



INTRODUCTION

Sheet steel farm cladding is used on farm buildings as the covering over traditional wood frame construction both as roofing and siding. Sheet steel farm cladding consists of lightweight steel sheets coated with zinc or aluminum-zinc alloy and is often prepainted before forming into a corrugated shape. The metallic coating, along with the paint coating if present, provides protection for the steel against corrosion. The service life and appearance of steel farm cladding can be enhanced by following proper installation procedures as described below.

SELECTING A STEEL FARM CLADDING PROFILE

There are many steel farm cladding profiles sold, not all of which are suitable for every application. The selection of the proper cladding profile will depend upon the anticipated loads that the cladding will have to carry (wind and snow), the span and slope of the cladding (i.e. the rafter or stud spacing), and whether the cladding is being used on the roof or the walls.

It is recommended that the cladding selected be manufactured by a company who is a member of the CANADIAN SHEET STEEL BUILDING INSTITUTE. This will provide assurance to the purchaser that the product is manufactured to industry standards of quality and performance for steel farm cladding.

Consult your steel farm cladding distributor: he will be able to help you in the selection of the profile, the material, and the accessories required to suit your needs.

INSTALLATION OF ROOFING SHEETS

Side laps between adjacent roofing sheets should face away from wind driven rain. Therefore, begin installation by laying the first sheet square with the eave which is at the down-wind end of the roof, farthest from the direction of prevailing winds. Refer to Figure 1.

Apply sheets in the sequence shown in Figure 1 so that the top sheet always overlaps the lower sheet for effective drainage. With a roof pitch of 4 in 12 or more, overlap sheets at least 6 inches (150 mm). For added protection, place a bead of caulking or a sealer strip at the end and side overlaps.

To provide a drip edge, allow an overhang of two inches at the eaves. At the gable edge, apply a standard side wall flashing piece or gable edge starter strip. This will provide a finished appearance.

When roofing sheets are to be installed directly on the purlins or rafters, these members should be sized as required by the anticipated snow load or as specified by the truss manufacturer. When roofing sheets are to be installed directly on sheathing, such as in re-roofing jobs, the soundness of the existing sheathing should be tested, and if necessary, new nailing strips spiked through the old sheathing and into the rafters.

INSTALLATION OF SIDING SHEETS

The easiest way to put up siding is to start at an opening in the wall such as a door or window. This minimizes cutting. For strong, neat corners, use formed flashings. Use a standard fastening and overlap pattern.

If siding sheets are installed horizontally, use caulking at the vertical laps to insure a windproof and watertight joint.

Do not run siding sheets all the way to the ground; provide a base of concrete block, mortar, treated wood or similar material 12 to 18 inches high and end the siding sheets at this point.

ACCESSORIES

Members of the CANADIAN SHEET STEEL BUILDING INSTITUTE who manufacture steel farm cladding also offer a complete line of accessories to insure a weathertight building and to enhance its appearance.

WORKING WITH STEEL FARM CLADDING

Cutting:

- Steel farm cladding can be cut by a number of methods such as reciprocating saws, nibblers, shears or a circular saw using a metal cutting blade. A circular saw (or any other cutting method that generates a lot of heat) should not be used to cut prepainted cladding since the heat will damage the painted surface.
- Filings from cutting or drilling should not be allowed to accumulate on the cladding surface. The filings are hot and will damage the paint.
- Filings that do accumulate on the cladding surface should be removed before the sheet is installed. If filings are left on the cladding, the overnight dew is often sufficient to cause these particles to rust giving the impression that the cladding sheet itself is rusting. Rusted filings cause an unsightly surface stain which is difficult to remove.

- If an abrasive or circular saw must be used:
 - (a) turn the painted side down before cutting;
 - (b) do cutting away from sheets already installed or any other sheets;
 - (c) burrs and metal filings left on the sheet by the abrasive saw should be removed immediately.

Fastening:

- There are a number of fasteners, both nail and screw type, that can be used to install steel farm cladding. The selection of the proper fastener will depend upon the cladding type, the supporting structure (wood or steel) and the preference of the installer. Fasteners with lead washers should not be used on sheet steel that has an aluminum-zinc coating (i.e. Galvalume).
- Caution should be used when fastening cladding through the top of the corrugation; if the fastener is overdriven, the corrugation will flatten and the next row of sheets will not overlap properly.
- Screw fasteners for roofing may be driven through either the top or the bottom of the corrugation or rib as long as a well sealing washer is included with the fastener and depending upon local conditions and the recommendations of the cladding manufacturer. Screw fasteners for siding should always be driven through the bottom of the profile to provide a better connection.

SITE STORAGE

- If cladding must be stored for an extended period of time, the most desirable place is under-roof in a cool, dry, well ventilated area. When storing indoors, the cladding bundles should be uncovered for ventilation.
- When outdoor storage is unavoidable, the following is recommended: use good quality covers (other than plastic) loosely shrouded over cladding bundles and anchored to prevent wind blow-off; tilt bundles for drainage; block bundles off ground for effective drainage and ventilation; block long bundles to prevent sagging; and store away from chemically aggressive substances (salt, cement, fertilizer), away from material that could contaminate the cladding surface (diesel oil, paint, grease), and away from site traffic.

FIGURE 1
Installation of Roofing Sheets

