



RibCore Installation Guide

RibCore by Trusscore

RibCore by Trusscore is a high-strength PVC corrugated panel that's long-lasting, cost effective, and easy to maintain. Available in two profiles and designed to be used in wall or ceiling applications, RibCore is ideal for a broad range of agricultural, commercial, and industrial applications, including: drive sheds, warehouses, public bathrooms and showers, garages, agricultural pole barns and facilities, horse stables, and dog kennels.

Contents

<u>Tools required</u>	3
<u>Storage</u>	3
<u>Acclimatizing your product</u>	3
<u>Fastening</u>	3
<u>Preparation</u>	4
<u>Cutting</u>	5
<u>Overlapping panels</u>	6
<u>Basic installation</u>	6
<u>Ceiling installation</u>	7
<u>Wall installation</u>	8
<u>Cutouts</u>	9
<u>Radiant heat</u>	10
<u>Epoxy floors</u>	10
<u>Trim application</u>	10
<u>Cleaning</u>	16
<u>Specifications</u>	16
<u>RibCore trims</u>	17
<u>CFIA, USDA & FDA approved installations</u>	17
<u>Disclaimers</u>	17

Warranty

For more information on product warranty please visit trusscore.com/warranty

Congratulations on your decision to use RibCore by Trusscore! Your project will soon look amazing, and it will last a lifetime. If you've never installed Trusscore products before, or even if you've installed RibCore in the past, be sure to familiarize yourself with this guide. It's filled with tips, time-saving suggestions, and a few must-dos that will make your installation successful.

Let's get started.

Tools required



Heavy duty scissors/ Tin snips



Level



Ladder and/or Scaffolding



Drill/Screw gun



Chalk line



Safety glasses



Table saw or Handhld power saw



Flexible silicone sealer



Face mask



Tape measure



Caulking gun

Storage

RibCore panels cannot be stored in direct sunlight or in an enclosed area that is subject to very high temperatures. RibCore panels should be stored indoors. If outdoor storage is necessary, panels must be covered with a white plastic sheet, cardboard cover, or another material that will not absorb or conduct heat. Make sure the entire surface of the panels is covered to avoid solar heat buildup between the panels.

Acclimatizing your product

RibCore must sit in the location where it will be installed for a minimum of 24 hours before installation. This will minimize the amount of expansion or contraction that occurs after the product is installed and ensure the best possible installation.

It is recommended that you loosen or remove any packaging material that may restrain the product while it is acclimatizing.

Fastening

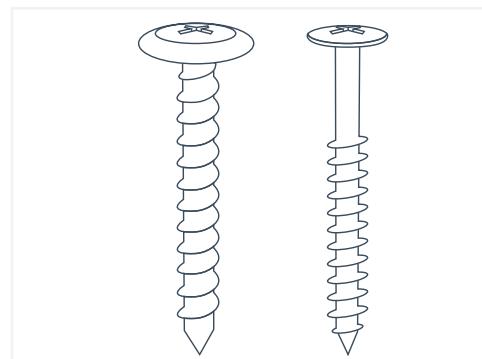
RibCore is designed to be installed with screws. Use only corrosion-resistant (galvanized, stainless steel, or aluminum) screws with a minimum head diameter of 3/8".



Do not use nails or staples.

Recommended fasteners

- **Wood** – #10 X 1-1/4" Truss or Pancake Head screws
- **Concrete** – 3/16" x 1-1/4" Flathead screw (Tapcon)
- **Metal studs** – Make sure to use self-tapping screws instead of wood screws



If installing over drywall, screws should be 1-3/4" to 2" long. If furring strips or strapping are part of your installation, screws should be 2-1/2".

! Failure to follow fastening instructions may damage the panel and/or void the warranty.

Fastening tips

- **Do not over-tighten fasteners**
- Holes must be pre-drilled for screw installation
- Fasteners should penetrate a minimum of 1" into solid backing
- Fasteners should be applied at every wood stud (no more than 24" apart)
- Fasteners must be at least 4" from the end of the panel

RibCore panels will expand and contract with fluctuations in temperature. To allow for this movement, holes must be pre-drilled before the panel is fastened. The diameter of these holes must be 1/8" to 1/4" larger than the diameter of the shaft of the screw, but smaller in diameter than the head of the screw.

Do not over-tighten fasteners; allow a minimum of 1/16" (about the thickness of a dime) between the back of the fastener head and the screw flange.

Screws should be fastened at the lowest portion of the profile (where it touches the wood studs) (Fig 1). Fastening at the top of the profile will compact or distort the panel and may cause damage if over-tightened (Fig 2).

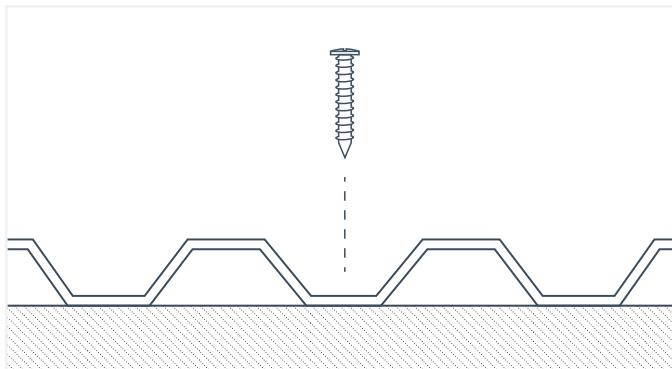


Fig. 1

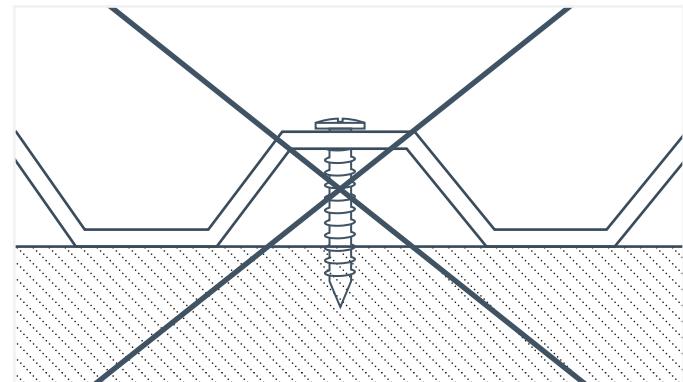


Fig. 2

Preparation

- Check surfaces for straightness and install strapping where necessary; make sure that all insulation and vapor barriers are installed to building code prior to RibCore being installed
- Install wood blocking (short pieces of lumber for added support/coverage) around all door and window openings to properly support trims
- When planning to suspend lighting or other items, install adequate backing at each location as required; never mount items directly to Trusscore
- Do not begin installation until the building is fully enclosed, heating/cooling equipment is in operation and any residual moisture from construction has been removed

Cutting

Trusscore recommends the use of heavy-duty scissors or tin snips when cutting single RibCore panels (Fig 3). When cutting multiple panels, a circular saw or fine-tooth hand saw should be used.

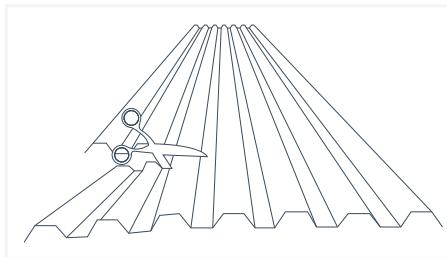


Fig. 3

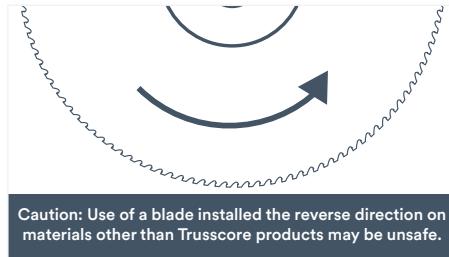


Fig. 4

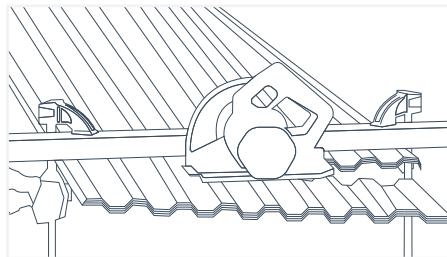


Fig. 5

When using a circular saw, use a saw blade designed to cut vinyl products. Alternatively, installing standard saw blades in the reverse direction is recommended (Fig.4). Coarse-toothed blades should be avoided for best results. As an additional option, concrete/masonry blades can be used. For all blades, apply smooth even pressure to the product when completing the cut. the panels should be supported or clamped near the cut location to avoid vibration and movement (Fig 5). Up to 5 panels can be cut simultaneously with a circular saw.

Here are some examples of widely available blades we recommend.

Description	Product Number
IRWIN Marathon 7 1/4" - 120T Vinyl Siding Corded Circular Saw Blade	11830
Dewalt 12" - 80T Precision Trim Saw Blade	DW3232PT
AvantiPro 12" - 80T Fine Finish Saw Blade	P128080PP
Dewalt 6 1/2" - 90T Construction Saw Blade	DW9153
Makita 7 1/2" - 40T Carbide Tipped Saw Blade	A-90629
Makita 6 1/2" - 44T Carbide Tipped Fine Crosscutting Saw Blade	A-98360
Diablo 7 1/4" - 60T Carbide Tipped Ultra Finish Saw Blade	D0760

In cold weather, move the saw through the material slowly to prevent chipping or cracking.

Performing a test cut will allow you to confirm the performance of your cutting tool without impacting your project.

For your safety, safety goggles and a dust mask should be worn while using power saws.



Any offcuts you create are recyclable.

Overlapping panels

RibCore panels need to be overlapped anywhere two panels meet. All overlaps should be sealed with a flexible silicone sealer.

Side overlap

Panels should be overlapped one corrugation/rib (Fig 6).

End overlap

Panels should be overlapped 4" at the end of a panel (Fig 7).

It is important to start at the bottom of the wall and work upwards (this will ensure that any water flows properly down the wall and will not get behind the panels).

If you are fastening panels where they overlap, make sure you pre-drill through both panels before installing the screw. If both panels are not pre-drilled, you may have issues with panel expansion and contraction.

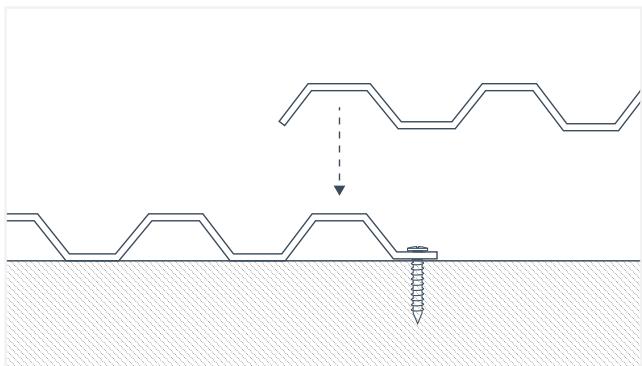


Fig. 6 Side overlap

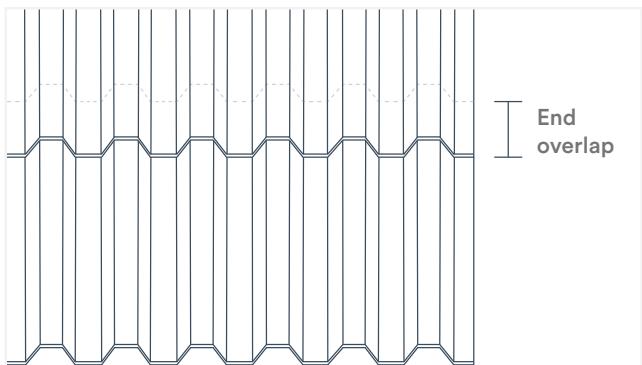


Fig. 7 End overlap

Basic installation

Install order

If RibCore is being installed on both the ceiling and walls of a project, it should always be installed on the ceiling first.

Silicone

We recommend that a one-part, neutral cure silicone sealant is used to seal all corners, around all fixtures, and to repair small holes. The sealant color should be off-white to match the panels.



Silicone is mandatory in wet installations.

Ceiling installation

1. Begin by installing J Trim or F Trim (if you will be adding panels to the wall as well) around the perimeter of the ceiling and around any openings.

Guidelines for trim installation can be found in the [Trim application](#) section of this document.

2. If your panels are larger than your opening, cut them to length before installing.
3. Lift your first panel into its installation position and mark the location of all fasteners (this step may require 2 people), then take it down for drilling.

Ensure that you leave a 1/4" gap between RibCore panels and any walls when installing.

4. Pre-drill the holes for each fastener at the locations you marked in Step 3.

5. Lift the panel into position and ensure it is parallel to the outside wall before fastening. To do this, measure the distance from the wall to the edge of your panels at both the top and bottom of the panel. If the measurements are uneven, you will need to correct the positioning of your panel (Fig 8).

6. Ensure there is a 1/4" gap between the edge of the first row of panels and the wall.

7. Install the fasteners per the [guidelines](#) above.
Remember not to over tighten your fasteners.

8. When starting your next panel, ensure that you are overlapping properly (1 corrugation at the side, 4" at the top or bottom) as mentioned in the [Overlapping panels](#) section above (Fig 9).

9. Repeat steps 3 to 5.

10. Continue until all panels are installed.

11. You may need to cut your last panel(s) in order for them to fit properly into your ceiling. Follow [cutting instructions](#) above in this instance.

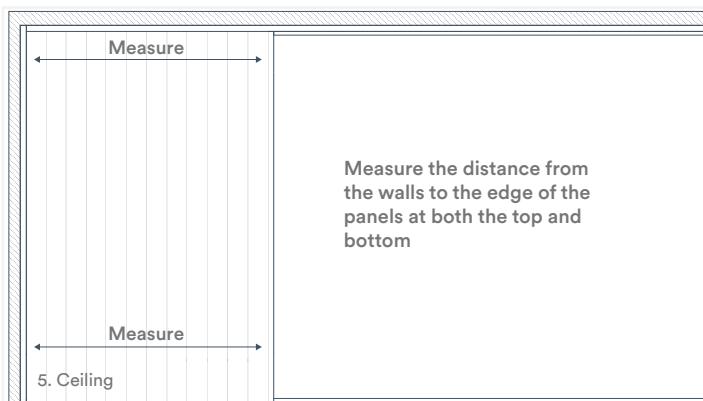


Fig. 8

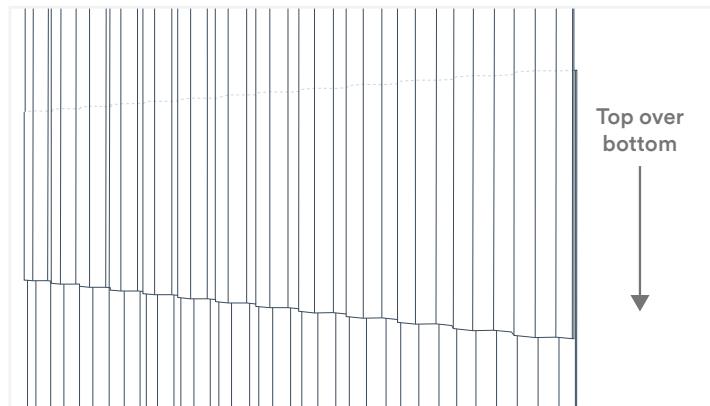


Fig. 9

Wall installation

1. It is important to start at the bottom of the wall and work upwards (this will ensure that any water flows properly down the wall and will not get behind the panels).
2. Begin by installing the Base Trim or J Trim along the bottom of your wall.
Guidelines for trim installation can be found in the [Trim application](#) section of this document.
3. Next, install F Trim or double J Trim in any corners on your wall.
Guidelines for trim installation can be found in the [Trim application](#) section of this document.
4. Then install J Trim along the perimeter of openings like doors or windows, and along the top of your wall.
Guidelines for trim installation can be found in the [Trim application](#) section of this document.
5. If your panels are larger than your wall, cut them to length before installing.
6. Lift your first panel into its installation position and mark the location of all fasteners (this step may require 2 people), then take it down for drilling.
7. Pre-drill the holes for each fastener at the locations you marked in Step 3.
8. Lift the panel into position and ensure it is parallel to the outside wall before fastening. To do this, measure the distance from the wall to the edge of your panels at both the top and bottom of the panel. If the measurements are uneven, you will need to correct the positioning of your board (Fig 10).
9. Ensure there is a 1/4" gap between the vertical edge of the first row of panels and the wall.
10. Install the fasteners per the [guidelines](#) above.
Remember not to over tighten your fasteners.
11. When starting your next panel, ensure that you are overlapping properly (1 corrugation at the side, 4" at the top or bottom) as mentioned in the [Overlapping panels](#) section above.
12. Repeat steps 3 to 5.
13. Continue until all panels are installed.
14. You may need to cut your last panel(s) in order for them to fit properly on your wall. Follow [cutting instructions](#) above in this instance.

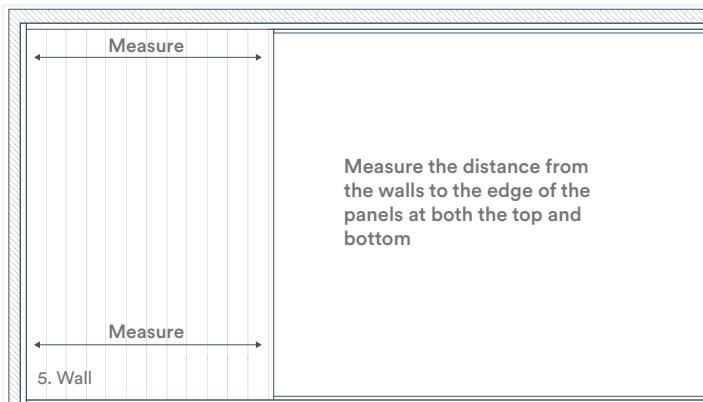


Fig. 10

Wall installation – High moisture environments

If you are installing RibCore in a high moisture environment (car wash, etc), the following guidelines must be followed:

- Silicone must be applied at all locations where panels are overlapped
- In addition, silicone must be applied prior to fasteners to ensure moisture does not get in through the enlarged fastener holes
- If you are using J Trim at the bottom of your wall, you must drill drainage holes in the bottom of the J Trim per the guidelines in the [Trim application](#) section of this document

Cutouts

If holes are required for things like electrical boxes, lights, taps, etc., it is recommended to use a jigsaw, oscillating saw or hole saw to cut out the shape. Here are some widely available options we recommend.

Description	Product Number
Bosch Basic for Metal-Thin Jig Saw Blade with 17-24 TPI	T118A
Diablo Bi-metal General Purpose Jig Saw Blade with 5/10 TPI	DJT345XF
Dewalt HCS Clean Cut (Wood) Jig Saw Blade with 10 TPI	DW3760H
Milwaukee 3" Diameter Hole Dozer Hole Saw Blade with Arbor	49-56-9670
Milwaukee Universal Fit Oscillating saw Blade	48-90-1231

Square cut-outs should be made following the steps below.

1. Measure the location of the opening on the wall.
2. Mark the perimeter of your opening on the panel.
3. Drill a 1/2" hole in the corner of the required opening (Fig 11).
4. Insert the blade into the hole and proceed to cut out along your marked lines.

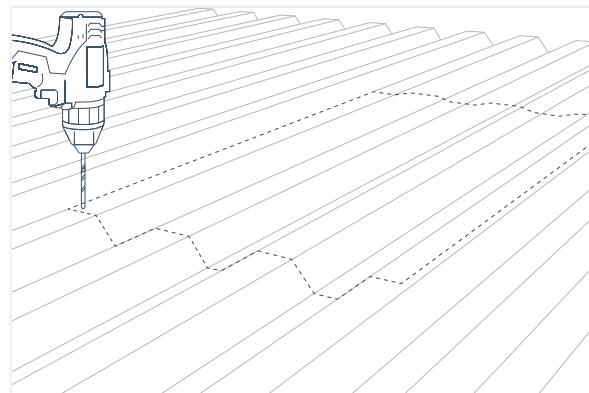


Fig. 11

If performing this cut after the panel has been installed, ensure the space behind the area to be cut is free of obstructions, electrical wires, plumbing or any other object.

Radiant heat

All sources of radiant heat must be shielded and located with a minimum of 24" clearance between it and RibCore. Consult the manufacturer of any heater for further guidelines regarding any necessary shielding and clearances before installing.

Epoxy floors

When installing RibCore in a location that will receive an epoxy floor, the epoxy cannot be sprayed onto the RibCore panels.

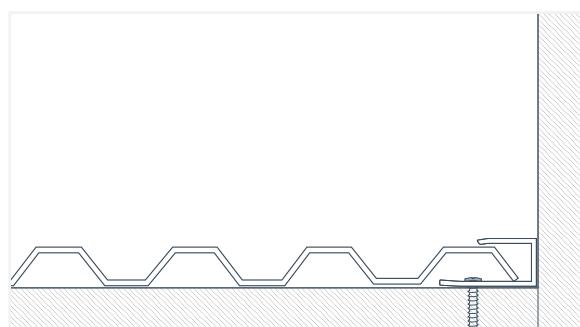
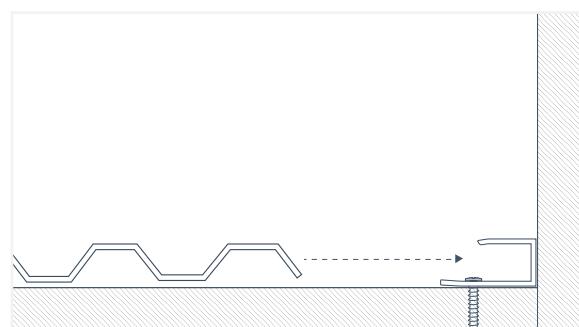
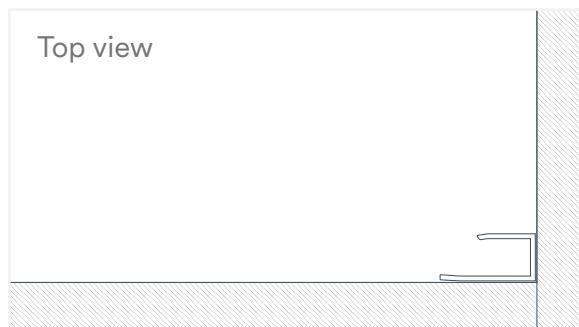
Trim application

Trim installation tips

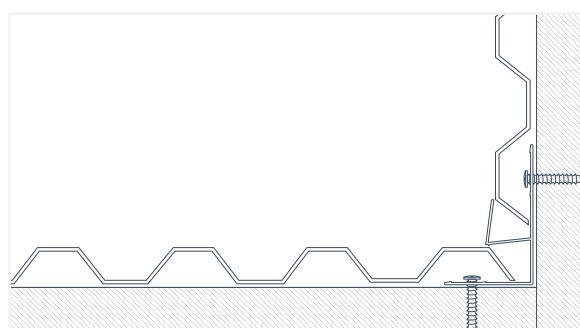
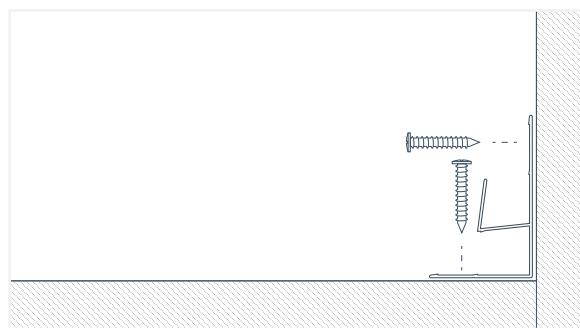
- Tin snips are the safest and easiest tool to use when cutting trims; for a cleaner cut, avoid closing the blades at the end of a stroke
- Trims should be screwed to the substrate at least once every 24" and at least 4" from the end of the panel
- If an area requires more than 10' of continuous trim, the trims should be butted tightly together with silicone sealant placed between the two pieces
- To create a water-tight corner at door and window openings, please insert a small bead of silicone caulking on channel opening of trim pieces before installing panels

Inside corners

J Trim



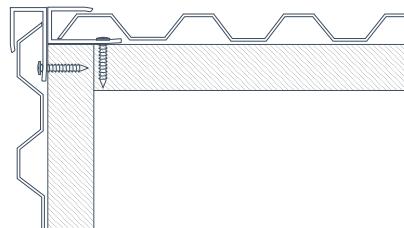
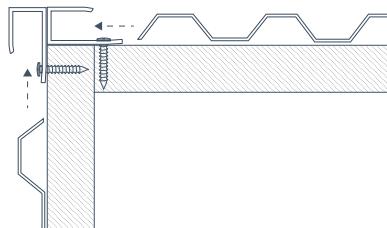
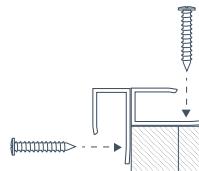
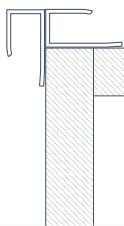
F Trim



Outside corners

Double J Trim

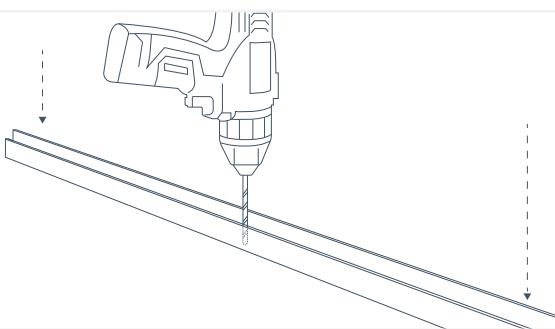
Top view



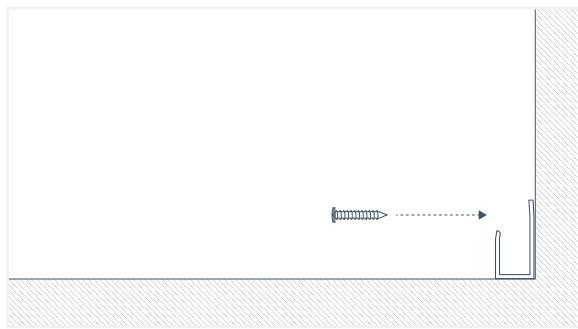
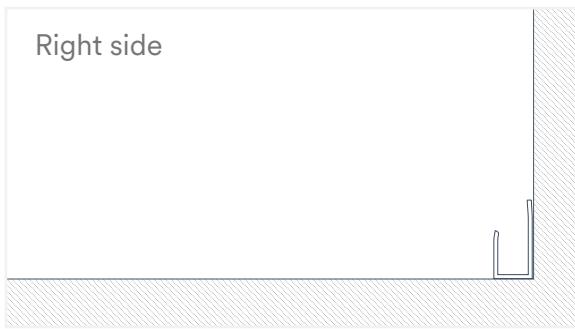
Bottom of wall

J Trim

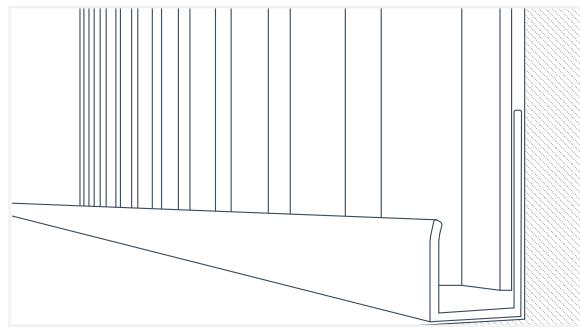
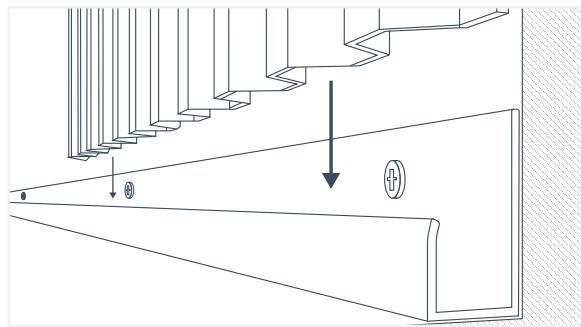
To ensure drainage, drill 1/4" diameter holes into the bottom of the J Trim before installing it on the wall. Holes should be placed 16" on center.



Right side

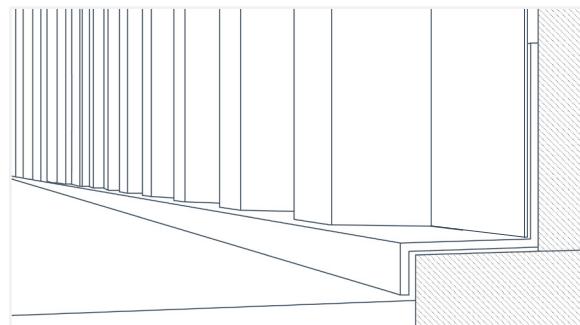
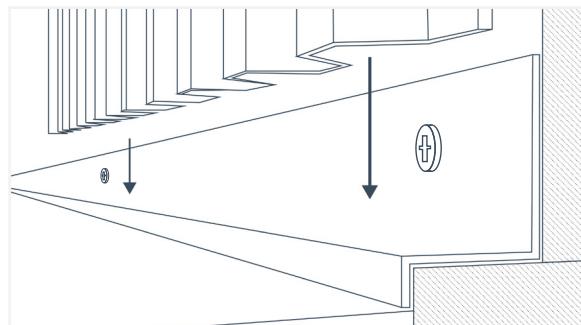
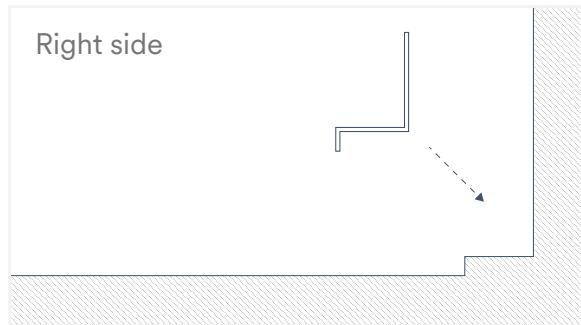


J Trim (continued)



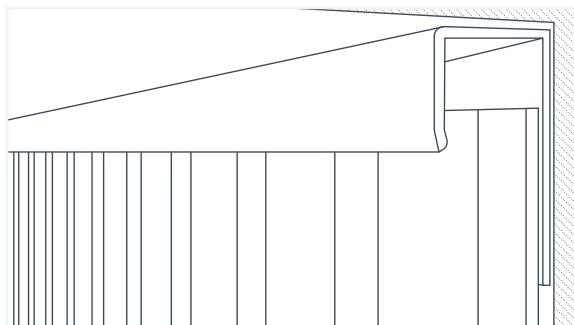
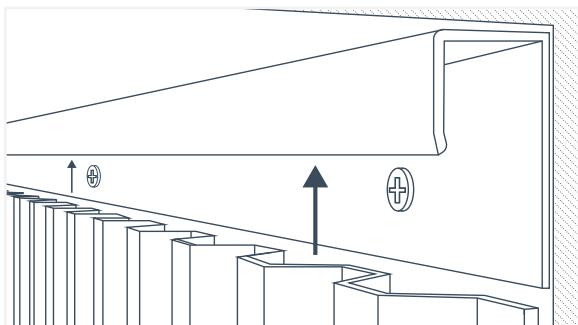
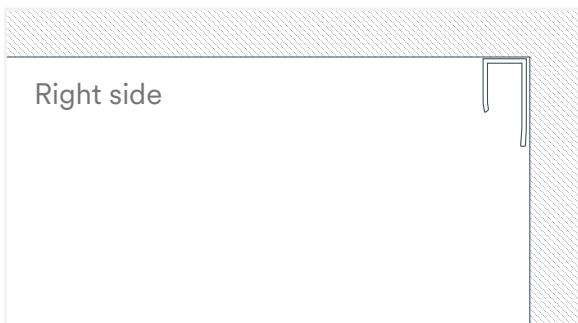
Base Trim

⚠ The Base Trim is not recommended for use with sloped floors as it will impact the alignment of wall panels.



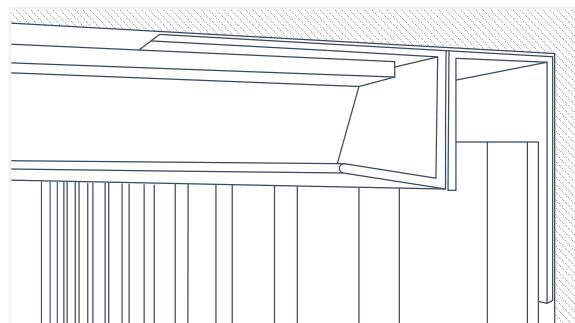
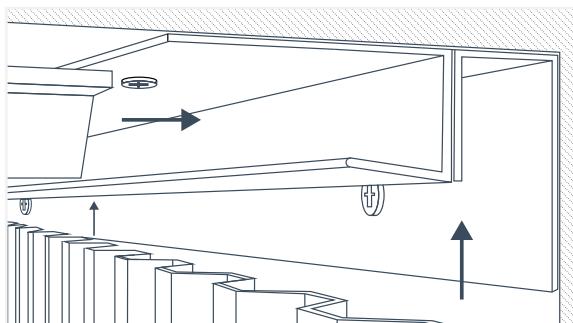
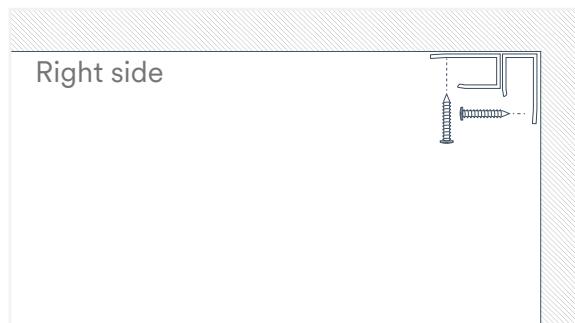
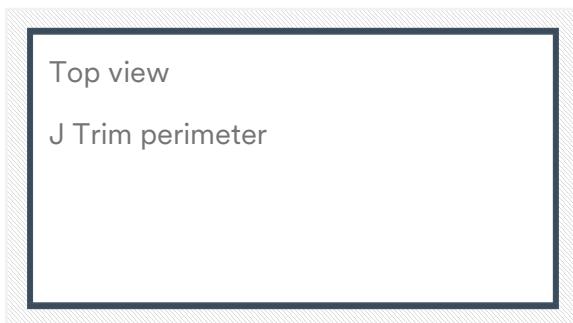
Top of wall

J Trim

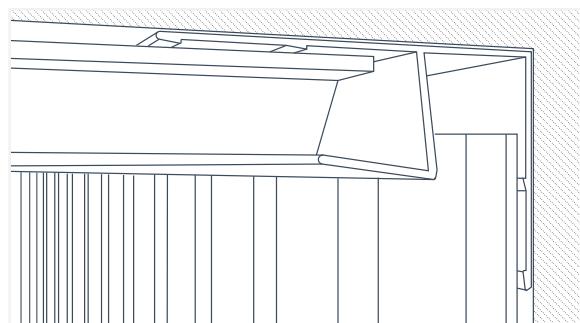
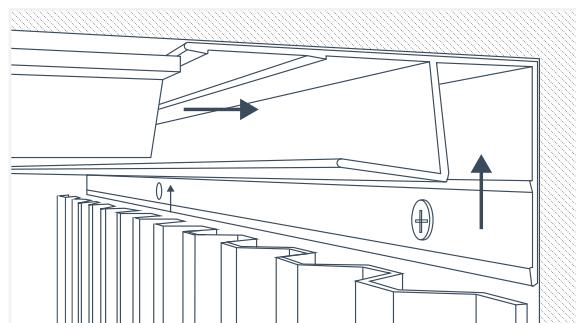
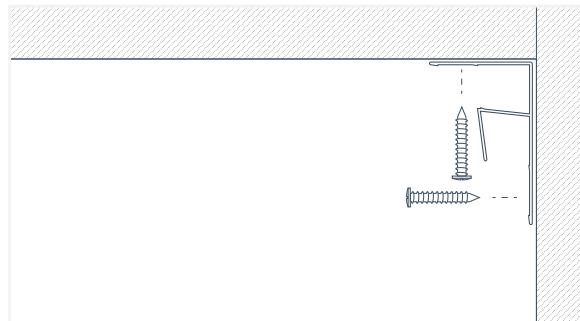
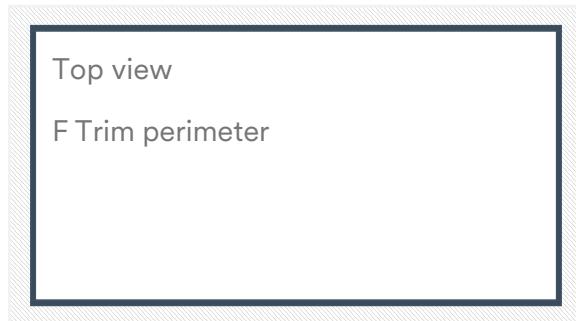


Ceiling perimeter

J Trim

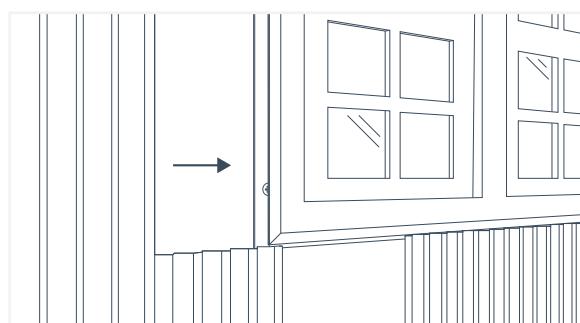
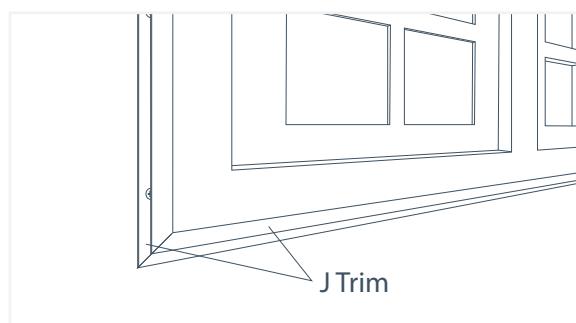
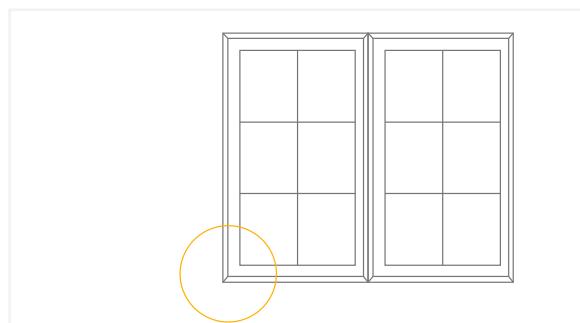
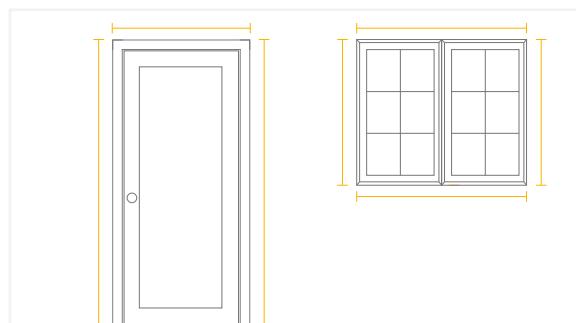


F Trim



Window & door openings

J Trim



Cleaning

Here are some guidelines to help you handle any level of dirt your product encounters:

Day-to-day cleaning

To remove common dirt and maintain your Trusscore product's beautiful appearance, wash using a sponge or soft cloth and a mild cleaning solution.

Abrasive cleaning pads/cloths should not be used as they could scratch or alter the surface of the product.

If the dirt is difficult to remove, wipe clean with a solution of:

- 1/3 cup laundry detergent (e.g. Tide®)
- 2/3 cup tri-sodium phosphate (e.g. TSP®)
- 3.79 L (1 Gallon) of water

Swiffer® Dusters™ are very helpful in removing dust from RibCore.

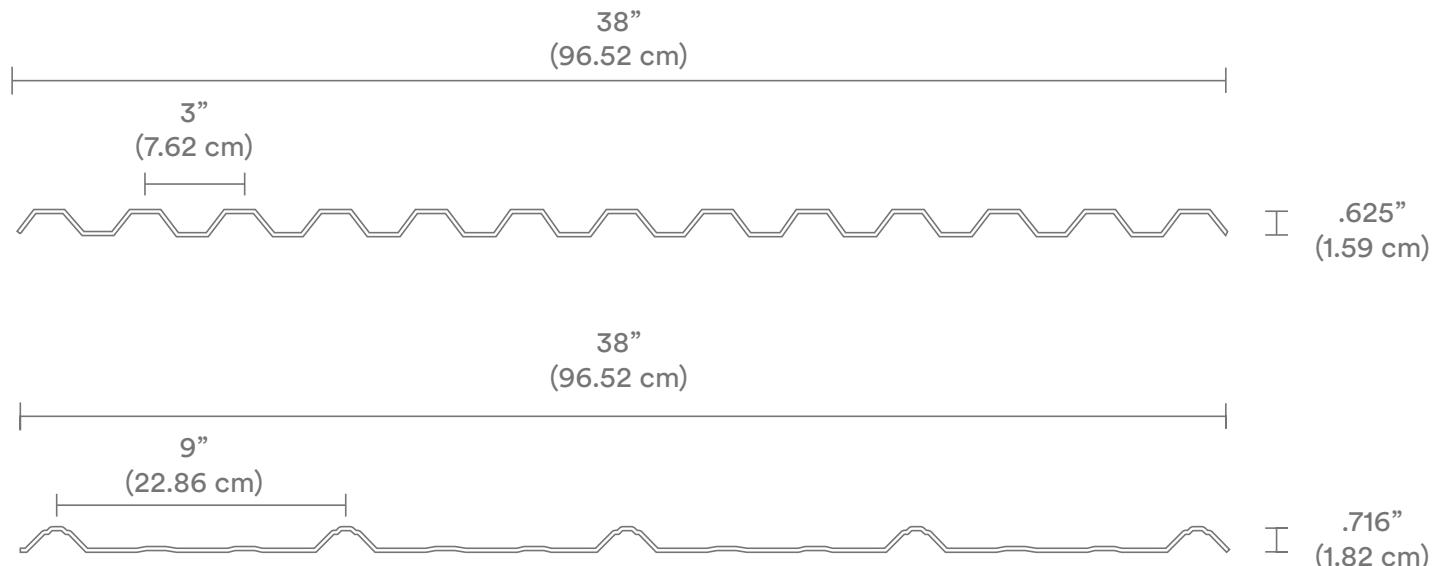
Mr. Clean® Magic Erasers™ can be used to remove marks on RibCore.

Pressure washing

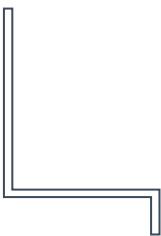
When hand cleaning doesn't get the job done, pressure washers may be used with mild soap and a sponge or soft cloth, provided the guidelines below are followed:

- Power washing nozzle should be at least 4-6 ft away from the wall
- Use a small-to mid-size power washer with less than 3,000 psi
- Use a wide spray nozzle angle (40° or greater is preferred) to distribute the water pressure across the wall

Specifications



RibCore trims



Base Trim



H Channel Snap-In Kit



3/4" F Trim



3/4" J Trim

CFIA, USDA & FDA approved installations

RibCore panels are fully compliant with the requirements set out by the CFIA, USDA and FDA for areas where food is prepared. In these applications, the following guidelines must be followed.

- The product is strictly for use on non-food contact surfaces
- All joints are to be sealed with an acceptable flexible caulking compound to provide a smooth, flush, and impervious joint

In Canada, MONO® SILICONE MAX™ Premium Kitchen & Bath Sealant can be used for this application. In the USA, the product is branded as DAP Commercial Kitchen 100% Silicone Sealant. Both meet FDA Reg. 21, CFR 177.2600 and are certified to NSF/ANSI Standard #51.

Disclaimers

The manufacturer is not responsible for problems related to expansion due to temperature fluctuations. If wide temperature fluctuations exist in the area of the Trusscore installation, allow for expansion and contraction gaps in moldings and perimeter. Before installation, RibCore and trims should be acclimatized to minimize expansion and contraction issues.

As part of our focus on continuous innovation, Trusscore leverages advancements in material science to improve the performance and environmental impact of our products. Through the use of zero wastewater production processes, incorporation of recycled material in our products, and commitment to using raw materials with low environmental impact we are developing more sustainable building products.

Our drive to continually develop better-looking, better-performing, and more sustainable products can result in minor changes to the color and texture of our products when compared to previously manufactured products. Therefore, install products of the same package and/or pallet when completing your project to ensure the best possible results to minimize any minor variations.



trusscore.com

Learn more about Trusscore
trusscore.com | hello@trusscore.com | 1.888.418.4679

Copyright © 2023 Trusscore Inc. Trusscore is a trademark of Trusscore Inc. All other trademarks are the property of their respective owners.
Specifications are subject to change. T-IG104-004 02/2023