SECTION 11 — Special Situations

Trimming Curved Openings

Flexible J-channel simplifies installations around curved objects such as half and full round windows. To install around the top of an arched window, follow these simple steps:

Measure the circumference of the arch, then add 1-1/2" to allow for overlap of the bottom J-channel.

Place the channel along one side of the window, leaving a 3/4" section below the bottom edge of the window sill (shown). Position the first nail at the base of the arch. Drive the nail through the flange, tightly securing the flexible channel.

**NOTE: This is an exception to the rule that says don’t fasten vinyl tightly. When installed around curved objects, flexible channel must be nailed tightly.**

Place additional nails every 6" along the flange. Again, nail tightly. Be sure the last nail is positioned at the base of the opposite arch.

Using a utility knife, cut through the back of the channel, at the point where it extends beyond the bottom edge of the window sill. Make a second cut perpendicular to the first at the base of the channel face. The length of the cut should equal the length of the extension (shown).

Put a 90° bend in the channel, then nail the resulting tab under the window (shown).

Repeat at the opposite ends of arch.

To install the bottom J-channel, square cut the corners to overlap the flexible J-channel. Use the same technique described under “Installing window and door trim” (page 39). Use pop-rivets to secure corners (shown). Use washers on the inside of the rivets to prevent pull through.

**NOTE: Remember to properly flash all windows.**
Frieze Board

You can create a frieze-board appearance using the 3-1/2” lineals in combination with new construction window starter or J-channel used as a starter.

You will need: 3-1/2” or 5” lineals and new construction window starter or J-channel.

Position the short leg of new construction window starter against the soffit or overhang and nail it in place.

Snap the lineal onto the locking edge of the new construction window starter between the starter and the soffit/overhang, and nail it in place.

Trim 1-1/2” from the return leg of the overlapping lineal. Make a cut 1-1/2” at the 90° bend of the lineal face and inside (locking) edge. Trim 1-1/2” from the nail flange and receiving channel. Overlap the lineals 1” by fitting the notched lineal over the un-notched lineal.

An alternative to using new construction window starter is to use 1/2” J-channel as a starter. Install the J-channel with the back edge against the soffit or overhang. Then slide the lineal over the J-channel.

Decorative Sunbursts

Sunbursts are not a product. They are an installation technique you can use to create an outstanding decorative finish at major accent areas such as gable ends or over garage door openings. Creating a decorative sunburst isn’t difficult, but it does take patience and attention to detail. If you’re ready for a professional challenge, add a sunburst to your next installation.

NOTE: Because each sunburst installation involves unique dimensions and angles, the following instructions outline the basic technique. You must adapt these instructions to your specific installation.
You will need J-channel, starter strip, coil stock and siding. When choosing a siding panel, remember that wider panels install more quickly than narrow panels. In addition, panels with decorative profiles—for example, dutchlap—are impractical for sunburst applications. For best appearance and easiest installation, choose from single exposure or larger face double exposure panels.

In addition to standard installation tools, you’ll need a nail hole punch and a pop rivet gun.

The following instructions assume an installation at a gable end. Refer to the illustrations for each step.

Plumb J-channels back-to-back in the center of the gable.

Cut the nail hem and lock off a siding panel. Put the pieces aside; you’ll need them for the final step.

Measure the distance between the J-channel and the rake. Subtract an allowance for expansion. Cut the panel to this length (“proper length” in illustration). Trim the panel at the rake end to match the rake angle.

Cut the panel to the correct taper (third cut). This is a critical step, because the “flaring” of each panel allows you to create the sunburst’s arch. To create the taper on a single exposure panel, start at the channel end of the panel. Mark a point 1-1/2” above the bottom butt. Then, on the opposite end, mark a point where the upper edge of the panel meets the rake. (If using double exposure panels, the mark goes under the center butt. On double exposure panels, the upper exposure is removed completely.) Now scribe a line between both points and cut with a utility knife or snips.

Pop-rivet the nail hem and lock to the trimmed panel. Using the factory nail hem as a guide, punch slots in the panel. Position the panel and nail it.
Repeat until both sides of the sunburst are completed.

**NOTE:** To install the final panels at the top of the sunburst, bow the panels slightly and slip them under the gable end J-channel. For added protection against high wind, you may have to face nail these panels.

Form a sleeve from aluminum coil stock and cover the center J-channels. Secure it with pop rivets.

Cut into the lock anarched section from coil stock to form the “sun” portion of the sunburst. Leave a 1” strip below the arch and bend it out at a right angle. Fasten the piece in place using pop rivets.
Section 12 — Repair

Replacing a Damaged Siding Panel

To remove a damaged panel, insert the hook end of a zip tool between the damaged panel and the panel above. Pull downward. This will allow access to the damaged panel’s nail flange. Remove the nails securing the panel.

The nails may be allowed to stay in the wall if they are driven flush with the substrate after the damaged panel is removed. Remove the damaged panel and install a new panel. Then use the zip tool to lock the new panel into the panel above.

Replacing a Damaged Outside Cornerpost

Remove the face portion of the damaged post by scoring along the outside corner of the receiving channel with a utility knife. It may be easier if you first cut away part of the face of the outside cornerpost to get better access to make these cuts.

Remove the nailing flanges from the new cornerpost by scoring and bending until the flanges snap off. Be sure to score along the inner corner of the receiving channel.

Lap the partial receiving channel of the new post over the partial channel on the remaining nail flange. Pop rivet the two receiving channel legs together as needed.
Repairing Buckled Siding at the Joist

Vinyl siding sometimes becomes buckled between the first and second floors of a newly built siding installation due to settling and shrinkage of wet lumber and some framing practices. Using “engineered” lumber for the joist greatly reduces the chances of shrinkage and settling and can help prevent buckling of siding. If, however, you do have a building with this situation, here is a way to correct the problem using aluminum starter strip.

With a zip-lock tool, unlock the buckled panel from the panel below by inserting the hooked end of the tool behind the return leg of the buckled panel until the hook catches.

Pull down and “unzip” the panel.

Insert an inverted scrap piece of starter strip into the exposed receiving lock of the lower panel.

With the scrap piece inserted into the lock, lay the upper panel over the starter strip. The starter strip should be visible behind the upper panel. Mark a line on the scrap piece where the return leg of the upper panel meets the scrap piece.

Trim the starter on this line, saving the portion with the locking edge.

**NOTE:** Cut the starter strip in short lengths to ease handling and relocking.

Insert the trimmed edge into the lock of the lower panel.

Begin at one end and, using a zip-lock tool, pull the return leg of the upper panel down to engage the upper panel with the aluminum starter strip.
Section 13 — Miscellaneous

Cleaning Vinyl Siding

Vinyl siding resists most common household stains, but it will become dirty like any product exposed to atmospheric conditions. In areas not exposed to direct sun and rain, periodic washing with a soft bristle brush and clean water from a garden hose may be necessary to remove surface dirt. Chalk may also accumulate on the surface. This is a normal condition for pigmented materials exposed to the elements.

For the best appearance, clean vinyl siding at least once a year.

To remove soil, grime and chalk from siding, use a garden hose, a soft bristle brush, and a bucket of soapy water. (You can also use the solution described below in the section about mildew.) To minimize streaking, wash the house from the bottom up.

Thoroughly rinse the siding with clean water from a garden hose. Avoid prolonged or high pressure rinsing of open ventilated areas. Keep cleaning solution off surrounding fixtures and surfaces not scheduled for washing.

**NOTE:** We do not recommend power washing vinyl or polymer siding as it can cause moisture intrusion, damage, and/or discoloration.

Stubborn stains

If you can’t remove especially stubborn stains using normal household detergents, request a cleaner from your siding contractor or your local building materials retailer. Always test any cleaner on an inconspicuous area before full use.

Mildew

Mildew may be a problem in some areas, especially warmer climates with consistently high humidity. Mildew appears as black spots on surface dirt and is usually detected in areas not subjected to rainfall, such as under eaves and porch enclosures. To remove mildew, prepare a solution as follows:

1/2 cup detergent (Tide, for example)
2/3 cup trisodium phosphate (Sollax, for example)
1 quart 5% sodium hypochlorite (Clorox, for example)
3 quarts water

**CAUTION:** Greater concentration may cause damage to the siding and soffit.

If the above solution does not readily remove mildew spots, ask your siding contractor or your local building materials retailer for a mildew cleaner.
Siding over Asbestos

Vinyl siding retrofit over asbestos

This is a recommendation from the Vinyl Siding Institute after discussions with Federal EPA officials. Because local regulations supersede federal regulations, local EPA officials should be contacted in the area where the work is being done.

The most desirable practice is not to disturb the existing siding on the home. Apply sheathing over the existing asbestos siding, and then apply vinyl siding over the top of the sheathing. The sheathing will serve to flatten the wall and also retain any breakage of the cement asbestos siding. Nails should be long enough to penetrate through the sheathing and existing asbestos siding and into the wall studs.

If there is a need to level or flatten a wall, apply furring strips over the sheathing.

In the case where the homeowner wants the existing cement asbestos siding removed completely, removal should be done by a professionally trained asbestos removal crew.

Please note that some jurisdictions require all asbestos removal to be performed by a trained asbestos removal crew.

Historic Restoration

Vinyl Siding Institute recommended guidelines

If a building is in an historic area or has been designated an historic building, be certain that approval for the use of vinyl siding has been obtained from the local historic society. This applies to building additions as well.

Before proceeding to re-side an historic building, the building should be examined for moisture, insect infestation, structural defects and other problems which may be present. These problems should be addressed and the building pronounced “healthy” before re-siding with any material.

Do not damage or remove the original siding. If at all possible, do not alter the original structure so that the application of vinyl siding is reversible (i.e. the original would remain intact and some time in the future, if desired, the vinyl siding could be removed). Exception: “In cases where a non-historic artificial siding has been applied to a building, the removal of such a siding before the application of vinyl siding would, in most cases, be acceptable.” (Preservation Briefs, Number 8 - U.S. Dept. of the Interior—1984)
Exercise every care to retain architectural details wherever possible. Do not remove, cover, or add details until you have the building owner’s written approval. Determine that the owner has consulted the local historic society regarding the foregoing.

Use siding which closely approximates the appearance of the original siding in color, size and style.

**Lead Renovations**

Many houses and apartments built before 1978 have paint that contains high levels of lead (called lead based paint). Lead from paint, chips, and dust can pose serious health hazards if not taken care of properly. You can find out about other safety measures by calling 1-800-424-LEAD. Ask for the brochure “Reducing Lead Hazards When Remodeling Your Home.” That brochure explains what to do before, during, and after renovations.

**Caulking and Sealants**

When installing vinyl siding, the use of caulking and other sealants is minimal. Do not caulk panels where they meet the receiver of inside corners, outside corners, or J-channels. Do not caulk the overlap joints.

**For More Information**

These instructions will enable you to successfully complete a siding, soffit, or porch ceiling installation. However, no set of instructions can answer every question or problem that might come up during a project. So if you are in doubt about how to complete a specific procedure, we suggest you try two avenues of help:

First, call or visit your building materials supplier. You should be able to find someone with the know-how and experience to answer your question or solve your problem.

Second, if you need additional help, call us at 1-800-233-8990. Our Sales Support Group is always ready to help you.

This installation manual is updated periodically. The most current information will always be posted on our website: www.certainteed.com.
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GLOSSARY

Because this manual was written for building professionals, we have freely used the language and jargon of the siding industry. To avoid confusion, we thought it a good idea to share our understanding of each of these terms with you.

Band Board—A decorative piece of horizontal trim placed between two floors along the rim joist.

Beaded—A narrow, half-round molding at the base of a lap siding panel.

Casing—Molding of various widths used to trim door and window openings at the jambs; also referred to as lineal, window, or door surround.

Contraction—Commonly refers to building products contracting due to outside temperature changes.

Course—A row of siding panels running the width of the wall.

Dormer—A gabled extension built out from a sloping roof to accommodate a vertical window.

Drip Cap—A horizontal flashing placed over exterior door or window frames to divert rainwater.

Dutchlap—Refers to a drop-style panel that was popularized by early American settlers in the seaboard states; lap siding panel with a horizontal bevel at the top of the panel that sits just below the bottom of the next course of siding.

Eave—The overhang of a pitched roof at the bottom edge, usually consisting of a fascia board, a soffit for a closed cornice, and appropriate moldings.

Expansion—Commonly refers to building products expanding as outside temperature changes.

Exposure—The width of the exposed face of each panel of siding; also referred to as reveal.

Face—The side of the siding, trim, or soffit that is exposed to view after the product has been installed.

Fascia—A flat, horizontal band that covers the rafter tails and runs along the bottom edge of the roof line.

Flashing—A thin, impervious material, usually metal, placed around openings to prevent water penetration or to direct the flow of water over the cladding.

Frieze—the horizontal trimboard connecting the top of the siding with the soffit.

Furring/Furring Strip—Long, thin strips of wood or other materials used to build out the fastening surface of a wall; commonly used to correct imperfections in wall surfaces, to establish a rainscreen, or to re-establish a structural fastening surface on the exterior of nonstructural products such as foam insulation.

Gable—The triangle formed on the side or the front of a building by a sloping roof.

Hot-dip Galvanized—The process of dipping metal into molten zinc to apply a protective coating that prevents corrosion; hot-dipped galvanized iron and steel are corrosion resistant.

Keyway—a recess or groove in a manufactured shake or shingle siding panel.

Lap—Where two siding panels join horizontally, one over the other.

Lineal—Molding of various widths used to trim door and window openings at the jambs; also referred to as casing, window, or door surround.

Miter Cut—a beveled cut, usually 45°, made at the end of a piece of molding or board that is used to form a mitered joint.
O.C.—On center; a measurement of the distance between the centers of two repeating members in a structure, usually studs.

OSB—Oriented Strand Board.

Panel Projection—The distance that the bottom edge of the siding projects from the wall.

Profile—The contour or outline of a siding panel as viewed from the side.

Rainscreen Wall—A method of constructing walls in which the cladding is separated from a membrane by an airspace that allows pressure equalization to prevent rain from being forced in. It consists of an exterior cladding, a cavity that is typically created through the use of furring strips behind the cladding, and an inner wall that incorporates a weather-resistant barrier.

Rake—Trim members of a gable roof that run parallel to the roof slope from the eave to the ridge.

Rigid Sheathing—Plywood, OSB, or foam sheathing.

Rim Joist—The board that the rest of the joists are nailed to. It runs the entire perimeter of the house.

Rip Cut—A cut made lengthwise on a piece of siding or trim.

Kick-Out Diverter Flashing—A flashing piece located where sloped roofs meet vertical walls; designed to divert water into a gutter.

Sheathing—Sheets of plywood, exterior gypsum board, or other material nailed to the outside face of studs as a base for exterior siding.

Shim—A building material, usually wood, used to even a surface.

Skirtboard—Treated lumber or PVC trimboard installed horizontally; used as a transition from foundation to siding or as a starter strip.

Soffit—The underside of an overhanging eave.

Square—Unit of measure for siding; equal to 100 square feet of exposure (e.g. a 10-ft. by 10-ft. wall section = 100 square feet = 1 Square).

Starter Strip—An accessory used to engage the locking leg of the first course of siding.

Structural Member—A support that is a constituent part of any structure or building.

Structural Sheathing—The layer of boards, wood or fiber materials applied to the outer studs, joists, and rafters of a building to strengthen the structure and serve as a base for an exterior cladding.

Substrate—A layer of material applied over the studs at the exterior walls of a building.

Weather-Resistant Barrier—A building membrane that protects building materials from exterior wind and water penetration.

NOTE: When the terms “recommend” and “should” are used in this manual, the step is optional for installing fiber cement. However, it is included because the step represents best practice. When the terms “required” and “must” are used, the step is a necessary part of the installation process and must be adhered to.