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L. H. MATTES  
BUILDING SIDING UNIT  
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3,485,004

Fig. 1

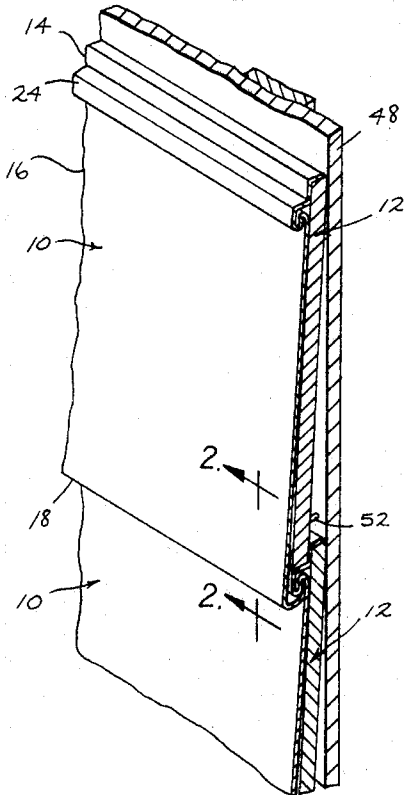


Fig. 2

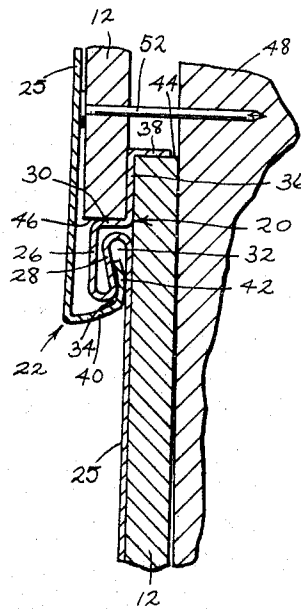
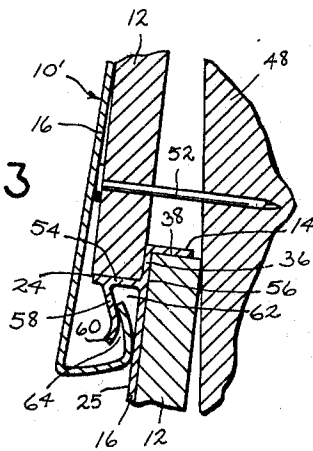


Fig. 3



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## BUILDING SIDING UNIT

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3 Claims

### ABSTRACT OF THE DISCLOSURE

A siding unit for a building comprising an outer panel and a backing board. The outer panel includes an upper marginal portion having a rearwardly extending lip, a face portion depending from said upper marginal portion and having a forwardly projecting retainer part adjacent the upper margin thereof, and a butt portion having a web extending rearwardly from the lower margin of the face portion and terminating in an upturned lip. The backing board is positioned against the back of the outer panel just under the rearwardly extending lip of the marginal portion with its lower margin resting upon the retainer part of the face portion and overlapping the marginal portion of the siding unit in the lower adjacent course. The backing board is anchored to the building by means of a nail which is driven through the backing board into the building adjacently above the marginal portion of the lower adjacent overlapped siding unit.

### SUMMARY OF THE INVENTION

This invention relates to a siding unit for a building or similar structure.

The siding unit of this invention comprises an outer panel and a backing board. The outer panel includes an upper marginal portion having a rearwardly extending lip, a face portion depending from said marginal portion and having a forwardly projecting retainer part at the upper margin thereof, and a butt portion having a web which extends rearwardly from the lower margin of said face portion and which terminates in an upturned lip.

The retainer part of the face portion preferably has an inverted channel-shaped configuration and is adapted to receive in slidable interlocking cooperation the upturned lip of the butt portion of an overlapping siding unit in the upper adjacent course. The backing board is positioned against the back of the panel face portion and has its upper margin preferably abutting the underside of the lip of the panel upper marginal portion. The lower margin of the backing board is adapted to overlie the upper marginal portion and rest upon the retainer part of the face portion of the siding unit in the lower adjacent course. A nail or similar securement means is driven through the backing board at the lower margin thereof adjacently above the upper marginal portion of said lower adjacent siding unit and into the building.

In the siding unit of this invention, the outer panel of the unit is not nailed to the building but instead is hung on its backing board which is nailed at its lower margin to the building structure. Each backing board when nailed to the building structure serves to hold the outer panel of the overlapped siding unit in the lower adjacent course against its backing board. The interlocked outer panels of adjacent siding units of this invention are not directly nailed or similarly secured to the building and are therefore free to expand or contract during use without warping or deforming.

Accordingly, it is an object of this invention to provide a siding unit for a building or similar structure having a backing board which is secured to the building and which serves to position parts of the overlapped siding unit in the lower adjacent course against the building.

It is another object of this invention to provide a building siding unit comprising an outer panel formed from plastic sheet material and a backing board in which only the backing board of each siding unit is fixedly secured to the building structure.

It is a further object of this invention to provide a building siding unit having an outer panel which is mounted to a backing board and which is shiftable relative to the backing board and to adjacent siding parts so as to permit expansion and contraction of the outer panel without warping or deforming thereof.

It is a further object of this invention to provide a building siding unit which is of economical construction and which can be rapidly attached to a building or similar structure.

It is a further object of this invention to provide a method for attaching siding units to a building structure in which only the backing boards of the units are nailed to the structure and the outer panels of the units are slidable relative to their respective backing boards and each other.

Further objects of this invention will become apparent upon a reading of the invention's description.

### BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a fragmentary perspective view of one embodiment of the siding unit of this invention shown attached to a building structure.

FIG. 2 is an enlarged detail sectional view taken along line 2—2 of FIG. 1.

FIG. 3 is an enlarged detail sectional view of the siding unit of FIG. 2 shown in modified form.

### DESCRIPTION OF THE PREFERRED EMBODIMENTS

The preferred embodiments illustrated are not intended to be exhaustive or to limit the invention to the precise forms disclosed. They are chosen and described in order to best explain the principles of the invention and its application and practical use to thereby enable others skilled in the art to best utilize the invention.

One embodiment of this invention is illustrated in FIGS. 1 and 2 and comprises an outer panel 10 and a backing board 12. Outer panel 10 of the siding unit may be formed from flat plastic or aluminum sheet blanks which are shaped by a series of progressive bending or forming dies. Outer panel 10 includes an upper marginal portion 14, a face portion 16 depending from marginal portion 14 and a butt portion 18 extending from the lower margin of face portion 16.

Face portion 16 of outer panel 10 has an upper margin 20 and a substantially parallel lower margin 22. Face portion 16 preferably has a slightly concavo-convex face 25 and includes an integral retainer part 24 which extends along upper margin 20 thereof. Retainer part 24 preferably comprises a downturned forwardly projecting double fold extension having an outer run 26 and a spaced inner run 28. A substantially horizontal flange 30 extends rearwardly from the uppermost edge of outer run 26. Inner run 28 of retainer part 24 defines an inverted channel 32 with the face 25 of face portion 16. Channel 32 preferably has a narrow or restricted lower opening 34.

The upper marginal portion 14 of outer panel 10 includes an upwardly extending flange 36 having its lower edge joining the rear edge of flange 30 of retainer part 24 of face portion 16. Flange 36 and the upper margin of face 25 of face portion 16 are preferably substantially coplanar. Flange 36 of upper marginal portion 14 terminates in a rearwardly extending substantially horizontal lip 38.

Butt portion 18 of outer panel 10 includes a web 40 which extends rearwardly from lower margin 22 of face

portion 16 and which terminates in an upturned and preferably forwardly inclined lip 42. Lip 42 of the butt portion 18 is adapted to be inserted upwardly into narrow opening 34 of the retainer part channel 32 of an overlapped siding unit in the adjacent lower siding course.

Backing board 122 is preferably formed of rigid material such as insulative fiberboard or honeycombed lightweight plastic and has an upper margin 44 and a substantially parallel lower margin 46. Backing board 12 is positioned against the back side of face portion 16 with its lower margin 46 resting upon flange 30 just forwardly of flange 36 of the siding unit in the adjacent lower course and is secured at its lower margin 46 by nails 52 or similar securement means which are driven through the backing board and into inner building siding 48 preferably adjacently above lip 38 of the lower adjacent siding unit. The upper margin 44 of backing board 12 extends to and preferably abuts the lower surface of lip 38 at the upper marginal portion 14 of the overlying outer panel 10.

To attach the siding unit heretofore described to inner building siding 48, a backing board 12 is first positioned against building siding 48 with its lower margin 46 resting upon flange 30 of the siding unit in the lower adjacent course. Nails 52 are then driven through backing board 12 at its lower margin and into building siding 48 just above outer panel 10 of the lower adjacent siding unit. This causes the lower margin of backing board 12 to engage flange 36 of the lower siding unit and thereby hold the upper marginal portion 14 of the lower siding unit against an adjacent backing board. The butt portion 18 of an outer panel 10 is then positioned against the outer panel of the siding unit in the lower adjacent course, and slid upwardly causing its lip 42 to be received within channel 32 of retainer part 24 of the lower adjacent siding unit and slideably interlocked therewith. With butt portion 18 of outer panel 10 so interlocked with the lower adjacent siding unit, the upper marginal portion 14 of outer panel 10 is swung inwardly until its lip 38 is positioned over the upper margin 44 of the backing board 12. Outer panel 10 can now be released as it will remain positioned against backing board 12. The heretofore described assembly procedure is repeated for another siding unit beginning with another backing board 12 being positioned against building siding 48 overlapping the upper margin of outer panel 10.

Another embodiment of this invention is illustrated in FIG. 3. Outer panel 10' is preferably formed from extruded plastic or aluminum and is of similar construction as outer panel 10 with the exception of retainer part 24 which includes a substantially horizontal flange 54 which extends forwardly from the lower edge 56 of flange 36 of the upper marginal portion 14 of the outer panel. A web part 58 projects downwardly and rearwardly from flange 54 and terminates in downwardly and forwardly extending lip 60 which is spaced from face 25 of face portion 16. Flange 54 and lip 60 of retainer part 24 cooperate with face 25 of face portion 16 to define an inverted channel 62 having a narrow or restricted lower opening 64. This embodiment of the siding unit includes a backing board 12 and is attached to inner building siding 48 in the same manner as the siding unit of the first described embodiment of this invention is attached to the building siding.

It can be seen from the above description that only the backing boards of the siding units of this invention are nailed to the building structure. This permits the outer panels of the siding units which are slidably interlocked together to expand or contract during use without buckling or distortion.

What I claim is:

1. A siding unit for a building or a like structure comprising an outer panel and a backing board, said outer

panel including spaced upper marginal and butt portions and an interconnecting face portion, said upper marginal portion including a substantially horizontal lip extending rearwardly of the plane of said face portion, said face portion having substantially parallel upper and lower margins and including a retainer part extending along the upper margin thereof, said retainer part including a substantially horizontal flange part extending forwardly of and below the lip of said upper marginal portion and the extension thereon generally paralleling said face portion extended toward said butt portion, said butt portion including a web extending rearwardly from the lower margin of said face portion and an upturned lip extending from the rear margin of said web, said retainer part being adapted to receive in slidably interlocking cooperation the upturned lip of the butt portion of an overlapping siding unit in the upper adjacent siding course, said backing board positioned against the back of said face portion and having an upper margin underlying the lip of said upper marginal portion and a lower margin adapted to overlie the upper marginal portion and abut the flange part of the retainer part of an overlapped siding unit in the lower adjacent siding course, the lower margin of said backing panel being adapted to receive a securement means adjacently above the upper marginal portion of said overlapped siding unit, said securement means serving to attach said backing board to said building and to hold the upper marginal portion of said overlapped siding unit against an adjacent backing board.

2. A method of attaching to a building or like structure a siding unit, which comprises an outer panel having an upper marginal portion which has a rearwardly extending lip, a face portion depending from said upper marginal portion and having a forwardly projecting retainer part at the upper margin thereof, and a butt portion having a web projecting rearwardly from the lower margin of said face portion and terminating in an upturned lip, and a backing board having substantially parallel upper and lower margins, comprising the steps:

- (a) positioning said backing board against said building with its lower margin resting upon the retainer part of the face portion and overlapping the upper marginal portion of the outer panel of a siding unit in the lower adjacent siding course;
- (b) securing said backing board at its lower margin to said building; and
- (c) slidably inserting the upturned lip at the butt portion of said first mentioned outer panel upwardly into the retainer part of the outer panel of said siding unit in the lower adjacent siding course and positioning said first mentioned outer panel against said backing board with the rearwardly extending lip at the upper marginal portion of said last mentioned outer panel overlapping the upper margin of said backing board.

3. The method of claim 2 wherein a securement member is driven through the lower margin of said backing board at a location adjacently above the outer panel of said siding unit in the lower adjacent siding course and anchored in said building.

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