

# **Deck** Images<sup>™</sup>

## **PRO GUIDE**



GLASS AND BALUSTER ALUMINUM RAILING SYSTEMS



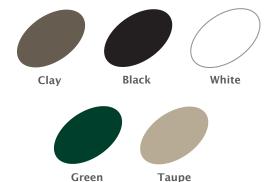


## Pro Series Railing Systems

From enclosing decks to surrounding commercial balconies, our Pro Series railings provide numerous advantages over traditional wood and metal railings. Adding that finishing touch to both residential and commercial installations, Deck Images<sup>™</sup> glass and baluster aluminum railings are made of durable aluminum with a long-lasting powder-coated finish to stay looking like new. We back that up with a 15-year limited warranty. We guarantee that your Deck Images glass and aluminum railing system will continue looking great for years to come.

Our easy to use connectors, in straight, 45° and 90° angles, securely fasten the rails and post together for a professional finished appearance. All connector brackets feature a durable, powder-coated finish to match the railing.

The powder-coated glass and baluster aluminum railings come in five standard colors for a rich, elegant look that doesn't sacrifice safety or stability.



Taupe

Deck Images has a design and system to will meet your needs—or we'll work together to custom design the perfect railings to your specifications. Our dealer network is available to assist you.

Deck Images Pro Series railing systems come with standard surface mount 1-5/8" square posts and 2-1/2" square top stair posts. All of our posts are made from high-grade extruded aluminum, offering superior strength and performance. The stainless steel fasteners provided with your railing system will not rust and are color matched to provide an attractive finished look. Fasteners to secure your railing to the deck surface are also available.

45° Corner Post



90° Corner Post



## Baluster Aluminum Railing System

All hardware pieces are available individually or in kits.





Top Rail Profile

#### **Baluster Panels**

- 36" and 42" heights
- 12' and 24' lengths
- Baluster Support Leg Kit sold separately

## BALUSTER HARDWARE KITS FOR 1-5/8" POSTS



## Baluster Center Kit

- Baluster post mount
- Two baluster bottom mounts
- Required screws for attachment to aluminum posts



### Baluster Joiner Kit

- Joiner top sleeve
- Two baluster bottom mounts
- Required screws for attachment to aluminum posts



## Baluster 45° Kit

- 45° top sleeve
- Two baluster 22.5° bottom mounts
- Required screws for attachment to aluminum posts





## Aluminum 1-5/8" Post

- 36" and 42" heights
- 4"x4" base plate



## Baluster 90° Kit

- 90° top sleeve
- Two baluster bottom mounts
- Required screws for attachment to aluminum posts



## Baluster End Kit

- Top mount
- Baluster post mount
- Baluster bottom mount
- Required screws for attachment to aluminum posts



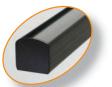
## Baluster Finish Kit

- End cap
- Baluster post mount
- Baluster bottom mount
- Required screws for attachment to aluminum posts

## Glass Railing System

All hardware pieces are available individually or in kits.

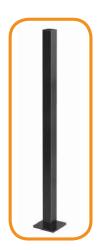




**Top Rail Profile** 

## Aluminum Glass Panel Rail

- 12' and 24' lengths
- Glass Support Leg
   Kit sold separately



## Aluminum 1-5/8" Post

- 36" and 42" heights
- 4"x4" base plate

## GLASS HARDWARE KITS FOR 1-5/8" POSTS



## Glass Center Kit

- Glass post mount
- Two glass bottom receivers
- Required screws for attachment to aluminum posts



### Glass Joiner Kit

- Joiner top sleeve
- Two glass bottom receivers
- Required screws for attachment to aluminum posts



## Glass 45° Kit

- 45° top sleeve
- Two glass 22.5° bottom receivers
- Required screws for attachment to aluminum posts





- 36" and 42" rail heights
- Custom lengths



## Glass 90° Kit

- 90° top sleeve
- Two glass bottom receivers
- Required screws for attachment to aluminum posts



## Glass End Kit

- Top mount
- Glass post mount
- Glass bottom receiver
- Required screws for attachment to aluminum posts



## Glass Mount Kit

- Top mount
- Glass bottom mount
- Required screws for attachment to aluminum posts



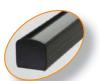
## Glass Finish Kit

- End cap
- Glass post mount
- Glass bottom receiver
- Required screws for attachment to aluminum posts

## Stair Rail Systems

## BALUSTER ALUMINUM





Top Rail Profile

#### Baluster Stair Panel

- 36" height
- 12' and 18' lengths
- 32°, 35° and 37° angles



## Aluminum 2-1/2" Stair Post

- 36" and 42" heights
- 5"x5" base plate
- Post cap sold separately

## BALUSTER STAIR HARDWARE KITS FOR 2-1/2" POSTS



## Baluster Stair Kit

- Top mount down
- Top mount up
- 32°, 35° and 37° angles
- Baluster bottom mount down
- Baluster bottom mount up
- · Required screws for attachment to aluminum posts



### Baluster Mount Kit

- Top mount
- Baluster bottom mount
- Required screws for attachment to aluminum posts



### Baluster Down Stair Kit

- Top mount down
- Baluster bottom mount down
- 32°, 35° and 37° angles
- Required screws for attachment to aluminum posts

## **GLASS**

## GLASS STAIR HARDWARE KITS FOR 2-1/2" POSTS



- Top mount down
- Top mount up
- 32°, 35° and 37° angles
- Glass bottom mount up/down
- Required screws for attachment to aluminum posts



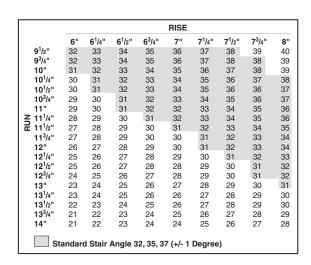
### 2-1/2" Glass Receiver Kit

- Top mount
- · Glass bottom receiver
- Required screws for attachment to aluminum posts



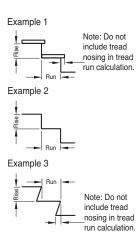
## Glass Down Stair Kit

- Top mount down
- Glass bottom mount up/down
- 32°, 35° and 37° angles
- Required screws for attachment to aluminum posts



## STAIR ANGLES

Baluster aluminum stair rail panels and attachment connector kits are available in three standard angles, 32°, 35° and 37°, to fit the most common stair angles. These stair rails accommodate angles +/- 1 degree. The chart shows the correct angle for common stair dimensions. Angles shown in the gray area can be accommodated with our standard stair rails. Custom angled railings and connectors can be ordered to meet most any need.



## BALUSTER STAIR HARDWARE KITS FOR 1-5/8" POSTS



#### Baluster Stair Center Kit

- Stair mount plate
- Baluster bottom mount up
- Baluster bottom mount down
- 32°, 35° and 37° angles
- Required screws for attachment to aluminum posts



#### Baluster Stair Joiner Kit

- Stair joiner sleeve
- Baluster bottom mount up
- Baluster bottom mount down
- 32°, 35° and 37° angles
- Required screws for attachment to aluminum posts



#### Baluster Stair Finish Kit

- End cap
- Stair mount plate
- Baluster bottom mount up
- 32°, 35° and 37° angles
- Required screws for attachment to aluminum posts

## GLASS STAIR HARDWARE KITS FOR 1-5/8" POSTS



#### Glass Stair Center Kit

- · Stair mount plate
- Glass bottom mount up/down
- 32°, 35° and 37° angles
- Required screws for attachment to aluminum posts



#### Glass Stair Joiner Kit

- · Stair joiner sleeve
- Glass bottom mount up/down
- 32°, 35° and 37° angles
- Required screws for attachment to aluminum posts



#### Glass Stair Finish Kit

- End cap
- Stair mount plate
- Glass bottom mount up/down
- 32°, 35° and 37° angles
- Required screws for attachment to aluminum posts



Excelsior Grand, Minneapolis, MN

Pro Series Aluminum Rail with Custom Railing

## Features and Accessories



Solar Post Light

Deck Images<sup>TM</sup> offers accessories to personalize any installation. Solar powered post lights attach to top of 2–1/2" square stair posts to accent and light the stairs. Our gate kits are available knockdown, with everything needed for easy assembly.

Deck Images railing systems are IBC/IRC tested systems, designed in aluminum and powder coated to create a stylish appearance for years to come.

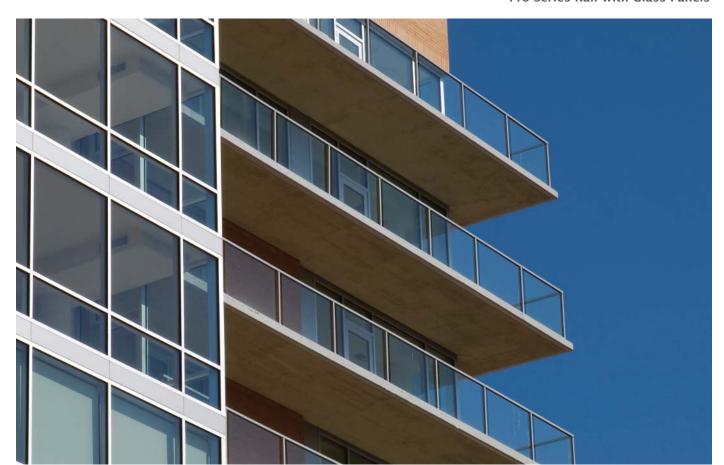
Custom deck railing designs are available when Deck Images standard railing systems do not meet your unique needs. Our extensive railing experience and talented team can provide design and planning expertise to fabricate your exact requirements.

## System Evaluation

- 1. Deck Images railing products have been evaluated for structural integrity by an independent laboratory through full-scale assembly testing. Deck Images 42" high Pro Series railing system was evaluated with a total railing span of 144" in a complete assembly. A center post (6005-T5 Aluminum) was located midway in the railing assembly (72" center-tocenter from the corner post). Return railing sections were provided at each end of the 144" span, with the return rail connected to wood framing using a "Top Mount" (6063-T5 aluminum). The Pro Series system has been evaluated with the 5/8" aluminum welded balusters (6063-T5) and 1/4" tempered glass panels (ANSI Z 97.1 tempered glass); the post base plates (6061-T6) have been evaluated for anchorage into both concrete substrate and wood substrate. Hilti KB3 SS304 1/4" x 3" wedge anchors (or equal) with a 2-1/2" nominal embedment were used in the concrete substrate condition. A #14 x 3" 18-8 stainless steel screw (or equal) was used on southern pine for the wood substrate condition. The concrete substrate shall be designed by a registered engineer to properly receive the load from the railing system. When the guardrail is installed in configurations other than described above, the fasteners must be specified by a design professional.
- 2. When Deck Images systems are assembled under the conditions described above, the railing meets the guardrail requirements of 1607.7.1 of the 2006 International Building Code (IBC).
- 3. When Deck Images guardrail is installed in configurations other than described above, each installation shall be designed using numerical methods by a registered professional engineer licensed in the state in which the project is constructed. Sealed shop drawings shall be made available to interested parties to demonstrate compliance with applicable building codes.
- 4. If Deck Images railing is installed contrary to the specific assembly described above and sealed engineering drawings are not available, then the railing is intended for decorative purposes only and cannot be used in applications where a structural railing system is required by building code.

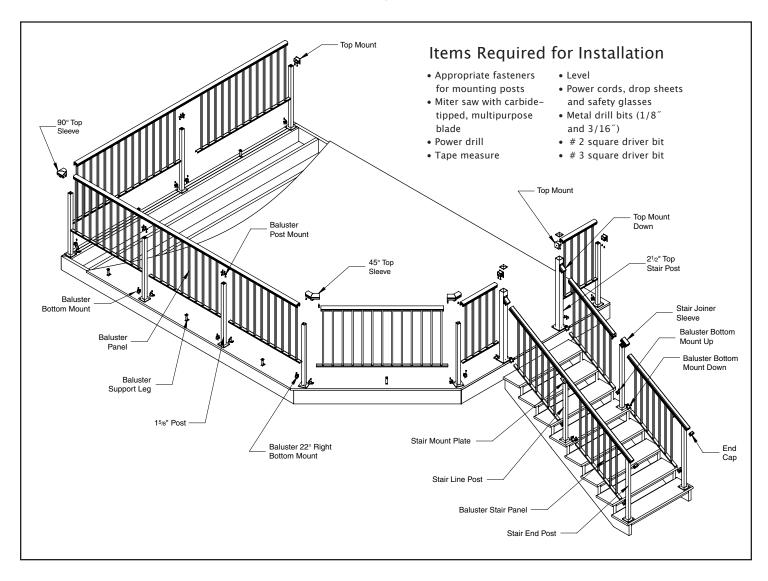
Adagio, Chevy Chase, MD

Pro Series Rail with Glass Panels



## Baluster Aluminum Rail Installation Overview

For complete installation instructions, visit our Web site www.deckimages.com.



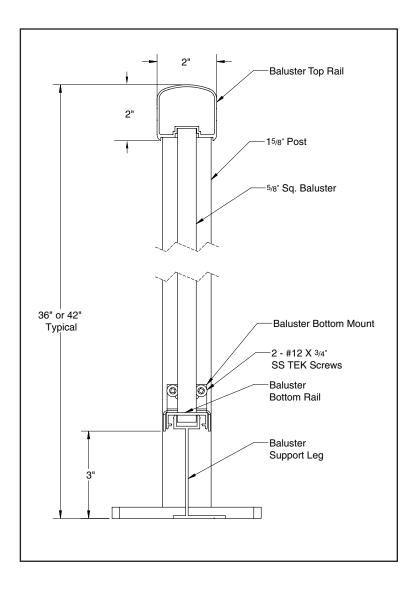
## Prior to construction, check with your local regulatory agency for special code requirements in your area.

Common railing height is 36" or 42". Maximum post spans will vary depending on job site conditions. Never span more than 6' on-center between railing posts. Railings longer than 12' in length will require reduced post spans. Refer to the system evaluation. For all other applications, consult a design professional or a Deck Images representative for more information. Read instructions completely to get an understanding of how the product goes together and how each piece affects the other.

## Baluster Aluminum Rail Cross Section

## **Key Notes**

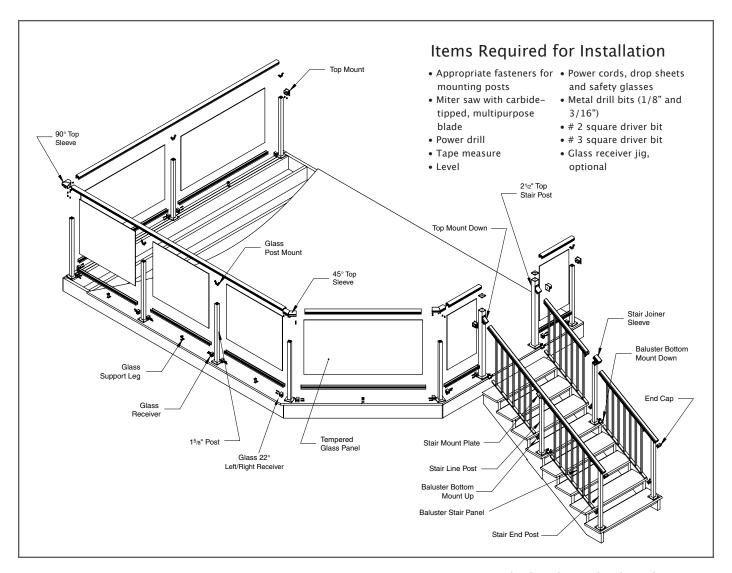
- Review materials and Deck Images installation instructions to ensure all necessary materials are present, prior to beginning installation.
- On wood structures, review outer deck framing and determine post placement.
   Solid structural blocking is required at all post locations. Typical rail centerline is 3" from deck edge; however, rail centerline can be adjusted to suit the application.
- Review and confirm a solid, structural mounting surface is present at building/ column locations where railing ends connect to the structure.
- Posts may require shimming to ensure all posts are plumb and level in all directions.
- For installations into wood framing, drill pilot holes through deck boards to prevent splitting.
- Use appropriate stainless steel fasteners to attach the railing system to the structure. (Refer to the system evaluations.) For all other applications, consult a design professional or a Deck Images representative for more information.
- When installing posts, ensure drain holes face outward from deck surface. This allows for any water that may get trapped inside of posts to drain to the deck exterior. This will also ensure correct screw port orientation inside of posts, which is critical for stair mount plate/post mount installation.
- It is necessary to trim all posts requiring top sleeves to maintain uniform rail height.
- Consult your Deck Images representative for installation methods not covered in this instruction guide.





## Glass Rail Installation Overview

For complete installation instructions, visit our Web site www.deckimages.com.



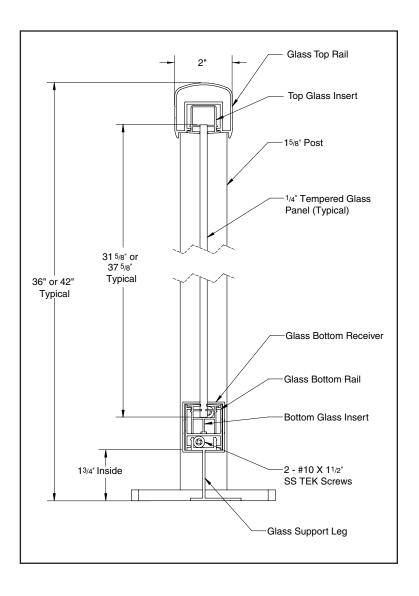
## Prior to construction, check with your local regulatory agency for special code requirements in your area.

Common railing height is 36" or 42". Maximum post spans will vary depending on job site conditions. Never span more than 6' on–center between railing posts. Railings longer than 12' in length will require reduced post spans. Refer to the system evaluation at the end of these instructions. For all other applications, consult a design professional or a Deck Images representative for more information. Read instructions completely to get an understanding of how the product goes together and how each piece affects the other.

## Glass Rail Cross Section

## **Key Notes**

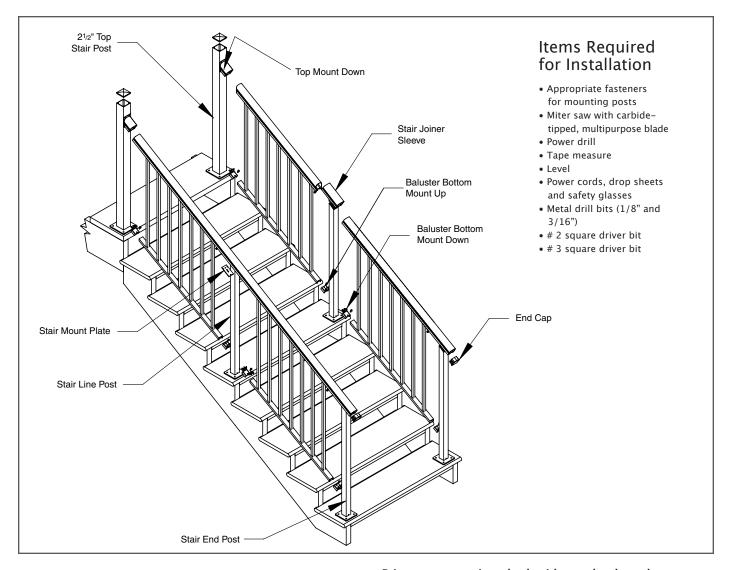
- Review materials and Deck Images installation instructions to ensure all necessary materials are present, prior to beginning installation.
- On wood structures, review outer deck framing and determine post placement. Solid, structural blocking is required at all post locations.
   Typical rail centerline is 3" from deck edge; however, rail centerline can be adjusted to suit the application.
- Review and confirm a solid, structural mounting surface is present at building/column locations where railing ends connect to the structure.
- Posts may require shimming to ensure all posts are plumb and level in all directions.
- For installations into wood framing, drill pilot holes through deck boards to prevent splitting.
- Use appropriate stainless steel fasteners to attach the railing system to the structure.
   (Refer to the system evaluation.) For all other applications, consult a design professional or a Deck Images representative for more information.
- When installing posts, ensure drain holes face outwards from deck surface. This allows for any water that may get trapped inside of posts to drain to the deck exterior. This will also ensure correct screw port orientation inside of posts, which is critical for stair mount plate/post mount installation in steps.
- It is necessary to trim all posts requiring top sleeves to maintain uniform rail height.
- Consult your Deck Images representative for installation methods not covered in this instruction guide.





## Baluster Stair Rail Installation Overview

For complete installation instructions, visit our Web site www.deckimages.com.



## Prior to construction, check with your local regulatory agency for special code requirements in your area.

Common stair railing height is 36". Maximum post spans will vary depending on job site conditions. Never span more than 6' on-center between railing posts. Railings longer than 12' in length will require reduced post spans. Refer to the system evaluation. For all other applications, consult a design professional or a Deck Images representative for more information. Read instructions completely to get an understanding of how the product goes together and how each piece affects the other.

## **Key Notes**

- Standard stair railing panels and stair connector parts are available in 32-, 35- and 37-degree stair angles. Custom angles are also available upon request.
- 1-5/8" x 42" posts are required for all stair line and stair end posts to accommodate additional length required when cutting top of stair posts to required stair angle.
- When angle cutting top of 1-5/8" stair posts, it is critical that screw ports in top of posts are correctly oriented to allow for fastening of stair mount plates.
- Maximum posts spans on stair railing applications is 6' on-center. Additional stair line posts are required on any stair application more than 6 feet in length.
- Use stair joiner sleeves to join sections of stair railing together.
- Use appropriate stainless steel fasteners to attach the railing system to the structure.
   (Refer to the system evaluation.) For all other applications, consult a design professional or a Deck Images representative for more information.

## Frequently Asked Questions

## What kind of railing systems does Deck Images™ Pro Series offer?

Deck Images Pro Series aluminum railing system consists of panels made from 5/8" square aluminum balusters, welded to aluminum rails and then powder coated. The glass railing system accepts 1/4" or optional 3/8" tempered glass panels. It is installed with rails and posts made from low-maintenance, powder-coated aluminum. Both styles feature a sleek, continuous top rail look.

#### What colors are available?

Deck Images Pro Series railing features a durable, powder-coated finish available in Black, White, Taupe, Clay and Green. Custom colors are also available by request.\* The tempered glass is clear for an unobstructed view. \*Custom colors require additional lead-time and cost.

### What rail heights are available?

Deck Images Pro Series railing is available in 36" and 42" heights. Custom heights are available through special order.

#### What type of Aluminum is used?

Our aluminum railing components are made from high grades of aluminum alloys. Aluminum alloys offer superior strength, yet are lightweight, easy to work with and recyclable. The aluminum is then powder coated for an attractive, low-maintenance finish.

#### Are stair railings available?

Stair railings are available. Fully welded aluminum stair railings match standard 32°, 35°, and 37° stairs. Angled glass is available for stair railings as well.

### Are gates available?

We offer gates to match our aluminum and glass railings. Our gates come in knockdown kits with standard hinges and a latch, and require assembly. Custom-welded gates are also available through special order.

## Can Glass railings be used with Baluster Aluminum Railings?

Glass and aluminum railings can be used together as long as connections are made at joiner posts.

## Where can I buy Deck Images Pro Series Railing and how much does it cost?

Deck Images Pro Series Railing is available at select lumberyards and specialty centers. For more information, visit the how-to-buy section of our Web site or call 877-446-7397. It is competitively priced in comparison to other premium railing systems.

#### Is obscured or tinted glass available?

Yes. Obscured and tinted glass are available. Special order.

## Frequently Asked Questions

## Can I purchase the glass from a supplier other than Deck Images?

Yes. Our versatile system will work with any 1/4" or 3/8" tempered safety glass.

#### **Installation and Warranty**

#### How far apart can the posts be spaced?

Post spans will vary depending on the application. Post spans may never be greater than 6' on-center. Railing runs longer than 12' will require reduced post spans.

#### Do I need special tools to install the railing?

Conventional tools can be used for cutting, drilling and fastening. For your safety, remember to wear protective clothing and safety glasses.

#### What can I use to cut the railing?

We recommend using a sharp, carbide-tipped multipurpose saw blade.

#### How do the posts attach to the deck?

Our standard surface mount posts come with a 4" x 4" base plate that easily attaches through a deck surface into structural blocking below. Additional options include a fascia mount post and a concrete core mount post.

### Does the railing system accommodate angles?

We offer connectors to handle all of the angles you would typically encounter, including 180°, 90°, 45° and 22.5°. Connectors can also be custom built at any angle for projects with nonstandard angles.

#### Can the railing system be installed on concrete?

Pro Series railing can be installed on concrete. There may be additional items required for installation, such as a hammer drill, masonry bits and concrete anchors.

### How is the angle of the stair calculated?

Pro Series stair railing is offered to fit 32°, 35° and 37° stairs. The angle is found using the rise and run measurements of the stair. For example, a stairway with a 7" rise and 10" run would require a 35° stair rail. The easiest way to determine the angle is with a universal protractor, which can be found at most building supply centers and hardware stores.

### Can the railing accommodate a core drill application?

Longer posts without base plates are available by special order for core drill installations.

### Can the railing be installed with Plexiglas®?

We do not recommend using Plexiglas as it scratches easily and tends to yellow over time.

### What is the spacing of the balusters?

The balusters are spaced 4–1/2" on–center so the maximum gap between balusters is 3–7/8". Most codes require that a railing can not allow a 4" sphere to pass between the balusters. Deck Images™ Pro Series railing meets this requirement. Check for code requirements in your area.

#### Does Deck Images Pro Series railing come with a warranty?

Yes. Deck Images Pro Series railing is covered by a 15-year limited powder coat warranty, which warrants the finish against visible checks, cracks, showing chalking, and color change.

Thousand Oaks Golf Course, Grand Rapids, MI

**Glass Panels** 



## Deck Images 15-Year Limited Powder Coat Warranty

#### **ELIGIBILITY**

Universal Consumer Products, Inc. (the "Warrantor"), is pleased to extend this 15-year Limited Warranty to you, the original consumer of the Deck Images powder-coated railing product ("the Product"). This Warranty is valid for Deck Images Product used in standard residential applications and may not be assigned or transferred by you. This Warranty extends only to the powder-coated surface of the Product and does not cover any structural aspects of the Product.

#### 15-YEAR LIMITED WARRANTY

Warrantor will replace any Deck Images Product that visibly checks, cracks, shows chalking or exhibits Change in Color within fifteen (15) years from the date of purchase. Change in Color covered under this Warranty is a color change in the coating on the Deck Images Product greater than five (5) CIE Lap AE units calculated in accordance with ASTM 2244 Section 6.3. This Warranty does not cover costs of installation, removal or reinstallation. Warrantor's sole obligation is limited to the replacement of the Deck Images Product.

#### **Limitations on Warranty**

The Warranty does not apply to any product that is damaged by physical abuse, prolonged exposure of the coatings to temperatures in excess of 110°C, acts of God, acts of war, or other chemical or biological factors; or has not been installed in accordance with Warrantor's installation guidelines and local building codes; or has been abused, or placed under or subjected to abnormal residential use conditions, including continuous exposure to chlorinated pool water; or has been used, modified or otherwise treated in any manner other than as intended by Warrantor.

This Warranty does not cover product failures associated with continuous exposure to salt water conditions when installed within one (1) mile of any coastal salt water. This Warranty does not cover any coating failures associated with the use of adhesive tapes, sealants or mastics in direct contact with the coated product. This Warranty does not cover any failures associated with fabrication activity carried out after your purchase of the product, including but not limited to bending, elongation, cutting, sawing or milling. Any cutting, sawing or drilling of the product not expressly provided for in the installation instructions shall make this warranty null and void.

The Customer assumes all risk and liability associated with the construction, installation or use of this product. The Customer or contractor should take all necessary steps to ensure the safety of everyone involved in the project, including, but not limited to, wearing the appropriate safety equipment.

Failure to follow any instructions, restrictions or warnings supplied with the product shall make the Warranty null and void and of no further effect. Warrantor reserves the right to investigate any claim and to inspect the materials on which the claim is made. Any construction or use of this product must be in accordance with all local zoning and/or building codes.

This Warranty expressly excludes any incidental or consequential damages. Some states do not allow limitations on how long an implied warranty last and/or do not allow the exclusion of incidental or consequential damages, so the above limitations and exclusions may not apply to you. This Warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

#### **CLAIM PROCEDURE**

To make a claim under this Warranty to receive replacement product, the original consumer must, within 90 days of actual or constructive notice of any covered defect in the product do the following:

- (1) Prepare a letter that includes the following:
  - A list of the number of pieces and the size of each piece for which the claim is made;
  - Proof of Purchase of the product, as shown on the original invoice;
  - Proof of Warranty, such as the original product tag, copy of the mark actually appearing on the product, or other evidence.

(2) Mail the above to: Universal Consumer Products, Inc.
Warranty Information
2801 East Beltline NE

Grand Rapids, MI 49525

WARRANTOR DOES NOT MAKE ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS OF THE PRODUCT FOR A PARTICULAR PURPOSE. THERE ARE NO OTHER WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION IN THE FACE HEREOF.



## www.deckimages.com

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