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INSULATING BOARD CONSTRUCTION

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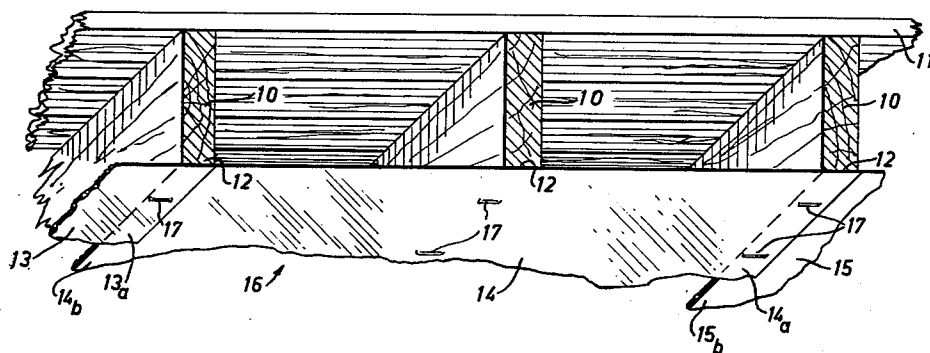


FIG. 1

FIG. 2

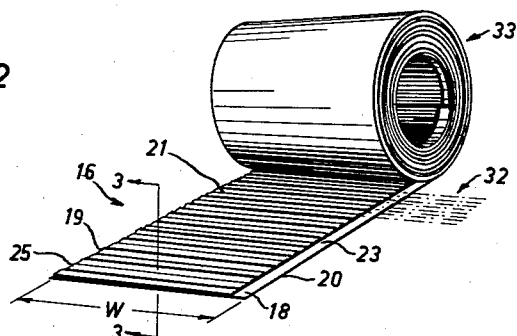


FIG. 3

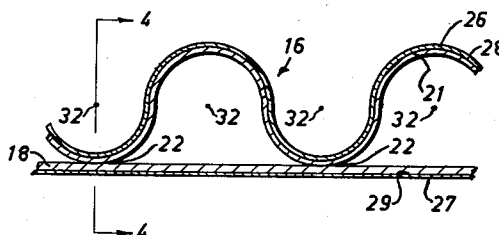
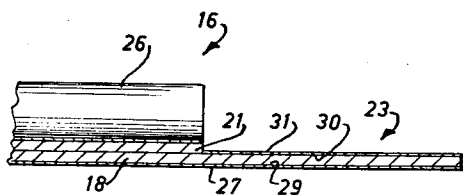


FIG. 4



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1 Claim. (Cl. 154—45)

This invention relates to an insulating board.

Various types of paper board having one side covered by aluminum foil have been employed for heat reflecting and/or insulating purposes in the building industry. Such paper board has been dimensioned in width to conform to a predetermined dimension of one or more standard joist spacings, hereinafter referred to as a "standard joist spacing multiple." Variation in actual joist spacings in practice results in separation of otherwise abutting edges of adjacent insulating boards rendering the construction susceptible to leakage in respect of both moisture and heat.

It is the main object of the invention to provide an insulating board having an overlapping flange on one edge thereof adapted for the formation of an effective heat and moisture seal with the adjacent edge of a like insulating board.

Other objects of the invention will be appreciated by a study of the following specification taken in conjunction with the accompanying drawings.

In the drawings:

Figure 1 is an underside perspective view of a floor supported by joists showing the insulating board of the invention and the manner of application thereof;

Figure 2 is a perspective view of a roll of insulating board of the invention;

Figure 3 is an enlarged section on the line 3—3 of Figure 2; and

Figure 4 is a section on the line 4—4 of Figure 3.

In Figure 1, the joists 10 at a predetermined standard spacing, support flooring 11 and have fastened to the lower edges 12 thereof, the strips 13, 14 and 15 of insulating board 16 of the invention held by any suitable means such as heavy wire staples 17.

The insulating board 16 comprises the paper board carrier sheet 18 having parallel spaced apart edges 19 and 20 of predetermined width W as shown in Figure 2. An undulated paper board sheet 21 as indicated also in Figures 3 and 4 is bonded by a suitable adhesive as at 22 to the carrier sheet. Sheet 21 is of lesser width than the carrier sheet and conforms in width dimension to a standard joisting spacing multiple. Accordingly, a

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sealing flange 23 is formed by that portion of carrier sheet 18 extending beyond the width of sheet 21 at one edge as shown in Figure 4. The edge 25 of sheet 21 is aligned with edge 19 of carrier sheet 18. A covering of metal foil such as aluminum foil at 26 and 27 extends entirely over the outer surfaces 28 and 29 of the thus constituted corrugated board. Preferably also, the inner surface 30 of the sealing flange 23 is covered with a moisture sealing coating or a foil layer 31.

It is preferred to undulate sheet 21 about a series of equally parallel spaced apart axes 32 disposed in the direction of the width dimension of the sheet as in Figure 2 whereby the constituted corrugated board 16 embodies lateral rigidity but is longitudinally flexible, permitting a roll 33 of the board of the invention to be formed for easy handling and shipment.

In use, the sealing flanges 13a and 14a of strips 13, 14 respectively as shown in Figure 1 overlies adjacent edges 14b and 15b of adjacent strips 14 and 15 though the strips need not be in precise abutment. The sealing flange shown provides an effective seal against humidity and heat and presents a more pleasing finish to the construction.

What I claim as my invention is:

1. An insulating board comprising, in combination: a paper board sheet of a width corresponding to a standard joist spacing multiple; transverse reinforcing means in said sheet in the form of rigidifying undulations formed about a series of equally spaced apart parallel axes extending the full width of said sheet, said series extending the full length of said sheet; a paper board carrier sheet having parallel spaced apart edges defining a predetermined width therefor greater than the width of said undulated sheet; means bonding said undulated sheet to said carrier sheet thereby aligning one edge of said carrier sheet with one edge of said undulated sheet and providing an extended portion of said carrier sheet beyond the other edge of said undulated sheet; a single flat surfaced sealing flange formed by the extended portion of said carrier sheet and continuing for the full length of the latter, said flange being adapted sealably to overlap the said aligned edges of an adjacent insulating board and to be fastened to a joist; and a metal foil covering extending entirely over the outer surfaces of said undulated sheet and said carrier sheet.

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