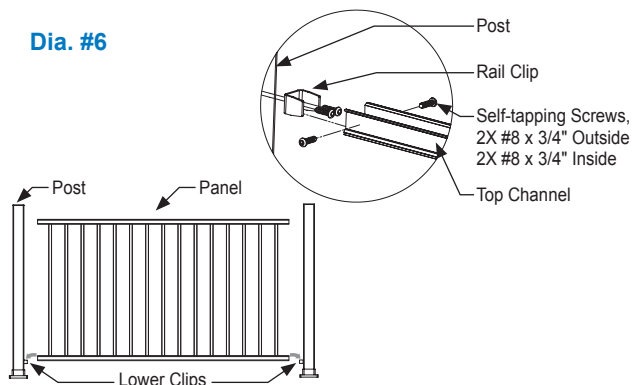


STEP FOUR - Secure Deck Panels to Posts

- Slide bottom channel of pre-cut panel on to lower clips. (Dia. #6)
- Insert clips into top channel of panel on each end.
- Using (4) - #8x3/4" Self-tapping screws, attach the upper 2 clips to the post.
- Using (8) - #8x3/4" Self-tapping screws, secure the upper and lower clips to the panel.

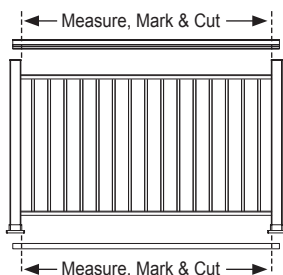
Dia. #6



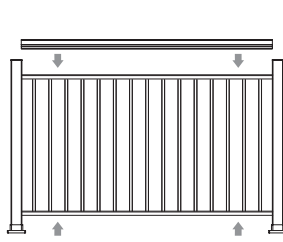
STEP FIVE - Cut and Install Top and Bottom Rail Snaps

- Measure between posts at the top and bottom. (Dia. #7)
- Cut top & bottom snap covers 1/16" less than opening.
- Clean cut areas and apply touch-up paint on all exposed metal.
- Snap each rail snap over the corresponding rail channel until properly seated. (Dia. #8) **TIP:** If snap will not seat, try installing support leg. Then apply pressure to snap starting from one end.

Dia. #7



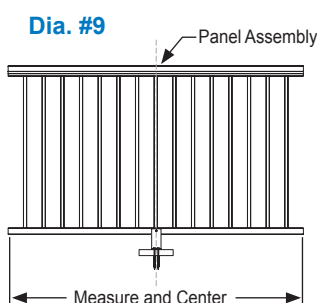
Dia. #8



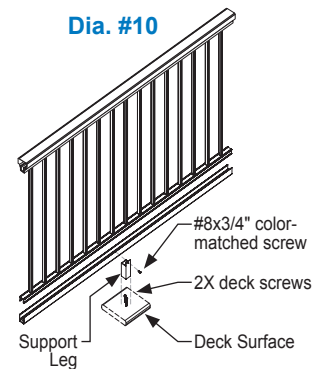
STEP SIX - Install Support Legs

- For openings greater than 4', install support legs under center of bottom rail (Dia. #9)
- Slide support leg under bottom rail and mark.
- Install two deck screws at location of support leg, install support leg over screws.
- Using (1) - #8x3/4" color-matched screw, secure the support leg to bottom rail. (Dia. #10)

Dia. #9



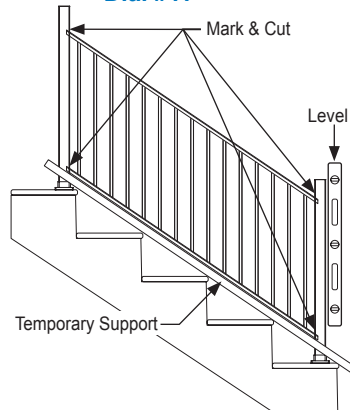
Dia. #10



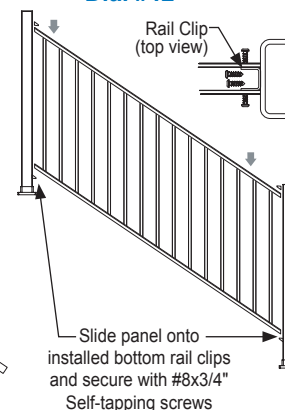
STEP SEVEN - Install Stair Panels

- Hold or temporarily clamp stair panel against posts and adjust for equal end spacing (Dia. #11)
- Mark the panel at 4 locations of post connection.
- Miter cut panel at marked locations and place panel in opening. Cut rail 1/16" less than opening.
- Mark posts for location of bottom rail clips.
- Remove panel and install lower clips. (Dia. #12)
- Clean cut areas & apply touch-up paint on exposed metal.
- Place cut panel between posts, push rail onto bottom clips, place clips into upper channel, attach clips to post and secure panel to all clips as per Step 4. (Dia. #6)
- Miter cut and install top and bottom rails as per Step 5. (Dia. #7 & #8)
- See Stair Panel Instructions for more details.

Dia. #11



Dia. #12



INSTALLATION INSTRUCTIONS

COMMERCIAL ALUMINUM RAILING SYSTEM

ITEMS REQUIRED FOR INSTALLATION:

- Post-to-Surface Mounting Screws
- Cordless Drill/Driver
- Pencil
- Safety Glasses
- Miter Saw W/Non-Ferrous Blade
- Level
- Tape Measure
- 6" #2 Square Drive Bit
- 3/16" Drill Bit

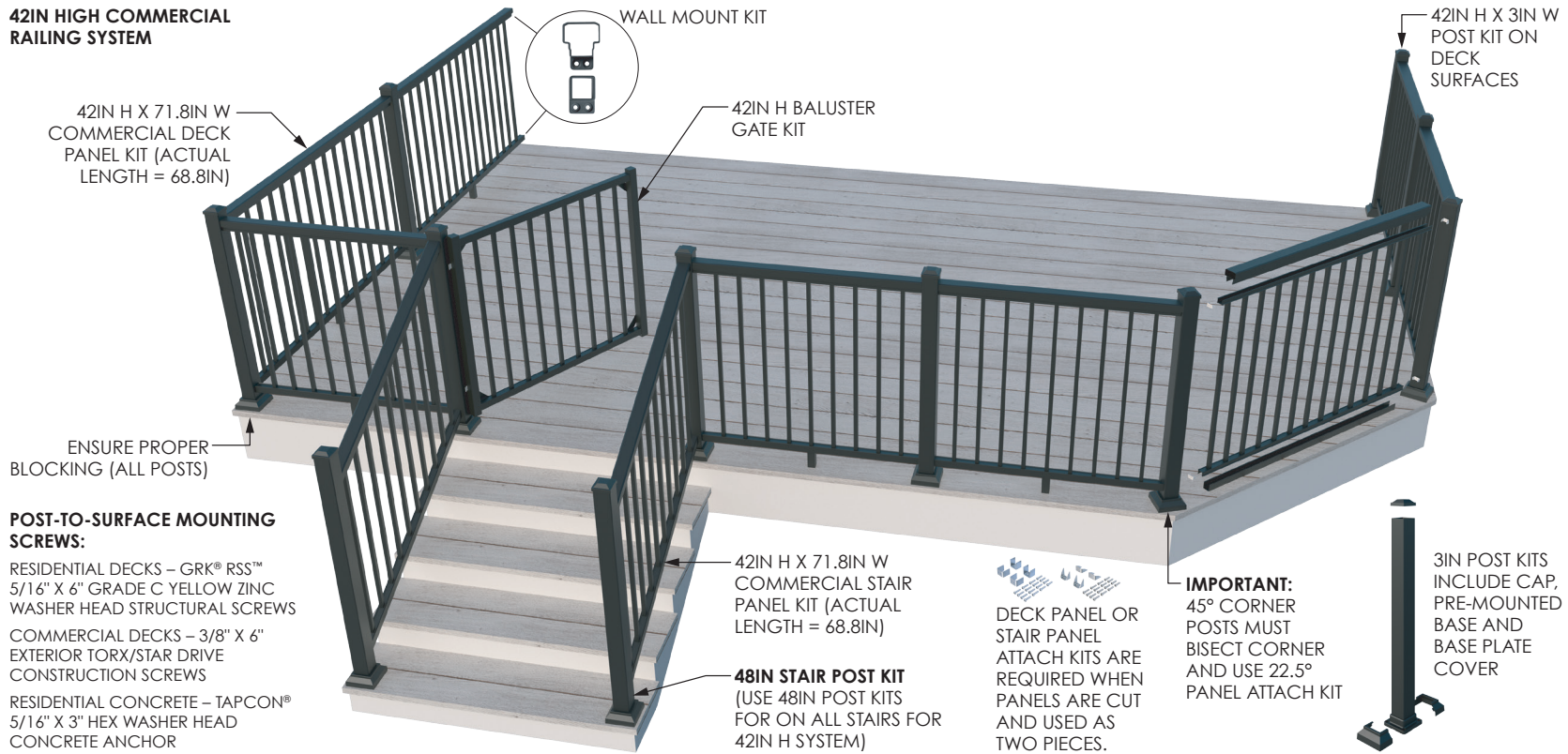
IMPORTANT NOTES:

- Do not install base plate covers until railing assembly is completed.
- If installing lighting, wiring must be installed prior to securing posts to deck surface and installing top rail snaps.
- Actual picket panel lengths: 71.8in Panels = 68.8".
- 3" posts are required to reach 71.8in lengths.
- MAX. POST SPAN ON STAIR RAILING APPLICATIONS IS 70" ON CENTER.
- Stair railing panels are shipped at a 37° angle. Panels are adjustable and will accommodate 30-40° stair angles. **CAUTION:** Over adjusting stair panels will cause loose and rattling pickets.
- 48" post kits are required for middle and bottom stair posts with the 42" railing system.
- 45° deck angles require 22.5° clips applied to each side of the post. The 22.5° clip kit is sold separately.
- Two 3" posts are recommended on top of deck surface if stair riser is not at a 90° angle from deck frame.

It is the responsibility of the installer to meet all local code requirements and obtain all required building permits. The installer should determine and implement appropriate installation techniques for each installation situation. The manufacturer or its reseller shall not be held responsible for improper or unsafe installation.

For other instructions and videos, visit
WilliamsRailing.com

42IN HIGH COMMERCIAL RAILING SYSTEM



POST-TO-SURFACE MOUNTING SCREWS:

- RESIDENTIAL DECKS – GRK® RSS™ 5/16" X 6" GRADE C YELLOW ZINC WASHER HEAD STRUCTURAL SCREWS
- COMMERCIAL DECKS – 3/8" X 6" EXTERIOR TORX/STAR DRIVE CONSTRUCTION SCREWS
- RESIDENTIAL CONCRETE – TAPCON® 5/16" X 3" HEX WASHER HEAD CONCRETE ANCHOR

DECK PANEL OR STAIR PANEL ATTACH KITS ARE REQUIRED WHEN PANELS ARE CUT AND USED AS TWO PIECES.

STEP ONE – Determine necessary posts required and prepare (end, center or corner)

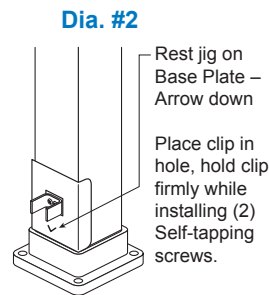
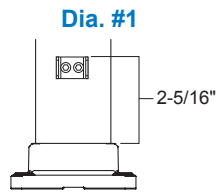
Install Lower Deck Rail Clips – Two Options:

Option A - When No Lower Rail Clip Jig Is Available

- Measure 2 5/16" from top of casting shoulder and place a pencil mark for location of the top edge of the rail clip. (Dia. #1)
- Center clip on post and secure with (2) - #8x3/4" Self-tapping screws.

Option B - Using Lower Rail Clip Jig

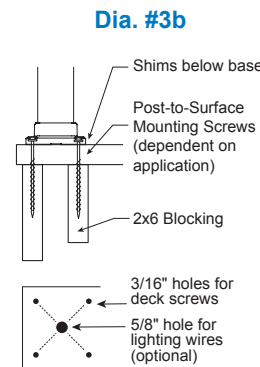
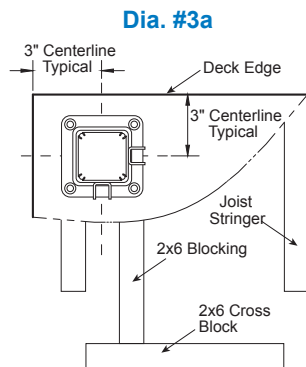
- Place lower rail clip jig (w/ arrow facing base plate) on top of base plate upper edge. (Dia. #2)
- Place clip in hole and fasten with (2) - #8x3/4" Self-tapping screws.



STEP TWO - Secure Posts to Deck

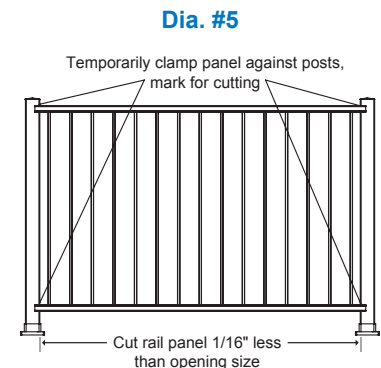
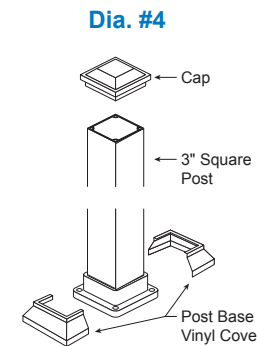
Install proper post blocking as per (Dia. #3a, 3b). Use proper attach screws or anchors as directed below. (Deck screws at each post location, are not provided with kits).

- With 3/16" drill bit, pre-drill through deck boards and into blocking.
- Level and plumb post using shims.
- Secure posts to deck with suggested screws.
- Set aside post caps and post base vinyl covers. Install them after the rest of the railing is complete. (Dia. #4)

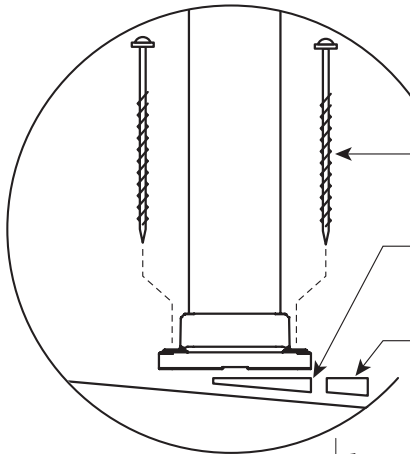


STEP THREE - Cut Deck Panels

- Clamp or hold panel against post, adjust for equal end spacing. (Dia. #5)
- Mark the top and bottom rails.
- Cut panel 1/16" less than opening size.
- Clean cut areas and apply touch-up paint on exposed ends.



IN ADDITION TO STANDARD LEVEL RAILING INSTRUCTIONS, FOLLOW THESE STEPS.



1 PLUMB AND LEVEL POSTS WITH SHIMS

4X Post-to-Surface Mounting Screws (dependent on application)

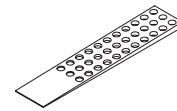
Level and plumb post using composite shims suitable for exterior applications.

Snap off excess shims after post is secured to surface.

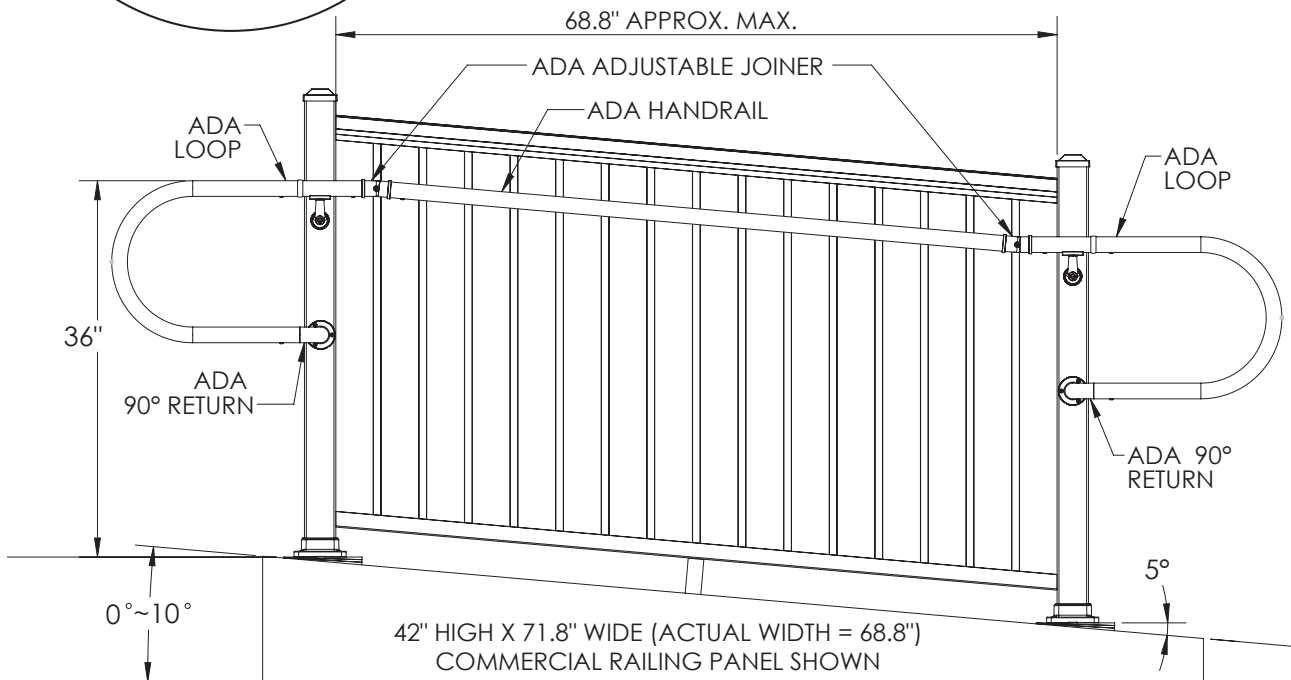
2 MARK AND CUT PANELS TO PROPER ANGLE

Hold or temporarily clamp panels, channels and snaps against posts and mark for cutting. Install panel as directed in standard instructions.

Cut all panels and top and bottom channels and snaps 1/16" less than each opening, **matching angle of ramp**. Snap each rail snap over the corresponding rail channel until properly seated.



Recommended product:
Nelson 7-1/2" Composite Shims
Menards® SKU: 4334210



INSTALLATION INSTRUCTIONS

COMMERCIAL ALUMINUM RAILING ON ADA RAMP

IMPORTANT NOTES:

- These instructions are a supplement and are by no means all-inclusive. They are intended to accompany the primary railing installation instructions.
- **PRODUCTS:** These instructions apply to only to the Williams aluminum railing commercial baluster system. **Use the deck (level) panels, NOT the stair panels.** The commercial railing system is available only in a 42in height. See separate instructions for installation of other systems.
- The Americans with Disabilities Act requires ramps to be installed in certain locations. The maximum slope of ramps in new construction is 1:12, which equates to a 4.76° angle.
- Aluminum commercial baluster railing deck (level) panels may be racked up to 10° to accommodate ADA ramps.
- Railing panel actual widths: 71.8in panels = 68.8in. 3in posts are required to reach 71.8in lengths. Racking panels to accommodate sloped ADA ramps will reduce the distance allowed between posts.
- **CAUTION:** Over-adjusting panels will compromise their strength, void their warranty, and cause loose and rattling pickets.
- **NOTE:** ADA handrails may be required in addition to your standard railings. Consult your local code requirements for details.
- It is the responsibility of the installer to meet all local code requirements and obtain all required building permits. The installer should determine and implement appropriate installation techniques for each installation situation. The manufacturer or its reseller shall not be held responsible for improper or unsafe installation.
- Please read and understand all instructions prior to starting installation.
- For more information about ADA compliance, please visit ada.gov.