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REGLET CONSTRUCTION

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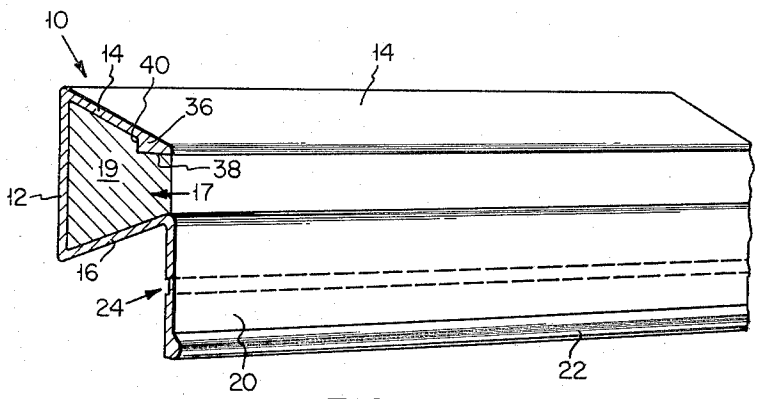


FIG. 1

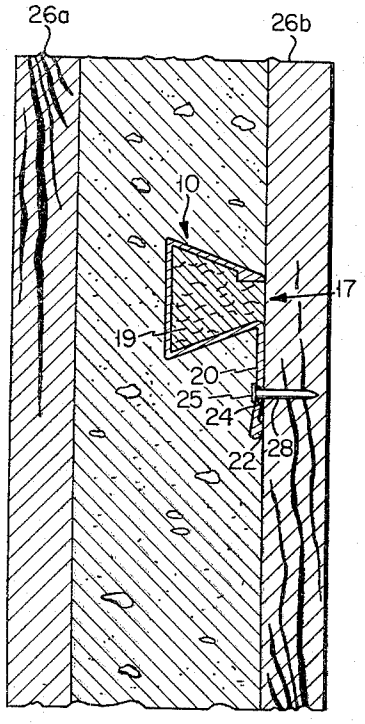


FIG. 2

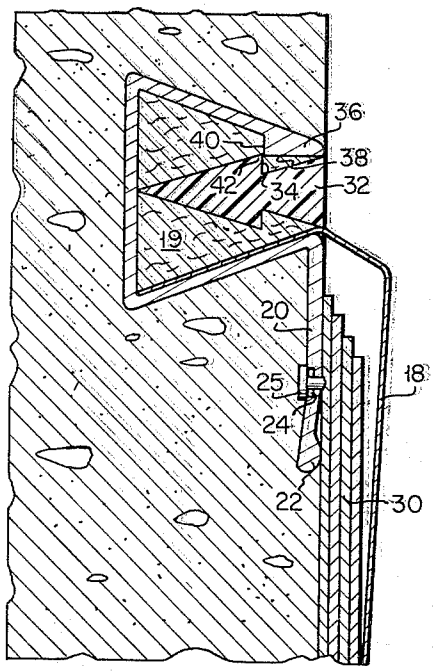


FIG. 3

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REGLET CONSTRUCTION

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The present invention relates to the metal channels known as "reglets" which are employed to support metal structures such as flashings and window frames, in a seepage tight manner from walls, parapets or roofs.

When constructing a concrete wall, a mold is usually set up which comprises two transversely spaced walls that are made of wooden boards and which define the sides of the concrete wall to be constructed. Before concrete is poured into the space between the wooden walls, the reglets are secured in their appropriate positions to the boards of said walls in such a manner that their openings are closed off by said boards. For this purpose the reglets are usually provided with flat lips, and said lips are held against the inner surfaces of the wooden boards and nails are driven through holes previously provided in the lips into said boards. Thereafter the concrete is poured into the space between the walls of the mold. Previously, no matter how tight the reglets were nailed against the boards, cement would invariably seep past the edges of the reglet opening and fill the interior of the reglets, or if the reglets had previously been filled with moisture-excluding compounds, would form crusts over the reglet openings; and after removal of the boards, upon completion of the concrete wall, the crusts had to be removed by special cumbersome and costly operations before flashings could be installed into the reglets.

It is an object of my invention to provide a reglet that may be installed in concrete walls during the construction thereof, without the danger that concrete may flow into their interior or form crusts over their openings.

More particularly it is an object of my invention to provide a reglet construction that may be secured so tightly against the boards which form the mold of the concrete wall, that no concrete can seep past the edges of its opening and fill its interior or form crusts over said opening.

These and other objects of my invention will be apparent from the following description of the accompanying drawing which illustrates a preferred embodiment thereof and wherein:

FIGURE 1 is a perspective, partly in section, of a reglet embodying my invention;

FIGURE 2 is a vertical diagrammatic section illustrating the manner in which the reglet of my invention is secured to the wooden boards that define the mold for a wall during construction thereof; and

FIGURE 3 is a section similar to FIGURE 2 illustrating the reglet in position in the completed wall, with a flashing retained therein.

In accordance with my invention I provide a longitudinal groove in the side of the lip of a reglet opposite to the opening of its channel a distance above the free edge of the lip; said groove weakens the structure of the lip sufficiently so that nails may be driven through it into the wooden boards that define the mold for the concrete wall, without the necessity for punching or drilling special holes for said nails; and along the free edge of the lip on the same side as the opening of the reglet channel, I provide a bead which raises the lower edge of the lip to a limited extent from the wooden board to which it is secured and which acts as a fulcrum whose center axis is somewhat spaced from the adjacent board and about which the upper edge of the channel opening may be forced so tightly into contact with the board by

driving nails through the lip along the described groove that there is no possibility for cement to seep around said edge and flow into the interior of the reglet channel or form crusts over its opening.

Having first reference to FIGURE 1, the reglet of my invention comprises a channel 10 which may be made from sheet metal or extruded metal, such as extruded aluminum, and which has a rear wall 12 and converging top and bottom flanges 14 and 16, respectivley, that form at their converging ends an opening 17 for the reception of a flashing 18 (FIGURE 3). The interior of the channel 10 may be filled with a plastic moisture-excluding compound indicated at 19. The bottom flange 16 is provided with a depending lip 20 that is preferably flat and extends in the plane defined by the edges of the converged ends of the top and bottom flanges of the reglet. Said lip carries along its free bottom edge on the side of the channel opening 17 a longitudinally extending bead 22 of rounded cross sectional contour, and at a level a distance above said bead the opposite side of the lip is provided with a longitudinally extending groove 24 that may be of rectangular cross sectional contour and which reduces the structural thickness of said lip to about half its normal size.

When a wall is constructed from concrete, a mold is usually set up which comprises two transversely spaced side walls 26*a* and 26*b* (FIGURE 2) that are made of wooden boards and which define the sides of the wall to be constructed, as previously pointed out. Before pouring the concrete, the reglet is held against one of said wooden walls 26 in such a manner that its opening 17 is closed by the boards of said wall, whereupon it is secured in position by driving nails through the lip 20 into said boards. Prior to my invention, when the lip was held flat against the wall of the mold, and nails were driven through the lip into the wooden boards, it was impossible to establish such tight contact between the wooden wall of the mold and the edge of the upper flange 14 and/or the bottom edge of the lip 20 as to exclude seepage of cement around said edges into the space between the reglet and the wall. In fact, the more tightly the lip of these reglets was nailed to the wall of the mold, the greater the tendency of the upper flange 14 of the reglet channel and the bottom edge of the lip 20 to yield away from the wall. However, when a bead is provided along the bottom edge of the lip on the side that faces the wall of the mold, and the lip is secured to the wall at a level a distance above the bead by driving nails 25 through the groove 24 on its opposite side, the edge of the flange 14 may be caused to bite into the wooden wall, and the bead 20 at the bottom of the lip can be pressed so tightly against said wall that neither moisture nor cement can penetrate into the space between the reglet and the wall, no crusts of concrete form over the opening of the reglet, and no reconditioning operations for the reglet are necessary upon completion of the wall. This is especially true for reglets made from relatively rigid materials; such as extruded aluminum reglets. The presence of the groove 24 in the opposite side of the lip makes it possible to secure the reglet in place without need for punching or drilling holes into the lip as was previously necessary, and provides the added advantage of aiding the craftsman in applying the nails at the proper level and along a straight line so that it is now possible to employ unskilled labor for securing the reglets to the walls of the mold.

Upon completion of the concrete wall, the wooden boards that formed the mold, are removed and the protruding points of the nails 25 that secured the reglets to said boards, are clipped off; and after roofing material indicated at 30 in FIGURE 3 has been laid along the wall or on the roof, as the case may be, the edge of a

counter-flashing 18 intended to protect the edges of the roofing material, is inserted into the reglet so that the counter-flashing may be held in its proper position by said reglet. As pointed out hereinbefore, the channel of the reglet may be filled with an initially soft, moisture-excluding compound indicated at 19, that hardens sufficiently after a relatively short period of time to hold the counter-flashing dependably in its proper position. To avoid displacement of the counter-flashings before the compound in the reglet channels has sufficiently hardened, however, wedges of a resilient material such as rubber-like plastics are driven at intervals into the mouth of the reglet above the counter-flashings as indicated at 32 in FIGURE 3. The wedges 32 have usually the cross sectional contour of a barbed spear head of a length about equal to the distance between the rear wall and the mouth of the reglet channel and of a base width about equal to the width of said mouth, and its barb forms a shoulder 34 at a point somewhat closer to the base of the wedge than to its edge. The reglet of my invention possesses means for preventing tilting and dislocation of such wedges so as to guide them into, and maintain them in, a position wherein they are most effective in holding the counter-flashings in place. For this purpose the upper flange 14 of the reglet is thickened along its edge on the inside thereof to form an inverted console 36 that presents a horizontal surface 38 to the oppositely located end of the lower flange 16 where the lip 20 commences, and which forms a narrow rearwardly directed shoulder 40. When a wedge 32 is pushed through the mouth of the reglet channel into the compound 19 above the engaged edge of the counter-flashing 18 to the position illustrated in FIGURE 3, the horizontal area 38 of the console 36 prevents the upper edge of the base of the wedge from dropping into the reglet channel, which it might easily do if it encountered nothing but the upwardly receding inner surface of the upper channel flange 14, and which would cause it to tilt rather than bring the opposite edge of its base to bear upon the engaged edge area of the counter-flashing; and once the wedge has been fully inserted into its proper position, its upper barb 42 engages behind the shoulder 40 of the console 36, which makes it impossible for the wedge to work itself loose.

The reglet construction of my invention is of particularly, but not exclusive, utility and effectiveness for the more rigid types of reglet made of extruded metal.

While I have explained my invention with the aid of a particular embodiment thereof, it will be understood that the invention is not limited to the specific constructional details shown and dsecribed by way of example, which may be departed from without departing from the scope and spirit of my invention.

I claim:

1. A reglet construction comprising a channel having converging top and bottom flanges arranged to form at their converged ends an opening for the reception of a flashing, a console formed along the end of said top flange on the inside thereof and arranged to present a horizontal surface to the end of said bottom flange and to form an inwardly directed shoulder, and a lip depending from the end of said bottom flange and having a longitudinally extending bead provided along its bottom edge on the same side as said channel opening.

2. A reglet construction comprising a channel having converging top and bottom flanges with their converged ends arranged to form an opening for the reception of a flashing, a console formed along the end of said upper flange on the inside thereof and arranged to present a horizontal surface to the end of said lower flange and form an inwardly directed shoulder, a flat lip depending from the edge of said lower flange in the plane determined by said ends, and a bead extending longitudinally along the bottom edge of said lip on the same side as the opening of said channel, said lip having a longitudinally extending groove of rectangular cross section on the side opposite to and at a level a distance above said bead.

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