





Double Glazed Units



Buying and Fitting Double Glazed Units

In the manufacture of double-glazed units there are three types of edge seals:

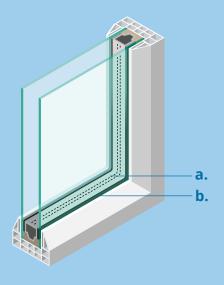
- a) The single seal system, using one sealant
- b) The swiddle strip system, using one sealant
- c) The dual seal system, with two sealants

The dual seal system being the most reliable (in a number of EEC Countries, only dual sealed units are accepted). Breakdown of the seal causes fogging between the sealed panes of glass. In the last twelve months Lee Glass has replaced over 2000 double glazed units where seals have broken down. Mostly all the failed units were of either the single sealed or swiddle strip type.

The firms that fitted the units have gone out of business, leaving customer guarantees worthless. It has been estimated that almost two thirds of the double glazing businesses that started six years ago have now shut down.

Dual Seal Units with Hollow Spacer Frame

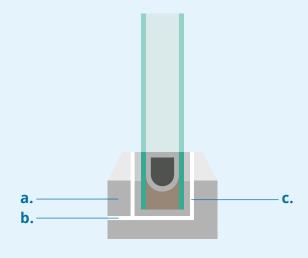
The main enemies of sealed units are ultra violet rays and water. It is therefore important that the sealed units are free from moisture on all edges of the unit, and the rebates and beads cover the sealed edge. If these two rules are not carried out, the unit will fail prematurely. See diagrams for frame design and glazing recommendations.



- a. Hollow spacer frame with low moisture vapour transmission. Primary seal applied to the side of the spacer in a continuous bead, usually butyl or polyisobutylene
- **b.** A secondary, liquidapplied, curing sealant used around the outside of the spacer usually polysulphide, polyurethane, silicone or epoxypolysulphide

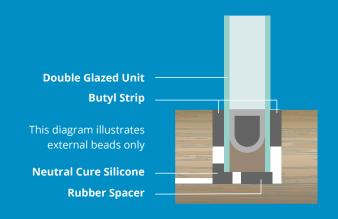
Frame Rebate Design Suitable for Beaded Fully Bedded Glazing System

With this design the glass is completely surrounded by the glazing material. It is recommended that the timber is primed with an undercoat paint or timber sealant. Do not gloss paint the rebates where the unit is being bedded.



- **a.** Bead width on platform to be at least equal to the rebate height
- **b.** Rebate platform should be of sufficient width to allow for bead, glazing material and glass
- c. Rebate height should be sufficient to allow for edge cover, edge clearance and deviations the minimum being 15mm

Glazing to Timber Frame Recommendation



Butyl glazing strip should be used to seal the unit to the rebate and beads of the window. Linseed putty is not the correct glazing compound and should not be used. All units should sit on rubber setting blocks. After glazing has been carried out, the window frame and beads should be painted and sealed up to the glass and regularly maintained.

Lee Glass only use the dual type sealed units which are manufactured and carry the new European standard EN1279-2 relating to the performance requirements and adopted test methods for the factory fabrication and sealing arrangements used in making hermetically sealed double glazing units. All are guaranteed for five years, which is the glass and glazing federation recommendation.

