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July 2020



# Kemwell **IsoVent-M** Rainscreen Façade Insulation Solution

**A1 non-combustible** stone mineral wool insulation for use with lightweight steel framed systems



SAVING LIVES | PROTECTING BUILDINGS & CONTENTS | MAINTAINING VITAL SERVICES

IsoVent from Kemwell manufactured by Isoroc



## PASSIVE FIRE PROTECTION

Specialists for the construction, infrastructure, transport, energy, industrial and commercial sectors.

[www.kemwell-fire.com](http://www.kemwell-fire.com)





## KEMWELL ISOVENT-M

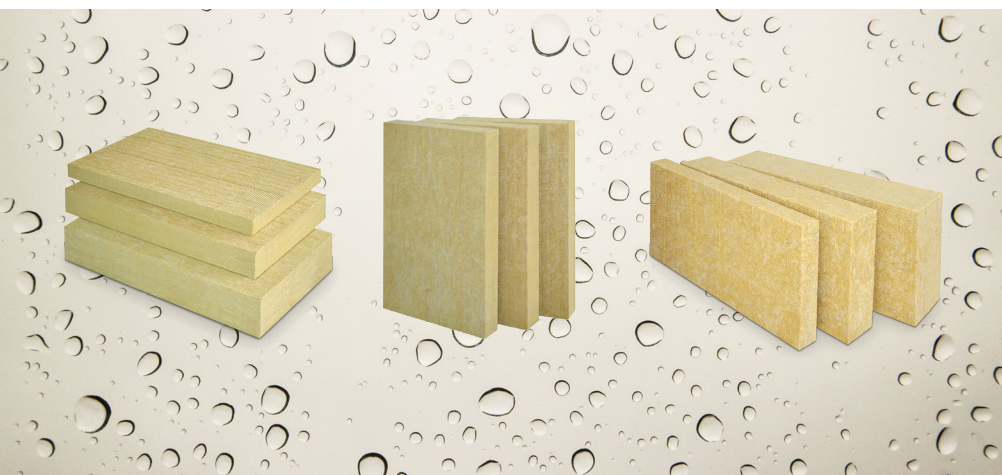
### A thermal, acoustic and fire insulation solution for rainscreen façades

Kemwell Isovent-M range of stone mineral wool rainscreen façade insulation slabs are used with lightweight steel framing systems which can offer building designers a variety of colours and aesthetic options and are vital in protecting buildings from the environment.

Kemwell Isovent-M insulation boards are classified A1 non-combustible stone mineral wool slabs as defined in BS EN 13501-1.

When combined with other Kemwell products, such as our A1 non-combustible WeatherKem® Fibre Cement Sheathing Board and Kemwell Firebreather fire-rated ventilated cavity barrier, the Kemwell rainscreen façade insulation solutions can provide fire performance, thermal and acoustic performance and weather resistance in a complete package for all buildings, including those above 18m in height.

You can specify **Kemwell IsoVent** with confidence.



### SUPPORT

Our project team provides expert support services throughout all stages of any construction project, including:

- Technical advice
- Supply of data sheets and certification
- Product selection and application consultation
- Site-visits
- Installation advice
- On-site and off-site educational seminars
- Benefit from years of industry knowledge and experience

We understand the complex and stringent requirements of the building and construction industry and our products provide architects, developers, and contractors with adaptability and performance benefits to enable safe and innovative designs to be easily realised.

Please contact us to discuss your project or requirements further.

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T: +353 (0)1 565 3756 (Ireland)  
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Kemwell Fire is the official distributor of Isoroc products in the UK and Ireland.





## COMPOSITION

Kemwell Isovent-M is made from stone mineral wool and manufactured under ISO 9001:2015 to guarantee product consistency and quality. Every slab is made from natural raw materials and is treated with a water repellent additive during manufacture to ensure water is not absorbed in use.

## APPLICATIONS

Kemwell Isovent-M rainscreen façade insulation for thermal, acoustic and fire insulation and is suitable for use on all buildings, including those above 18m in height, providing compliance with fire related building regulations.

- External insulated façade
- External walls with stone, glass or cladding panel façade
- Cavity walls
- Internal stud walls
- Acoustic screens

## SECTORS

- Flats and residential properties
- Student accommodation
- Healthcare
- Hotels
- Education
- Commercial buildings and offices



# FEATURES



### Fire Resistance

Kemwell Isovent-M is a Euroclass A1 non-combustible board providing excellent protection against fire and is rated to BS EN 13501-1.



### Moisture and Weather Resistant

Kemwell Isovent-M is hydrophobic (will not absorb moisture – particularly important during construction) and will not deteriorate when used in damp or humid conditions and will not encourage mould or bacteria growth. Boards will repel water yet remain breathable, limiting the risk of condensation.



### Acoustic Performance

Kemwell Isovent-M has excellent sound reduction with high levels of sound absorption. The insulation absorbs and reflects sound, trapping and dampening sound waves to help provide comfortable living and working environments.



### Thermal Performance

Kemwell Isovent-M has excellent thermal performance and will provide comfortable internal spaces and will also allow walls to breathe.



### Easy Workability

Kemwell Isovent-M is easy to handle can be easily cut to accommodate installation requirements and will simply butt together at joints.



### Chemical Stability

Kemwell Isovent-M is resistant to chemical and biological corrosion and is chemically inert and compatible with most materials in normal building applications.



### Durability

The durability of Kemwell Isovent-M is a feature of the modern manufacturing systems employed by Isoroc.

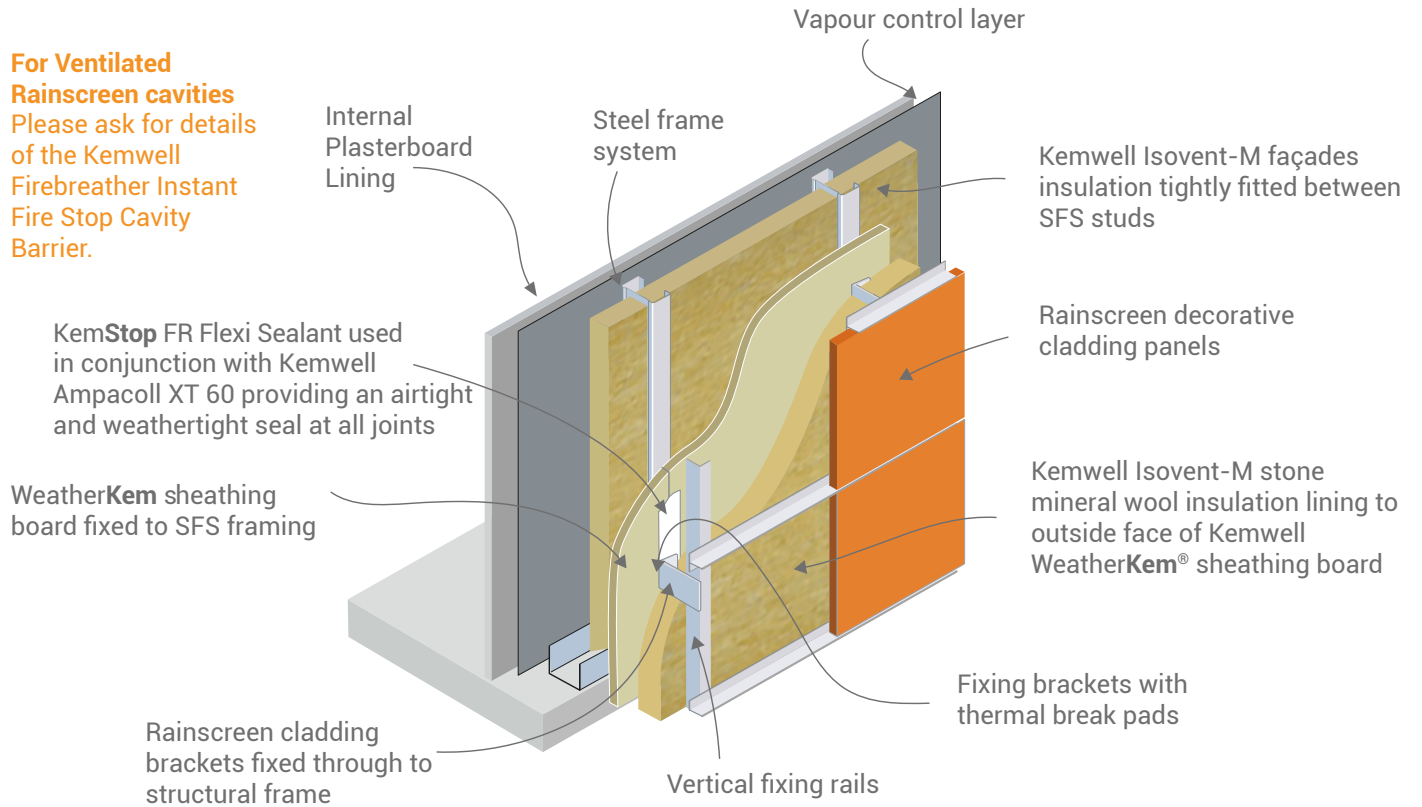


### Eco-friendly

Kemwell Isovent-M is produced from natural raw materials. The boards help to ensure optimal temperature regardless of the weather conditions and its thermal properties can dramatically reduce heating, cooling and ventilation costs, helping to reduce a building's carbon footprint.

# INSTALLATION

**For Ventilated Rainscreen cavities**  
Please ask for details of the Kemwell Firebreather Instant Fire Stop Cavity Barrier.



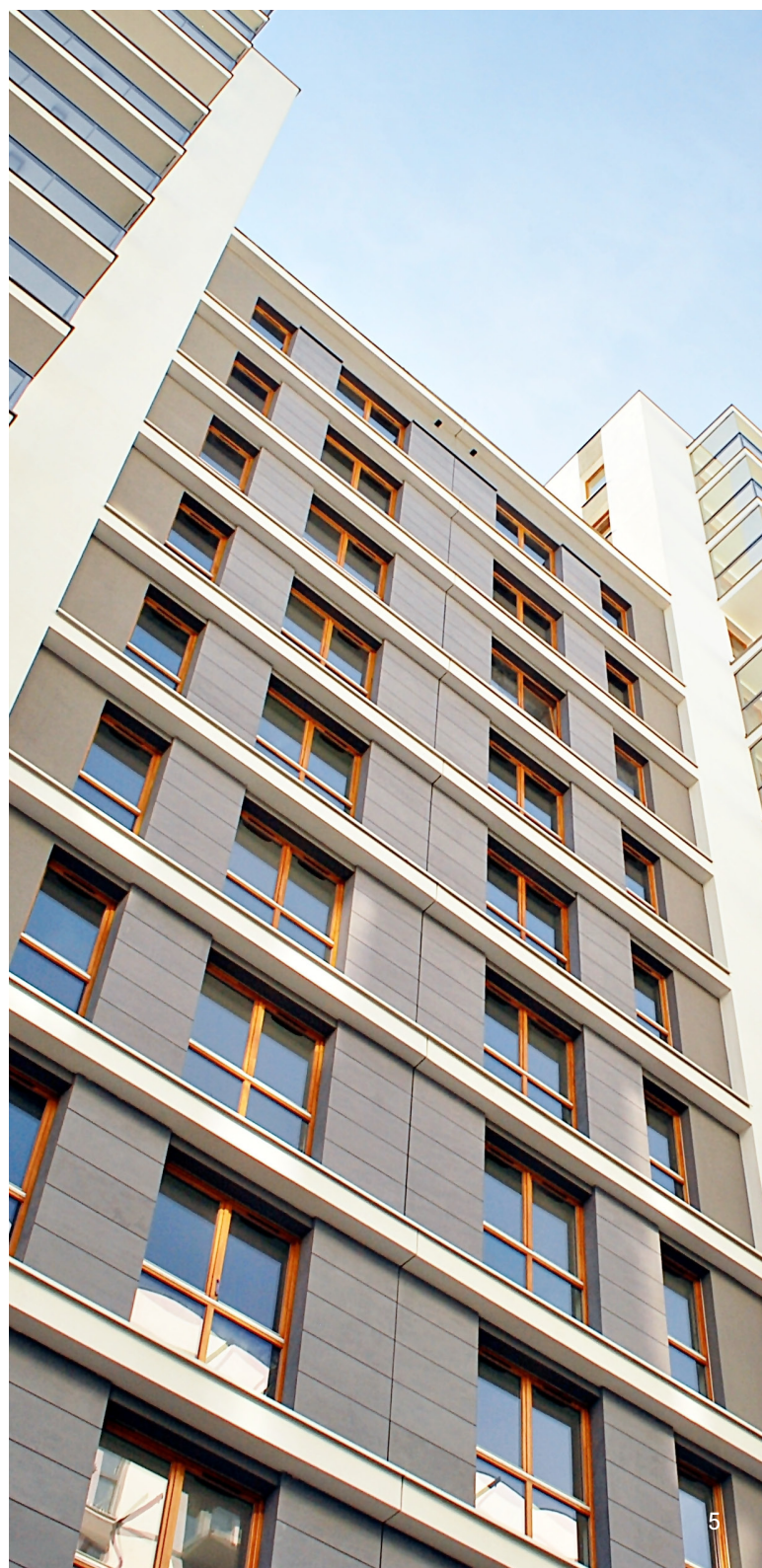
# TECHNICAL PROPERTIES

ISOVENT-M MW-EN 13162-T3-DS(70,90)-CS(10)10-TR5-WS-WL(P)-MU1-AW1,00				
Declared properties of the product acc. to EN13162+A1:2015-04	Test method	Unit of measurement	Levels or tolerances	
			Classes of levels codes	Values
Length (class of dimensional tolerance)	EN 822	[%]	[-]	± 2
Width (class of dimensional tolerance)		[%]	[-]	± 1,5
Thickness (class of thickness tolerance)	EN 823	<100 mm [mm/%]	T3	- 3mm / + 10%
		≥100 mm [%/mm]		- 3% / + 10mm
Squareness S <sub>0</sub>	EN 824	mm/m	[-]	≤ 5
Flatness S <sub>max</sub>	EN 825	mm	[-]	≤ 6
Dimensional stability under specified temperature and relative humidity conditions	EN 1604	[%]	DS(70,90)	± 1,0 (change of thickness, length and width)
		[mm/m]		± 1 (change of flatness)
Compressive stress at 10% deformation	EN 826	[kPa]	CS(10)10	≥ 10
Tensile strength perpendicular to faces	EN 1607	[kPa]	TR5	≥ 5
Short-term water absorption	EN 1609	[kg/m <sup>2</sup> ]	WS	≤ 1,0
Long term water absorption by partial immersion	EN 12087	[kg/m <sup>2</sup> ]	WL(P)	≤ 3,0
Water vapour diffusion resistance factor	EN 12086	[-]	MU1	≤ 1
Weighted sound absorption coefficient	EN ISO 11654	[-]	AW1,00	1,00
Thermal conductivity λ <sub>0</sub>	EN 12667	[W/mK]	[-]	≤ 0,035
Reaction to fire	EN 13501-1	A to F	Euroclass	A1



## DECLARED THERMAL RESISTANCE $R_D$ FOR RESPECTIVE THICKNESSES OF THE PRODUCT

Thickness [mm]												
50	60	70	80	100	120	130	140	150	160	170	180	200
Thermal resistance $R_D$ [m <sup>2</sup> K/W]												
1,40	1,70	2,00	2,25	2,85	3,40	3,70	4,00	4,25	4,55	4,85	5,10	5,70





# DIMENSIONS AND PACKAGING

KEMWELL ISOROC INSULATION PACKAGING INFORMATION									Standard Board Size 1000 x 600mm 1200 x 600mm available to order		
Kemwell ISOVENT-M Facades and SFS light-weight external wall Insulation											
Product Code	Thickness mm	No. Bds in Pack	m <sup>2</sup> in Pack	m <sup>3</sup> in Pack	Pack height mm	No. Packs on Pallet	m <sup>2</sup> on Pallet	m <sup>3</sup> on Pallet	Pallet height m	26 pallets, full load, m <sup>3</sup>	Weight per pallet kg
1	50	6	3.60	0.180	300	16	57.60	2.88	1.32	74,880	187.2
2	60	5	3.00	0.180	300	16	48.00	2.88	1.32	74,880	187.2
3	70	4	2.40	0.168	280	16	38.40	2.688	1.24	69,888	174.7
4	80	3	1.80	0.144	240	20	36.00	2.88	1.32	74,880	187.2
5	100	3	1.80	0.180	300	16	28.80	2.88	1.32	74,880	187.2
6	110	3	1.80	0.198	330	12	21.60	2.376	1.11	61,776	154.4
7	120	2	1.20	0.144	240	20	24.00	2.88	1.32	74,880	187.2
8	130	2	1.20	0.156	260	36	43.20	5.616	2.56	73,008	365.0
9	140	2	1.20	0.168	280	16	19.20	2.688	1.24	69,888	174.7
10	150	2	1.20	0.180	300	16	19.20	2.88	1.32	74,880	187.2
11	160	2	1.20	0.192	320	28	33.60	5.376	2.46	69,888	349.4
12	170	2	1.20	0.204	340	28	33.60	5.376	2.46	69,889	371.3
13	180	2	1.20	0.216	360	12	14.40	2.592	1.2	67,392	168.5
14	190	2	1.20	0.228	380	12	14.40	2.592	1.2	67,393	177.8
15	200	2	1.20	0.240	400	12	14.40	2.88	1.32	74,880	187.2



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