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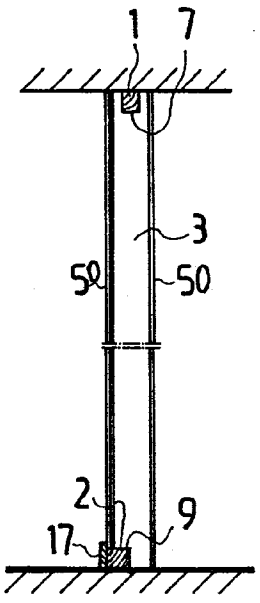
(54) Procedure for fixing an element wall and element for applying the procedure.

(57) The present invention concerns a procedure for mounting an element wall, comprising one or more structural elements, in the immediate adjacency of existing wall confinements, such as a wall or ceiling, of a room or equivalent, or more in the centre of the room, in connection with major renovation or equivalent. Furthermore, the invention concerns an element structure for applying the invention.

The realigning of walls which is necessary in connection with major renovation or equivalent precludes or impedes the immersed installation of electric wires and piping. The fixing of the elements is associated with drawbacks implying increased expenditure of work, e.g. fixing to the lath system by nailing.

As taught by the invention, on a wall confinement, advantageously on the ceiling, is fixed a lath (1), advantageously of the wall confinement's length, and on the opposite confinement, advantageously on the floor, is fixed another parallel lath (2), advantageously of the length of the wall confinement. By using these two laths (1, 2), the element wall is mounted and supported by fixing one end of the element wall to one lath (1) and the other end to the other lath (2).



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Procedure for fixing an element wall and element for applying the procedure

The present invention concerns a procedure for fixing an element wall comprising one or more building elements, in the immediate adjacency of the confinements of a wall or equivalent, such as a wall or a ceiling, or more in the centre of the room, in connection with major repair or similar. The invention also concerns a building element for applying the procedure.

When old buildings are being renovated, old wall confinements, in particular the walls and the ceiling, are covered with specific structural or surface elements. The alignment of the wall confinement is examined and the system of equalizing laths is installed which may be necessary. The elements are affixed to laths or equivalent fixed on the wall structure in question.

The procedures known in the art present several drawbacks. When straightening laths are used, electrical and sewage conduits cannot be hidden in the walls. Handling and fixing of the elements is awkward owing to the fact, that they have to be affixed to a plurality of laths.

The object of the invention is to introduce a procedure, by using of which the drawbacks associated with the fixing of an element wall in connection with repair work are reduced and the problems related to the elements' handling and mounting are facilitated. It is furthermore an object to disclose a building element for applying the procedure.

Regarding the characteristic features of the invention, reference is made to the claims.

When the procedure of the invention is applied, a lath is affixed to the existing confinement and another lath parallel therewith is affixed to the opposite wall confinement. The laths are preferably

as long as the wall confinement. The elements constituting the element wall are affixed and supported by using these two laths only and otherwise standing unsupported between the laths. For instance, when walls are being renovated or repaired, the laths are affixed to the ceiling and to the floor. No laths for aligning are then required. Any electrical conduits and piping are easy to place between the wall confinements. Since the elements are affixed only by both ends to the laths, the fixing of the elements becomes easier, and time and costs are saved.

The element for applying the invention is advantageously suitably shaped for affixing the element at both ends to the laths. A groove at one end is provided to secure the end of the element to the lath over which it is pushed. A rabbet on the other end is so arranged that the element is thereby fixed to another lath. When the end with groove is pushed over the lath, the lath becomes impacted in the element. The other lath is impacted in the rabbet provided for it. Hereby is accomplished a firm and a substantially thinner structure compared with upright installation methods known in the art. If the element wall is composed of more than one element, the elements are advantageously provided with lateral structures connecting one to the other in a manner known in prior art.

The invention is described in the following by referring to the drawing attached, wherein:-

Fig. 1 presents an element according to the invention affixed to the wall confinements, in elevational view,

Fig. 2 presents another element according to the invention viewed obliquely from the side,

Fig. 3 presents an attachment of elements according to the invention in elevational view, and

Fig. 4 presents another element according to the invention, fixed, in elevational view.

As shown in Fig. 1, the element straightens a skew or warped wall. The lath 2 is affixed to the ceiling in the immediate adjacency of the juncture of the wall and ceiling. The lath 1 is so affixed to the floor, under the lath 2, that the element 5 that has to be fixed can be mounted at right angles to the floor. The end 6 of the element 5 provided with groove 7 is fitted over the lath 1 so that, when the element is erected, the lath 1 has entered the groove 7 and supports and fixes the element. The other end 8 is pushed fast to the lath 2, whereby the lath 2 enters the rabbet 9. The element is affixed to the laths in manners known in the art. Fixing at only one end is often satisfactory, preferably to the lath 2 in the rabbet 9.

The element as shown in Fig. 2 comprises an insulating layer 3, reinforcements 4 and a coating sheet 50. The insulating layer 3 is of any insulating material known in the art, e.g. advantageously of polyurethane. The reinforcements 4 support the element and make it rigid. The coating sheet 50 is a thin sheet manufactured from materials known in the art. One end 6 of the element is provided with a groove 7 of the length of the element, and the other end 8 is provided with a rabbet 9 of the length of the element.

In the design of Fig. 3, the elements have been attached to cover both the ceiling 10 and the wall 11. The element 12 covering the ceiling has been affixed to a lath 13 attached on the wall. An element 14 covering the wall has been attached to the lath 15 affixed to the element 12. In the angle defined by elements has been affixed a lath 16.

In the design of Fig. 4, an element wall is mounted to be a partition in the middle of the room. In this case there are coating sheets on both sides of the element. The element is fixed by attaching lath 1 to the ceiling and the lath 2 to the floor and by aligning the groove on one end of the element with the lath on the ceiling, and by placing the rabbet on the other end in alignment with the lath on the floor and by affixing the element to the laths. On the element and on the lath 2 has been provided a list 17 to make the structure more attractive.

As shown in Figs. 1-4, one end of the element has been disposed to be mounted against one lath from the side. The building work and fixing is considerably facilitated hereby. It is also possible to make both ends such that they have been fitted to be mounted against laths from the side. In that case, both ends of the element are rabbeted, and when the elements are pushed against the laths, the laths enter the rabbets, thus allowing the element to be affixed to the laths.

When using on the outer walls insulating, panel-covered elements according to the invention, it is possible on the other walls to use a special panel element with a view to obtaining unified interior architecture. An element of this kind is composed of wooden panels and of laths uniting them, these laths being mounted behind the panels so that the nails will be hidden. The elements are completely surface-treated, easy to install, manufacture and machine. Moreover, they contribute to faster work. The elements are mounted, according to the invention, in that the first element is affixed by its top and bottom ends to laths fixed on the ceiling and floor. In this manner further elements are mounted until the wall has been completed.

The invention is not confined to comprise merely the embodiment examples presented and covers instead all modifications within the scope of the inventive idea defined by the claims.

Claims

1. A procedure for affixing an element wall comprising one or more structural elements, in the immediate adjacency of the existing confinement of a room or equivalent, such as a wall or ceiling, or more in the centre of the room, in connection with a major renovation or equivalent, characterized in that on one wall confinement, preferably on the ceiling, is fixed a lath (1), preferably as long as said confinement, and on the opposite confinement, advantageously on the floor, is affixed another lath (2) running in the same direction and preferably having the length of said wall confinement, and that using exclusively these two laths (1,2) the element wall is so mounted and supported that one end of the element wall has been disposed to be mounted over one lath (1) and the other end has been disposed to be mounted against the other lath (2) from the side.

2. Procedure according to claim 1, characterized in that the element wall is mounted and supported by fitting a groove (7) on one end (6) of the element over a lath (1) and a rabbet (9) on the opposite end (8) over the other lath (2).

3. Procedure according to claim 1, characterized in that the element wall is mounted and supported by fitting rabbets (9) on the element's ends (6,8) over the laths (1,2).

4. A structural element for applying the procedure according to claim 1, said element comprising an insulation layer (3), preferably reinforcements (4), and coating sheets (50) fixed on one side or both sides of the element , characterized in that one end (8) of the element at least is provided with a rabbet (9) conforming to the breadth of the element and to the shape of the lath by means of which the element is affixed to the lath (2).

5. Structural element according to claim 4, characterized in that one end (6) of the element is provided with a groove (7) conforming to the breadth of the element, and that the groove has been arranged to fix the element end to the lath (1).

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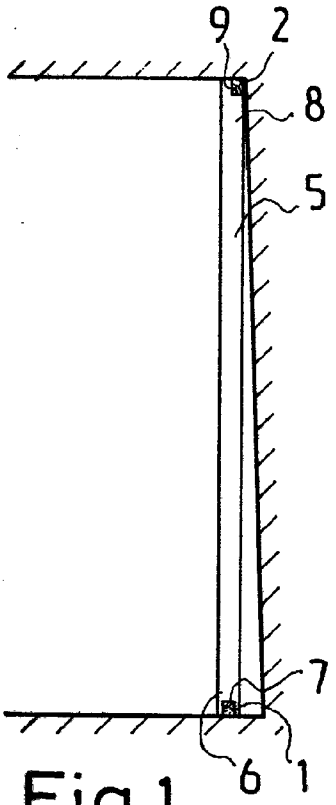

Fig.1

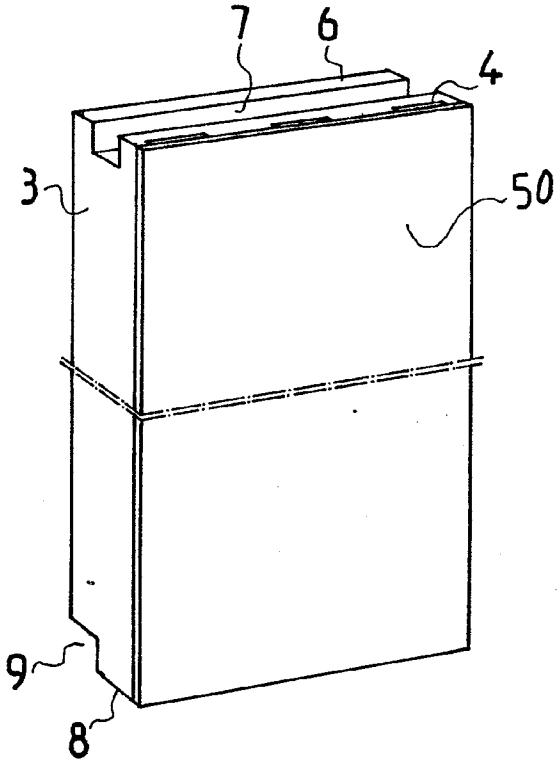

Fig.2

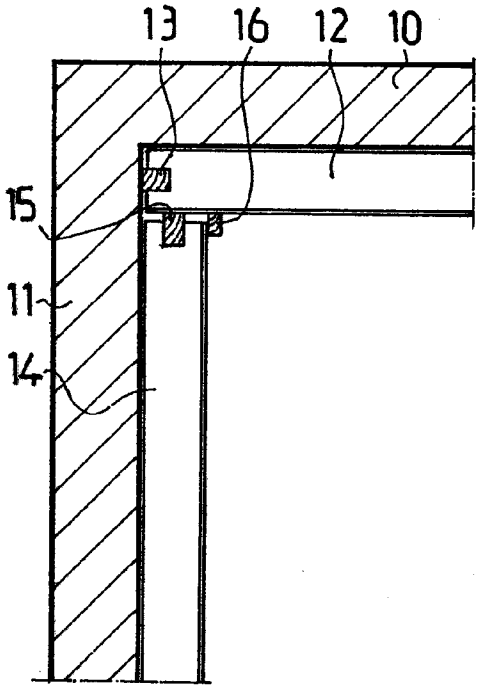

Fig.3

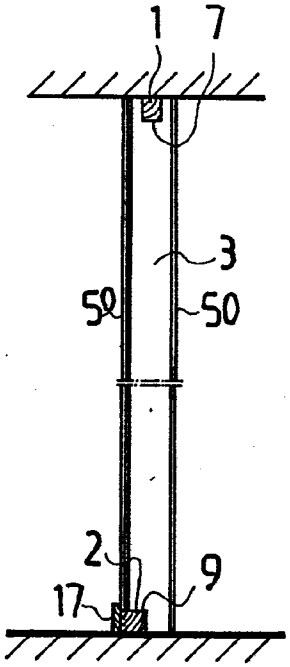

Fig.4

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EUROPEAN SEARCH REPORT

0093906
Application Number

EP 83 10 3862

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. ³)
A	DE-U-8 017 134 (CLOISALL) * Figure 2; claims 1, 8, 9, 11; pages 3, 4 *	1,3,4	E 04 B 2/72 E 04 B 2/82 E 04 B 1/60 E 04 C 2/48
A	CH-A- 524 035 (H. WENGER) * Figure 2; subclaim 2 *	1,3,4	
A	DE-A-2 439 979 (R. MICHEL) * Figures 1, 4, 5 *	1,2	
A	DE-A-2 601 742 (R. ZEEB) * Figures 1, 2; claim 1 *	1	

TECHNICAL FIELDS SEARCHED (Int. Cl. ³)

E 04 B 1/00
E 04 B 2/00
E 04 C 2/00

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
BERLIN	18-07-1983	VON WITTKEN-JUNGNIK

CATEGORY OF CITED DOCUMENTS

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