

[54] CLAPBOARD ASSEMBLY FOR ROOFS AND SIDINGS

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[58] Field of Search 52/478, 519, 520, 52/521, 529, 309, 530, 516, 540

[56] References Cited

UNITED STATES PATENTS

2,013,352	9/1935	Levin	52/516
2,232,075	2/1941	Nevin	52/540
3,284,967	11/1966	Elliot et al.	52/521
3,332,193	7/1967	Elmendorf	52/521 X
3,626,651	12/1971	Kough et al.	52/540 X

Primary Examiner—Price C. Faw, Jr.

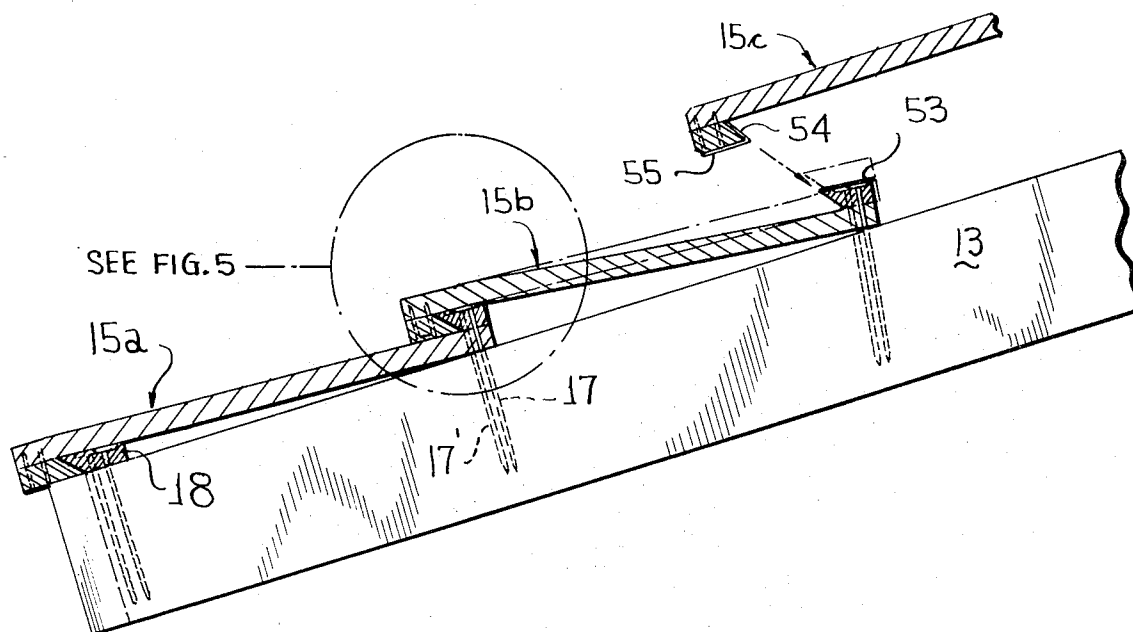
Attorney—Donal E. McCarthy et al.

[57]

ABSTRACT

An epoxy-joined-and sealed weatherproof clapboard assembly comprising a plurality of interlocked clapboards which are adhesively joined along beveled mating surfaces and epoxy-coated on all weather-exposed surfaces, each clapboard having a beveled drip edge and a beveled shelter edge, whereby the epoxy coating forms a C-joint which grasps the lower or drip side of the clapboard rather than merely holding it in shear. Each clapboard is sealed with an epoxy resin on all surfaces before assembly and comprises an elongated panel to which a pair of inwardly beveled interlocking strips are adhesively attached along each long edge and on opposite sides of the panel. The upper holding interlocker is on the weather surface and adjacent to the upper side of the installed panel, and the lower sealing interlocker is on the interior or protected surface and adjacent to the drip side of the installed panel. Each panel is also provided with lap joints along its end, whereby the clapboards are adhesively conjoined end-to-end, and is preferably one-half inch thick.

13 Claims, 7 Drawing Figures



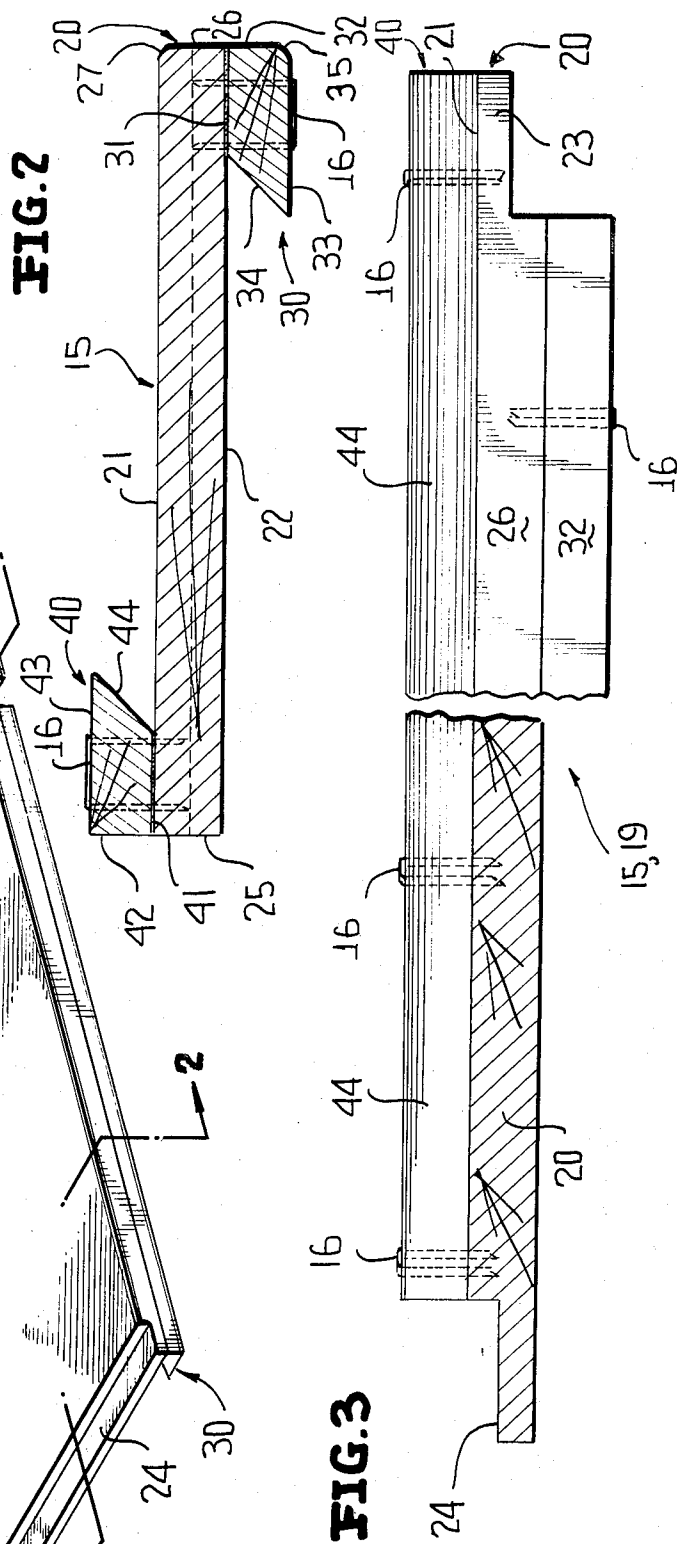
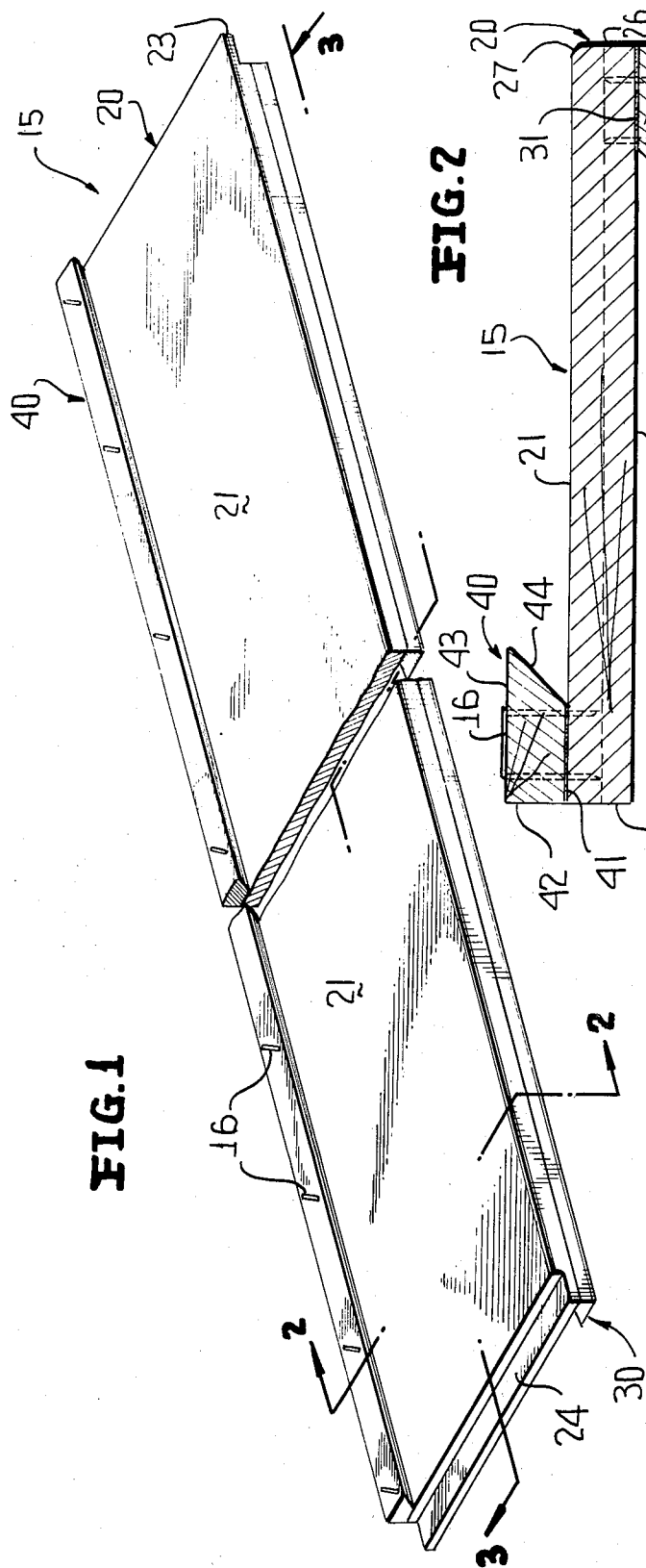


FIG. 4

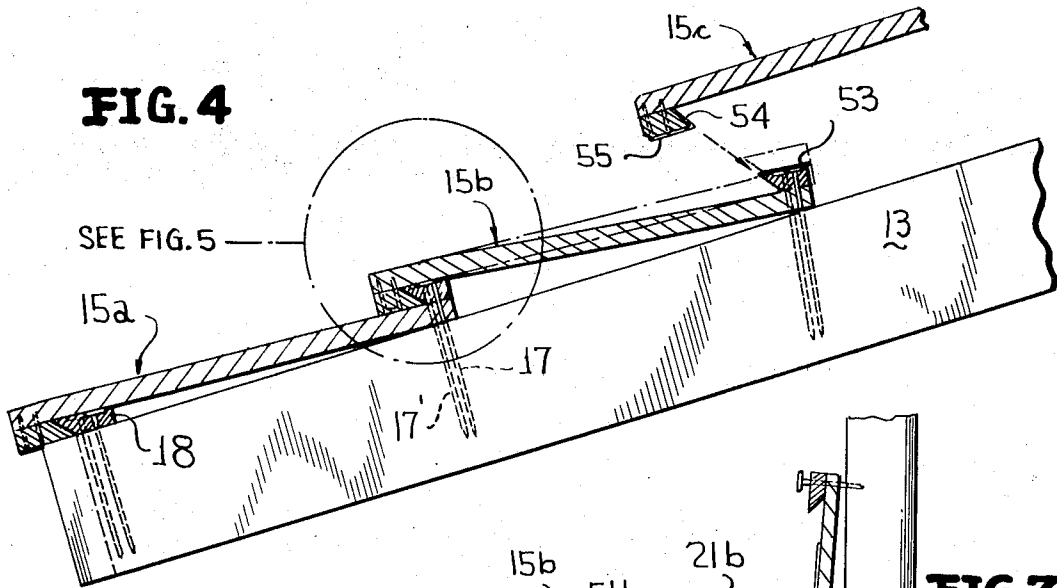


FIG. 5

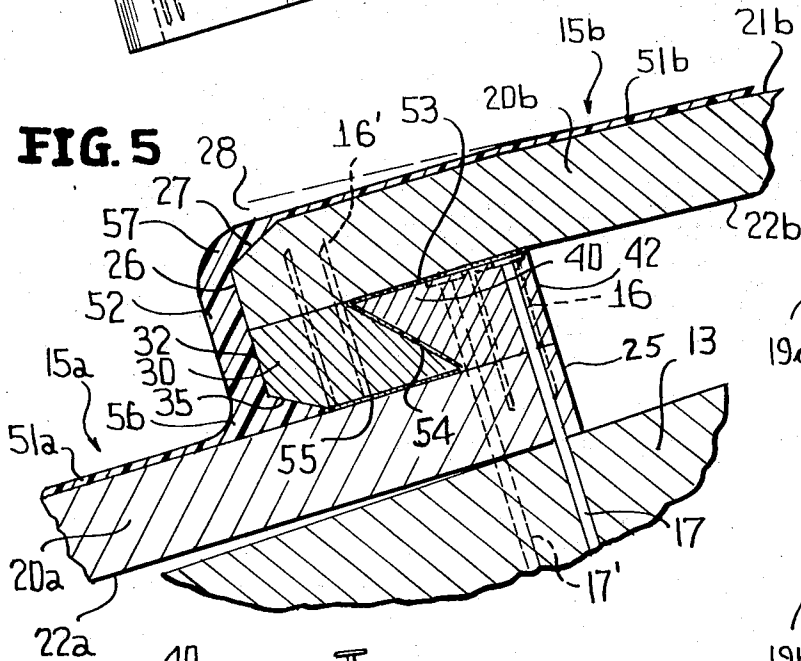


FIG. 6

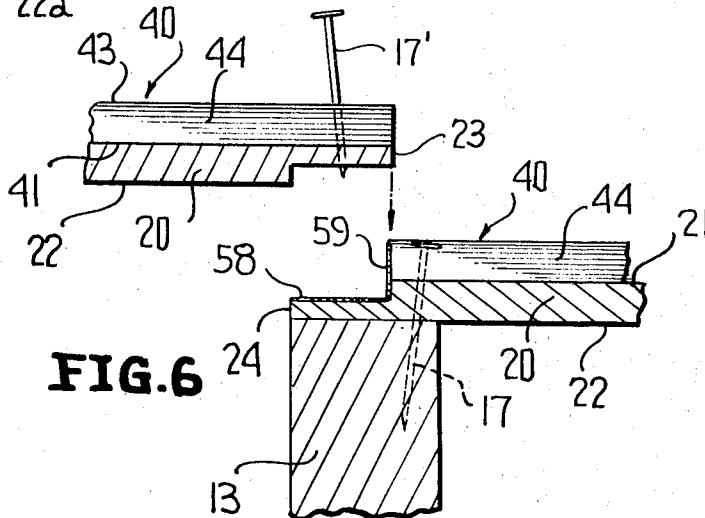
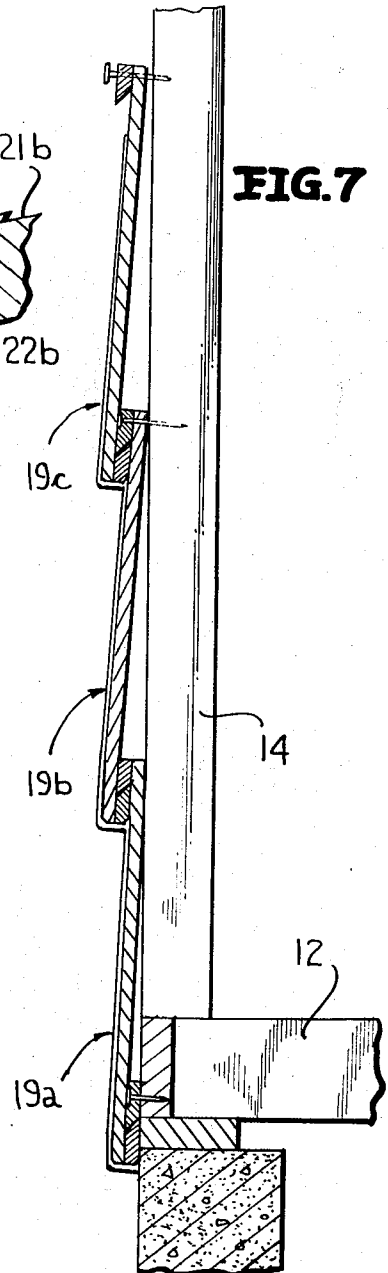


FIG. 7



CLAPBOARD ASSEMBLY FOR ROOFS AND SIDINGS

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to exterior protecting surfaces and particularly relates to roof and sidings of clapboard construction. It especially relates to joining and sealing of shingles and clapboards which are used for roofs and sidings.

2. Review of the Prior Art

Many attempts have been made to prepare a roof having sufficient weatherproofness, freedom from warping, strength, lightness, stiffness, and durability that underlayment can be dispensed with. An example is visible in FIGS. 2 and 3 of U.S. Pat. No. 3,284,967 of Elliott et al. where clapboards 16, 17, 18 of 6-20 feet in length have upper beveled edges and alignment strips 20,21 attached to the underside thereof with matching bevels on their lower edges. These clapboards 16, 17, 18 are attached with nails 5,6 to studs 1 or to rafters 24 and trusses 19. V-shaped seals 43 of soft plastic or rubber are positioned therebetween so that lower edges 45 and upper edges 46 cover the entire upper tapered sides of the panels 40. The clapboards 16, 17, 18, preferably of ½-inch-thick plywood, are covered with a waterproof plastic film 13.

The Nevin U.S. Pat., No. 2,232,075, shows a plywood siding in which adjacent lapboards are lap-joined to form a flush joint at the ends thereof.

The Elmendorf U.S. Pat. No. 3,332,193, discloses a siding or roof panel comprising a base panel 1 with a pliable pigmented, and weather-resistant film 3 thereon which extends to the clamping strip 2 with a gap 4 therebetween equalling the combined thickness of the panel 1 and strip 2 so that the film 3 covers the outer or drip sides of both panel 1 and strip 2 when the strip 2 is rotated therebeneath on its film hinge. The base panel 1 has a shoulder 10 and a groove 9 which respectively fit into a recess 11 and a shoulder projection 8 in the clamping strip 2. Adhesive is used to conjoin the base panel to the clamping strip 2. Nails 6 are driven through a clamping strip 2 and panel 1 of the next lowest panel before hingeably folding the attached panel 1 thereover.

Although soundly designed, these prior art constructions have nevertheless experienced difficulty in resisting the driving rains and the very hot sun of some locations, such as in Florida. Specific difficulties which have been noted include occurrence of hair-line cracks in plastic covering films, cracks in joints between clapboards or shingles into which water has been driven, warping of boards after long exposure, chipping of protective films along the drip edges of clapboards, damaging deflection from the weight of a man walking on a roof, and penetration of water through openings in the protective films caused by dropped tools.

Yet a need exists for a lightweight roof that withstands the weight of workmen and incidental blows therefrom, is attachable directly onto rafters without an underlayment therebeneath, and has high durability, weatherproofness, and ease of installation.

SUMMARY OF INVENTION

It is accordingly an object of this invention to provide a clapboard assembly formed of a plurality of prefabricated clapboards that can be installed as a Bermuda-

style roof or clapboard-style siding directly onto trusses or studding, respectively.

It is a further object to provide a clapboard assembly having sufficient strength as an installed roof to be able to withstand walking thereon by a plurality of workmen without impairment of long-range weatherproofness when constructed of ½-inch plywood.

It is an additional object to provide a prefabricated clapboard which is useful in the clapboard assembly of this invention.

It is also an object to provide a method for constructing the clapboard assembly of this invention having exceptional durability, weatherproofness, lightness, and strength.

In satisfaction of these objects and in accordance with this invention, a lightweight, weatherproof, strong, and durable clapboard assembly is provided herein and is described in the accompanying drawings which comprises clapboards or elongated shingles, made of ½-inch-thick plywood, which are nailed directly to rafters or studdings. Each clapboard is sealed with an epoxy-based resin on all surfaces and comprises an elongated panel, having interior and exterior laps along its ends, to which two inwardly beveled interlocking strips are adhesively joined at each long edge of the panel and on opposite sides thereof. The upper holding interlocker is adhesively conjoined to the weather surface of the panel. This panel is nailed directly to a truss or stud through this holding interlocker. The sealing interlocker is adhesively conjoined to the interior or protected side of the panel, alongside its lower or drip side, and the shelter and drip edges of the combined drip sides are deeply sloped or rounded. In making the clapboard assembly, the sealing interlocker of the next higher clapboard is interlocked in mating relationship with the holding interlocker of the previously nailed-down clapboard, and all contacting surfaces are adhesively conjoined. The clapboard assembly of adhesively conjoined clapboards is finally sealed with a marble dust-epoxy resin mixture on all surfaces exposed to the weather, forming a C-joint covering the drip side of the clapboard and locking the clapboards together.

DESCRIPTION OF THE DRAWINGS

The invention may be more clearly understood by referring to the accompanying drawings, as follows:

FIG. 1 is a perspective view of a clapboard in which the elongated drip side, the weather surface, and the lap joints along the ends of the clapboard panel are visible.

FIG. 2 is a cross-sectional side elevation taken in the direction of the arrows 2-2 in FIG. 1, looking across the panel toward the far end thereof.

FIG. 3 is a partial cross-sectional front elevation taken in the direction of the arrows FIG. 3-3 in FIG. 1, looking upwardly toward the holding interlocker.

FIG. 4 is a cross-sectional side elevation of a portion of a clapboard assembly, used as a roof, in which the bottom clapboard is installed at a steeper angle by omission of an underlayment strip so that the panel of the second clapboard must be bent slightly.

FIG. 5 is an enlarged cross-sectional elevation of the lower joint of FIG. 4.

FIG. 6 is a cross-sectional front elevation of an end joint as the lap joints are being mated.

FIG. 7 is a sectional side elevation of the clapboard assembly used as a siding.

DESCRIPTION OF THE PREFERRED EMBODIMENT

As shown in FIG. 1, a clapboard 15 comprises a panel 20, a sealing strip-type interlocker 30, and a holding strip-type interlocker 40. The panel 20 has an exterior or weather surface 21, an interior surface 22, an exterior or weather lap 23 at one end, an interior lap 24 at the other end, an elongated upper side 25, an elongated lower or drip side 26, and a sloped or rounded drip edge 27. The sealing interlocker 30 has a panel side 31, a drip side 32, a joint side 33, a sealing bevel 34, and a sloped or rounded shelter edge 35. The holding interlocker 40 has a panel side 41, an interior side 42, a joint side 43, and a holding bevel 44.

As is clearly apparent in FIGS. 1 and 3, each interlocker 30,40 is shorter in length than a panel 20 by the width of a lap joint 23,24. The bevels 34,44 are preferably at 45° to the respective panel sides 31,41 but may be at any suitable angle; it is necessary, however, that they be mutually parallel when in mating relationship. Panel sides 31,41 are narrower than the joint sides 33,43. Preferably, the width of a panel 20 is 14-1/4 inches and the length is 8 feet, so that 12 clapboards cover 100 square feet or one square, in terms used by all builders and roofers for mental estimates. Of course, 15 panels having dimensions of 8 feet by 10 inches or 10 clapboards having dimensions of 15 inches by 8 feet also expose one square to the weather when joined to form the clapboard assembly of this invention.

The drip and shelter edges 27,35 are preferably sloped as shown in FIGS. 2 and 5 by routing a triangular strip of five-sixteenths inch by three-sixteenths inch along the edges joining the weather surface 21 and the drip side 26 and joining the joint side 33 and the drip side 32, respectively, before applying the humidity sealer to each clapboard 15. However, these drip and shelter edges 27,35 may be rounded or cut with varied dimensions so long as the resultant cross-section, as shown in FIG. 5, reveals a C-shaped coating of epoxy resin that overlays the combined drip sides 26,32 and locks the clapboard 15b, for example, to the clapboard 15a. Hereinafter, "sloped" is to be considered as comprising any substantial flattening or rounding of a clapboard edge.

When constructing a clapboard panel 15, plywood sheets, measuring 4 feet by 8 feet by one-half inch, are stacked flat and level with suitable supports, under a roof with open sides so that an air space is available around each plywood sheet for air circulation in order to acclimatize them to local weather conditions. After sufficient exposure to produce uniform conditions, each plywood sheet is ripped into three panels 20, measuring 8 feet by 14-1/4 inches by 1/2 inch, and one pair of interlockers 30,40. Additional interlockers 30,40 are sawn from another plywood sheet as necessary. The plywood sheets must be exterior grade and are preferably one-half-inch thick. The interlockers must be equal in thickness to each other but need not be equal in thickness to the panel.

Interlocker strips 30,40 are then adhesively conjoined to opposite weather and interior surfaces 21,22, respectively, along the elongated edges thereof and on opposite sides thereof, as shown in FIGS. 1-3 with any weatherproof adhesive, such as epoxy, resorcinol-formaldehyde, polyurethane, and polyester resins. If desired, staples 16 are driven into each interlocker

30,40 across the outer grain of the plywood into the underlying panel 20 in order to have suitable clamping pressure during polymerization of the adhesive resin which is applied to the glue sides 31,41. If another means of maintaining interlockers 30,40 in tight relationship to the panel 20 is available while the adhesive therebetween is polymerizing, the staples 16 may be omitted.

The resinous humidity sealer must be compatible with the conjoining resin and with the weather coating to be subsequently applied. The conjoining resin and the humidity sealer are preferably epoxy-based resins. A highly preferred resin is made with 60 percent of an epoxy resin and 40 percent of styrene resin, such as 32-111 epoxy-styrene resin which is manufactured by the Reichhold Chemical Company. A chemical reaction hardener such as methyl ethyl peroxide in methyl ethyl ketone is added as one liquid ounce per 40 pounds of resin. The mixed resin, having a normally usable hardening time of 15 minutes, may be applied as both the conjoining resin and the humidity sealer by spraying, dipping, brushing, or rolling. When sealing each clapboard 15 with this resin as the humidity sealer, all surfaces are covered. It is important that the humidity sealer is applied only to surfaces which are freshly sawn or not previously sealed or painted. If the weather coating is not applied within 15 minutes, coarse sandpaper should be applied to the conjoining surfaces 21,22,33,43,34,44. 17,17'

The method of attaching a plurality of clapboards 15,19 to a supporting structure, such as trusses 13 of a roof or studding 14 of a wall, begins with nailing or adhesively attaching a beveled starter strip 18 at about one-half inch from the bottom edge of the trusses 13,14 and in parallel therewith. This starter strip 18 is suitably of the same dimensions as a sealing interlocker 30. An adhesive conjoining resin is then applied to the joint and beveled sides of the starter strip 18 along its entire length. The first or lowest clapboard 15a is then interlocked with the starter strip 18, and a pair of ringnails 14,17' are driven into and through the panel 20a, close to its upper side 25, and into the underlying trusses 13 or studs 14. These nails 17,17' are clearly visible in FIG. 5, nail 17' being staggered to be somewhat behind nail 17. A coating of adhesive resin is then liberally applied to the joint side 43 as interior glue 53, to the beveled surface 44 as bevel glue 54, and to the weather surface 21 of the panel 20a as sealing glue 55. The next clapboard 15b is then interlocked with the clapboard 15a. If the lowest clapboard 15a is applied as shown in FIG. 4, wherein the starter strip 18 is laid directly onto the trusses 13 or studs 14, the panel 20a is more nearly parallel to the underlying trusses 13 or studs 14 than is the subsequent panel 20b so that there is a slight angle therebetween. This angle between first and second clapboards 15a,15b, respectively, can be avoided by nailing the starter strip 18 onto a previously nailed underlayment strip, which is not shown in the drawings, having dimensions of about 2 inches by 1/2 inch by 8 feet. The starter strip 18 should then correspond in dimensions to a holding interlocker 40.

Without such an underlayment strip, as shown in FIG. 4, the panel 20b of the second clapboard 15b must be bent slightly through a starting angle 28. This is done by pushing firmly against the drip edge 27 while pushing downwardly on the weather surface 21b near the upper side 25b of the clapboard 15b and nailing this

clapboard securely to the underlying trusses 13 or studs 14. If, however, the second clapboard 15b is not held with sufficient firmness during the nailing so that the bending angle 28 tends to occur in the joint, such as by opening up where the sealing glue 55 is applied along the joint side 33, the adhesive in the sealing glue 55 is sufficiently viscous that it effectively occupies the small space that is opened up.

The next clapboard 15c is then interlocked with the nailed-down clapboard 15b after applying adhesive to the joint surfaces. As shown in FIG. 4, the interior glue 53 may be applied to the joint side 43, but the bevel glue 54 and the sealing glue 55 are preferably applied to the bevel 34 and the joint side 33 respectively, just before interlocking the clapboard 15c with the clapboard 15b. Because the panels 20c and 20b are parallel, no bending of the panel 20c is necessary.

If the starter strip 18 is attached directly to a supporting structure, such as trusses or studding, the widths of the sealing and holding interlockers 30,40 become important. Although the cross-sectional dimensions of the interlockers 30,40 are substantially the same size in the drawings, the joint side 43 of the holding interlocker 40 having a 45° bevel 44 should be 1-½ inches wide, and the panel side 41 should be 1 inch wide for ½-inch thick plywood. The joint side 33 of the sealing interlocker 30 having a 45° bevel 34 should be 1-¼ inches wide, and the panel side 31 should be three-fourths inch wide for one-half-inch thick plywood. These dimensions are minimum for double nailing into a truss 13 or stud 14 and should also not be exceeded when attaching a second clapboard 15b to a bottom clapboard 15a with no under-layment strip beneath the starter strip 18, whereby bending of the panel 20b through the starter angle 28 is necessary. If not necessary to bend the panel of a clapboard, the interlockers may be as wide as desired, however.

The thickness of the panel 20 is preferably one-half inch, but thinner thickness are feasible in accordance with stiffness calculations of a panel having tripled thickness along the elongated edges. Because the modulus of stiffness increases with the cube of thickness, the effect of two panels sandwiching a pair of interlockers is to impart very great increases in stiffness to a clapboard assembly. For a 14-¼-inch wide clapboard panel 20 having a pair of interlockers 30,40 along the edges thereof, there is 10-¾ inches of unsupported space. If the panel is made somewhat narrower, such as 10 inches, the unsupported distance becomes 5-½ inches so that a thickness of ¾ inch is suitable, and even a ¼ inch thickness is feasible as Southern pine plywood is utilized.

After all of the clapboards for the clapboard assembly have been sequentially interlocked, adhesively conjoined, and nailed to the supporting structure, the weather coating is applied to all weather-exposed surfaces. This weather coating must be compatible with the humidity sealer and the weatherproof conjoining adhesive previously applied. An epoxy-based resin is preferred, and the epoxy-styrene resin used for the weatherproof conjoining resin is highly preferred.

Ten pounds of this 60/40 epoxy-styrene mixture are combined with 15 pounds of finely divided marble dust (such as — 200 mesh marble dust from the Georgia Marble Co., Tate, Ga.), 0.5 pounds of pigment (such as Jelcote pigment from the Reichhold Chemical Co.) and 0.5 pounds of titanium dioxide (such as T102 tita-

nium dioxide from the Reichhold Chemical Co.). The mixture can be thoroughly mixed in a breadmixer and allowed to stand while the clapboard assembly is being constructed.

Surfaces coated with the humidity sealer must be quickly roughened with coarse sandpaper, unless 15 minutes or less have elapsed since application thereof. The peroxide hardener is then added into the contents of the breadmixer, in the same proportions as used for conjoining adhesive, after it has run briefly to compensate for settling of marble dust. The resulting exothermic reaction can raise the temperature of the mixture to as high as 185°F so that cooling of the breadmixer, rapid spray application of the resin through a special spray gun, or other methods of preventing premature hardening should be used. Alternatively, the quantity of hardener can be reduced utilizing overnight hardening.

The coating should be approximately one-sixteenth-inch thick on weather surfaces 51 and one-fourth-inch thick in the drip bead 57 over the drip edge 27, in the drip coating 52 over the panel drip side 26 and over the sealing interlocker drip side 32, and in the sealing bead 56 over the shelter edge 35, as shown in FIG. 5, which collectively exhibit a C-shaped outline in cross-section, thereby grasping the lower or drip edge of the upper clapboard, instead of merely holding it in shear, and bonding overlappingly adjacent clapboards together against very strong disruptive forces. The sealing bed 56 also forms a smooth, elongated concavity that inhibits its localized moisture accumulation.

Furthermore, the clapboard manufacture, assembly, and coating methods of this invention provide complete isolation of the weather-exposed surfaces and edges from the direct effects of sun, rain, and wind and also provide for filling of joints and creation of rounded surfaces at shelter edges and drip edges, whereby chipping of exposed edges is minimized and accumulation of moisture in joints is substantially prevented. As a result, crazing and hair-line cracks do not occur.

EXAMPLE 1

Five sheets of exterior grade Douglas Fir plywood, one-half inch thick, were laid horizontally over several parallel battens under an open shed for two months. Three sheets were each cut with a wide panel of 8 feet by 37-½ inches and a narrow panel of 8 feet by 10 inches. A 5-inch strip of 8-foot length was cut along one long edge of the fourth sheet and a 19-inch strip was sawn along one long edge of the fifth sheet. The remaining wider portions of both the fourth and fifth sheets were end-lapped to provide exterior and interior laps on the ends thereof measuring 1-½ inches by ¼ inch. Then five panels having a width of 14-¼ inches and a length of 8 feet were cut therefrom. The narrower portions cut from the fourth and fifth sheets were shortened by 1-½ inches. Then five sealing interlockers, having widths of 1-½ inches and 1 inch with a 45° bevel therebetween, and five holding interlockers, having widths of 1-¼ inches and ¾ inch with a 45° bevel therebetween, were cut from these narrower portions. Finally, a single under-layment strip, having widths of 2-½ inches and 3 inches with a 45° bevel therebetween, was cut from the remainder.

These panels and interlockers were transversely cut into 2-foot portions which were used for manufacture of test panels. The lapped ends of the end portions were

adhesively conjoined with the epoxy-styrene resin, with hardener as described hereinbefore, to form 4-foot panel lengths having widths of 37-½ inches, 14-¼ inches, and 10 inches. Then clapboards were formed with the same conjoining resin by clamping a two-by-two member over each interlocker after this resin had been applied to the panel sides of the interlockers. After overnight hardening of the resin, these clapboards were sealed with the epoxy-styrene resin, as humidity sealer, on all surfaces and were then used to manufacture test clapboard assemblies according to the method of this invention which were exposed in central Florida to the weather for protracted periods.

EXAMPLE 2

The end-lapped clapboard assembly incorporating the 37-½-inch wide clapboards was manufactured as a portion of the mansard roof, for a single-story house. The roof had a pitch of 1 foot in 10 feet. The test area was at one corner thereof with a northern exposure. After 4 years, no defects were visible to close inspection.

EXAMPLE 3

The intermediate-width clapboards, 14-¼ inches wide and end-lapped into 4-foot lengths, became a clapboard assembly mounted on a test rack to simulate a valley section of a roof with a pitch of 1 foot in 20 inches. The exposure was to the south and southeast. After 4-½ years, the test section was completely free of hairline cracks and showed no evidence of moisture accumulations, seepage of water into the sealing beads or sealing glue areas, or chipping of the weather beads.

EXAMPLE 4

The end-lapped clapboards having a 10-inch width and end-lapped into 4-foot lengths became a clapboard assembly as a siding at the rear of a test building. At intervals of approximately once a week, a garden hose having 40-psi water pressure was used to attempt to force water between the clapboards, thereby augmenting the effects of hot sun and driving rains normally experienced. No defects were visible at the end of one year.

EXAMPLE 5

The two center portions of panels and interlockers, having 2-foot lengths and of all three widths, were made into clapboards by workmen who were instructed to work as if under pressure to complete the job in a hurry, no overt supervision being used. Staples were employed to clamp the interlockers, having freshly applied epoxy-styrene resin on their panel sides, onto the panels, and the finished clapboards were expeditiously nailed onto supporting structures simulating trusses and sidings while being unceremoniously conjoined with the same epoxy-styrene resin applied to their joint sides.

As two men were laying the clapboards in sequence to form test assemblies, another man added the peroxide hardener to the epoxy-styrene-pigment-marble dust mixture in a breadmixer and began applying the resin to each clapboard assembly, keeping one clapboard behind the manufacturing process. The workmen were left to do their own inspection.

After remaining overnight, the four test assemblies were installed on test racks that faced approximately toward the four directions of the compass, three being simulated roofs of medium to flat pitch and one being a simulated siding subject to much shade and a northerly exposure.

After five yearly inspections, no visible defects were discernible on any of the four assemblies. A visitor during the fourth inspection was handed a square, sharp-edged masonry hammer and was asked to hammer on one of the roof assemblies as hard as he chose or until tired. After a dozen blows therewith, there was no substantial damage and there seemed to be no ill effects a year thereafter.

EXAMPLE 6

A small test assembly having a length of 6 inches was fabricated from scraps left from construction activity of Examples 3-5, the ends being sealed, however, after sawing to the 6-inch length. As a combination of two panels having a 14-¼-inch width and one panel having a 10-inch width, this test piece was shipped to a Connecticut location where it was secured to a low-lying roof in simulated roof posture for an entire winter. The test piece was then shipped back to Florida and exposed for three years atop a roof having a southern exposure. The test piece seemed to remain in excellent condition.

Various modifications of the basic invention of clapboards, clapboard assemblies, and manufacturing methods therefor may be made without departing from the spirit and scope of my invention. What I accordingly wish to protect and believe to define my invention is to be limited only according to the following claims.

What is claimed is:

1. An interlockable clapboard suitable for roofs and sidings without an underlayment therebeneath, comprising:

A. an elongated panel having:

1. broad weather and interior surfaces and narrow drip and upper sides therebetween,
2. interior and exterior laps of equal width along the ends thereof, and
3. a sloped drip edge between said panel drip side and said weather surface,

B. an elongated sealing interlocker having:

1. opposed panel and joint sides,
2. a sealing bevel therebetween,
3. a drip side therebetween and in opposed relationship to said sealing bevel, and
4. a sloped shelter edge between said interlocker drip side and said joint side, said panel side being adhesively conjoined to said interior surface so that said panel and interlocker drip sides are in flush relationship, and

C. an elongated holding interlocker having:

1. opposed panel and joint sides,
2. a holding bevel therebetween, and
3. an interior side therebetween and in opposed relationship to said holding bevel, said panel side being adhesively conjoined to said weather surface of said panel so that said panel upper side and said interlocker interior side are in flush relationship and said bevels are parallel.

2. The clapboard of claim 1 wherein said interlockers are adhesively conjoined to said panel surfaces with a weather-proof adhesive.

3. The clapboard of claim 2 wherein all surfaces of said clapboard are sealed with a resinous humidity sealer which is compatible with said weatherproof adhesive.

4. The clapboard of claim 3 wherein said interior and exterior laps of at least two contiguous clapboards are adhesively conjoined end-to-end and in longitudinally aligned relationship to form an extended clapboard.

5. The extended clapboard of claim 4 wherein said clapboards are 8 feet in length and up to 10 of said contiguous clapboards are adhesively conjoined end-to-end.

6. The clapboard of claim 3 wherein at least two of said clapboards are interlocked in side-by-side relationship to form a clapboard assembly, by mating and adhesively conjoining said sealing bevel of an upper clapboard to and beneath said holding bevel of a lower clapboard with said weatherproof adhesive, said clapboards being nailed through said holding interlockers and through said panel to a supporting structure.

7. The clapboard assembly of claim 6 wherein the joint sides of the holding and sealing interlockers are adhesively conjoined to the interior and weather surfaces, respectively, of the panels of said upper clapboard and said lower clapboard, respectively.

8. The clapboard assembly of claim 7 wherein a weatherproof coating is applied to all surfaces exposed to the weather.

9. The clapboard assembly of claim 8 wherein said weatherproof coating forms a C-joint over said drip sides and said shelter and drip edges of each clapboard therein, whereby said C-joint grasps the lower side of each clapboard.

10. The clapboard assembly of claim 9 wherein the sealing interlocker of the lowest clapboard therein is interlocked with a beveled starter strip which is attached directly to said supporting structure.

11. The clapboard assembly of claim 10 wherein the next higher clapboard to said lowest clapboard is bent through a starting angle.

12. The clapboard assembly of claim 9 wherein said drip sides are one-half wide and said panel sides of said holding and sealing interlockers, respectively, are 1 inch and $\frac{3}{4}$ inch in width.

13. The clapboard assembly of claim 12 wherein said weatherproof coating is approximately one-sixteenth-inch thick over said weather surfaces and approximately one-fourth-inch thick as said C-joint.

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