

## LandVac™ – Toughened Vacuum Insulated Glazing

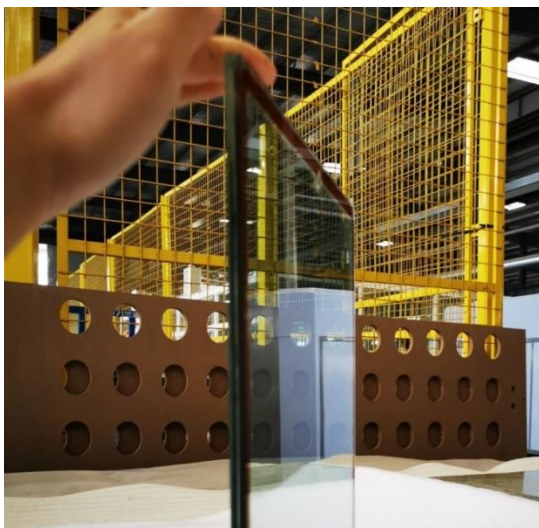
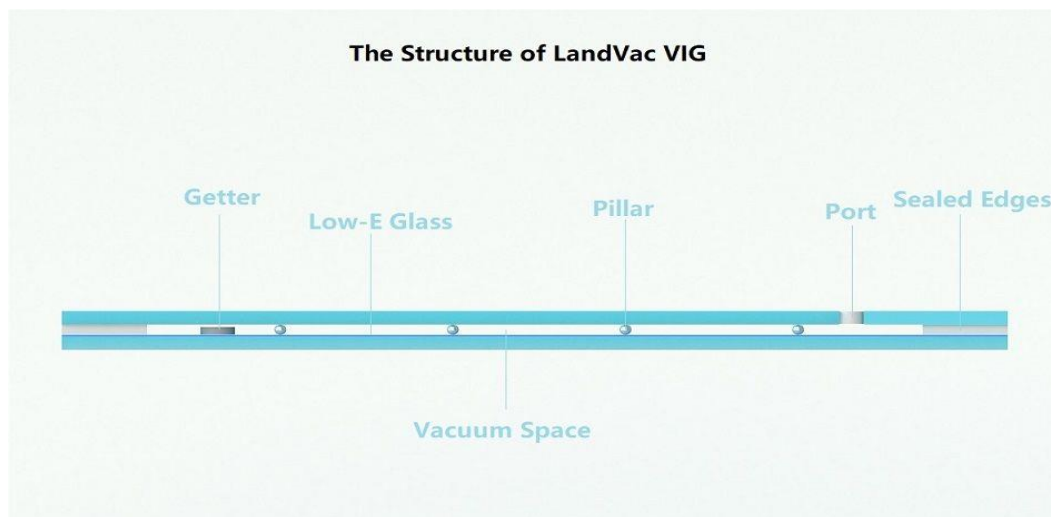
Vacuum Insulated Glazing [VIG] is a development of the Dewar Vacuum Flask that we are all familiar with to keep our drinks hot or cold. A vacuum delivers the best thermal insulation possible, and significantly better than normal double glazing that is filled with an air and/or gas mixture.

### Benefits:

- Only 8.3mm thick so can replace existing single glazing
- U value of around 0.5 W/m<sup>2</sup>K (single glazing is normally around 5.8 W/m<sup>2</sup>K)
- Constant performance from day one with no drop-off over time
- Superior sound insulation
- Toughened glass as standard so good for safety and in doors and low level glazing
- 15 year guarantee and life expectancy of more than 25 years
- Shaped and curved heads available

These benefits arise out of some technological advances which are described here:

**LandVac comprises 2 panes of 4mm glass separated by a 0.3mm Vacuum Space**



At **8.3mm** LandVac can be retro-fitted into existing windows with minimal rework.

LandVac weighs 20kg/m<sup>2</sup>, the same as most double glazing

Minimum Size: 300mm x 300mm

Maximum Size: 2450mm x 1450mm



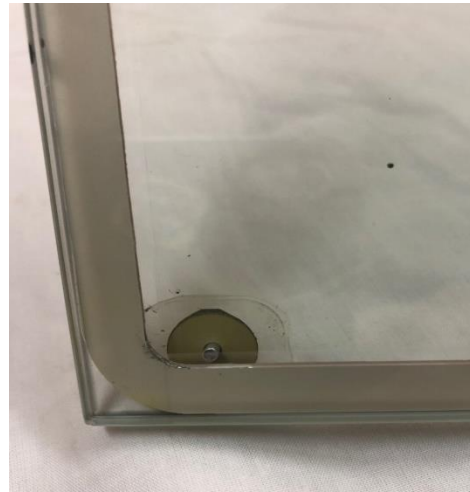
Edges of glass are welded together via a 10mm wide metallic sealing strip. No adhesives, butyl sealants or dessicant so provides for an extremely long life

Tiny micro-spacers, often referred to as the 'dots'. These are spaced on a 50mm grid and hold the glass panes apart under the atmospheric pressure on either side.

These are generally not visible from a metre or so away and when looking through the glass.

#### **The Evacuation port:**

Where the air is drawn out and capped off. This is in the far corner out of the sightline and can be hidden in the rebate or behind the glazing bead



#### **The Getter.**

A clever device that absorbs the outgassing of air molecules from the glass itself to maintain the vacuum

Again tucked in the corner