the use of waterstops in all construction joints, subject to hydrostatic pressure. Waterstop networks must be continuous through all joints and penetrations if they are to be effective. Contact Grace regarding specific applications where movement is expected.

Product Advantages

- Engineered swell reduces risk of concrete spalling
- Conformable — can be installed onto a variety of irregular substrates
- Controlled expansion reduces the need for product replacement due to premature expansion
- Retains cohesive strength at both original and expanded volume
- No need for protective steel mesh
- Volumetric expansion min 100%
- Simple overlap jointing on site
- Reproducible swell after wet-dry cycling
- Contains no sodium bentonite

Installation

1. Concrete surfaces must be clean and free of all contaminants. Remove all debris and loose concrete.
2. On irregular concrete faces, apply a ½ in. (12 mm) bead of Adcor ES Adhesive as bedding for Adcor ES.
3. Secure Adcor ES using masonry nails 1½–2 in. (40 mm–50 mm) long with a washer ¾ in. (20 mm) in diameter. Hilti EM6-20-12 FP8 shot fired fixings with ¼ in. (6 mm) nuts and ¾ in. (20 mm) diameter washers may also be used. Fixings should be spaced at a maximum of 12 in. (300 mm) centers with a minimum spacing that ensures proper contact to substrate.
4. For pipe penetrations, Adcor ES Adhesive must be applied to dry substrates only. Apply by brush to the substrate. Wait until surface is dry to touch, and then press Adcor ES firmly into place.
5. Adcor ES joints should overlap a minimum of 4 in. (100 mm), ensuring full contact between jointed pieces.
6. Adcor ES can be bent around corners; however, on complex geometry, use Adcor ES Adhesive to fill any gaps.
7. Any damaged sections should be removed and repaired with a new section of Adcor ES.
8. Keep Adcor ES dry prior to pouring concrete.

Concrete Placement

1. Normal weight structural concrete should be placed carefully to avoid damage to the waterstop.
2. Adcor ES should be encapsulated with a 3 in. (76.2 mm) concrete cover minimum.

Physical Properties

Property	Typical Value
Color	Grey
Size	1.0 in. x ½ in. x 16 ft (25.4 mm x 12.7 mm x 4.9 m) rolls
Packaging	6 rolls per case
Hydrostatic Head Resistance	231 ft (70 m)
Wet-Dry Cycling [25 Cycles @ 231 ft (70 m)]	No Effect
Adhesion to Concrete using Adcor ES Adhesive	Excellent

Health & Safety

Adcor ES

There is no legal requirement for a Material Safety Data Sheet for Adcor ES. For health and safety questions on this product, please contact Grace.

Adcor ES Adhesive

Read the product label and Material Safety Data Sheet before use. Users must comply with all risk and safety phrases.

Storage & Handling

Adcor ES should be stored in its original unopened packaging until ready for installation and kept dry prior to pouring concrete. Dispose of any materials in accordance with the requirements of local authorities having jurisdiction.

Limitations

Not suitable for use in movement joints.

Not suitable for use with pre-cast concrete components.

www.graceconstruction.com

For technical assistance call toll free at 866-333-3SBM (3726)

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