

Polyurea waterproofing coating for construction sites



CASE STUDY

Challenge

Vancouver-based Ecolink Group, a manufacturer of green building materials and protective coatings, needed a way to apply waterproofing material to an elevator shaft at an active construction site. Restricted access to the application site prohibited using a larger electric Reactor® and a larger rig would have been cost-prohibitive. Although the Reactor E-10™ may have been acceptable, at over 220 pounds with material in hoppers, the difficulty of getting equipment to the dispense point and the requirement for a larger power generator would have increased application costs.

Solution

The portability and ease of use of the Graco® Reactor E-8p™ Portable Plural-Component Sprayer made this an ideal choice for this application. At 95 pounds (43 kg), with a single 110 VAC power outlet, the E-8p is lightweight, compact and highly transportable. The E-8p allows materials to be fed directly from pails – reducing fluid handling, possibility for spills, contaminants and mixing errors. This factor also helped with the portability since the job only required two 5-gallon pails of material.

The chemical used for this application required external temperature conditioning prior to being pumped and sprayed by the proportioner. The contractor warmed the A-side and the B-side of the ECO Shield using 5-gallon Powerblanket® pail heaters. Refer to the manufacturers' material Tech Data Sheet for temperature recommendations.

Results

Ecolink was able to use the Reactor E-8p to spray approximately 2000 square feet of ECO Shield in less than ten minutes. They left the job site within an hour of spraying and returned the job site to the General Contractor the same day.



“Ecolink applicators brought the E-8p on site, carried the unit over uneven hilly terrain and set it up in 20 minutes. They finished spraying and returned the site to Adera the same day.”

— Chris Eddicott,
Adera Construction Ltd.

SPECIFICATIONS

END USER

Adera Construction Ltd.

DISTRIBUTOR

Ecolink Group

INDUSTRY

Construction

APPLICATION

Waterproofing

Material Specs:

- Material Supplier – Ecolink Group
- Name of Material – ECO Shield

ECO Shield is a low-rise polyurea waterproofing resilient coating that rises to approximately four times the application thickness to achieve a fully bonded, structurally-strong waterproof coating. For additional information on this material, refer to the ECO Shield tech data sheet.

Typical Properties

- Ratio (A:B) by volume: 1:1
- Viscosity: A-Side 450 cpi
B-Side 750 cpi
- Chemistry: Polyurea

GRACO EQUIPMENT

- Reactor® E-8p Portable
Plural-Component Sprayer

CONFIGURATION

- Hose length (non-heated hose):
35 ft (10.6 m) standard,
105 ft (32 m) maximum
- Recommended spray guns
(round and flat pattern): Fusion® AP,
Fusion CS, or P2 guns
(00 max mix chamber size for
all recommended spray guns)
- Weight: 95 lb (43 kg)
- Max output: 12 lb/min (5.44 kg/min)



“For us, the best feature was its ease of setup. The E-8p was plugged into a standard 110 VAC power outlet. There was no need for a generator to be brought onsite. Five-gallon pails of the material were hooked into the pumping system. The entire set-up took 20 minutes. The E-8p kept the material on ratio during the entire application.”

— David Smith, Ecolink Group