

DIRECTIONS FOR APPLYING GLATEX* ASBESTOS CEMENT SIDING SHINGLES

PLAINTIFF'S EXHIBIT

USG-1467

PLEASE OBSERVE THESE PRECAUTIONS: Store the shingles in a perfectly dry place, preferably in a building. If impossible to store inside, you must pile the shingles on edge on planks at least 4" from the ground, and protect them carefully with a waterproof covering. Moisture getting between the shingles in bundles may cause discoloration.

Never apply over wet, frosty, or ice covered walls, or in wet weather.

It is recommended when leaving a job at night that the top unfinished course be temporarily flashed with asphalt roofing paper to prevent rain running down behind the shingles before the job is finished.

The special face nails furnished with the shingles should be used for all exposed nailing.

These shingles are for application on vertical side walls only, and must not be used on roof surfaces.

ATTENTION These shingles may develop a temporary condition known as efflorescence or "bloom" when exposed to such moisture elements as dew, frost or fog. This is merely a surface film and ordinary rains will rinse it off. In area not exposed to the rain, such as those under porches, wide eaves, etc., rinsing with ordinary water will remove it. It rarely occurs again after a single washing.

PREPARATION OF WALLS The wall surfaces to be covered should be made as smooth and even as possible. All warped and irregular boards must be firmly nailed in place. If old shingles or clapboards have thick butts and large exposure, it is necessary to apply bevel wood nailing strips running horizontally, or lath of sufficient thickness to bring the surface out in line with the vertical of the wall. These nailing strips should be on 10½" centers.

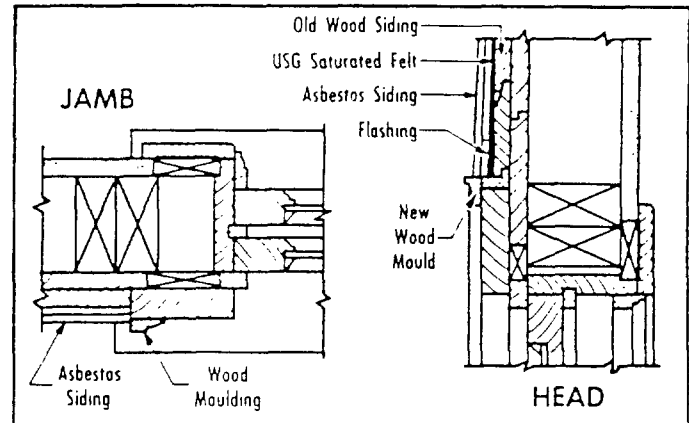
Where applying Asbestos Shingles over old brick or stone walls, horizontal nailing strips should be similarly spaced.

For applying over old stucco, the best practice is to remove the old stucco, nailing the shingles to the wood sheathing. Where the stucco is in good condition, however, wood nailing strips may be used as for brick walls.

To assist in preventing air infiltration and to provide a suitable even surface upon which to nail the shingles, the walls should preferably be covered with a layer of USG Asphalt Felt or similar breather type material before applying the shingles. As an alternative, such "breather" type under-layments as Silvercote may be used but we do not recommend the use of such absolute vapor barrier products as aluminum foil for this purpose. When such foil type product is used, we cannot assume responsibility for improper performance of the siding shingles.

MOULDING Where the use of Asbestos Cement Siding Shingles over old siding brings the wall surface out beyond the old door and window frames, new wood moulding should

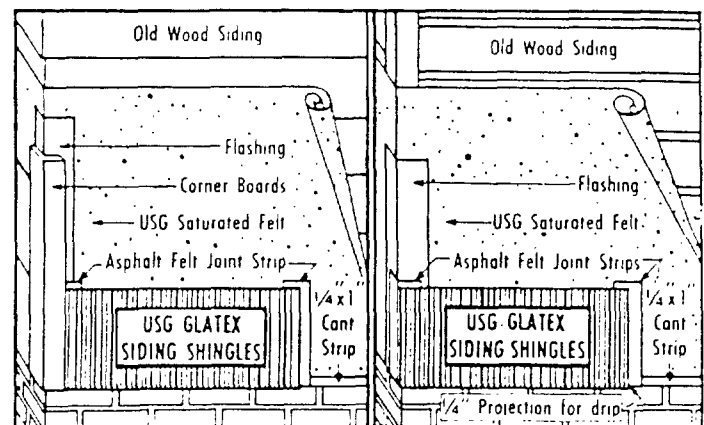
be installed to cover the exposed edges of the siding shingles. Adequate flashing should be used over all window and door openings, and a suitable water table or drip edge provided along the base and under all openings. See detail No. 1.



Detail No. 1 FINISHING AROUND WINDOWS

OUTSIDE AND INSIDE CORNERS Any one of several methods of finishing corners may be used. Shingles may be butted against existing corner boards, or new corner boards installed. Bull nose corner bead or individual metal corners are sometimes used. Individual metal corners matching various colors in our shingle line are obtainable. Some outside corners are formed by weaving or "lacing" alternate courses of shingles, lining up the side edges of corner shingles at each course with the faces of the two walls alternately, so a single line will not be formed. When this is done, edges should be brought down to a close fit with a rasp. See detail No. 3.

Both inside and outside corners should be flashed with heavy asphalt felt or metal flashing strips to provide a true corner and additional weather protection. See details No. 2 and No. 3.



Detail No. 2 APPLICATION OF FIRST COURSE

CAULKING All door and window frames should be adequately caulked with Super-Tite Caulking Cement applied with a pressure gun.

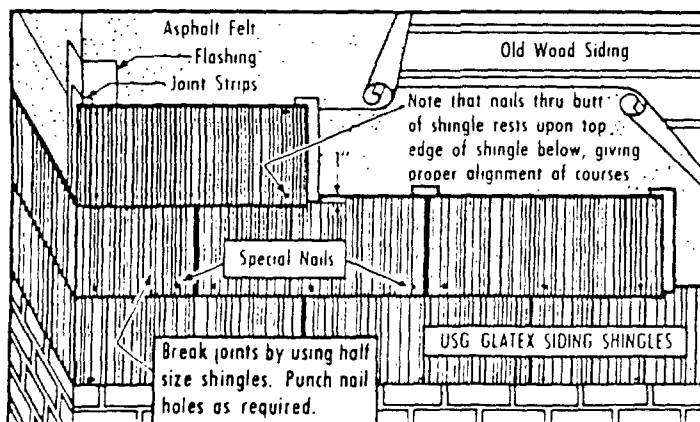
CUTTING AND PUNCHING USG Asbestos Cement Siding Shingles are furnished die cut, with clean, sharp edges. Where it is necessary to cut shingles on the job, both for the sake of a finished job, and because it is quicker, it is recommended that an asbestos shingle cutter be used. It is in fact almost indispensable. Such shingle cutters with a 27½" or 32" blade are regularly provided with a punch for punching holes for concealed nails, and a notching device for cutting irregular shapes to fit around window sills. These cutters can be easily obtained from our dealers.

Where shingle cutters are not available, shingles may be scored with a sharp instrument, and snapped over a straight edge.

FIRST COURSE Apply ¼" x 1" cant strip or wood furring strip along the bottom of the wall. Snap a level chalk line 11¾" above the bottom of this cant strip. Shingles in the first course should be laid with the top edge along this chalk line, thus insuring a straight level base line, and permitting the shingle to overhang the cant strip ¼", forming a proper drip edge. Apply a joint strip folded vertically at the corner. See detail No. 2. Start the application of the first course with a full size shingle, extending the butt ¼" below the cant strip to form a drip edge. Secure the shingle by nailing the first galvanized nail at the top of the shingle. Then insert a joint strip beneath the shingle so that the strip centers under the vertical joint of this shingle and the shingle to be applied adjacent to it. Bring the top edge of the shingle to the chalk line and drive in the second galvanized top nail. Continue application of subsequent shingles in a similar manner placing an asphalt joint strip under each joint.

Butts of shingles are to be secured with special face nails, driven through the holes provided. Be sure that each face nail at the end of a shingle engages a joint strip.

It is important in nailing at the bottom that you nail across the shingle — never nail both ends and then the center.



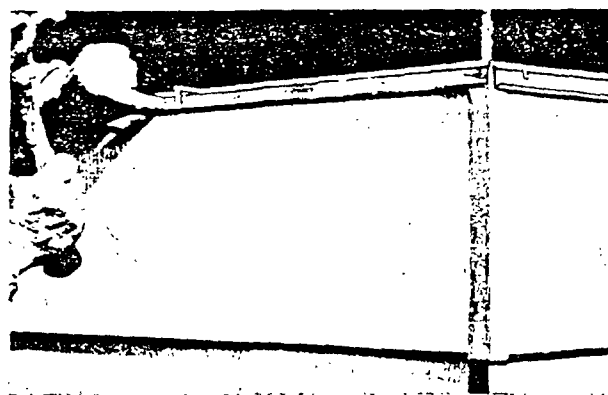
Detail No. 3 APPLICATION OF SUCCEEDING COURSES

SECOND AND SUCCEEDING COURSES Apply a folded joint strip at the corner as in the first course, providing a one inch lap of the strip over the first course shingle. See detail No. 3. Cut a full size shingle in half to provide for staggered joint application. Always use two holes in the head and two holes in the butt of any piece of shingle, punching new holes if necessary. **Note:** Shingles can be aligned for proper exposure by inserting two nails in the holes at the butt of the shingle allowing the inserted nails to rest upon the top of the underlying shingle. Upper nails are then driven as before being careful to insert a joint strip at each vertical joint as before described with the end coming one inch down over the lower course. Continue application with full size shingles, being careful to make tight joints.

Complete succeeding courses as described, breaking vertical joints at half shingles in alternating courses.

Where galvanized top nails are exposed as under windows, apply additional wood moulding to cover same.

OVER GYPSUM OR INSULATING SHEATHING When applying USG Asbestos Cement Shingles over this type of sheathing, the USG Shadow-Lock System is recommended. See detail No. 4.



Detail No. 4 USG SHADOW-LOCK SYSTEM

This method of attachment creates a deeper and more beautiful shadow line than obtainable with usual application. The top leg of the channel is placed over the top edge of the preceding course of siding and secured with the hook-head type USG SHADOW-LOCK* Nails driven through the nailing flange into each stud. Succeeding courses of asbestos siding are inserted into the channels and the process repeated. All corner shingles shall be top and bottom nailed ½" from the outside edge to prevent lateral movement of the shingles in the channels. These nails will be concealed when the aluminum corners are inserted. Exterior corners are finished with USG SHADOW-LOCK Corners. USG CRIMP-BACK SHADOW-LOCK Channels are 8' long and 1" wide. Estimate 103 lin. ft. per square. USG SHADOW-LOCK Close-end Corners are 11½" long. One carton of corners is ample for the average one story house. USG SHADOW-LOCK Nails are 12 gauge galvanized 1¾" long. Estimate ½ lb. nails per square of shingles.



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