

RAINTECK

Installation Guide

Ceiling panel drainage and ventilation system

BEFORE YOU BEGIN

Read this guide completely before beginning installation. Proper layout, spacing, and slope are critical to ensure the RainTeck system drains correctly and performs as intended.

Installation Best Practices

- Determine the location of the gutter and downspout before beginning installation. When possible, locate the downspout away from the home.
- Check the deck for an existing slope. When possible, install the RainTeck system in the same direction as the existing deck slope, provided it works with the planned gutter location.
- Confirm all measurements before cutting components.
- Water-test the system throughout installation rather than waiting until the entire system is complete.

Tools & Additional Materials

- Gutter
- Downspout
- White or silver permanent marker
- Caulk gun
- Chalk line
- Tape measure
- Rubber mallet, if needed
- Non-angled gutter hangers
- Sliding compound miter saw with a fine-tooth blade
- Sawhorses
- Silicone caulk
- Aviation snips
- Drill/driver
- Zip ties, if installing RainTeck ventilation fans

RainTeck Components

Ceiling Panel: The finished panel that forms the underside ceiling surface and directs water toward the gutter.

Panel Hanger: Supports and connects adjoining Ceiling Panels.

Edge Channel: Previously referred to as the F Channel. Used around the perimeter to capture and finish the cut edge of the Ceiling Panel.

Rim Cover: Previously referred to as the L Channel. Used to provide a finished appearance at the rim of the deck.

Shims: Available in 1/4-inch, 1/2-inch and 1-inch sizes. Shims establish the drainage slope of the RainTeck Ceiling Panels.

Installation Terminology

Front: The edge of the deck opposite the gutter.

Gutter Side: The edge of the deck where the gutter will be installed.

Installation Instructions

1 Prepare the Deck

If the ledger hangs LESS THAN two inches below the joists, install a 2x4 below the ledger. If the ledger hangs AT LEAST two inches below the joists, move to step 2.

2

Install the Perimeter Mounting Board and Rim Cover

Install a board to provide a mounting surface for perimeter components of the RainTeck system. If the deck is 10 feet deep or less, install a 2x4. If the deck is 10-16 feet deep, install a 2x6. Then install Rim Cover on both sides of the deck.

3

Establish the Perimeter Reference Line

Measure 2 inches up from the bottom of the joists and snap a chalk line across the installed 2x4s. Use this line as the reference for installing the perimeter Edge Channel.

4

Install the Edge Channel

Attach the Edge Channel to the ledger (or 2x4 extension from step 1) tight to the joists using 1-1/4-inch RainTeck screws.

ESTABLISHING DRAINAGE SLOPE

5

Install the First Shim

Install a 1/2-inch shim 6 inches from the ledger. Secure the shim to every joist. This establishes the starting elevation of the RainTeck ceiling.

6

Determine the Shim Layout

- Place shims every 2 feet (24 inches) toward the gutter.
 - Shim height increases by 1/4 inch every 2 feet toward the gutter.
 - The final shim is located no more than 6 inches from the gutter line.
- IMPORTANT: The gradual increase in shim height creates the slope that directs water toward the gutter. Incorrect shim placement or insufficient slope may cause water to pool above the Ceiling Panels.

OPTIONAL VENTILATION FAN INSTALLATION

7

Install RainTeck Fans

If the RainTeck ventilation system is being installed, position fans in approximately every other joist bay. Locate each fan as close to the center of the joist bay as practical without interfering with the shim system. Maintain at least 6 inches of clearance between the fan and adjacent shims whenever possible. Secure fans according to the RainTeck fan installation requirements.

INSTALLING PANEL HANGERS

8

Establish the First Panel Hanger Location

Begin as close to the center of the deck as possible. RainTeck Ceiling Panels are 12 inches wide, and the layout should allow the panels at each outside edge to be ripped to fit. IMPORTANT: Plan the layout so ripped panels at the outside edges are at least 4 inches wide. Avoid creating very narrow finishing panels.

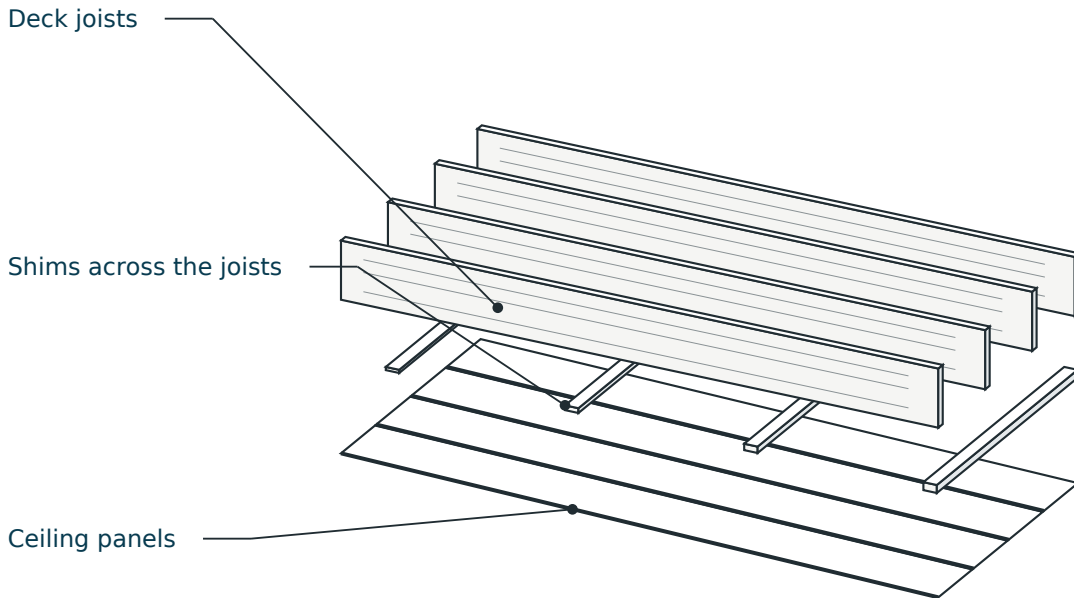
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Create a Hanger Spacing Guide

Cut a piece of 2x4 to exactly 9-1/8 inches. Use this block as the spacing guide when positioning Panel Hangers.

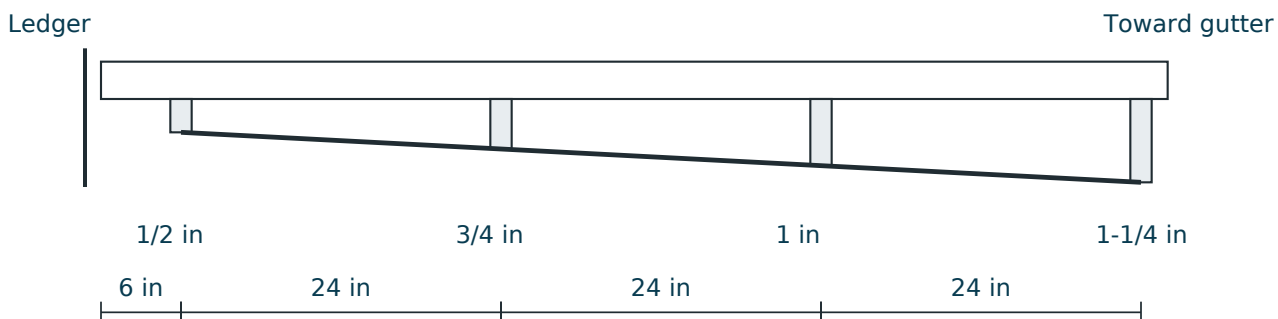
Establish the drainage slope

Steps 5-6 / Shim placement and drainage slope



Exploded view separates the layers to show their relationship.
Components meet when installed. Hanger profiles omitted in this view.

SIDE SECTION | SHIM HEIGHT AND SPACING



Vertical drop exaggerated for clarity; section is not to scale.

INSTALLATION REQUIREMENTS

First shim: 1/2 inch thick, placed 6 inches from the ledger.
Increase shim height by 1/4 inch every 2 feet toward the gutter.

10

Install the First Panel Hanger

Place the 9-1/8-inch guide at the top of the Panel Hanger near the first 1/2-inch shim. Position the hanger using the guide and secure the hanger to the shim. Make sure the hanger is straight before fastening.

11

Continue Installing the Panel Hanger

Repeat the process at each shim location while working toward the gutter. Use the 9-1/8-inch guide at every shim to maintain consistent Panel Hanger alignment.

PREPARING CEILING PANELS

12

Measure the Deck

Measure the inside dimension of the underside of the deck in the direction the Ceiling Panels will run. Measure carefully at several locations if necessary to account for framing variations.

13

Cut the Ceiling Panels

Cut each Ceiling Panel to the approximate center point of where your gutter will be positioned. Use a sliding compound miter saw equipped with a fine-tooth blade for clean cuts.

NOTE: You may also use a reversed standard wood blade for clean cuts.

14

Prepare the Edge of the First Panel

On the end of the panel that will enter the Edge Channel, remove approximately 1-1/4 inches of the vertical J-hook profile. This allows the panel to properly engage the perimeter channel.

INSTALLING CEILING PANELS

15

Apply Sealant

Apply a continuous bead of silicone caulk inside the Edge Channel between the Panel Hangers. The sealant helps prevent water from migrating beyond the drainage system.

16

Insert the First Panel

Slide the prepared end of the Ceiling Panel into the caulked Edge Channel. Make sure the cut end remains fully seated inside the channel.

17

Snap the Panel Into the Hangers

Working from the Edge Channel toward the gutter, snap the Ceiling Panel into each Panel Hanger. Engage one side at a time. Continue checking the opposite end of the panel to make sure it does not pull out of the Edge Channel during installation.

18

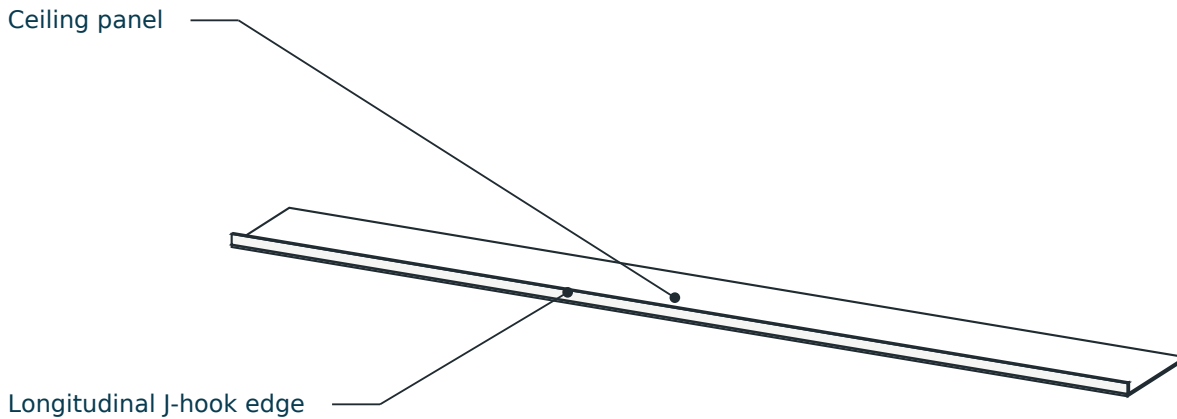
Test the First Panel

Before installing additional panels, water-test the first panel. Apply water to the top surface and confirm that it flows toward the gutter side of the deck. Run your hand across the top of the panel to check for low areas or standing water.

IMPORTANT: If water doesn't flow, do not continue installing panels until the slope has been corrected.

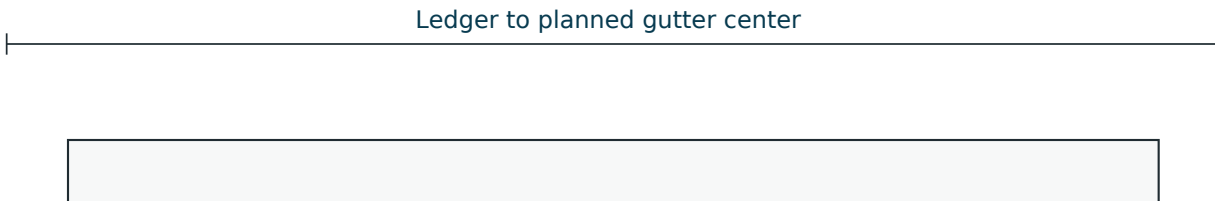
Prepare the ceiling panels

Steps 12-14 / Measure, cut and prepare the receiving end



Panel shown in perspective; exact profile is simplified.

CUT LENGTH



Cut each panel to the approximate center of the planned gutter.

PREPARE THE END THAT ENTERS THE EDGE CHANNEL



Remove approximately 1-1/4 inches of the vertical J-hook at this end.

BEFORE CUTTING

Measure at several locations to account for framing variations. Verify the exact J-hook cut against the approved panel profile.

19

Install Additional Panels

Continue installing full-width panels from the center of the deck toward one outside edge. Follow the same installation process for each panel. Leave the final full-width panel out temporarily so the outside ripped panel can be measured and installed.

20

Test During Installation

Water-test the system every few panels. Periodic testing allows drainage or slope issues to be corrected before the entire ceiling is installed.

INSTALLING THE OUTSIDE EDGE

21

Install the Outside Edge Channel

Following the slope established by the Panel Hangers, attach the Edge Channel along the inside face of the outside rim joist. Position the channel so it properly receives the cut edge of the outside Ceiling Panel.

22

Measure the Outside Panel

Before installing the final full-width panel, measure from the center of the last Panel Hanger to the inside of the outside rim. Subtract 1/2 inch from this measurement. The resulting dimension is the width of the ripped outside panel.

23

Rip the Outside Panel

Rip the Ceiling Panel lengthwise to the dimension determined in the previous step. Before cutting, confirm which side of the panel must retain the J-hook profile.

24

Apply Sealant to the Outside Edge Channel

Apply a continuous bead of silicone caulk inside the previously installed Edge Channel.

25

Install the Ripped Panel

Insert the cut edge of the ripped Ceiling Panel into the caulked Edge Channel. Snap the J-hook side into the final Panel Hanger. Verify that the panel is fully engaged at both connections.

26

Install the Final Full-Width Panel

Install the previously omitted full-width Ceiling Panel between the finished outside panel and the completed field of panels. Confirm that all connections are fully seated.

27

Complete the Opposite Side

Return to the center of the deck and repeat the Panel Hanger and Ceiling Panel installation process toward the opposite outside edge. Complete the opposite ripped perimeter panel using the same process.

INSTALLING ANTI-WICKING CHANNELS

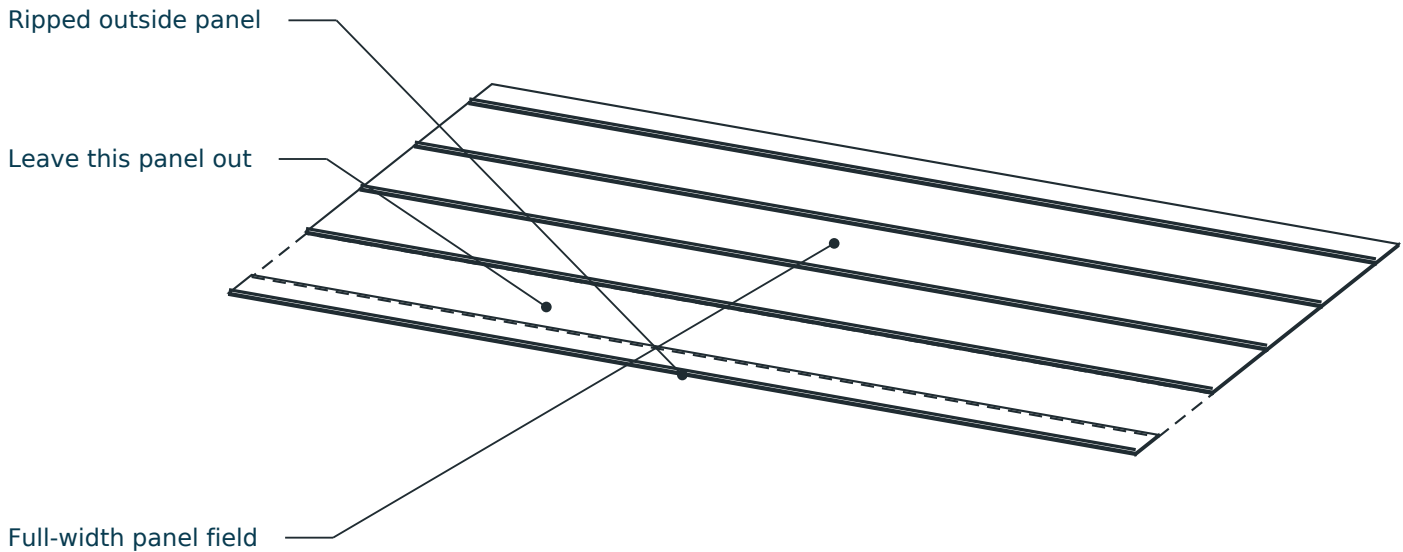
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Cut Anti-Wicking Sections

Cut one 10-inch section of Edge Channel for each joist bay.

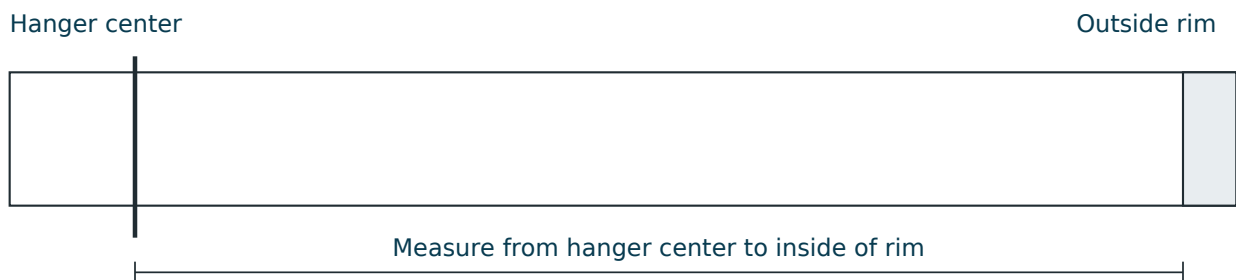
Finish the outside edges

Steps 19-27 / Work outward from the center and fit the ripped panels



Underside layout shown in perspective.

MEASURE THE OUTSIDE PANEL



Ripped panel width = measured distance minus 1/2 inch. Retain the J-hook on the side that engages the final Panel Hanger.

INSTALLATION SEQUENCE

Fit the ripped panel in the caulked Edge Channel, engage the J-hook side, then install the omitted full-width panel. Repeat on the opposite side. Keep ripped panels at least 4 inches wide.

29

Install the Anti-Wicking Sections

At the gutter edge of each Ceiling Panel, install the 10-inch Edge Channel section in an inverted orientation. Make sure each section is securely positioned and does not interfere with drainage into the gutter.

FINAL TESTING & GUTTER INSTALLATION

30

Test the Completed Ceiling

Thoroughly water-test the entire RainTeck system before installing the gutter.

- Panel slope
- Panel-to-hanger connections
- Perimeter channels
- Sealed connections
- Outside ripped panels
- Gutter-side drainage
- Areas around fans, if installed

IMPORTANT: Confirm that water flows consistently toward the gutter line without pooling.

31

Install the Gutter and Downspout

Install the gutter along the designated gutter edge using non-angled gutter hangers. Install the downspout at the predetermined location. When practical, direct discharged water away from the home and foundation.

32

Perform the Final Water Test

After the gutter and downspout are installed, thoroughly water-test the RainTeck system again.

- Water flows toward the gutter.
- No water pools above the Ceiling Panels.
- Water enters the gutter cleanly.
- Connections remain secure.
- No perimeter leaks are present.
- The gutter drains properly through the downspout.

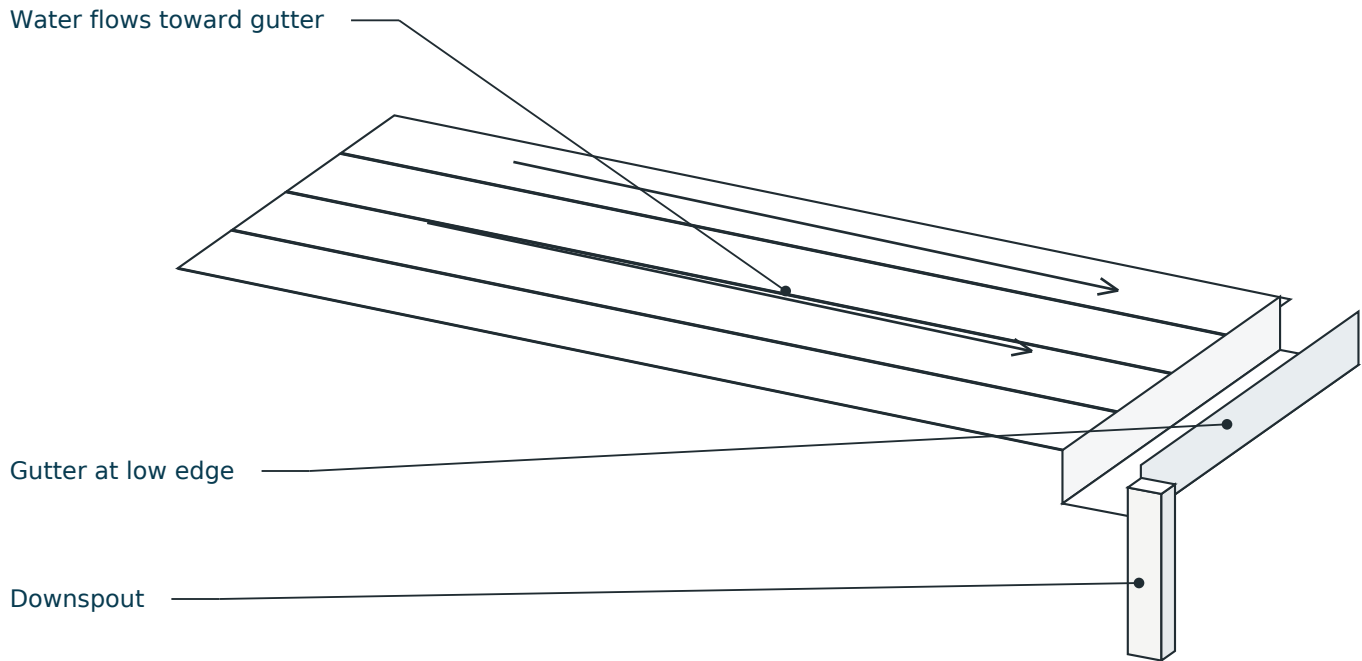
IMPORTANT: Correct any drainage or sealing issues before considering the installation complete.

INSTALLATION COMPLETE

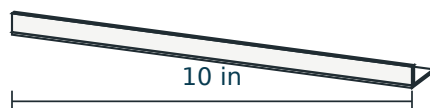
The RainTeck system should create a clean finished ceiling beneath the deck while collecting and directing water toward the gutter system. For best performance, periodically inspect the system and gutter for debris and confirm that all drainage paths remain clear.

Verify drainage and finish

Steps 18, 20 and 28-32 / Anti-wicking, gutter and water testing



ANTI-WICKING AT THE GUTTER EDGE



Cut one 10-inch section of Edge Channel for each joist bay. Install it inverted at the gutter edge as directed in steps 28-29. Exact channel profile and installed orientation require a product detail reference.

TEST THROUGHOUT INSTALLATION

Test the first panel, repeat every few panels, test before installing the gutter, and test again afterward. Correct pooling, leaks, loose connections or blocked drainage before completion.