

Description

Background of the Invention

[0001] This invention relates to an improved spacer for mounting a deck ledger board to a building surface.

[0002] Ledger boards are those boards of a deck which make up the rim joist of a deck on the side which contacts a building. Ledger boards are typically secured to the building wall to give the deck more stability. Unfortunately this often causes the ledger board to be drawn so closely to the house or building side wall that it does not allow for water drainage between the ledger board and the building thus allowing moisture to be retained in this area and giving rise to premature deterioration of the building and deck components, such as wood rot.

[0003] The prior art exemplified by U.S. Patent Nos. 4,953,339 and 4,811,542 to Jewell, relating to "Deck Bracket and Method of Attaching a Deck to a Building" and U.S. Patent No. 5,201,156 to Newman, for "Water-Shedding Spacing Mount for Decks and Fences" shows techniques for securing a deck or the like to a building in such a way as to provide a space between the deck and the building with the intention to reduce moisture accumulation therebetween. Other previously suggested solutions involve the use of a flashing cap which is arranged to force water to run off and away from the building. Alternatively, it has been known to build a free-standing deck with no attachments to the house but this solution has the disadvantage that the structural stability provided by the house is lost.

Summary of the Invention

[0004] It is accordingly an object of the present invention to provide an improved spacer for mounting a deck ledger board to a building wall surface, which spacer is extremely simple in construction and inexpensive to manufacture as compared to the known prior art, which is easy to install while at the same time providing a very effective mounting arrangement which maintains a gap between the ledger board and the wall of the building, thus maintaining proper drainage and ventilation and enabling the building wall and ledger board to properly dry out.

[0005] A spacer for mounting a deck ledger board to a building surface in accordance with one aspect of the invention comprises: a spacer portion having a first panel adapted to engage a building surface and a second panel connected to and spaced from said first panel by a selected distance; and a ledger board retainer connected to said spacer portion and defining therewith a generally U-shaped region for receiving a ledger board therein in close juxtaposition to said spacer portion.

[0006] In one preferred embodiment of the invention said first and second panels of the spacer portion are generally parallel to one another and said ledger board retainer includes a third panel spaced from said second

panel to receive a ledger board between said second and third panels such that when fasteners are extended through all the said panels and the ledger board, the ledger board may be secured to the building surface in spaced relation thereto.

[0007] Still further according to a preferred embodiment said first and second panels are retained in their spaced relation by transverse panel portions located at opposing ends of said first and second panels, and said third panel is connected to said spacer portion by a further transverse panel portion to define said region for receiving a ledger board therein.

[0008] The spacer is preferably formed from a single strip of sheet metal having right angle bends at spaced intervals to form said first, second and third panels. Typically said first, second and third panels are generally planar.

[0009] The spacer in a preferred form has spaced aligned apertures extending therethrough to receive mounting fasteners through said ledger board retainer and said spacer portion.

[0010] Further in accordance with an embodiment of the invention there is provided, in combination, an elongated ledger board and a plurality of spacers as described above, said spacers being spaced apart along said board with said ledger board being disposed in the regions defined by the retainers of each of said spacers.

Brief Description of the Drawings

[0011] An embodiment of the present invention will now be described, presented by way of example only with reference to the accompanying drawings in which:

Fig. 1 is a perspective view of a deck ledger board spacer in accordance with an embodiment of the present invention.

Fig. 2 is a transverse section view showing the spacer mounting a deck ledger board and connected by fasteners to a wall of a building structure.

Fig. 3 is an elevation view of the ledger board spacer; and

Fig. 4 is a plan view thereof.

Description of a Preferred Embodiment

[0012] The deck ledger board spacer is designated generally by reference numeral 10 and includes a spacer portion 12 and a ledger board retainer 14 connected thereto. The spacer portion 12 includes a first panel 16 adapted, in use, to engage a building surface, and a second panel 18 spaced from the first panel by a selected distance. The ledger board retainer 14 is connected to the spacer portion 12 and defines therewith a generally U-shaped region 20 for receiving a ledger board 22 there-

in in close juxtaposition to the spacer portion 12.

[0013] It will be seen that the first and second panels 16 and 18 of the spacer portion 12 are generally planar and parallel to one another with the ledger board retainer 14 including a third planar panel 24 spaced from the second panel 18 by a distance sufficient to snugly receive the ledger board 22 between the second and third panels. It will be easily seen that the arrangement is such that when fasteners 26 are extended through all the panels 16, 18 and 24 and through the ledger board 22, the ledger board may be secured to the building surface, indicated by reference 28, in spaced relation thereto.

[0014] The spacer 10 as illustrated is preferably formed from a single strip of sheet metal having right angle bends therein at spaced intervals to form the first, second and third panels 16, 18 and 24, respectively. The first and second panels are retained in their spaced parallel relation by transverse panel portions 30 and 32 located at opposing ends of the first and second panels with the third panel 24 being connected to the spacer portion by a further transverse panel portion 34 to define the above-noted region for receiving the ledger board 22. It will also be noted that the lower transverse panel portion 32 has an in-turned lip 36 thereon which bears against the rear face of the second panel 18 thus ensuring the stability of the spacer portion 12 and maintaining the first and second panels 16 and 18 in parallelism under the forces exerted thereon during and following completion of the structure.

[0015] In the preferred embodiment as illustrated, the spacer is provided with spaced apart aligned apertures 38 and 40 which extend through the first, second and third panels thereby to facilitate the placement and installation of fasteners 26.

[0016] The sheet metal strip from which the spacer is formed should be of sufficiently heavy gauge as to withstand the forces thereon which are likely to be encountered during installation and normal usage of the deck which will, of course, be partially supported by the deck ledger board. The sheet metal surfaces will be suitably coated as to resist corrosion, e.g. as by galvanizing.

[0017] The spacer dimensions will vary, particularly the overall height of same, depending on the size of the ledger board to be installed. Typically, three sizes of ledger board spacer will be supplied in sizes to accept nominal 2 x 8 inch, 2 x 10 inch and 2 x 12 inch ledger boards.

[0018] The distance between the first and second panels 16 and 18 of the spacer portion 12 is not critical but in a typical embodiment it is selected to be about 12 mm. The distance between the second and third panels 18 and 24 is sufficient to receive a nominal 2 inch thick board, such distance being approximately 40 mm. The overall width dimension of the spacer again is not critical but in a typical embodiment its dimension is about 50 mm. As indicated previously, the single strip of sheet metal from which the spacer is formed is of sufficiently heavy gauge as to provide the required structural stability and to act together with fasteners 26 following installation to with-

stand the loadings applied by the overall deck structure.

[0019] In the course of installation, the spacers 10 are fitted to the ledger board 22 at the desired spaced apart intervals and the entire assembly is fitted against the building wall structure and the fasteners 26, preferably deck screws or lag bolts, are extended through the pre-formed apertures 38 and 40 and the ledger board 22 and thence into the building side wall structure thereby to securely mount the deck ledger board to the building surface. Following mounting of the ledger board 22, joist hangers (not shown) typically are secured to the ledger board in conventional fashion and the remainder of the deck installed following any desired and acceptable construction techniques.

[0020] It will be seen from the foregoing, that the embodiment described provides an extremely simple construction which can be fabricated at a low cost and which can be fitted and installed with a minimum of effort thus reducing construction costs. At the same time the spacer provides the desired spacing between the ledger board and the building side wall surface thus ensuring proper drainage between them as well as maintaining suitable ventilation, thus enabling the building structure as well as the ledger board to dry out following inclement weather conditions.

[0021] A preferred embodiment of the invention has been described by way of example. Those skilled in the art will realize that various modifications and changes may be made while remaining within the spirit and scope of the invention. Hence the invention is not to be limited to the embodiment as described but, rather, the invention encompasses the full range of equivalencies as defined by the appended claims.

Claims

1. A spacer for mounting a deck ledger board to a building surface comprising:

a spacer portion having a first panel adapted to engage a building surface and a second panel connected to and spaced from said first panel by a selected distance; and
a ledger board retainer connected to said spacer portion and defining therewith a generally U shaped region for receiving a ledger board therein in close juxtaposition to said spacer portion.

2. The spacer of claim 1 wherein said first and second panels of the spacer portion are generally parallel to one another and wherein said ledger board retainer includes a third panel spaced from said second panel to receive a ledger board between said second and third panels such that when fasteners are extended through all the said panels and the ledger board, the ledger board may be secured to the building surface

in spaced relation thereto.

3. The spacer of claim 2 wherein said first and second panels are retained in their spaced relation by transverse panel portions located at opposing ends of said first and second panels, and said third panel is connected to said spacer portion by a further transverse panel portion to define said region for receiving a ledger board therein. 5
4. The spacer of claim 2 when formed from a single strip of sheet metal having right angle bends at spaced intervals to form said first, second and third panels. 10
5. The spacer of claim 3 when formed from a single strip of sheet metal having right angle bends at spaced intervals to form said first, second and third panels. 15
6. The spacer of claim 2, wherein all of said first, second and third panels are generally planar. 20
7. The spacer of claim 3, wherein all of said first, second and third panels are generally planar. 25
8. The spacer of claim 4, wherein all of said first, second and third panels are generally planar.
9. The spacer of claim 1 having spaced aligned apertures extending there through to receive fasteners through said ledger board retainer and said spacer portion during and following installation. 30
10. The spacer of claim 2 having spaced aligned apertures extending there through to receive fasteners through said ledger board retainer and said spacer portion during and following installation. 35
11. The spacer of claim 3 having spaced aligned apertures extending there through to receive fasteners through said ledger board retainer and said spacer portion during and following installation. 40
12. The spacer of claim 4 having spaced aligned apertures extending there through to receive fasteners through said ledger board retainer and said spacer portion during and following installation. 45
13. The spacer of claim 6 having spaced aligned apertures extending there through to receive fasteners through said ledger board retainer and said spacer portion during and following installation. 50
14. In combination, an elongated ledger board and a plurality of spacers as defined in claim 1, said spacers being spaced apart along said board with said ledger board being disposed in the regions defined by the 55

retainers of each of said spacers.

15. In combination, an elongated ledger board and a plurality of spacers as defined in claim 2, said spacers being spaced apart along said board with said ledger board being disposed in the regions defined by the retainers of each of said spacers.
16. In combination, an elongated ledger board and a plurality of spacers as defined in claim 3, said spacers being spaced apart along said board with said ledger board being disposed in the regions defined by the retainers of each of said spacers.
17. In combination, an elongated ledger board and a plurality of spacers as defined in claim 4, said spacers being spaced apart along said board with said ledger board being disposed in the regions defined by the retainers of each of said spacers.
18. In combination, an elongated ledger board and a plurality of spacers as defined in claim 6, said spacers being spaced apart along said board with said ledger board being disposed in the regions defined by the retainers of each of said spacers.
19. In combination, an elongated ledger board and a plurality of spacers as defined in claim 9, said spacers being spaced apart along said board with said ledger board being disposed in the regions defined by the retainers of each of said spacers.

FIG. 1

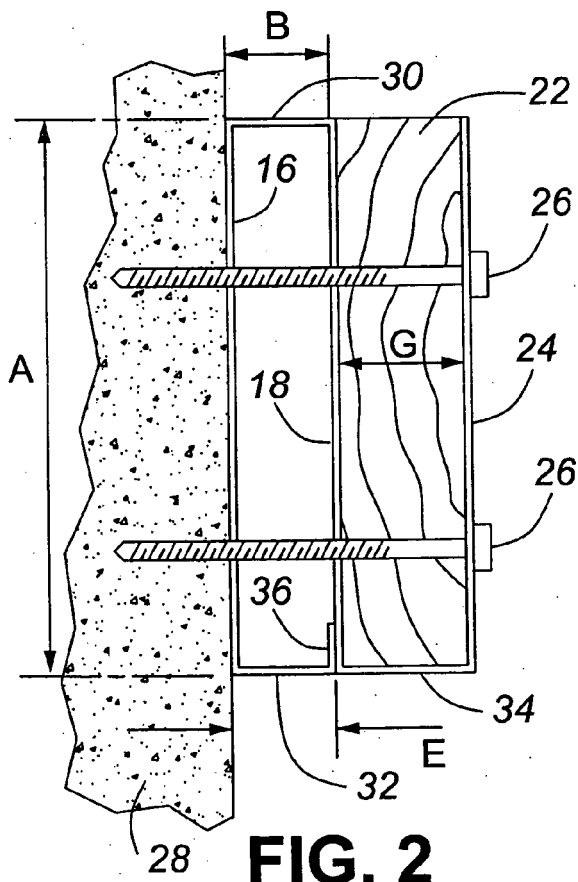
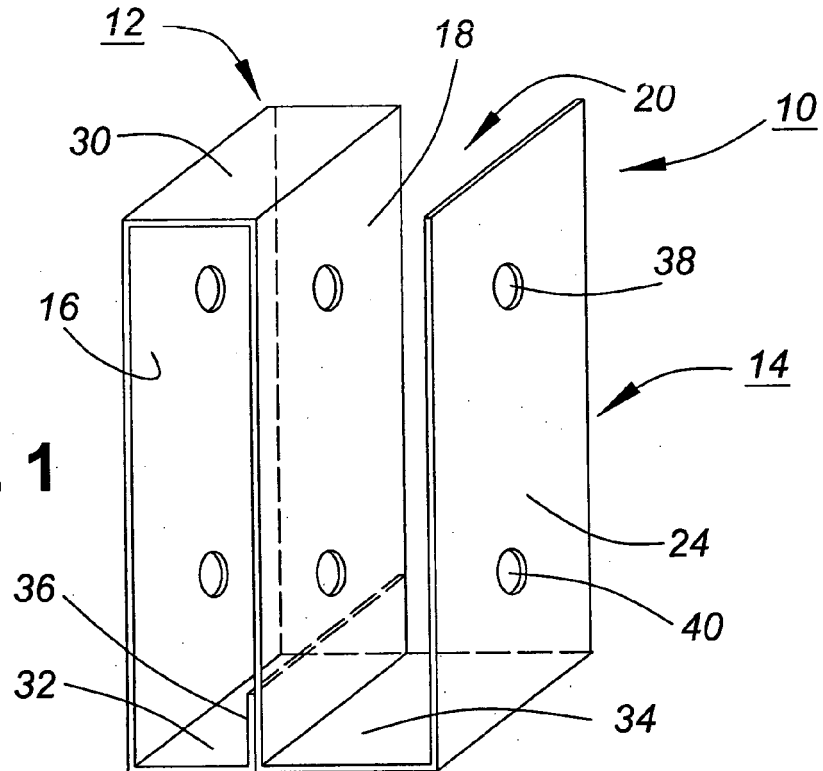


FIG. 2

FIG. 3

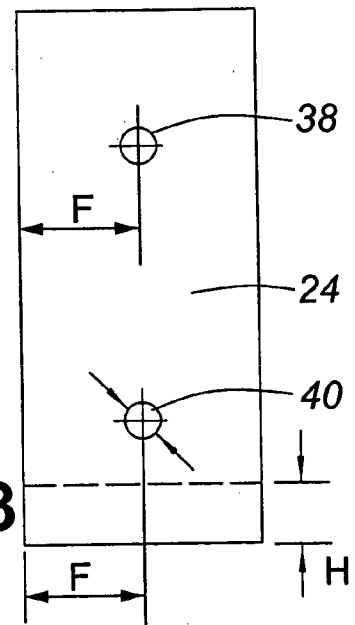


FIG. 4

