

# Before You Begin

## IMPORTANT

Always wear safety glasses when cutting and drilling railing or decking products.

### HELPFUL HINTS

- Use carbide-tipped, multi-purpose blade for cutting.
- Do not lay components on abrasive surfaces.
- Do not use excessive force while assembling components.
- If any components are missing or defective, please call us at 800-233-8990.

### TIPS

- Make sure you have all the pieces you need to complete the job.
- Separate your flat and stair pieces to avoid using the wrong ones.

### IMPORTANT FIRE INFORMATION

Rigid vinyl decking and railing are made from organic materials that will not burn on their own but melt or burn when exposed to a significant source of flame or heat. Consequently, owners and installers should take a few simple steps to protect vinyl building materials from fire. Building owners, occupants and outside maintenance personnel should always take normal precautions to keep sources of fire, such as barbecues, and combustible materials like dry leaves, mulch and trash, away from vinyl decking and railing.

### TOOLS REQUIRED FOR ALL INSTALLATIONS

- Chop/mitre saw (with carbide-tipped, multi-purpose blade or non-ferrous blade)
- Power drill and bits
- Tape measure
- Pencil
- Level
- Safety glasses and equipment (as identified by tool manufacturers)
- #2 square drive
- Phillips screwdriver or bit

### ADDITIONAL TOOLS REQUIRED FOR SPECIFIC JOBS

- **Certa-Snap® Post Wrap**
  - Hammer
  - Siding snips
- **Gates**
  - 1/8" drill bit
  - 3/16" drill bit
  - 1/4" drill bit
  - 5/32" drill bit
  - 11/64" drill bit
  - 7/16" wrench
  - #3 square drive bit
- **Handrail Component System**
  - 3/8" masonry drill bit (for concrete installation)
  - 3/4" drill bit
  - Angle finder
  - Quick-clamps
  - Adhesive
  - Recommended adhesives:
    - Aluminum bonding-
    - Loctite® Metal/Concrete Epoxy™
    - Gorilla™ Epoxy-Impact Tough®
    - J-B Weld®-2-Part Epoxy
    - Loctite® Extra Time Epoxy
- **Mount Post Support Wood Surface**
  - 2" x 6" or 2" x 8" blocking
  - Wood screws to attach blocking to deck
  - 3/8" drill bit
  - 1/8" drill bit
  - 1/2" wrench or socket
- **Panorama®**
  - 1/4" drive socket, extension and 7/16" socket
  - Jigsaw/coping saw (optional)
  - Utility knife (optional)
  - File (optional)
  - Box-end wrenches (optional)
  - Chalk line (optional)
  - Silicone caulk and caulk gun (optional)
  - Angle finder (optional)
  - Extension bit for crush block (optional)
- **Porch Columns**
  - Saber saw with a fine-tooth blade
  - Hammer drill with 1/4" and 1/2" drill bits
  - T-square
- **UnderShield® Water Diversion**
  - Gloves
  - Step ladder
  - Snips
  - Utility knife
  - Chalk line
  - 12" speed square
  - Vinyl snap lock punch
  - Cordless drill/driver
  - 1-inch "J" channel
  - Flashing
  - Gutter and Downspout
  - Fascia boards
- **Vinyl Decking and Oxford T-Rail**
  - 2" hole saw
  - Circular saw
  - Drop cloth
  - Screwdrivers
    - Phillips and flat-bladed
  - Wood clamps
  - Wrenches (sockets)
    - 3/4" (post support)
    - 7/16" (EZ Set bracket)
    - 3/8" (rail plate)
  - Bevel guide (optional)
  - Chalk line (optional)
  - File (optional)
  - Jigsaw/hacksaw (optional)
  - Rotary hammer drill (optional)
  - Utility knife (optional)

**TIP: Stainless steel fasteners are recommended to prevent future rust streaking.**

## STEP-BY-STEP INSTALLATION INSTRUCTIONS FOR

# KINGSTON RAILING ASSEMBLY

## Flat, Column, 45°, 22-1/2°, Stair, Steep Stair

### IMPORTANT

Before installing posts, note rail lengths are nominal. Actual rail lengths are:

6' Rail = 68-1/2"

8' Rail = 92-1/2"

10' Rail = 116-1/2"

To ensure meeting code requirements, be sure that the space between the last baluster and the wall or post is not more than 4".

**NOTE:** When installing dark-colored product (Black, Clay, Warm Spice, Rustic Rose), keep product in a shady/cooler area and out of direct sunlight prior to installation.

**NOTE:** Top/Bottom rails for aluminum baluster in-fill contains pre-installed adhesive foam tape to prevent rattling.

### ASSEMBLY FOR FLAT AND COLUMN

**Step 1:** Check for equal baluster spacing at posts. For flat and columns, mark rail where it meets the post. Measure back 1/4" from mark.

**Step 2:** Square rails and cut. Install crush block to bottom rail.

**Aluminum In-Fill:** Use rail with foam tape as bottom rail.

**Step 3:** Slide vinyl covers over ends of rails. Insert aluminum brackets into both ends of rails.

**NOTE:** Vinyl cover can be field cut to avoid baluster interference.

**Step 4:** Position bottom rail between posts.

**Aluminum In-Fill:** Use rail with foam tape as bottom rail.

**Step 5:** To secure aluminum bracket to posts with screws provided (two screws per aluminum bracket), on the TOP rail, place screws in the bottom holes of the bracket. On the BOTTOM rail, place screws in the top holes of the bracket. Slide vinyl covers to posts.

**Step 6:** Fasten cover and rail to aluminum bracket with 1" screws (provided) through flat sides of vinyl covers.

**NOTE:** Pre-drilling rail and bracket will enhance application. Use a 9/64" drill bit.

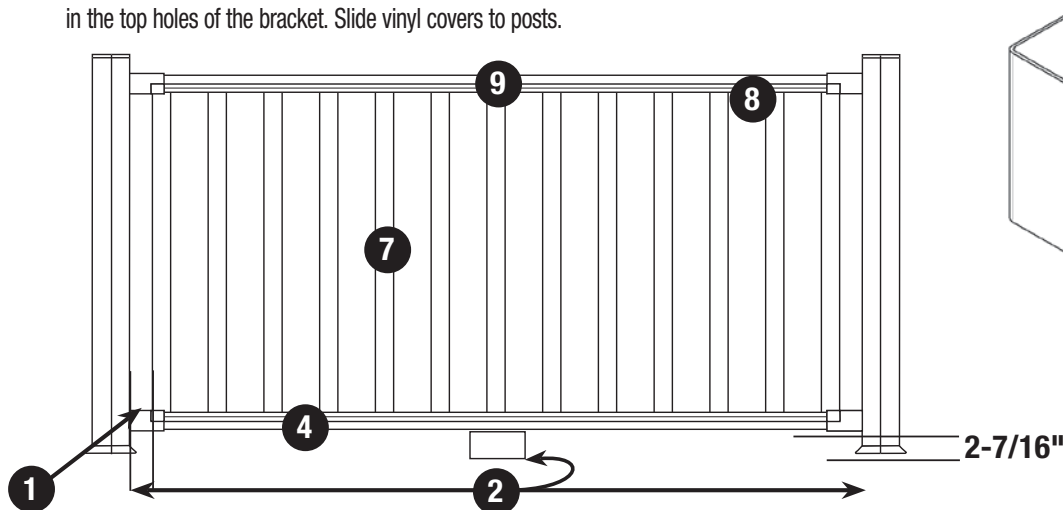
**Alternative Flat Installation:** Secure rail to aluminum bracket first and then slide vinyl cover to post. Secure cover in place with vinyl adhesive.

**Step 7:** Insert balusters into bottom rail.

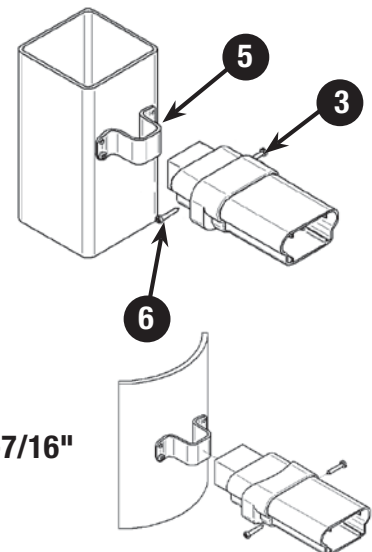
**Step 8:** Install top rail and repeat steps 5-6.

**NOTE:** Aluminum brackets can be inserted into top rail after balusters are installed.

**Step 9:** For 10' railing, insert provided screws through flat side of top and bottom rails into middle baluster to secure midpoint of railing.



**NOTE:** Two brackets are required per section end.



**NOTE:** Column bracket cover is cut to work with an 8" round column

## ASSEMBLY FOR 45° AND 22-1/2°

**Step 1:** Check for equal baluster spacing at posts. For 22-1/2° and 45°, mark rail where it meets post. Do not measure back.

**Step 2:** Square rails and cut. Install crush block to bottom rail.

**Aluminum In-Fill:** Use rail with foam tape as bottom rail.

**Step 3:** Slide vinyl covers over ends of rails. Insert aluminum brackets into both ends of rails.

**NOTE: Vinyl cover can be field cut to avoid baluster interference.**

**Step 4:** Position bottom rail between posts. For 22-1/2° and 45°, slide rail down inside corner of post.

**Step 5:** To secure aluminum bracket to posts with screws provided (two screws per aluminum bracket), on the TOP rail, place screws in the bottom holes of the bracket. On the BOTTOM rail, place screws in the top holes of the bracket. Slide vinyl covers to posts.

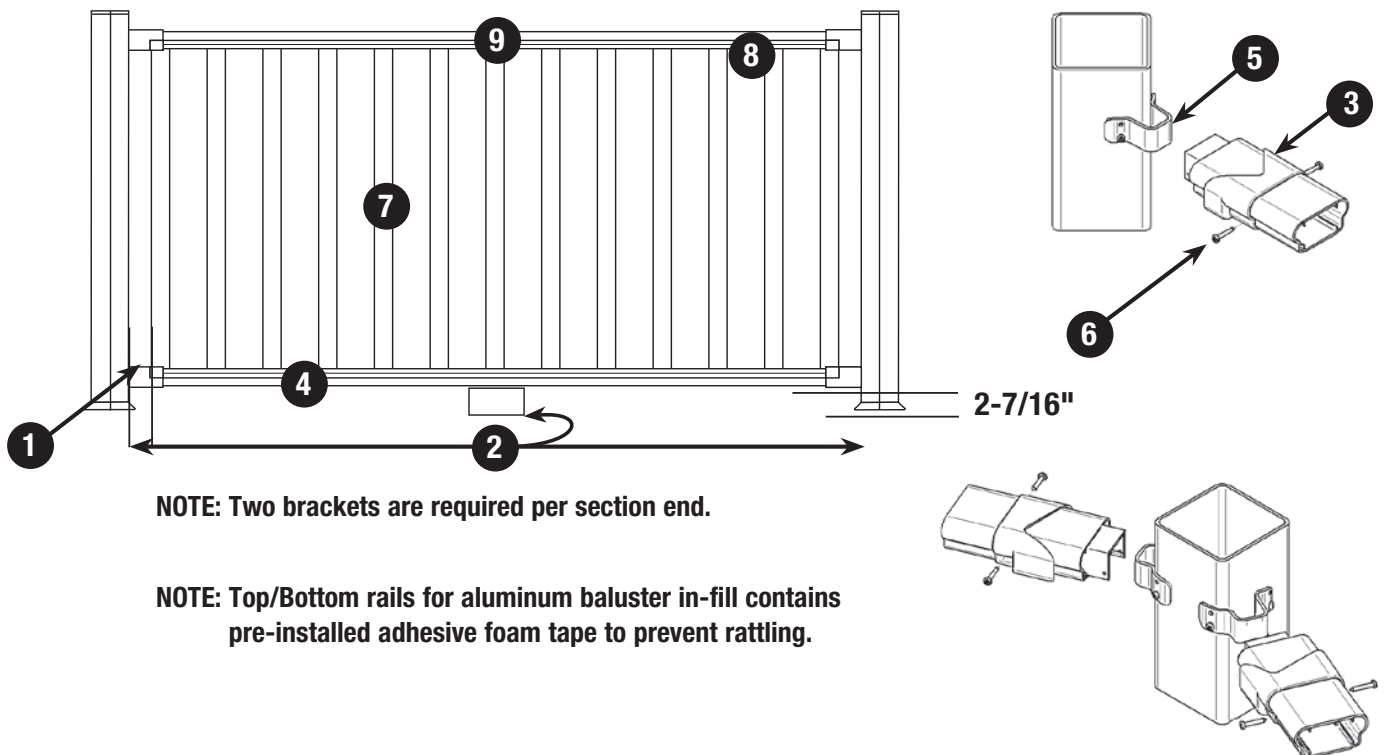
**Step 6:** Fasten cover and rail to aluminum bracket with 1" screws (provided) through flat sides of vinyl covers.

**NOTE: Pre-drilling rail and bracket will enhance application. Use a 9/64" drill bit.**

**Step 7:** Insert balusters into bottom rail.

**Step 8:** Install top rail and repeat steps 5-6.

**Step 9:** For 10' railing, insert provided screws through flat side of top and bottom rails into middle baluster to secure midpoint of railing.



# ASSEMBLY FOR STAIR

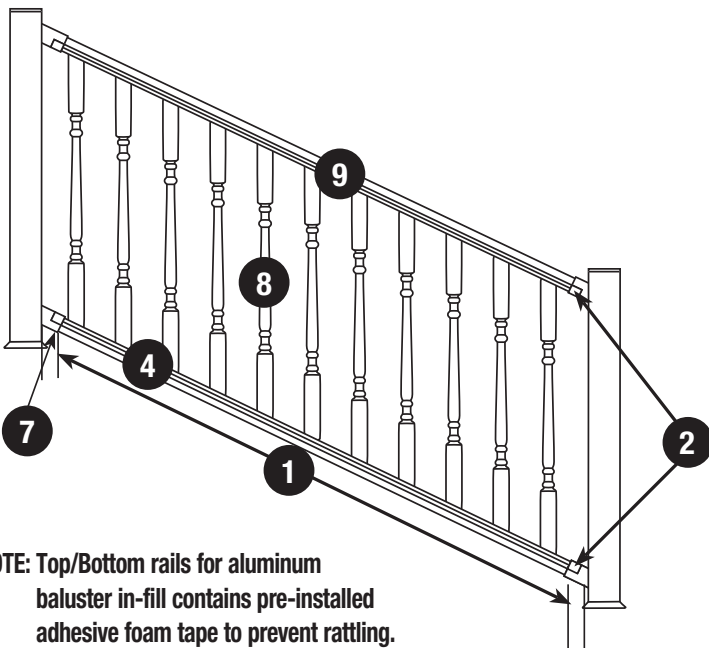
STAIR ANGLE CHART

		Run in Inches														
		8	8.5	9	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5	15
Rise in Inches	8.5	47	45	43	42	40	39	38	36	35	34	33	32	31	30	30
	8	45	43	42	40	39	37	36	35	34	33	32	31	30	29	28
	7.5	43	41	40	38	37	36	34	33	32	31	30	29	28	27	27
	7	41	39	38	36	35	34	32	31	30	29	28	27	27	26	25
	6.5	39	37	36	34	33	32	31	29	28	27	27	26	25	24	23
	6	37	35	34	32	31	30	29	28	27	26	25	24	23	22	22
		Calculated Angle in Degrees														

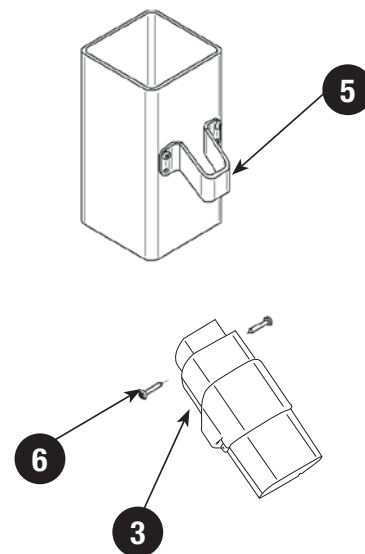
- Standard stair covers angles from 25 to 37 degrees
- Steep stair covers angles from 37 to 42 degrees

- Step 1:** Check for equal baluster spacing at posts.
- Step 2:** Mark rail for stair angle where it meets the post. Square top rail to bottom rail, measure back 1/4" from mark and cut rails.
- Step 3:** Transfer stair angles to covers and cut. Place covers over a scrap piece of rail when cutting to required angle. To hold rail level place cover on both ends. Attach covers to scrap rail with tape or plastic wrap to hold in place while cutting. Do not attempt to cut covers without placing on a rail. Slide vinyl covers over ends of bottom rail. Insert aluminum brackets into both ends of rail.
- Step 4:** Position bottom rail between posts.

- Step 5:** To secure aluminum bracket to posts with screws provided (two screws per aluminum bracket), on the TOP rail, place screws in the bottom holes of the bracket. In the BOTTOM rail, place screws in the top holes of the bracket. Slide vinyl covers to posts.
- Step 6:** Secure rail to aluminum brackets with 1" screw (provided) through flat side of rail.
- Step 7:** Slide vinyl cover to post and fasten to rail with set screw provided.
- Step 8:** Insert baluster into bottom rail.
- Step 9:** Install top rail and repeat steps 5-7.



**NOTE:** Top/Bottom rails for aluminum baluster in-fill contains pre-installed adhesive foam tape to prevent rattling.



Standard Stair: 25° min – 37° max  
Steep Stair: 37° min – 42° max

**NOTE:** The 1-1/2" x 1-1/2" Kingston square baluster must measure 32-1/2" for stair applications. You can field cut a 1-1/2" x 1-1/2" x 33-1/4" square baluster to 32-1/2" (cut 3/4" from end) for this use. The 1-1/2" x 1-1/2" x 33-1/4" Kingston traditional baluster works for both flat and stair applications.

# CARE AND MAINTENANCE

## CARE AND MAINTENANCE

Vinyl and composite building materials require very little maintenance. Nevertheless, common sense dictates that builders and suppliers of these products store, handle, and install materials in a manner that avoids damage to the product or structure.

CertainTeed decking and railing is not difficult to work with, but there are a few precautions you should take before you begin to unload and install the product. Always place planks, posts, rails and accessories on a non-abrasive surface, such as a drop cloth or cardboard, to avoid scratches. Protect all components during transport. Finally, when assembling the deck and railing, avoid over-tightening the screws.

## CLEANING VINYL DECKING AND RAILING

CertainTeed vinyl decking and railing resists most common household stains, including oil and grease. But, like any other product, it will get dirty when it is exposed to the atmosphere. Chalk may also accumulate on the surface. This is a normal condition for all pigmented materials that are constantly exposed to sunlight and the elements. Soil, grime and chalk can be removed with a garden hose and a bucket of soapy water.

### Mildew

Mildew may be a problem in some areas, especially warmer climates with consistently high humidity. Mildew appears as black spots on surface dirt and is usually first detected in areas not subjected to rainfall, such as eaves and porch enclosures. You can remove mildew from vinyl decking and railing with the following solution.

### Mix together:

- 1/3 cup detergent (Tide, for example)
- 2/3 cup trisodium phosphate (e.g., Soilex)
- 1 qt. 5% sodium hypochlorite (e.g., Clorox)
- 3 qt. water

**CAUTION: Cleaning solution mixed at greater concentrations may harm the vinyl.**

If the above solution does not readily remove the mildew spots, purchase mildew cleaner from your local hardware store. Before you use any commercial cleaner, test it on an inconspicuous area.

The chemical agents mentioned above may be hazardous to the user or to the environment. Be sure to follow all precautions and warnings on the product label, particularly those that may be necessary to prevent personal injury. Please DISCARD these chemical agents in the manner

prescribed by the manufacturer. If you are unsure how to use or dispose of these chemical agents, contact the manufacturer.

## CLEANING PANORAMA® COMPOSITE RAILING

Panorama® Composite Railing resists most common household stains, but it will become dirty like any product exposed to atmospheric conditions. Periodic washing with a soft bristle brush and clean water from a garden hose may be necessary to remove surface dirt which may accumulate on the surface. For best appearance, clean your Panorama Composite Railing at least once a year, unless local conditions require additional cleaning.

## CLEANING UNDERSHIELD® WATER DIVERSION SYSTEM

UnderShield® resists most common household stains, but it will become dirty like any product exposed to atmospheric conditions. Periodic washing with a soft bristle brush and clean water from a garden hose may be necessary to remove surface dirt. Chalk may also accumulate on the surface. This is a normal condition for pigmented materials exposed to the elements. For the best appearance, clean UnderShield at least once a year. To remove soil, grime and chalk from UnderShield, use a garden hose, a soft bristle brush, and a bucket of soapy water. (You can also use the solution described in the section dealing with mildew.) Thoroughly rinse UnderShield with clean water from a garden hose. Avoid prolonged or high pressure rinsing of open ventilated areas. Keep cleaning solution off surrounding fixtures and surfaces not scheduled for washing.

If debris such as leaves gets in the system, you will need to periodically flush out the system with a garden hose. This can be done from above or possibly from access to the sides by removing the fascia panel.

**NOTE: We do not recommend power washing UnderShield as it can cause moisture intrusion, damage, and/or discoloration.**

### Stubborn Stains

If you can't remove especially stubborn stains using normal household detergents, request a cleaner from your contractor or your local building materials retailer. Always test any cleaner on an inconspicuous area before full use.

**CAUTION: Greater concentration may cause damage to UnderShield.**

If the above solution does not readily remove mildew spots, ask your contractor or your local building materials retailer for a mildew cleaner.