

Assembly Instructions

for Crossover Stair and Ramp Units





Required Tools:

1. Impact Wrench / Socket wrench with 3/4 and 9/16" sockets

2. 3/4 Open Ended Wrench

3. Level

4. Tape Measure

Helpful Hints:

1) Take the time to insert 1/2" hardware into all brackets EXCEPT the stair brackets.

2) Do not tighten bolts fully until assembly is complete. Adjustments will likely be required as you work.

<u>Step 1</u>:

Arrange RTSF21 bases to match approximate platform size. Insert main upright supports (back-to-back 1-3/4" x 1-5/8" channel) into square receiver and anchor with 3/8" gold channel nut and bolt.



<u>Step 2</u>:

Attach corner brackets to the uprights using 1/2" silver bolt and 1/2" gold channel nut. To make step 4 easier, mount the top flange of the bracket at the desired clear height of the platform.



<u>Step 3</u>:

Off to the side and upside down, attach the platform grating (11-3/4" W) to the main platform beams (back to back 3-1/4" x 1-5/8" channel) using the 1/2" hardware.



<u>Step 4</u>:

Lift the platform assembly and flip so walking surface is facing up. Carefully set onto corner brackets. <u>This will likely require two people</u>. Secure with 1/2" hardware.



<u>Step 5</u>:

Attach 1-5/8" channel to the ends of the walking surface for additional rigidity using 1/2" hardware.



<u>Step 6</u>:

Arrange stair bases around the platform, two per side, and attach stair base brackets to the channel on the base using 1/2" hardware. ONLY HAND TIGHTEN. Adjustment will be needed.



<u>Step 7</u>:

Connect the stair stringers (back-to-back 3-1/4" x 1-5/8" beveled) to the stair base bracket on the base. Be sure to leave about 2" of channel exposed on the base to allow room for the railing upright to connect to the other side of the bracket (See Step 10). Also attach the stringer to the platform upright using the 135° bracket and 1/2" hardware.



<u>Step 8</u>:

Attach stair brackets to the stair stringers at the approximate height. This system is designed around a 8-1/2" - 9" rise.



<u>Step 9</u>:

Place stair grating (9-1/2" W) between brackets, and secure with grating washer, 2-3/4" bolt, flat washer and nut. Once secure, adjust and level stairs to 8-1/2"-9" rise.



Step 10:

Attach railing uprights (1-5/8" x 1-5/8" channel) to stair base bracket using 1/2" hardware. You may now secure the bracket to the base. Also attach and hand tighten all railing brackets with 1/2" hardware.



Adjustment will be required for next step.

<u>Step 11</u>:

Attach stair railings, top first, and secure. Mid rail should be centered between the top and the stringer. Attach yellow end caps.



<u>Step 12</u>:

Attach platform railings and secure. Mid rail should be centered between the top and the platform.



Custom solutions are offered, and may deviate from the standard design slightly. If there are ever any questions, please feel free to call Eberl Iron Works, Inc. Rooftop Support Systems division:

(716) 854-7633

Standard Crossover Stair units range from 2 stairs to 8 stairs, and can span 3 ft. to 8 ft.



Thank you very much for your business! We look forward to working with you again!



Crossover Ramp Assembly

Estimated Assembly Time:

One worker—1.5 hrs.

Two workers— < 1 hrs.

(3' Ramp with 3'x3' platform)

Required Tools:

1. Impact Wrench / Socket wrench with 3/4 and 9/16" sockets

2. 3/4 Open Ended Wrench

3. Level

4. Tape Measure

Helpful Hints:

1) Take the time to insert 1/2" hardware into all brackets.

2) Do not tighten bolts fully until assembly is complete. Adjustments will likely be required as you work.

<u>Step 1</u>:

Arrange RTSF21 bases to match approximate platform size. Insert main upright supports (short 1-5/8" channel) into square receiver and anchor with 3/8" gold channel nut and bolt.



<u>Step 2</u>:

Off to the side, attach the grating to the platform frame pieces (3-1/4" x 1-5/8" channel) as well as the ramp frame pieces (3-1/4" x 1-5/8" channel w/ 15° bevels).



<u>Step 3</u>:

Attach the platform portion to the top of the uprights using the 90° brackets and 1/2" hardware. (NOTE: Larger 3-Hole 90° brackets are supplied for higher ramps)



<u>Step 4</u>:

Arrange ramp bases around the platform to prepare for ramp attachment.



<u>Step 5</u>:

Attach the four hole 15° bracket to the top of the beveled ends of each ramp assembly. Lay the ramps over the bases and secure the 15° bracket to the platform as well as the ramp bases.



<u>Step 6</u>:

Place rubber transition pieces at the bottom of each ramp (seen above).

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(716) 854-7633

Standard Crossover Ramp units range from 3 ft. ramps to 8 ft. ramps, and can span 3 ft. to 6 ft.



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