



ClaytonGlass 

 **SmartVAC™**

The only thing
inside our new
SmartVAC™ unit
is pure green



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Introducing our new double glazed SmartVAC™ unit, a stellar leap in thermal performance with U-Value of just 0.4 W/m²K

Our new insulated SmartVAC™ unit, incorporates pillar supported micro cavity glass such that at a typical 24mm overall, it exhibits a centre pane U-Value of just 0.4 W/m²K.

Putting that into perspective, that's three times more thermally efficient than our standard 28mm DGU, and 50% better than a conventional double softcoat, argon, triple glazed unit – and that's assuming you've got the required 44mm of depth to glaze one.

20% Lighter, more thermally efficient and acoustically better than any unit that's ever gone before, in terms of setting a whole new level of performance, SmartVAC™ is right up there. Incorporable in every window type and system including our existing product range, we are delighted to be able to bring this to our customer base as a key differentiator for your products.





TRIPLE GLAZED UNIT



SmartVAC™

The SmartVAC™ Unit is constructed from two sheets of toughened glass bonded together, leaving a 0.3mm vacuum gap, air is then evacuated, the unit is sealed, and advanced technology is used to maintain the vacuum. Under the atmospheric pressure of the vacuum, barely visible micro-pillars are used to keep the two panes of glass apart.

SmartVAC™ boasts the slender profile of single glazing while delivering unparalleled thermal and acoustic performance that outperforms even triple glazing. SmartVAC™ is the most thermally and acoustically efficient glazing on the market today. Thinner and lighter than traditional double glazing, SmartVAC™ is also more durable and attractive, lending itself beautifully to conservation sliding sash and casement windows



Triple Glazing

28mm

6.2mm

SmartVAC

SmartVAC™ insulates equally as well as triple glazing, but is much lighter and thinner, meaning it can be installed into an existing 44mm window frame using standard 28mm beads. This often makes SmartVAC™ the most cost-effective solution for renovation and restoration projects.





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A photograph of a traditional living room. On the left, there is a large arched window with a decorative leaded glass pattern. The room features a classic leather tufted sofa and a wooden coffee table. The background shows a bright, sunny day outside the window.

Retain the Look Improve Efficiency

**Now with SmartVAC™,
traditional and heritage
windows can perform like
modern triple glazing thanks
to its ultrathin depth.**

The unique combination of original traditional joinery and SmartVAC™ 6.2mm vacuum glazing offers the best of all worlds. The appearance of traditional single-glazed windows with industry leading levels of thermal and acoustic insulation, which also benefit from low maintenance, durability, and sustainability.



Cosy, warmer rooms in Winter without the need for heavy, deep triple glazing™

With SmartVAC™ you will feel much warmer in Winter compared to single or double glazing. Due to SmartVAC's 'exceptional low u-value, the internal pane is warmer, which in turn eliminates draughts and cold spots.

SmartVAC™ exploits the sun's heat, meaning you consume less energy during the cold winter months.

With SmartVAC™, you turn your windows into heaters and reduce energy bills and most importantly lowers your energy usage, which is good for everyone and good for the planet.





Why choose Vacuum Glass?

Five reasons to choose SmartVAC™



Ultra-thin profiles make vacuum insulated glass perfect for retaining the aesthetics of single glazed heritage buildings, there is no internal double glazing spacer bar, and no visual disturbance from the double reflection associated with traditional double glazing. Vacuum glass seamlessly mimics the appearance of single glazing, making it an ideal solution for listed buildings and conservation areas.



Vacuum glazing gives you a warmer home in winter and a cooler one in summer. The vacuum chamber blocks thermal transmission, providing thermal insulation performance which is 2 – 4 times more efficient than double or triple glazing and between 6 – 10 times better than single glazing.



For a quieter more peaceful home, vacuum insulated glass offers leading noise reduction without using heavy and chunky triple glazing or expensive laminated acoustic glazing.



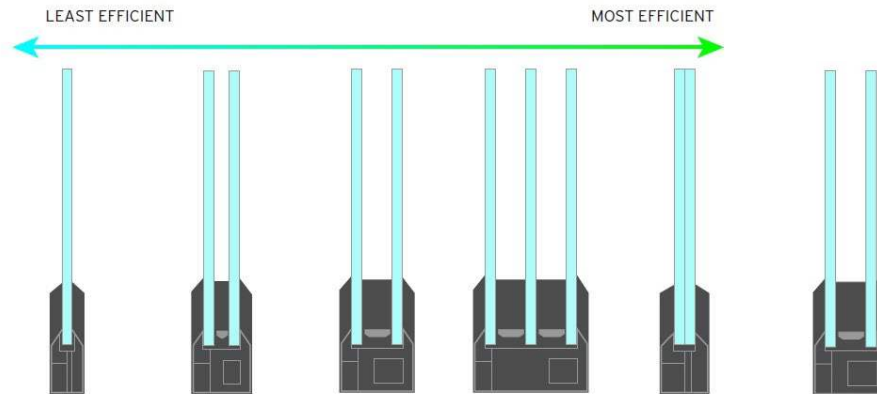
SmartVAC™ vacuum insulated glass boasts a robust bonded construction, utilising toughened glass throughout, ensuring a stable product with a lifespan surpassing that of double or triple glazing. Additionally, it comes with a market-leading 15-year warranty.



SmartVAC™ vacuum glass has a centre-pane U-value of just 0.6W/m²K which allows for lower energy consumption, reducing CO₂ emissions and bills. Vacuum glass is lightweight, uses less materials, is fully recyclable, and does not use any energy intensive Nobel gases such as Argon, Krypton, or Xenon.



SmartVAC™ compared to Traditional Glazing



	Single Glazing	Slim Double Glazing	Double-Glazing	Triple Glazing	SmartVAC™	Hybrid IGU inc. SmartVAC™
Thickness	4mm	11mm	28mm	36mm	6.2mm	28mm
U-Value (W/m ² K)	5.8	1.9	1.2	0.8	0.6	0.4
Light Transmission	90	80	80	71	81	78
Sound Reduction Rw (C;Ctr) dB	29 (-2; -3)	31 (-2; -5)	31 (-2; -5)	32 (-1; -5)	37	39



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