

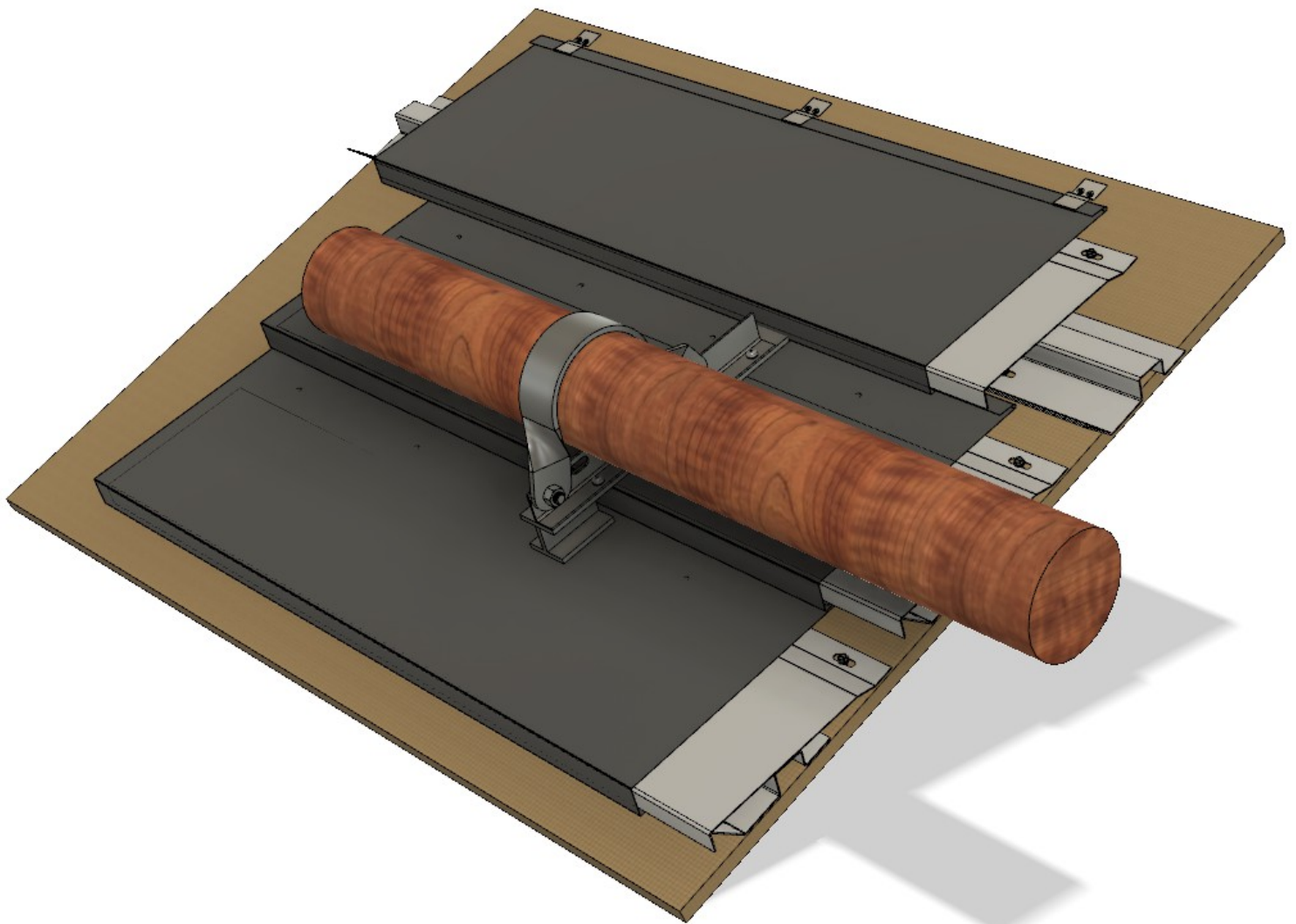


**SPENGLER**  
INDUSTRIES

5066 West Amelia Earhart Drive - Salt Lake City, UT 84116 - 801 - 462 - 5264

## Prairie Panel Installation Manual 2020

- Heavy Snow Load Area
- Custom Wooden Log Snow Fence



## FOREWORD

Known for its outstanding look, Prairie Panels – also widely known as Bermuda Panels – have been in use for a long time.

To ensure proper performance, the Prairie Panels must be installed according to this Manual using appropriate hand tools, common fine metal roofing installation practices and to meet or exceed local, and if required, national building codes. If you think these recommendations interfere with these or any building codes in your area, please consult the manufacturer before proceeding.

## CONSIDERATIONS

### - INSTALLING FOR ROOFING PERFORMANCE

Metal roofing is the most preferred material for roofing applications if high performance is required. Its strength, durability and aesthetics are only outperformed by its longevity.

Achieving a high performing roof however, requires, in addition to a well chosen roofing system and the appropriate metal material, proper installation technique, the roof design, and the roof preparation. Please consult us for designing and installing high performance metal roofing systems.

### - INSTALLING FOR WIND LOAD RESISTANCE

Metal roofing systems are frequently tested to over 200 miles per hour wind requirements. Metal is unmatched with regard to impact resistance due to inherent characteristics. To achieve these high ratings as a manufacturer, we recommend using a specified quantity of specially designed fastening systems matched to the application to ensure that our metal roof won't go anywhere in the event of a severe weather encounter for the lifetime of the product installation.

### - INSTALLING FOR AESTHETICS

As many building products claim to outperform the competition, our engineered products have no known competition. If you purchase a metal roofing or metal wall cladding product from us you can expect that it is foremost engineered for performance, strength and longevity and comes with an unlimited, maintenance-free lifetime warranty. If your choice of roofing product has to be engineered for aesthetics as the main feature we will still make sure that we engineer the system with the utmost performance given the requirements for the look.

## BASIC INSTALLATION RULES OF METAL ROOFING

Before getting started, it is important to review several basic rules for metal roofing. Adhering to the rules which are repeated in this Manual, is critical for proper metal roof installation.

1, Apply metal roof only to a broom-clean roof surface. Sweeping or air-blasting the ice and water shield before installing the metal panels or any other roofing components ensures that no left over debris will puncture or dent the metal from below, during or after the installation, causing a potential void in the future warranty.

2, Plan ahead and only store materials on the roof that you can process within your weather window. It is very difficult quickly tying down long metal panels or any other roofing accessories on a smooth roof properly. Avoid falling materials.

3, Limit walking over or storing anything on already installed metal panels to avoid surface scratches and mid-surface dents from shoe prints and/or other materials or tools.

4, Always use a physical line or a chalk line at least when installing panels longer than 10 feet to assure proper alignment, flawless connections and the proper base for the next row of panels to ensure a perfect outcome.

5, Always use the recommended fasteners and fastening methods.

6, OSHA fall protection guidelines for sloped roofs should be followed at all times.

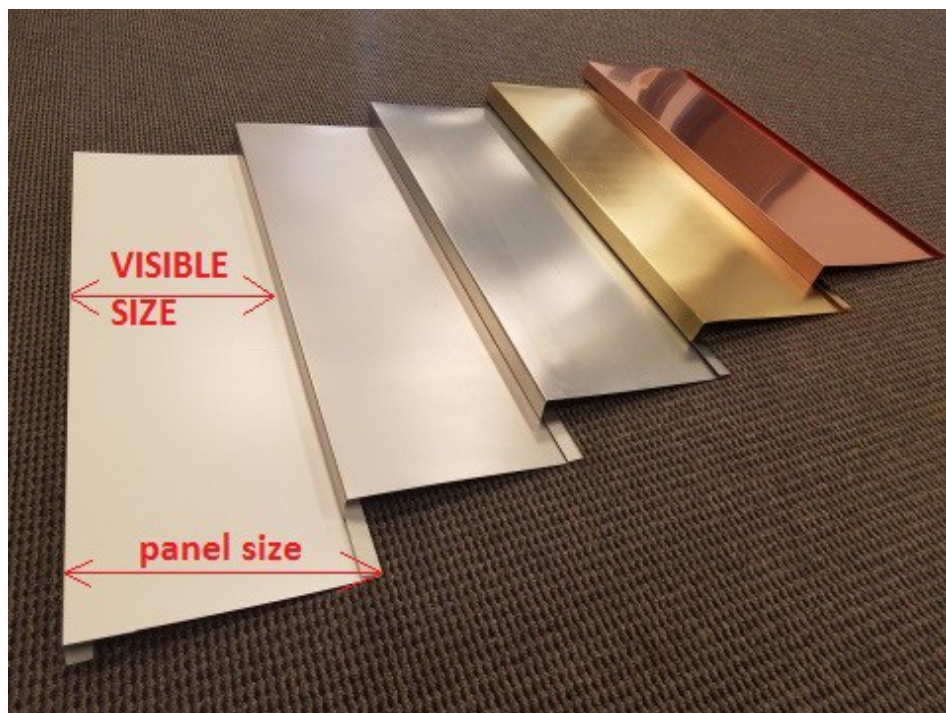
7, Heat can be generated in any metal roof system. If using a self-adhered membrane as an underlayment, consult manufacturer's guidelines or specifications to ensure that the membrane is designed for use under high-temperature conditions.

## APPLICABLE STANDARDS AND CODES

- For applicable Florida rating and Metro Dade County Product Control Acceptance please comply with the applicable fastener requirements listed below.
- Class A fire-rated system may be achieved by installing under the roof panels a minimum 1/2"-thick (12.7mm) water-resistant core gypsum sheathing complying with ASTM C 79, 1/4"-thick (6.4 mm) Dens-Deck overlayment board manufactured by Georgia Pacific, or "Versa-shield" non-asphalt fiberglass-based roll roofing manufactured by Elk Corporation, installed over the plywood sheathing. The gypsum and Dens-Deck materials are to be attached to the roof deck with eight 1-1/2"-long (38mm) nails per 4' x 8' sheet. Length of the fasteners used to attach the metal roofing or cladding must be increased by the thickness of the barrier boards.
- Minimum roof pitch 5/12 (22°) for the standard Prairie Panel Roofing System. Installation on 3/12 (14°) possible, please call.

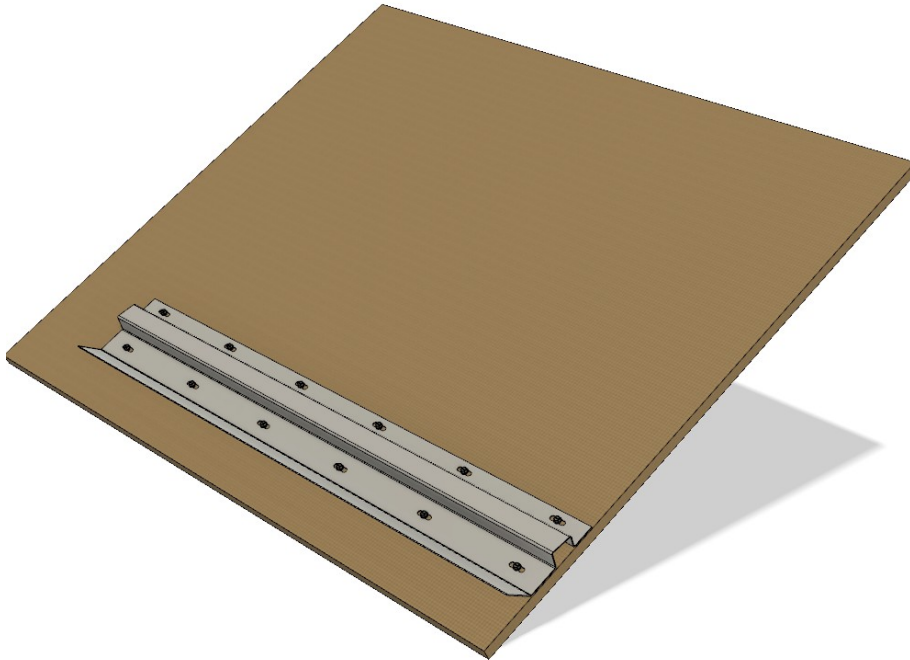
## PRAIRIE PANEL ROOFING SYSTEM

- Roll formed metal panels available from following metals, including (indication) of their maximal/single panel length limit due to elongation - material thermal expansion and contraction:  
(certain exceptions in choice of lengths can be arranged. Let us know what your design requires)
  - Copper or Brass (30 feet)
  - Zinc (27 feet)
  - Galvalume (33 feet)
  - Stainless steel (41 feet)
  - Titanium (50 feet)
  - Aluminum (25 feet)
- Panel standard widths available from 12" to 16" visible size. Other sizes possible.

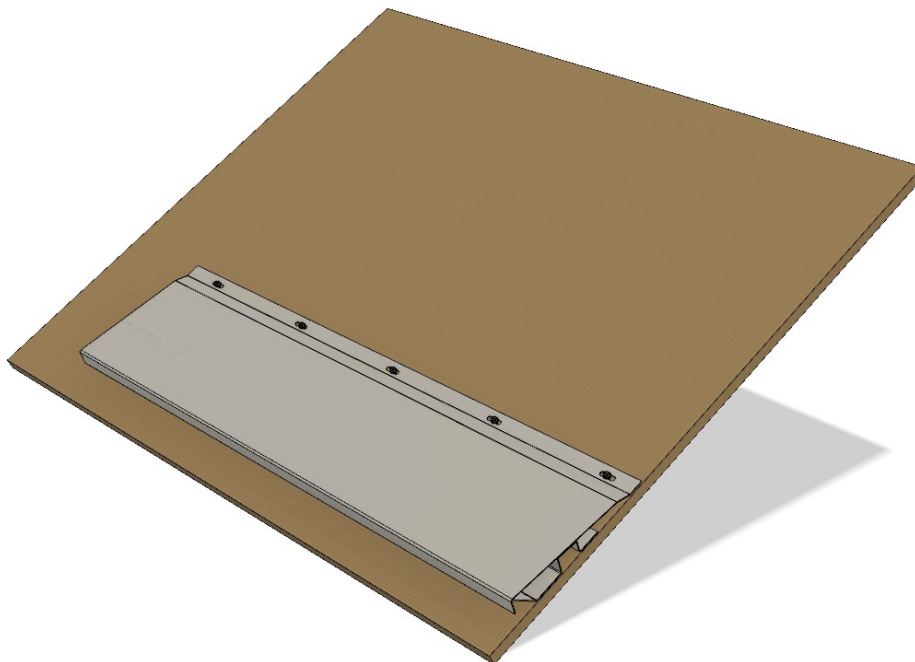


## INSTALLATION INSTRUCTIONS

1, To install the Prairie Panels, start at the base of the roof or wall, and affix the drip edge starter clip. Since the Prairie Panel System is a fully interlocking system make sure that the starter clip is perfectly perpendicular to the eave so the Panels will install and look perfectly perpendicular as well. The drip edge style, shape and size will be determined by other factors like the gutter, fascia and soffit shape and design and the planned panel size.

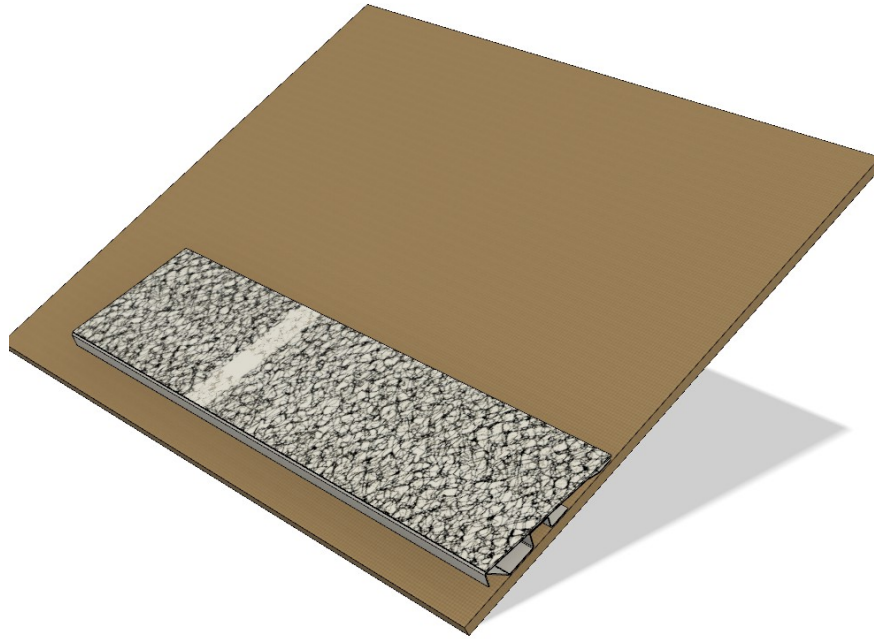


2, Install the lower Panel sub-support profile, perfectly parallel with the drip edge and at the precise distance from the drip edge metal.

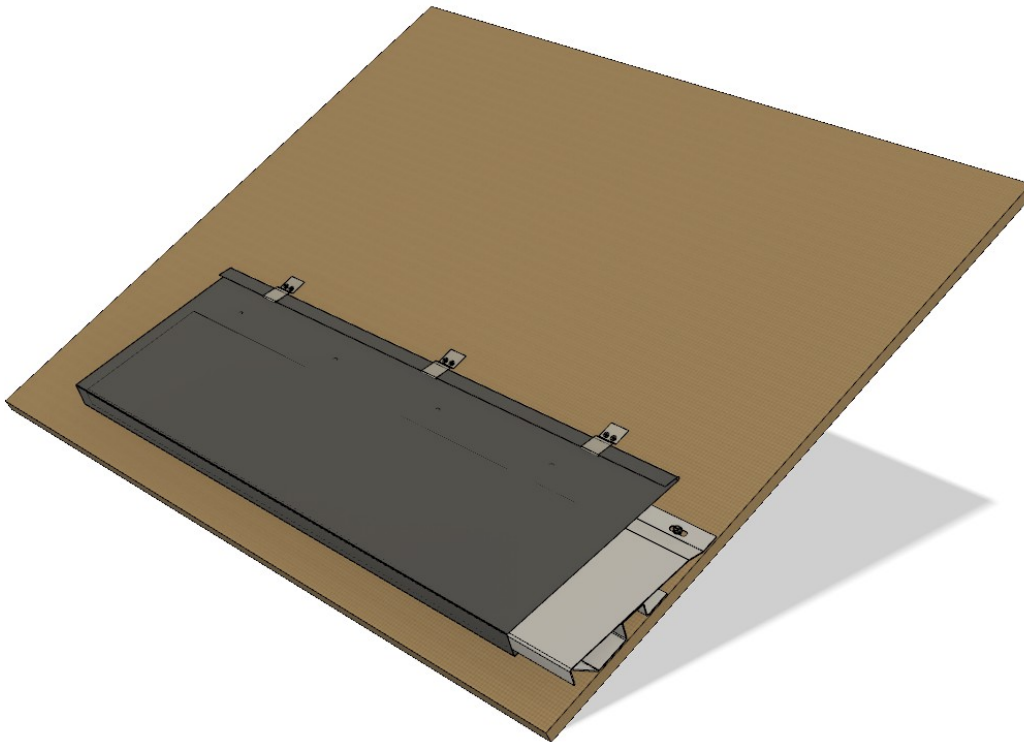


3, Install the upper Panel sub-support profile

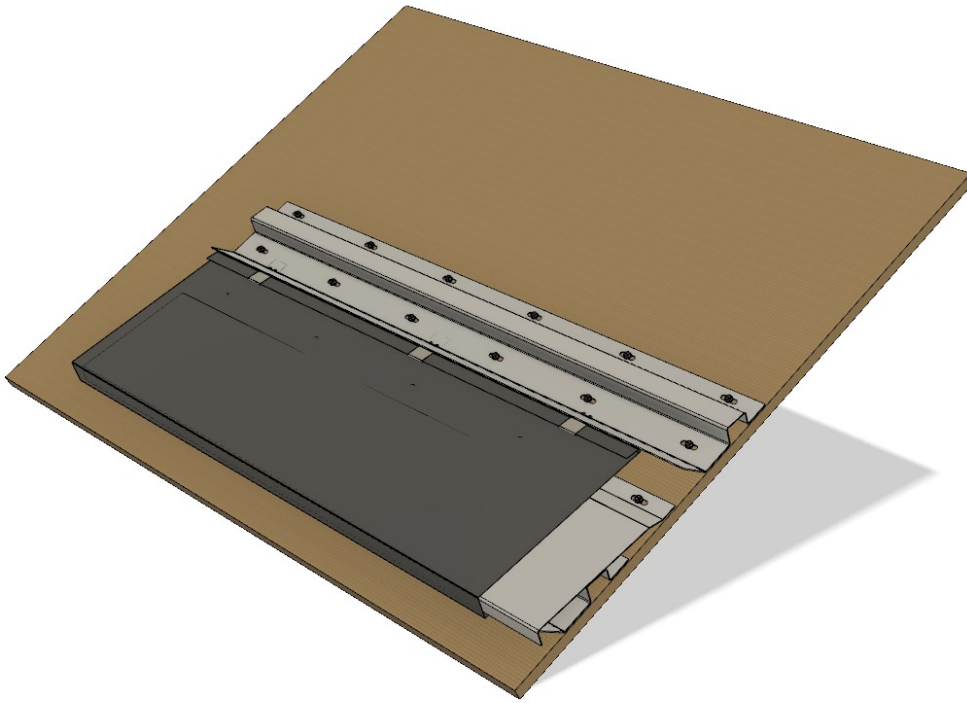




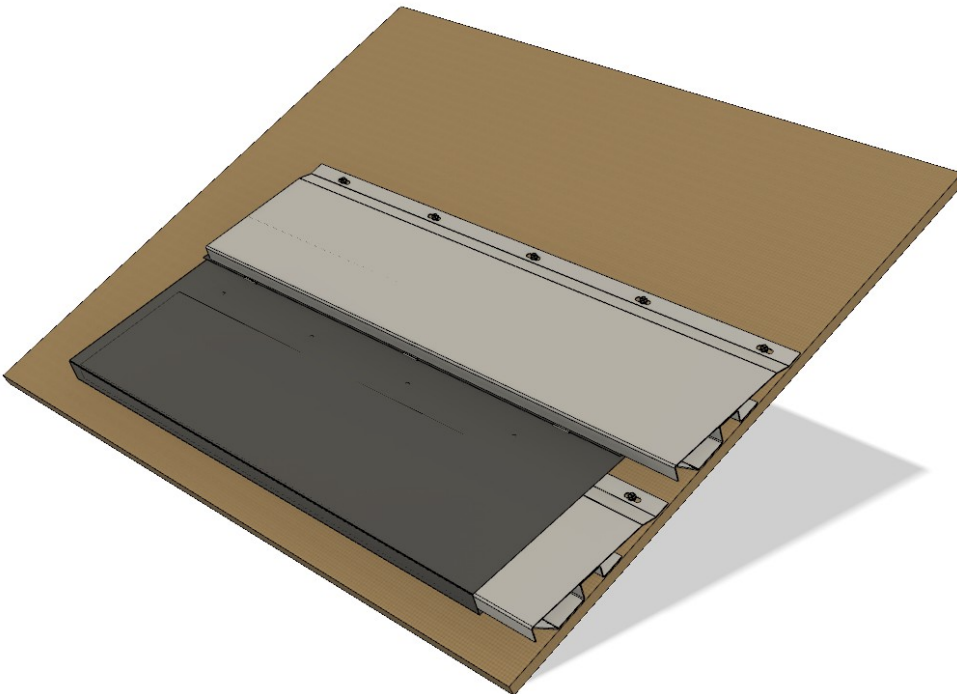
3, Some metals require the installation of a special separation layer (ENKAMAT) between the sub-support metal and the cover metal itself for venting the underside of the covering metal. We will specify upon request.



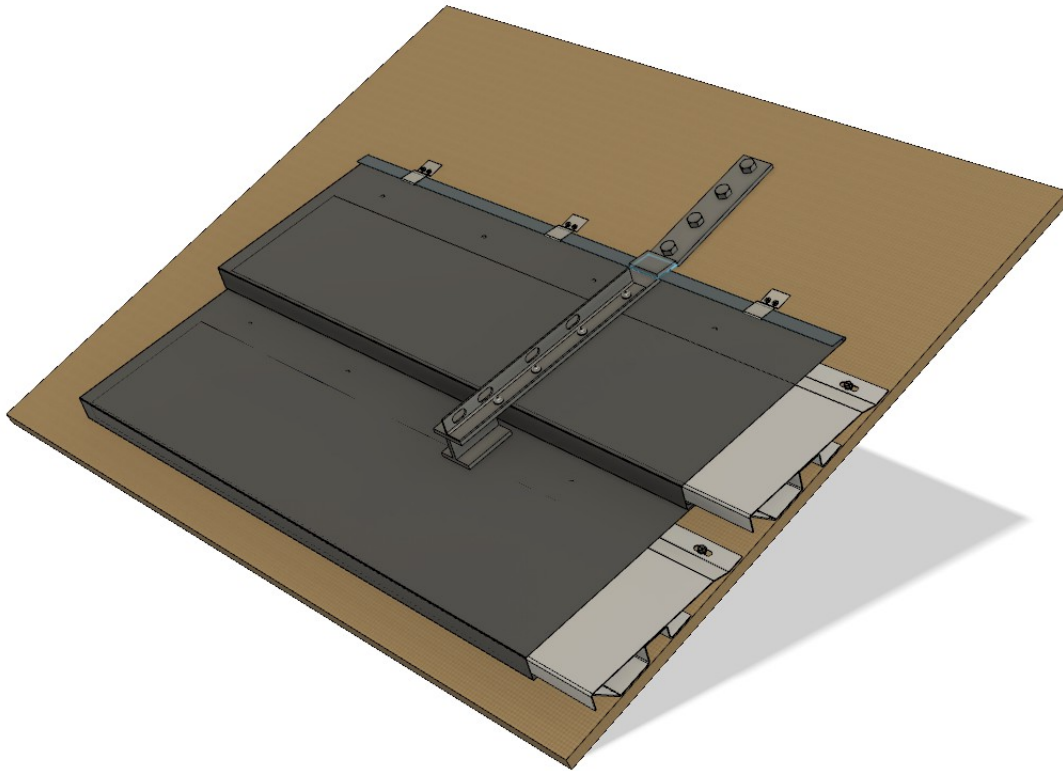
4, Install the first roofing Panel as shown above by interlocking its lower edge into the drip edge and fasten the upper edge, by aligning with the line or chalk line, using the supplied stainless steel clips.



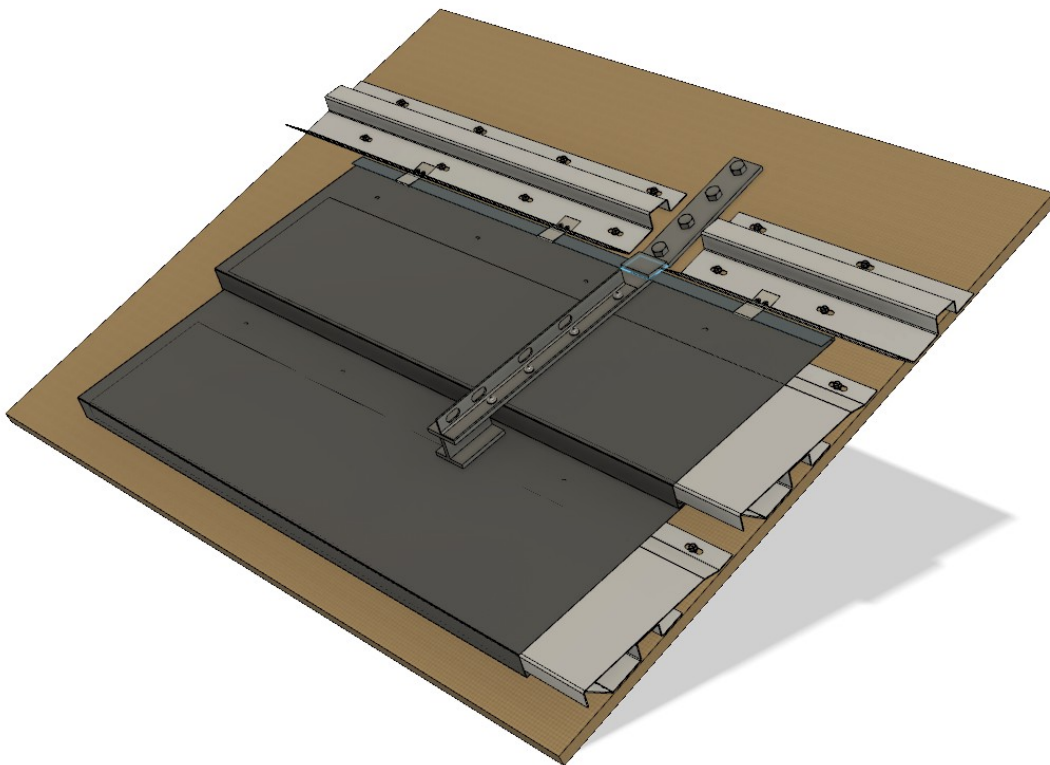
5, Install the lower sub-support profile for the next row of Panels, appropriately aligning it with the first installed Panel.



6, Install the next components as before described... and so on.

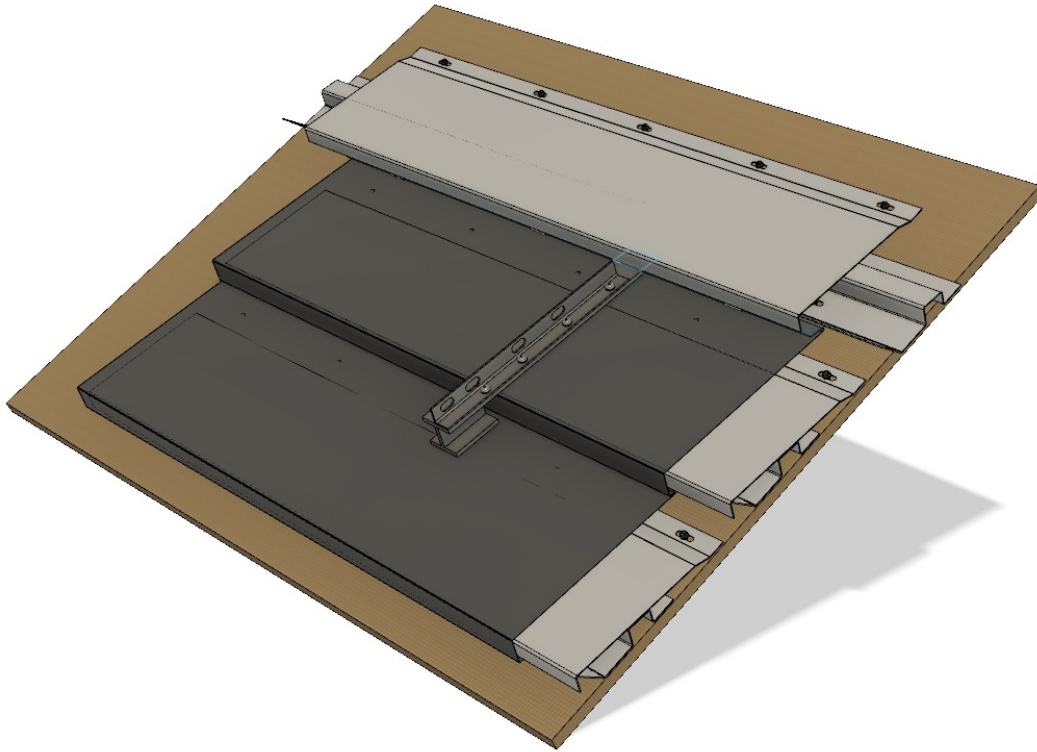


7, If a log type snow fence is desired, plan the snow fence holder brackets to be installed just above bearing walls to carry the extra weight. After installing the Panels below the planned snow fence, install the snow fence brackets as shown above. There is no need to cut the Panel's back hem, just bend the hem up a little to accommodate the bracket's thickness. Fasten the snow fence brackets with appropriate fasteners.

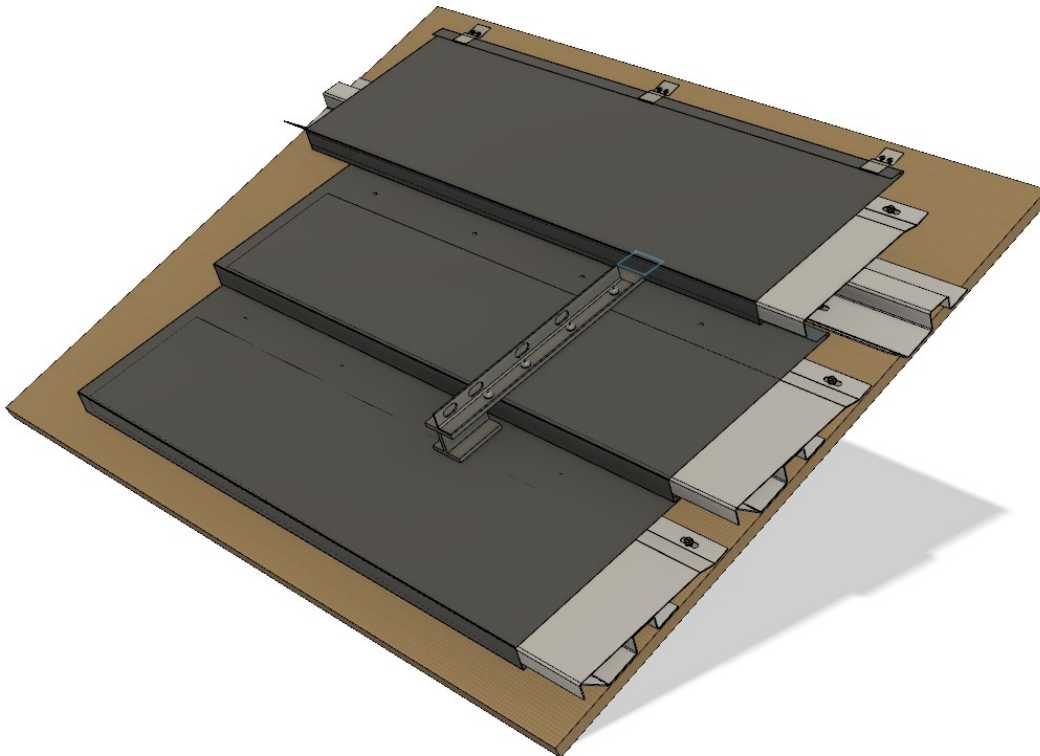


8, Install the next row sub-support, keep a 1 inch gap between the snow fence holder bracket and the lower sub-support profiles.

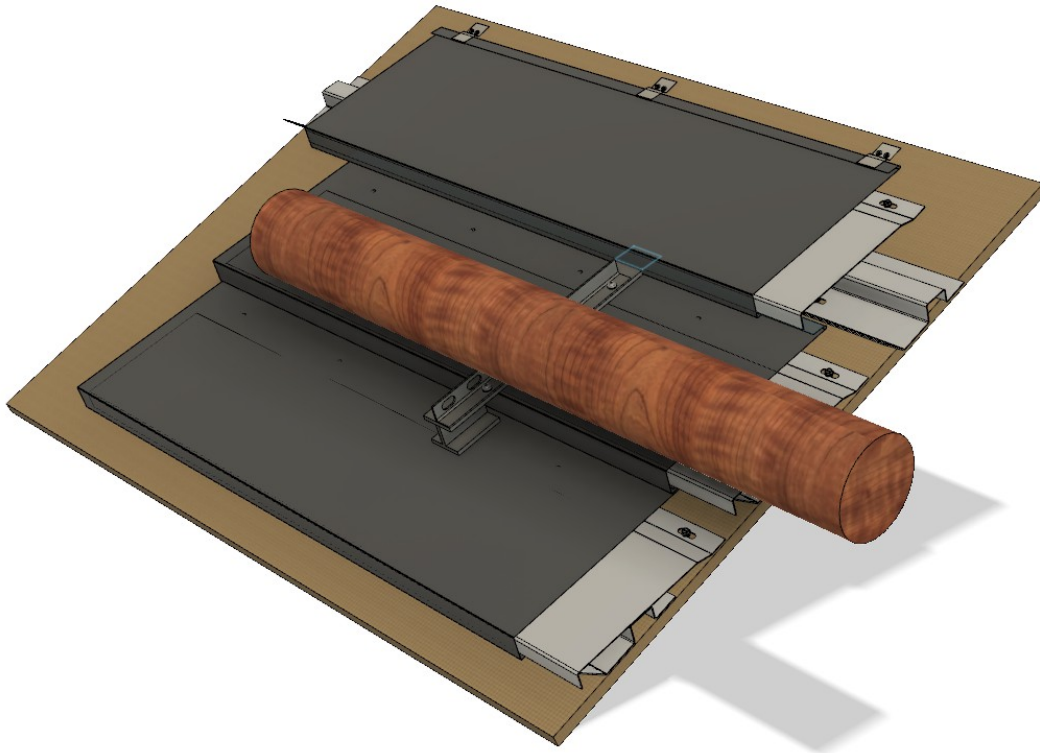




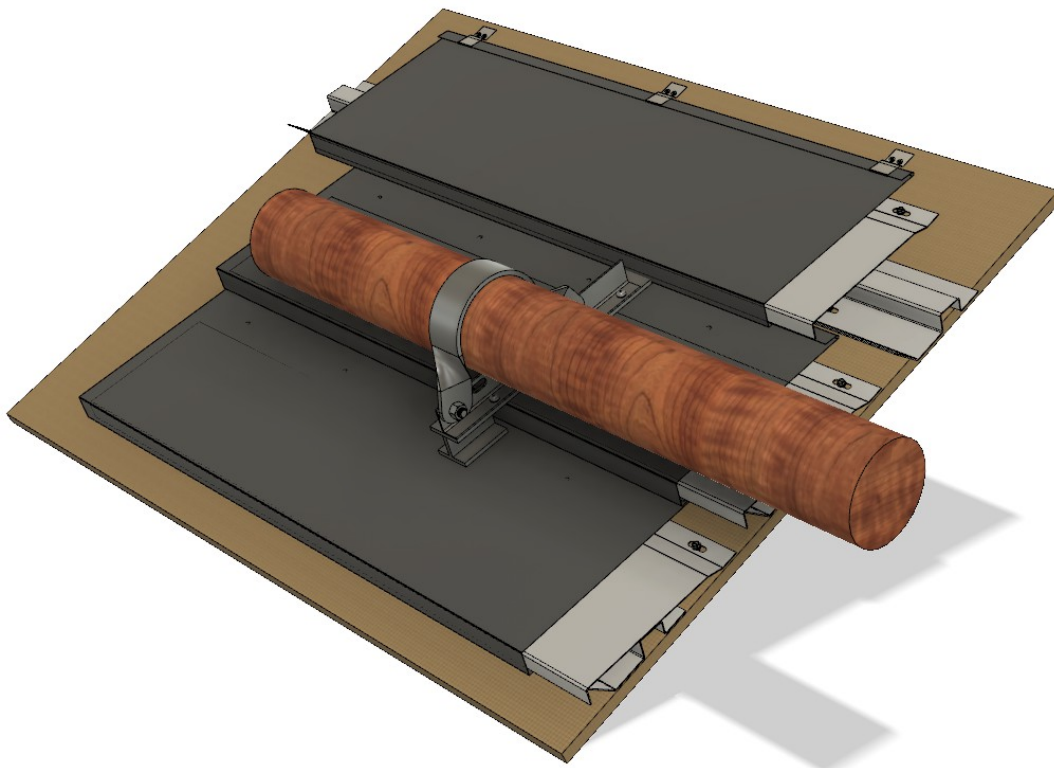
9, Install the next row's upper sub-support profile, it will need to be notched out a small area where it would otherwise interfere with the snow fence holder bracket.



10, Install the next Panel. This panel too needs to be notched out a tad where the Panel would otherwise push against the snow fence bracket.



11, Place snow fence log atop of the snow fence holder bracket.



12, Fasten the log with the supplied log-fastener clamp onto the bracket. We recommend using no longer than 12 feet long logs as snow fence, using 2 sets of snow fence brackets per log, each bracket installed 2 feet from the ends of the log for best use of snow holding power.



5066 West Amelia Earhart Drive - Salt Lake City, UT 84116 - 801 - 462 - 5264

DISCLAIMER & COPYRIGHT © 2020 Spengler Industries (SI) & Fine Metal Roof Tech (FMRT). All rights reserved.

No part of this publication may be reproduced in any form or by any means, including photocopying, or utilized by any information storage or retrieval system without permission of the owners above.

The Manual is for general information only. The Manual is designed to delineate areas requiring consideration. Information contained in the Manual should not be used without first securing competent advice with respect to its suitability for any given application.

SI or FMRT will not assume responsibility and disclaims any representation or warranty, express or implied, that such information is suitable for any general or particular use. Anyone making use of the Manual assumes all liability resulting from such use.

The existence of the Manual does not in any respect preclude a member or nonmember of SI or FMRT from manufacturing, selling, or specifying products not conforming to the Manual, nor does the existence of an SI or FMRT Manual preclude its voluntary use by persons other than members.

The Manual does not purport to address all safety problems associated with its use or all applicable regulatory requirements. It is the responsibility of the user of the guideline to establish appropriate safety and health practices and to determine the applicability of regulatory limitations before use of the Manual.

SI & FMRT reserve the right to change, revise, add to, or delete any data contained in the Manual without prior notice.

It is the responsibility of the end user to verify the applicability of this information with the local building and fire officials.