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⑤④ **Fascia and soffit system for buildings.**

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Description

This invention relates to a fascia for use in conjunction with various types of soffit in the construction of buildings. In a typical roof construction for buildings such as houses, at the eaves of the roof the rafters project beyond the wall. A vertically extending fascia board is provided along the ends of the rafters and a horizontally extending soffit is provided in the space between the wall and the fascia board. Thus access to the roof space beneath the rafters is closed off, although ventilation apertures, and so forth may be provided. Traditionally, the fascia board has been of wood and the soffit has been of a suitable sheet material.

In recent years, it has become common to use fascia panels of extruded plastics material, as in for example WO 83/02636, either to replace conventional wooden fascia boards or to be used over such boards. The fascia panels may even be combined with other components such as a gutter system which can be formed on the outer face of the panel. On the inner face of the fascia panel, adjacent its lower edge, is generally provided a groove for receiving the edge of the soffit. The soffit itself may now be of many different types. It may, for example, be a plain sheet of wood or of a cement based composite material. Alternatively it may comprise a series of interlocking plastics panels. The groove along the fascia panel is designed to receive, and in some cases interlock with, the particular soffit with which it is to be used.

In an attempt to reduce the number of different systems necessary the Applicant has analysed existing soffits and has now designed a fascia panel which can be used with a range of different soffits.

Thus according to the present invention there is provided an extruded fascia panel for use at the eaves of a roof, having adjacent its lower edge a first longitudinally extending flange, a second longitudinally extending flange spaced upwardly from the first so as to define a first groove for receiving the edge of a soffit, and a third longitudinally extending flange spaced upwardly from the second so as to define a second groove for receiving the edge of a soffit, the spacing between the first and second flanges at least in part being substantially different from the spacing between the second and third flanges, at least one of the first and second flanges being resilient to permit variation of said spacing between them, at least one of the second and third flanges being resilient to permit variation of said spacing between them, and each of said first and second grooves being provided with interlocking means for engagement with a soffit if desired.

The interlocking means could be in the form of a downwardly extending projection extending adjacent the free edge of each of the second and third flanges, which can engage in a longitudinal groove in a soffit board or interlock with e.g. a flange along a plastics

soffit panel.

In many applications the fascia panel can be used in the form above described. However in some cases it may be desired to remove one of the flanges. This could be done by making the flange frangible but in general it could be achieved at the manufacturing stage by extruding the fascia panel with one flange missing. In some applications the, or each, groove may not be used for soffit location but for other purposes. Preferably, one of the grooves has its minimum spacing defined by a projection extending from one of the respective flanges towards the other. This projection is generally in addition to any projection forming the interlocking means. Where the soffit is to extend perpendicularly to the fascia panel it will rest flat on the projection. However, it is possible to tilt the soffit at an angle to the fascia panel, the projection acting as a fulcrum. In such an application the projection must be sufficiently great, and must be positioned sufficiently near to the entry to the groove, to permit the desired angle of tilt. In one preferred system the projection is positioned on one flange opposite an interlocking means projection on the other. To provide an increased level of support when the soffit is used perpendicularly to the fascia panel, without excessive use of material, it may be desired to use two relatively thin projections with one spaced inwardly of the other. In a tilting arrangement in which the soffit is angled upwardly away from the fascia panel, the inner of the two projections will act as the fulcrum.

Such an arrangement of projections can be of use with single groove fascias, whether of a generally different design to that disclosed herein or resulting from elimination of one of the flanges as mentioned earlier. This disclosure encompasses all such fascia panels and of course extends to fascia panels which are parts of other units such as gutter systems.

The flanges may serve purposes other than locating soffits. For example, a flange can receive a clip which enables the fascia panel to be attached to e.g. a conventional wooden fascia board. A particularly advantageous possibility is that of using the lower groove to receive the soffit and using the third flange for attachment to a board.

There will now be described by way of example some fascia and soffit systems embodying some of the above concepts, with reference to the accompanying drawings in which :

Figure 1 is a view of part of a first fascia and soffit system ;

Figure 2 is a view of part of a second fascia and soffit system ;

Figure 3 is a view of part of a third fascia and soffit system ;

Figure 4 is a view of part of a fourth fascia and soffit system ;

Figure 5 is a view of part of a fifth fascia and soffit system ;

Figure 6 is a view of part of a modified type of fascia and soffit system ; and

Figure 7 is a view of part of a further modified type of fascia and soffit system.

In Figures 1 to 5 the fascia panel 1 is the same and is a suitable length of extruded plastics such as UPVC. Along its lower edge it has a first flange 2. Spaced above this by a distance a is a second flange 3 and spaced above this by a distance b is a third flange 4. There are thus defined two grooves 5 and 6 for receiving soffits. The distance a is less than distance b, but in any event the first flange 2 is provided with two relatively thin, vertically projecting, longitudinally extending supports 7 and 8 which thus define the narrowest part of groove 5. Support 7 is at the mouth of the groove 5 and support 8 is positioned inwardly of it. In some arrangements one of the supports 7 or 8 can be omitted and this may facilitate extrusion. One preferred arrangement uses support 7 only.

Flange 3 has a downwardly projecting, longitudinally extending barb 9 along its outer edge and flange 4 has a similar barb 10. These barbs are intended to interlock with various types of soffit. Barb 9 has its point 11 disposed opposite the inner support 8 on flange 2. The flanges 3 and 4 are deflectable resiliently.

In Figure 1 a soffit 12 of rigid sheet material is received in groove 5. It extends perpendicularly to the fascia panel and rests on supports 7 and 8. It is kept in place by means of the barb 9 engaging in a longitudinally extending groove 13 in the soffit 12. The flange 3 and barb 9 will have been deflected upwardly as the soffit 12 was pushed into the groove 5 since the space between the point 11 of barb 9, and the support 8 is less than the thickness of the soffit.

In Figure 2 a soffit 14 of thicker sheet material is positioned in groove 5. In this case the resilience of flange 3 keeps the barb 9 engaged against the upper surface of the soffit 14, the lower surface resting on supports 7 and 8.

In Figure 3 there is shown a plastics soffit panel 15 engaged in the upper groove 6. Along its edge the soffit panel 15 has an interlocking region which in use can be used to interlock the panel 15 with a like panel to provide a soffit of appropriate size. The interlocking region includes an upwardly directed portion 16 and a return portion 17. The soffit panel 15 rests flat on the upper surface of flange 3 and the free end of the portion 17 interlocks with the barb 10 of flange 4 which is deflected resiliently away from flange 3 to a certain extent.

Figure 4 shows an installation in which a soffit is inclined upwardly away from the fascia panel 1. The soffit 18 is of sheet material with a groove 19. It is received in the groove 5, resting on support 8 which acts as a fulcrum. The barb 9 is received in the groove 19 with the downwardly and outwardly facing flat part 20 of the barb engaging the bottom of the groove 19

in the soffit. The angle of this part 20 of the barb 9 can thus set the angle of the soffit. It is possible to have a tilted soffit with a fascia having only support 7, which will act as the fulcrum.

In Figure 5 there is shown a soffit 21 engaged in groove 5 in a manner identical to the arrangement of Figure 1. However flange 4 is also used, to assist in securing the fascia panel 1 to a conventional wooden fascia board 22 which will generally be part of an existing roof structure which is being modified. Thus a metal or plastic clip 23 is provided. The clip can be a short item, with a number being used, or can be a long strip. This has a groove 24 and fits over flange 4. A projection 25 cooperates with the barb 10 to locate the clip 23. A nail 26 or like fastener secures the clip 23 to the board 22. A further projection 27 is provided on the clip 23 opposite projection 25 but this is optional and need not be provided. At the upper end of the fascia panel 1 a clip 23' identical to clip 23 is used to secure this upper end to the wooden board, the clip 23' itself being attached to the board by means of a nail 28. The upper end of the fascia panel 1 is gripped between projections 25 and 27, the clip being suitably resilient. In an alternative construction the fascia panel 1 could itself have an inwardly directed flange at its upper edge which could be secured to the top of the board 22. This flange could have apertures to receive fixing nails or the like.

In Figure 6 there is shown a modified type of system. Thus a fascia panel 29 is provided which whilst in most respects is identical to that shown in Figure 5, has the third flange 4 missing. The fascia panel 29 is attached to a wooden board 30, this being achieved at its upper end by means of clip 23' as in the arrangement of Figure 5.

To the lower end of board 30 is attached a soffit 31 of rigid sheet material by means of a nail or like fastener 32. A further clip 23'', identical to clips 23' and 23 (from the arrangement of Figure 5), is then secured to the soffit 31 and board 30 by means of a further nail or like fastener 33. The lower end of the fascia panel is then secured to the board/soffit construction by means of flange 3 engaging in the groove 24 of clip 23''. The barb 9 of flange 3 interlocks with the projection 25 of clip 23''.

Fig. 7 shows an arrangement similar to Figure 6, once again for adaptation of an existing wooden fascia board system. In this case, the fascia board 34 is connected to clip 23'' directly by nail 33, without the intervention of a soffit. Instead, the board 34 is provided with a groove 35 extending along its length which receives a conventional soffit sheet 36 in a known manner.

Thus it can be seen that the fascia panel designs disclosed herein are capable of being used in many contexts with many different types of soffits and constructions.

Soffit systems for use with the arrangements dis-

closed herein could be as disclosed in the Applicant's co-pending application EP-A-0361713 of even date entitled "soffit system for a building".

Claims

1. An extruded fascia panel (1) for use at the eaves of a roof, having adjacent its lower edge a first longitudinally extending flange (2), a second longitudinally extending flange (3) spaced upwardly from the first so as to define a first groove (5) for receiving the edge of a soffit (12), and characterised by a third longitudinally extending flange (4) spaced upwardly from the second so as to define a second groove (6) for receiving the edge of a soffit, the spacing between the first and second flanges at least in part being substantially different from the spacing between the second and third flanges, at least one of the first and second flanges being resilient to permit variations of said spacing between them, at least one of the second and third flanges being resilient to permit variation of said spacing between them, and each of said first and second grooves being provided with interlocking means (9, 10) for engagement with a soffit if desired.

2. An extruded fascia panel according to claim 1, wherein the interlocking means (9, 10) is in the form of a downwardly extending projection extending adjacent the free edge of each of the second and third flanges (3, 4).

3. An extruded fascia panel according to claim 1 or claim 2, wherein one of the grooves (5) has its minimum spacing defined by a projection (7, 8) extending from one of the respective flanges (2) towards the other.

4. An extruded fascia panel according to claim 3, wherein the projection (7, 8) is positioned on one flange (2) opposite an interlocking means projection (9) on the other.

Patentansprüche

1. Stranggepreßte Stimbrettplatte (1) zur Verwendung an Dachrinnen, -traufen oder -vorsprüngen, die in der Nähe ihres unteren Randes einen ersten sich in Längsrichtung erstreckenden Flansch (2), einen zweiten sich in Längsrichtung erstreckenden Flansch (3), der nach oben hin vom ersten in einem Abstand angeordnet ist, um so eine erste Nut (5) zu bilden, um den Rand einer Schalung (12) aufzunehmen, und die gekennzeichnet ist durch einen dritten sich in Längsrichtung erstreckenden Flansch (4), der nach oben vom zweiten einen Abstand aufweist, so daß er eine zweite Nut (6) zum Aufnehmen des Randes einer Schalung bildet, wobei der Abstand zwischen den ersten und zweiten Flanschen wenigstens teilweise im wesentlichen unterschiedlich ist vom

Abstand zwischen den zweiten und dritten Flanschen, wobei wenigstens einer der ersten und zweiten Flansche elastisch ist, um Veränderungen des Abstands zwischen ihnen zu ermöglichen, wobei wenigstens einer der zweiten und dritten Flansche nachgiebig ist, um Änderung des Abstands zwischen ihnen zu ermöglichen, und wobei jede der ersten und zweiten Nuten mit Eingriffsmitteln (9, 10) zum Eingreifen mit einer Schalung falls gewünscht versehen sind.

2. Stranggepreßte Stimbrettplatte nach Anspruch 1, bei der die Eingriffsmittel (9, 10) die Form eines sich nach unten erstreckenden Vorsprunges haben, der sich in der Nähe der freien Kante jedes der zweiten und dritten Flansche (3, 4) erstreckt.

3. Stranggepreßte Stimbrettplatte nach Anspruch 1 oder 2, bei der bei einer der Nuten (5) der kleinste Abstand durch einen Vorsprung (7, 8) definiert ist, der sich von einem der entsprechenden Flansche (2) zum anderen erstreckt.

4. Stranggepreßte Stimbrettplatte nach Anspruch 3, bei der der Vorsprung (7, 8) auf einem Flansch (2) gegenüber einem Eingriffsmittelvorsprung (9) auf dem anderen angeordnet ist.

Revendications

1. Panneau extrudé de corniche (1) destiné à être utilisé à une avancée de toit, ayant au voisinage de son bord inférieur une première aile (2) s'étendant longitudinalement, une seconde aile (3) s'étendant longitudinalement, espacée de la première vers le haut de façon à définir une première rainure (5) destinée à recevoir le bord d'une bordure (12), et caractérisé par une troisième aile (4) s'étendant longitudinalement espacée de la seconde vers le haut de façon à définir une seconde rainure (6) pour recevoir le bord d'une bordure, l'espacement entre les première et seconde ailes étant, au moins partiellement, sensiblement différent de l'espacement entre les seconde et troisième ailes, au moins une des première et seconde ailes étant élastique pour permettre des variations dudit espacement entre-elle, au moins une des seconde et troisième ailes étant élastique pour permettre des variations dudit espacement entre-elle, et chacune des première et seconde rainures étant munie de moyens d'accrochage (9, 10) pour être engagée en prise, si on le souhaite, avec une bordure.

2. Panneau extrudé de corniche selon la revendication 1, dans lequel les moyens d'accrochage (9, 10) ont la forme d'une saillie, s'étendant vers le bas, qui s'étend au voisinage du bord libre de chacune des seconde et troisième ailes (3, 4).

3. Panneau extrudé de corniche selon la revendication 1 ou 2, dans lequel une des rainures (5) a son espacement minimum délimité par une saillie (7, 8) s'étendant d'une des ailes (2) respectives vers l'autre.

4. Panneau extrudé de corniche selon la reven-

dication 3, dans lequel la saillie (7, 8) est disposée sur une aile (2) à l'opposé d'une saillie (9) des moyens d'accrochage de l'autre.

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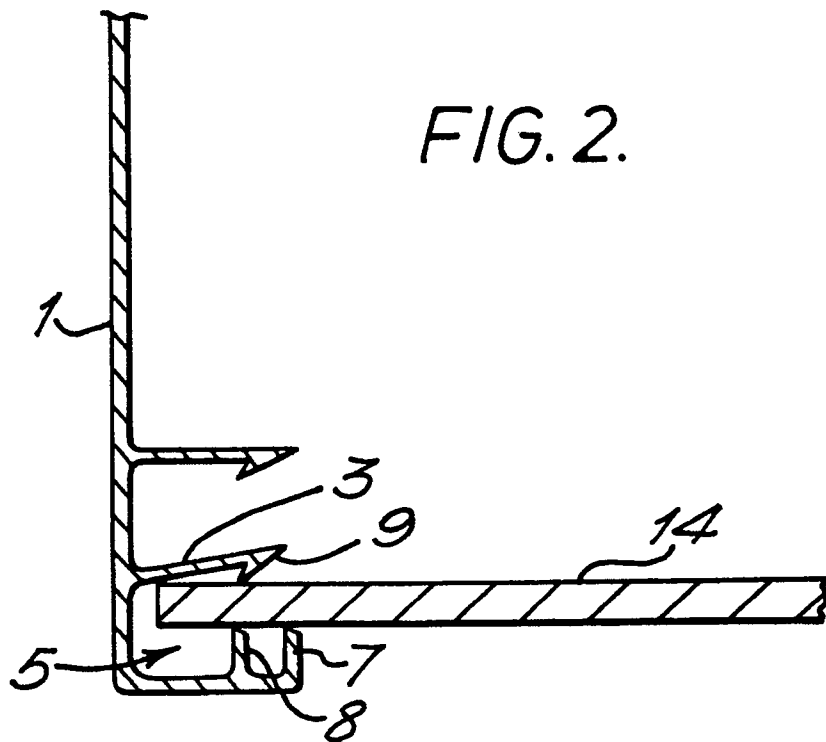
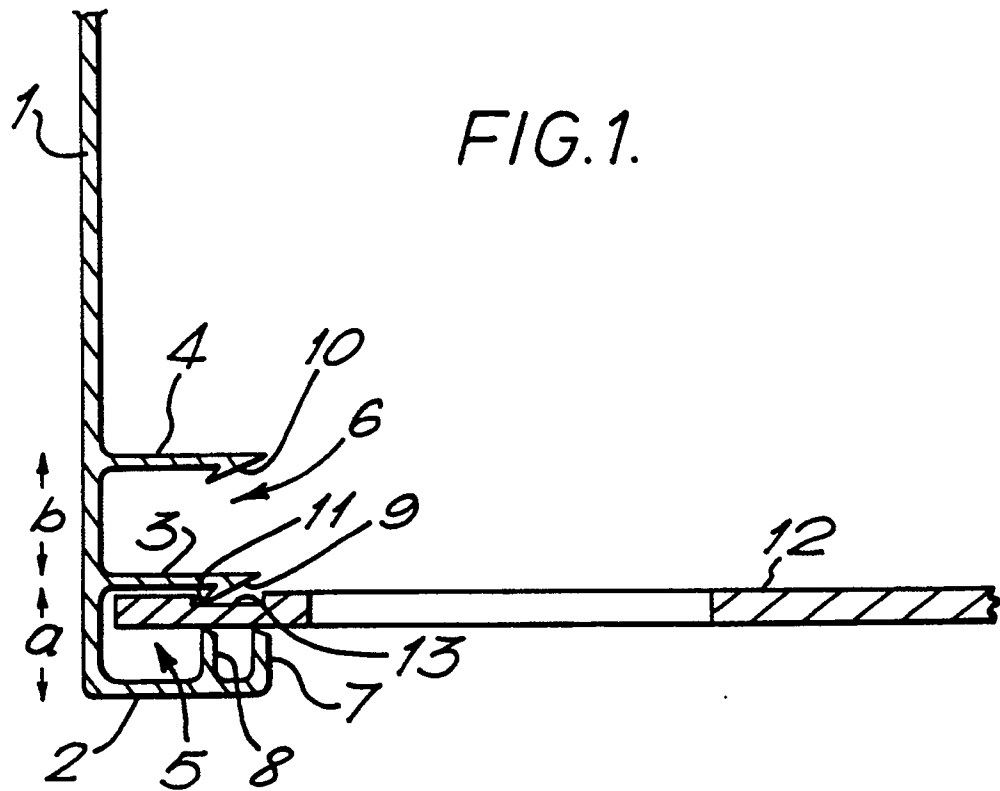


FIG. 3.

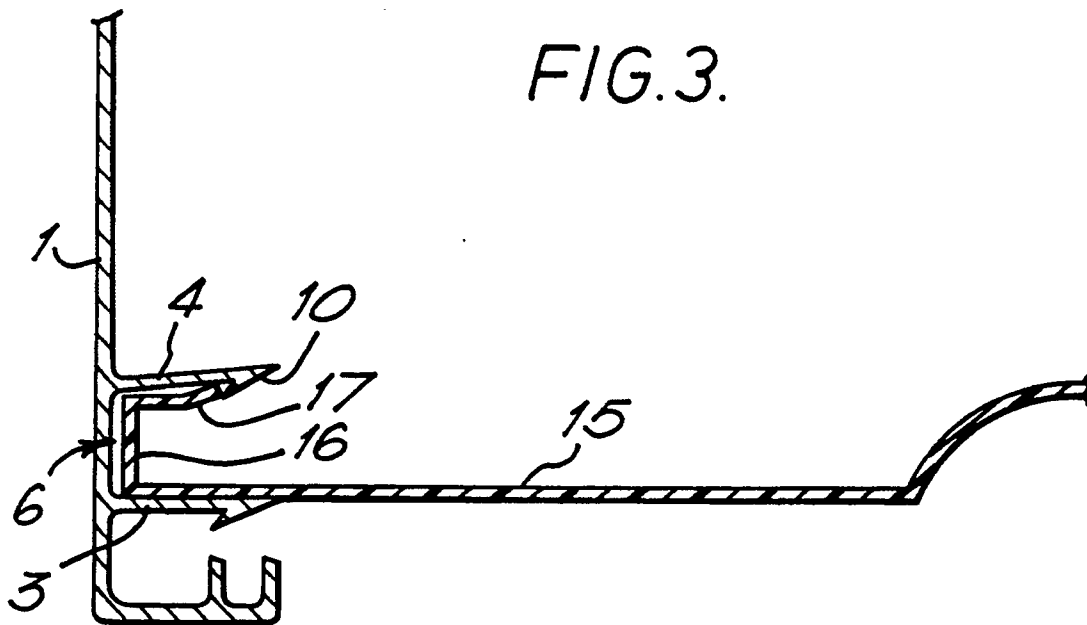


FIG. 4.

