

March 15, 1966

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3,240,144

BAFFLE MEANS FOR CONTROLLING AIR FLOW AT THE
PLATE LINE IN FRAMED CONSTRUCTION

Filed Dec. 11, 1963

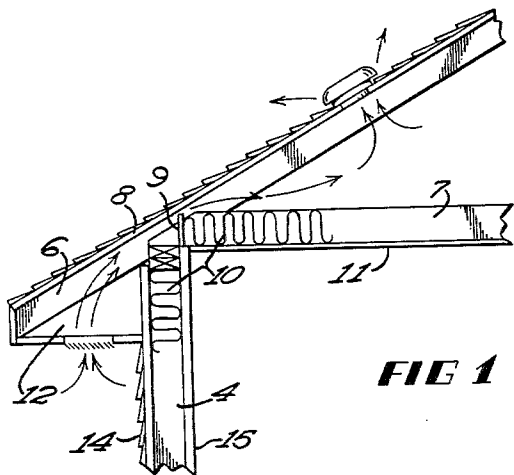


FIG 1

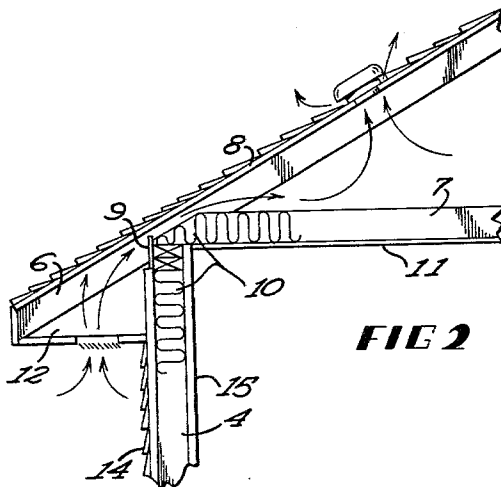


FIG 2

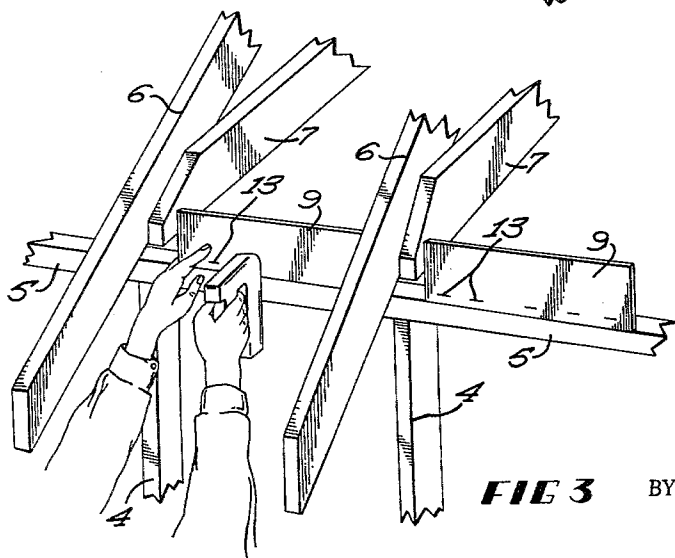


FIG 3

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**BAFFLE MEANS FOR CONTROLLING AIR FLOW
AT THE PLATE LINE IN FRAMED CONSTRUCTION**Raymond R. Lind, 224 N. Cedar Lake Road, Apt. 12,
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Filed Dec. 11, 1963, Ser. No. 329,804

1 Claim. (Cl. 98—37)

This invention relates broadly to construction materials, more particularly to framed wood building construction, and specifically to baffle means to control the flow and circulation of air at the plate line between insulated ceilings, rafters and roof boards in such construction.

It is well known in the building trades that in construction of the class described it is always troublesome when ceilings are insulated by either the blowing or pouring method, whereby the joist runs are filled to prescribed depth, not to close off or impede the free flow of air over the plate or to retard air flow between the rafters and the roof boards. The free flow and circulation of air in these areas is of primary importance to combat the forming of condensation and thus keep ceilings dry to prevent staining and eventual damage from an accumulation of moisture.

It is further well known that in applying insulation by the methods above described in the joist runs the same has a tendency to blow by or be forced over the plate and settle on soffit areas and thus bring about additional problems such as closing air vents therein thereby causing an accumulation of moisture that will eventually cause rotting in the soffit and adjacent areas to say nothing of the fact that insulation in such areas is wasted as it is of absolutely no value as far as the control of heat and cold is concerned.

My present invention is intended to overcome the problems stated above and to provide means whereby it is possible to build up insulation to a greater depth at the plate and ceiling line and at the same time to provide means to insure an ample movement of air, over, between, and around areas adjacent the plate.

Accordingly, the principle object of this invention is to provide baffle means to be installed between the joints and rafters of framed construction, said baffle means being vertically adjustable to insure ample and free movement of air thereover and at the same time allow for the application of insulation to a greater depth in this area that is difficult to reach and control, namely, the point where the ceiling and walls meet.

A further object of this invention is to provide baffle means to be installed between the plate, the rafters and the roof boards of framed wood construction to provide means for preventing blow-by of insulation over the plate into soffit areas where such insulation is of no value.

Another object of this invention is to provide baffle means to be installed between the plate, the rafters, and the roof boards of framed wood construction to provide means for preventing blow-by of insulation being applied to joist runs and to prevent blow-back or washaway of such insulation materials over the plate line caused by wind currents acting on said insulation, said baffle means being provided to direct such air currents through a space well above the ceiling line and the insulation in the joist runs thus permitting said air currents to be directed through roof louvers.

Another object of this invention is to provide baffle means to be installed in framed wood construction between the plate, the rafters, and the roof boards in a

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manner that will not in any way interfere with other building materials, exterior or interior.

A still further object of this invention is to provide baffle means to be installed in a vertical plane between the plate, the rafters, and the roof boards of framed wood construction, said baffle means being color coded to be visible above the said plate so that insulation materials can be applied evenly at the plate line and to a depth that is related to the height of the baffle and the space or clearance between the said baffle and the said roof boards.

These and other objects of the invention will become apparent from the following specification and claims when taken in conjunction with the appended drawing which forms a part of this application, and in which drawings, like characters indicate like parts throughout the several views.

To the above end, generally stated, the invention consists of the following devices and combination of devices hereinafter described and defined in the claim.

Referring to the drawing:

FIG. 1 is a fragmentary view of framed construction showing the invention applied thereto and positioned between the inside edge portion of the double plate and interior sheathing with directional arrows indicating generally, the circulation of air under normal conditions in such construction.

FIG. 2 is also a fragmentary view similar to FIG. 1 but showing the invention applied to framed construction between the double plate and exterior siding also showing directional arrows to indicate normal air circulation.

FIG. 3 is a fragmentary perspective view of framed construction showing the invention being initially applied to the outer edge portions of the double plate.

Of the several elements of framed wood construction it is important to note for the purpose of this application, the studs 4, the double plate 5, the rafters 6, the joists 7 and the roof boards 8.

The invention proper is a baffle plate 9 that consists solely of a pre-dimensioned sheet of plastic or equivalent material to be applied in a longitudinal plane to the double plate 5 by staples or other suitable means. This baffle plate 9 extends substantially between the respective rafters 6 and the joists 7 adjacent the plate line and adjustably positioned in a vertical plane to extend upwardly above the plate line with its upper edge portion in close proximity to the under side of the roof boards 8. It will be understood however that the said baffle plate 9 will not project upwardly to such an extent that the air flow over the double plate 5, or the air flow between the rafters 6, the joists 7, and the roof boards 8 will not in any way be impeded. Air flow in these areas is highly important to combat the forming of insulation 10 poured or blown into the joist runs.

With further reference to the importance and advantages of the invention relative to insulation in the said joist runs, the baffle plate 9 permits the buildings up of said insulation material at the double plate 5 and the ceiling line 11 as this area is normally difficult to work and control because of the limited space at the point where the said walls and ceiling meet. Obviously the installing of the baffle plate 9 permits the filling of the joist run with a greater depth of insulation 10 at this point while at the same time prevents the blow-by of blown insulation particularly over the plate 5 and into soffit areas where the same is wasted and detrimental.

The baffle plate 9 is applied to the plate 5 either on the exterior or interior thereof by a minimum number of staples 13 or the like to initially position the same longitudinally between the rafters 6 and the joists 7, and in a vertical plane relative to the under surface of the

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roof boards 8, thereby allowing a free flow of air there-between.

Generally speaking, in most framed construction, only a single securing means such as a staple 13 is necessary for initially positioning the baffle plate 9 for the reason that being very thin in cross-section, the said baffle plate is secured along its lower edge portion on the double plate 5. This position may be either between the exterior siding 14 and the plate 5 or the interior sheathing 15 and said plate. By virtue of its thin cross-sectional dimension the said baffle plate is sandwiched between the said siding or sheathing without causing any distortion of these elements. Thus, when the said baffle plate is initially positioned it is permanently secured in its proper position on the plate 5 by the same fastening means whereby the said siding 14 or the sheathing 15 is secured to the framing.

Although I have described my invention with a certain degree of particularity, it is understood that the present disclosure has been made only by way of example and that numerous changes in the details of construction and the combination and arrangement of parts may be resorted to without departing from the spirit and the scope of the invention as hereinafter claimed.

What I claim is:

In wood framed building construction, the combination including a plurality of upright studs with upper ends, a plate affixed upon the upper ends of said studs, a plurality of joists supported on the plate and separated from each other by a predetermined space, a plurality of inclined rafters supported on the plate, each of said rafters lying against a re-

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spective joist, roof boards overlying the rafters and affixed thereon, wall surfacing means affixed to said studs and plate and defining exterior and interior walls of the building, ceiling means underlying said joists and affixed thereto and defining an interior ceiling, loose-fill insulation between said joists and overlying said ceiling means,

the improvement including a plurality of substantially rigid upright imperforate retainer panels, each of said panels extending across the space between a pair of joists and being affixed between the wall surfacing means and the plate, said retainer panels extending upwardly from the plate and having upper edges uniformly spaced from the roof boards to retain said loose-fill insulation thereagainst at a desired depth while allowing outward spilling of the loose-fill insulation over the upper edges during installation of the insulation to prevent build-up of insulation against the roof boards and thereby provide continued free passage of air along the roof boards.

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