Sept. 8, 1970 J. W. HEMMINGER 3,527,012

MOISTURE DEFLECTOR

Filed April 14, 1969

FIG. 3

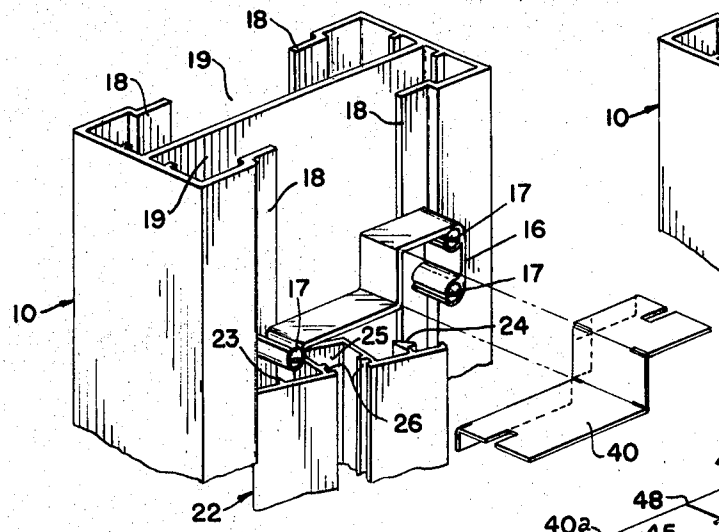


FIG. 4

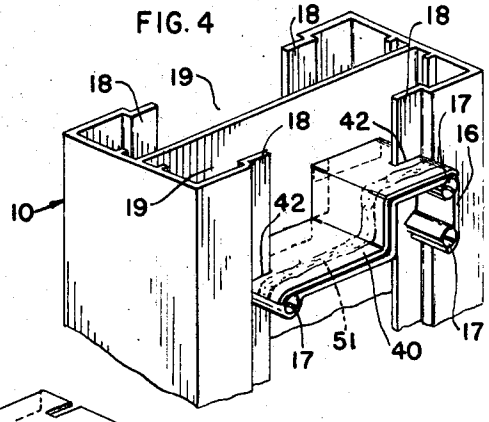


FIG. 5

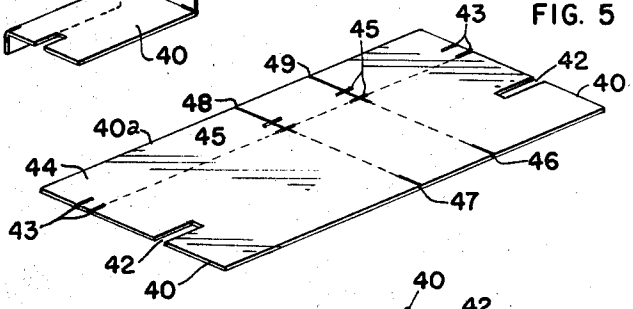
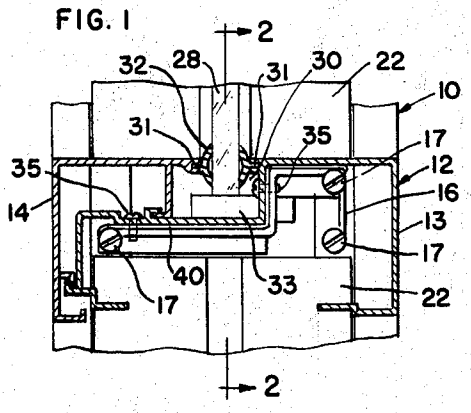


FIG. 1



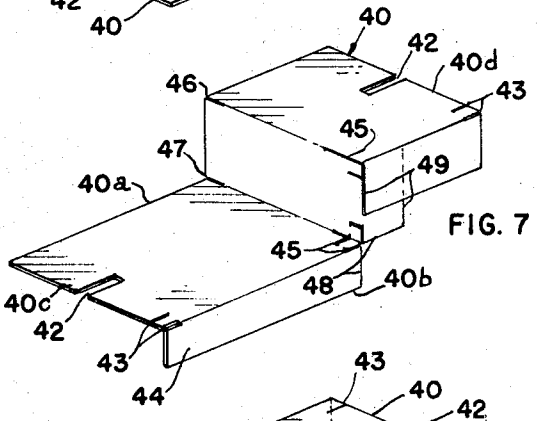


FIG. 7

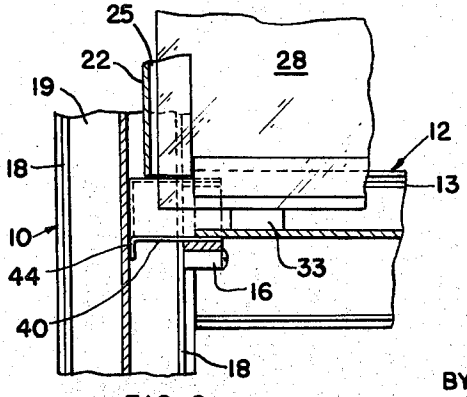


FIG. 2

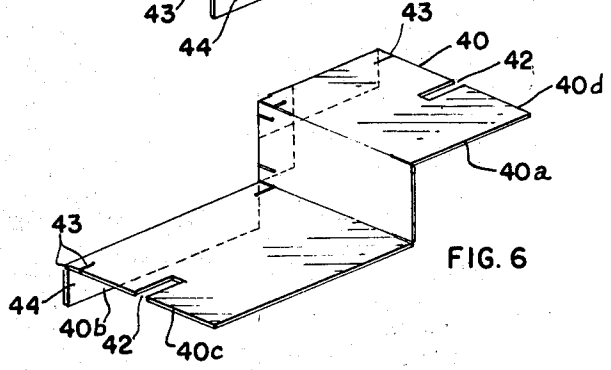


FIG. 6

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MOISTURE DEFLECTOR

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U.S. Cl. 52—665 2 Claims

ABSTRACT OF THE DISCLOSURE

There is provided an improved moisture deflector for use in wall construction of the type including a vertical mullion defining a frame pocket and interconnected horizontal members. The horizontal members are secured to the vertical by means of a shear block attached to the vertical mullion. A filler member snaps or secures to the vertical mullion and defines a glazing pocket for glass or other panels. A moisture deflector is positioned at each end of the horizontal structural member and extends over the upper end of the glazing pocket so as to direct moisture between the frame pocket and the filler member.

The present invention relates to an improved wall construction, and more particularly, to an improved moisture deflector for use with a wall construction.

Commercial structures are known wherein vertical mullions are provided defining vertical extending frame pockets for receiving snap-in faces or filler members. Intermediate horizontal members may be provided interconnecting adjacent vertical mullions. In certain types of commercial construction, the horizontal members butt against the vertical mullions, and are secured thereto by any suitable means such as with shear blocks fastened to the vertical mullions. Glass or other panels fit within the glazing pockets of the floors, and on the horizontal members, being locked in place with suitable glass stops.

Difficulty has heretofore been experienced with moisture collecting in the glazing pocket defined in the horizontal members, such moisture running along the surface of the horizontal members and following the edge underneath the horizontal member, dropping loose in the glazing pockets of lower panels and eventually working its way to the interior of the building. Thus, it would be desirable to direct moisture from the glazing pocket into the space formed by the vertical mullion and filler where it may run down the open vertical channel of the mullion and be directed to the exterior of the building.

It is therefore an object of the present invention to provide a new and improved wall construction which overcomes the above-mentioned difficulty.

Another object of the present invention is to provide a new and improved wall construction.

Still another object of the present invention is the provision of a new and improved moisture deflector for use in a building wall construction.

Still another object of the present invention is the provision of an improved moisture deflector which would direct moisture from the glazing channels of a wall construction to the space between the mullion and filler thereof.

In accordance with these and other objects, there is provided an improved wall construction of the type including a vertical mullion defining a frame pocket, a shear block attached to the vertical mullion, and an intermediate horizontal member connected to the vertical mullion by means of the shear block. Filler members are positioned in the frame pockets to define suitable glazing pockets receiving glass or other panels.

In accordance with the present invention a moisture deflector is positioned at one end of the horizontal structural member extending over the outer ends of the glazing pockets in the filler to direct moisture between the frame pocket and the filler member. Advantageously, the moisture deflector may be formed of flat sheet metal having long and short sides, adapted to be folded so as to conform to the shape of the deflector to either end of the horizontal mullion, and in one embodiment containing slots receiving the vertical flanges of the frame pocket to position the deflector.

For a better understanding of the present invention, reference may be had to the accompanying drawing wherein:

FIG. 1 is a vertical cross-sectional view of a typical wall construction employing a moisture deflector according to the present invention;

FIG. 2 is a vertical cross-sectional view of the wall construction of FIG. 1, taken along line 2—2 of FIG. 2;

FIG. 3 is an exploded view illustrating some of the components of the wall construction of FIG. 1;

FIG. 4 is a perspective view illustrating assembly of the moisture deflector to the shear block of a vertical mullion;

FIG. 5 is a developed view of the moisture deflector;

FIG. 6 is a perspective of the moisture deflector for the end of the horizontal mullion as illustrated in FIGS. 1 to 4; and

FIG. 7 illustrates a moisture deflector folded in the complementary direction for use at the other end of a horizontal structural member.

Referring now to the drawings, and particularly to FIGS. 1 to 4, there is illustrated a wall construction in accordance with the present invention and formed of a plurality of vertical mullions **10**, only one of which is illustrated in the drawings, and interconnecting horizontal members **12**. The horizontal members **12** in the illustrated embodiment each include a frame member **13** and an interlocking glass stop **14**. Moreover, each of the horizontal members **12** is fitted to the respective mullion **10**, and is secured thereto by a shear block **16**, fastened to the mullion **10** in any suitable manner as by screws **17**. The horizontal member **12** may be secured to the shear block **16** in any suitable manner, as with the screws **35**.

The mullion **10** in the illustrated embodiment is of generally I-shape, having inwardly facing flanges **18** to define opposed frame pockets **19**. The filler **22** may be snapped between the flanges **18**, and to this end is provided with suitable interlocking edge components **23** and **24**. The illustrated filler **22** is provided with an inwardly extending glazing pocket **25** having opposed gasket channels **26**. The glazing pockets **26** are adapted to fix glazing gaskets **27** to secure glass or other panels **28**.

The interlocking parts of the horizontal member **12** also define a glazing pocket **30** provided with opposed gasket channels **31** for securing suitable glazing gaskets **32**. The glass **28** normally would rest on a suitable setting block **33** in a manner known in the art.

In accordance with the present invention, there is provided a moisture deflector **40** positioned on the shear block **16** for directing moisture collecting in the glazing pockets **25** and **30** to the frame pocket **19** outside of the filler **22**, as best illustrated in FIG. 2. Specifically, the moisture deflector **40** is formed of flat sheet metal, generally rectangular in its developed form, as illustrated in FIG. 5. Thus, the deflector **40** defines a pair of long sides **40***a* and **40***b*, and a pair of short sides **40***c* and **40***d*. The short sides **40***c* and **40***d* have opposed inwardly extending slots **42** to receive a pair of flanges **18** of the frame member, as illustrated in FIG. 4. Additionally, the short ends **40***c* and **40***d* include one or more pairs of slits **43**

defining score marks for folding a flange **44** along the inner end of the deflector **40**. Additional slits **45** may be provided intermediate the slits **43** to further define score marks and facilitate in bending or folding of the flap **44**. Moreover, the outside edge of the moisture deflector **40** includes additional slits **46** and **47** and the inner edge **40***a* includes cuts **48** and **49** extending inwardly a distance equal to the spacing of the slits **43** and **45** to permit folding of the flange **44**. Thus, the deflector **40** may be folded along its score marks to conform to the shape of the shear block **16**. Moreover, the deflector **40** may be folded with either side of its surface up, as illustrated in FIGS. 6 and 7, thereby adapting the deflector for use on either end of the horizontal member **12**.

FIG. 4 illustrates the assembly of the moisture deflector **40** onto the shear block **16**. Specifically, it will be noted that the slots **42** fit or receive a pair of inwardly opposed flanges **18** of the mullion **10**. The flange **44** of the moisture deflector forms a drip edge extending beyond the glazing pocket **25** of a lower filler **22**, as illustrated in FIG. 2. Preferably, a strip of mastic or other sealing compound **51** is positioned on each side of the moisture deflector **40** to prevent the creepage of moisture along the underside of the horizontal member **12** or between the deflector **40** and the shear block **16**.

It will be understood that the moisture deflector **40** is effective to prevent moisture accumulating in the glazing channels **25** and **30** from moving along the lower surface of the components, or from dripping into the glazing pocket **25** of a lower filler member. Thus, such moisture can only move outwardly to the end of the deflector **40**, and down the flange **44** thereof. The flange **44** serves as a drip edge and directs moisture collecting thereon into the space of the frame pocket **19** formed

by the mullion **10** and filler **22**, so that such moisture can pass down the mullion **10** to the bottom of the mullion where it will be deflected outwardly of the building.

What is claimed as new and desired to be secured by Letters Patent of the United States is:

1. A wall construction including a vertical structural member defining a frame pocket, a shear block attached to said vertical structural member, a horizontal structural member having one end overlying and connected to said shear block, a filler member in said frame pocket below said horizontal structural member defining a glazing pocket, and a moisture deflector positioned at said one end of said horizontal structural member extending over the open end of said glazing pocket to direct moisture between said frame pocket and said filler member.

2. A wall construction as set forth in claim **1** wherein said deflector includes downwardly extending flaps defining drip edges extending into said frame pocket.

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U.S. Cl. X.R.

52—97, 456, 476