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(54) **Wall construction**

(57) A clip C1 adapted to be received in the head channel 1 of a stud wall, comprises a generally planar base 10 and a pair of side walls 11 projecting upwardly from opposite sides of the base 10, indents 12 extend inwardly from opposite sides of the base 10 at a location

adjacent of the side walls 11 to form a waist 13 whereby the base 10 comprises a major portion and an extension portion 14 whereby when the clip C1 is received in a head channel 1 the associated stud wall member 15 can move in a vertical direction.

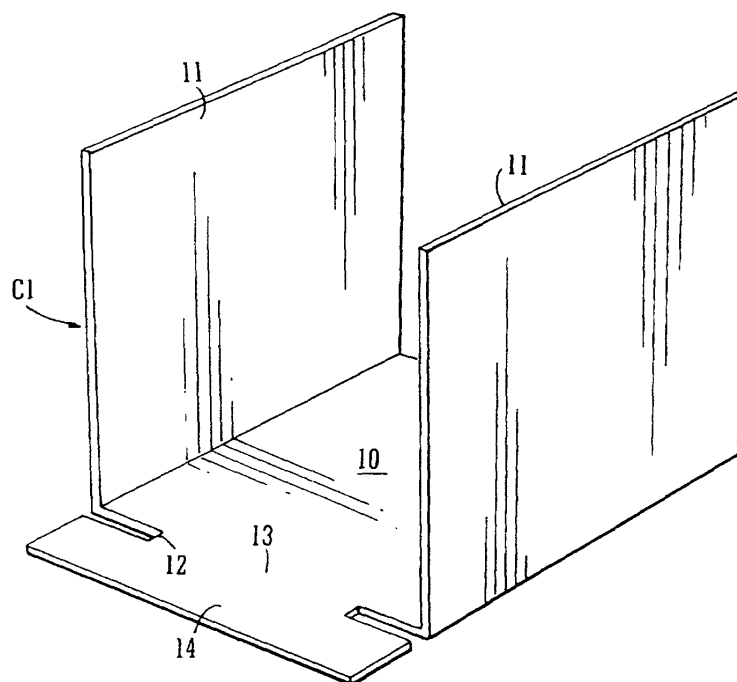


FIG. 2

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Description

[0001] The invention relates to a bracket or clip, for use in the formation of a wall (e.g. a stud wall), which receives a member made, for example, of lightweight metal or cold rolled structural steel.

[0002] Stud walls usually comprise vertical studs at the top of which there is a head channel. The head channel may be connected to the underside of a beam or a grid floor that deflects and accordingly the parts are arranged so that the head channel can move up and down in the vertical plane freely and independently of the vertical studs. It is known to use various shapes of clip for this purpose. They all suffer from disadvantages in terms of their ease of manufacture and/or safety and/or ease of assembly and their efficiency in use.

[0003] Two such clips are disclosed in US 5040345 and GB 2364335.

[0004] In one aspect the invention provides a clip to be received in the head channel of a stud wall, the clip comprising a generally planar base and a pair of side walls projecting upwardly from opposite sides of the base, indents extending inwardly from opposite sides of the base at a location adjacent of the side walls to form a waist whereby the base comprises a major portion and an extension portion whereby when the clip is received in a head channel the associated stud wall member can move in a vertical direction.

[0005] Preferably the side walls and the head channel are held together by screws or like retention means against lateral movement.

[0006] In another aspect the invention provides a clip for a stud wall, the clip comprising a base and a pair of opposed side walls projecting from opposed edges of the base having an extension portion joined thereto by a waist portion, the waist portion being rebated with respect to the base to provide a pair of opposed indents, the indents being arranged such that, in use, with the clip disposed within a head channel member and the distal edges of the side walls abutting or lying adjacent the inner surface of the channel member margins, for example in-turned margins, of a stud wall member are receivable in the indents to allow the stud wall member to move in a direction along its longitudinal axis but to restrict movement of the stud wall member otherwise.

[0007] In order that the invention may be well understood it will now be described by example only with reference to the following diagrammatic drawings:

Figure 1 is a side elevation of the top portion of a stud wall according to the invention;

Figure 2 is a perspective view of one clip of the invention; and

Figure 3 is a perspective view of another clip of the invention.

[0008] The stud wall shown in Figure 1 comprises a deflection head channel 1, above which is a beam 2 made of concrete or steel. The head channel 1 comprises a base 3 having longitudinally extending upright sidewalls 4. The head channel 1 is joined to the top end of vertical studs 15 at its ends and may also be at spaced apart locations. The terminal surface at the end of the stud 15 will usually be about 15-40 mm (e.g. 25 to 35 mm), from the base 3 to provide a deflection gap.

[0009] A clip C1 is located in, and may protrude below, the head channel 1 to render visible evidence of installation. As best shown in Figure 2 the clip C1 comprises an elongate base 10 having opposite upright side walls 11. The sidewalls 11 extend only along part of the length of the base 10 and where they end inwardly extending indents 12 are present to define a waist 13. A short, full width, extension 14 is present beyond the waist 13.

[0010] The gauge of the head channel 1 and of the clip C1 can be of much reduced thickness than is usually used.

[0011] In use, the clip C1 is received in the head channel 1 above a vertical stud channel 15. The clip C1 allows vertical movement (but not sideways movement) to take place as loads are applied to the beam 2.

[0012] Restraining means, for example screws such as self tapping screws may be used to restrain movement of the Clip C1 with respect to the head channel 1.

[0013] In the embodiment of Figure 3 the opposite side walls 11 of clip C2 have inwardly extending portions 16 to fit into the head channel, which may extend orthogonally to the sidewalls 11 or may be arranged to describe an acute or obtuse angle with the sidewalls 11.

[0014] The advantages of a clip C1, C2 of this invention are that the vertical stud 15 can be located anywhere in a deflection head channel 1. The clip C2 positively restrains the vertical stud 15 against rotational forces, the result of which there is little or no need for bracing. The depth of the clip C1, C2 ensures positive restraint to the stud 15 within the full depth of the head channel 1 and ensures a high visibility that the clip C1, C2 is in position and working. In addition the clip C1, C2 reinforces local area of the head track 1 to the maximum applied load from the vertical which enables the head track 1 to have a lower wall thickness.

[0015] Each clip C1, C2 may be supplied in one gauge only for all applications say 1.0-1.9 mm, preferably 1.1-1.5 mm (say 1.2 mm), and the design is stiff enough to resist flexing when fixing into position.

[0016] Where the clip C1, C2 has a tapered angle which matches the head track the clip C1, C2 is prevented from falling out prior to fixing. The clip C1, C2 may also have reinforcing ribs 17 where the side walls 11 of the channel meet the base 10.

[0017] The clips C1, C2 may be provided in various sizes to fit correspondingly rigid head channels.

Claims

1. A clip (C1, C2) adapted to be received in the head channel (1) of a stud wall, the clip (C1, C2) comprising a generally planar base (10) and a pair of side walls (11) projecting upwardly from opposite sides of the base (10), indents (12) extending inwardly from opposite sides of the base (10) at a location adjacent the side walls (11) to form a waist (13) whereby the base (10) comprises a major portion and an extension portion (14) whereby when the clip (C1, C2) is received in a head channel (1) of an associated stud wall (15) member can move in a vertical direction.

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2. A clip (C1, C2) as claimed in Claim 1, wherein the side walls (H) and the head channel are held together by screws or the like against lateral movement.
3. A clip (C1, C2) for a stud wall, the clip (C1, C2) comprising a base (10) and a pair of opposed side walls (11) projecting from opposed edges of the base (10) having an extension portion (14) joined thereto by a waist portion (13), the waist portion (13) being rebated with respect to the base (10) to provide a pair of opposed indents (12), the indents (12) being arranged such that, in use, with the clip (C1, C2) disposed within a head channel member (1) and distal edges of the side walls (11) abutting or lying adjacent inner surfaces of the head channel member (1), margins of a stud wall member (15) are receivable in the indents (12) to allow the stud wall member (15) to move in a direction along its longitudinal axis but to restrict movement of the stud wall member (15) otherwise.

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4. A clip (C2) according to any of Claims 1 to 3, wherein each side wall (11) has a foot portion (16) joined thereto, the foot portions (16) extending towards one another.

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5. A clip (C2) according to any preceding Claim, further comprising reinforcing ribs (17) provided at the juncture of side walls (11) and base (10).

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6. A method of constructing a stud wall, the method comprising locating a clip according to any preceding Claim in a head channel and locating an end of a stud wall member in the waist of the clip, to restrain movement thereof.

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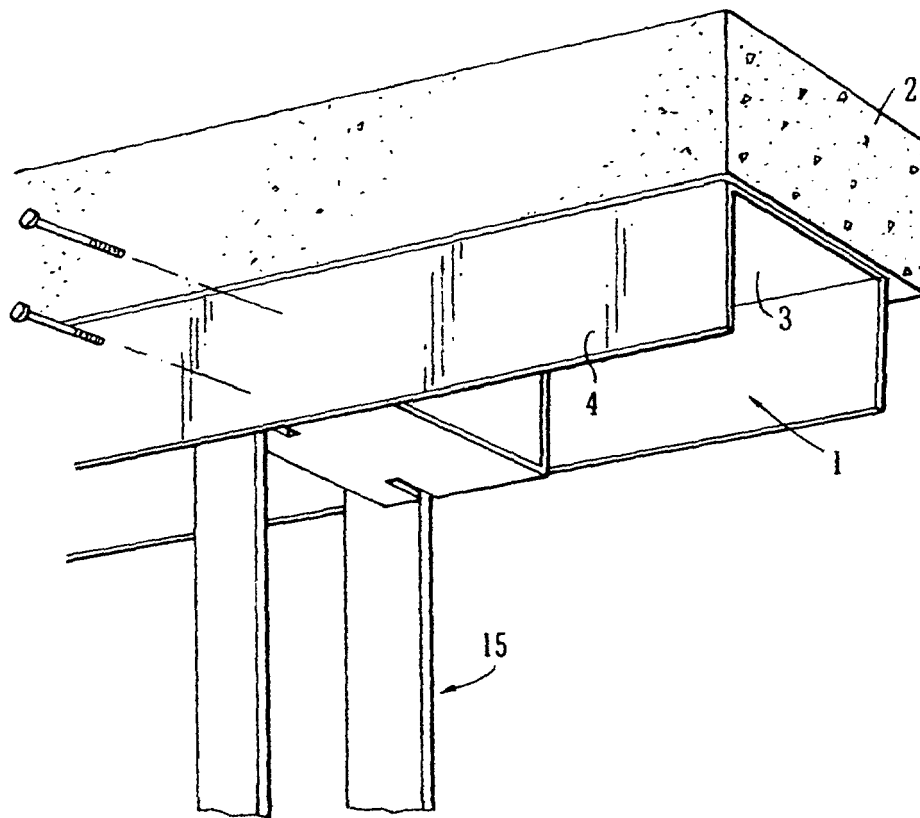


FIG. 1

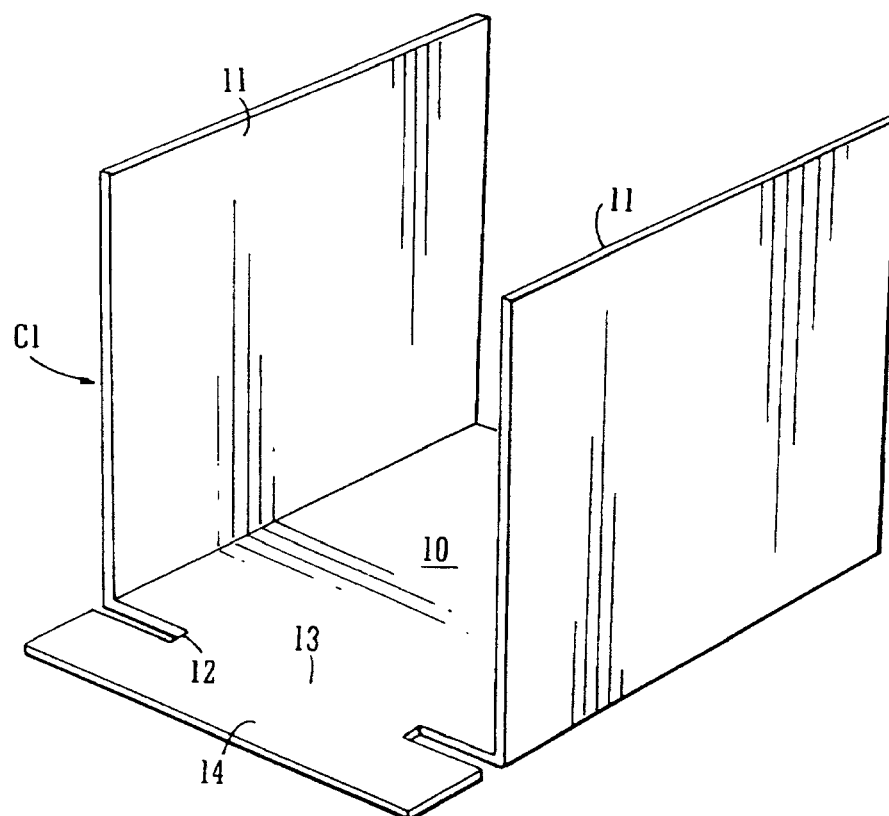


FIG. 2

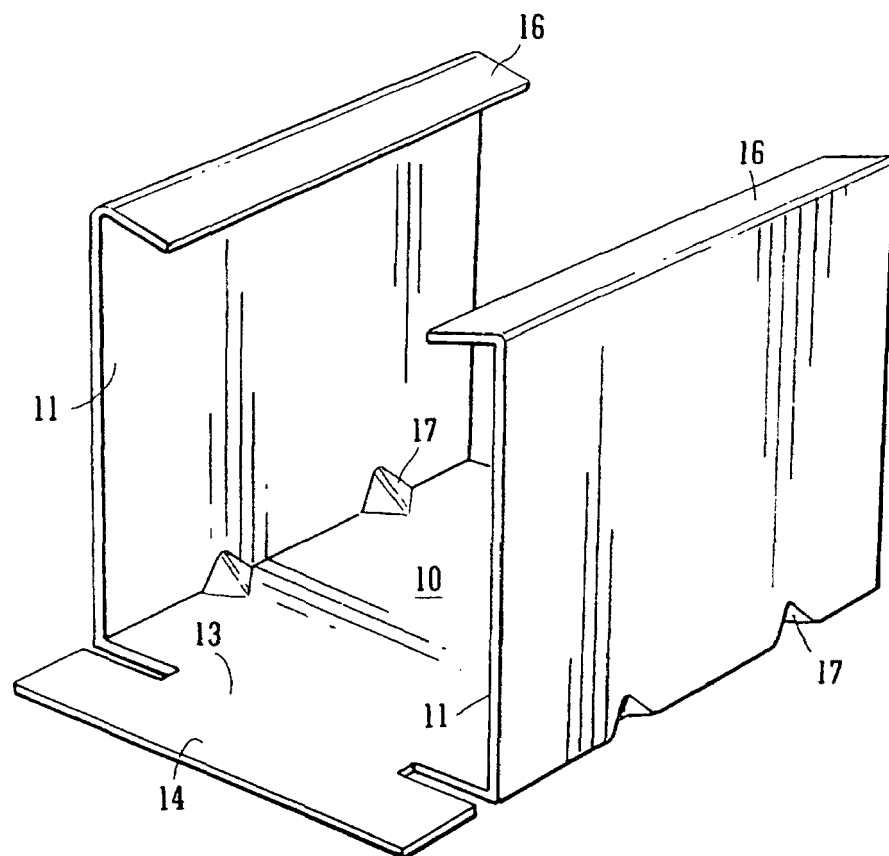


FIG. 3