FREQUENTLY ASKED QUESTIONS

1. Can an EIF system be adhesively attached over treated plywood?

   It is recommended that EIFS applied over treated wood products be
   attached using mechanical fasteners. Because of variations in the chemical
   compositions of the treatments used on plywood, questions exist regarding
   long-term performance.

2. Why does the foam need to be picture framed around penetrations?

   Stresses in exterior walls will concentrate at openings and other re-entrant
   corners because of framing and sheathing discontinuities. By ensuring that
   the EPS insulation is continuous, we help distribute those stresses over a
   wider surface area and provide a more effective buffer to minimize the
   chances of stresses being transferred to the coatings.

3. Is a water-resistive barrier required prior to installing an EIF system in residential
   construction?

   Dryvit encourages the use of water-resistive barriers over moisture sensitive
   substrates to provide additional protection in the event of a component
   failure. Local building codes will stipulate whether this is a requirement or
   not. Additionally, specific Dryvit systems may require a water-resistive
   barrier as part of the warranty requirements. The project specification
   should note whether one should be installed.

4. In using the EIF system, is the need for vapor barrier eliminated?

   No. Although EIFS will minimize internal wall condensation by reducing the
   air infiltration as well as increasing the internal wall temperature (for heating
   climates) climates that normally would use vapor retarders should still use
   them with EIFS claddings. When requested, Dryvit can perform a Water
   Vapor Transmission Analysis for specific walls to evaluate the tendency for
   condensation to occur.

5. What type of water-resistive barrier is best for EIFS?

   The most important consideration is to be consistent with the
   recommendations for the specific Dryvit EIF system being used to ensure
   compatibility. Generally, liquid applied barriers (Backstop® NT) is more
   effective because it completely eliminates air infiltration by avoiding laps.
   Also, it permits adhesive application of EIFS thereby providing improved
   wind resistance and ease of installation.
6. How long does it take for an adhesive/base coat to dry?

Drying time is always affected by the temperature of the material, the temperature of the substrate, and the prevailing climatic conditions at the time of application/installation. In general, adhesives require overnight cure at ambient conditions before mesh may be installed. Most base coats require overnight cure at ambient conditions before a finish may be applied. Colder temperatures and higher humidity will slow drying so that longer cure times are required. Some of the newer fast set products are cured in 24 hours at colder temperature. Always consult the Product Data Sheet for specific product information prior to usage.

7. What is efflorescence?

An Application Bulletin on “Efflorescence of Cementitious EIFS Base Coats” is distributed every fall and early spring. This bulletin defines efflorescence as “a crystalline deposit, usually white, that may develop on the surface of a cementitious base coat”. Most applicators have seen the light white deposits develop on cementitious base coats that are applied and exposed under damp, cool conditions. Efflorescence deposited on the base coat is a bond breaker, and may adversely affect the development of adhesion of a finish to a base coat. The Application Bulletin contains complete information and recommendations on efflorescence.

8. What is minimum thickness allowed with an EIF system?

Generally the minimum thickness of EPS for Dryvit EIFS is 1 inch. Locally, where clearance may be an issue (window and door returns, etc.). 3/4 inch thickness is acceptable. Since this limits rasping, it is not recommended to be used over full wall areas. Also some EIF systems, such as Infinity® and Outsulation® MD System®, have internal tracks and grooves and will require minimum 2 inch EPS.

9. What is the maximum foam thickness allowed with an EIF system?

Building codes generally limit EPS thickness to 4 inches. In some cases thicker foam is permitted provided that full scale testing has been performed to justify it.

10. Why must a closed cell backer rod be used with an EIF system?

The use of closed cell backer rod (instead of open cell) behind sealants is recommended to prevent premature failure of the sealant joint. Open cell backer rod will absorb and hold water that could affect the sealant/EIFS bond line.
11. Why do you have to apply Color Prime™ or Demandit® in areas that come in contact with sealant vs. applying finish?

Color Prime or Demandit are required at the sealant/EIFS bond line to maximize the performance of the joint. Application of sealant to a smooth surface is much easier and provides a more consistent watertight interface than to a textured finish.

12. In using mechanical fasteners: How many fasteners are needed per piece of foam?

Fastener spacing depends on EPS thickness, fastener manufacturer, and required wind load design criteria. Generally the data is provided by the manufacturer. Dryvit has compiled this data into Application Bulletin #00-04.

13. Can Wind-Devil 2 or ITW Buildex plates be used to attach Quik-R or Stucco Shield insulation board to an approved substrate?

The appropriate plates for attaching Quik-R or Stucco Shield are Wind-lock’s ULP 302 or 402 plates or ITW Buildex’s Grid-Mate PB washer or Grid-Mate washer with stem.

14. Does Outsulation®SMD System® (Formerly Sprint MD System) have to be fully meshed?

Yes. Meshing only joints is not permitted in some building code areas and has significant limitations regarding impact resistance, therefore, Dryvit requires fully meshing wall areas.

15. Why is Dryflex® required as the base coat on parapets, sloped surfaces, and at a grade?

Sloped surfaces are normally subjected to more severe exposure levels than vertical surfaces, and the more we do to improve performance of these areas the less maintenance will be required over the building life. Dryflex will provide improved flexibility, extensibility, and water resistance over conventional base coats.

16. In refinishing a wall that already has a finish why do you have to use NCB™ or Freestyle® finish to skim the surface instead of Primus® or Genesis®?

Field experience in the 1980’s revealed that many jobs where cementitious base coat had been used to skim out finish were exhibiting delamination and blistering problems. The cementitious base coat retained caused excessive softening of the underlying finish, and the bond failed at the interface because the cementitious layer could not maintain adhesion to the softened finish.
17. Can I apply an EIFS finish on an interior wall surface? If yes, what process must I follow?

EIFS finishes provide great aesthetics on many types of interior wall surfaces. Surface preparation depends upon the interior surface being coated. Follow the instructions provided on system application instructions that cover applications on interior surfaces. It is generally recommended to prime smooth surfaces or drywall with Revyvit® or sanded primer. Both provide “tooth” to the substrate that facilitates subsequent trowel application of a finish.

18. Why must I use Dryvit foam? The foam at a local hardware is cheaper.

First, for life safety reasons, it is a building code violation to use EPS that is not manufactured under a third party quality assurance program and meets specific fire criteria. Second, it must be remembered that EIFS are engineered systems and each component is designed to work in conjunction with the others. It is critical to the performance of the EIFS that the EPS used be manufactured to the EIFS manufacturer’s specifications and is properly labeled as part of a quality assurance program.

19. What is potable water?

The dictionary defines potable water as water clean enough for cooking or human consumption. It is a general descriptive term for clean water. If the water is not clean enough to drink, do not use it to mix with a Dryvit finish or base coat.

20. How high must I terminate the system above grade? How high above concrete?

Building codes have criteria for minimum separation of siding materials from grade. Dryvit requires that EIFS be maintained minimum 8 inches above finished grade to ensure code compliance. At concrete patios, walks, etc. the systems should be held a minimum of 3/4 inches above the finished surface.

21. What is a “Boot Flashing”? Where is it installed?

Boot flashing is installed where a lower parapet terminates into a taller wall face. This flashing is configured to ensure a weather tight transition.
22. What is a “Roof Stop” flashing? Where is it installed?

Roof stop flashing is common in single-family homes and is installed at the roof ends where a shed roof terminates into a taller vertical wall face. This can also occur at chimney/eave intersections.

23. Can a base coat, mesh, and finish be applied to a masonry or poured concrete wall? If so what type of surface prep is required?

For masonry and concrete substrates, a skim coat of base coat (typically Genesis) is normally used to fill in rough surfaces and provide a smooth base for finish application. The use of reinforcing mesh is optional but may help hide mortar joint patterns in masonry. Preparation involves cleaning to remove any efflorescence, dirt, dust, form release agents or other contaminants that may inhibit adhesion.

24. Do aesthetic reveals function as true expansion joints?

Reveals in EIFS are strictly aesthetic and also are used to provide convenient stopping points for finish application in large wall areas. If movement relief is necessary, a full expansion joint with sealant is necessary.

25. What is the “weather barrier” part of an EIF system?

The reinforced base coat component of EIF systems is considered the weather barrier and is designed to resist water penetration.

26. How do I determine if I can adhesively attach an EIF system over a painted wall?

The preferred method to attach EIFS to painted surfaces is to use mechanical fasteners or expanded metal lath. Painted surfaces will require special attention because although the EIFS will generally bond to the paint, adequate bond between the paint and the wall will need to be assured. Refer to Prymit® product sheet DS424 for guidelines for preparation of painted surfaces including adhesive bond test protocols.

27. What is critical light?

This is a term used to describe when the angle of incidence between sunlight and the wall is small. When this occurs, any small surface imperfection will be magnified many fold because of the long shadow cast along the wall surface.
28. What size notch trowel is required in applying adhesive?

A stainless steel trowel with notches 3/8" wide, 1/2" deep spaced maximum 1 1/2" apart is used to apply cementitious adhesives. ADEPS® may also be applied using a 1/4" V-notched trowel.

29. What is a moisture drainage system?

This is an EIF system incorporating provision for discharging of incidental water that may enter behind the insulation board. Normally this involves use of a water-resistive barrier over the sheathing and a path to facilitate the exiting of water to the exterior. Dryvit’s moisture drainage systems include: Infinity® System, Outsulation® MD System®, Outsulation® Plus MD System®, Outsulation® LCMD (Formerly Light Commercial MD System®), Outsulation RMD System™ (Formerly Residential MD System®) and Outsulation SMD System™ (Formerly Sprint® MD System®)

29. Can I apply Dryvit products/systems over EPS Form Block Systems?

In most cases the best way to finish Insulated Concrete Forms (ICF) is to adhesively apply a 1" EIF system over it. This will help compensate for wall irregularities as well cover any exposed ties. Use of reinforced base coats and finish directly over the ICF’s should consider the effects of exposed ties, irregular and out-of-plane wall surfaces, as well as surface weathering of the EPS. Base coat materials should not be used to skim irregular surfaces.

30. Can I use Custom Brick™ over interior walls?

Yes! Promotional photos on Custom Brick feature applications on interior wall surfaces.

31. Can I use vinyl trims with the Outsulation System?

Use of vinyl trims affect the fire performance of the EIF system. Therefore it is important that each system be installed as designed and tested. The Outsulation® System does not include the use of trims. Outsulation Plus MD, Outsulation RMD and Outsulation SMD do include use of trims in specific areas. Be sure to follow the criteria for the specific system being used.

32. In using StuccoWrap as a water-resistive barrier how do I allow for drainage above the windows, doors and at the base of the wall if I do not use vinyl tracks?

The details for the specific EIF system should be followed. In most cases the use of Dryvit’s Drainage Strip™ would be adequate.
33. What is a spline? Where is it used?

This is a term sometimes used to refer to the wrap for a window or door opening and is installed prior to window or door. The spline is then lapped weather board fashion with the water-resistive barrier to ensure proper shedding of water.

34. Can StuccoWrap be used as the spline to wrap penetrations such as windows and doors?

Because of its corrugated nature it could be difficult to provide a tight seal to the window. Dryvit recommends the use of Flashing Tape™ whenever possible.

35. Can steel towel be used to apply finish?

Stainless steel trowels are normally used for trowel application. Stainless steel trowels may also be used for floating, but they may have a tendency to discolor very light colored finishes if the floating technique is forceful. A light touch with a plastic float diminishes the risk of steel trowel float burning.

36. Is Panzer® Mesh overlapped?

Adjacent pieces of Panzer 15 or Panzer 20 mesh are butted, not lapped. The thickness of the mesh would result in visible lap lines.

37. In mechanically attached foam what is the minimum thickness?

The minimum EPS thickness for mechanically attached systems is 1”. Thicker EPS may be necessary because of wind load design criteria.

38. Why is mock-up required for specialty finishes?

Many specialty finishes develop a unique appearance that is very dependent upon the skill and techniques of the applicator. A mock-up establishes a reference standard not only for initial approval, but also for all applicators that may be involved with the finish application.

41. What is the purpose of back wrapping?

Back wrapping is necessary to provide protection of the EPS for water resistance, system fire performance, as well as to provide a durable surface for adhesion of perimeter sealants.
42. On new construction of the Outsulation System, why can’t the system be abutted to windows/doors than use a triangular backer rod and sealant?

A space is necessary between EIFS and windows, doors, and other materials for two reasons. In order to properly back wrap the EIFS, adequate space is necessary for the installer to work the materials on the edge of the insulation board. Additionally, different materials have different expansion coefficients and will move relative to each other. The space must accommodate these movements and provide enough of a gap to properly apply the sealant. Triangular sealants with backer rod or bond breaker tape can theoretically be used provided they are properly designed for the anticipated movement and the issues above are considered.

43. How much more does Primus shrink than Genesis?

Primus and Genesis actually exhibit very similar shrinkage characteristics. However, Genesis is more resistant to cracking from the forces of shrinkage because of a proprietary combination of fiber reinforcement components.