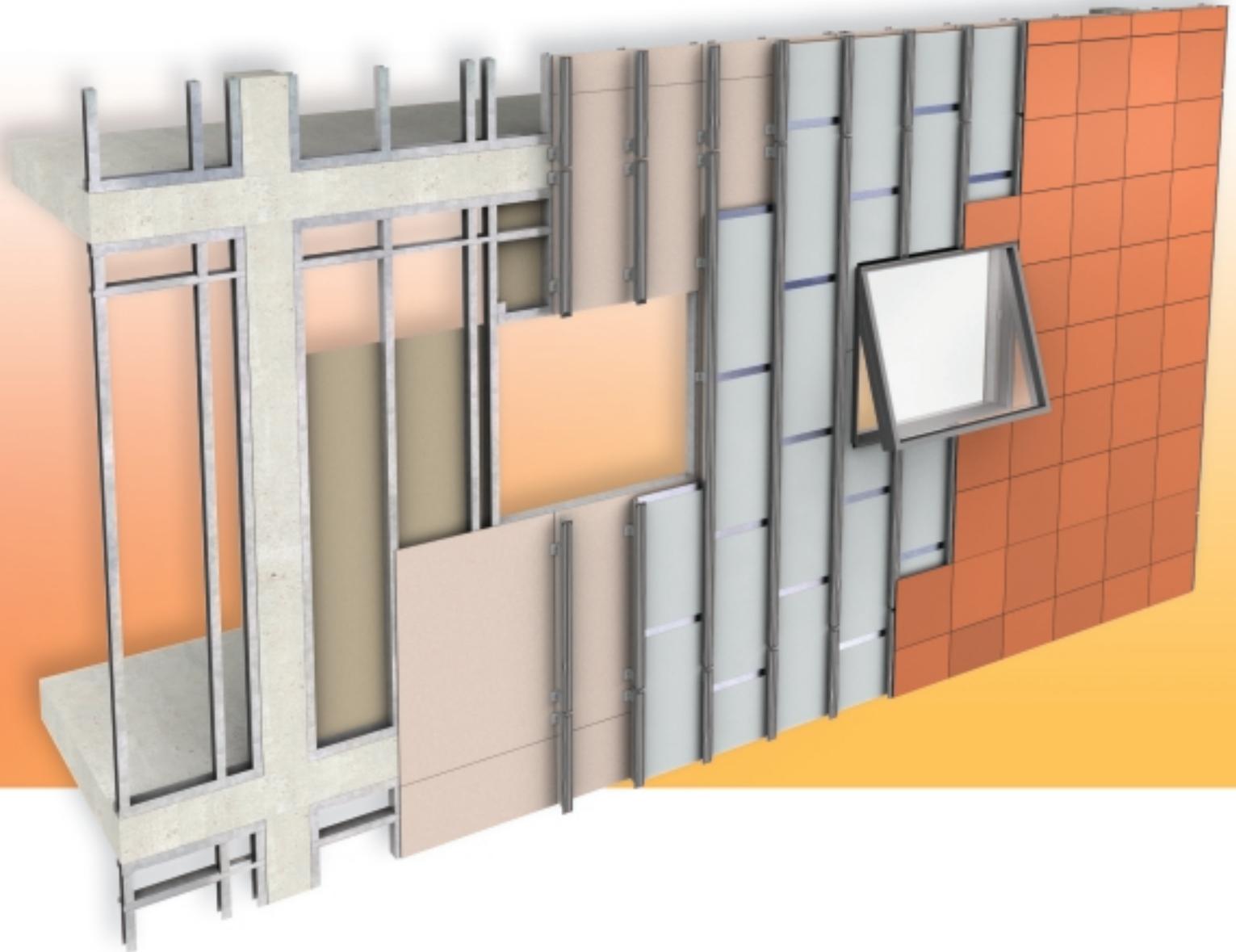




:rainscreenworks



rainscreenworks.ie



Kingspan Insulation offers an extensive range of premium performance insulation products for the construction

industry. Offering the best thermal performance Kingspan Kooltherm® K15 Rainscreen Board has been specifically developed for use in rainscreen cladding applications. Kingspan Kooltherm® K15 Rainscreen Board has been successfully tested at the Building Research Establishment (BRE) to BS 8418-1: 2002 and, when assessed in accordance with BR 135, it is acceptable for use above 18 metres in accordance with the English, Scottish and Irish Building Regulations. Since it also achieves a Class O / Low Risk fire rating and exhibits less than 5% smoke obscuration when tested to BS 5111, its fire performance makes it best in its class.



Williaam Cox Ireland Ltd offer a design support service for safe and optimised setting out of rainscreen brackets and grid systems.



On request, Williaam Cox Ireland Ltd can provide static calculations and setting out information for the components and rails that will be required to support the chosen façade. Each calculation is "project specific" and will be according to Engineering intent e.g. panel weight / cladding zone / building height / building location and Architectural intent e.g. panel layout.



Promat is a market leader in passive fire protection and high temperature insulation. The fire protection division offers an extensive range of boards, penetration seals and glazing, designed to provide systems which

meet the most stringent requirements of today's projects. Promat are pleased to offer many of the leading brands in fire protection including SUPALUX®, DURASTEEL®, MASTERBOARD® PROMASEAL® and the PROMATECT® range of products.



MAK Fastener Specialists Limited has been in business for over 25 years serving the roofing, cladding and general construction industry via its network of 3 depots in Dublin, Cork and Tyrone.

The partnership with EJOT began over 10 years ago and through MAK Fasteners the EJOT brand has become a well known source for high quality fastening systems in the Irish Market.

EJOT U.K. Limited is a subsidiary of EJOT HOLDING GmbH & Co. KG, a company that employs 1,900 people in 11 manufacturing plants and 16 Sales and Distribution subsidiaries throughout Europe and the United States.

EJOT specialises in cold forming and injection moulding and are one of Europe's largest manufacturers of fastener and anchor systems. This includes specialist product for the Roofing and Cladding, Single Ply Roofing, External-Wall Insulation and Façade markets.

EJOT provides high quality fasteners and a technical service to the Building and Construction Industry.



Sika is a global company with a worldwide network of subsidiaries active in the fields of speciality chemicals for construction and industry. Sika is committed to quality, service, safety and environmental care. Our world-leading branded products are all proven solutions.

The SikaTack® Panel Secret Fix Adhesive System has been successfully used throughout Europe and the UK since the 1980s.

The unique structural bonding characteristics of the polyurethane based SikaTack® Panel Adhesive, make it ideally suited for the secret fixing of HPL, ACM, Ceramic Tile, Composite, or Cement based rainscreen cladding panels, via treated timber batons or aluminium carrier rails.

Use of the SikaTack® Panel Secret Fixing System, provides the designer with an improved factor of safety and is the only structural adhesive system with full BBA certification.



Trespa International BV represented in Ireland by Williaam Cox Ireland Ltd, has been manufacturing panels for use within the construction industry since the early 1960s, and currently produces circa 5 million square metres of material per annum. The Meteon panel has been specifically developed for external applications using special patented technology. An extensive range of colours, finishes and textures, makes Meteon the ideal choice for external decorative cladding.



Venture Tape Corp. is a global manufacturer of

specialized adhesive tapes for a wide range of markets and applications and markets. Founded in 1980 and based in Rockland, Massachusetts, Venture has grown from a modest 6,000 sq. ft. facility to a state-of-the-art 250,000 sq. ft. manufacturing site with additional manufacturing and converting operations in Australia, Italy, Ireland and the United Kingdom, as well as worldwide distribution partners.

Venture Tape is committed to providing the highest level of customer service, offering timely standard and custom tape solutions for applications ranging from splicing to satellites. Honesty and integrity are the hallmarks of Venture Tape and the cornerstones of Venture's permanent customer satisfaction commitment.

Plasterboard

The internal plasterboard lining protects the external steel frame in the event of fire, contributes to overall acoustic performance and provides a flat, impact resistant surface that will help to maintain an attractive internal appearance throughout the building's life.

Ventilated Cavity Barrier

The passage of fire in the void between a rainscreen system and the face of the building can be prevented by the use of a purpose-made system comprising of a perforated intumescent sheet bonded to a similarly perforated galvanised steel sheet. The rainscreen barrier is screw or rivet fixed to a separate bracket or angle to form a ventilated cavity barrier with 60 minutes fire resistance and is available in 100, 125 and 150 mm widths.



Insulation

The use of premium performance insulation in a rainscreen cladding system provides the thermal performance, required by the Building Regulations / Technical Standards, with minimum impact on the footprint of the building.



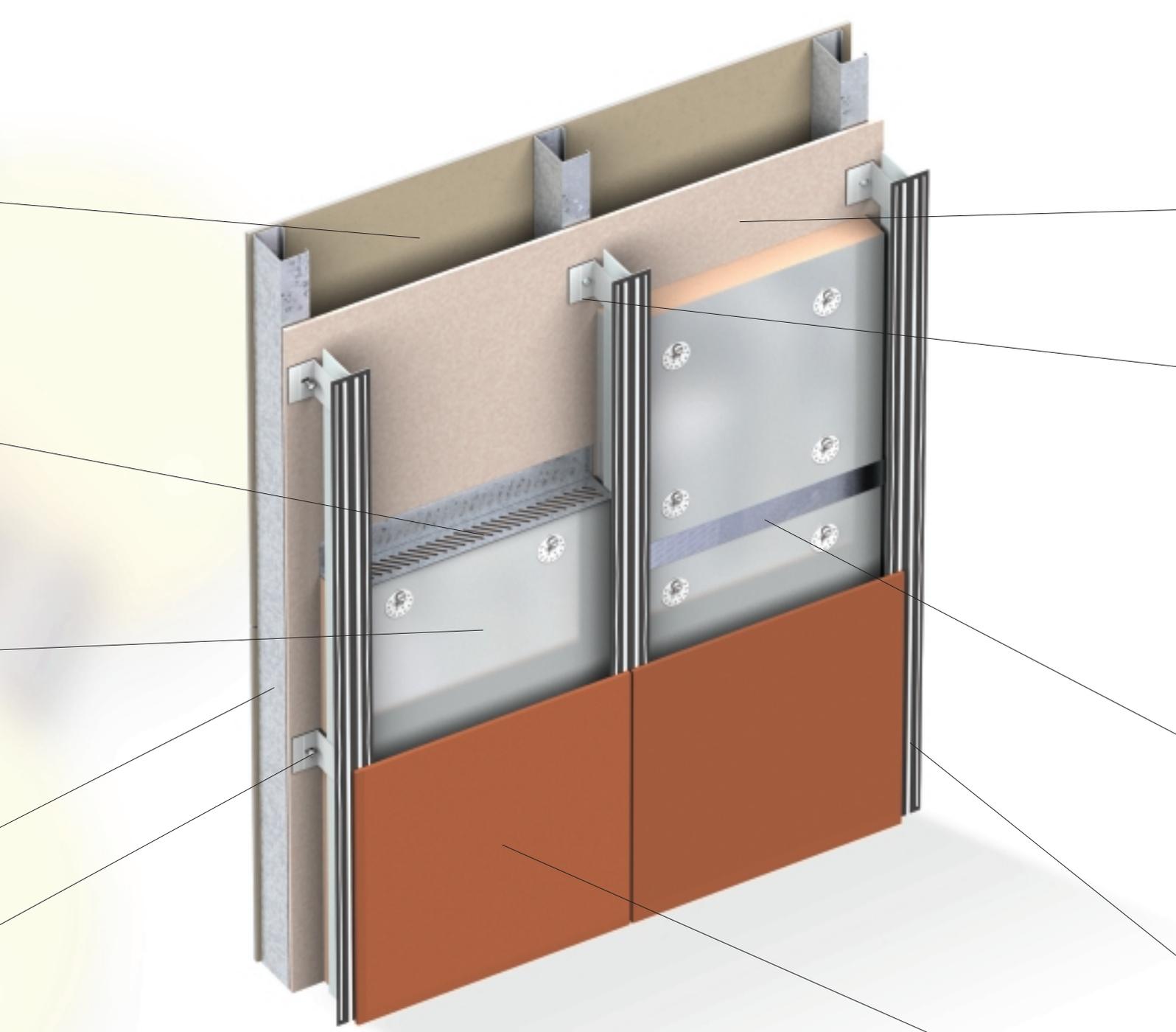
Steel, Timber and Concrete Frame

The use of either a steel, timber or concrete frame will provide support to the rainscreen. When this inner leaf is erected, the result is the building being protected from the elements at an early stage and removing the installation of the rainscreen from the critical path.

Fasteners and Anchors

A wide choice of fasteners and anchors are available for a fast and efficient installation. The fixing element may be divided into four specific areas: bracket to substrate, bracket to frame, insulation to substrate and fascia panels to frame. System flexibility allows for application to a wide variety of background materials. The range of fasteners and anchors meet this diversity. Full technical information with regard to product performance is an essential element of the design. All required details are easily available on request.





Why Rainscreen Works

It is a common premise of modern engineering that it is far more beneficial to work with nature than try to resist its influences. However, the traditional solution to keeping rainwater out of buildings has been to use the latter concept and provide walls that are fully sealed against the weather by the use of barriers, joints and sealants. Unfortunately the failure of such walls due to material degradation, poor workmanship and unexpected building movements has been far too common an occurrence. Rainscreen cladding offers a solution that utilises the effects of the wind to control rainwater and prevent it entering the building.

The modern concept of rainscreen cladding was developed in Scandinavia during the 1940s and came into widespread use in Europe and Canada in the 1970s. Lightweight rainscreens were developed in the UK in the 1980s with the majority of the earlier projects located in the harsh climatic conditions of Scotland. It is not a new concept and many years of experience have been gained in the development of the relatively easily installed lightweight systems currently available.

Rainscreen cladding offers a relatively simple solution to the problem of keeping rainwater out of buildings and although there are several variations, the principle concepts are:

- The careful design of ventilated cavities that use the pressure effects of the wind to dissipate energy of driven rainwater
- Properly designed drainage paths that collect and direct the water away from the cavity

The concept of overcladding is simple, but to be successful it is essential that a detailed knowledge of the physical principles and materials involved be incorporated into the design details.

The organisations that contribute to rainscreenworks.ie all have extensive experience of rainscreen cladding in practice, and recognise that it is difficult for the specifier to obtain such specialist information from one location. By joining together and forming a focus for such information we aim to provide a readily accessible source of knowledge in Ireland.

Building Board

The use of a Class O non-combustible building board can provide up to 60 minutes fire protection in timber and metal stud framed constructions. The calcium silicate board is manufactured with selected fibres and fillers. The board is resistant to the effects of moisture, will not physically deteriorate when used in damp or humid conditions and can withstand high temperatures and frequent temperature changes.



Brackets and Profiles

Rainscreen cladding support systems have been developed to service the ever changing face of architecture and the designers demands for more flexible and economical cladding solutions. Modern rainscreen support systems need to maintain aesthetic quality and offer excellent technical performance.

Advanced vertical and horizontal support systems solutions, utilising both mechanical and structural adhesive techniques for concealed and visible construction are available for façades ranging from lightweight high-pressure laminate panels to 70+ kg/m² tiles. Cladding zones from 40 mm to 350 mm can be accommodated.

This versatility provides the designer with an almost infinite range of façade appearance and layout options, each of which must be safely engineered.



Tape

Weatherproofing insulation can be done by using an adhesive system in the form of tape. The film bonds 100% to the surface of the insulation providing a zero-permeability barrier that moisture cannot penetrate. This adhesive system offers excellent resistance to moisture, UV exposure, and allows application in all weather conditions including cold temperatures.



Structural Adhesives

Secret fixing of exterior and interior cladding panels is easily achieved using state of the art structural adhesives. They offer long term durability whilst accommodating differential movement caused by varying climatic conditions.



Façade

To the majority of people, the only parts of a building they normally see are the internal and external façades. Given that first impressions count it is imperative that the 'look' of the building portrays the 'right' image. It is with this 'image' in mind that makes rainscreen cladding an attractive proposition, the panels can offer a modern or natural look which maintains its aesthetics without the need for continual maintenance.



