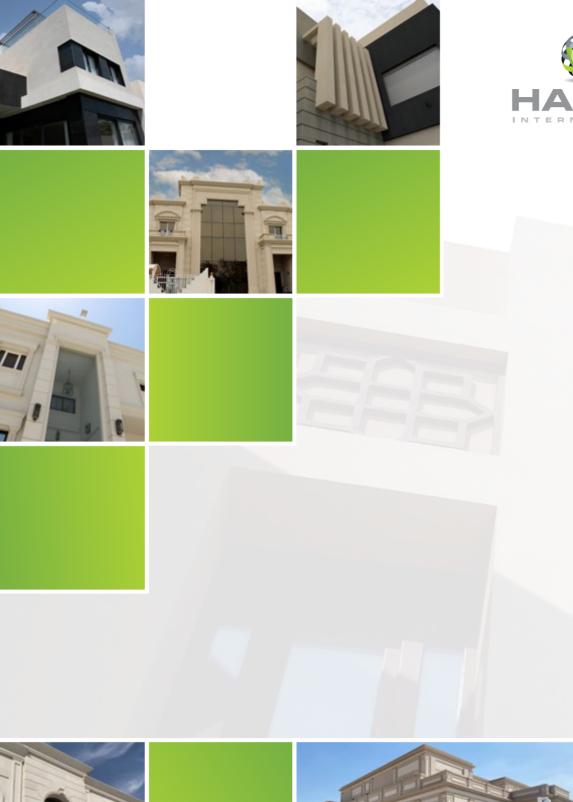


HALLGO

INTERNATIONAL





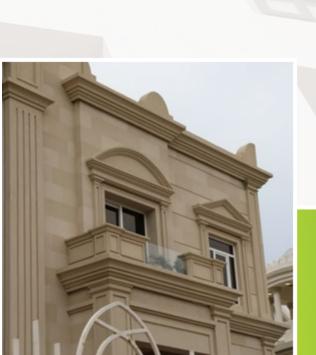




Halco International is a facade finishing company specializing in Exterior Insulation and Finishing Systems (EIFS).

HALCO is the exclusive agent of the Dryvit Base Coat & Finish Coat rendering system, which provides clients with a variety of color and texture options









About Us







Halco international was formed in 2003 and began operations in 2005 to perform and deliver a high quality specialty finishes.

Halco is a specialty finishing, contracting company with the initial strength derives from its experience for two decades supply and apply **Dryvit Exterior Insulation Finishing System (EIFS**) in Qatari Market with over 20 years experience.







HALCO has been working with most prominent architects, consultant and contractors in Qatar and delivering major projects.





DRYVIT OUTSULATION® AND ROXSULATION® BARRIER EXTERIOR INSULATION AND FINISHING SYSTEMS

Dryvit's Outsulation and Roxsulation are cost effective exterior insulation and finishing systems (EIFS) suitable for use on either new construction or refurbishment projects. The systems are based on a simple premise...insulation is more effective when placed on the exterior of a building. By bringing insulation to the outside of external walls, these barrier EIFS eliminate thermal bridges; reduce air, wind and moisture penetration through the system; stabilise interior environments.











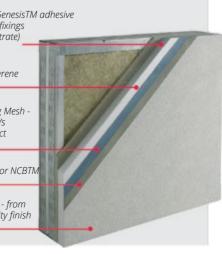


DRYVIT OUTSULATION SYSTEM:

A polymer-based barrier external wall insulation system incorporating EPS 70E grade expanded polystyrene (EPS) insulation. British Board of Agrément Certificate No.

Detail Sheet 2. NBS Specification Clause - M21

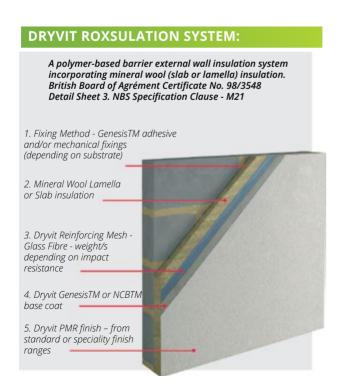
- 1. Fixing Method GenesisTM adhesive and/or mechanical fixings
- (depending on substrate)
- 2. Expanded Polystyrene Insulation
- 3. Dryvit Reinforcing Mesh -Glass Fibre - weight/s depending on impact resistance
- 4. Dryvit GenesisTM or NCBTM base coat
- 5. Dryvit PMR finish from standard or speciality finish ranges

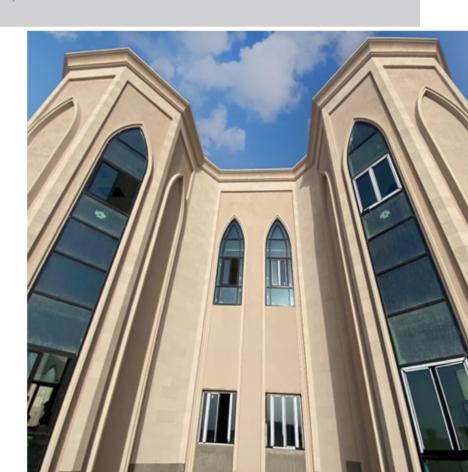


BENEFITS

- **Design freedom.** Both systems can be installed over a variety of substrates. Expanded polystyrene (EPS) insulation is lightweight and can be cut or grooved to various shapes and surface patterns.
- Energy efficiency. Outsulation and Roxsulation enable new or existing buildings to meet strict energy efficiency requirements. Heating or cooling costs are demonstrably lower in lieu of other exterior materials.
- Weatherability. Dryvit EIFS are formulated to provide the utmost in weather protection, providing a resilient barrier against the elements.
- **Durability.** The combination of system components provide unsurpassed long-term durability meeting design requirements for use in virtually any location.
- **Aesthetics**. Dryvit finishes are available in a wide array of textures in both standard and custom colours. Our speciality finishes enable designers to replicate a variety of real stone or brick finishes from limestone to granite at a fraction of the cost.
- Cost effective. Outsulation and Roxsulation are easily adapted to complex project details. Installation is rapid, and routine maintenance is minimal.
- Testing. Independently certified by BBA and other international test bodies. Dryvit manufacturing plants are

ISO 9001:2000 certified, demonstrating the highest standards of quality and consistency.







DRYVIT PREFABRICATED FEATURES STANDARD AND CUSTOM PREFABRICATED EIFS MOULDINGS

Dryvit's Prefabricated Features are an innovative range of mouldings that enable architects and specifiers to transform the exterior façades of new build and renovation projects.

The mouldings use the same composite construction as the company's successful Outsulation® exterior insulation and finishing system (EIFS).

Traditional features include cornices, pilasters and corbels with a more contemporary range available to suit your desired look.

We can also produce special designs and shapes customised for specific needs.

Dryvit's Prefabricated Features take their place as a viable and cost-effective method of reproducing either the look of traditional buildings on the most modern of developments or transforming a facade into a contemporary work of art.







DRYVIT PREFABRICATED FEATURES:

A shaped expanded polystyrene (EPS) core coated with a non-cementitious acrylic base coat and coated with one of Dryvit's standard or speciality finishes.

- 1. Adhered to substrate with adhesive and dowels where required
- 2. Expanded polystyrene core
- 3. Base coat and reinforcement
- 4. Dryvit PMR finish from standard or speciality finish ranges









Installation of cornice



Taping of joints



Installation of feature

BENEFITS

- **Design freedom.** The prefabricated features can be installed over a variety of substrates. Expanded polystyrene (EPS) core is lightweight and can be cut into virtually any shape or style with endless possibilities. Range of standard features with custom profile service available.
- Quality. The advantage of Dryvit Prefabricated Features stems from the unique production process whereby the mouldings are designed, pre-cut and pre-coated in a controlled factory environment, guaranteeing quality.
- Fast track. Prefabricating the mouldings dramatically reduces the time associated with the labour intensive manufacture of site formed EIFS features.

 The lightweight nature of the profiles and simple fixing methods ensure that the features are quick to install compared to alternatives such as stone, GRP, powder coated aluminium or site formed EIFS shapes.
- Weatherability. Dryvit finishes are formulated to provide the utmost in weather protection providing a resilient barrier against the elements.
- **Durability.** The combination of components provide unsurpassed long-term durability meeting design requirements or use in virtually any location.
- Aesthetics. Dryvit Prefabricated features can transform a buildings façade adding to it's appeal and value. Also the Dryvit finishes used to coat the features are available in a wide array of textures in both standard and custom colours.

Our speciality finishes enable designers to replicate a variety of real stone finishes from limestone to granite at afraction of the cost.

• **Cost effective.** On account of the savings in installation and versatility of manufacture, no matter how simple or complex moulding shape, Dryvit Prefabricated Features are more cost effective than alternatives such as stone, GRP or powder coated aluminium.













(Engineering)

Halco design team is set on high professional architectural background to perform and help clients to design and engineer their Facades using optimum Dryvit system architectural strength transforming ideas into reality .

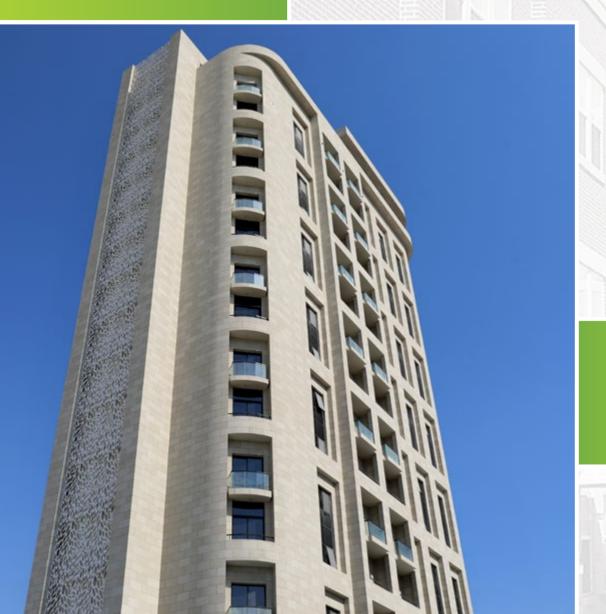






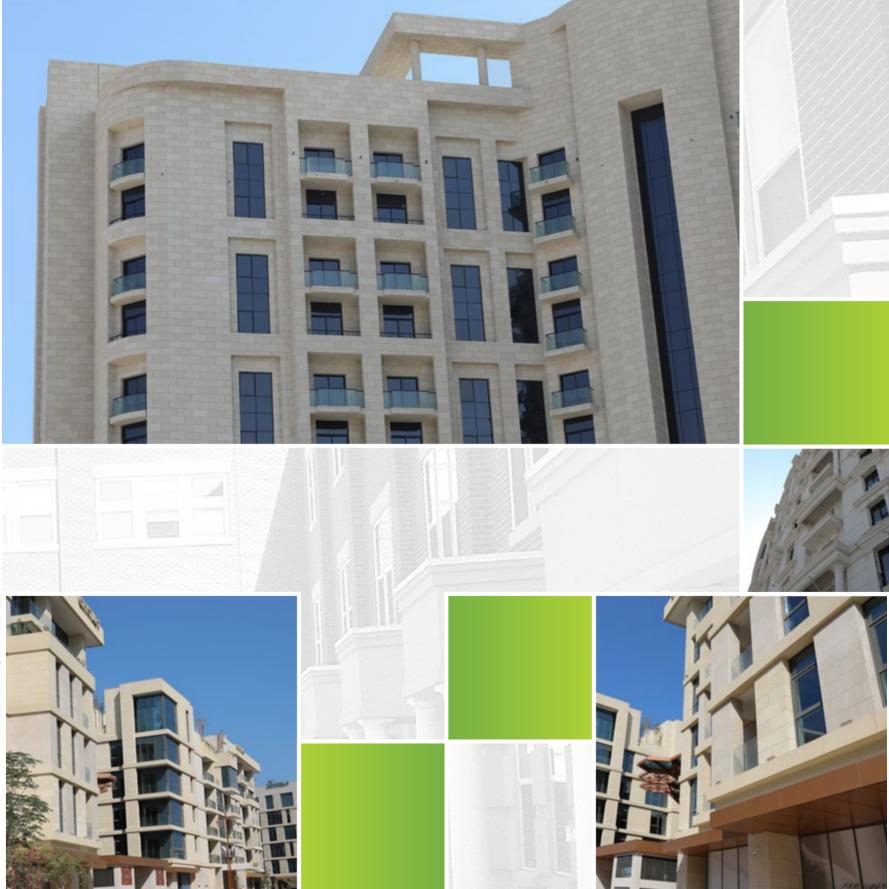












WHY IS DRYVIT EXTERIOR INSULATION AND FINISHING SYSTEM?

Dryvit is part of one of the most environmentally advanced, architecturally friendly, and energy efficient exterior cladding systems available on the market today. The advantages of Dryvit will be pointed out in the succeeding literature.

Buildings in the Middle East are subject to some of the most severe climatic conditions that affect the longevity and energy efficiency of any region in the world. When energy was cheap as it was in the 70's and early 80's, not much attention was paid to making sure that the buildings were energy efficient. Even in the late 80's and 90's, the countries in the Middle East who were selling energy (oil) were still rich and could afford to be careless about their energy consumption.



The last 20 years or so have changed that situation and now even the oil exporting countries are paying much more attention to insulate buildings to save on the size of air conditioning and the yearly cost of electricity needed to operate those units.

Today, almost all buildings are insulated; mostly by the use of adding insulation to the inside of the building and covering it over with an interior finish wall. This, of course is good, but placing the insulation on the inside or the middle of the exterior wall still allows the exterior wall to absorb the heat of the day and retain it until late in the night.







Interior insulation also allows for discontinuities at floors and columns where the insulation interrupts and the structure expose to the outer climet. These areas are called Heat Leaks. Thirdly, because of the nature of the construction, there are often actual gaps around windows and doors that allow the actual passage of air from outside to inside or vice versa.

Placing the insulation on the outside wall eliminates all these three shortcomings and therefore produces a superior insulation system.

Dryvit is an exterior insulating material.



















Another advantage of Dryvit is the fact that it remains **flexible** and therefore does not need expansion joints and absorbs the normal thermal movement of buildings within its own system. The materials flex and adjust and therefore are much more resistant to cracking and eventual deterioration which the common plaster is subject to.

The **finish color** of the **Dryvit system is integral with the material** which means that the total finish coat is colored instead of having a color applied to the surface. It is common knowledge that paint systems in the Middle East last from 5-7 years and then have to be redone.

But with Dryvit coating a **lifetime finishing** is achieved.







The third advantage of **Dryvit is its adaptability to architectural design elements**. The decorative elements such as window trims, cornices, architectural lines, and reveals can be constructed using the Expanded Polystyrene shapes and simply glues on to the under layer of EPS or Rockwool before the fiberglass mesh is applied.

A whole industry which produces columns, coins, and trims used to decorate buildings offers the architect a new set of tools to enhance his design. Lettering can also be cut out and applied to the surface of the building.





Dryvit also comes in a series of textures which can be used alone or with other textures or materials.





As the name suggests, **Outsulation**[®] systems place insulation on the outside of the building, and are the **most effective solution for meeting today's energy code requirements** for Continuous Insulation (C.I.). But there is much more to **Outsulation**[®] than (C.I.) alone.

Outsulation[®] systems with moisture drainage are engineered to include an air- and water-resistive barrier as well as durable, aesthetically diverse finish options, which work together to form a single, seamless and sustainable cladding.

Outsulation[®] systems have been rigorously tested **to perform in all climates**, and since 1969 have been used on over 450,000 projects of all shapes and sizes around the world.

Whether for new construction or renovation, commercial or residential, Dryvit offers a proven solution to meet the needs of your next project.







With this in mind, you must:



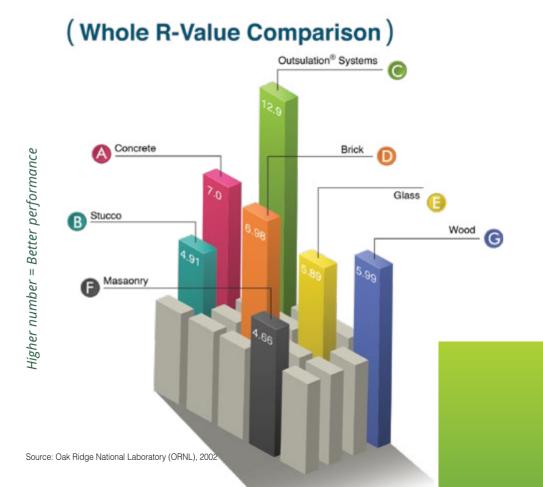


- 1. Identify the climate zone for the location of your project.
- 2. Determine what energy code is currently adopted for the province/jurisdiction in which the project is located.
- 3. Based on the type of construction and code requirement, determine the amount of C.I. required.

Exterior C.I. is much more efficient than the use of insulation in the wall cavity, and 2 inches of C.I. can have the effective R-value of 8 inches of cavity (batt type) insulation! As such, you should consider eliminating the use of cavity insulation altogether by using the right amount of C.I. to meet your total exterior wall insulation goals. Rigid insulation, such as Expanded Polystyrene (EPS), can also be easily cut and shaped to provide dramatic architectural details and design effects, such as reveals, quoins, cornices and trim that are much more difficult and expensive to achieve with heavier materials. Using an Outsulation® system to combine the design flexibility and C.I. benefits of EPS is unique and extremely cost-effective.









Dryvit Systems



SYSTEM OPTIONS

All **Outsulation**® systems include adhesive, rigid insulation, glass fibre mesh embedded in base coat, and finish, which are installed sequentially by a trained professional contractor as specified by the design team and as required by code.

Some **Outsulation**® systems protect the underlying wall with an air- and water-resistive barrier under the rigid insulation, which maximizes **the Continuous Insulation (C.I.)** benefit.

Outsulation® systems can be installed in either "barrier," "moisture drainage" or "pressure equalized" configurations, and these systems are engineered to perform in all climates and on all types of structures.

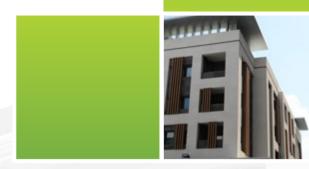
On certain types of construction (high-rise) and in certain job conditions (cold weather), a prefabricated assembly method may be preferred.











(Fossil Fuel Depletion) (All 5 Stages of Life Cycle)

Megajoules/Unit.



Lower number represent better preformance Source National Institute of standers and technology (NIST). SEES v4.0 analysis, 2007

SUSTAINABLE SOLUTIONS...GO GREEN!

Outsulation® systems have been evaluated by the American National Institute for Standards and Technology (NIST) and have the smallest environmental impact compared to other common claddings.

Outsulation[®] also contributes toward achieving LEED credits, depending upon project design and location.

Outsulation® systems are more cost-effective throughout their lifecycle because the manufacturing process requires less energy than other common claddings and the lightweight composition reduces fuel costs associated with transport.

After application, **Outsulation**® systems continue to keep heating and cooling costs low for the life of the building.

Visit www.dryvit.com



Dryvit Systems



DURABILITY

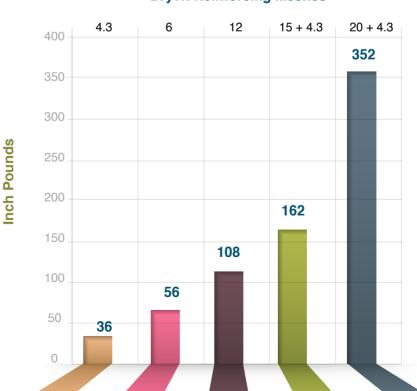
All **Outsulation**[®] systems incorporate alkali and fire-resistant glass fibre mesh that is embedded into the base coat over the entire surface of the insulation board.

This combination provides the primary weather barrier, as well as tensile strength and impact resistance for the system and these factors all play a critical role in protecting the physical integrity and beauty of the building exterior.

The mesh is available in several weights and is specified according to the anticipated level of exposure to potentially damaging impact. The heaviest and strongest — Panzer® 20 Mesh — is intended for use at all ground floor locations and high-traffic areas such as balconies. Hurricane-prone regions may have building codes that require assemblies reinforced with Panzer® Mesh.

FIVE OUNCES

Comparative Impact Resistance of Dryvit Reinforcing Meshes

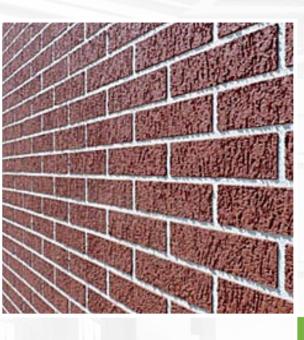


Ounces Per Square Yard igh traffic areas, specify 20.5 + 4.3 oz. of mesh, achieving 352 inch pounds of impact resistance

THE PERFECT SOLUTION FOR ANY DESIGN

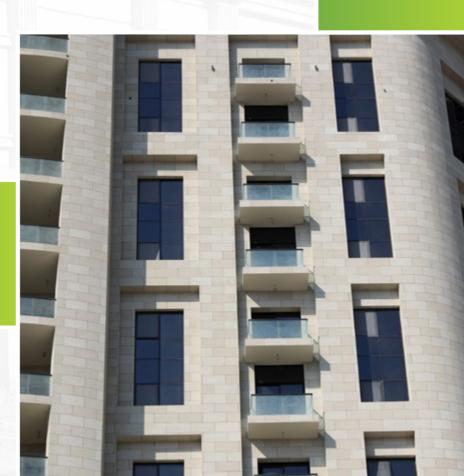
Dryvit Outsulation[®] systems offer unlimited design flexibility to suit any architectural style and are available with a wide range of finishes that can be customized to meet virtually any color or texture desired. The ability to easily create a vast array of architectural designs using decorative shapes and reveals is one of the hallmarks of an **Outsulation**[®] system.



















HIGH STYLE MEETS HIGH PERFORMANCE

All Dryvit finishes are formulated with superior quality raw materials and have been thoroughly tested to perform in a wide range of expected conditions, but options exist to further enhance performance in particularly harsh or challenging environments.

These include:

Fade resistance - StratoTone™ high-performance pigments are used to formulate vivid colors that would otherwise be prone to rapid UV breakdown. This state-of-theart technology is also VOC and APEO free.

Elasticity – Weatherlastic™ special elastomeric technology used to provide increased flexibility, which performs exceptionally well when used in finishes applied directly to stucco or other rigid surfaces.

Pick up resistant for Dusty environments an advanced technology to ensure easy cleaning of surfaces.

















MULTIPLE BENEFITS OF USING OUTSULATION SYSTEM:

Using **Outsulation**® Systems can reduce material use, shorten construction time, and lower building operating costs.

The architects, contractors and building owners enjoy these measurable benefits every day.

















BUILDING ENERGY CODES ARE CHANGING

The movement to improve energy performance and lower environmental impact is dramatically affecting the way buildings must be designed and built, particularly with the requirements for air barriers and continuous insulation. **Outsulation**® by Dryvit is a tested and proven solution to this challenge. Best of all, with **Outsulation**® systems, performance and aesthetics aren't mutually exclusive. The wide variety of finishes, textures and colors can make nearly any architectural vision a reality.

The benefits of **Outsulation**[®] have been realized in hundreds of thousands of projects around the world, and the systems provide **a single-source**, **seamless and sustainable cladding** solution for buildings of any shape, size and type. Simply put, **Outsulation**[®] systems provide everything you need from a building code perspective, and everything you want from a performance and aesthetic standpoint.







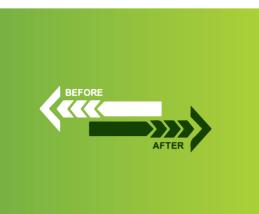






























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