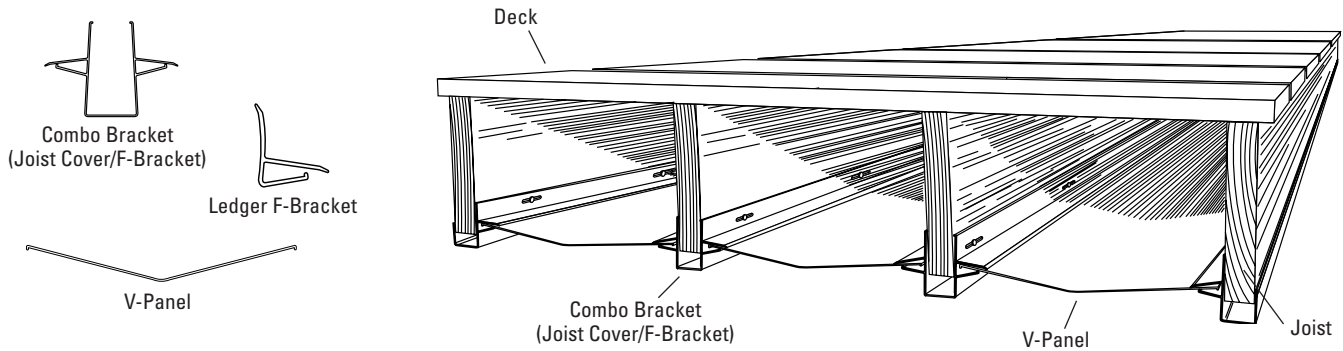


INSTALLATION INSTRUCTIONS

For decks with 12" and 16" on-center joist spacing

Important! Read entire Installation Instructions before starting.



Available in kits and individual pieces.

12" on-center 12' length kit:

- 10, 12" O.C. V-Panels
- 11 Combo Brackets (Joist Cover/F-Bracket)
- 1, 12' Ledger F-Bracket
- Covers 120 sq. ft.

16" on-center 12' length kit:

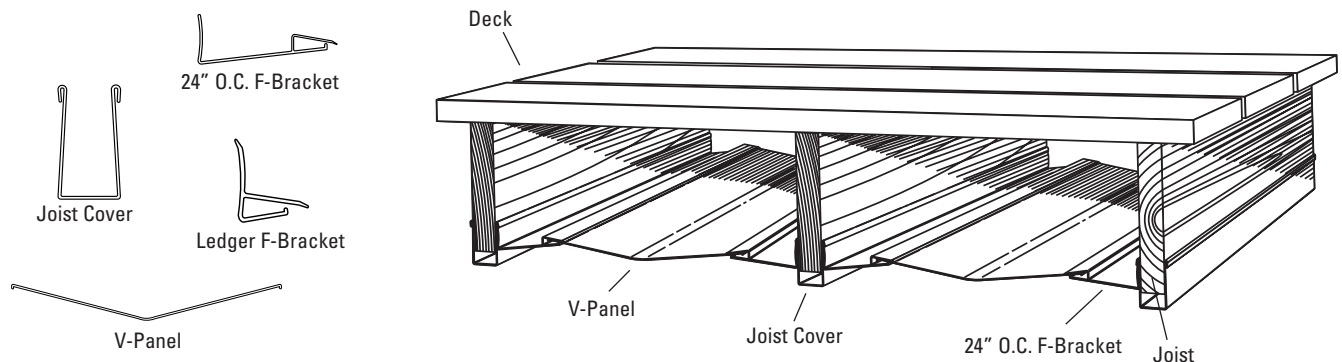
- 9, 16" O.C. V-Panels
- 10 Combo Brackets (Joist Cover/F-Bracket)
- 1, 12' Ledger F-Bracket
- Covers 144 sq. ft.

16' length kit:

- 8, 16" O.C. V-Panels
- 9 Combo Brackets (Joist Cover/F-Bracket)
- 1, 12' Ledger F-Bracket
- Covers 170 sq. ft.

For decks with 24" on-center joist spacing

Important! Read entire Installation Instructions before starting.



Available in a kit and individual pieces.

24" on-center 12' length kit:

- 6, 16" O.C. V-Panels
- 12, 24" O.C. F- Brackets
- 1, 12' Ledger F-Bracket
- 7 Joist Covers
- Covers 144 sq. ft.

Installation Instructions for decks with 12" and 16" on-center joist spacing

Before You Begin

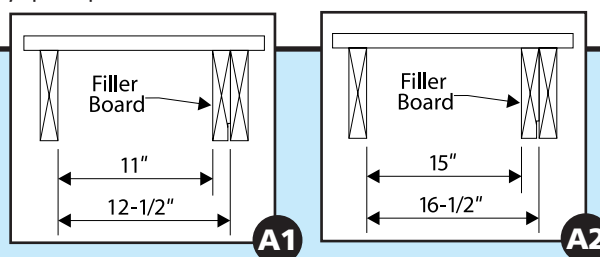
- This DrySpace kit is designed for decks with 12" and 16" on-center joist spacing. A 2x6 filler board can be installed to accommodate joist spacing up to 14" for the 12" on-center and 18" for the 16" on-center. The open space between on-center joists should not be more than 11" for the 12" on-center (Fig. A1), and no more than 15" for the 16" on-center (Fig. A2). For decks with joist spacing greater than 14" on-center, the DrySpace kit for 16" on-center joists should be used, and for decks with joist spacing greater than 18" on-center, the DrySpace kit for 24" on-center joists should be used.
- Installation of DrySpace must stop a minimum of 3" before the fascia board. This allows water to exit the DrySpace panel and provide for ventilation.
- Never install DrySpace over a beam.
- DrySpace cannot be spliced to achieve longer runs.
- **DrySpace must be installed so that water runs away from the house.**
- Appliances, such as dryers and exhaust fans, should not be vented into the space between the deck surface and DrySpace panels.

STEP 1-Determining the correct installation pitch

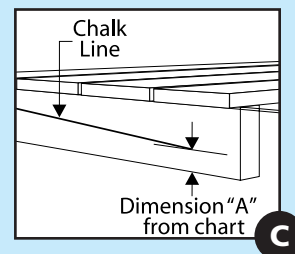
DrySpace must be installed with a pitch (Fig. B). Mark the correct pitch on each side of the joist with a chalk line. Measure from the bottom of the joist (Fig. C). A 12' long Combo Bracket installation will have an overall downward pitch of 1-1/2" from the house to the front of the deck. **The pitch must be directed away from the house.**

STEP 2-Ledger F-Bracket installation

Cut the Ledger F-Bracket 1/4" shorter than the joist opening. Measure 1-1/2" from the bottom of the joist (Fig. E). Then fastener the Ledger F-Bracket to the ledger board by driving 1" hot dipped galvanized (meet ASTM A 153 class D are acceptable) roofing nails (or deck screws) in the center of the nail slots. Do not overdrive the fastener, but make sure the Ledger F-Bracket is firmly secured.



Joist Length	Dimension "A"
6'	3/4"
8'	1"
10'	1-1/4"
12'	1-1/2"
14'	1-3/4"
16'	2"



Tools & Materials Needed To Install DrySpace

NOTE: Installation is easiest with two people

- | | | | |
|--|--|--|---|
| <input type="checkbox"/> Safety Glasses | <input type="checkbox"/> Chalk Line | <input type="checkbox"/> Hammer | <input type="checkbox"/> Two Putty Knives |
| <input type="checkbox"/> Metal Snips | <input type="checkbox"/> Square | <input type="checkbox"/> Tape Measure | <input type="checkbox"/> Miter Saw |
| <input type="checkbox"/> Gloves | <input type="checkbox"/> Utility Knife | <input type="checkbox"/> Pliers | <input type="checkbox"/> Two Step Ladders |
| <input type="checkbox"/> Butyl Rubber Tape | <input type="checkbox"/> Tin Flashing | <input type="checkbox"/> 1" Hot Dipped Galvanized Roofing Nails or 1" (for ACQ Lumber) Deck Screws | |

STEP 3-Installing Combo Brackets

NOTE: The Combo Bracket includes integral brackets on each side to insert and hold the V-Panel. Bracket must stop at beam.

3a-Measure bracket length. Then cut the DrySpace Combo Bracket 1" shorter than the joist. **NOTE:** To ensure a straight clean cut, place a scrap piece of 2x4 wood inside the Combo Bracket. Cut with a miter saw (Fig. D).

3b-Slide each DrySpace Combo Bracket over the joist bottom. Make sure the integral V-Panel Brackets on the outside of the Combo Bracket overlap the Ledger F-Bracket (Fig. E). Slide the lower leg of the Ledger F-Bracket into the Combo Bracket outside V-Panel Brackets. Align the top edge to the pitch chalk line.

3c-Nail the Combo Bracket in place with 1" hot dipped galvanized (meet ASTM A 153 class D are acceptable) roofing nails (or deck screws) in the provided nail slots. Nail both sides of the Combo Bracket. **NOTE:** Nail tight, but don't overdrive the nail.

Outside Combo Bracket installation

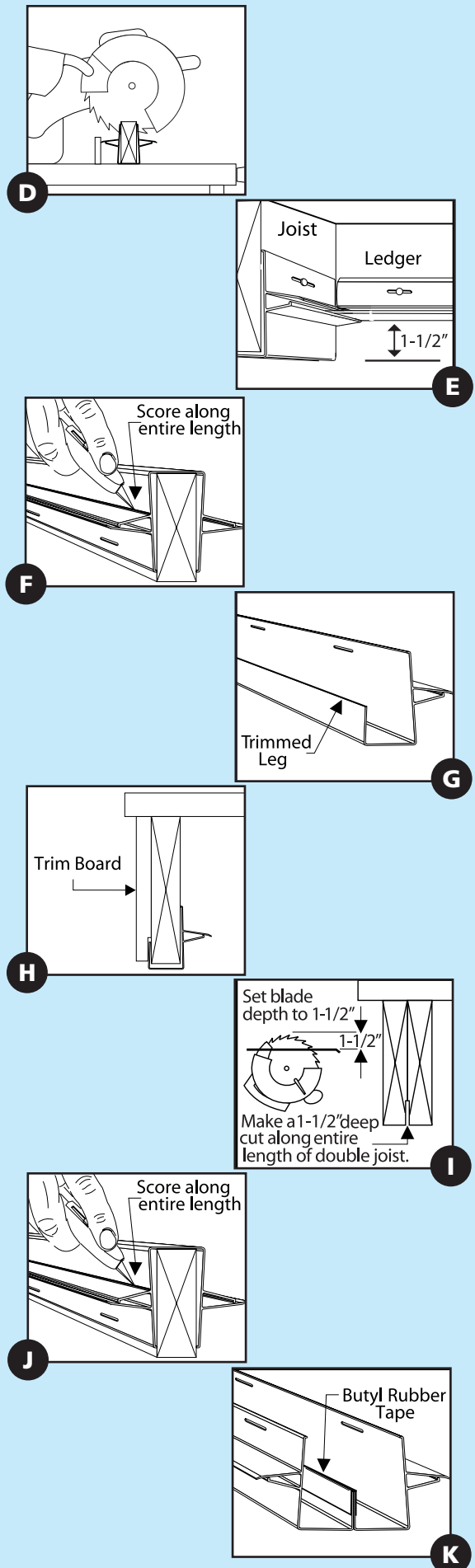
3d-For the two outside deck brackets, the outside integral V-Panel Bracket must be removed. Trim what will be the outside portion of the Combo Bracket by making a score line under the V-Panel Bracket with a utility knife (Fig. F). Then, snap off the section with the integral V-Panel Bracket (Fig. G). Install the trimmed Combo Bracket (Steps 3a, b and c) for the inside portion of the bracket (Fig. H). This piece can be trimmed with a piece of lumber.

Need to install Combo Brackets on a double joist?

3e-Remove any nails or obstructions that might be in the bottom 1-3/4" of the doubled joist. Make a 1-1/2" deep saw cut along the entire bottom of the double joist (Fig. I). Trim what will be the inside leg of two Combo Brackets just below the brackets for V-Panel installation (Fig. J). **Note: Notch (with a utility knife) 1-1/2" of both Combo Bracket legs near each end. Notching the legs will help lock the combined Combo Brackets in the saw cut at both ends of the cut. Check the fit of the trimmed Combo Brackets.** Tape the two cut legs together with butyl rubber tape to create a sealed joint (Fig. K). Then install into the saw cut. Make sure the Combo Brackets follow the chalk pitch line. Nail in place (Step 3c). **NOTE: Decks with a triple joist or other obstacles will not allow use of the DrySpace Combo Bracket in those areas.**

3f-Apply butyl rubber tape (Fig. L) to the following areas:

- 1) Corners where the F-Brackets overlap
- 2) Along the top edge of the Ledger F-Bracket making sure to cover the F-Bracket nail slots



STEP 4-V-Panel installation

4a- Measure, then cut each V-Panel 3" shorter than the joist to allow for drainage. **Note: To prevent water from running back up the bottom side of the panel and Combo Bracket, crimp the drainage ends of the V-Panel and Combo Bracket downward with pliers (Fig. M).**

4b- First install the V-Panel that will be anchored in the Ledger F-Bracket by inserting one panel edge into one of the Joist Cover's outside brackets. Then, flex the panel to insert the opposite edge into the other Combo Bracket. Then push the rest of the V-Panel in place.

4c- To insert the V-Panel into the Ledger F-Bracket, place a putty knife in each corner where the Combo Bracket's outside bracket and Ledger F-Bracket overlap (Fig. N). Place a scrap piece of 2x4 lumber against the open edge of the V-Panel and tap with a hammer. **NOTE: The 2x4 protects the V-Panel edge from damage. V-Panels must stop at the beam.**

4d- To collect and drain away water an optional vinyl or aluminum gutter can be installed (see Step 6 - Gutter installation).

Faced with a smaller joist opening?

4e- If the joist opening (Fig. A) is less than 14-1/2", the V-Panel must be trimmed to 1/2" less than the joist opening dimension. Score one side of the V-Panel with a utility knife, then snap the extra panel width off. Should the joist opening be 12" or less, trim an equal amount of material from each side of the V-Panel.

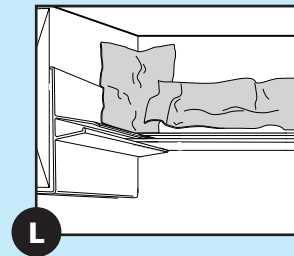
4f- Use pliers to crimp the trimmed edges of the V-Panel downward every 6" along the cut line (Fig. O) to provide anchor notches when the V-Panel is installed in the Combo Bracket.

Step 5-Best practice recommendation: Install tin flashing under first deck boards

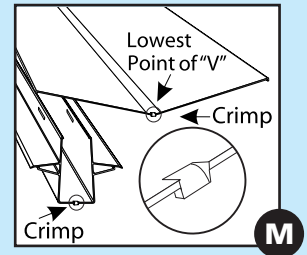
For best results, install tin flashing under the length of the two deck boards closest to the house (Fig. P). This will assure that water is pushed out into the V-Panels below.

Step 6-Gutter installation*

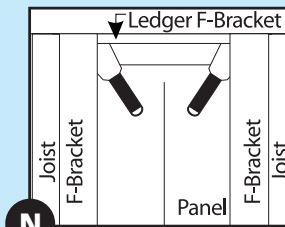
An optional gutter and downspout can be installed with DrySpace. Gutters must be installed at support beams to collect water from the V-Panels. Each project will have different requirements. The most common installations are shown (Figs. Q and R). A gutter can also be installed along the ledger board to collect water from between the ledger board and house and between the ledger board and joist ends. Standard vinyl or aluminum gutters and downspouts can be used. These are readily available at lumberyards. **NOTE: Gutter, downspout and accessories are not included with the DrySpace system.**



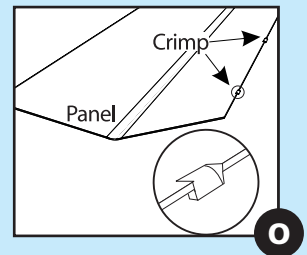
L



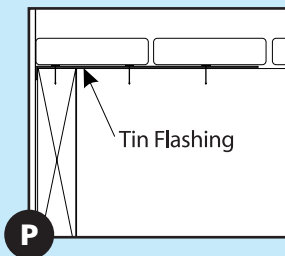
M



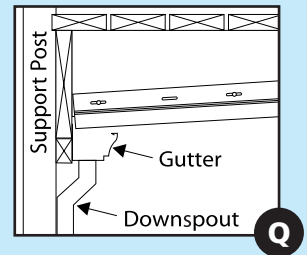
N



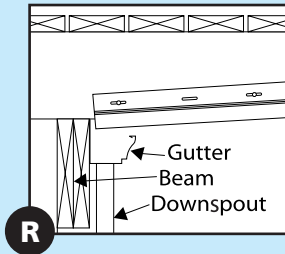
O



P



Q



R

Installation Instructions for decks with 24" on-center joist spacing

Before You Begin

- This DrySpace kit is designed for decks with 24" on-center joist spacing. The open space between joists should be 22-1/2" (Fig. A). For decks with joist spacing less than 18" on-center, the DrySpace kit for 16" on-center joists should be used.
- Installation of DrySpace must stop a minimum of 3" inches before the fascia board. This allows water to exit the DrySpace panel and provides ventilation.
- Never install DrySpace over a beam.
- DrySpace cannot be spliced to achieve longer runs.
- DrySpace must be installed so that water runs away from the house.
- Appliances, such as dryers and exhaust fans, should not be vented into the space between the deck surface and DrySpace panels.

STEP 1-Determining the correct installation pitch

DrySpace must be installed with a pitch (Fig. B). Mark the correct pitch on each side of the joist with a chalk line. Measure from the bottom of the joist (Fig. C). A 16' long Joist Cover installation will have an overall downward pitch of 2" from the house to the front of the deck. The pitch must be directed away from the house.

STEP 2-Installing Joist Covers

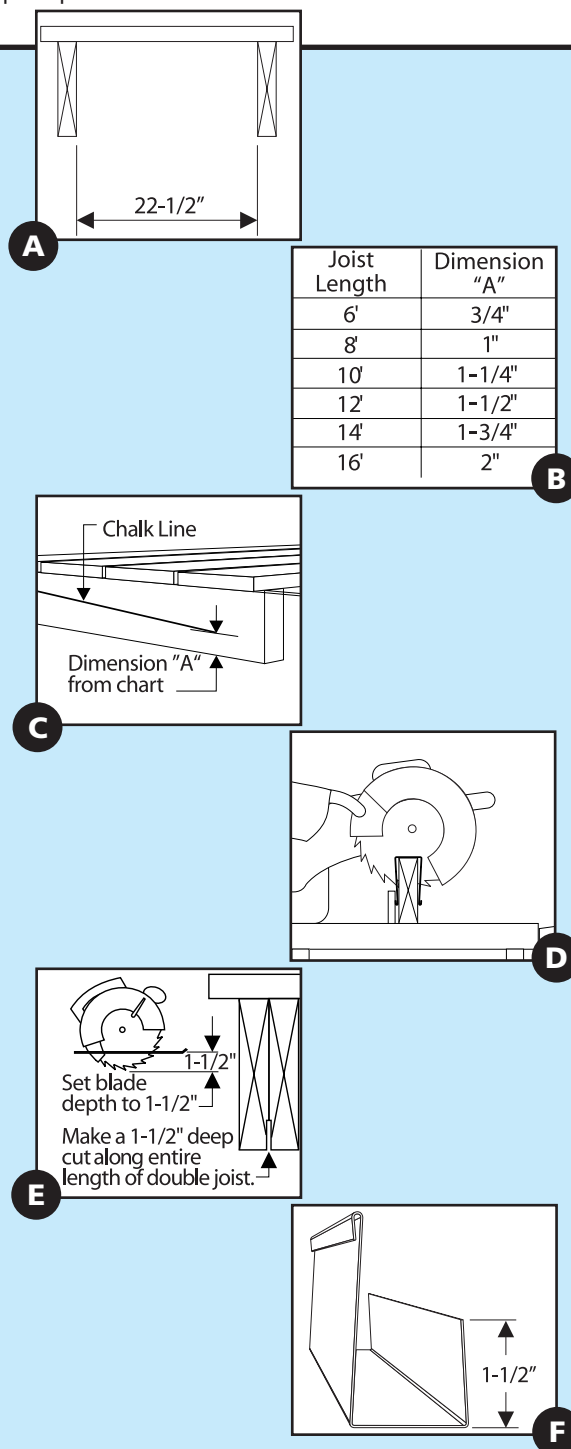
2a- Measure joist length. Then cut the DrySpace Joist Cover 1" shorter than the joist. **NOTE: To ensure a straight clean cut, place a scrap piece of 2x4 wood inside the Joist Cover. Cut with a miter saw (Fig. D).**

2b- Slide each DrySpace Joist Cover over the joist bottom. Align the top edge to the pitch chalk line.

2c- Nail the Joist Cover in place with 1" hot dipped galvanized (meet ASTM A 153 class D are acceptable) roofing nails (or deck screws). Position each nail 1" down from the top edge of the Joist Cover. Space each nail 24" apart the entire length of the Joist Cover. Nail both sides of the Joist Cover. **NOTE: Nail tight, but don't overdrive the nail.**

Need to install Joist Covers on a double joist?

2d- Remove any nails or obstructions that might be in the bottom 1-3/4" of the doubled joist. Make a 1-1/2" deep saw cut along the entire bottom of the double joist (Fig. E). Trim with a utility knife what will be the inside leg of two Joist Covers to a 1-1/2" height (Fig. F). **Note: Notch (with a utility knife) 1-1/2" of both Joist Cover legs near each end. Notching the legs will help lock the combined Joist Covers in the saw cut at both ends of the cut. Check the fit of the trimmed Joist Covers.**



Tape the two cut legs together with butyl rubber tape to create a sealed joint (**Fig. G**). Then install into the saw cut. Make sure the Joist Covers follow the chalk pitch line. Nail in place.
NOTE: Decks with triple joists or other obstacles will not allow use of the DrySpace Joist Covers in those areas. It is possible to use a V-Panel to fabricate a joist cover for that area. Please call 1-800-307-7780 for instructions.

STEP 3-F-Bracket installation

3a- The 24" O.C. F-Bracket is installed along the inside length of the joist over the installed Joist Cover. Measure joist length, then cut the 24" O.C. F-Brackets 3" short (**Fig. H**). The 24" O.C. F-Brackets must stop at least 3" from the rim joist to allow for drainage. To install, push the upper tip of the 24" O.C. F-Bracket into the hook at the top of the Joist Cover. Attach to the joist using 1" hot dipped galvanized (meet ASTM A 153 class D are acceptable) roofing nails (or deck screws) in the center of every F-Bracket nail slot. Do not overdrive the fastener, but make sure the 24" O.C. F-Bracket is firmly secured.

3b- Cut the Ledger F-Bracket 1/2" longer than dimension "A" (**Fig. I**). Make sure the 24" O.C. F-Bracket overlaps the Ledger F-Bracket. Slide the leg of the Ledger F-Bracket into the 24" O.C. F-Bracket (**Fig. J**). Then fasten the Ledger F-Bracket by driving 1" hot dipped galvanized (meet ASTM A 153 class D are acceptable) roofing nails (or deck screws) in the center of the nail slots. Do not overdrive the fastener, but make sure the Ledger F-Bracket is firmly secured.

3c- To help prevent leaks, apply acrylic latex caulk or butyl rubber tape to the following areas:

- 1) Corners where the F-Brackets overlap
- 2) Along the top edge of the Ledger F-Bracket making sure to cover the F-Bracket nail slots
- 3) All nail slots

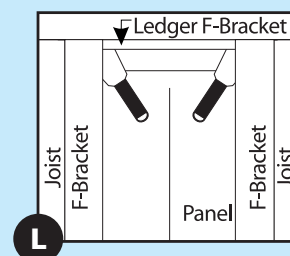
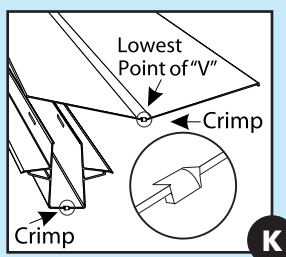
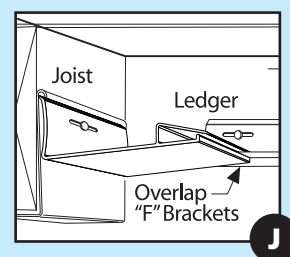
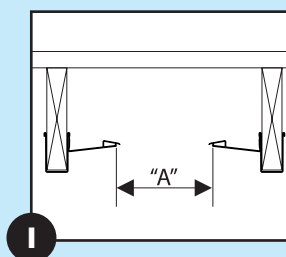
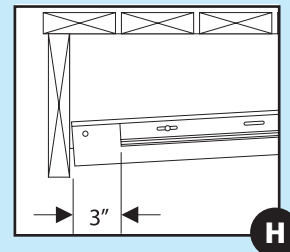
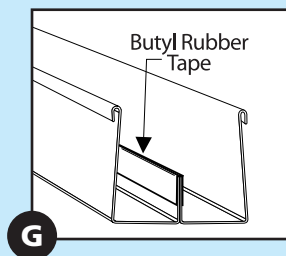
STEP 4-V-Panel installation

4a- Cut each V-Panel to the same length as the installed 24" O.C. F-Bracket. **NOTE: To prevent water from running back up the bottom side of the panel and Joist Cover, crimp the drainage ends of the V-Panel and Joist Cover downward with pliers (Fig. K).**

4b- First install the V-Panel that will be anchored in the Ledger F-Bracket by inserting one panel edge into one of the 24" O.C. F-Brackets. Then, flex the panel to insert the opposite edge into the other 24" O.C. F-Bracket. Then push the rest of the V-Panel in place.

4c- To insert the V-Panel into the Ledger F-Bracket place a putty knife in each corner where the 24" O.C. F-Bracket and Ledger F-Brackets overlap (**Fig. L**). Place a scrap piece of 2x4 lumber against the open edge of the V-Panel and tap with a hammer. **NOTE: The 2x4 protects the V-Panel edge from damage. V-Panels must stop at the beam.**

4d- To collect and drain away water an optional vinyl or aluminum gutter can be installed (**see Step 6 - Gutter installation**).



Faced with a smaller joist opening?

4e- If the joist opening (**Fig. A**) is less than 22-1/2", the V-Panel must be trimmed to 1/2" less than the joist opening dimension "A". Trim one side of the V-Panel with a utility knife, then snap off to the correct width. Should the joist opening be 20" or less, trim an equal amount of material from each side of the V-Panel.

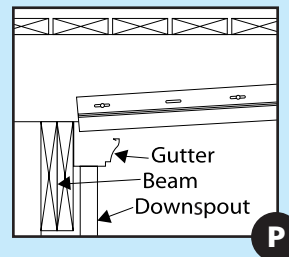
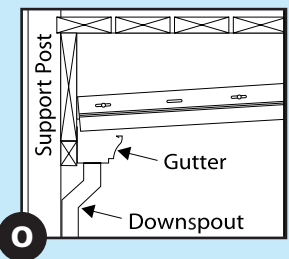
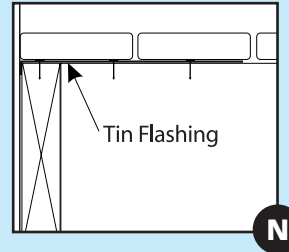
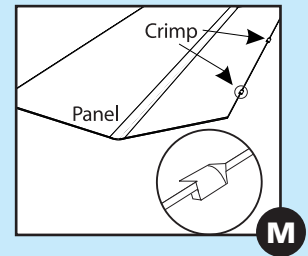
4f- Crimp the trimmed edges of the V-Panel downward every 6" along the cut line (**Fig. M**) with pliers to provide anchor notches when the V-Panel is installed in the 24" O.C. F-Brackets.

STEP 5-Best practice recommendation: Install tin flashing under first deck boards

For best results, install tin flashing under the two deck boards closest to the house (**Fig. N**). This will assure that water is pushed out into the V-Panels below.

STEP 6-Gutter installation*

An optional gutter and downspout can be installed with DrySpace. Gutters must be installed at support beams to collect water from the V-Panels. Each project will have different requirements. The most common installations are shown (**Figs. O and P**). A gutter can also be installed along the ledger board to collect water from between the ledger board and house, and between the ledger board and joist ends. Standard vinyl or aluminum gutters and downspouts can be used. These are readily available at lumberyards. **NOTE: Gutter, downspout and accessories are not included with the DrySpace system.**



Tools & Materials Needed To Install DrySpace

NOTE: Installation is easiest with two people

- | | | | |
|--|--|--|---|
| <input type="checkbox"/> Safety Glasses | <input type="checkbox"/> Chalk Line | <input type="checkbox"/> Hammer | <input type="checkbox"/> Two Putty Knives |
| <input type="checkbox"/> Metal Snips | <input type="checkbox"/> Square | <input type="checkbox"/> Tape Measure | <input type="checkbox"/> Miter Saw |
| <input type="checkbox"/> Gloves | <input type="checkbox"/> Utility Knife | <input type="checkbox"/> Pliers | <input type="checkbox"/> Two Step Ladders |
| <input type="checkbox"/> Butyl Rubber Tape | <input type="checkbox"/> Tin Flashing | <input type="checkbox"/> 30-Year Acrylic Latex Caulk | <input type="checkbox"/> Caulk Gun |
| <input type="checkbox"/> Chalk Line | <input type="checkbox"/> 1" Hot Dipped Galvanized Roofing Nails or 1" (for ACQ Lumber) Deck Screws | | |

LIMITED WARRANTY

The manufacturer warrants that this product will not peel, blister, pit, flake, crack, or corrode as a result of manufacturing defects, or as a result of exposure to ocean air (salt spray) for a period of five years. Should any of this occur, the manufacturer will provide replacement product. Minor dripping may occur.

(Patent # 6,393,785)

TimberTech Dryspace is available nationally through a network of lumberyards.

Visit www.timbertech.com or call 1-800-307-7780 for more information.



TimberTech
894 Prairie Avenue
Wilmington, OH 45177
www.timbertech.com
1-800-307-7780



Crane Plastics™ is a trademark of Crane Plastics Company LLC. TimberTech®, TimberTech Engineered Decking Systems®, Less Work. More Life.®, You'll Never Find Wood This Good®, TwinFinish® and the swirl design are registered trademarks and Floorizon™, TwinFascia™, Earthwood™, RadianceRail™, VertiGrain™ and BuilderBoard™ are trademarks of TimberTech. TimberTech Engineered Decking Systems products are covered by one or more of the following U.S. Patents: 5,393,536; 5,783,125; 5,827,462; 5,836,128; 5,866,264; 6,011,091; 6,035,588; 6,103,791; 6,117,924; 6,131,355; 6,180,257; 6,248,813; 6,272,808; 6,337,138; 6,344,504; 6,409,952; 6,423,257; 6,453,630; 6,464,913; 6,498,205; 6,511,757; 6,578,368; 6,579,605; 6,590,004; 6,617,376; 6,632,863; 6,637,213; 6,662,515; 6,685,858; 6,708,504; 6,780,359; 6,784,216, 6,863,972 and other patents pending.

Crane Plastics Manufacturing's use of the mark DRYSPACE is with consent of DrySpace, Inc., in Cedar Rapids, Iowa. Crane Plastics Manufacturing and DrySpace Inc., are not affiliated in any way. Neither company warrants the goods or services of the other.

©2006 TimberTech. Printed in the U.S.A.

LIT-TT06-DSINSTALL