

PATENT SPECIFICATION

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(54) WEATHERBAR

(71) We, SCHLEGEL (U.K.) LIMITED, a company organised under the laws of Great Britain, of Ring Road, Seacroft, Leeds, LS14 1LY, formerly of Henlow Division, Henlow Industrial Estate, Henlow Camp, Bedfordshire, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to a weatherbar.

According to the invention a weatherbar of a plastics material comprises a substantially rigid elongate body having a base portion adapted for attachment to a frame of a building structure, a resiliently deformable ridged section running the length of one side of the body and a comparatively flexible fin extending the length of the body between the ridged section and the base portion and projecting from the said one side of the body outwardly beyond the ridged section.

Another aspect of the invention resides in the combination of the weatherbar defined above and the threshold of a door frame.

Preferably the base portion is adapted to slot into a preformed rectangular groove in the said frame. In this instance opposite surfaces of the base portion can each be provided with sharp longitudinally extending ridges which are parallel with one another and which are designed to coact with sidewalls of the groove to secure the weatherbar in position.

In use with the threshold of a door frame, the flexible fin of the weatherbar is so located that when the door is closed the fin is contacted by a surface of the door and is urged towards the sidewall of the body from which it projects by the door surface. Thus the fin makes an effective weathertight seal with the door surface. The ridged section running the length of the body enhances this seal. As with the fin itself, the ridges of this section are resiliently deformable and they provide a more efficient seal when pressed by the surface of the closed door.

The weatherbar can incorporate an additional fin extending the length of the body and projecting therefrom in a direction opposite to that in which the first mentioned fin projects. The additional fin prevents to a certain extent rain water from splashing over the weatherbar.

Two embodiments of the invention are now described with reference to the accompanying drawing in which:—

Figure 1 is a perspective view of one embodiment of a weatherbar,

Figure 2 is a sectional elevation of the weatherbar of Figure 1 used with a door frame for an inwardly opening door,

Figure 3 is a sectional elevation of the weatherbar of Figure 1 used with a door frame for an outwardly opening door, and

Figure 4 is a sectional elevation of another embodiment of a weatherbar.

Referring to Figures 1 to 3 of the drawings, a weatherbar of a plastics material includes an elongate body 2, of generally rectangular cross-section, having a base portion 4. Extending for the length of the body 2 is a comparatively flexible fin member 6 provided with a fin 8 projecting from a sidewall 10 of the body 2. The fin member 6 is further provided with a ridged section 12, and is so mounted on the body portion that the fin 8 is disposed between the ridged section 12 and the base portion 4 and extends outwardly beyond the ridged section 12. Both the fin and the ridged portion are resiliently deformable.

Opposite surfaces of the base portion 4 are each formed with sharp ridges 14 which, in section, define a sawtooth wave form. The base portion 4 terminates at ledges 16 and 18 which project from opposite sides of the body 2 at right angles to the central plane of the body 2. Preferably the ledge 16 projects further from the body than the ledge 18.

A preferred use of the weatherbar is in combination with a threshold of a door frame, and as can be seen in Figures 2 and 3 the base portion 4 of the weatherbar is slotted in a rectangular groove 20 preformed

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in a threshold 22 of a doorframe (not shown). The ridges 14 of the base portion 4 coact with the sidewalls of the groove 20 to secure the weatherbar in position. Respective under surfaces of the ledges 16 and 18 abut a surface 24 of the threshold thereby ensuring that the fin member 6 is proud of the surface 24. A door 26 whether it be inwardly opening (Figure 2) or outwardly opening (Figure 3) has a surface 28 which, when the door is closed, abuts the fin member 6 and urges the tongue portion 8 towards the sidewall 10 and compresses the ridged section 12. A weathertight seal is thus formed between the door surface 28 and the fin member 6. The ledge 16 lends support to the body 2 such that the body is maintained substantially upright when the door 26 is closed thereby ensuring a good seal between the door surface 28 and the fin member 6.

Referring to Figure 4 (in which parts similar to those appearing in Figure 1 bear the same reference numerals), a weatherbar is shown to include an additional fin member 30. The fin member 30 projects from a sidewall 32 of the body 2 opposite the sidewall 10 from which the fin member 6 projects, and extends the length of the body. The additional fin member serves to prevent a substantial amount of rain water from splashing over the weatherbar.

WHAT WE CLAIM IS:—

1. A weatherbar of a plastics material comprising a substantially rigid elongate body having a base portion adapted for attachment to a frame of a building structure, a resiliently deformable ridged section running the length of one side of the body

and a comparatively flexible fin extending the length of the body between the ridged section and the base portion and projecting from the said one side of the body outwardly beyond the ridged section.

2. A weatherbar according to claim 1 additionally comprising another fin extending the length of and projecting from the body.

3. A weather bar according to claim 2 wherein the additional fin projects from a side wall of the body opposite that from which the first-mentioned fin projects.

4. A weatherbar according to any one of the preceding claims wherein the base portion includes opposite surfaces each provided with sharp longitudinally extending ridges which are parallel with one another and which, in use, coact with sidewalls of a groove formed in the same frame.

5. A weatherbar according to claim 4 wherein, in section, the sharp ridges define a sawtooth wave form.

6. A weatherbar substantially as hereinbefore described with reference to Figure 1 of the accompanying drawing.

7. A weatherbar substantially as hereinbefore described with reference to Figure 4 of the accompanying drawing.

8. In combination, a weatherbar according to any one of the preceding claims and a threshold of a door frame.

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