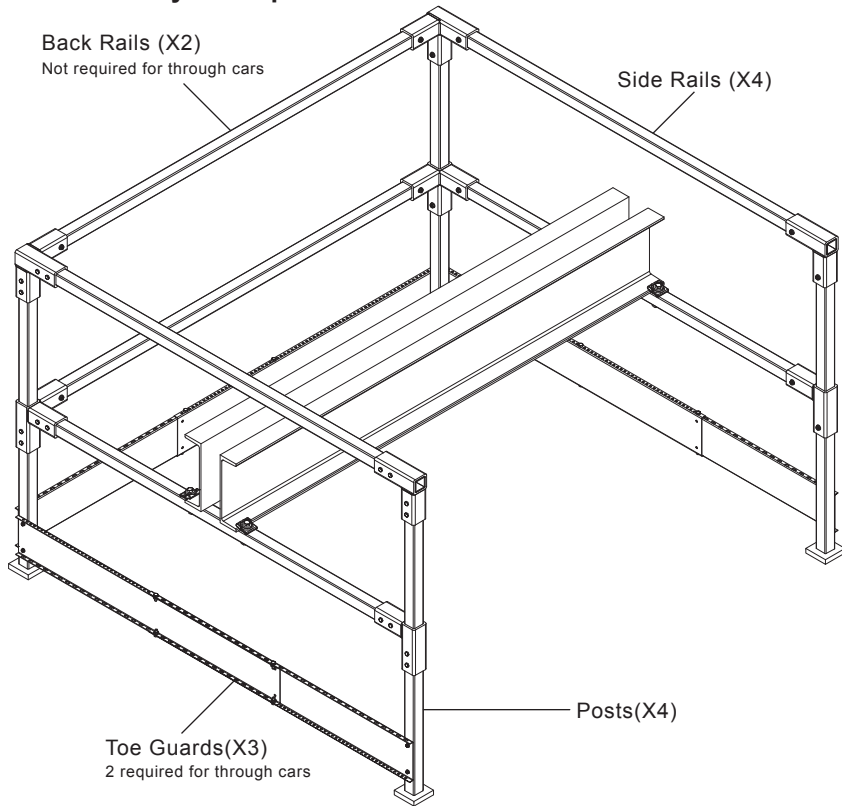


This manual describes the standard procedure for Car Top Railing assembly.

Standard Assembly Example



IMPORTANT

- FOR ASSEMBLY, YOU WILL REQUIRE FOUR POSTS, TOE GUARDS, AND RAILING.
- THE NUMBER OF RAILING AND TOE GUARDS MAY CHANGE DEPENDING ON REQUIREMENTS AND/OR SPECIFICATIONS.
- ALL COMPONENTS MUST BE ADEQUATELY SECURED.
- SOME FIELD TRIMMING MAY BE REQUIRED FOR INSTALLATION OF THE GUARDS.
- GUARD CAN BE MOUNTED ABOVE OR BELOW CROSSHEAD.

⚠ WARNING

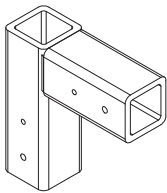
- WATCH YOUR FINGERS WHEN ADJUSTING GUARDING. THEY MAY BECOME PINCHED RESULTING IN INJURY.
- BE CAREFULL AROUND PIPE ENDS, INSIDE THE PIPE AND SCREW ENDS. METAL SHAVINGS, ETC. MAY INJURE YOUR FINGER.
- DO NOT STEP OR SIT ON TOP OF RAILING.
- ALWAYS WEAR PROPER SAFETY EQUIPMENT WHEN INSTALLING AND CUTTING RAILING.

1

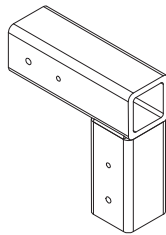
Check the contents of each package.

Contents may change depending on requirements and/or specifications.

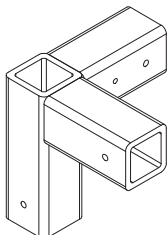
Fixtures Package



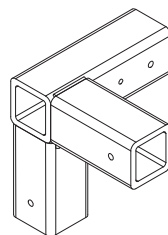
CH-0090
90 Degree Top Left Hand (X1)
90 Degree Top Right Hand (X1)



CH-0091
90 Degree Bottom Left Hand (X1)
90 Degree Bottom Right Hand (X1)



CH-0030
Three Way Top Left Hand (X1)
Three Way Top Right Hand (X1)
Not required for through cars.



CH-0031
Three Way Bottom Left Hand (X1)
Three Way Bottom Right Hand (X1)
Not required for through cars.

Hardware Package



Forged Rail Clip (X4)



Long 1/4" HH Bolt (X22)



Plastic Caps (X4)



1/2" HH Bolt (X4)



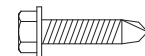
Short 1/4" HH Bolt (X32)



Rubber Foot (X4)



1/2" Hex Nut (X4)



1/4" Self Tapping Screw (X12)



1/4" Serrated Nut (X32)



1/2" Flat Washer (X4)



1/2" Lock Washer (X4)



1/4" Nut (X2)



1/4" Flat Washer (X4)

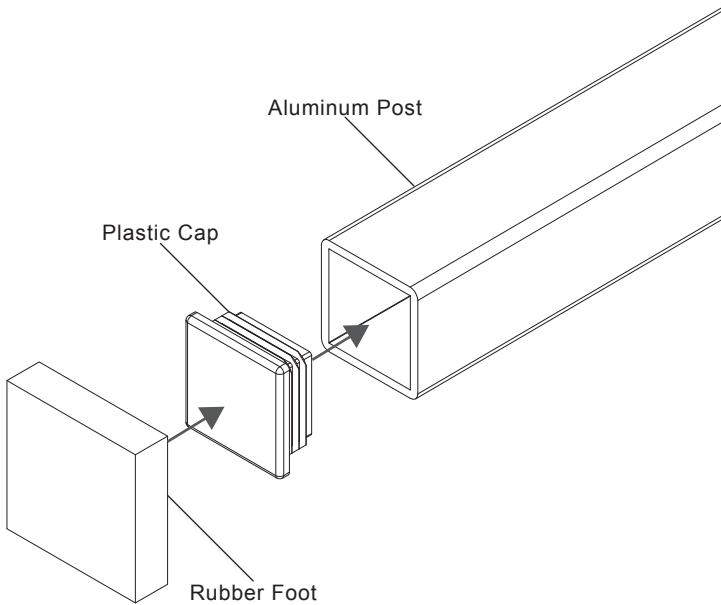


1/4" Lock Washer (X2)

2 Mount the rubber feet to guard posts.

Assemble Posts

1. Insert plastic caps in 1.5" x 1.5" aluminum leg posts.
2. Remove paper from rubber foot to reveal adhesive.
3. Attach rubber foot to plastic cap.



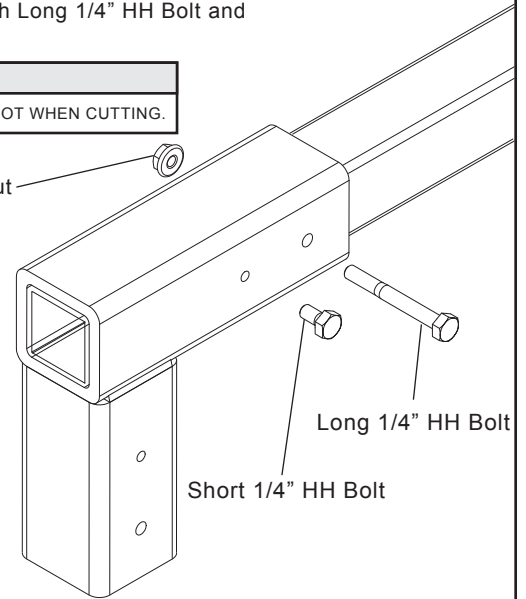
3 Attach fixtures to rail.

1. Cut back and side rails to desired length.
2. Attach fixtures to rails and post with supplied Short 1/4" HH Bolt.
3. Once guarding is set in desired location, drill and through-bolt with Long 1/4" HH Bolt and 1/4" Serrated Nut.

CAUTION

- MATERIAL MAY GET HOT WHEN CUTTING.

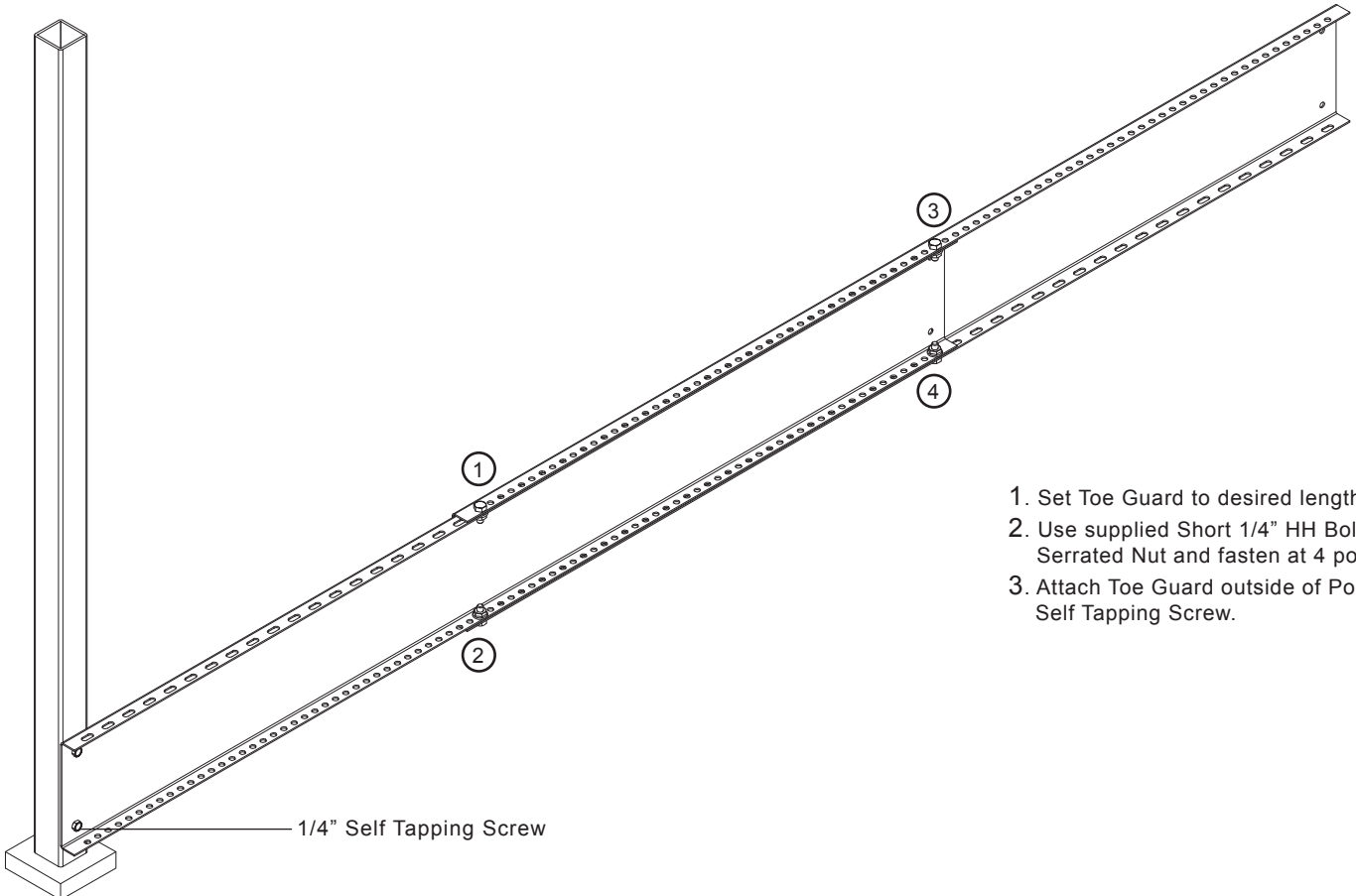
1/4" Serrated Nut



4 Mount Toe Guards in place.

Typical toe guard assembly detail.

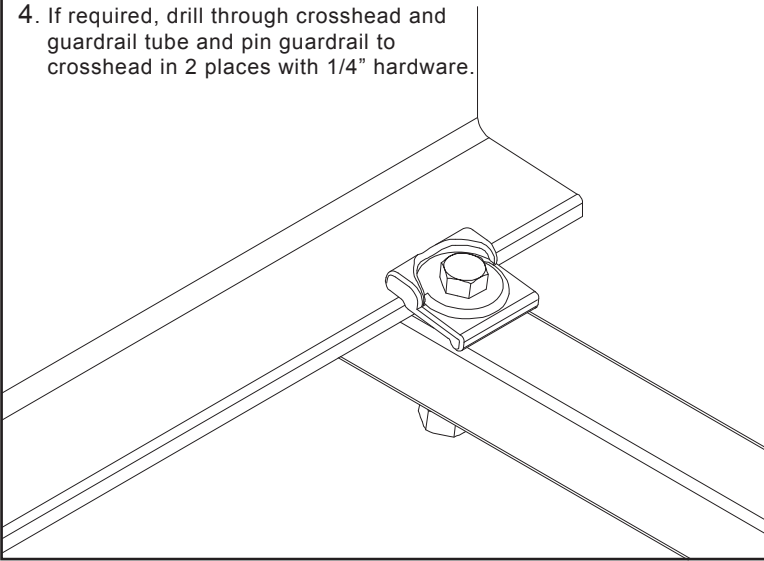
Toe Guards



1. Set Toe Guard to desired length.
2. Use supplied Short 1/4" HH Bolt and 1/4" Serrated Nut and fasten at 4 points as shown.
3. Attach Toe Guard outside of Post using 1/4" Self Tapping Screw.

5 Attach railing to crosshead.

1. Drill hole to accommodate 1/2" HH Bolt.
2. Secure guarding to crosshead using 8 Lb Rail Clips in 4 places. Attach using supplied 1/2" hardware.
3. Guarding can be secured above or below crosshead with the middle or top rail.
4. If required, drill through crosshead and guardrail tube and pin guardrail to crosshead in 2 places with 1/4" hardware.



This completes the assembly procedure.

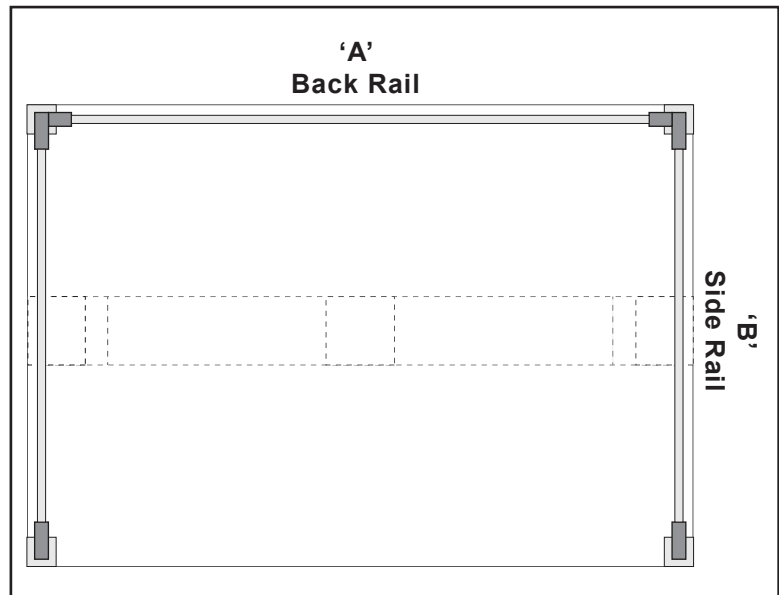


Isometric 3D view of a typical guardrail assembly

Product information.

Estimated guardrail weights for standard capacity and platform sizes.

	PART #	CAR WEIGHT	GUARD WEIGHT
Passenger Front Opening	CH-2001	2000 lb. 72" ('A') x 61" ('B')	57 lb.
	CH-2501	2500 lb. 84" ('A') x 61" ('B')	59 lb.
	CH-3001	3000 lb. 84" ('A') x 67" ('B')	60 lb.
	CH-3501	3500 lb. 84" ('A') x 74" ('B')	62 lb.
	CH-4001	4000 lb. 72" ('A') x 100" ('B')	67 lb.
Passenger Through	CH-4501	4500 lb. 72" ('A') x 106" ('B')	68 lb.
	CH-2002	2000 lb. 72" ('A') x 66" ('B')	50 lb.
	CH-2502	2500 lb. 84" ('A') x 66" ('B')	50 lb.
	CH-3002	3000 lb. 84" ('A') x 72" ('B')	51 lb.
	CH-3502	3500 lb. 84" ('A') x 80" ('B')	53 lb.
Freight Front Opening	CH-4002	4000 lb. 72" ('A') x 108" ('B')	60 lb.
	CH-4502	4500 lb. 72" ('A') x 114" ('B')	61 lb.
	CH-4010	4000 lb. 76" ('A') x 96" ('B')	66 lb.
	CH-6010	6000 lb. 100" ('A') x 120" ('B')	75 lb.
	CH-8010	8000 lb. 100" ('A') x 120" ('B')	75 lb.
Freight Through	CH-1010	10,000 lb. 100" ('A') x 144" ('B')	81 lb.
	CH-1210	12,000 lb. 124" ('A') x 168" ('B')	90 lb.
	CH-4020	4000 lb. 76" ('A') x 96" ('B')	57 lb.
	CH-6020	6000 lb. 100" ('A') x 120" ('B')	63 lb.
	CH-8020	8000 lb. 100" ('A') x 120" ('B')	63 lb.
	CH-1020	10,000 lb. 100" ('A') x 144" ('B')	69 lb.
	CH-1220	12,000 lb. 124" ('A') x 168" ('B')	74 lb.



NOTICE

- Weights and size may vary due to customization.
- Guardrail tube may need to be cut to suit platform configuration.