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(54) Glass mounting strip.

(57) A mounting strip 10 (comprising of an extruded length of thermoplastic elastomer for mounting a glass pane 21 is generally in the shape of a right angled triangle, having a first leg 11 and a second leg 12, which legs define the right angled legs of the triangle and a hypotenuse 13. A recess 14 is provided which extends from the hypotenuse 14 into the triangle parallel to first leg 11 . Recess 14 serves to accomodate one edge of a glass pane 21.

The pane 21, including mounting strips 10 fitted to its edges is pushed into frame 20 until lip formation 15 clips over and firmly engages the free end of the side member 20.2.

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This invention relates to mounting strips for glass panes. More particularly, this invention relates to an extruded plastics mounting strip for mounting a glass pane in a window frame.

The conventional method of mounting a glass pane in a window frame for a house or other dwelling is by means of glaziers putty which is a type of pliable feller material made from whiting and raw linseed oil.

There are a number of disadvantages in the use of glaziers putty for mounting glass panes. For example, glaziers putty takes a relatively long time to dry out sufficiently before it can be painted. During the drying out period, the putty is very soft and can be removed relatively easily, thereby allowing for the easy removal of the glass pane and entry into the building. Another disadvantage of the conventional method lies in the fact that it is a time consuming operation to mount glass with glaziers putty.

It is accordingly an object of the present invention to provide an arrangement for mounting glass panes in a frame which applicant believes will overcome or at least minimize the disadvantages of the known method.

According to one aspect of the invention, a mounting strip for mounting a glass pane in a frame comprises a mounting element having an engagement formation to engage the frame, and a recess for holding at least one edge of the pane.

Preferably, the engagement formation is in the form of a lip formation for firmly engaging the frame.

The mounting element may be adapted to engage a frame which comprises, in cross-section, a base member and a side member extending perpendicular to the base member, the mounting element being in cross-section, substantially in the shape of a right angled triangle having first and a second legs defining the right angled legs of the triangle and an hypotenuse, the recess extending into the triangle from the hypotenuse, parallel with the first leg.

The lip formation preferably extends laterally away from the first leg and is adapted to engage the free end of the side member of the frame.

With the above arrangement, lengths of the mounting element may be extruded and cut to the size of a glass pane to be mounted and fitted to the edges of the pane. Thereafter, the pane, including the mounting strips is pushed into the window frame from the outside until the lip formation and the strips firmly engage the free ends of the side members of the frame. The hypotenuse portion of the strip is then visible from the outside of the window and provides an even and neat finish to the mounted glass pane.

The arrangement ensures that it is impossible to remove the mounting strip from the outside without first breaking the glass pane. It will be appreciated that the above feature overcomes, to a large extend, a security defficiency which is present in the known method of mounting glass windows. The arrangement could obviate the necessity of installing burglar bars on window frames if laminated security glass is used instead of ordinary glass sheeting.

In a preferred form of the invention, the mounting element is extruded from a synthetic resinous material.

The synthetic resinous material preferably consists of a thermoplastic elastomer commonly known by the trade mark SANTOPRENE. or U.P.V.C.

The mounting element may be extruded in a variety of different colours.

With this arrangement, a customer may order the strip in a colour of his choice. This would of course obviate the necessity of painting the strip. Alternatively, a neutral coloured strip may be used and painted subsequent to mounting. It will be appreciated that the strip may be painted immediately after mounting, as there would be no drying out period as in the case with glaziers putty.

The extrusion preferably includes an elongate internal cavity adjacent the recess.

According to another aspect of the invention a method of mounting a glass pane in a frame comprises the steps of fitting lengths of mounting strips as defined above to the edges of the pane and pushing the pane into the frame so that the lip formation on the mounting strips firmly engage the frame.

One embodiment of this invention will now be described in more detail with reference to the accompanying drawings in which:

Figure 1 is a perspective view of a mounting strip according to the invention;

Figure 2 is a sectioned end view of two mounting strips of figure 1 mounted in window frame of particular cross section; and

Figure 3 is a sectioned end view of two mounting strips of figure 1 mounted in a window frame of different cross-sectional configuration to the frame shown in figure 2.

In figure 1, a mounting strip 10 for mounting a glass pane (not shown) comprises an extruded length of thermoplastic elastomer, commonly known as SANTOPRENE. In cross-section, the strip 10 is generally in the shape of a right angled triangle having a first leg 11, a second leg 12, which legs define the right angled legs of the triangle and an hypotenuse 13. A recess 14 is provided which extends from the hypotenuse 14 into the triangle parallel to first leg 11. Recess 14 serves to accommodate one edge of a glass pane

(not shown).

A cavity 10.1 is provided during the extrusion process to economize on material used.

In figure 2, two mounting strips 10 are shown fitted to a window frame 20. Frame 20 comprises a base member 20.1 and two side members 20.2 extending perpendicular to base member 20.1.

In use, the edge of a glass pane 21 is accommodated in recess 14 as shown. Thereafter, the pane 21, including mounting strips 10 fitted to its edges is pushed into frame 20 in direction A until lip formation 15 clips over and firmly engages the free end of the side member 20.2. Contact cement may be applied to the interface 22 between side member 20.2 and mounting strip 10.

In figure 3, mounting strips 10 are used in association with a window frame 30 which is in cross-section substantially channel shaped.

In use, the space 31 under the mounted mounting strip 10 is filled with a filler strip of extruded synthetic resinous material 32. The filler strip 32 also features a central cavity 32.1 which is included during the extrusion process to economize on material.

It will be appreciated that many modifications or variations of the invention are possible without departing from the spirit or scope of the appended claims.

Claims

1. A mounting strip for the mounting of a glass pane in a frame comprising a mounting element having on engagement formation to engage the frame, and a recess for holding at least one edge of the pane.

2. A mounting strip as claimed in claim 1 wherein the engagement formation is in the form of a lip formation for firmly engaging the frame.

3. A mounting strip as claimed in claims 1 or 2 wherein the mounting element is adapted to engage a frame which comprises, in cross-section, a base member and a slide member extending perpendicular to the base member, the mounting element being in cross-section, substantially in shape of a right angled triangle having first and a second legs defining the right angled legs of a triangle and a hypotenuse, the recess extending into the triangle from the hypotenuse, parallel with the first leg.

4. A mounting strip as claimed in claim 2 or 3 wherein the lip formation extends laterally away from the first leg and is adapted to engage the free end of the side member of the frame.

5. A mounting strip as claimed in any one of the previous claims wherein the mounting element is extruded from a synthetic resinous material

6. A mounting strip as claimed in claim 5 wherein the synthetic resinous material consists of a thermoplastic elastomer commonly known by the trade mark SANTOPRENE.

7. A mounting strip as claimed in claims 5 or 6 wherein the extrusion includes an elongate internal cavity adjacent the recess.

8. A method of mounting a glass pane in a frame comprising the steps of fitting lengths of mounting strips in anyone of claims 1 to 7 to the edges of the pane and pushing the pane into the frame so that the lip formation on the mounting strips firmly engage the frame.

9. A mounting strip substantially as herein described with reference to the accompanying drawings.

10. A method of mounting a glass pane in a frame substantially as herein described with reference to the accompanying drawings.

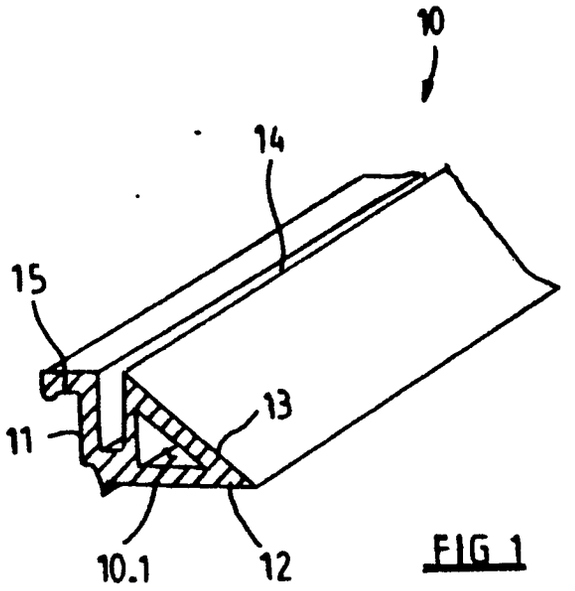

FIG 1

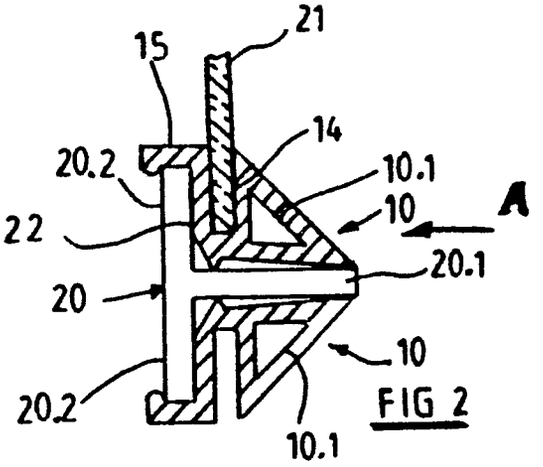

FIG 2

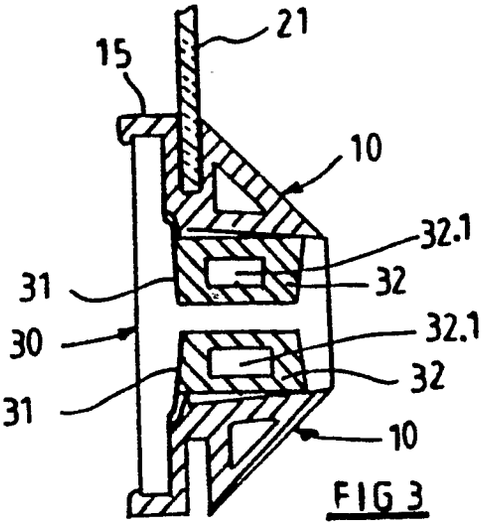

FIG 3