Dec. 10, 1968 M. A. ANDERSEN 3,415,019

INTEGRAL SOFFIT AND FASCIA UNIT OF SYNTHETIC PLASTIC

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Fig. 1

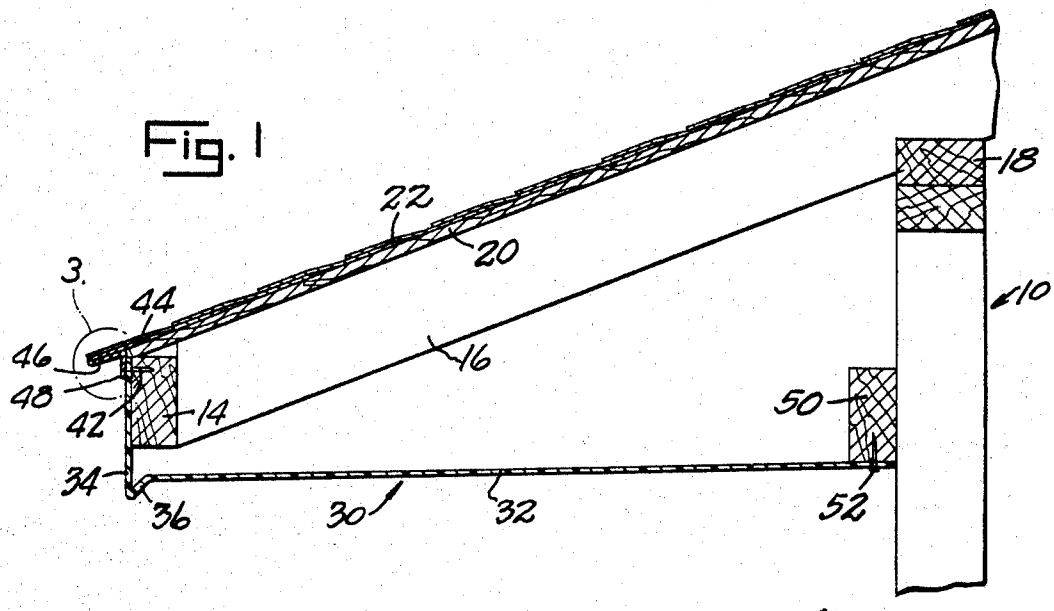


Fig. 2

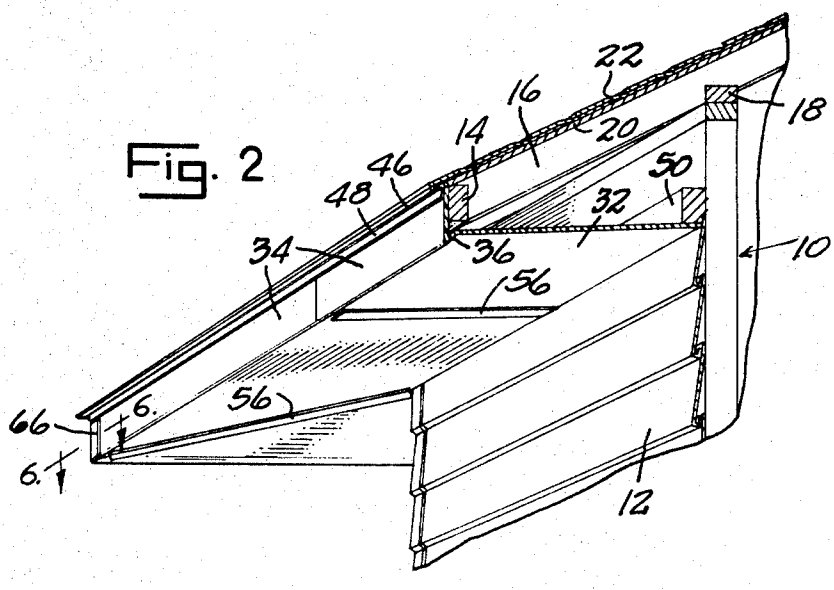
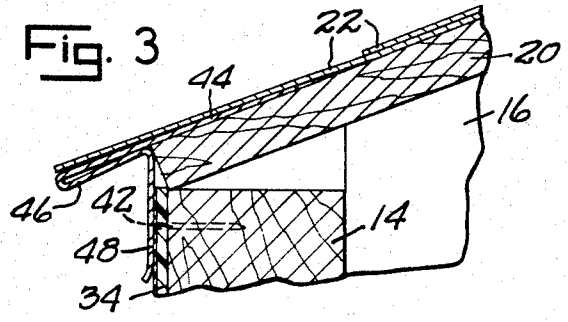


Fig. 3



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Fig. 4

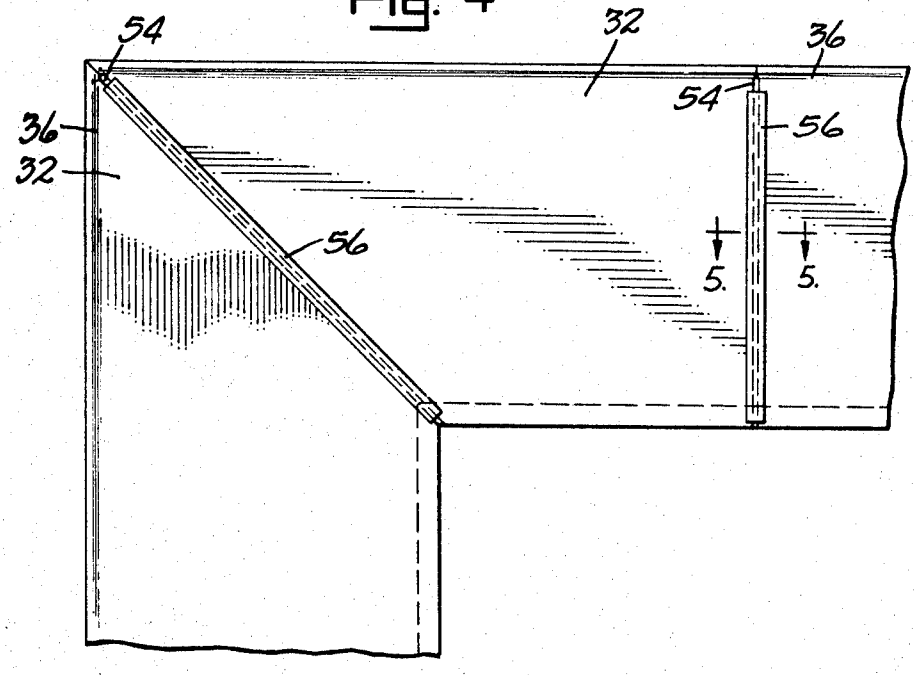


Fig. 5

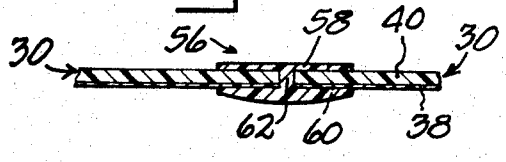
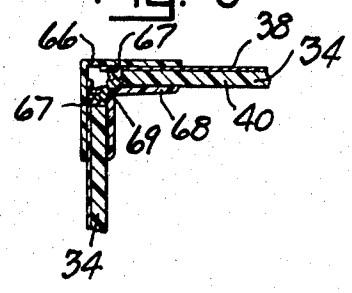


Fig. 6



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INTEGRAL SOFFIT AND FASCIA UNIT OF SYNTHETIC PLASTIC

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5 Claims. (Cl. 52—94)

ABSTRACT OF THE DISCLOSURE

A soffit and fascia unit formed of rigid synthetic resin with an integral trough between the soffit and fascia portions.

This invention relates to improvements in building construction members, and particularly to a combined soffit and fascia unit.

The application of soffit and fascia members to a building, such as a residence which has a marginal portion of its roof over-hanging or projecting laterally beyond the side walls, requires time-consuming construction practices and operations, and also requires multiple parts which must be handled individually. It is common practice to use plywood panels for soffit construction, but substantial disadvantages accrue therefrom because of the need to paint the same frequently, and the requirement for use of separate fascia members in conjunction therewith and with other parts which render the soffit and fascia construction time-consuming and expensive. Efforts have been made to utilize metal panels at soffits, the same being provided with a baked enamel finish, but these have been objectionable for various reasons, including high cost of fabrication and assembly, the exposure of nail heads which tend to rust, the tendency of the parts to bend or bow incident to expansion and contraction upon changes of temperature and need to protect inner faces to avoid rusting by condensation, and other disadvantages. Some efforts have been made to use plastic panels as soffits, but these efforts have entailed difficulties because of lack of panel rigidity, difficulty in joining adjacent panels, difficulty in providing vents and the like.

It is the object of the present invention to overcome these disadvantages by means of a novel soffit and fascia unit which can be applied easily and quickly, which produces a trim and weather-tight construction, which is attractive in appearance, which can provide venting as required, and which is subject to minimum dimensional variations with variations of temperature.

A further object is to provide a soffit and fascia unit which has a permanent weather-proof attractive surface, which is light in weight, which is easily installed, which is rigid, and which can be cut to desired size and shape easily and quickly.

A further object is to provide a soffit and fascia unit which can be assembled readily with like coplanar units by means of joint members which are easily applied to span the gaps between adjacent panels, or selected portions thereof, and which can provide gaps at selected points between panels to serve as vents.

A further object is to provide a novel fascia and soffit unit of such construction and configuration as to present an attractive appearance and to direct condensate collected therein to a low level point spaced from the building wall for discharge thereof.

Further objects will be apparent from the following specification.

In the drawings:

FIG. 1 is a vertical sectional view illustrating the soffit and fascia unit installed.

FIG. 2 is a fragmentary perspective view illustrating the installation of the fascia and soffit unit.

FIG. 3 is an enlarged detail sectional view of the portion of the construction in the area encircled at 3 in FIG. 1.

FIG. 4 is a bottom plan view of a soffit at a corner of a building.

FIG. 5 is an enlarged detail sectional view taken on line 5—5 of FIG. 4.

FIG. 6 is an enlarged detail sectional view taken on line 6—6 of FIG. 2.

Referring to the drawings, the numeral **10** designates a building side wall of any suitable character to which exposed siding or facing material **12** of any suitable type is applied to a level approximating the level of the lower part of an eave plate or subfascia member **14** connecting the ends of roof rafters **16** which are supported by plate **18** at the upper end of the wall structure. The rafters form part of a roof, and carry roof sheathing **20** which supports roofing material or shingles **22**.

My improved soffit and fascia unit consists of a prefabricated, unitary, synthetic resin member **30** having a substantially flat soffit portion **32**, a substantially flat fascia portion **34** and an angular or inclined portion **36** joining the portions **30** and **32**. The member may be of laminated or single thickness construction, and may be extruded or molded. The fascia portion or panel **34** extends in a plane substantially at right angles to the plane of the soffit portion or panel **32**. The inclined part **36** extends at an acute angle upwardly from the lower margin of the fascia portion to form a through below the level of the outer margin of the soffit portion **32**.

When laminated, member **30** preferably includes an outer lamination **38** of a thin sheet of polyvinyl chloride or any other suitable synthetic resin material having the desired properties of rigidity, smooth surface finish, permanent coloration, and weather and sun resistance. Thus, the lamination **38** may be made of the same types of material which are commercially available as building siding material. An inner lamination **40** preferably constitutes a mat of synthetic resin in which fiberglass is imbedded for reinforcement. The mat resin will preferably be a thermo-setting resin having the properties of rigidity, low cost, weather resistance, and capability of adhesion to the outer lamination **38**. If desired for rigidity, ribs (not shown) may be molded in the soffit at spaced intervals extending transversely of the soffit. In the preferred form, the laminated structure will be of a thickness in the order of ⅛ inch to 5/16 inch, although the thickness may be less or greater, if desired. Thus, in some instances, it may be desired to increase the thickness of the inner lamination **40** at the trough portion above portion **36** for the purpose of strengthening the unit. The fascia portion will preferably be of a width in the order of 4½ inches to 8 inches, and the overall width of the unit, measured along the width of the soffit portion, may be from 8 inches to 24 inches or more. The material will preferably be made in standard lengths, such as 6, 8 or 12 feet. It will be understood, however, that the dimensions above mentioned are illustrative and are not intended to be limiting inasmuch as the unit can be made in a wide range of dimensions.

The unit is installed by securing the fascia portion **34** to the edge of the roof structure, as at the ends of rafters **16** or at eave plate **14**, by securing means such as nails or staples **42**. The roof structure will preferably include a conventional metal drip panel **44** which underlies the lower margin of the roofing **22** and is return bent at **46** and has a downturned trim flange **48**. The flange **48** overlaps the upper margin of the fascia portion **34**. The fascia panel **34** is preferably so positioned that it will ex-

tend below the level of the eave plate **14**. A cleat, plate or stud **50** is secured to the side wall **10** above the inner margin of the soffit panel **32**, and the soffit panel is secured to this cleat or stud **50** by means of nails or staples **52**, with its inner edge preferably adjacent to or in contact with the siding **12**. The parts are so arranged that the soffit panel **32** will incline downwardly and outwardly toward the trough part **36** at a slight angle, so that any condensate which collects thereon will flow away from building wall **10** and toward trough **36**.

The members **30** are mounted end-to-end and are preferably spaced apart at **54**, at the soffit portions **32** thereof. They may be similarly spaced at the fascia portions **30**, or the edges of the fascia portions **30** may abut as shown in FIG. 2. Joint strips **56**, which may be formed of synthetic resin or of aluminum or other metal having an enameled finish, span the gaps between adjacent panels to interconnect the members **30**. The joint strips are preferably of H shape in cross-section, having an outer leg portion **60** of desired cross-section shape, such as a crowned shape as illustrated in FIG. 5. Strips **56** also include an inner leg portion **58**, and a central web portion **62** extending lengthwise of the strip centrally between the side edges of the legs **58** and **60**. The strips **56** provide opposed grooves each of a width substantially equal to the thickness of the portion **32** or **34** of the member **30** which fits therein. Where the joint strips are applied only to soffit panels **32**, as seen at FIG. 4, the strips terminate at or adjacent to the trough-forming part **36** so that gaps **54** occur between panels at the trough to provide vents and also provide means through which condensate collected at the trough may drain. The joint strips **56** serve as means to insure register of adjacent panels at their ends and provide a decorative but inconspicuous concealment for the joints. Where the joint strips extend along the entire joint between adjacent members **30**, the inner leg portion **60** and web **62** will preferably be cut away adjacent to the part **36** and the bends adjacent thereto, to facilitate the bending of the strip to follow the approximate contour of the members **30** while also providing vent clearance thereat.

The soffit panels **32** may be mitered at building corners, as shown in FIGS. 2 and 6. The mitering may provide for vent openings at **54** and for contact and abutment of angularly extending fascia portions at the corner. An alternative construction at a building corner is illustrated in FIG. 6, wherein trim joint strips **64** are utilized to interconnect and to span the gap between spaced edges of angularly disposed fascia portions **34**. In the construction shown in FIG. 6, an outer angular or L-shaped trim part **66** engages the outer faces of the adjacent angularly disposed fascia panels **34** at the margins thereof, and an inner L-shaped trim part **68** engages the margins of the inner faces of the fascia parts **34**. The outer trim part **66** has a pair of longitudinal central inwardly projecting hook flanges **67** adapted to be interposed between the adjacent edges of the fascia panels **34**. Longitudinal outwardly projecting hook flanges **69** project from the central portion of the inner L-shaped part **68** and are complementary to and interlock with the hook flanges **67**. By this arrangement the inner trim part **68** may be applied at the corner of the building as the fascia strips are secured in place and thereafter the outer trim part **66** may be applied to place by effecting a snap interlock of the hook flanges **67** and **69**. This arrangement effectively holds the parts of the corner trim strips **64** assembled and in operative position to present a corner structure of attractive appearance, though not designed to attract attention. The trim joint strips **64** are preferably formed of synthetic resin having sufficient resilience to accommodate the snap interlock of hook flanges **67**, **69**.

If desired, corner pieces (not shown) may be formed with fascia portions projecting at two sides of a rectangular soffit portion, so as to eliminate the need to miter units at a building corner. Also, a downturned flange may be formed at the free edge of the soffit to abut the wall and accommodate and receive securing means.

It will be apparent that the use of the described soffit and fascia unit provides an attractive trim for a building which can be installed quickly and at low cost, which is weather resistant, which does not need frequent painting, and which provides venting and drainage of condensate.

While the preferred embodiment of the invention has been illustrated and described, it will be understood that changes in the construction may be made within the scope of the appended claims without departing from the spirit of the invention.

I claim:

1. A soffit and fascia unit for a building having a roof projecting laterally beyond a side wall, comprising a rigid synthetic resin member having a fascia portion adapted to be secured to the edge of the roof, a soffit portion underlying the projecting portion of said roof and adapted to be secured to the side wall, and an intermediate portion connecting said soffit and fascia portion and extending at an angle thereto so as to define a V-shaped part in combination with said fascia portion, said V-shaped part projecting below said soffit portion.

2. A soffit and fascia unit as defined in claim **1**, wherein said member is laminated and has an outer thin lamination having a permanent surface finish and an inner lamination reinforced with imbedded glass fibers.

3. A soffit and fascia system for a building having a roof structure projecting laterally from a side wall and including roofing and a drip panel underlying the outer margin of said roofing had having a downwardly projecting part, said side wall mounting a horizontal cleat at approximately the level of the outer edge of said roof structure, the improvement comprising an integral synthetic resin unit having a fascia portion and a soffit portion, said fascia portion being secured to the outer edge of said roof structure with its upper margin underlying said downwardly projecting drip panel part, said soffit portion being secured to the bottom of said cleat and inclined downwardly and outwardly toward said fascia portion.

4. A soffit and fascia system as defined in claim **3**, wherein a portion of said unit between said soffit and fascia portions extends angularly downwardly and outwardly from said soffit portion to define a trough in conjunction with said fascia portion.

5. A soffit and fascia system as defined in claim **3**, wherein a plurality of units are assembled end-to-end with spacing between the soffit portions of adjacent units, and a joint strip is interposed between and embraces soffit portions of adjacent units, said system having a vent opening between adjacent units at the low level outer margins of said soffit portions.

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U.S. Cl. X.R.

52—309, 288, 464