

Spray applied elastomeric air and vapor barrier for waterproofing



CASE STUDY

Challenge

Exterior Building Services is an applicator of Grace Perm-A-Barrier® Liquid, a spray applied air and vapor barrier. Grace Construction Products has a network of contractors applying plural component waterproofing materials throughout the U.S. Traditionally the Graco Bulldog® Hydra-Cat® proportioning systems have been used. Although Grace was ready for an updated solution when the Graco XP™ Plural-Component Sprayers were introduced in 2010, this application required a lower-pressure sprayer.

Solution

Graco Distributor, C. J. Spray, was able to integrate a Graco XP35™ Plural-Component Sprayer as an OEM system to meet the specifications of the application and material. The XP35 was configured with a plural component, static mix gun and required around 2000 psi (137 bar) (13.7 MPa) to spray the material.

Results

The Graco XP35 Plural-Component Sprayer has proven to be a high performing solution. The XP35 uses an NXT® air motor with de-icing controls, Xtreme® lowers built for durability and fast rebuilds and X-Tuff™ packing kits for extended packing life in plural-component applications. With the previous equipment, the customer found the B-side material became gummy in the packing throat. With the new X-Tuff packings, the throat seal was only slightly discolored after one month of operation.



The combination of the Graco XP35 Plural-Component Sprayer and X-Tuff packing kits are well-suited for applying an air and vapor barrier.

SPECIFICATIONS

END USER

Exterior Building Services, Inc.

INDUSTRY

Construction, air and vapor barriers

DISTRIBUTOR

C.J. Spray

APPLICATION

Spray applied air and vapor barrier

Material Specs:

- Name of Material – Perm-A-Barrier® Liquid
- Material Supplier – W. R. Grace & Co.– Conn. Grace Construction Products

Perm-A-Barrier Liquid is a two component, synthetic rubber, cold-vulcanized, fluid applied air and vapor barrier membrane. It cures to form a resilient, monolithic, fully bonded elastomeric sheet, protecting above grade wall assemblies against the damaging effects of air, vapor and water ingress.

Typical Properties

- Ratio (A:B) by volume: 2.5:1
- Chemistry: Two-component synthetic rubber, cold-vulcanized, fluid applied membrane
- Color: Green
- Solids content: 100%

GRACO EQUIPMENT

- Graco XP35 Plural-Component Sprayer, customized by C.J. Spray (Graco distributor)

CONFIGURATION

- Part Number: 281255 XP35 for static mix-at-gun applications
- Blue Side (A) Pump: 145 cc
- Red Side (B) Pump: 58 cc
- Heat zones: Ambient
- Hose:
 - 3/8 in x 3/8 in (9.5 mm x 9.5 mm) dual, unheated hose to gun with custom reel

Accessories:

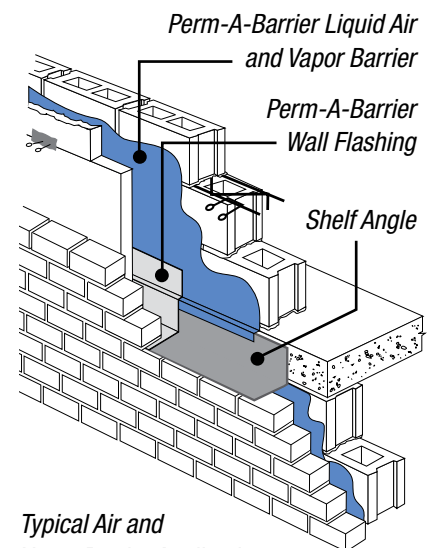
- Graco Husky™ 1040 diaphragm pumps

Delivery Method:

- Static-mix spray gun



Graco XP35 Plural-Component Sprayer, customized by C.J. Spray



Typical Air and Vapor Barrier Application

Drawings are for illustration purposes only. Please refer to www.gracoconstruction.com for specific application details.