



HDP™

**HYDROPHOBIC COATING AND
FINISH THAT REPELS WATER
AND TAKES DIRT WITH IT**





Shown above: The entire front face of this building was pressure washed. HDP Coating was applied to only the left portion of the building. Five years later, the left side is still clean while the right side is showing normal environmental conditions without HDP Coating.

HYDROPHOBIC COATING AND FINISH FROM DRYVIT

Without HDP technology, water droplets hit an exterior wall, flatten and cling to the surface until evaporation occurs. Frequently these same water droplets contain atmospheric dirt and contaminants, which can create an environment conducive to the growth of microbes such as mold and mildew – which are unsightly and, if not removed, can potentially harm the surface.

To combat this problem Dryvit has developed a revolutionary formulation that utilizes both state-of-the-art silicone technology and fractal geometry to enable a wall surface treated with HDP™ to repel water, allowing it to dry faster and slow the accumulation of dirt and other contaminants. This hydrophobic performance is available as a coating or finish for both renovation and new construction projects.

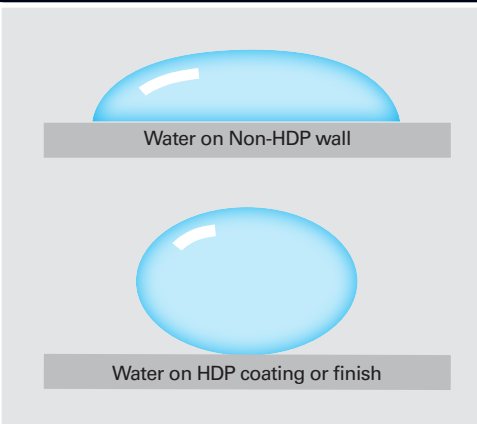
REASONS TO USE HDP TECHNOLOGY ON YOUR EXTERIOR

- Improves the appearance of your building exterior
- Increases the curb appeal and value of your building
- Great renovation solution to change the building appearance

BENEFITS OF USING HDP TECHNOLOGY ON YOUR WALL

- Keeps wall surface dry
- Facilitates dirt and contaminants to run off the wall
- Reduces future maintenance costs
- Available as a paint or textured finish

THE ADVANTAGES OF HDP HYDROPHOBIC COATING AND FINISH



There are two main factors, the first of which is chemical incompatibility, which can create a hydrophobic surface. For example, oil is hydrophobic, and does not mix well with water. The freshly waxed hood of a car is also hydrophobic, transforming any water into droplets that bead and then easily run off the surface.

The other factor is the profile of the surface itself. Though they may appear smooth to the naked eye, most surfaces are comprised of microscopic peaks and valleys. When a water droplet rests only on the peaks without settling into the valleys it is said to have a high 'contact angle,' which makes it hydrophobic.

Typically, a hydrophobic surface exhibits only one of these characteristics – but there are examples in nature where both are present. Several birds, including this penguin, have feathers which are both chemically and geometrically hydrophobic and shed water extremely effectively.



HDP products are ideal for renovation projects, recreating that "just built" look. ReVyvit by Dryvit is a building envelope solution that may include an HDP coating and finish as part of an overall exterior package. The process begins with a building assessment to establish a proper scope of work. Possible ReVyvit solutions range from cleaning and coating, to a complete over cladding of the building exterior with a CI solution. Learn more at [Dryvit.com/ReVyvit](https://www.dryvit.com/ReVyvit)

HDP COATING TESTING

TEST	TEST METHOD	CRITERIA	RESULTS
Mildew Resistance	ASTM D 3273	60+ day exposure period	>60 days: No growth
Accelerated Weathering	ASTM G 155 Cycle 1 Xenon Arc	2000 hours: No deleterious effects ¹	No deleterious effects after 2000 hours ¹
Water Vapor Transmission	ASTM E 96 Procedure B	Vapor Permeable	46 Perms
Tensile Strength	ASTM D412-06	N/A	415 psi
Adhesion to Concrete	ASTM D 4541	N/A	305 psi
VOC (g/l)			29.8 g/l

HDP FINISH TESTING

TEST	TEST METHOD	CRITERIA	RESULTS
Surface Burning Characteristics	ASTM E 84	Flame Spread <25 Smoke Developed <450	Passed
Water Vapor Transmission	ASTM E 96 Procedure B	Vapor Permeable	46 Perms
Accelerated Weathering	ASTM G 155 – Cycle 1 (Xenon Arc)	ICC: 2000 hours: No deleterious effects ¹	2000 hours: No deleterious effects ¹
Freeze-Thaw Resistance	ASTM E 2485-06	AC219: 10 cycles: No deleterious effects ¹	No deleterious effects ¹ after 10 cycles
Mildew Resistance	ASTM D 3273	60+ day exposure period	>60 days: No growth
Salt Spray Resistance	ASTM B 117	300 Hours: No deleterious effects ¹	No deleterious effects ¹ after 300 hours
Tensile Bond	ASTM C 297/E 2134	15 psi minimum	>18.6 psi
Water Resistance	ASTM D2247	ICC and ANSI/EIMA 99-A-2001 14 days: No deleterious effects ¹	42 days: No deleterious effects ¹
Abrasion Resistance	ASTM D968 Method A Falling Sand	ICC and ANSI/EIMA 99-A-2001 500 liters (528 quarts); No deleterious effects ¹	1000 liters (1057 quarts): No deleterious effects ¹
	ASTM D4060 Taber Abrasion (1 kg load)	No ICC or ANSI/EIMA criteria	1000 cycles: 107 mg mass load
VOC (g/l)			<50 g/l

1. No cracking, checking, rusting, crazing, erosion, blistering, peeling, or delamination when viewed under 5x magnification



Independence, MO



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