



Issue 4
Durability
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## **OVERVIEW**

Exterior Insulation and Finish Systems (EIFS) with Drainage are non-load bearing, exterior wall cladding systems that provide unparalleled cost-effectiveness and durability for buildings in every climate and have clad thousands of buildings across North America.

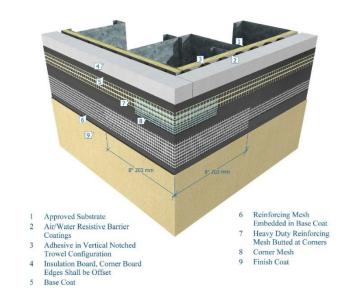
Evolving over the past several decades, EIFS with Drainage are one of the most researched and tested exterior solutions on the market. The cladding's weather barrier technology and continuous insulation have proven their versatility and utility across climate zones by providing energy efficiency and moisture control, reducing the amount of energy associated with heating and cooling. EIFS with Drainage have also complied with the internationally recognized National Fire Protection Association (NFPA) 285 fire standard since its inception.

Because today's EIFS with Drainage are truly 21st century solutions that offer superior performance, aesthetics, and financial value in one package, major world-class organizations depend on EIFS with Drainage for high-profile building projects in communities all over North America. Many of these buildings have won major awards, and examples include but are not limited to: multi-billion-dollar casinos in Las Vegas, such as Bellagio®, Venetian®, Caesars Palace®; hotel properties for Hilton®, Hyatt®, Omni®, Marriott®; corporate projects for Top Golf®, Armstrong®, Electronic Arts®; offices for Los Alamos National Laboratory; medical centers for Arizona State University; the Mall of America, Habitat for Humanity® and more.

## **DURABILITY**

EIFS with Drainage are designed to be durable and long-lasting, which translates to low maintenance. Most EIFS with Drainage systems are specially formulated with a 100% acrylic binder, which gives finishes superior resistance to fading, chalking, and yellowing. As a result, the systems tend to maintain their original appearance over time.

EIFS with Drainage manufacturers have developed and tested systems to meet specific requirements that address windborne debris and cyclic wind pressure. The designer simply needs to consider these requirements and select from properly tested and approved systems.



One of the primary "tools" that provides impact resistance in EIFS with Drainage is the type and weight of the glass-fiber reinforcing mesh. The mesh is available in different weights and is embedded in the base coat, which has been applied to the insulation.

Higher impact resistance is an important consideration for areas such as entrances, columns, and other regions subject to surface impacts. ASTM E2486, Standard Test Method for Impact Resistance of Class PB and PI Exterior Insulation and Finish Systems (EIFS), establishes four impact-resistance classifications for EIFS with Drainage — Standard, Medium, High, and Ultra High — which are achieved through increased weights of reinforcing mesh and/or multiple layers of reinforcing mesh.

Specific impact testing requirements for exterior walls were developed after Hurricane Andrew hit South Florida in 1992. Exterior wall assemblies incorporating EIFS with Drainage can be designed to comply with small and large missile impact test requirements - the benchmark for impact resistance - through use of heavier weight and or multiple layers of reinforcing mesh.

## EIFS ARE USED IN EVERY CLIMATE

EIFS with Drainage, used across a number of jurisdictions and climates, provide consistent durability and versatility to a diverse group of building types and designs. With proper installation practices, EIFS with Drainage buildings will last for decades and are a trusted material for building projects, including the most expensive property ever developed in Las Vegas, Resorts World casino.