Invention disclosure

Self-aligning setting block for insulating glass units (fictional invention) · Prepared for attorney review

This is a technical description prepared for the inventor and the inventor's patent attorney. It is not a patent application and contains no legal opinion.

TITLE

Self-aligning setting block for insulating glass units

THE PROBLEM

Insulating glass units rest on two small blocks at the bottom of the frame. If a block sits even slightly out of position, the weight of the glass concentrates on one edge. Over several years that load can break the edge seal and fog the unit. Installers place blocks by eye, and the position cannot be checked once the glass is in.

WHAT IS NEW

A setting block with a sprung locating tab that engages the frame's drainage slot. The block can only seat at the correct distance from the corner, and a colored indicator stays visible through the glazing pocket until the block is fully seated.

HOW IT WORKS

1. The installer drops the block into the glazing pocket near the quarter point.
2. The sprung tab slides along the pocket until it meets the drainage slot and snaps in.
3. The indicator on the block's upper face retracts as the tab seats. A visible indicator means the block is out of position.
4. The glass is set. The tab holds the block against movement during shipping and thermal cycling.

VARIATIONS

- A two-piece block with a replaceable hardness insert for different glass weights
- A tab shaped for frames with round weep holes in place of slots
- A version molded with a recess for a moisture sensor

WHAT EXISTS ALREADY

Existing approach	Limitation
Loose blocks placed by eye	Position varies by installer and cannot be inspected
Adhesive-backed blocks	Hold position but can still be placed in the wrong location
Blocks molded into the frame	Fixed to one glass size; not usable in field-glazed systems

FIGURES TO BE PREPARED

- Figure 1: perspective view of the block with the tab extended
- Figure 2: section through the glazing pocket showing the tab seated in the drainage slot
- Figure 3: indicator positions, seated and unseated

RECORD

First sketched and first prototype dates, the names of everyone who contributed, and any showing of the device outside the company are recorded on the attached log for the attorney.