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2,784,687

SHEET-METAL GUTTER BOARD

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1 Claim. (Cl. 108—28)

This invention relates to a building construction and, in particular, to certain features in the eaves of a building with a pitched roof, having side and end walls and a ceiling composed of prefabricated metal panels disposed side-by-side.

This is a division from my application Serial No. 247,439 filed September 20, 1951, for "Eave and Gable-End Construction for Panel-Type Building," now abandoned.

The object of the invention is to provide a gutter board for mounting under the eaves of a building of the type mentioned, which will constitute a closure for the space between the side walls and roof and serve as an attractive finish as well as a support for a gutter.

A complete understanding of the invention may be obtained from the following detailed description and explanation which refer to the accompanying drawings illustrating the present preferred embodiment. In the drawings,

Figure 1 is a partial section through an eave of a building constructed in accordance with the invention;

Figure 2 is an elevation of the gutter board; and

Figure 3 is a transverse section therethrough taken along the plane of line III—III of Figure 2.

Referring now in detail to the drawings a plurality of panels 10 are disposed vertically, side-by-side, with splines or keys therebetween, to form the walls of a building. Each panel 10 comprises a frame including channel-section side rails 11 and top and bottom rails 12, having a metal sheet 13 on one side. A sheet of hardboard 14 or the like covers the other side and the interior is filled with thermal insulation 15. Ceiling panels 16 disposed horizontally, span the wall panels on opposite sides of the building, being aligned therewith. The ceiling panels are composed of a frame including Z-section side rails 17 and channel-section end rails 18, covered on the lower side by a metal sheet 13a. A filling of thermal insulation 19 in the frame is covered by a sheet of hardboard 20.

The ceiling panels have bearing pieces in the form of channels 30 extending longitudinally therefrom at each corner. Each piece 30 is disposed with its flanges inwardly, the upper flange thereof engaging the upper flange of the side rail 17 and being secured thereto, and the web engaging that of the side rail. Thus when the ceiling panels are aligned with the wall panels, the projecting ends of pieces 30 fit closely against the webs of the side rails 11 of panels 10 so that the wall and ceiling panels may be connected by bolts 31 (see Figure 1). The projecting ends of pieces 30 have vertical slots 32 therein for mounting a gutter board as will now be explained.

Rafters 33 connected to the side rails 17 of the ceiling panels 16 by angle brackets 34, carry a roof deck 35.

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A gutter board 36 is disposed under the eave of the roof. It has an inclined upper edge portion 37 to which a flanged strip 38 is secured, forming a downwardly opening vertical groove 39. The portion of the strip 38 in contact with inclined portion 37 bears against the under surface of roof deck 35. The lower edge of the board 36 is flanged inwardly as at 40 but terminates short of the outer sheet of panels 10. A spacer strip 41 of channel section extends along the board adjacent its lower edge and has a bottom flange 41a and turned-up flange 41b which abuts the panel sheet flatwise. Vent holes 41c are spaced along the bottom flange.

Tongues 42 are spaced along the inner face of board 36 and extend longitudinally thereof. The tongues are secured to the board at one end as by spot-welding and are displaced laterally thereof at the other end so as to enter slots 32 in bearing pieces 30. The board may be installed by placing it against the ends of these pieces with the tongues at one side of the latter, respectively, and pushing it horizontally until the tongues enter the slots whereby the board is supported on bearing pieces 30. The board may then be locked in place by any suitable means. It may, for example, be locked against horizontal movement by pilasters secured to the corners of the building, the pilasters extending upwardly past the end of the board. This gutter-board mounting means is claimed in the copending application of Milton Male, Serial No. 243,408, filed August 24, 1951.

A sheet metal gutter 43 having stays 44 spaced therealong and a bracket 45 extending along the bottom thereof, is applied to the gutter board by pushing the upper edge of the inner wall of the gutter into groove 39. The gutter is then secured by inserting screws 46 through bracket 45 into the gutter board.

Although I have disclosed herein but a preferred embodiment of my invention, I intend to cover as well any change or modification therein which may be made without departing from the spirit and scope of the invention.

I claim:

1. A building construction including side walls and a roof, a sloping sheet-metal gutter board mounted under the eave of the roof parallel to a side wall and spaced outwardly therefrom, spacer means carried by the lower edge of said board engaging the side wall, the upper edge of the board being bent at an oblique angle to the vertical and in flatwise engagement with the under surface of the eave, a downturned flange adjacent the upper edge of the board spaced outwardly of the plane of the latter and parallel thereto, forming with the adjacent portion of the gutter board a vertical groove opening downwardly, a sheet-metal gutter having an inner side wall in flatwise engagement with the gutter board, the upper edge of said inner side wall of the gutter extending upwardly into said groove, and a bracket secured to the gutter board supporting said gutter.

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