

:: HOW TO ::

# INSTALL UNDERDECK



## 1 SETTING PITCH LINE AND POSITIONING JOIST RAILS

Before installing UnderDeck double check that your deck is level. This will allow you to correctly set the pitch lines ensuring that the water will drain away from the home. Begin where deck connects to the home, at the ledger board. Place a mark on side of joist 1" up for every 10' of joist length (approximately 1/8" per 1' of joist length) - no higher than 1-3/4" from bottom edge of joist. Move to outside of deck (rim joist) and snap a chalk line from the bottom of the joist, up to the mark that establishes the pitch at the house end of the joist. Repeat this step on both sides of all main joists and only on the inside of the edge joists (boundary gutters).

## 2 ATTACH UNDERDECK FLASHING

Attach UnderDeck flashing on all sides of the deck that are connected to the structure. UnderDecks water diverters/flashing should also be installed at the ledger board between each joist to ensure water run-off at ledger. Place a bead of waterproof caulk along top edge where water diverter meets the joist.

## 3 LOCATING AND ATTACHING JOIST RAILS (Important: install UnderDeck' water diverts/vinyl flashing at ledger board first.)

Starting 1" from ledger board (at home end of deck), position the bottom of the joist rail along the existing chalk line. Attach both ends of the rail in place using approved fasteners (stainless steel). Each joist rail requires at least three fasteners (do not over drive the head of the fastener, leave little room for movement). Locate and fasten each successive rail along the same line, maintaining a 1-1/2" minimum to 2" maximum space between the rails for drainage. Repeat this step on both sides of all main joists and only on the inside of the edge joists (boundary gutters). Joist rails can be cut at the end of the joist to maintain the appropriate spacing.

## 4 INSTALLING COLLECTOR PANEL

Measure the joist length of the joist space and cut collector panels 1/4" shorter than the measurement to allow for expansion. The textured side of the collector panel should be facing down. Where the deck attaches to the home, insert one long edge of the collector panel between upper and lower flanges of the joist rails. Gently push the other side of panel into joist rails on the opposite side of joist space. Work your way to other end of joist space. For joist space widths other than 16" on center, see chart below. Warning: Do not allow panels to flatten out. A consistent arch is necessary for strength and drainage.

## 5 ATTACHING JOIST GUTTERS

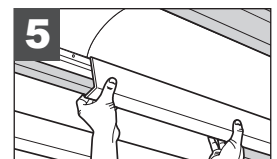
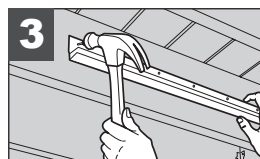
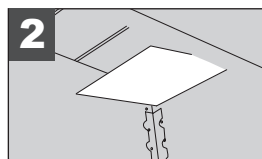
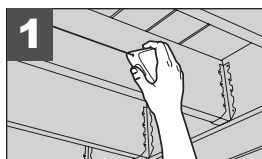
Measure the joist length and cut the joist gutter 1/4" shorter than the measurement to allow for expansion. (If joists rest on a dropped beam, cut the joist gutter 1-1/2" shorter than the distance from ledger board to the beam.) Hold the joist gutter up to bottom of the joist, spread open slightly while pushing up firmly until gutter snaps into the joist rail and nests tightly against the collector panel. Squeeze the sides of gutter to ensure a tight fit in the joist rail slots. Work your way to the end of the deck. \*Recommendation: Before installing the joist gutters and boundary gutters, apply 5" pieces of UnderDeck' adhesive-backed foam weather-stripping to the gutter. Affix the foam rubber to the inside edge of joist gutter at the home end only to form a water dam. Place a bead of acrylic caulk on the inside corner of the gutter where the foam rubber and gutter meet.

## 6 ATTACHING BOUNDARY GUTTERS

Boundary gutters are used on the two edge joists at the two outer edges of the deck. The boundary gutter is installed by sliding the back wall of the boundary gutter behind the joist rails, pushing firmly upward until gutter rib locks into the rib on the back of the joist rails. Work your way to the end of the deck. When the edge joist (boundary gutter) is attached to the building, it is important to install UnderDeck' vinyl flashing 4"-5" above the joist rails along edge joist. This will divert water onto the collector panel and not allow water to drip behind the joist rails and the boundary gutter. (please see recommendation in STEP 5 before installing boundary gutters)

### WORKING AROUND A BEAM

Some decks have a support beam running perpendicular to the joists at a distance from the home. In such cases joist rails and collector panels can continue to run over the beam. However, the joist gutters must end at the beam. Stop the gutters 1-1/2" short of beam to allow for drainage. Mount a standard conventional rain gutter (not provided) along the full length of the beam to catch water emerging from the UnderDeck' joist gutters. This gutter should be pitched in one direction and can be installed with a downspout at corner post. On the other side of the beam, begin a new set of joist gutters following the same procedure as outlined in STEP 1-6 above. Continue to the end of the deck joist.



### COLLECTOR PANEL WIDTH CHART

Joist Space	Collector Panel Width
0" Ø 3"	N/A
3 1/8" Ø 8"	Same as joist space
8 1/8" Ø 15"	1/2" Wider than joist space
15 1/8" Ø 18"	1" Wider than joist space
18 1/8" Ø 22-1/2"	1 Ø 1/2" Wider than joist space
22-5/8" Ø Wider	N/A

### REQUIRED TOOLS AND SUPPLIES

- ✦ Tape measure
- ✦ Chalk Line
- ✦ Step Ladder
- ✦ Water Diverters
- ✦ 1Ø or 1 1/2Ø approved fasteners (stainless steel, 3-4 per rail)
- ✦ Gloves
- ✦ Safety glasses
- ✦ Hammer or Screw Gun
- ✦ Vinyl flashing

