PARTITION WALL CONSTRUCTION

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3 Claims

ABSTRACT OF THE DISCLOSURE

The disclosure relates to a partition wall construction, and more particularly to a removable partition wall comprising spaced wall panels mounted on opposite sides of a stud frame. The bottom edge of a wall panel is located in a channel defined by a pair of parallel upright members, thus the flange forming part of a frame member secured to the floor, and the other flange forming part of a sealing member of elastomeric material such as vinyl plastic; the sealing member has a base portion clamped between the frame member and the floor, and so prevents the penetration of moisture to the frame member or to the bottom edge of the wall panel.

Preferably the upstanding flange of the sealing member cooperates with a flange trim element, the two flanges having a matching appearance and overlapping to give the base of the wall a neat appearance.

This invention relates to partition wall constructions and to base fixtures therefor which include a metal frame member secured to the floor, the frame member providing an upstanding flange against which the lower edge of a wall panel is located. Such a partition wall usually comprises a stud frame consisting of a channel-sectioned frame member extending across the floor and secured thereto, a second horizontal frame member adjacent to the top of the wall, vertical spaced studs extending between the frame members, and wall panels secured to the studs on opposite sides of the stud frame. The bottom edges of the wall panels are usually concealed by trim strips or covings.

One serious disadvantage of known wall constructions is that water, for example water used when cleaning the floor, can penetrate beneath the trim strips or covings and cause the frame member and/or its fixing means to rust. The rusting is very difficult to prevent and may lead to the necessity for replacing the whole wall. The bottom edges of the wall panels themselves can also suffer deterioration from this cause.

It is an object of the present invention to provide a base fixture for a wall structure, which substantially eliminates the possibility of water penetrating to the interior of the wall. According to the invention this is achieved by providing a sealing member of elastomeric material, such as a vinyl plastic, having a base portion which is clamped between the frame member and the floor and an upstanding flange which lies against the front face of a wall panel adjacent to its bottom edge.

Two embodiments of the invention will now be described, by way of example with reference to the accompanying drawings, in which:

FIGURE 1 is a fragmentary perspective view of the base portion of a first wall structure according to the invention;

FIGURE 2 is a cross-section through the wall structure shown in FIGURE 1;

FIGURE 3 is a view similar to FIGURE 2 of a modified form of the invention; and

FIGURE 4 is a cross-sectional view of a standard base or coving.

Referring to FIGURE 1, a partition wall comprises gypsum boards or other suitable wall panels 1 mounted on opposite sides of a stud frame 2. The stud frame 2 is generally of a conventional construction, consisting of a base frame member 3, an upper horizontal frame member, not shown, and spaced vertical studs extending between the horizontal frame members, the wall panels 1 being secured to the studs. The base frame member 3 is a steel member of channel section having a base 4 and a pair of parallel, upstanding flanges 5 which are integral with the base. The member 3 is secured to the floor by fixing screws 7 passing through the base 5. Instead of being secured directly to the floor, the frame member 3 is disposed within a channel-sectioned member 9, which is preferably of vinyl plastic, but may be of other elastomeric material. The member 9 has a flat base 10 which is clamped between the base 4 of the member 3 and the floor, the base 10 being compressed and acting as a seal to prevent water from reaching the metal frame member. The sealing member 9 also has a pair of parallel, longitudinal, upstanding flanges 11, which are spaced from the flanges 6 and defined therewith a pair of channels in which the bottom edges of the panels 1 are located. Butt joints between lengths of the sealing member 9 may be sealed by a watertight sealing compound.

In this construction the metal frame member 3 and the bottom edges of the wall boards are protected by the sealing member 9 to prevent water from reaching them. The bottom edge of the wall is concealed by a trim element which will now be described. Extending horizontally across the faces of the wall at a predetermined height is a continuous rigid fixing strip 12, preferably of metal such as aluminium, which is attached at intervals to the vertical studs. A trim element of vinyl plastic, indicated generally at 13, and having an appearance to match that of the upstanding flange 11, is mounted on the fixing strip 12. The trim element 13 is an extrusion comprising a channel-sectioned portion 14, which is clipped onto the fixing strip and retained thereby, and a downwardly extending flange 15 which overlaps and bears against the flange 11. This construction gives a particular neat appearance, and any small variations in floor level are unnoticeable since the position of the horizontal upper edge of the trim element is quite independent of floor level variations.

FIGURE 3 illustrates a second embodiment of the invention, which is identical with the first in most respects, but differs from it in certain other respects to which the following description is directed. The parts of the construction which are the same as the corresponding parts of the first construction are denoted by the same reference numerals and will not be described again in detail.

In this second construction the sealing means consists of two L-sectioned sealing members 16 of elastomeric material, preferably vinyl plastic. Each sealing member 16 has a base 17, which is clamped between the channel-sectioned frame member 3 and the floor, and an integral upstanding flange 18, which defines with a respective flange 5 a channel in which the bottom edge of a panel 1 is located, the flange 15 lying against the front face of the panel. The base 17 of each sealing member is compressed, as in the first construction, to provide a longitudinal seal which prevents ingress of water. The bottom edge of the wall, on each face, may be concealed by a trim element as shown in the first embodiment.

In each of the embodiments described, a conventional coving or base as shown in FIGURE 4 may be secured to the base of the wall instead of providing a vinyl plastic extruded trim element.
I claim:

1. In a partition wall structure, a floor-mounted frame member having a base secured to the floor and an upstanding flange integral with the base, a sealing member of elastomeric material, the sealing member having a base clamped between the base of the frame member and the floor and an integral upstanding flange, a wall panel having a bottom edge located between said flanges, the sealing member providing a seal to prevent penetration of moisture to the frame member and the bottom edge of the wall panel, a trim element secured to the wall panel and extending horizontally across the wall panel adjacent to the base thereof, the trim element having a downwardly extending flange which overlaps the upstanding flange of the sealing member, said downwardly extending flange and the upstanding flange of the sealing member having a matching appearance.

2. In a partition wall structure according to claim 1, the sealing member being of vinyl plastic.

3. In a partition wall structure according to claim 1, the frame member and the sealing member both being channel sectioned and both having a second integral upstanding flange, the frame member being nested within the sealing member, and a second wall panel having a bottom edge located between said second pair of flanges.

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