



# Wetsuit® 2-Part Fluid Applied Waterproofing Membrane

Professional use only

## Description

WetSuit® 2 Part is a patented VOC-Free, instant-set, water-based two-component cold spray applied, fully-adhered, auto-terminating bituminous high grade rubber membrane suitable for a variety of waterproofing, roofing, air/vapor barrier, and protective applications. WetSuit® 2 Part builds to any specified millage in a single pass application resulting in rapid application and a variety of vertical and horizontal uses

## Recommended Uses

WetSuit® is designed for exterior and interior vertical and horizontal waterproofing, roofing, and environmental barrier applications. Typical applications include:

Split slab and structural slab waterproofing, Plaza decks, balconies, roof decks, sea walls, dams and retaining walls, Green roofs, blue roofs, terraces, and planters, corrosion protection, wall restoration Below grade foundations and walls, Impermeable air and vapor barriers, ponds, fountains, pools, tanks, containment, marine and industrial applications, new and retrofit roofing over Capsheet/APP, Single-Ply (TPO, PVC, EPDM), metal roofs, built-up roofs, plywood, spray foam, and many coatings.

## Features and Benefits

Spray a uniform membrane at any thickness in a single pass with no concern for mud cracking or pin holes.

Trained crews of three can complete up to 1500 sqft per hour

- Versatile: Wetsuit 2-part has tested and proven systems for Roofing, Air and vapor barrier, Hydrostatic pressure, below grade, Interiors, exposed to sunlight exteriors, vertical and Horizontal.
  - Durable: 2124% elongation and superb memory, highly resistant to puncture and impact, approved for foot traffic, excellent weathering and UV resistance performance, withstand ponding water indefinitely, and is Class A Fire Rated and self-extinguishing
  - Simple: High adhesion with the waterbased Wetsuit® primer over a wide variety of substrates eliminates laborious prep; the system is easy to clean, and components mix externally. Always test adhesion before installing a membrane. ⚠ The Wetsuit® 2-part will not adhere to Silicone.
  - Instant set: It is 80% cured in 3 Seconds—immediately tack free
  - Environmentally friendly, low-impact install; LEED eligible
  - Efficient Prep work: engineered and tested systems to provide reliable results when detailing and pre-treating transitions, joints, gaps and penetrations, with options for peel and stick tapes as well.
- Three coursing, peel and stick tapes and liquid cant strip options available.

## Recommended Membrane Dry thickness per application:

Application	Recommended Dry Thickness	Rate of Application
Air Barrier	40 mils / 1 mm	3.7 Gal/square - 1.5 l or 1.58kg/m2
Roofing	60 Mils / 1.5 mm	5.0 gal / square - 2.0 l or 2.10kg/m2
Vertical waterproofing	80 Mils / 2 mm	6.2 gal/square - 2.5 l or 2.63 kg/m2
Horizontal waterproofing	100 Mils / 2.5 mm	8.1 Gal/square - 3.2 l or 3.37 kg/ m2
Shotcrete application	100 Mils / 2.5 mm	8.1 Gal/square - 3.2 l or 3.37 kg/ m2

Due to surface irregularities, transitions, and wind, actual product consumption may increase by up to 10% or 15%



## Membrane Curing After Spraying:

Time	Stage	Notes
2- 3 Seconds	Rain resistant, no wash out	The membrane will not wash out
24 hours	Recoat Top coat Installation Limited traffic	After 24 hours, it is possible to recoat the membrane or begin the installation of a top coat. The membrane can support pedestrian traffic of the workers with protected shoes, no weight shall be put on the membrane
7 days	Ponding Flooding test	The membrane can support ponding water The flooding test, if needed, can be performed after the 7th day of curing
14 days	Fully Cured Return to full service	after the 14th day, the membrane is fully cured and can return to full service. if installed in a tank, the tank can be filled with water.

WetSuit® Products will cure at different rates depending upon the Temperature, Humidity, Thickness Applied, and Substrate that is being applied onto. This cure schedule is based upon films cast at 60 mils DFT, at 50% Relative Humidity, and 77°F. As the full curing time is highly dependent of the atmospheric condition and the ventilation on the surface of the membrane, verify the curing state of the membrane with a moisture meter before applying any load. The membrane is considered as fully cured when the moisture meter indicates a measure below 6%.

## Properties:

**Color:** Brown to black

**Volatile Organic Compounds:** 0%

**Shelf life:** 18 months

**Dry Weight:** 60 mils: 6oz/ft<sup>2</sup>

**Ignition / Flash temperature**

(ASTM D92): 960°F / 516°C

**Elongation / after 2000 Hrs Weathering / at freezing**

ASTM D412: 2124% / 1602% / > 550%

**Tensile strength / after 2000 Hrs weathering**

ASTM D412: 363.2 psi / 525 psi

**Cold temperature pliability**

ASTM D2136-02: Passed at -30°F

**Water vapor Transmission**

(@ 60 Mils) ASTM F1249-06: 243 MNsg-1 / 0.072 perm

**Puncture resistance (Blunt/edge)**

ASTM D5635: 80 J.in-1 / 21 J.in-1

**Adhesion to concrete / after 2000 Hrs**

**weathering**

AS/NZ 1580.408.5: 1.52 MPa-221 psi / 1.92 MPa - 279 psi

## Instructions for application:

### SURFACE PREPARATION AND APPLICATION

WetSuit® should not be applied to wet surfaces or surfaces with latent moisture. Surface should be clean and dry with no oils, loose debris, laitance, organic matter or other interfering matter.

See Neptune Coatings "Surface Preparation Quick Guide" for detailed substrate guidance, full application instructions in Guide Specifications.

### SUBSTRATE TEMPERATURE

Wetsuit® 2-Part can be applied on substrates with a temperature above 5°C / 41°F .

Substrate temperature must be above 40°F/5°C, product must not be allowed to freeze during storage and until final cure. WetSuit® 2-Part is applied using Neptune Coatings patented WetSuit® Spray System.

See Spray System Technical Data Sheet for more information.

### SUBSTRATE MOISTURE

Prior to any application, a moisture test of the substrate shall be done and the substrate should have a moisture content of less than 6%.



**TOP COATING AND SURFACE MODIFICATION**

For a colored or reflective topcoat, use Neptune Coatings Reflex or approved equal. Contact manufacturer for approved coatings.

For a granulated or bead finish, after the 2-Part membrane has been allowed to cure completely, apply a 30 wet mil coat of WetSuit® 1-Part (single component) and broadcast approved bead or granule into it. Time to cure completely will depend on temperature and humidity conditions.

**RE-APPLICATION**

WetSuit® is self adhering, and does not require scarification. WetSuit® 1-Part or Trowel adhere directly to 2-Part. If a topcoat has been applied, contact the Manufacturer.

**MINIMUM EQUIPMENT**

WetSuit® 2-Part is applied using Neptune Coatings patented WetSuit® Spray System.

Always use a “mosquito mesh” filter on the product pickup tube to ensure proper filtration of product during application. A standard window-type mosquito mesh (18x16 threads per inch, approximately 1.1 mm openings) is typically sufficient to trap solid residues and prevent clogging, without being too fine to restrict material suction.

SPRAYING SYSTEM & COATING IS COVERED by US Pat. No. 8,919,278, US Pat. No. 8,940,382 and patent pending

**Post installation cares:**

**Secondary Works Protection**

No secondary work shall be initiated over the membrane before it is fully cured, except the installation of an authorized top coat.

Once the membrane is fully cured, secondary works can be executed in the area of the membrane at the condition to install a due protection of the membrane against damage by the work or by the induced traffic.

**Handling During Curing:**

During the initial curing period, the membrane builds resistance and adhesion. It should not be pulled or stretched from the substrate to prevent compromising its bond.

No light traffic, repairs, or additional coatings should be performed until the membrane has fully cured, with a minimum waiting period of 24 hours.

If the area must be used or exposed to traffic before the curing process is complete, it is recommended to install a protection course to safeguard the membrane.

**Rinsing and Cleaning**

**Initial Rinse:**

After the membrane has cured, rinse it with clean water to remove surface dust, debris, and any residual accelerator that may remain.

**Preparing for Overcoats:**

Rinsing is critical for eliminating bond breakers, ensuring proper adhesion for reflective coatings or any additional systems to be applied on top of the membrane.

**Packaging/ shipping / storage**

Container size	Shipping class	Reference
55 Gallon drum (208.1 liters)	Class 55	17-WS-55
Accelerator Bags		17-WSA-5

One (1) WetSuit® 2-Part kit includes 50 gallon drum of coating and (1) bag of accelerator.

Store in a cool dry area between 40°F/5°C-140°F/60°C, Protect from freezing.

Mix periodically during storage (1x/Month)



## Storage guidelines

For more detailed instructions refer to the storage guidelines document

### Reception of the product

At reception, it is mandatory that the delivered products' containers are fully inspected for leaks, label presence, absence of damage, and well-sealed lids. It is important that the freeze detectors are checked and then let in place to detect any later exposure to freezing temperature. The presence of the corresponding Certificate of Analysis must also be checked.

In case of any detection of an issue, contact Neptune Coatings immediately.

### Storage

The products must be protected from freezing and excessive heat. Storage temperature of Wetsuit® product must imperatively be between 40°F / 5°C and 140°F / 60 °C;

All Wetsuit® products must be stored in dry places. The storage area must be well-ventilated.

The shelf life of the Wetsuit® product is 18 months.

The products must be kept in their original container, closed, and sealed.

The indication of the batch number should not be covered, erased, or modified in any way until the moment the drum/pail is empty.

### Stacks

Do not stack 2 layers of drums. Only stack at maximum 2 layers of pails over a layer of drums. Only stack at maximum 2 layers of pails over a pallet of 2 or 3 layers of pails. Never stack a 3 layer pail pallet as the top layer;

### Regular inspection of products

Due to the nature of the WetSuit® product, a separation of the emulsion can form a hardened layer at the top, known as cookie or lump, which should be re-emulsified into the same drum by following the instructions below.

Randomly, every month, a selection of drums of Wetsuit® 2-Part shall be checked and opened to see if a cookie or lumps has been forming. After the check, the drum shall be stirred for several minutes as such stirring may delay a later formation of the cookie. Anyhow, drums must be agitated and inspected prior to application.

If a hardened layer ('cookie') is present, it should either be removed or re-emulsified, depending on its consistency.

If a soft cookie or lumps is found in a drum, the cookie should be broken in small pieces and the drum stirred to reintegrate the pieces. The drum will need to be filtered before being applied in order to avoid clogging the spraying gun.

If it is too dense or rubbery, discard it to avoid clogging or application failure.

When a cookie or lumps is found in a drum, the other drums of the same batch shall also be checked for the presence of cookies or lumps and in any case, stirred for several minutes.

For full instructions regarding the reintegration of a cookie or lumps, please refer to the full Storage guidelines document.

### Accidental Release Remediation

In case of accidental release of the Wetsuit® product, the corresponding Safety Data Sheet gives proper instructions on how to remedy the spill or leakage.

### Disposal of Wetsuit® Products

Each region may have specific regulations about disposal of chemical products. The local regulations must be verified before to take any action. Disposal of Wetsuit® products must be done according to official regulations.

Characterization and compliance with applicable laws are the responsibility solely of the installation contractor.

## Certifications:

### FM Approval Class 1 roofing - FM 4470

Certificate # 3030656

ASTM E108: Class A on 2 in 12 Slope

Wind uplift: Class 1-990 on Concrete / Class 1-420 on Mod Bitumen

Hail Damage: Class Severe Hail (SH)

Foot Traffic: Passed

Leakage susceptibility: Passed

### Fire classes

#### EN 13501-5

Class BroofT1 Non combustible substrate - Pitch <20°

Class BroofT2 All substrate - All Pitch

Class BroofT3 Non combustible substrate - Pitch < 10°

Class BroofT4 Metal substrate - Flat roofs

#### EN 13501-1

Euroclass E All substrate Euroclass A2-s1,d0

#### ASTM E108

Class A on a slope of 2 in 12

### CE Mark - HEN 15814

Notified Body 1119 - DOP-WS16001-E

Reaction to Fire: Class E

Crack bridging Ability: Class CB2

Resistance to rain: Class R3

Water resistance: Passed

Flexibility at low temperature: Passed

Dimensional stability at high temperature: Passed

Reduction of layer thickness when fully dried: Passed

Water tightness: Class W2B

Resistance to compression: Class C2B

### Florida Building Code compliance - 2014

Registration # 14499.1

### Los Angeles Research Report

Report RR 26190

### Drinking water compatibility

AS/NZS 4020 compliant

UNE-EN 12873-2:2022 Compliant



## How to obtain a Warranty

**CAUTION: Only certified Wetsuit® applicators can apply to obtain a warranty for Wetsuit 2-part installation.**

A Neptune Coatings Wetsuit® Membrane Warranty may be issued after warranty procedure is fulfilled and all required documents are reviewed.

For further detail see your Neptune Coatings representative

## Job security

This product is designed for professional installation. Before working with this product, you must read and become familiar with the available information on its risks, proper use and handling. Information sources include but are not limited to SDS and product labels. More resources are available by contacting Neptune Coatings directly.

A painter's nose/mouth mask and goggles are recommended while spraying. Gloves are recommended to avoid minor skin irritation. Refer to SDS for complete safety information. We always recommend adherence to OSHA fall safety guidelines and best practices.

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To the best of our knowledge, all information contained in this document is accurate as of the date of publication of this technical data sheet. They remain subject to modification without prior notification. The user may contact Neptune Coatings to check for updated information before specifying the product and before ordering it.

We guarantee that our product complies with the quality control standards established by Neptune Coatings. We accept no responsibility for coverage rate, performance or any injury resulting from use of the product. Neptune Coating's liability is limited to the strict replacement of a defective product. No other guarantee is given by Neptune Coatings directly or indirectly, by regulations or otherwise, on the fact that the product is suitable or not for a given use.

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