



CALI DECKING™

TruOrganics® Rail & Post Kit

Installation Guide - 36"

(888) 788-2254
www.CaliBamboo.com

Rail & Post Kit Systems



POST KIT
3.5" x 3.5" x 44.8"



RAIL KIT
42" x 72"

Available Colors



SEDONA



GLACIER



DENALI



YOSEMITE

IMPORTANT: Pre-Installation Guidelines

Note: Railings not used for its intended purpose will not be covered under warranty. For the most up-to-date information, please visit our website at CaliBamboo.com

Prior to installing any composite product, it is recommended that you check with local building codes for any special requirements or restrictions. The diagrams and instructions outlined in this guide are for illustration purposes only and are not meant or implied to replace a licensed professional. Any construction or use of TruOrganics® must be in accordance with all local zoning and/or building codes. The consumer assumes all risks and liability associated with the construction and use of this product.

Safety

When dealing with any type of construction project it is necessary to wear appropriate safety equipment to avoid any risk of injuries. Cali Bamboo® recommends the following safety equipment when handling, cutting, and installing Cali Bamboo® decking: gloves, respiratory protection, long sleeves, pants, and safety glasses.

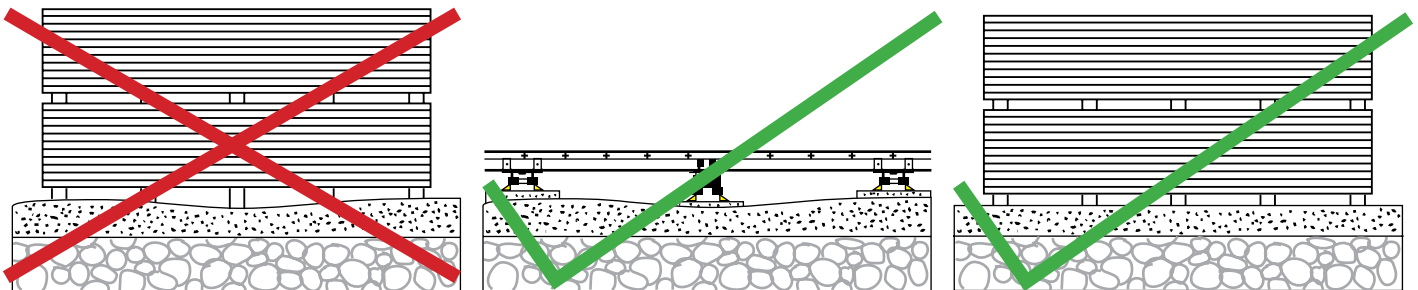
Tools Needed

Typical tools needed include but are not limited to:

- Miter Saw with minimum 60 tooth carbide tipped blade
- Miter saw blade rated for cutting metal
- Level
- Hammer
- Chalk line
- Speed square
- Tape Measure
- Pencil
- Impact driver/screw gun
- 1/8" drill bit
- 3/16" drill bit
- 1/4" drill bit
- 7/64" drill bit
- 5/64" drill bit
- 12mm Hex bit that can be attached to screw gun
- Ratchet Set

Storage

A clean, smooth and flat surface is needed to install TruOrganics® products correctly. TruOrganics® products need to be stored on a flat and even surface at all times. Surfaces such as dirt and grass are not recommended as they can move over time and potentially cause warping or distortion. Always remember to keep TruOrganics® products dry until you are able to start installation.



Planning

Planning for your railings should start during the framing phase of your project. Proper framing is critical for your railings to be properly mounted. Plan a layout for your railing before starting it to ensure the best possible looking railing for your project. Building codes and zoning ordinances generally apply to permanent structures, meaning anything that is anchored to the ground or attached to the house. So nearly every kind of railing requires permits and inspections from a local building department. We recommend drawing out a site plan of your proposed project that you intend to do to minimize errors and make your perfect railing.

Construction

TruOrganics® decking is NOT intended for use as columns, support posts, beams, joist stringers or other primary load-bearing members. TruOrganics® must be supported by a code-compliant substructure.

Static

Static build-up is a natural occurring phenomenon that can occur with many plastic products. Dry and windy environments may make this more apparent and varies depending on the climate and age of the decking.

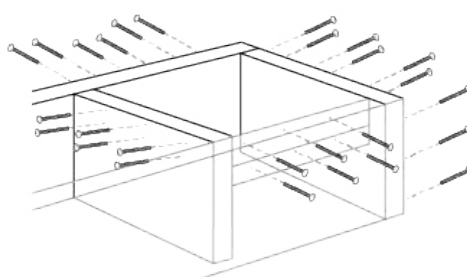
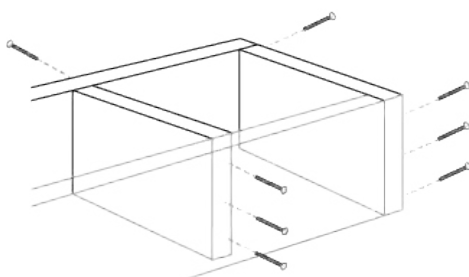
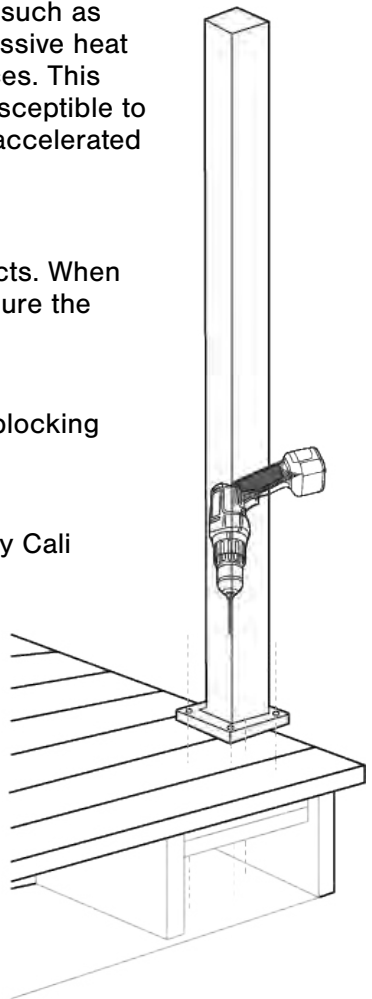
Heat and Fire

Excessive heat on the surface of TruOrganics® products from external sources such as fire or reflection of sunlight from energy efficient window products can cause passive heat gain within a structure. This can lead to unusual heat build-up on exterior surfaces. This extreme elevation of surface temperatures can make TruOrganics® products susceptible to melting, sagging, warping, discoloration, increased expansion/contraction, and accelerated weathering.

Framing

A clean, smooth, flat, and strong frame is needed to install TruOrganics® products. When installing TruOrganics® railing reinforcing the framing may be necessary to ensure the metal post can be properly fastened to the frame to meet local building codes.

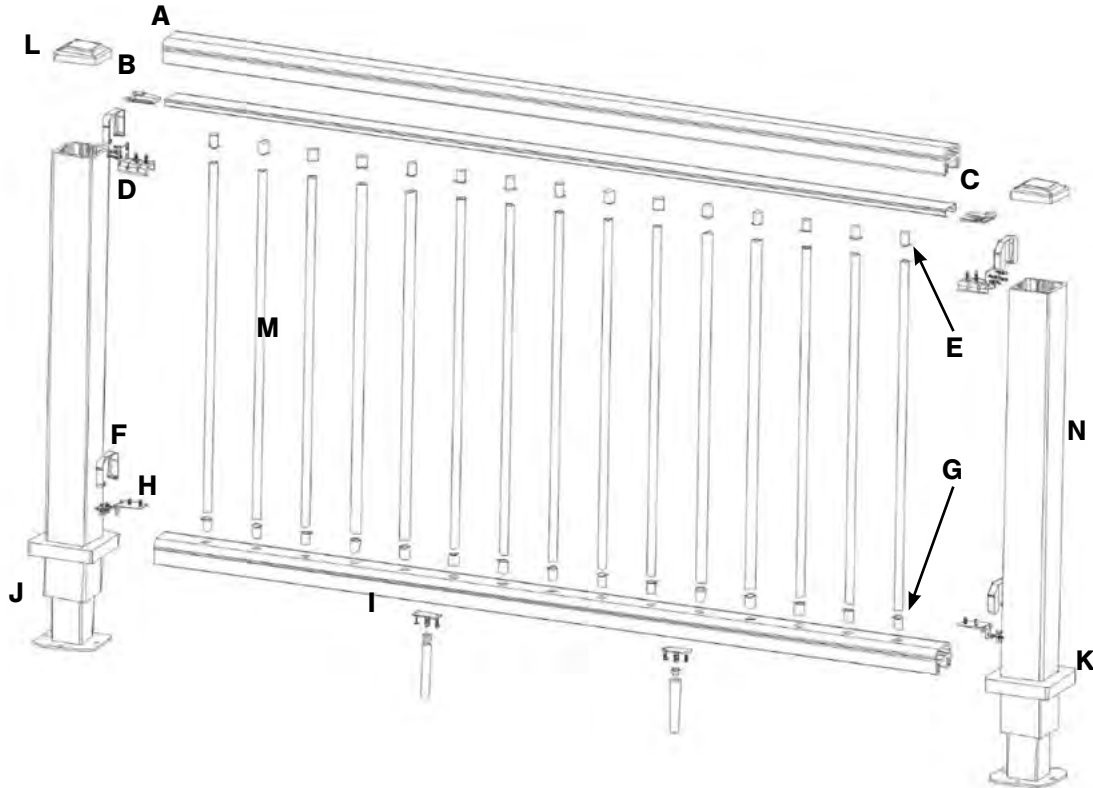
1. Determine your layout and where posts will be placed.
2. Once you have determined the layout for the posts, you may need to install blocking between the designated joists.
3. Blocking should consist of at least two 2" x 8" blocks.
4. Secure the blocking using at least three #10x3 1/2" deck screws (not sold by Cali Bamboo) penetrating through the joists at least 1-1/2" into the blocks on each side.



Straight Railing and Post Parts

Please Note:

- Parts D, E, and F will be different from those displayed in the stair railing and post parts.
- All other parts are the same for straight and stair railings and posts.



A - UR02
(x2)



E - LV-0218-B
(x30)



I - R0222
(x2)



L - LV-0120
(x2)



B - R0224-1
(x1)



F - R0102
(x4)



J - R0221-42
(x2)



M - R0218-42
(x15)



C - R0224-2
(x2)



G - R0205
(x2)



K - LV-0119
(x2)



N - UH35
(x2)



D - R0223
(x2)



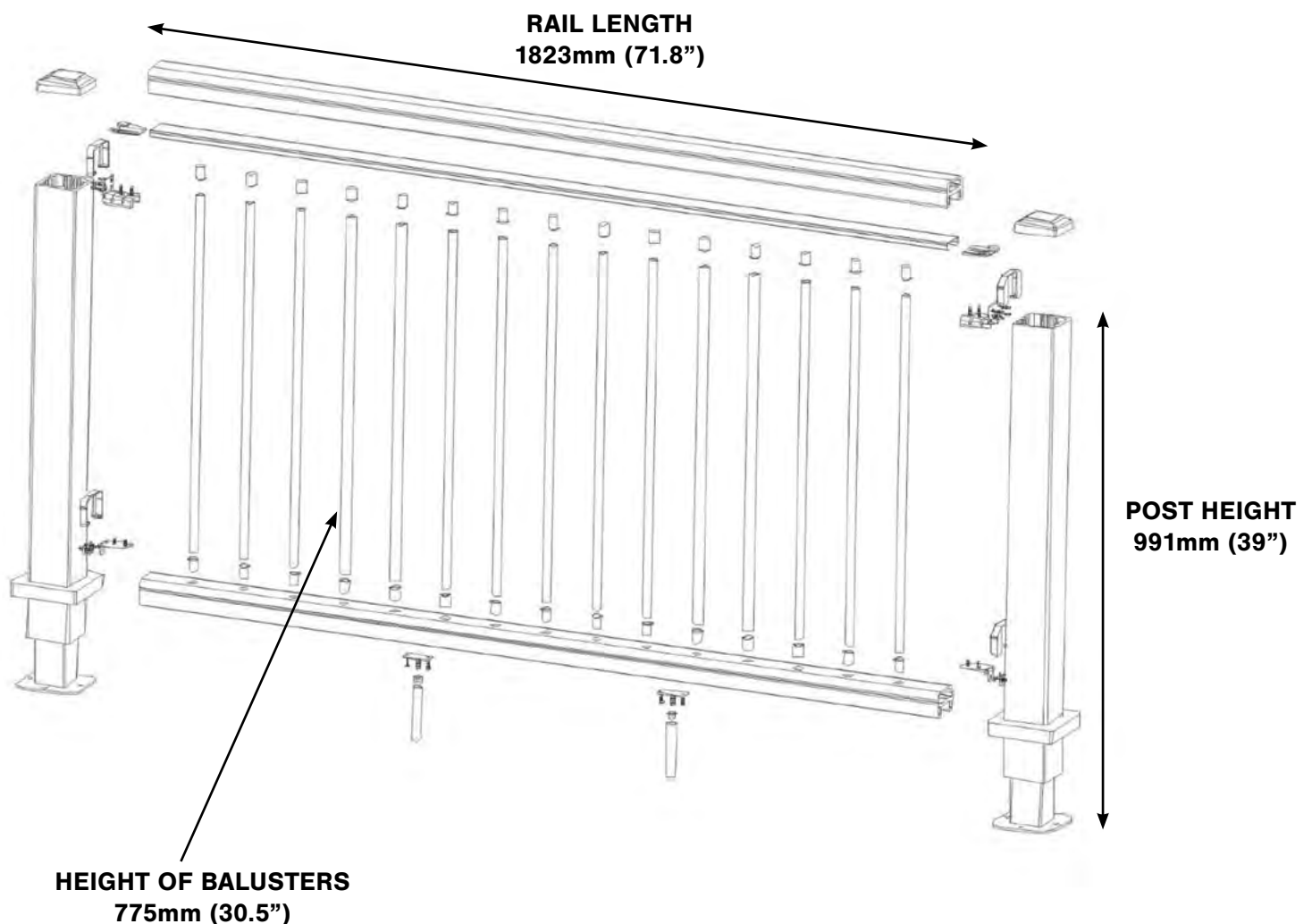
H - R0204
(x2)



Straight Railing Installation 36-inch

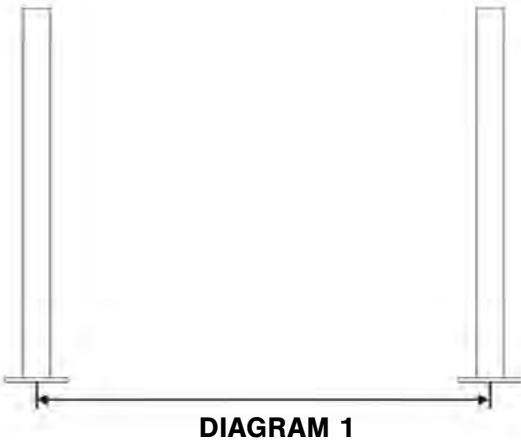
IMPORTANT POINTS

- This railing is designed for a maximum of 1823mm (71.8") internal rail length.
- Aluminum balusters (**M-R0218-42**) DO NOT need to be cut for the straight railing 775mm (30.5").
- Cut the handrail, the bottom rail and the galvanized insert on each side to comply with your local Building Code.
- Posts need to be cut to the proper design height of 991mm (39") for the composite sleeve and 937mm (36.9") for the steel post.
- Foot blocks should be evenly spaced out depending on the length of the final rail.
- Foot blocks cannot be installed underneath a pre-drilled baluster hole.

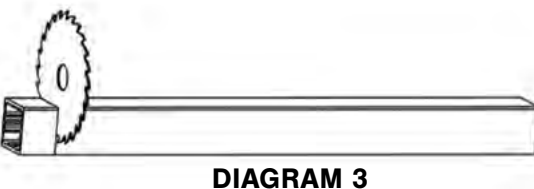
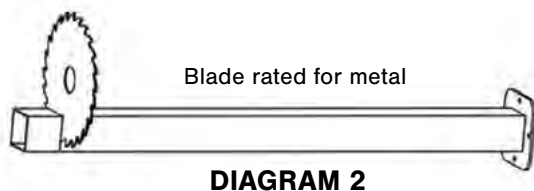


36-inch Post Setup

- 1 Mark where the post mount (**J-R0221-42**) will be installed. The maximum distance of the post mount is 1923mm (75.7") from center to center as shown in diagram 1.



- 2 Cut post mount (**J-R0221-42**) to the length of 937mm (36.9") as shown in diagram 2.
Cut post sleeve (**N-UH35**) to the length of 991mm (39") as shown in diagram 3.



- 3 Install the post mount (**J-R0221-42**) as shown in diagram 4.

Note: Screw **WJ0094** can be used when installed on wood and concrete. Screw **WJ0155** can be used when installed on wood or metal framing. Make sure to predrill using a 5/16" drill bit.

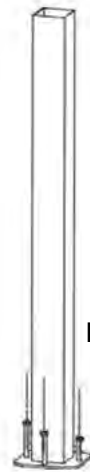


DIAGRAM 4



DIAGRAM 5

For Screw **WJ0094**, predrill with 1/4" bit.
For Screw **WJ0155**, predrill with 5/16" bit.
Install the post sleeve (**N-UH35**) as shown in diagram 5.

- 4 Mark where the post brackets will be installed with the "Straight Railing" cardboard template as shown in diagram 6. Use the top 4 holes for top post brackets and use the bottom 2 holes for the bottom post brackets as shown in diagram 7.

Note: The cardboard template location should be measured from the bottom.

Pre-drill post bracket holes with a 1/8" bit

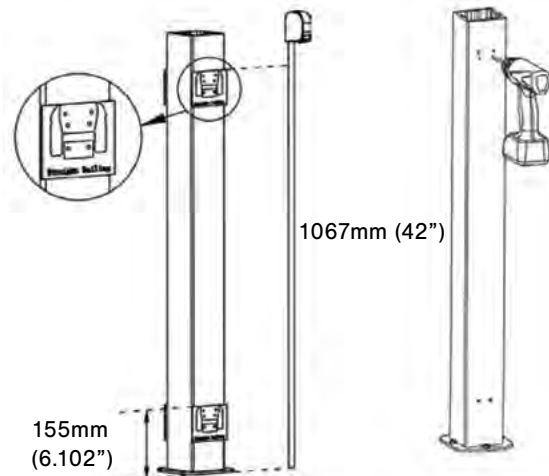


DIAGRAM 6

DIAGRAM 7

- 5** Lower the post skirt (**K-LV-0119**) over the post sleeve (**N-UH35**) as shown in diagram 8.

Drill in the top post brackets (**D-R0223**) with screw **WJ0130** as shown in diagram 9.

Drill in the bottom post brackets (**G-R0205**) with screw **WJ0131** as shown in diagram 10.

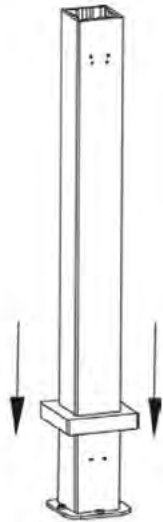


DIAGRAM 8

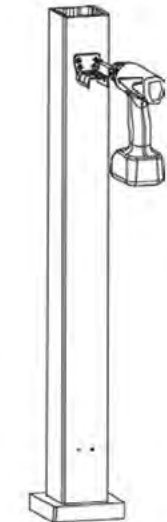


DIAGRAM 9

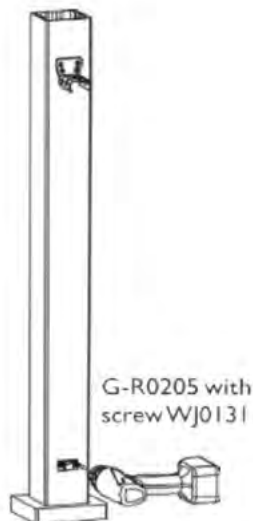


DIAGRAM 10

- 6** Cut rail (**A-UR02**) to the length between the post sleeve (**N-UH35**) minus 3mm (0.118") on each side for inserting the gaskets (**F-R0102**) as shown in diagram 11.

Remember to take out galvanized insert (**B-R0224-1**) before cutting rail (**A-UR02**). The galvanized insert (**B-R0224-1**) should be cut 6mm (1/4") shorter than the rail (**A-UR02**).

Note: Need to leave at least 75mm (2.953") between the ends of the rail and the first hole of each end as shown in diagram 12.

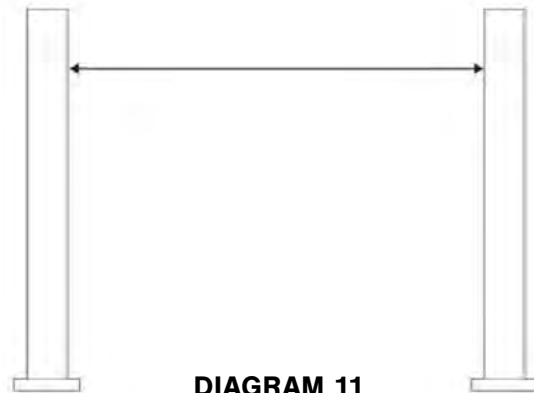


DIAGRAM 11

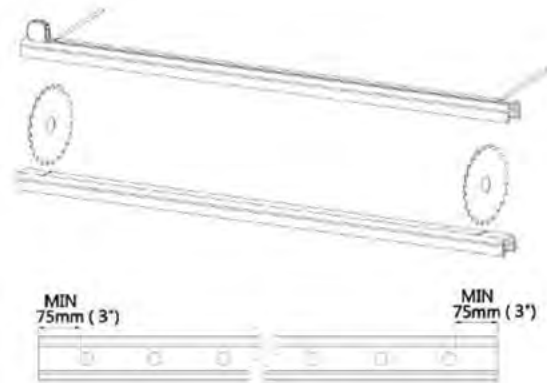
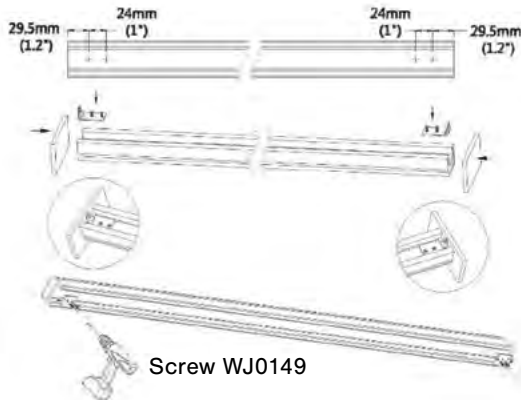


DIAGRAM 12

- 7 The bottom bracket (**H-R0204**) should be installed with screw **WJ0149** at 29.5mm (1.2") and 24mm (1") from the ends of the rail as shown in diagram 13. Alternatively, a flat board can be used to press the bracket up against the end of rail to line up the correct distance.

DIAGRAM 13



- 8 Pre-drill with a 5/64" drill bit and install the foot blocks (**I-R0222**) with screw **WJ0149** on the bottom rail as shown in diagram 14. Foot blocks should be evenly spaced out depending on the length of the final rail and cannot be installed underneath a pre-drilled baluster hole.

Note: Top rail is A in diagram 15. The holes should be facing downwards. Bottom rail is B in diagram 15. The holes should be facing upwards.

DIAGRAM 14

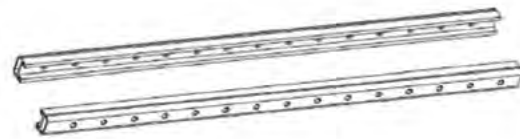
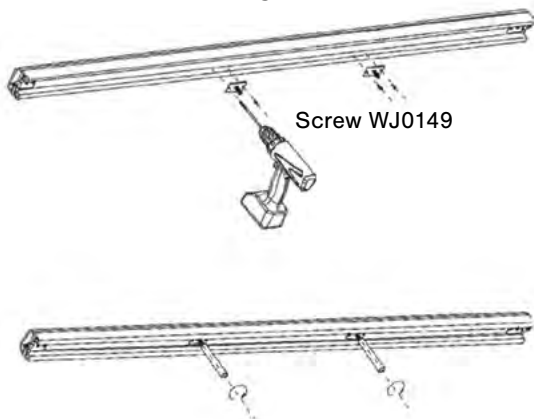


DIAGRAM 15

- 9 Attach the bottom rail (**A-UR02**) onto the bottom post brackets (**G-R0205**) as shown in diagram 16.

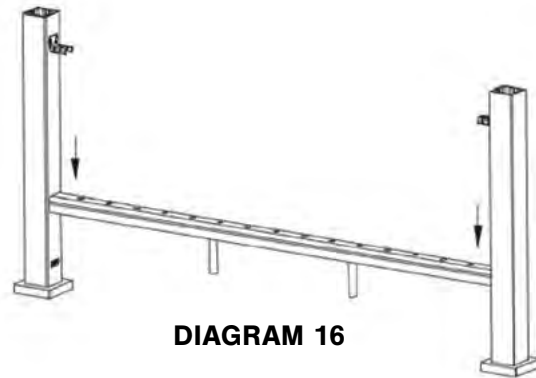
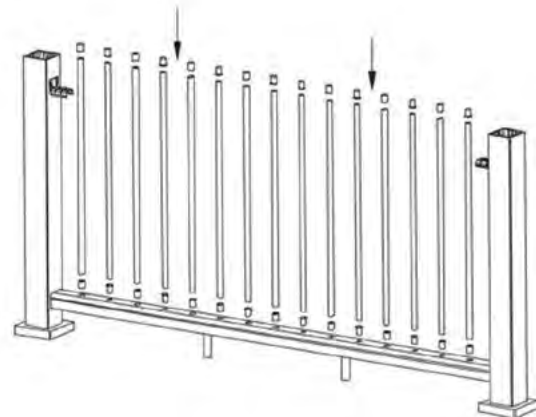


DIAGRAM 16

- 10 Install the baluster plugs (**E-LV-0218-B**) and aluminum balusters (**M-R0218-42**) as shown in diagram 17.

DIAGRAM 17



- 11 Attach the galvanized adaptors (**C-R0224-2**) on both ends of the galvanized insert (**B-R0224-1**) as shown in diagram 18.



DIAGRAM 18

DIAGRAM 19



- 12 Slide the galvanize insert (**B-R0224-1**) into the top rail (**A-UR02**) as shown in diagram 19.

- 13 Attach the top rail (**A-UR02**) onto the top of the post brackets (**D-R0223**) as shown in diagram 20.

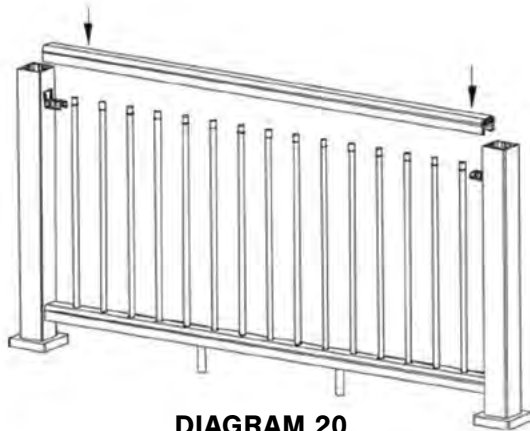


DIAGRAM 20

- 14 Pre-drill with a 7/64" drill bit and install with screw **WJ0143** as shown in diagram 21.

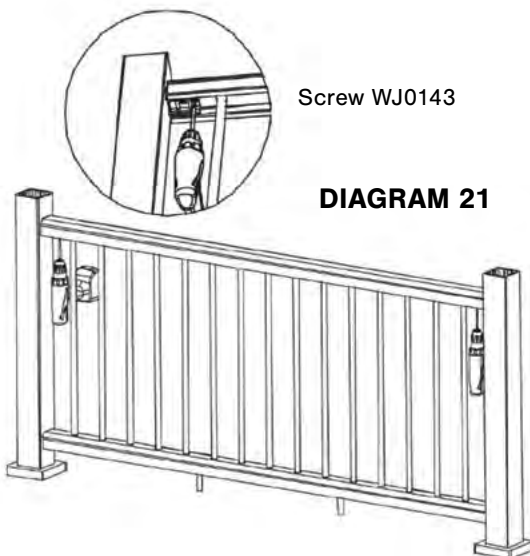
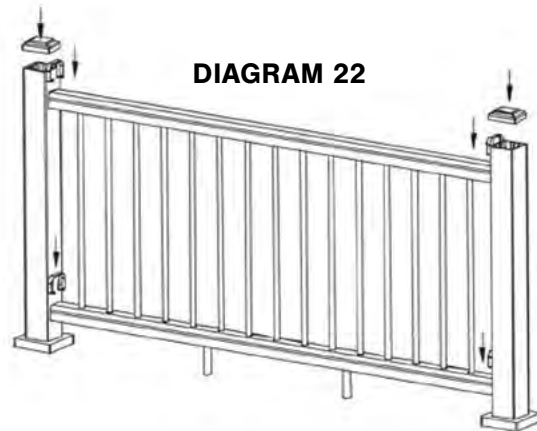


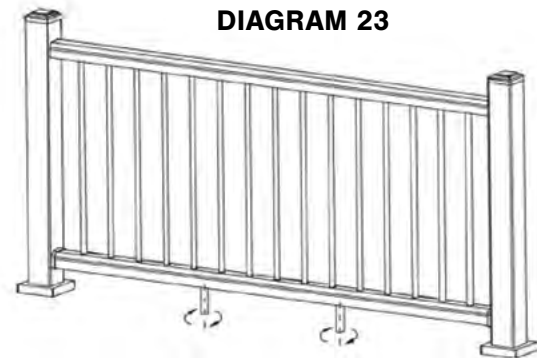
DIAGRAM 21

DIAGRAM 22



- 15 Attach post caps (**L-LV-0120**) and gaskets (**F-R0102**) as shown in diagram 22.

DIAGRAM 23



- 16 If needed adjust the foot blocks (**I-R0222**) to the correct height as shown in diagram 23.

- 17 Install the post cap (**L-LV-0120**) with screw **WJ0155** as shown in diagram 24.

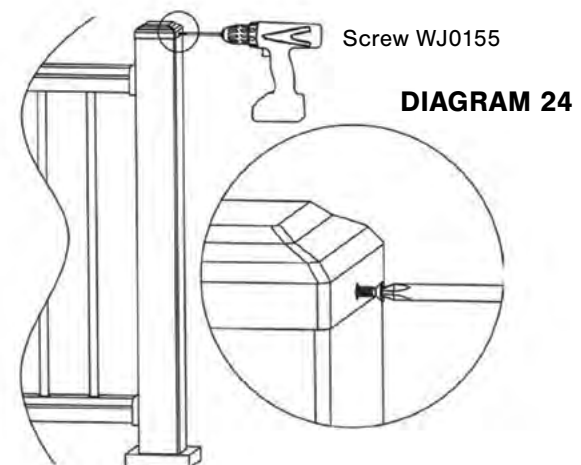
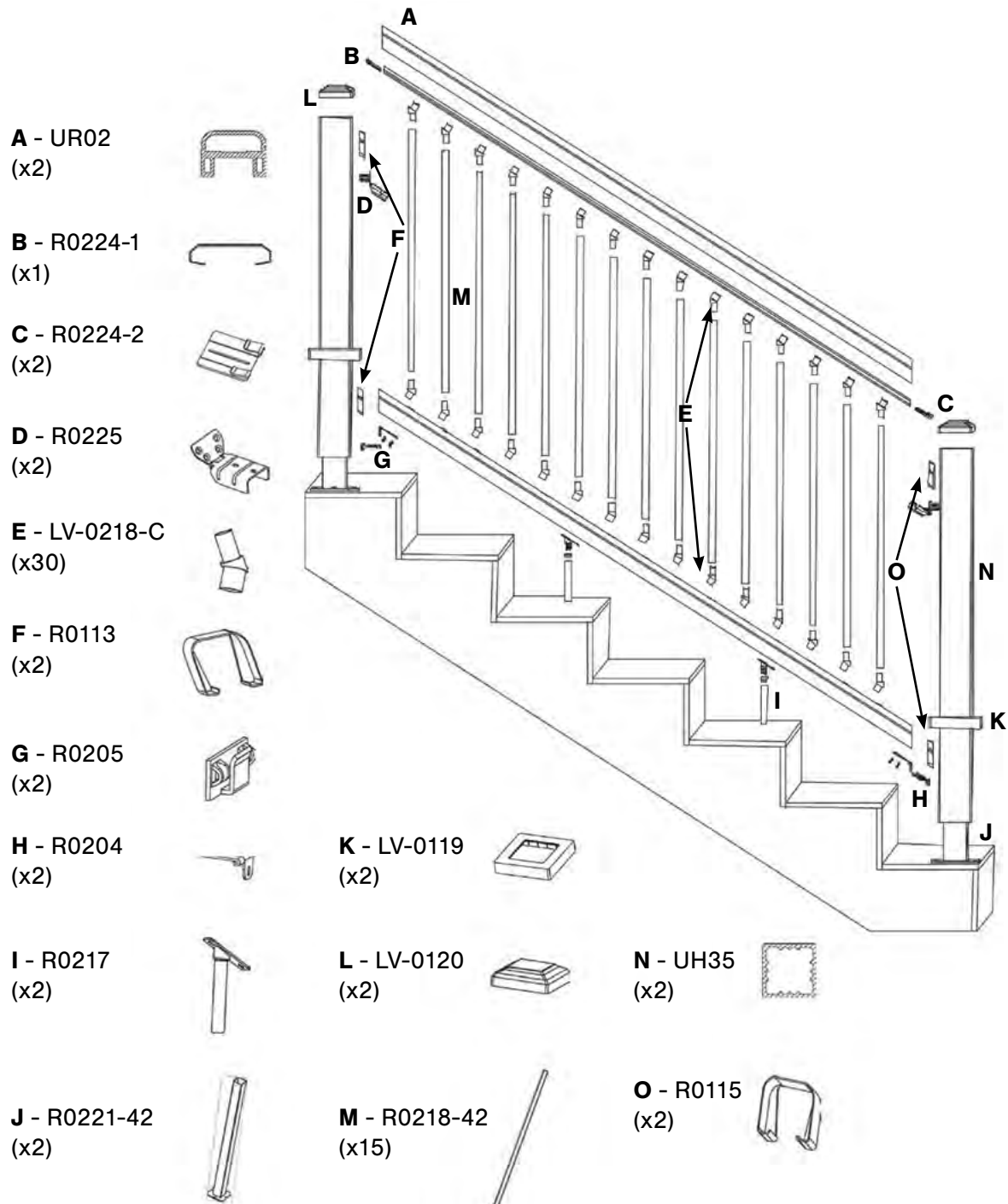


DIAGRAM 24

Stair Railing and Post Parts

Please Note:

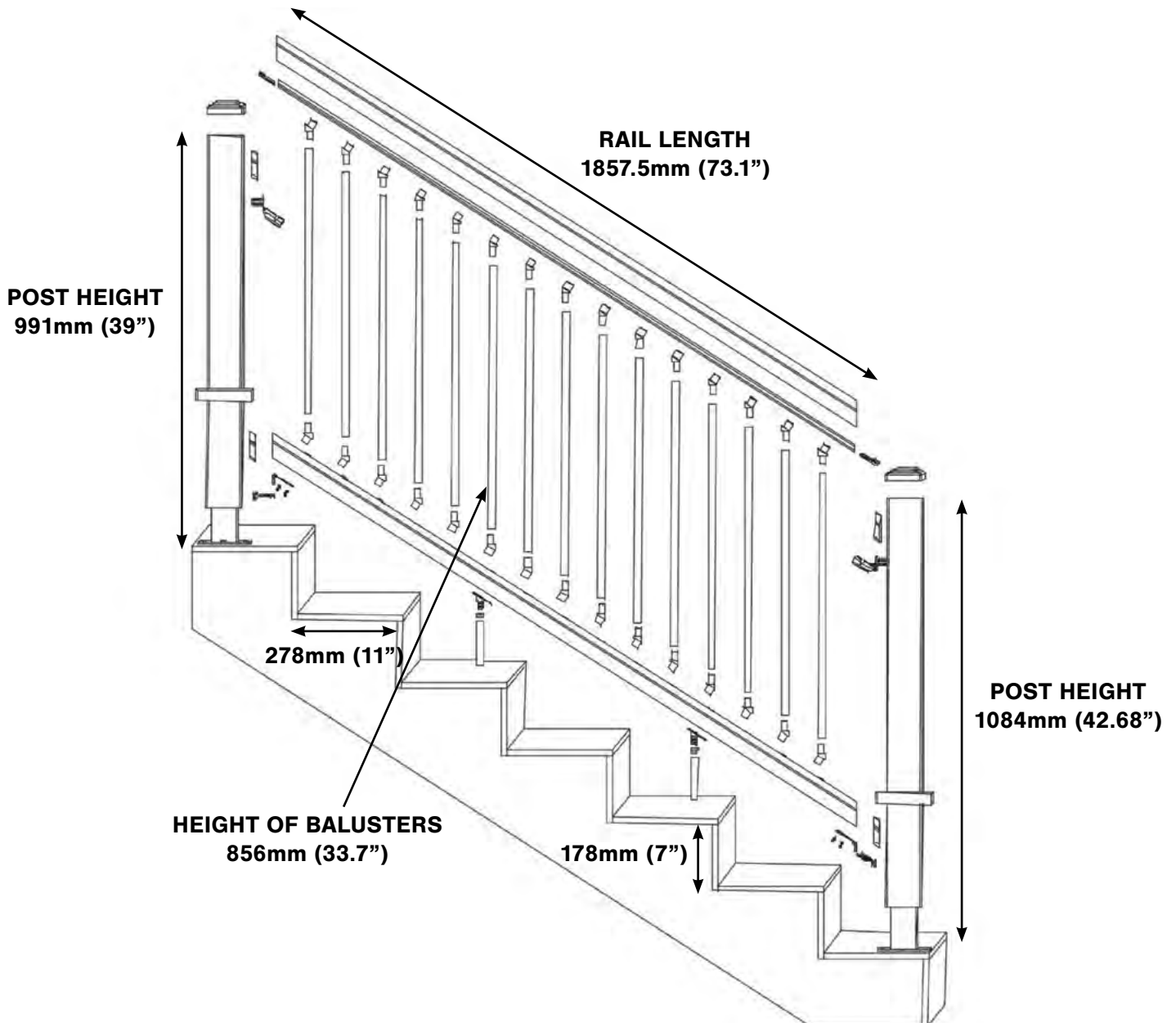
- Parts D, E, F, and O will be different from those displayed in the stair railing and post parts.
- All other parts are the same for straight and stair railings and posts.



Stair Railing Installation 36-inch

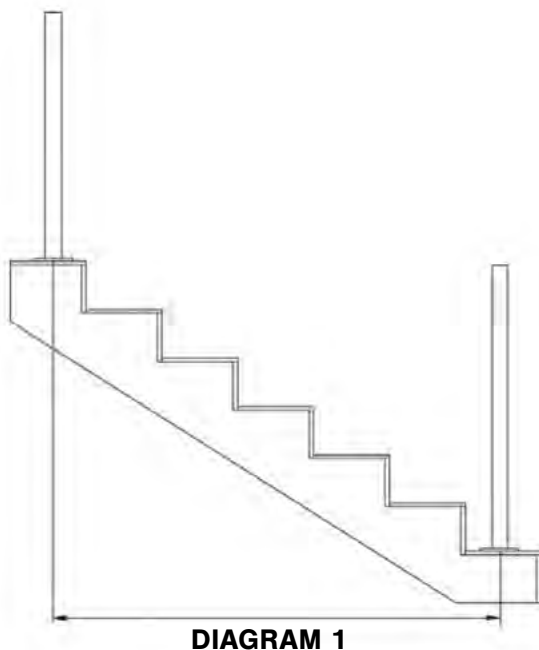
IMPORTANT POINTS

- The stair railing is designed for a 32-degree angle with stair treads at 278 mm (11") and stair risers 178mm (7").
- The stair railing is designed for a 1857.5mm (73.1") rail length.
- Aluminum balusters for the stair rail need to be cut to the height of 703mm (27.7").

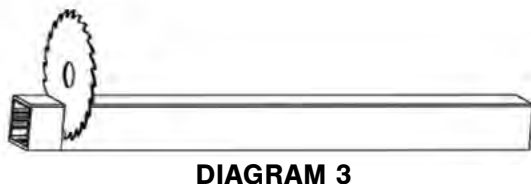
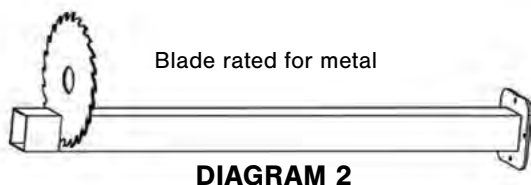


36-inch Post Setup for Stairs

- 1 Mark where the post mount (**J-R0221-42**) will be installed. The maximum distance of the post mount is 1645mm (64.8") as shown in diagram 1.



- 2 Cut post mount (**J-R0221-42**), which will be placed on the top, to the length of 937mm (36.9") as shown in diagram 2. Cut the post mount on the bottom to the length of 1035mm (40.75")
- Cut the post sleeve (**N-UH35**), which will be placed on the top, to the length of 991mm (39") as shown in diagram 3. Cut the post sleeve on the bottom to the length of 1084mm (42.7")



- 3 Install the post mount (**J-R0221-42**) as diagram 4.

Note: Screw **WJ0094** is used when installing on concrete or wood. Screw **WJ0155** is used when installed on wood or metal framing.

Install the post sleeve (**N-UH35**) as shown in diagram 5.

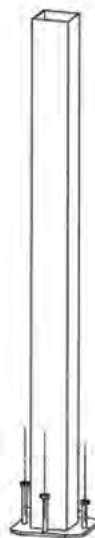


DIAGRAM 4

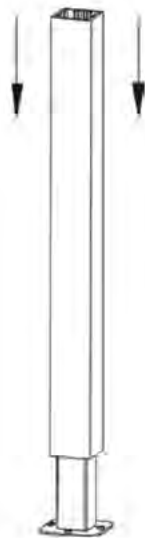


DIAGRAM 5

For Screw **WJ0094**, predrill with 1/4" bit.

For Screw **WJ0155**, predrill with 5/16" bit.

- 4 First, mark on the post which will be on the stair top using the "Stairs - Top Post" cardboard template. Use the top 4 holes for top post brackets and use the bottom 2 holes for the bottom post brackets.

Then, pull a string down at a 32-degree angle for locating the "Stairs - Bottom Post" cardboard template on the stair bottom post as shown in diagram 6.

Note: The cardboard template location should be measured from the bottom.

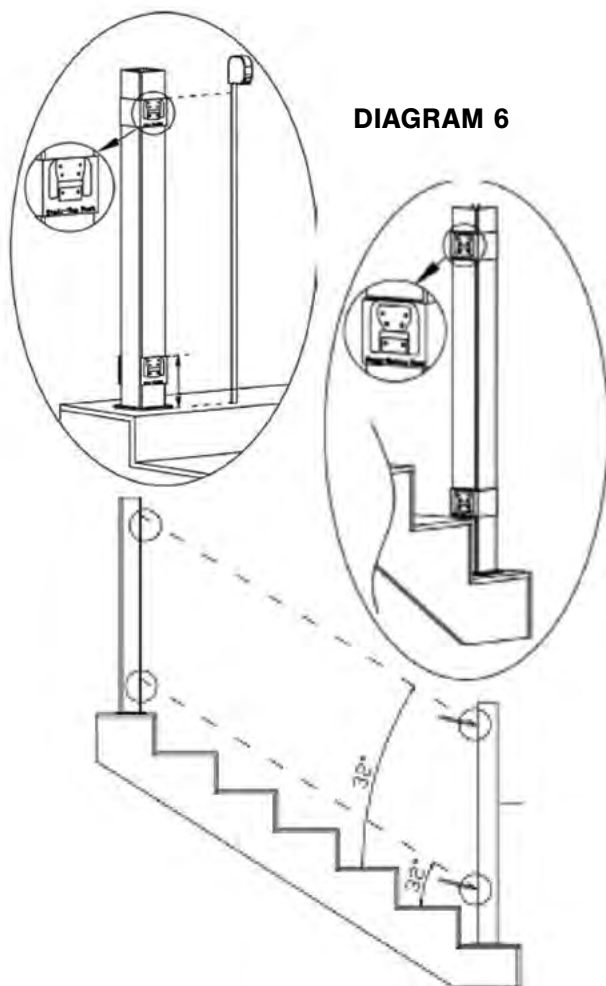


DIAGRAM 6

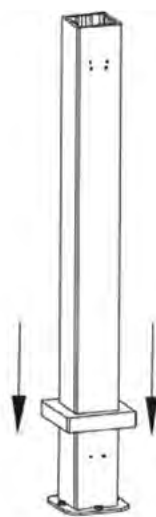
- 5** Pre-drill post bracket holes with a 3mm (1/8") bit as shown in diagram 7.

Lower the post skirt (**K-LV-0119**) over the post sleeve (**N-UH35**) as shown in diagram 8.

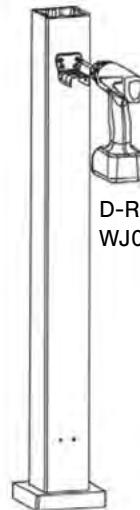
DIAGRAM 7



DIAGRAM 8

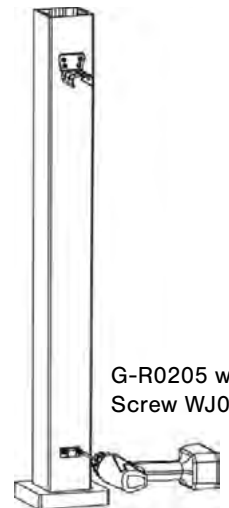


- 6** Drill in the top post brackets (**D-R0225**) with screw **WJ0130** as shown in diagram 9.
Drill in the bottom post brackets (**G-R0205**) with screw **WJ0131** as shown in diagram 10.



D-R0225 with Screw WJ0130

DIAGRAM 9



G-R0205 with Screw WJ0131

DIAGRAM 10

- 7** Cut rails (**A-UR02**) to the length (L1 in diagram 11) between the post sleeve (**N-UH35**) minus 3mm (0.118") on each side for inserting gaskets at a 32 degree angle. L1 can be measured like L minus 3mm (0.118") on each side.

Remember to take out galvanized insert (**B-R0224-1**) before cutting rail (**A-UR02**). The galvanized insert (**B-R0224-1**) should be cut 6mm (1/4") shorter than the rail (**A-UR02**).

DIAGRAM 11

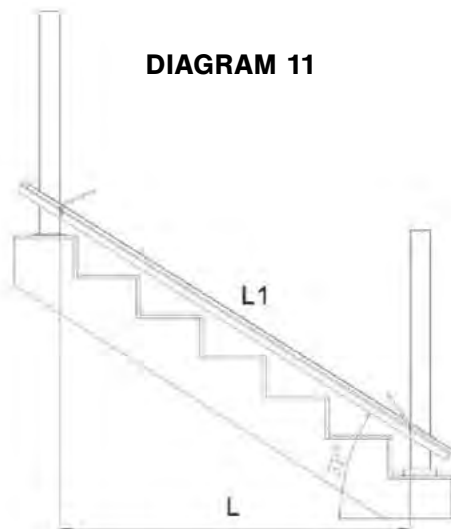
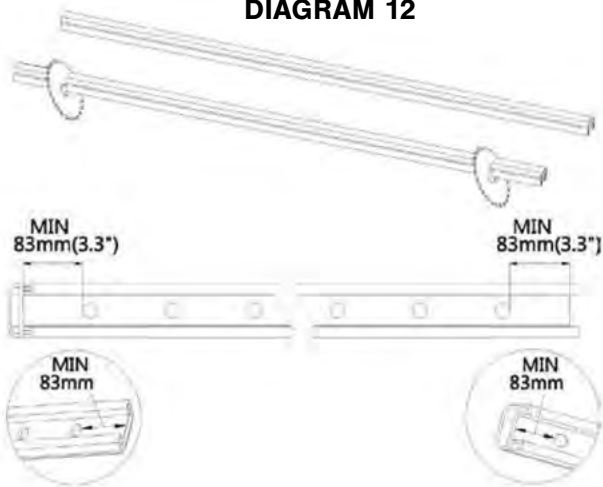


DIAGRAM 12



Note: Need to leave at least 83mm (3.3") between the ends of the rail and the first hole of each end as shown in diagram 12.

The galvanized insert (**B-R0224-1**) is designed for a maximum of 1825.7mm (71.9") as shown in diagram 13.

The railing is designed for a maximum of 1857.5mm (73.1") as in diagram 14.

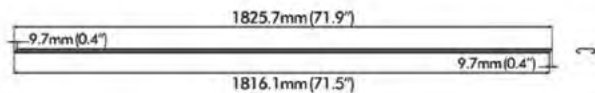


DIAGRAM 13

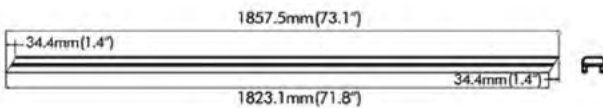


DIAGRAM 14

- 8** The bottom bracket (**H-R0204**) should be installed with screw **WJ0149** at 32.5mm (1.28") and 24mm (1") from the end of the rail which will be placed on the higher side of the stairs as shown in diagram 15. The bottom bracket (**H-R0204**) should be installed with screw **WJ0149** at 28mm (1.1") and 24mm (1") from the end of the rail which will be placed on the lower side of the stairs. Alternatively, a flat board can be used to press the bracket up against the end of rail to line up the correct distance.

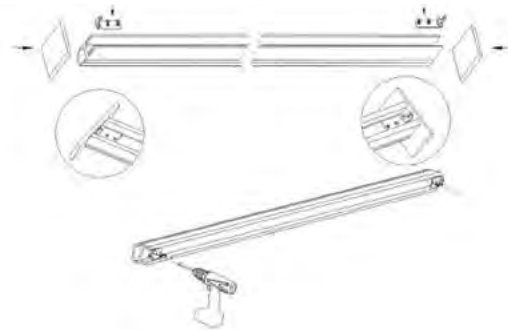


DIAGRAM 15

- 9** Pre-drill with a 7/64" bit and install the foot blocks (**I-R0217**) with screw **WJ0149** on the bottom rail as shown in diagram 16. Foot blocks should be evenly spaced out depending on the length of the final rail and cannot be installed underneath a pre-drilled baluster hole.

Note: Top rail is A in diagram 17. The holes should be facing downwards. Bottom rail is B in diagram 17. The holes should be facing upwards.

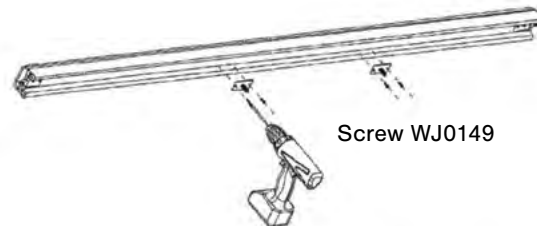


DIAGRAM 16



DIAGRAM 17

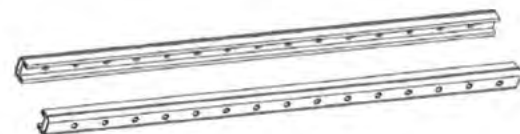


DIAGRAM 18



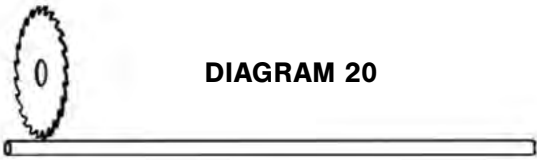
- 10 Attach the galvanized adaptors (**C-R0224-2**) on both ends of the galvanized insert (**B-R0224-1**) as shown in diagram 18.

DIAGRAM 19



- 11 Slide the galvanized insert (**B-R0224-1**) into the top rail (**A-UR02**) as shown in diagram 19.

DIAGRAM 20



- 12 Cut aluminum balusters (**M-R0218-42**) to the length of 703mm (27.7") as shown in diagram 20.

- 13 Attach the bottom rail (**A-UR02**) onto the bottom post brackets (**G-R0205**) as shown in diagram 21.

DIAGRAM 21

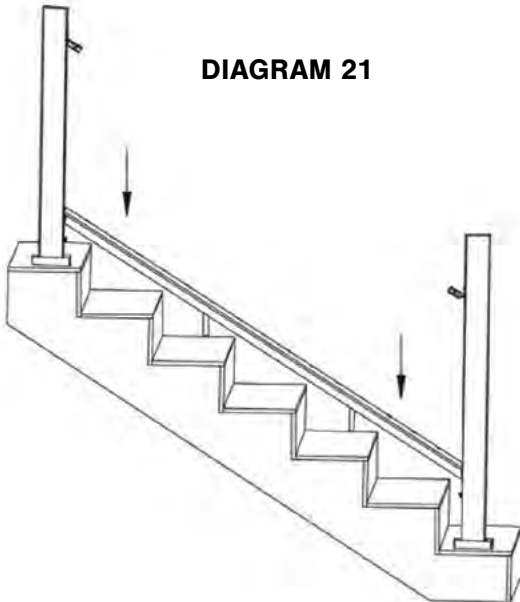
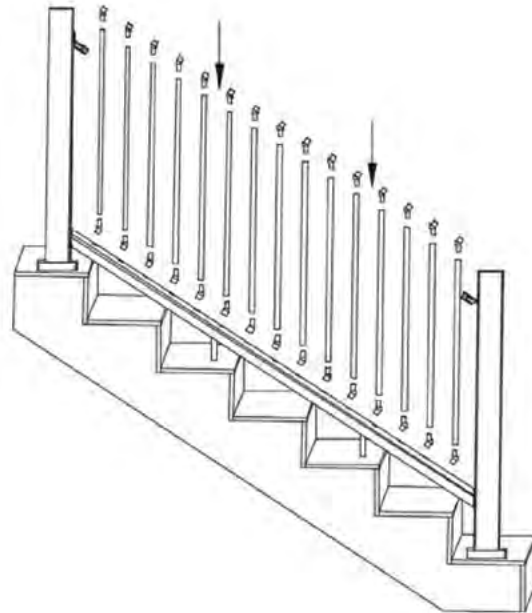


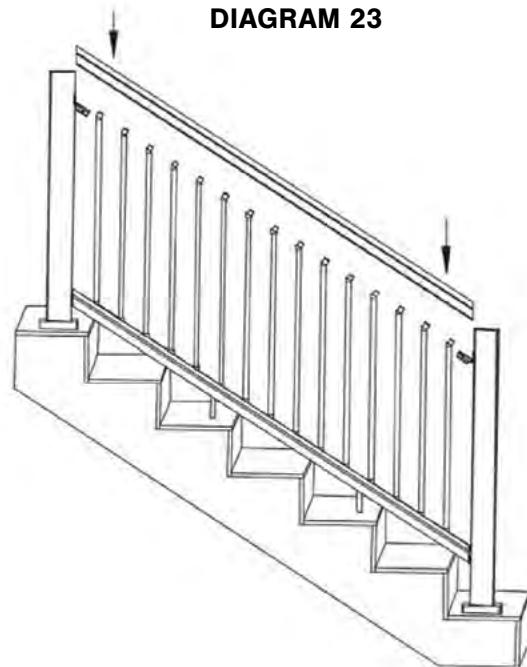
DIAGRAM 22

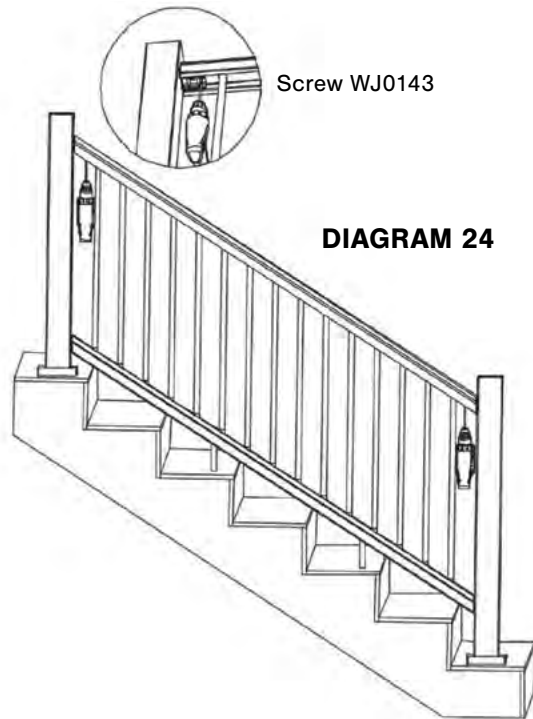


- 14 Install the baluster plugs (**E-LV-0218-C**) and aluminum balusters (**M-R0218-42**) as shown in diagram 22.

- 15 Attach the top rail (**A-UR02**) to the top brackets (**D-R0225**) as shown in diagram 23.

DIAGRAM 23





Screw WJ0143

DIAGRAM 24

- 16 Pre-drill with a 7/64" drill bit and install with screw **WJ0143** as shown in diagram 24.

- 17 Install the post cap (**L-LV-0120**) and gaskets (**F-R0113**, **O-R0115**) as shown in diagram 25.

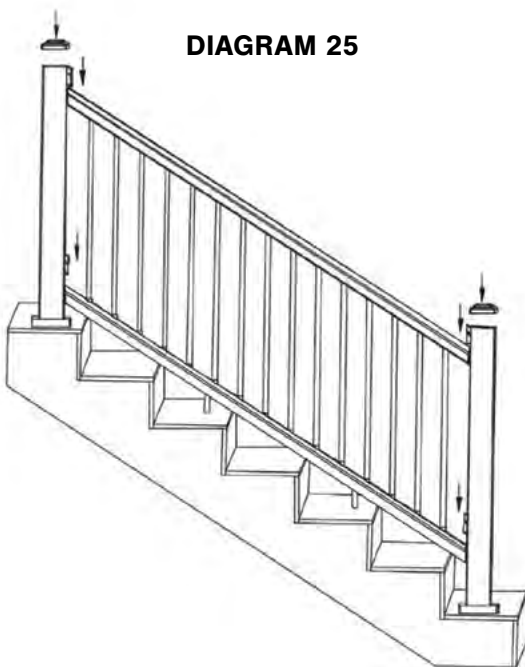


DIAGRAM 25

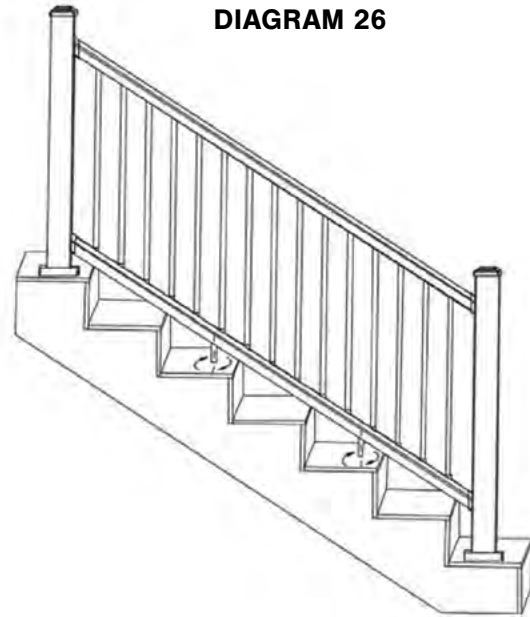


DIAGRAM 26

- 18 If needed adjust the foot blocks (**I-R0217**) to the correct height as shown in diagram 26.

- 19 Install the post cap (**L-LV-0120**) with screw **WJ0155** as shown in diagram 27.

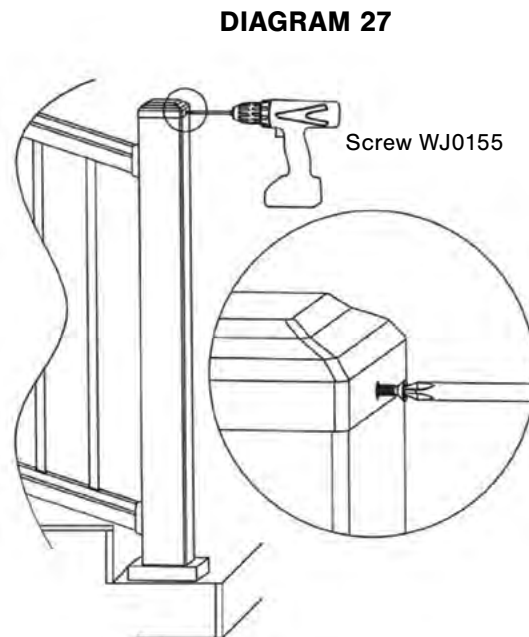


DIAGRAM 27

Screw WJ0155