The present invention relates to dry wall partitions such as are used in building structures normally employing concrete floors and ceilings.

Heretofore, in constructions of this type due to the rigidity of the floor and ceiling and sway or bending of the building due to wind or weather conditions is productive of cracking of the plastered wall partitions.

It is the object of the present invention to provide a non-load bearing dry wall partition construction for buildings wherein means are provided for eliminating cracking.

It is a further object of the present invention to provide a resilient dry wall partition construction for buildings employing floor and ceilings tracks and with the partition elements positioned and supported and retained between the said tracks and with means for providing a resilient connection between the partition elements and the floor and ceiling.

These and other objects will be seen from the following specification and claims in conjunction with the appended drawings in which:

FIG. 1 is a fragmentary vertical section of a wall partition in accordance with the present invention.

FIG. 2 is a fragmentary section taken on line 2—2 of FIG. 1.

FIG. 3 is a fragmentary vertical section of a slightly different construction.

It will be understood that the above drawings illustrate merely a preferred embodiment of the invention, and that other embodiments are contemplated within the scope of the claims hereinafter set forth.

Referring to the drawing the concrete floor and ceiling of a building are generally indicated at 11 and 12, and the non-load bearing wall partition at 13. An elongated floor track 14 is mounted upon and extends along floor 11 and is secured thereto by fasteners 15. The floor track includes bottom plate 16 and the reverse turned flattened members 17 which terminate in the upright spaced flanges 18 and 19 of different heights.

A similar elongated ceiling track 20 of the same construction as track 14 is mounted adjacent to and extends along ceiling 12 and is secured thereto by fasteners 15, being directly above floor track 14 and also including the pair of preceding spaced flanges 18 and 19.

The elongated metal partition cap 22 is mounted upon and extends along ceiling 12 and is secured thereto by fasteners 23 directly above floor track 14. Said cap includes the pair of spaced depending channel flanges 25 whose ends are reversed turned upwardly at 26. Flanges 25 are spaced outwardly to provide for the respective upper ceiling track flanges 18 and 19, FIG. 1.

An elongated compressible resilient gasket 21 constructed of rubber, artificial rubber, neoprene, or resilient plastic material, is secured between cap 22 and the ceiling track 20. Edge portions of partition 22 are vertically displaced at 24, FIG. 1, to define elongated grooves adjacent ceiling 12 within which is inserted a suitable caulking compound 27 finishing assembly at the ceiling.

A suitable supporting medium is interposed between the respective flanges 18 and 19 of the floor ceiling tracks, as best shown in FIGS. 1 and 3. For example, in FIG. 1, the supporting medium is in the form of a series of longitudinally spaced metal channels 28 of general U-shape, including opposed side walls 29 and interlaced flanges 30, FIG. 2. The series of longitudinally spaced channels 28 are interposed between tracks 14 and 20 with their respective top and bottom edges snugly nested and retained between the pairs of ceiling and floor track flanges 18 and 19.

A suitable wall board 31 is mounted upon and interposed between the outer edge portions 17 of the respective tracks and bears against the respective flanges 18 and 19 and is secured to the supporting medium, namely the series of channels 28, by a series of sheet metal screws 32. These project through the gypsum board or wall boards 31 and are threaded through walls 29 of the channels, FIG. 2. In the illustration embodiment, the gypsum board is in the nature of a solid body of gypsum having upon its outer surfaces a layer of stiff paper 33.

In FIG. 1, the gypsum boards 31 are joined to the outer surfaces of the gypsum board or wall board 31, after which a perforated tape in sheets, as at 34, is applied to the outer surfaces. This tape may extend over the entire surface of the wall board or may be limited merely over those portions which represent lines of contact between adjacent longitudinally aligned wall boards, as in FIG. 2, and over the fastening screws for concealing the same.

With the use of the compressible resilient gasket 21, a yielding relationship is established between the dry wall partition and the respective floor and ceiling so that with swaying or slight bending movements of the building there will be no cracking of the non-load bearing dry wall partition.

As shown in FIG. 1, there is a dead air space provided, as at 35, between the interior portions of partition cap 22 and upper track 20 to acoustically isolate one side of the partition from the other.

A variation of the present construction is shown in FIG. 3 wherein again floor track 14 and ceiling track 20 are of the same construction, as is also the elongated metal partition cap 25.

The primary difference in partition 36 is the central supporting means which is one or more longitudinally aligned upright core boards 37.

In this case an elongated filler strip 38, preferably of wood or other material, is mounted within floor track 14 between flanges 18 and 19 and provides a support for the central upright core board 37. Respective top and bottom edges of the said core board are positioned within the respective parallel spaced flanges 18 and 19 of the two tracks for supporting the central core board in the upright position shown. A dead air space 39 is provided above the core board adjacent the ceiling track.

The flanges 18 of the respective tracks 14, 20 are shorter than flanges 19 thereof to provide an entrant opening to facilitate the insertion of the core board in the assembly shown in FIG. 3.

The core board 37 used may be of various constructions generally available on the market and normally includes a fibrous or other hardened material or may be a body of gypsum having outer paper coverings such as described with respect to the gypsum boards 31 of FIG. 1.

Mounted upon opposite sides of core board 37, FIG. 3, are the upright longitudinally aligned gypsum boards 40 which are snugly interposed between the respective tracks 14 and 20 and bear against the outer surfaces of the respective flanges 18 and 19 and are suitably secured by an adhesive, or other means. Here again the gypsum boards may be of the same construction as above described with respect to FIG. 1, namely a central body of gypsum with outer paper surface coverings as at 33.
As in FIG. 1, the partition cap is vertically displaced at 24 at its ends and a suitable caulking compound 27 is projected in the space defined between said cap and the ceiling to complete the assembly.

Again as shown in FIGS. 1 and 2 a suitable joint compound is normally applied to the outer surface of the gypsum boards 40 finishing off the same after which a sheet of perforated tape is applied thereto as at 34, FIG. 2, for covering the lines between adjacent gypsum panels 40 and for covering any fastening means which may be employed.

Having described my invention, reference should now be had to the following claims.

1. In a wall partition for use between a concrete floor and ceiling of a building;
   an elongated floor track upon and extending along the floor secured thereto and including a pair of upright spaced flanges;
   an elongated metal partition cap upon and extending along the ceiling secured thereto directly above the floor track and including a pair of spaced depending channel flanges;
   an elongated ceiling track adjacent to and extending along the ceiling nested within said cap and secured thereto directly above the floor track including a pair of spaced depending flanges;
   an elongated compressible resilient gasket interposed and secured between said cap and ceiling track;
   a longitudinally disposed upright support medium interposed between said tracks with its respective top and bottom edges snugly nested and retained between said pairs of ceiling and floor track flanges; and
   wall boards bearing against the floor and ceiling track flanges secured to said support medium and interposed between the floor and ceiling tracks, and with the upper edge of said wall boards nested within and engaging said cap channel flanges.

2. In the wall partition of claim 1, said support medium being in the form of a series of upright longitudinally spaced metal channels snugly interposed between said tracks;
   the securing of said wall boards including screw means extending through the wall boards and threaded into said channels.

3. In the partition of claim 1, said support medium being an upright core board snugly nested and supported between said tracks; and
   means securing the wall boards respectively to said core board.

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