



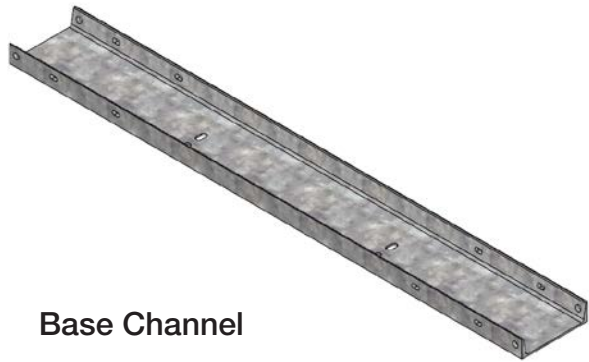
Rooftop Solutions



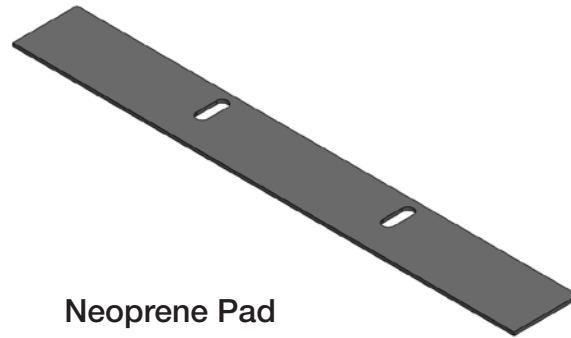
ES0325_ErectaStep Rooftop_Manual_R1

OWNER'S MANUAL

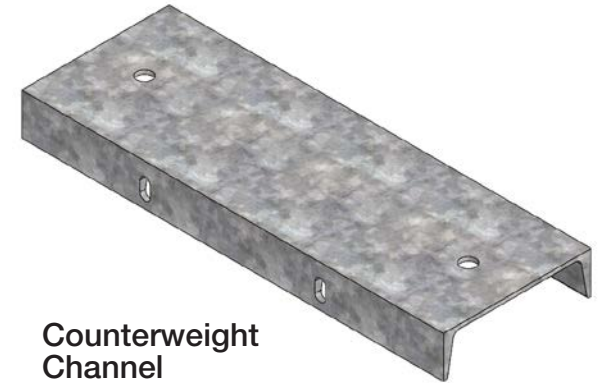
ErectaStep Rooftop Solutions



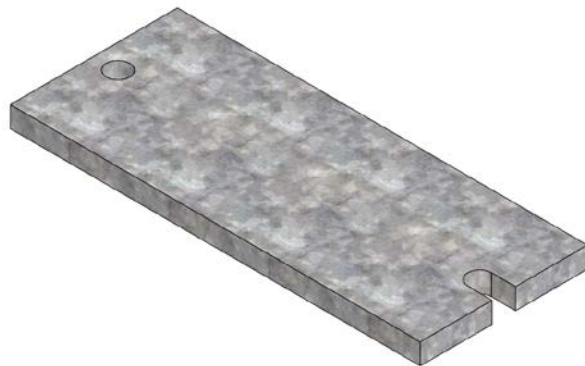
Base Channel



Neoprene Pad



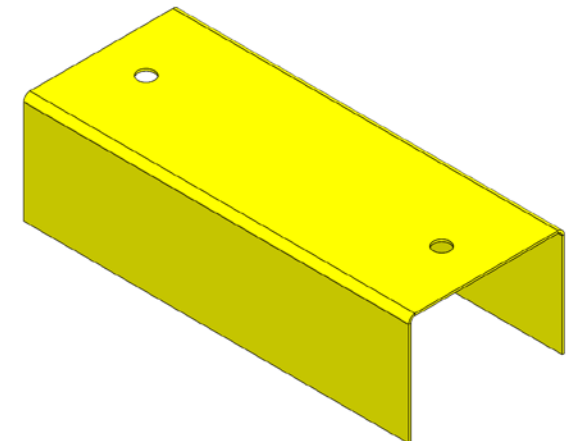
Counterweight Channel



1" Counterweight



1/2" Counterweight




Counterweight Cover Plate

WARNINGS!

READ CAREFULLY AND UNDERSTAND ALL INSTRUCTIONS BEFORE STARTING INSTALLATION. FAILURE TO FOLLOW ALL INSTRUCTIONS MAY RESULT IN DEATH OR SERIOUS PERSONAL INJURY.

IMPORTANT

- Equipment should not be altered or modified from its original design without consultation with the manufacturer.
- Equipment which is damaged or becomes damaged during use, handling, or shipping should be set aside and not used.

 **WARNING!** Failure to assemble unit properly with the correct layout dimensions can result in product damage not covered under warranty – Failure to secure all fasteners may result in death or serious personal injury.

- System should only be assembled in its final location. Never move an assembled system.

 **WARNING!** Backing plates must be used where designated in the instruction manual. Failure to use backing plates where designated may cause equipment to fail and may result in death or serious personal injury.


TORQUE DATA:

- All ½” bolted connections = 56 ft-lbs. lubricated or 75 ft-lbs. dry +/-10%.
For 5/8” anchor bolts = 75 ft-lbs. lubricated or 90 ft-lbs. dry +/-10%.

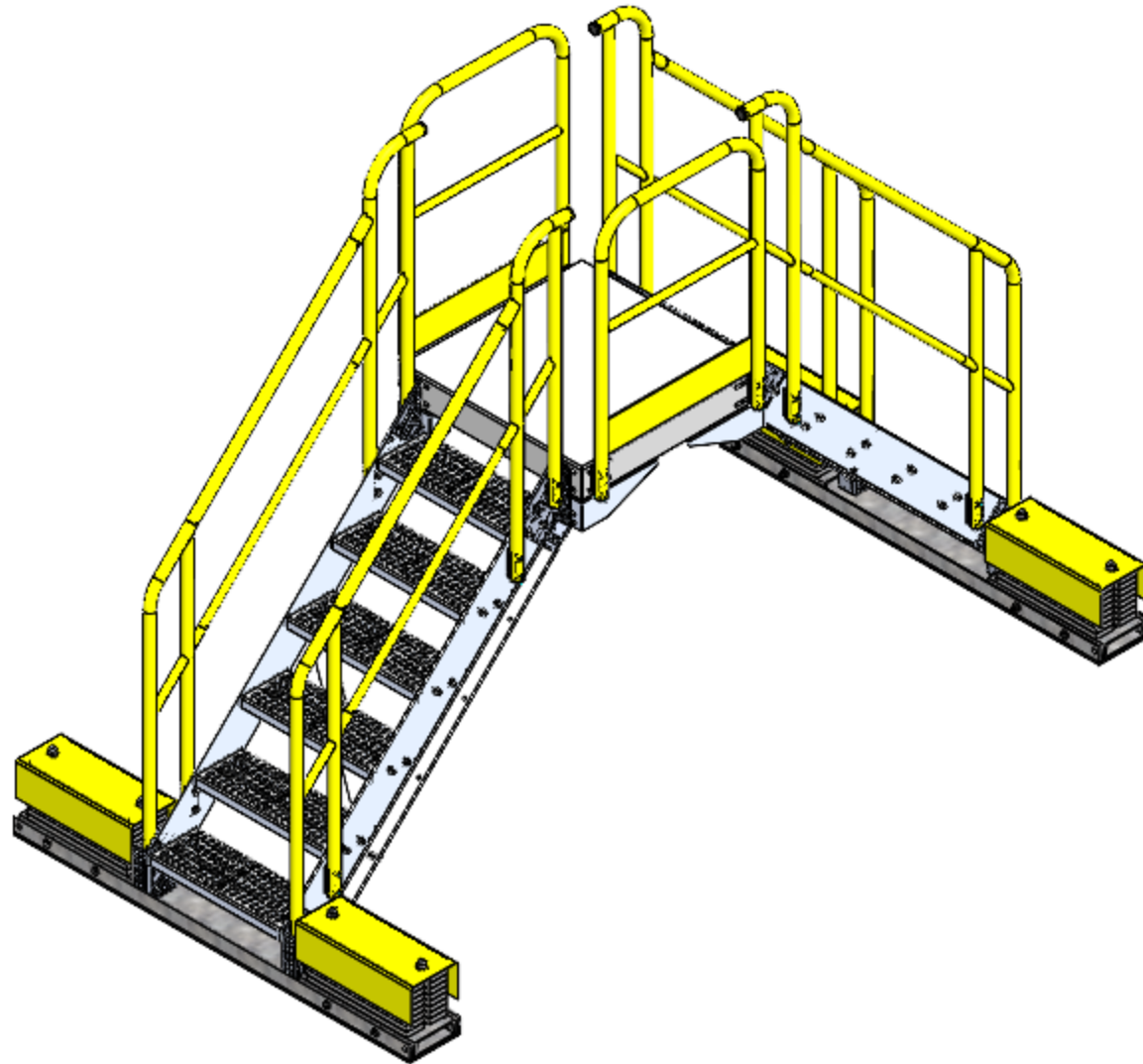
Use of impact wrenches **NOT** sanctioned.



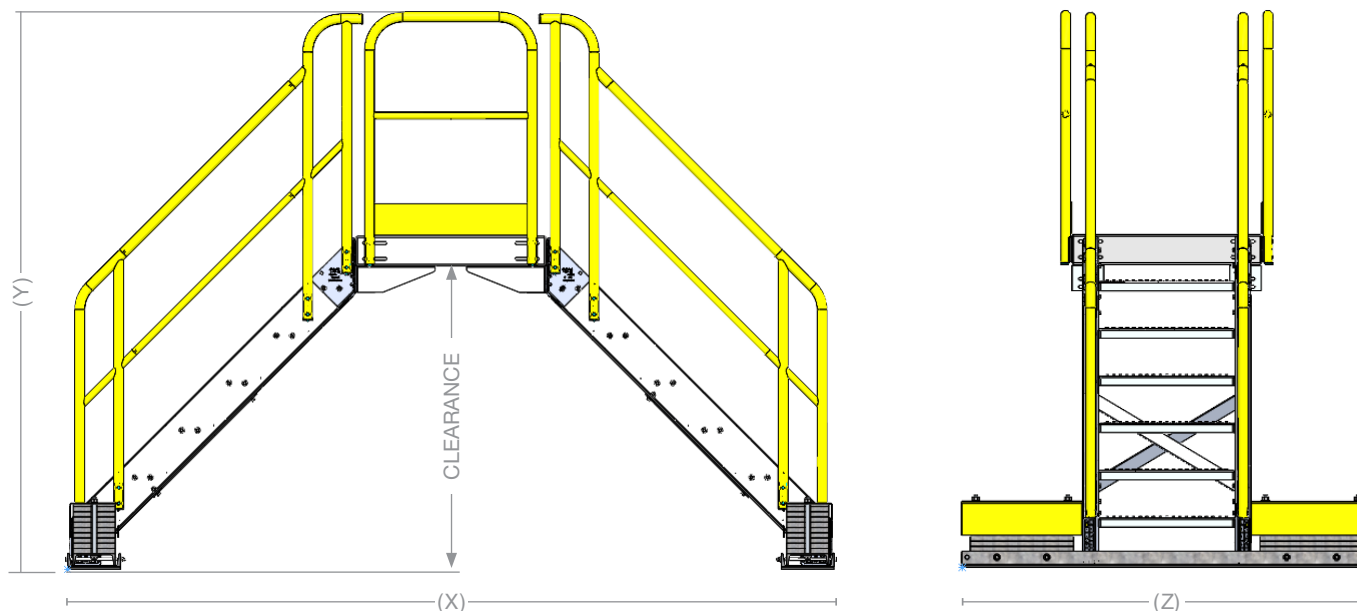
- Min 2 people are recommended for assembly.

 **WARNING!** After a usage period of 60-90 days, check all fasteners to ensure connections are secure. Periodic inspection is recommended to ensure all fasteners are secured. Failure to secure all fasteners may result in death or serious personal injury.

ROOFTOP CROSSOVER WITH COUNTERWEIGHTS



REACTION TABLES FOR ROOFTOP CROSSOVER WITH COUNTERWEIGHTS



System Height	3-Step	4-Step	5-Step	6-Step
Dimension (X)	7'-7 7/8"	9'-1 7/8"	10'-7 7/8"	12'-1 7/8"
Dimension (Y)	6'-6 3/4"	7'-3 3/4"	8'-0 3/4"	8'-9 3/4"
Dimension (Z)	6'-6"	6'-6"	6'-6"	6'-6"
Clearance	2'-6 3/4"	3'-3 3/4"	4'-0 3/4"	4'-9 3/4"
Weight	1,690 lb	1,828 lb	2,146 lb	2,454 lb
Total wind shear (1.0 dead)	1,202 lb	1,432 lb	1,660 lb	1,889 lb
Total overturning moment from wind (1.0 wind)	2,236 lb-ft	3,226 lb-ft	4,386 lb-ft	5,716 lb-ft
Static load capacity	Platform: 50 PSF, Stairs: 1000 lb			
Maximum roof height: 50 ft Maximum applied wind: 115 mph				

ADDITIONAL INFORMATION/WARNINGS FOR ES-ROOFTOP SYSTEM (COUNTERWEIGHT VERSION)

- Self-supporting, counter balanced rooftop application composed of a galvanized steel base, aluminum cross-over, galvanized steel counterweights, powder-coated aluminum counterweight cover and neoprene strips to protect the rooftop.
- Designed for relatively flat rooftops.
- Maximum rooftop height of 50 ft.
- Maximum wind speed of 115 mph.
- Application is only designed for a single platform crossover up to 6 steps.
- Customer is responsible for ensuring roof can withstand bearing pressure/load reported.
- Customer is responsible for ensuring friction-based rooftop system is acceptable for use in proposed location.
- Customer responsible for ensuring existing rooftop can accept ErectaStep Rooftop System.

1. ROOFTOP BASE CHANNEL

FOLLOW INSTRUCTIONS BELOW TO:

- Adhere adhesive backed neoprene pad (2) to the base channel (1). Neoprene pad (2) has a pressure-sensitive adhesive (PSA) backing.

SURFACE PREPARATION:

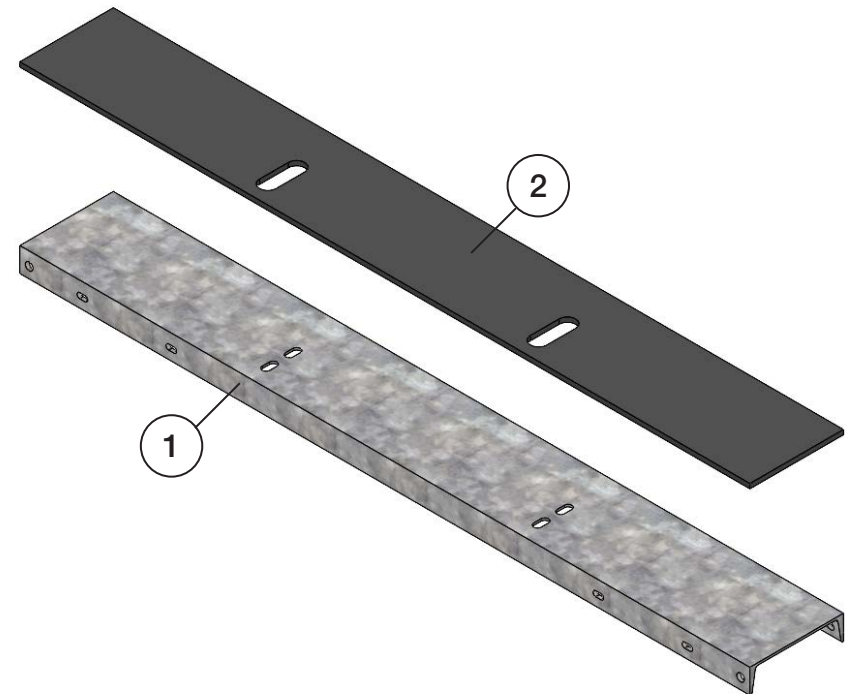
- Free the surface of dust, mold releases, dirt, oil, moisture or other contaminants. This assures optimum bond strength. Select a cleaning agent that does not leave a residue such as isopropyl alcohol.

REMOVAL OF BACKING PAPER:

- Remove backing paper with care, ensuring that the backing paper has separated from the adhesive layer from the neoprene pad.

CAUTION:

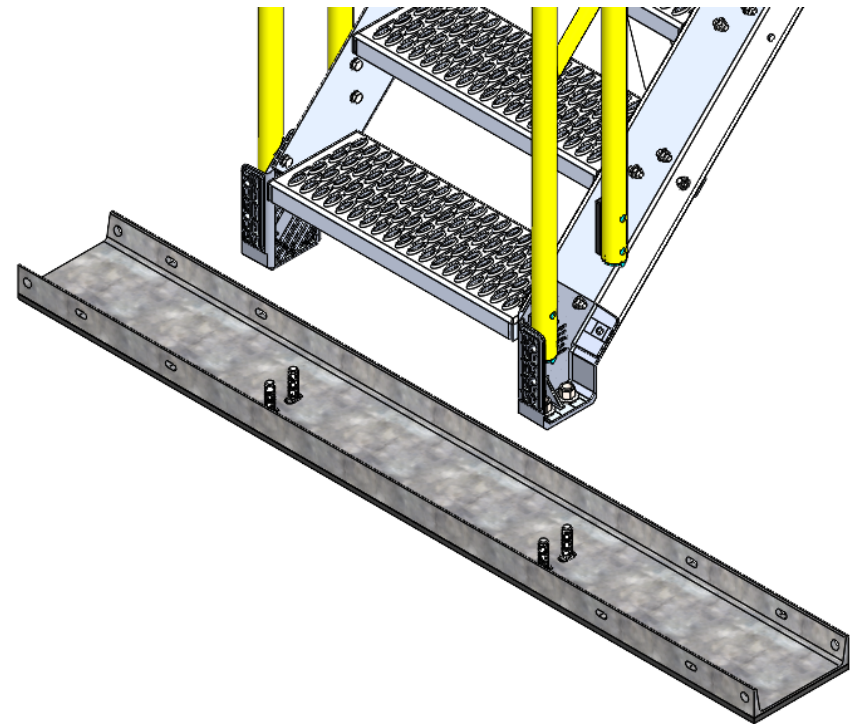
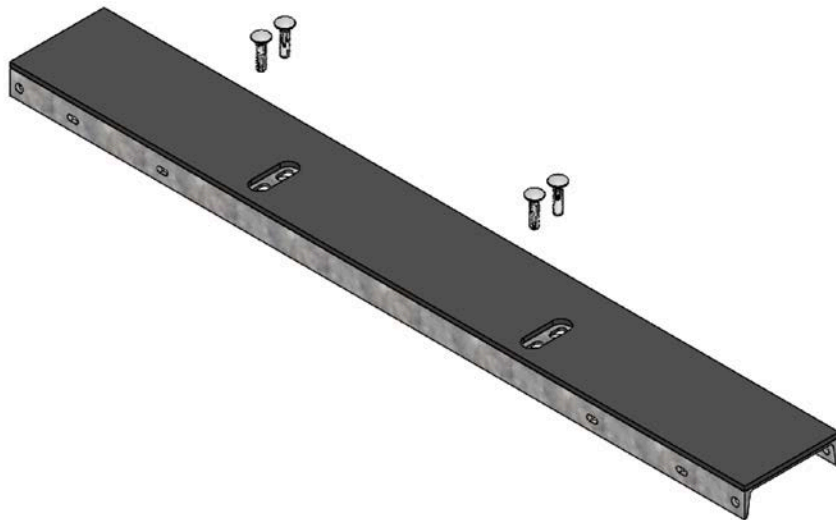
- Use care when removing the backing paper. Even with the best PSA application, the PSA may peel off along with the backing paper. Use caution when peeling off the backing so your PSA functions as intended.
- Repeat for second base channel



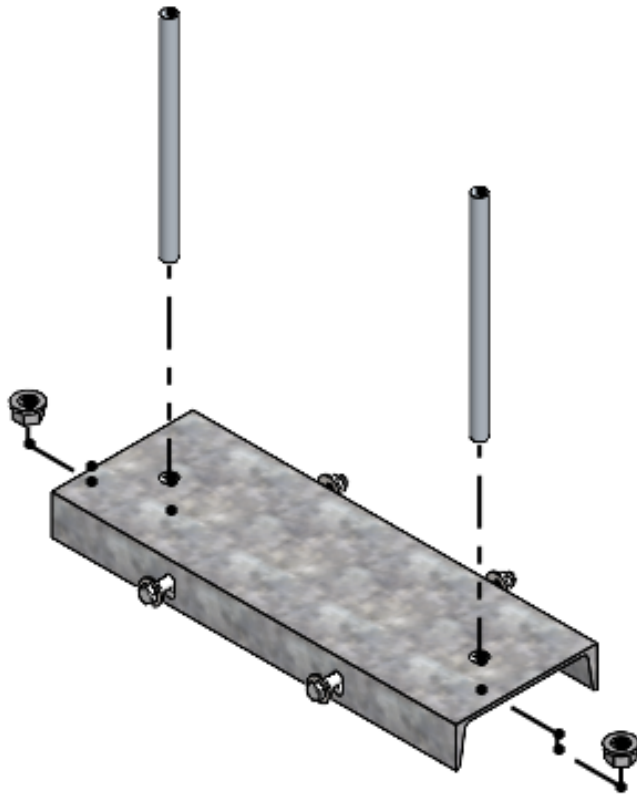
2. BASE CHANNEL TO STAIR CONNECTION

- Insert carriage bolts into the designated slots on the base channel.
- Flip the base channel over so the neoprene pad lays flat on the rooftop surface, ensuring the carriage bolts stay in place, protruding upwards.
- Align the stair system with carriage bolts and set the stair assembly in place, then install washers and nuts onto the bolts. Tighten to specified torque.
- Orientation of the base channel: The holes are offset closer to one flange than the other. When installed, the flange with the closer holes should be recessed beneath the front of the stair to minimize tripping hazards.

Refer to the ES Owner's Manual for details on assembling stairs, connecting stairs to an unsupported ES platform and mounting ES handrails.



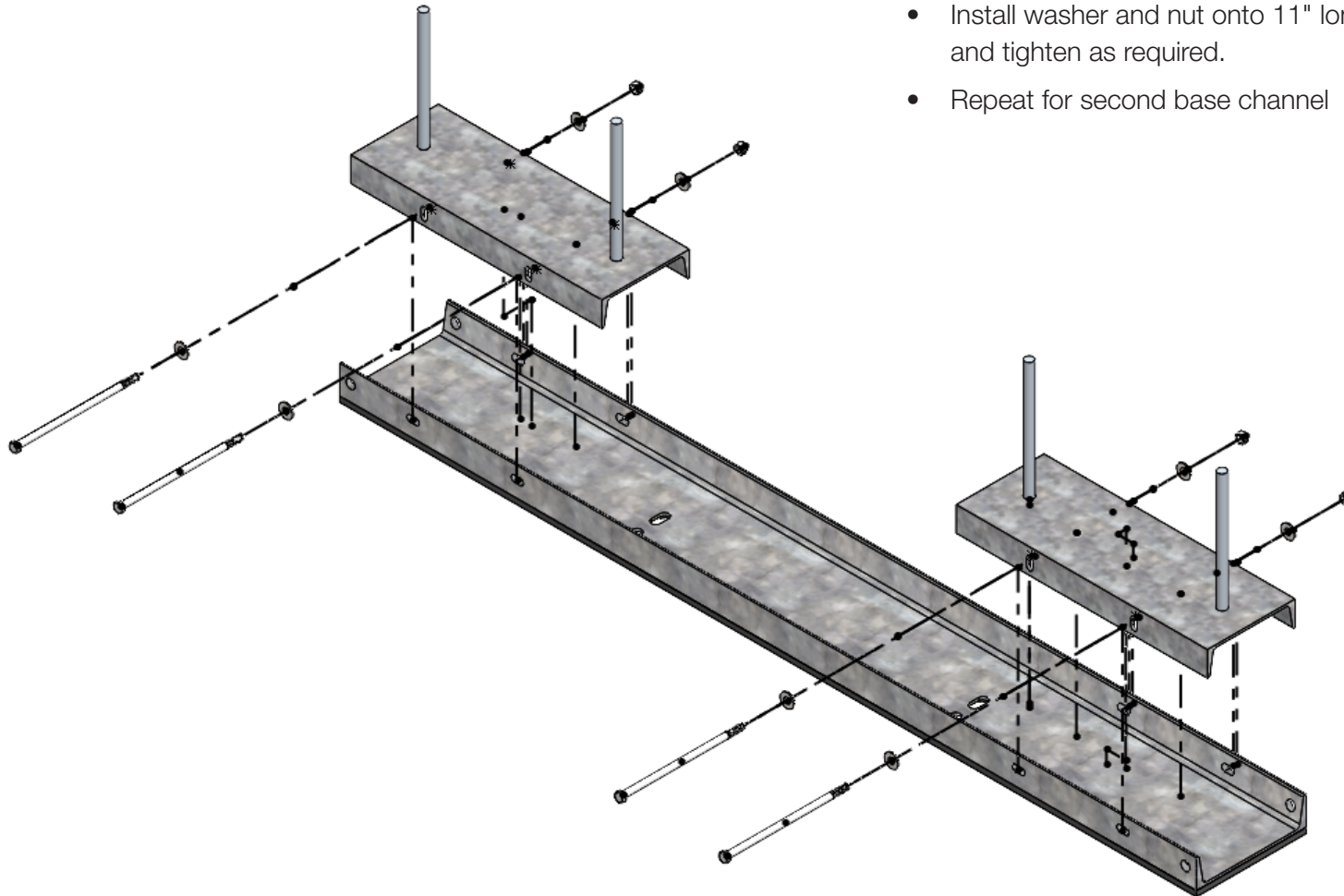
2. ADD THREADED RODS TO COUNTERWEIGHT CHANNEL



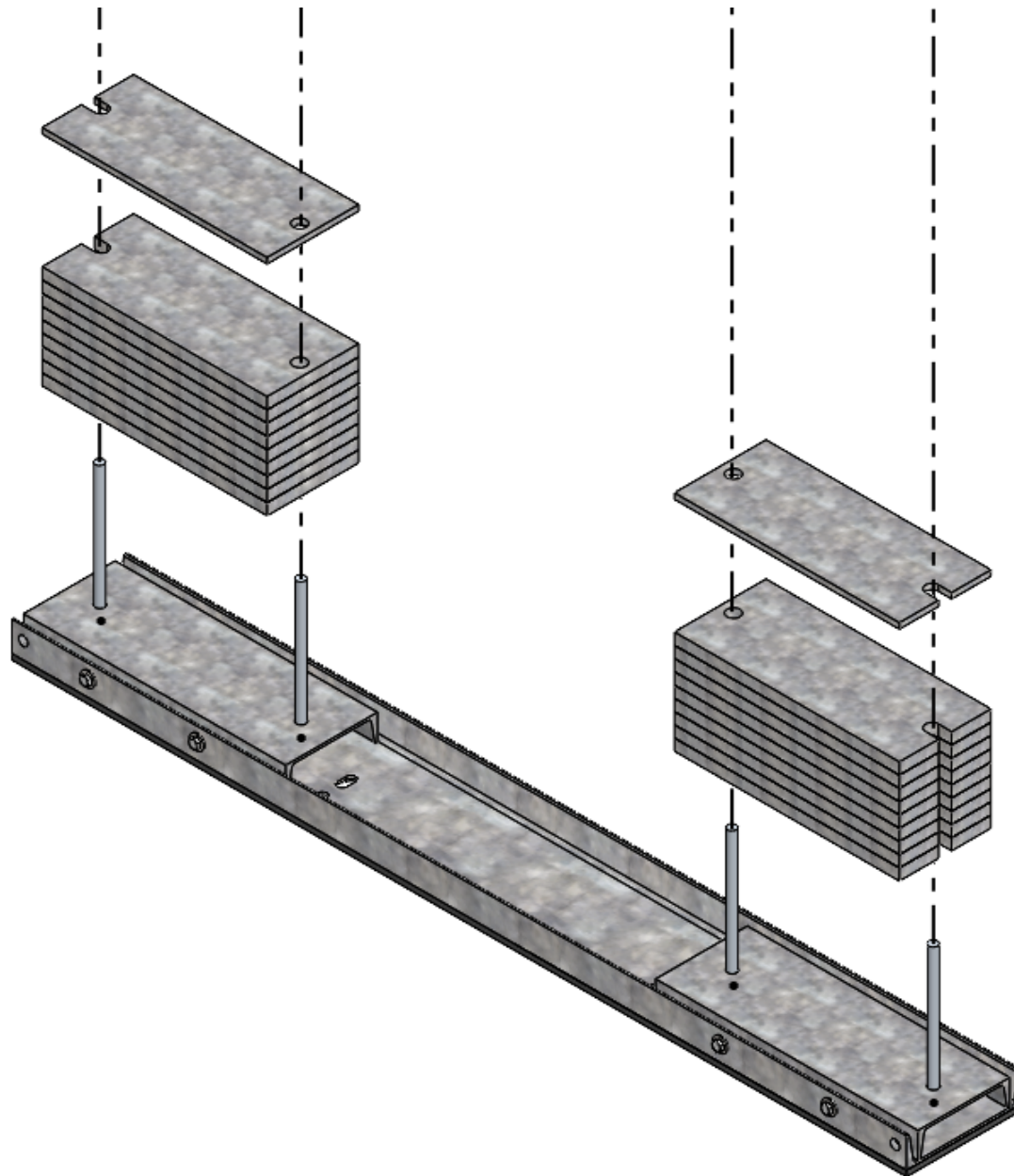
- With the counterweight channels, insert threaded rods through the holes at the top of each counterweight channel.
- Install a washer and nut on the underside of the counterweight channel, and tighten such that at least 3 threads of the threaded rod are through the nut.
- This will loosely secure the rods.
- Repeat 3 more times setting up all 4 counterweight channels.

4. CONNECT COUNTERWEIGHT CHANNEL TO BASE CHANNEL

- Align the slots of the counterweight channel with the slots on the base channel.
- Insert an 11" long hex head bolt and washer through the slots of the counterweight channel and base channel.
- Install washer and nut onto 11" long hex head bolt, and tighten as required.
- Repeat for second base channel

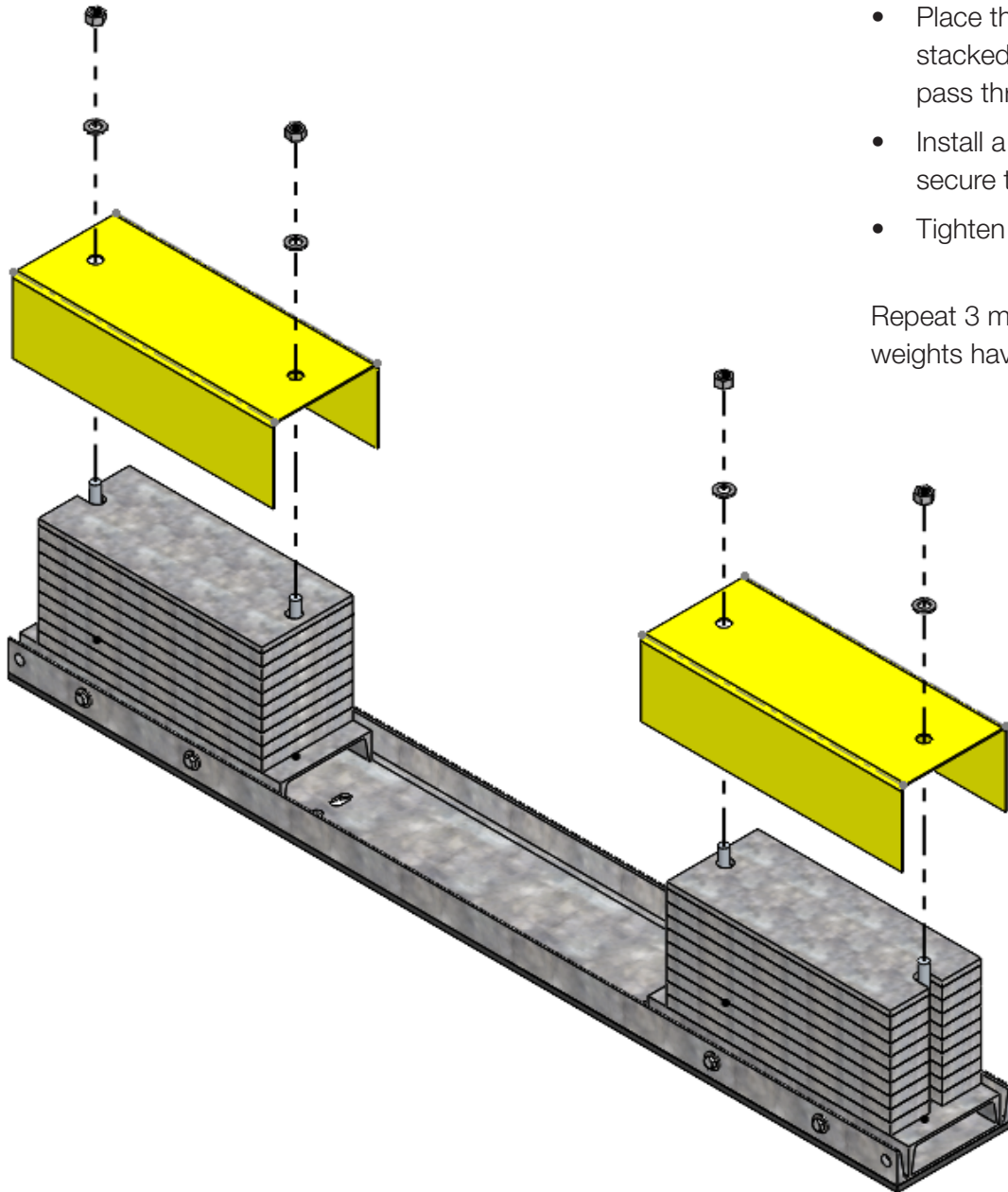


5. STACK COUNTERWEIGHTS



- Stack one counterweight at a time onto the counterweight channel, ensuring the threaded rods pass through the hole and open slot of each counterweight.
- Repeat until all counterweights are in place.
- Initial 3-Step stack is (6) 1" counterweights.
- 4-Step, (7) 1" counterweights per stack.
- 5-Step, (8) 1" counterweights per stack.
- 6-Step, (9) 1" counterweight and (1) ½" counterweight per stack.

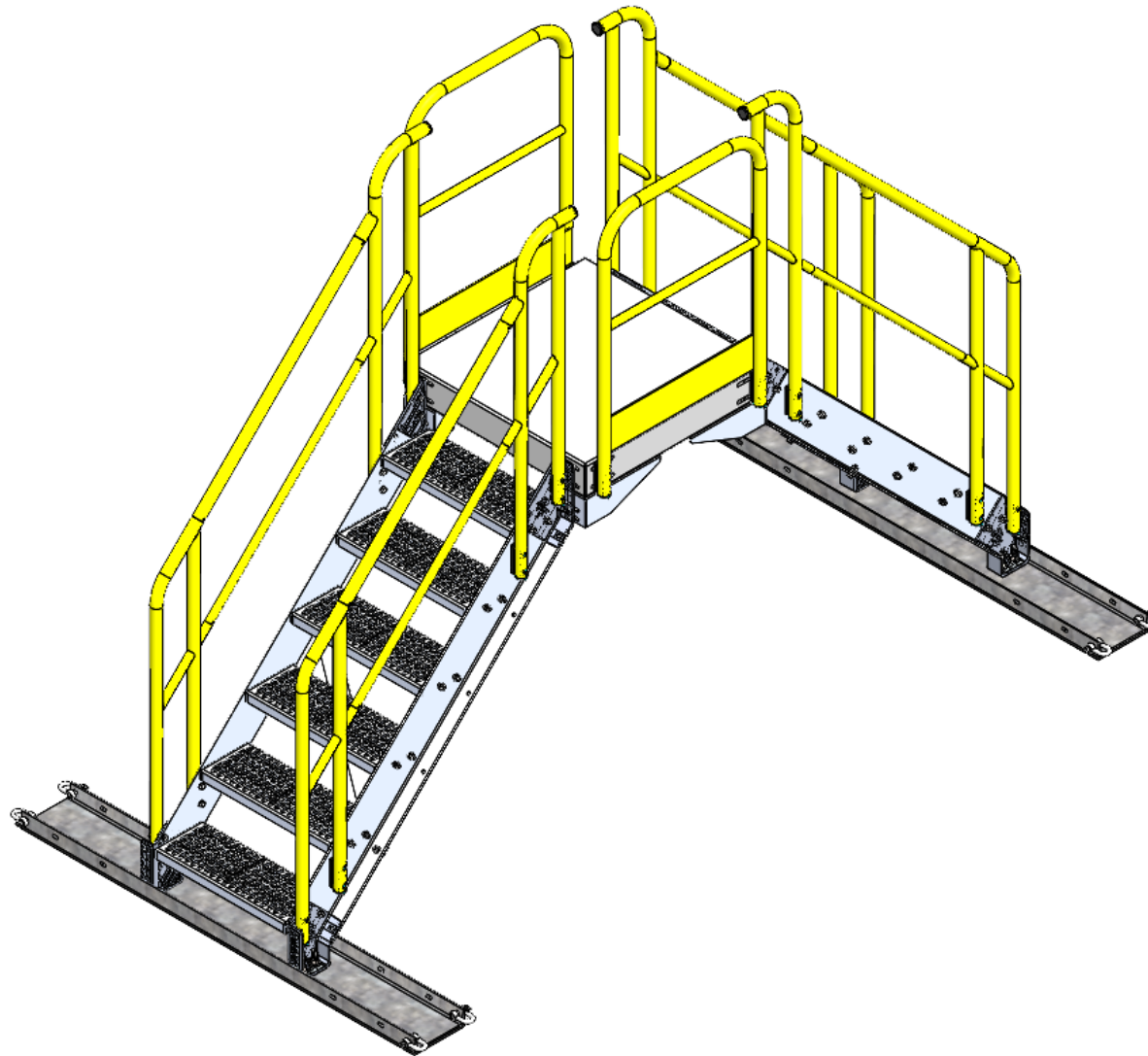
6. ADD COUNTERWEIGHT COVER PLATE AND FASTEN THREADED RODS



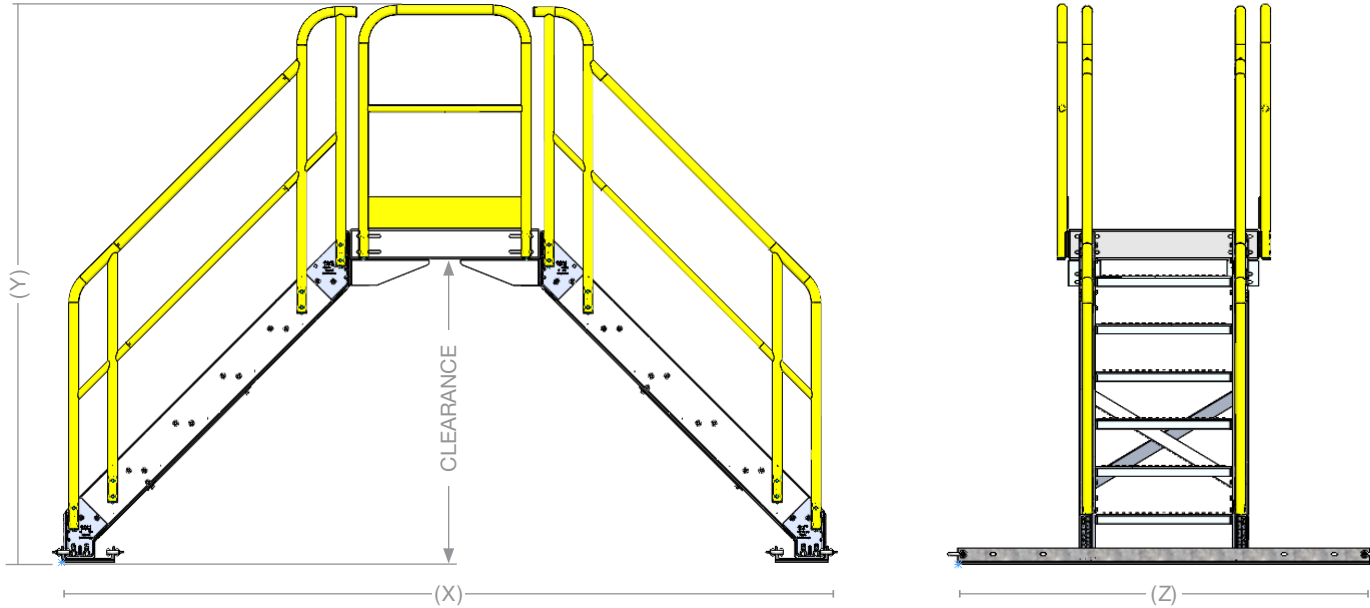
- Place the counterweight cover plate on top of the stacked counterweights, ensuring the threaded rods pass through the holes in the cover plate.
- Install a washer and nut onto each threaded rod to secure the counterweights and cover plate in place.
- Tighten as required

Repeat 3 more times, ensuring all 4 corners of counterweights have been secured.

ROOFTOP CROSSOVER WITHOUT COUNTERWEIGHTS



REACTION TABLES FOR ROOFTOP CROSSOVER WITHOUT COUNTERWEIGHT



System Height		3-Step	4-Step	5-Step	6-Step
Dimension (X)		7'-7 7/8"	9'-1 7/8"	10'-7 7/8"	12'-1 7/8"
Dimension (Y)		6'-6 3/4"	7'-3 3/4"	8'-0 3/4"	8'-9 3/4"
Dimension (Z)		6'-6"	6'-6"	6'-6"	6'-6"
Clearance		2'-6 3/4"	3'-3 3/4"	4'-0 3/4"	4'-9 3/4"
Reactions at each corner	Dead load (FY)	117 lb	129 lb	141 lb	153 lb
	Wind X (FX)	122 lb	140 lb	158 lb	176 lb
	Wind X (FY)	45 lb	57 lb	68 lb	79 lb
	Wind Z (FX)	172 lb	249 lb	339 lb	441 lb
	Wind Z (FZ)	601 lb	716 lb	830 lb	944 lb
Static load capacity		Platform: 50 PSF, Stairs: 1000 lb			
Maximum roof height: 50 ft / Maximum applied wind: 115 mph					
Reactions are reported as totals at each corner and should only be applied to ties that are put in tension by any given load					

ADDITIONAL INFORMATION/WARNINGS FOR ES-ROOFTOP SYSTEM (NON-COUNTERWEIGHT VERSION)

- Tie down rooftop application composed of a galvanized steel base, aluminum cross-over construction, stainless steel shackle, and neoprene strips to protect the rooftop.
- Designed for relatively flat rooftops.
- Designed to be tied into existing anchor points on rooftop.
- Maximum of 50 ft roof height and 115 MPH applied wind load.
- Application is only designed for a single platform crossover of up to 6 steps.
- Customer is responsible for ensuring roof can withstand bearing pressure/load reported.
- Customer responsible for ensuring existing rooftop can accept ErectaStep Rooftop System.
- Customer is responsible for ensuring that anchoring point can withstand loading called out in chart on page 12

1. ROOFTOP BASE CHANNEL

FOLLOW INSTRUCTIONS BELOW TO:

- Adhere adhesive backed neoprene pad (2) to the base channel (1). Neoprene pad (2) has a pressure-sensitive adhesive (PSA) backing.

SURFACE PREPARATION:

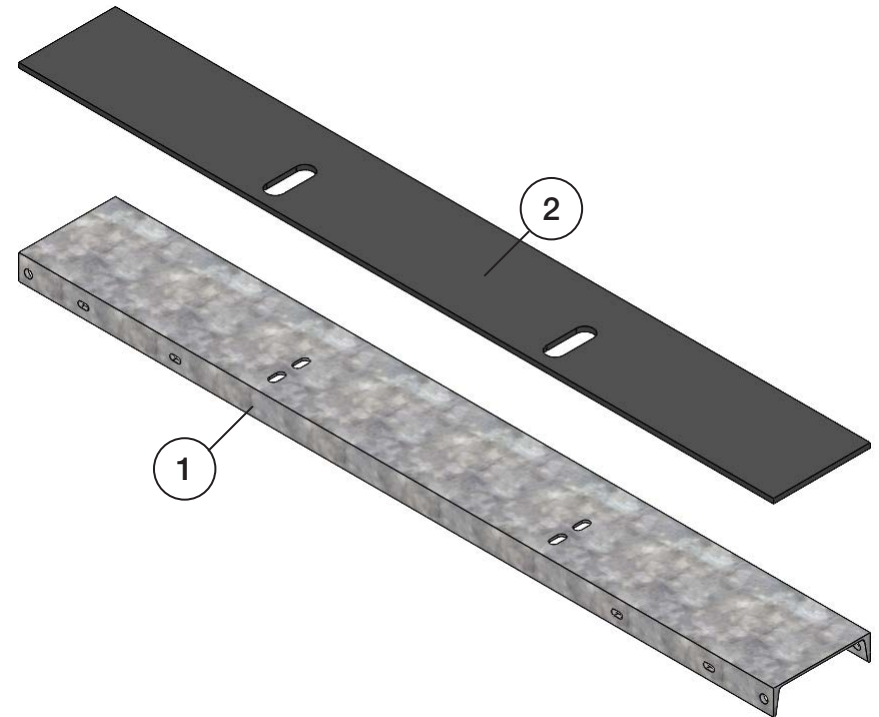
- Free the surface of dust, mold releases, dirt, oil, moisture or other contaminants. This assures optimum bond strength. Select a cleaning agent that does not leave a residue such as isopropyl alcohol.

REMOVAL OF BACKING PAPER:

- Remove backing paper with care, ensuring that the backing paper has separated from the adhesive layer from the neoprene pad.

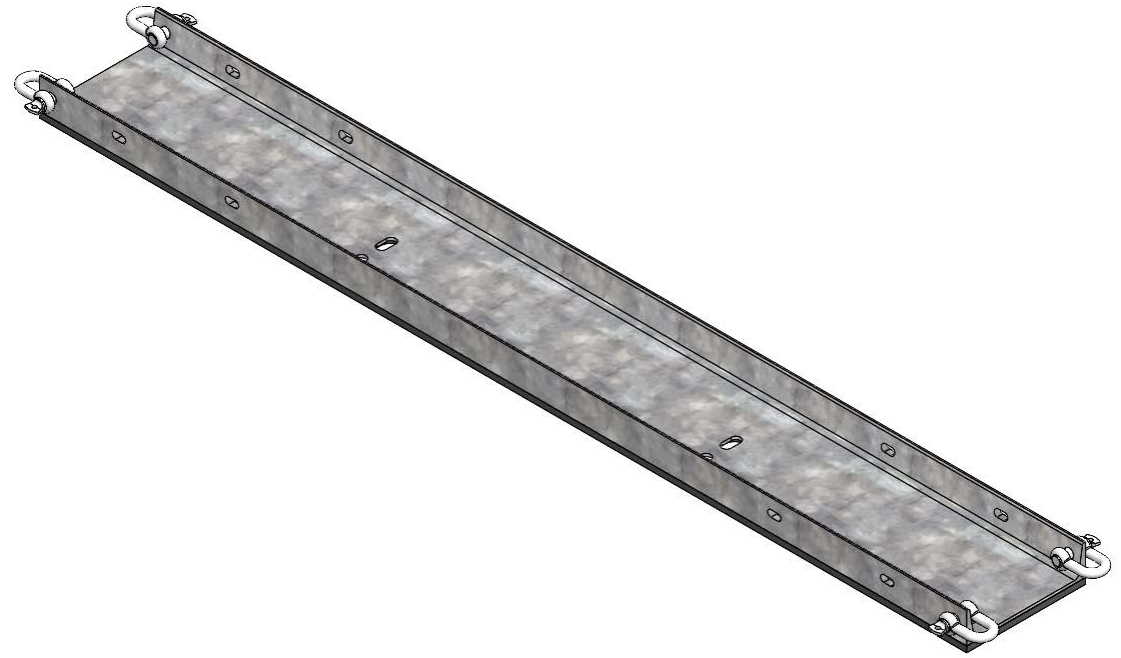
CAUTION:

- Use care when removing the backing paper. Even with the best PSA application, the PSA may peel off along with the backing paper. Use caution when peeling off the backing so your PSA functions as intended.
- Repeat for second base channel.



2. TIE-DOWN CONFIGURATION

- Shackles will be installed at the 4 corners of the Base Channel.
 - Mounting holes are 13/16”.
- Ensure shackles are securely fastened and base channel remains properly aligned and stable.
- The shackles will be used to strap or tether the system to an existing structure on the customer’s roof.
- **Important Note:** The customer is responsible for ensuring the structure used to secure the system is capable of withstanding applicable wind loads. Proper engineering evaluation should be conducted to confirm structural adequacy.
- For this configuration, the counterweight channel and counterweights will NOT be used.



ROOFTOP CROSSOVER SYSTEM

ASSEMBLY CRITERIA

The assembly of stairs, platform, and handrails should be performed in accordance with their respective manuals. Ensure all components are installed as specified to maintain structural integrity and safety. Refer to the individual manuals for detailed installation procedures, fastening requirements, and safety guidelines.



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