

About EIFS with Drainage – A Brief Overview

INTRODUCTION

The first iteration of Exterior Insulation and Finish Systems (EIFS) arrived in the United States of America from Europe in the late 1960s. Those early iterations were commonly referred to as Barrier EIFS, but a few decades later, EIFS evolved to include several new moisture management features commonly used today. Known as EIFS with Drainage, these systems are the predominant form of EIFS installed today.

BACKGROUND

EIFS with Drainage were introduced in the United States over 30 years ago. At the time, the systems were commonly mechanically fastened over a sheet type water resistive barrier and achieved drainage through insulation boards that incorporated grooves, channels, flutes, etc. or insulation board applied over a drainage medium such as an open mat material.

As industry standards developed and technology evolved, manufacturers developed systems with fluid applied water resistive barriers or coatings which enabled systems to be adhesively fastened although mechanically fastened systems are also in use today. With this technology, a common system application method is to apply the adhesive to the insulation board in a notched or groove pattern (see **Figure 1**) which creates channels to accommodate drainage of incidental moisture. Additional features of these systems are as follows:

- Easy integration of the fluid applied water resistive barrier with other building enclosure elements such as flashings, rough openings, penetrations, etc.
- Wind load capacity that meets the typical requirements of commercial construction.
- Fluid applied water resistive barriers typically comply with the requirements for air-barrier materials and integrated with other air-barrier components to create an air-barrier assembly.

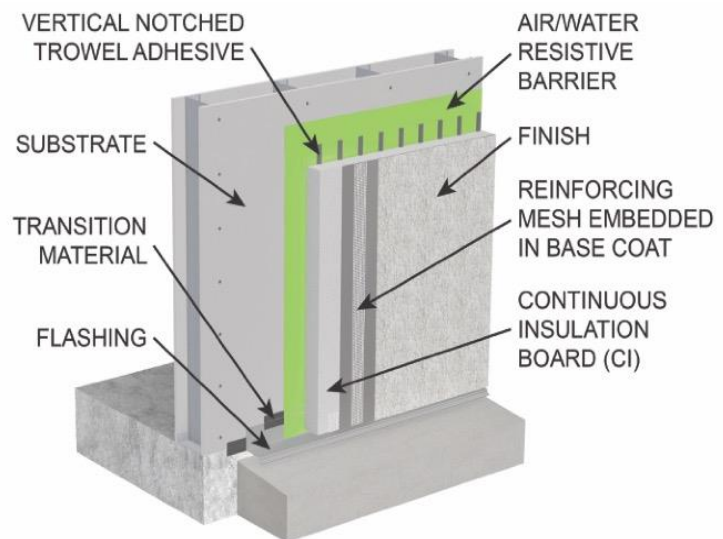


Figure 1: EIFS with Drainage/Notched Adhesive

DRAINAGE - PRESCRIPTIVE AND PERFORMANCE REQUIREMENTS

The International Building and Residential Codes (IBC/IRC) contain prescriptive and performance requirements for EIFS with Drainage. To meet the requirements for drainage, the system must be applied over a water resistive barrier that meets ASTM E 2570 or IBC/IRC respective code sections 1403.2/703.2. Additionally, the system must incorporate a means for incidental moisture to escape and obtain a minimum 90% drainage efficiency when tested per ASTM E 2273.

SUMMARY

EIFS with Drainage, which includes air and water resistive barriers, has been in the building codes since 2009. Originally fastened mechanically over sheet type of water resistive barriers, current systems can use fluid applied water resistive barriers that can be attached adhesively. These newer systems furnish additional features described herein.

ABOUT EIMA

Founded in 1981, the EIFS Industry Members Association (EIMA) is a North American non-profit technical trade association dedicated to advancing and promoting the Exterior Insulation and Finish Systems (EIFS) industry. As a leading authority on EIFS, EIMA serves as a vital hub for leading suppliers, manufacturers, distributors, contractors, architects, and professionals in the industry. EIMA stands as a cornerstone for individuals and businesses seeking to thrive in the dynamic world of Exterior Insulation and Finish Systems. Learn more at www.eima.com.

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