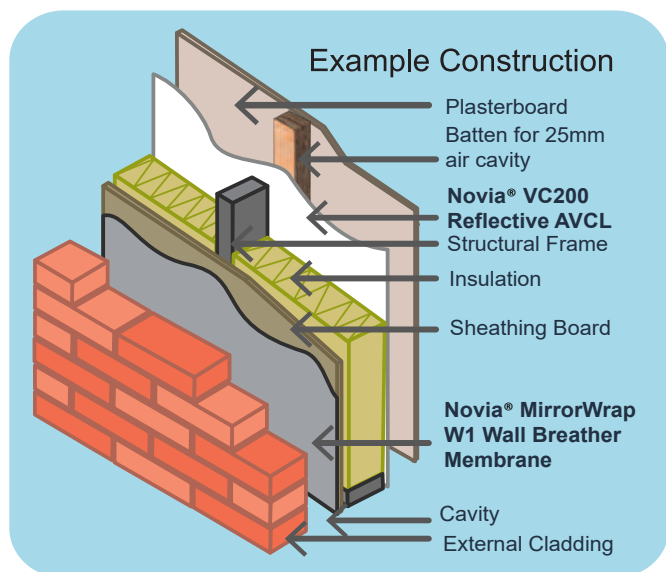


**Novia® MirrorWrap W1** is a high quality, 4-layer laminate, Class W1 water resistant and reflective wall breather membrane for insulated wall applications. The product is CE certified and meets EN 13859-2 for wall applications. **Novia® MirrorWrap W1** meets EN 1928 Class W1 water resistance, but still provides high breathability. It has a reflectivity of 98%, which can improve the U values of constructions. When correctly installed, it is possible to achieve an additional r value of up to 0.74 m<sup>2</sup>K/W in an unventilated wall cavity. Additionally, the reflective face allows the construction to remain cooler in summer and warmer in winter. **Novia® MirrorWrap W1** is ideal for use on timber frame and offsite/modular constructions. To maximise performance the reflective face is not Novia branded, has no text or images, and is white on the reverse.



### Key Features:

- 4-layer, wall breather with microporous core
- Roll sizes: 1.5m x 50m & 2.7m x 100m
- **98% reflectivity**, which can achieve an additional r value of up to 0.74 m<sup>2</sup>K/W
- **Class W1** water resistance to EN 1928
- Cooler in summer and warmer in winter
- Airtight, and highly vapour permeable
- Fire Classification E to EN 13501-1
- CE to EN 13859-2 (walls)

For projects which require improved U values, we also offer **Novia® VC200 Reflective**. It is an air and vapour control layer which is also 98% reflective and can significantly improve r values by up to 0.74 m<sup>2</sup>K/W. See datasheet for more product specific information.

	Value	Units	Test Method
Standard width	1.5 / 2.7	m	
Roll length	50 / 100	m	
Roll weight 1.5m / 2.7m	9 / 34	kg	
Nominal weight	118	g/m <sup>2</sup>	EN 1849-2
Tensile strength MD / CD	200 / 110	N/50mm	EN 12311-1
Elongation MD / CD	75 / 90	%	EN 12311-1
Tear Resistance MD / CD	80 / 110	N	EN 12310-1
Water vapour resistance, Sd	0.08	m	EN ISO 12572
Resistance to water penetration	W1	Class	EN 1928
Resistance to water penetration (after ageing)	W1	Class	EN 1928
Resistance to air penetration	0.00	m <sup>3</sup> /m <sup>2</sup> .h.50pa	EN 12114
Temperature Resistance	- 40 / + 80	°C	
Emissivity	0.02	ε	EN 15976
Reaction to fire	E*	Class	EN 13501-1
UV resistance	Do not leave the product exposed for extended periods of time, to avoid unwanted environmental damage.		



Use the QR code to link direct to the product webpage.



NOTE: COSHH safety datasheets available upon request.

\*Fire class tested on chipboard according to EN 13238.

Date Published: V2, January 2025. Novia's most recently published datasheet supersedes any previous versions which may still be in circulation.

DS0125\_MirrorW1

### Installation Guidance for Walls:

Fix the **Novia® MirrorWrap W1** to the wall structure; upper layers should overlap lower layers. Work from the bottom moving upwards, using minimum overlaps of 100mm on the horizontal joints. Do not begin a vertical lap joint within 300mm of a corner, and vertical laps should be at least 150mm. Ensure the bottom timber is also protected by an overlap. Fix at suitable intervals with galvanised nails, stainless staples or similar fixings that will be permanent. Do not leave the membrane unnecessarily exposed to weathering, such as high winds, excessive UV, pooling water etc, without suitable temporary protection materials, as this will cause damage to the material, particularly the reflective face. Any off-site installations, such as timber frame panels or modular frames, fitted with **Novia® MirrorWrap W1**, should not be stored horizontally when exposed to weathering (external storage), unless covered with suitable temporary protection materials.

### Installation Tapes:

For a fully reflective seal, we recommend the use of **Novia® Double Sided Lap Tape (DSLTL)** and **Novia® Reflective Membrane Lap Tape (RMLT)**. The use of **Novia® DSLTL** will greatly improve the final installation quality by improving the performance and overall airtightness of the structure, reducing wind chatter and allow for any unexpected damage to be repaired quickly. We offer **Novia® DSLTL** for use between laps, in high specification work where there is an emphasis on air-tightness. **Novia® RMLT** should only be used in addition to **Novia® DSLTL**, for a high specification and fully reflective finish.

### Thermal Performance:

**Novia® MirrorWrap W1** uses a highly reflective surface to maximise the r value of the membrane. When the product is suitably installed facing a minimum 25mm air cavity, it contributes significantly to improving the U value achieved for the construction. Novia has tested the product, and it has achieved the maximum possible value of 98% reflectivity, which is the maximum allowed reflectivity result under the test method BS EN 15976. **Novia® MirrorWrap W1** will therefore provide the maximum possible additional benefit achievable by any reflective breather product. Novia input the maximum possible 98% EN 15976 test result into the calculation model BS EN ISO 6946, and determined the maximum possible r value that can be claimed by this process. That value is 0.74 m<sup>2</sup>K/W, which is the stated r value for **Novia® MirrorWrap W1**.

### Other Notes:

- Achieved U values of the construction are improved when **Novia® MirrorWrap W1** is installed with the reflective side facing a minimum 25mm air cavity.
- The r value achieved by the low emissivity cavity depends on factors such as horizontal and vertical heat flows and the level of cavity ventilation.
- Emissivity is the inverse of reflectivity, and so they are simply two ways of looking at the same result. In the case of 98% reflectivity, the emissivity value is 0.02.
- Ensure that a Novia Air & Vapour Control Layer, such as **Novia® VC200 Reflective** or **Novia® VariCheck FR**, is installed on the warm side of the insulation to limit unwanted interstitial condensation. As little as 1% - 3% moisture contamination within the insulation can adversely affect the achieved thermal performance by more than 30%.
- Always handle material carefully to prevent tears and punctures. Repair any on-site damage with Novia tapes.
- All rolls of Novia membrane should be stored horizontally, indoors and out of direct sunlight. For all products, including tapes, external storage must be on a temporary basis. When stored externally, Novia products should be covered and protected from exposure to weather conditions, especially wind, rain, frost and UV. Pallets should not be stacked.