

DuPont™ Tyvek® StuccoWrap®

BUILDING SCIENCE BULLETIN

For better drainage and stronger stucco.



DuPont™ Tyvek® StuccoWrap® is designed to better manage moisture and promote stronger stucco.

With a specially engineered surface texture designed for traditional and synthetic stucco systems in both commercial and residential construction, DuPont™ Tyvek® StuccoWrap® helps reduce cracking, improves stucco curing and channels moisture out of the wall.

Over 25 years ago, DuPont invented the housewrap category with the introduction of DuPont™ Tyvek® HomeWrap®. Recognizing that stucco facades have unique water-resistive barrier needs, DuPont introduced DuPont™ Tyvek® StuccoWrap® in 1998. DuPont™ Tyvek® products have been used successfully behind traditional 3-coat stucco, 1-coat stucco and EIFS for many years. By developing specifically engineered products, DuPont helped create better-performing and forgiving wall systems for stucco construction.

Better curing, better finish

In tests on traditional 3-coat systems, stucco cured on DuPont™ Tyvek® StuccoWrap® had up to 30% more flexural strength than stucco cured on 60-minute building paper. Less cracking means better stucco integrity and less chance that water will penetrate the facade. Ideally, each stucco layer should dry at a similar rate front to back. DuPont™ Tyvek® StuccoWrap® helps control moisture distribution in the mix during the critical early hardening, improving the curing process and resulting in stronger stucco.

Outstanding protection after curing

Stucco is susceptible to fractures and cracks. Cracking not only occurs during curing, but also during expansion and contraction of sheathing or wood studs. Bulk water and moisture can get behind stucco, potentially causing mold, mildew and damage to wall components. DuPont™ Tyvek® StuccoWrap® acts as a secondary water-resistive barrier against moisture that can enter through cracks in the stucco, around windows, doors or other joints in the wall system.



The miracles of science™

DuPont™
Tyvek®
StuccoWrap®

Choose DuPont™ Tyvek® StuccoWrap®

Specially designed for use with stucco facades, DuPont™ Tyvek® StuccoWrap® has an engineered surface that better manages water and promotes a stronger stucco facade. It is an ideal water-resistive barrier that is recognized by all the major building codes, has a long track record of proven performance and is not restricted for use in any way. For more than 25 years, DuPont™ Tyvek® Weatherization Systems have made millions of homes more energy-efficient and comfortable. Reduce your risk of moisture-related issues and callbacks with the #1 brand in the category: DuPont™ Tyvek® StuccoWrap® provides the quality of DuPont™ Tyvek® customized for the unique needs of stucco facades.

Proper water barrier installation behind stucco

DuPont™ Tyvek® Weatherization Systems are recognized as water-resistive barriers in ICC-ES Evaluation Report ER-4000 and have been used successfully in traditional 3-coat stucco for many years. The application of DuPont™ Tyvek® water-resistive barriers is governed by the code adopted and enforced by the local jurisdiction. In jurisdictions that require two layers over wood-based sheathing and accept DuPont™ Tyvek® StuccoWrap® as equivalent to two-ply Grade D building paper, only one layer of DuPont™ Tyvek® StuccoWrap® is necessary. When stucco is installed over wood-based sheathing, the International Building Code (Section 2510.6) and the 2006 International Residential Code (Section R703.6.3) require "a water-resistive vapor-permeable barrier with a performance at least equivalent to two layers of Grade D paper" or a layer of water-resistive barrier which is separated from the stucco by an "intervening layer". In jurisdictions that require two layers over wood-based sheathing and do not accept DuPont™ Tyvek® StuccoWrap® as equivalent to two-ply Grade D building paper, DuPont™ Tyvek® water-resistive barriers should be separated from the stucco by a second layer of DuPont™ Tyvek® water-resistive barrier, a layer of Grade D building paper, felt, rigid foam board or the paper backing of paper-backed lath. The first layer (directly over sheathing or studs) serves as the wall system's water-resistive barrier and is integrated with window and door flashings, the weep screed at the bottom of the wall and any through-wall flashings or expansion joints.



It is important to note that in high-exposure areas where severe weather and wind-driven rain are a significant factor in normal weather patterns, we recommend design of wall systems that incorporate an intervening layer or airspace to maximize drainage. In these systems, DuPont™ Tyvek® StuccoWrap® provides enhanced drainage over other two-layer systems. In addition, current literature indicates that inconsistencies in stucco applications and formulations, particularly inclusion of additives (which in some cases may contain surfactants), may negatively impact the water hold-out capabilities of all water-resistive barriers. Therefore, the practice of incorporating unapproved additives into stucco formulations is not advised.

DuPont Residential Warranty

DuPont™ Tyvek® Weatherization Systems come backed by a 10-year limited warranty, providing added assurance that the homes builders construct will continue to protect the homeowner's investment for years to come.

Our Specialist Network

A national group of over 180 highly-trained field representatives is available to assist you with your installations. From the latest updates on building codes, to on-site consulting and training, your local DuPont™ Tyvek® Specialist will help make sure the job gets done right.



The miracles of science™

For more information, please call
1-800-44-Tyvek or visit
www.Construction.Tyvek.com