

LINTELS

The invention relates to lintels, particularly lintels for internal use.

According to the invention there is provided a member, for use as or as part of a lintel, which is corrugated and defined by a series of adjacent channel-shaped corrugations adjacent limbs of successive corrugations being joined by a part
10 spaced from the web of the channel-shaped corrugations the limbs of each corrugation having spaced apertures through the thickness of the limbs.

Using the invention, it is possible to provide a lintel which effectively acts in a composite manner with supported
15 brick or blockwork in an internal wall and to provide a key for plaster when no frame is used in an opening below the lintel.

The limbs may be upwardly convergent, as considered in use. This provides a relatively simple shape which can be made
20 relatively simply.

The limbs and webs may be integral. This provides for ease of construction, for example the profile of the member can be made relatively simply by pressing when made from a metal blank.

25 Each aperture may comprise an elongate slot or hole, the end boundary surfaces of which may be rounded.

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The member may have two, or three, corrugations, depending on the width of wall in which a lintel made from it is to be installed.

The member may be made from sheet steel.

- 5 The invention also extends, it will be understood, to a wall including a lintel made from a member as hereinbefore defined.

Embodiments of the invention are hereinafter described, by way of example, with reference to the accompanying drawings.

10 BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a transverse section on line A-A of Figure 2 through one embodiment of member embodying the invention;

Figure 2 is a side elevational view of the member of Figure 1;

Figure 3 shows a cross-section of a second embodiment of member embodying the invention installed in an internal wall; and

Figure 4 shows a cross-section of the second embodiment of member installed in a further kind of internal wall.

Referring to the drawings, both embodiments of lintel are identical except that the second embodiment of member 2 shown in Figures 3 and 4 has three transverse corrugations rather than the two of the member 1 of Figure 1, which will be described in detail, like references being used for like parts in Figures 1-4. The member 1 has two transverse corrugations 3 the boundary surface of each of which is defined by upwardly converging webs 4 (as shown and as considered in use) which merge with an integral substantially planar plate or part 5. Adjacent corrugations 3 are connected by a substantially planar plate or part 6 and the outermost webs terminate in outwardly directed lips 7. Each web 4 has a single series of apertures through it, each in the form of an elongate hole 9 having rounded end boundary surfaces 10. Each hole 9 is equidistantly spaced along the length of the member 1 from immediately adjacent holes 9.

The webs 4 are inclined at 15° to a reference plane. The planar plate or parts 5 each have a width of 10 mm and the width of the open end of each corrugation is 20 mm. The lips 7 are each 7 mm wide. The second plate or part 6 is 10 mm wide, making the total width of the member 64 mm.

The webs 4 merge with the respective plates and parts 5 and 6 and the lips 7 in a rounded or smooth curve.

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Use of the members embodying the invention as a lintel in an internal wall is described with reference to the three corrugation member 2 shown in Figures 3 and 4. In Figure 3, the member is supporting blockwork 11 over an opening in which no door or window-frame is installed. The member 2 is placed in position on buttresses at either side of the opening and the wall is then built up over the opening with 100 mm blockwork 11. Plaster or sand/cement backing 12 is then applied so that the member 2 is completely engulfed, the holes 9 providing a key to the underside of the lintel and retaining the plaster or sand/cement backing 12 in position in the opening. The plaster, or sand/cement backing 12 passes through the holes 9 to be keyed in position. The member 2 also strengthens the plaster or sand/cement backing 12 by being incorporated in it and the member therefore acts in a composite manner with the supported blockwork 11, which effectively rests on the support surface defined by the plates or parts 5 of each corrugation. A plaster skin 13 coat is subsequently applied to finish the wall. Referring now to Figure 4, the member 2 is shown in position in an internal wall, over an opening therein in which there is a door 14. The member 2 is mounted on a door fringe 15 and the plaster or sand/cement backing 12 is then applied, the door fringe 15 acting as a guide for the application of this backing 12. The backing material 12 passes through the holes 9 and is thereby keyed in position while again the 100 mm blockwork 11 is supported by the member 2, on the support surface defined by the plates or parts 5. A plaster skin 13 is then applied, as is an architrave 16 and a door-stop 17.

In both Figure 3 and Figure 4, the blockwork 11 is seated on a layer of backing material 12 which is keyed to the member by the holes 9 so that the member 2 and blockwork 11 act in a composite manner.

In both Figures 1 and 2 and in Figures 3 and 4, the members 1 and 2 are preferably made from sheet steel, of Gauge B.G. 18 or 1.2 mm, preferably hot dipped and galvanised to B.S. 2989, 1975, ZI quality. It
5 will be understood that the members 1 and 2 may be of any desired length, and width, for example they may include more than three corrugations.

CLAIMS

1. A member, for use as or as part of a lintel, which is corrugated and defined by a series of adjacent channel-shaped corrugations adjacent limbs of successive corrugations
5 being joined by a part spaced from the web of the channel-shaped corrugations the limbs of each corrugation having spaced apertures through the thickness of the limbs.
2. A member according to Claim 1, the limbs being upwardly convergent, as considered in use.
- 10 3. A member according to Claim 2, the two limbs of each corrugation being joined by a substantially planar web.
4. A member according to Claim 3, the limbs and webs being integral.
5. A member according to any preceding claim, the apertures
15 each comprising an elongate slot or hole.
6. A member according to Claim 7, the elongate slot or hole having rounded end boundary surfaces.
7. A member according to any preceding claim, having two corrugations.
- 20 8. A member according to any of Claims 1 to 6, having three corrugations.
9. A member according to any preceding claim, made from sheet steel.
10. A member, for use as or as part of a lintel,
25 substantially as hereinbefore described with reference to



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and as shown in the accompanying drawings.

11. A wall, including a lintel made from a member according to any preceding claim.
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