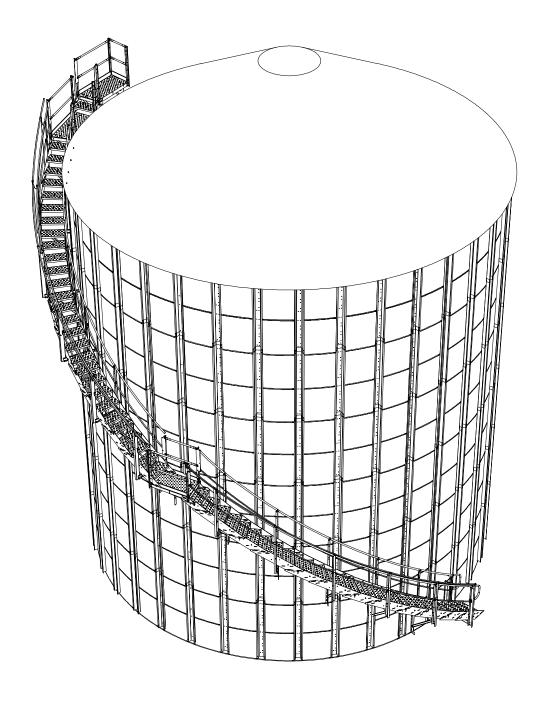
C-Series Sidewall Stairs

39" Commercial Duty Assembly Instructions & Parts Reference

CC3900



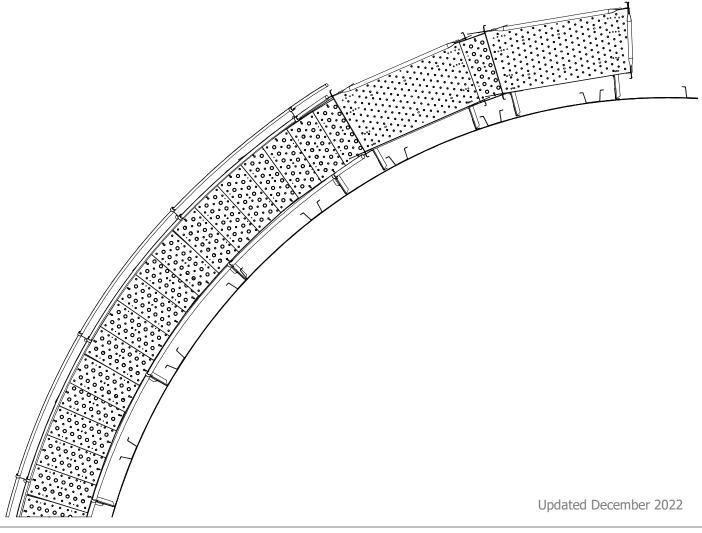


C-Series Sidewall Stairs

39.37" Commercial System

Document Guide

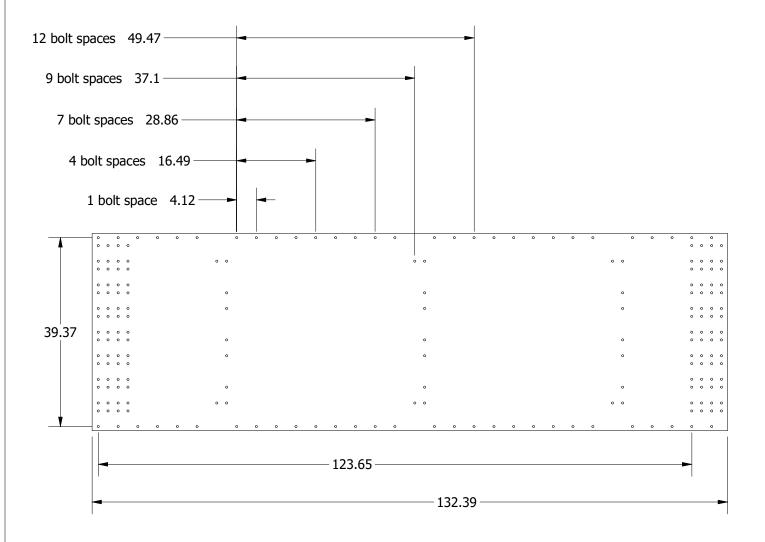
Wall Bracket Layout			4
Position Guide			6
Eave Platform Layouts		7	
Top Platforms: Roof Access Platform		10	
Top Platforms: Manhole Access Platform		18	
Stair Run: split 4-step	2	20	
Stair Run: 5-step	25		
Rest Landing Platform	28		
Stair Run: 4-step30			
Stair Run: Bottom Section35			
Handrail Guides37			



39" Bin Sheet Bolt Spacing

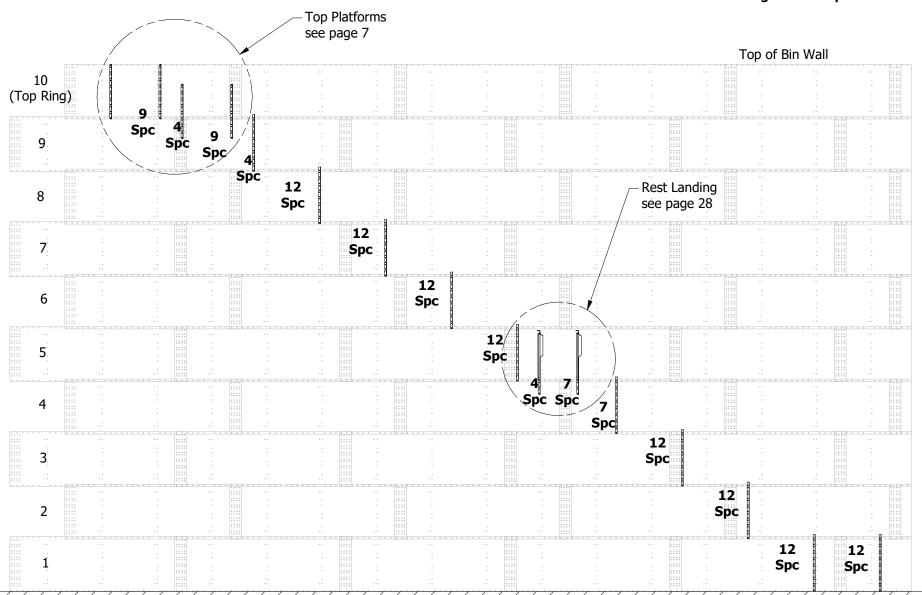
A standard 39" bin sheet is shown below. Wall bracket placement is marked by "Bolt Spaces" throughout these instructions. On a 39" sheet, a bolt space is equal to 4.125 inches.

Use this page to convert distances given in bolt spaces to inches. Example: 12 SPC = 49.5" Correct spacing between wall brackets is crucial for proper stair assembly.



39" Bin Sheet (1 Sheet = 30 bolt spaces)

C-Series Commercial 39" Sidewall Stairs, 10-Ring Bin Example



Overall Stair Run Distance along the bin wall can be determined using this formula:

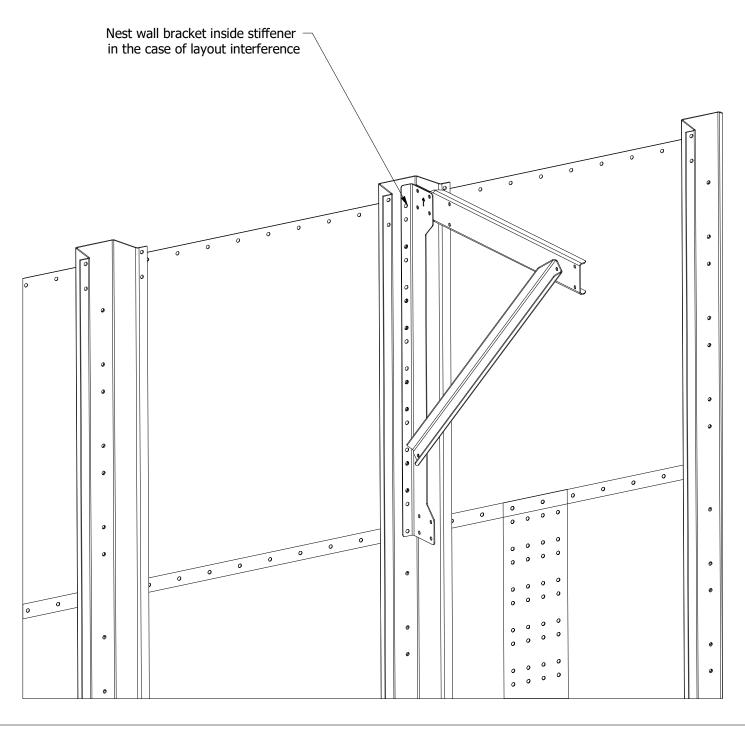
Bolt Spaces: 14 + 12 per ring + 6 per rest landing = Total Bolt Spaces

Linear Feet = Total bolt spaces/2.91 **Bin Sheets** = Total bolt spaces/30

39" Outside Stiffener Accommodation

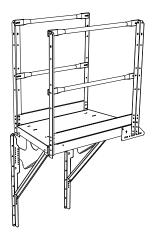
Standard wall bracket layout may be interrupted by the use of exterior stiffeners If the bracket lands on an occupied bolt hole, it is recommenced to nest the wall bracket in the stiffener valley to utilize existing holes

Minor deviation (\pm 1.5") from standard bolt spacing can be absorbed by adjustment of stair sections



CC3900 Platform Elevation Positions

PARTS LIST				
ITEM QTY PART NUMBER		PART NUMBER	DESCRIPTION	
1	1 CS-33901		Bracket, Wall, 39.37 Platform	
2	1	CS-34402	Brace, Plate, Platform Support	
3	1	CS-32002	Channel, K-Brace, C-Series	

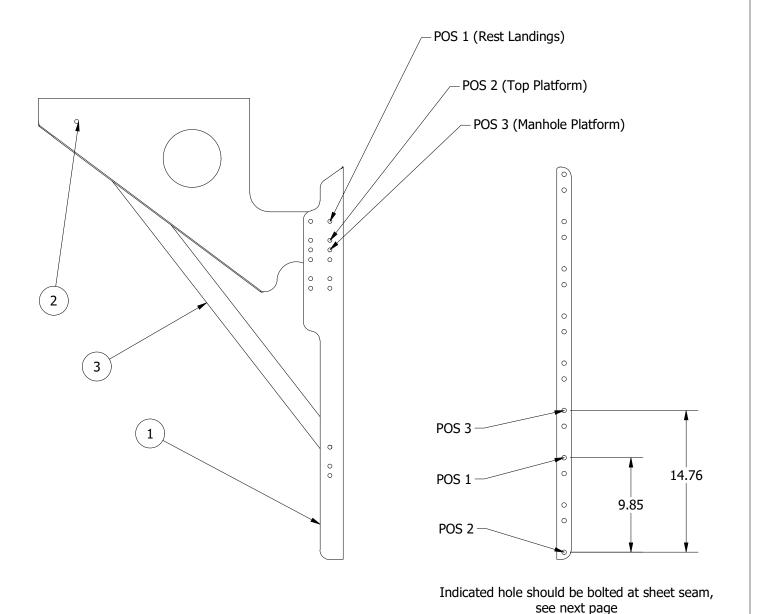


There are 3 position adjustments for brackets mounted in or below the seam.

On Commercial duty, the top platform bracket is mounted in the sheet seam at POS 2, with the platform support in the 2nd hole down.

The manhole platform bracket is mounted below the seam in POS 3, with the platform support in the 3rd hole down.

The rest landing platform brackets are mounted below the seam in POS 1, with the the platform support in the 1st hole down.



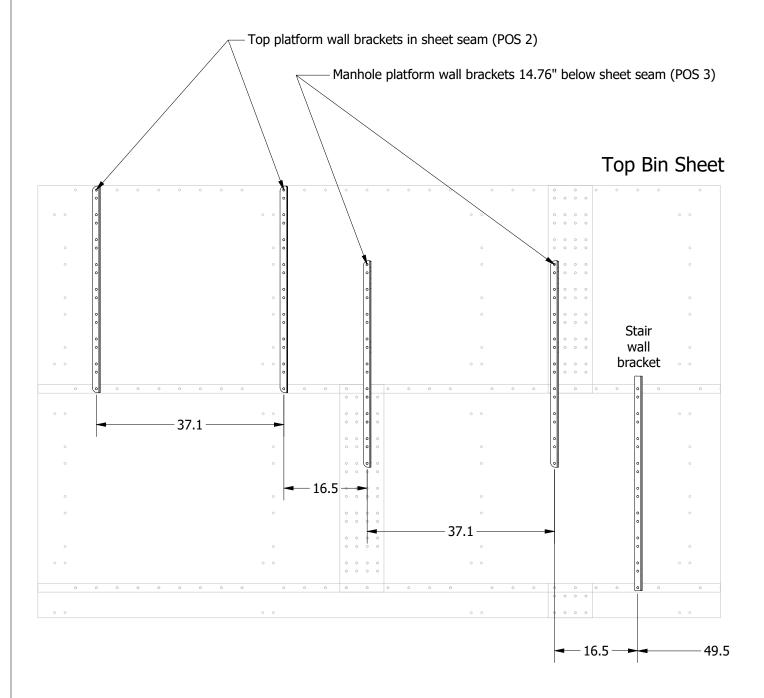
CC3900 Top Platforms Layout - Wall Brackets

The horizontal spacing between the long eave platform wall brackets is 9 bolt spaces (37.1")

The two long platforms are separated by 4 bolt spaces (16.5")

The horizontal spacing from the platform wall bracket to the 4-step stair wall bracket is 4 bolt spaces (16.5"")

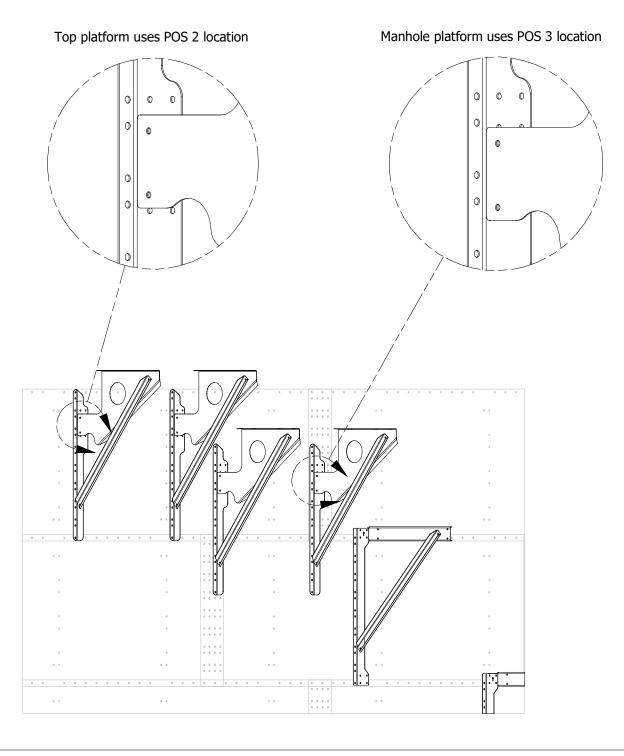
The remaining stair brackets are 12 bolt spaces apart (49.5"")

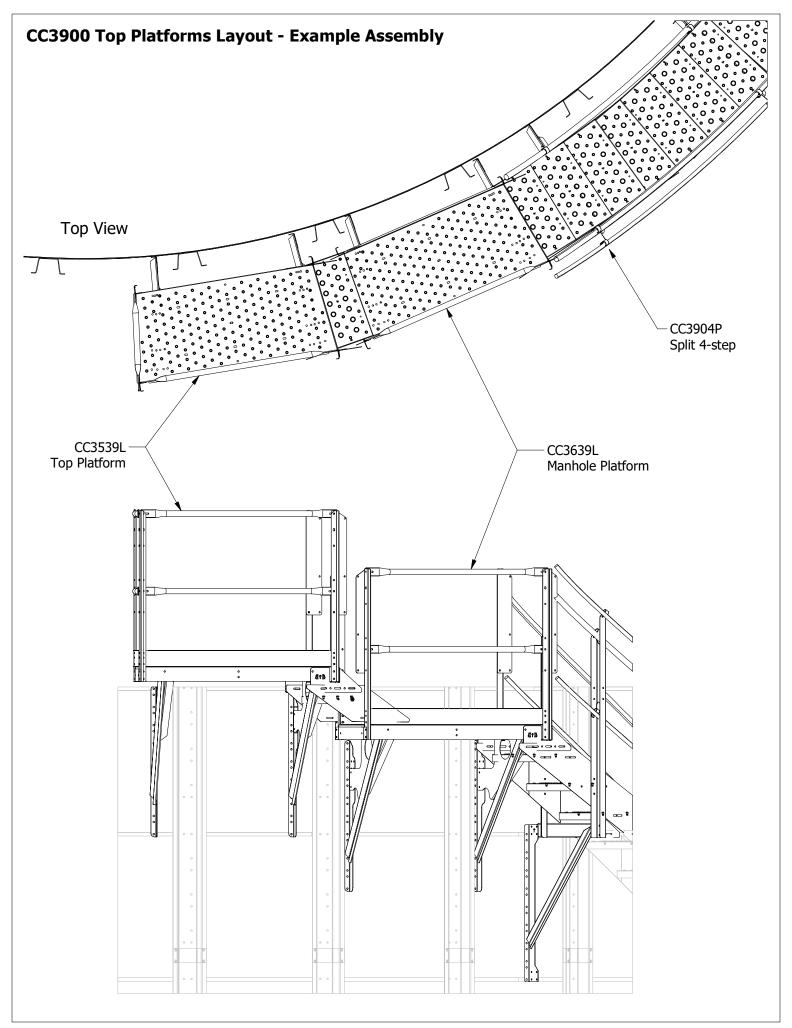


CC3900 Top Platforms Layout - Elevation Positions

The platform supports for the top platform use the 2nd hole down (POS 2)

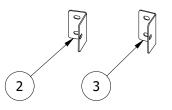
The supports for the manhole platform use the 3rd hole down (POS 3)

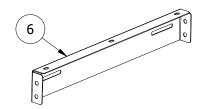




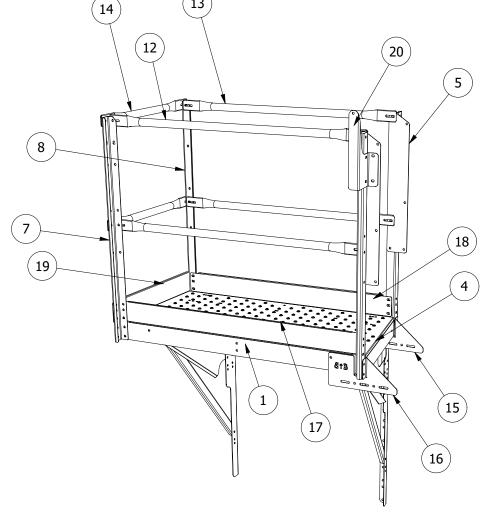
CC3539L Parts List

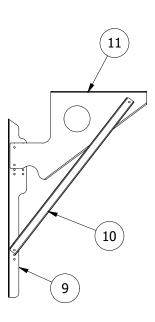
Roof Access Platform



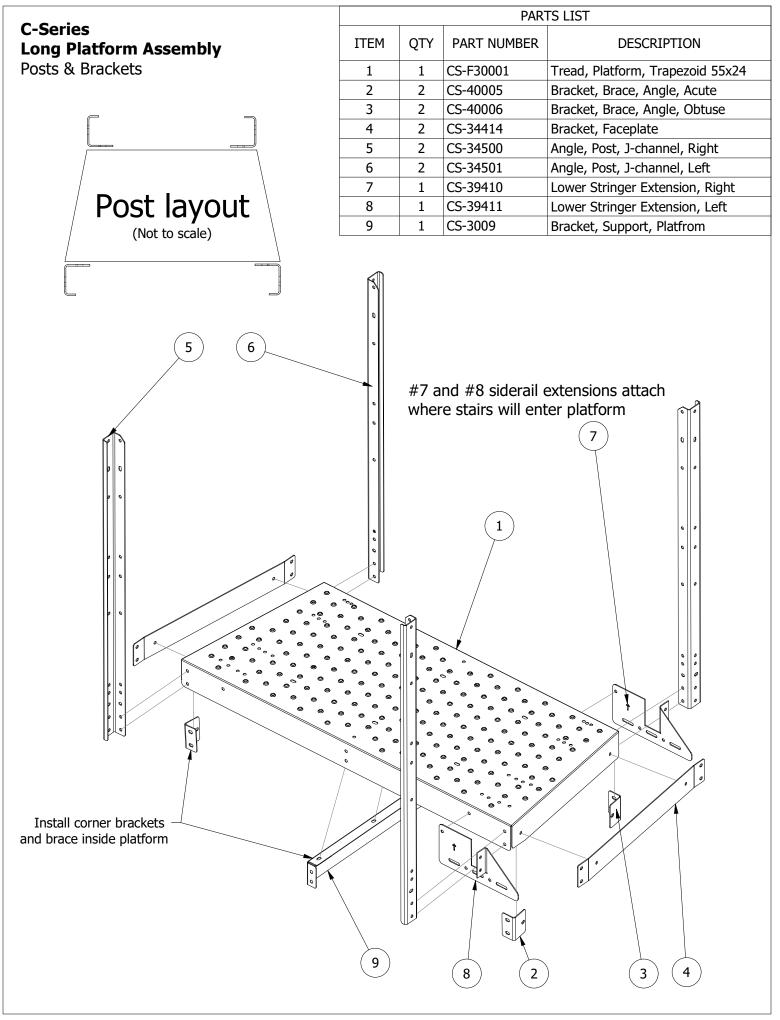


PARTS LIST				
ITEM	QTY	PART NUMBER	DESCRIPTION	
1	1	CS-F30001	Tread, Platform, Trapezoid 55x24	
2	2	CS-40005	Bracket, Brace, Angle, Acute	
3	2	CS-40006	Bracket, Brace, Angle, Obtuse	
4	2	CS-34414	Bracket, Faceplate	
5	2	CS-30010	Bracket, Plate, Handrail	
6	1	CS-3009	Bracket, Support, Platfrom	
7	2	CS-34500	Angle, Post, J-channel, Right	
8	2	CS-34501	Angle, Post, J-channel, Left	
9	2	CS-33901	Bracket, Wall, 39.37 Platform	
10	2	CS-32002	Channel, K-Brace, C-Series	
11	2	CS-34402	Brace, Plate, Platform	
12	2	TRS1505400	54" long 1.5 in tube railing slotted end tabs	
13	2	TRS1504800	48" Long 1.5 in tube railing slotted end tabs	
14	2	TRS1502800	28" Long 1.5 in tube railing slotted end tabs	
15	1	CS-39410	Lower Siderail Extension, Right	
16	1	CS-39411	Lower Siderail Extension, Left	
17	1	CS-34406	Channel, Kickboard, Outside Long	
18	1	CS-34407	Channel, Kickboard, Inside, Long	
19	1	CS-34408	Channel, Kickboard, End	
20	1	ART-0007	Entry Guardrail Post Right	
21	1	ART-0008	Entry Guardrail Post Left (Not Shown)	









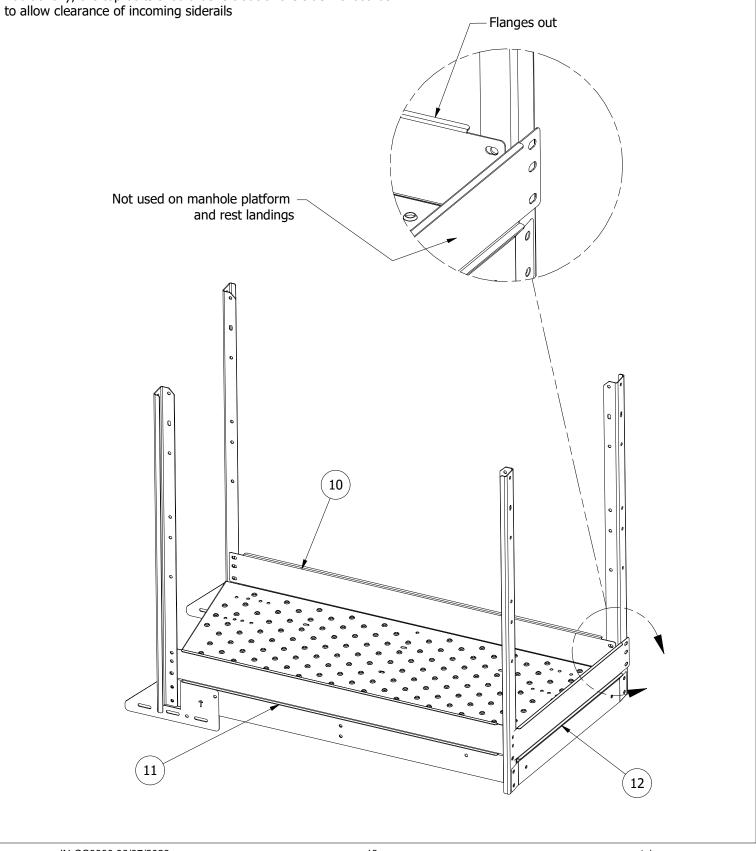
C-Series Commercial Platform Assembly

Kickboards

	PARTS LIST					
ITEM QTY PART NUMBER			DESCRIPTION			
10	1	CS-34406	Channel, Kickboard, Outside Long			
11 1 CS-34407		CS-34407	Channel, Kickboard, Inside, Long			
12	1	CS-34408	Channel, Kickboard, End			

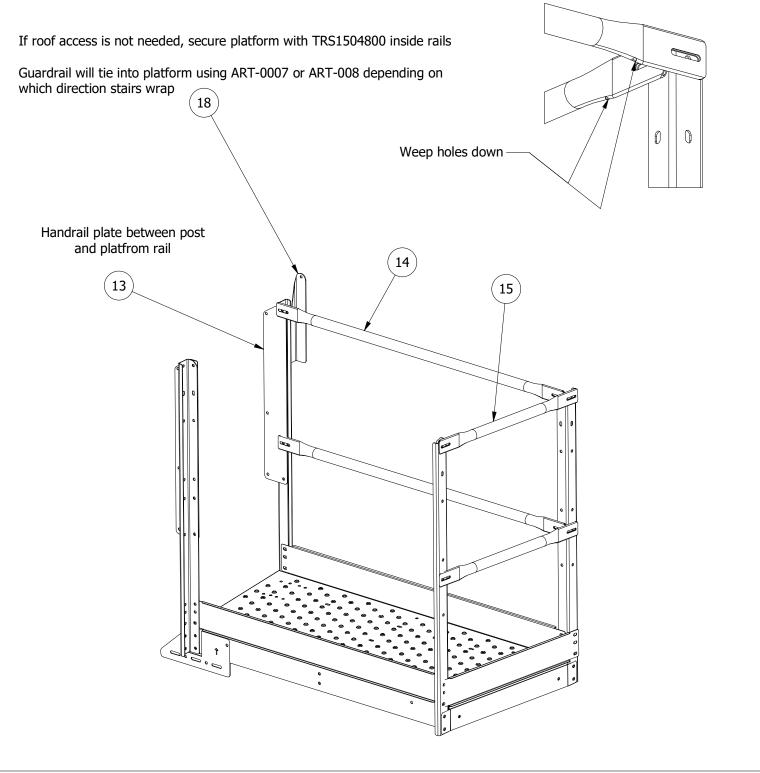
Note:

On manhole platform and rest landings, there is no end kickboard Additionally, the top bolts should be left out of the side kickboards



C-Series Commercial Platform AssemblyRailing

	PARTS LIST						
ITEM	QTY	PART NUMBER	DESCRIPTION				
13	2	CS-30010	Bracket, Plate, Handrail				
14	2	TRS1505400	54" x1.5" dia tube railing, slotted end tabs				
15	2	TRS1502800	28" x1.5" dia tube railing, slotted end tabs				
18	1	ART-0007	Entry Guardrail Post Right				
19	1	ART-0008	Entry Guardrail Post Left				

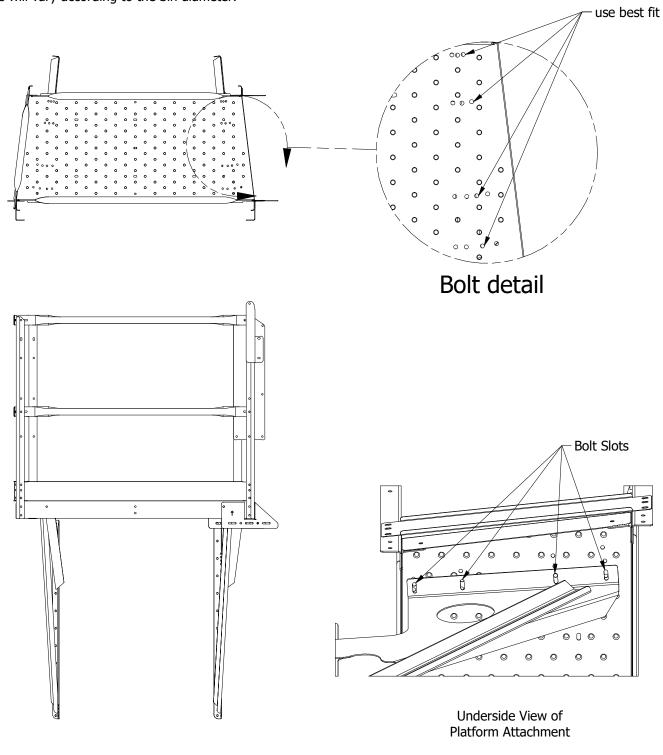


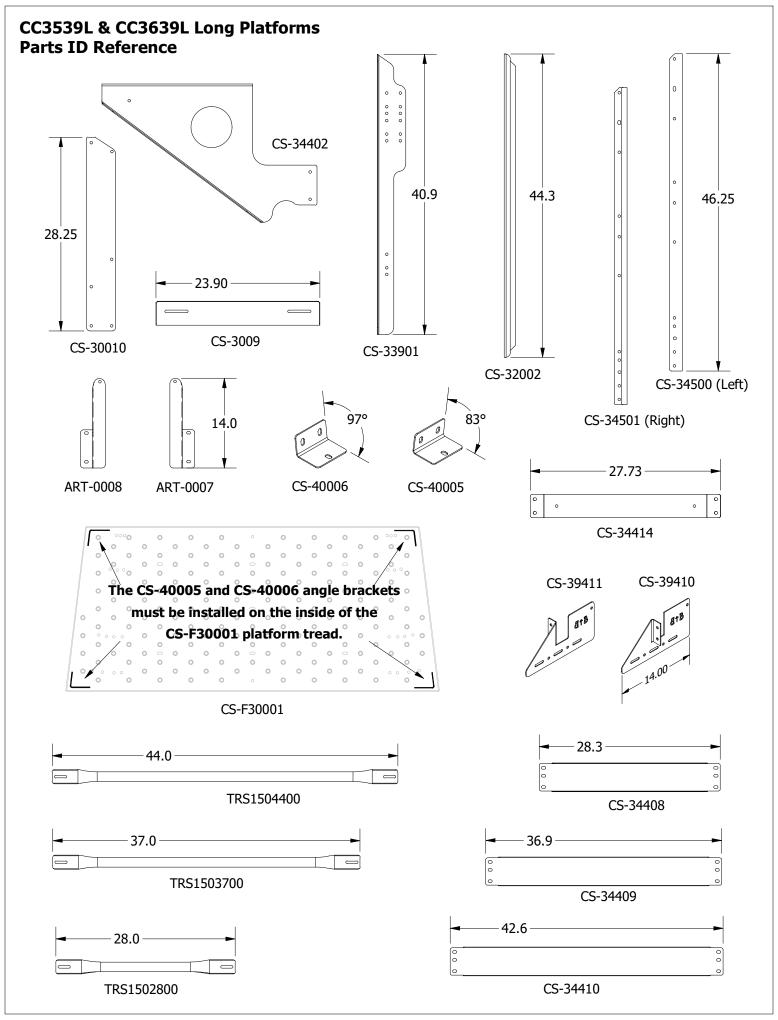
C-Series Commercial Platform Assembly

Center the platform assembly on top of the A-frame wall mounts.

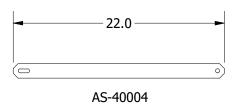
Use 4 bolts to attach each wall mount plate to the platform.

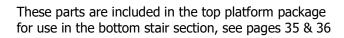
Use the bolt holes in the platform that best align with the A-frame mounts, this will vary according to the bin diameter.

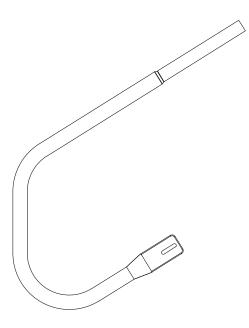




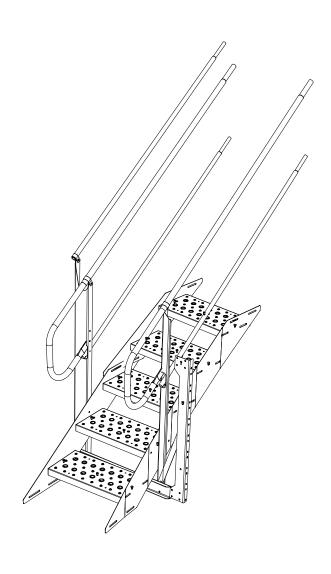
CC3539L Top Platform PackageAdditional Stair Components







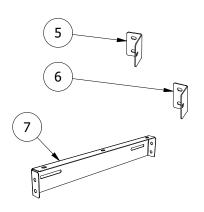
ART-2226



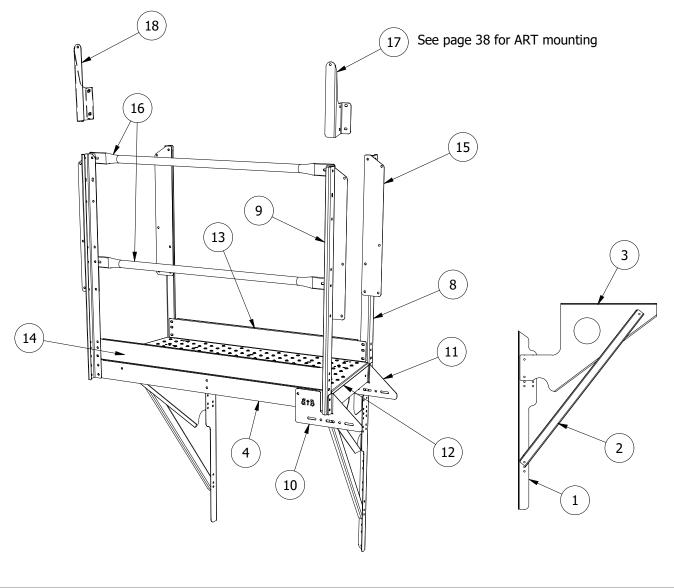
CC3639L Parts List

Manhole Access Platform

Refer to page 12 and repeat instruction process with these components



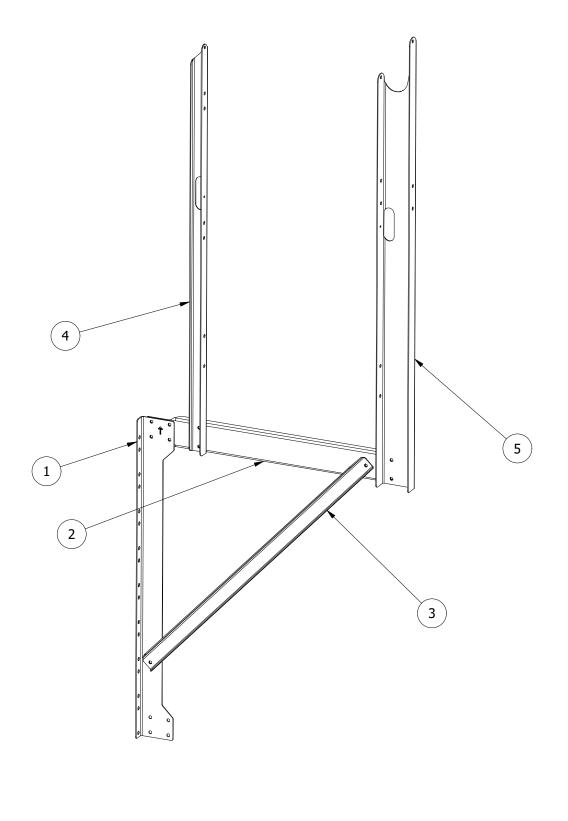
	PARTS LIST		
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	CS-33901	Bracket, Wall, 39.37 Platform
2	2	CS-32002	Channel, K-Brace, C-Series
3	2	CS-34402	Brace, Plate, Platform
4	1	CS-F30001	Tread, Platform, Trapezoid 55x24
5	2	CS-40005	Bracket, Brace, Angle, Acute
6	2	CS-40006	Bracket, Brace, Angle, Obtuse
7	1	CS-3009	Bracket, Support, Platfrom
8	2	CS-34500	Angle, Post, J-channel, Right
9	2	CS-34501	Angle, Post, J-channel, Left
10	1	CS-39411	Siderail Extension, 39"
11	1	CS-39410	Lower Stringer Extension 39
12	2	CS-34414	Bracket, Faceplate
13	1	CS-34407	Channel, Kickboard, Inside, Long
14	1	CS-34406	Channel, Kickboard, Outside Long
15	4	CS-30010	Bracket, Plate, Handrail
16	2	TRS1505400	54" long 1.5 in tube railing slotted end tabs
17	1	ART-0007	Entry Guardrail Post Left
18	1	ART-0008	Entry Guardrail Post Right



A-Frame and Posts

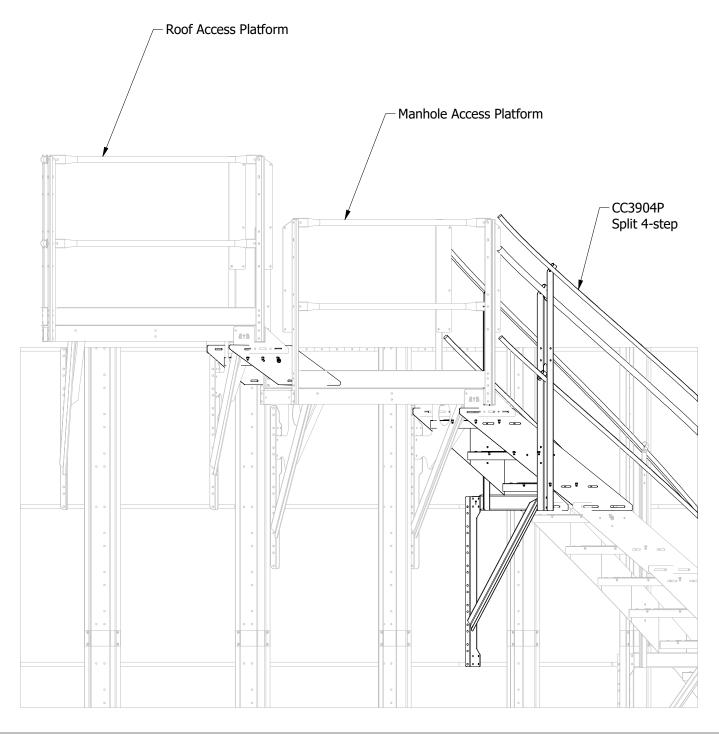
It is recommended to attach the inside post first, attach the assembled stair section to the inside post, then add the outside post last.

	PARTS LIST				
	ITEM	QTY	PART NUMBER	DESCRIPTION	
İ	1	1	CS-39001	Bracket, Wall, 39.37" Stair	
	2	1	CS-40002	Channel, Crossbar	
	3	1	CS-32002	Channel, K-Brace, C-Series	
	4	1	CS-40001	Post, Inside Stair	
	5	1	CS-40011	Post, Stair Rail, Guard Rail Outside	



CC3904P 4-step Split Stair Section

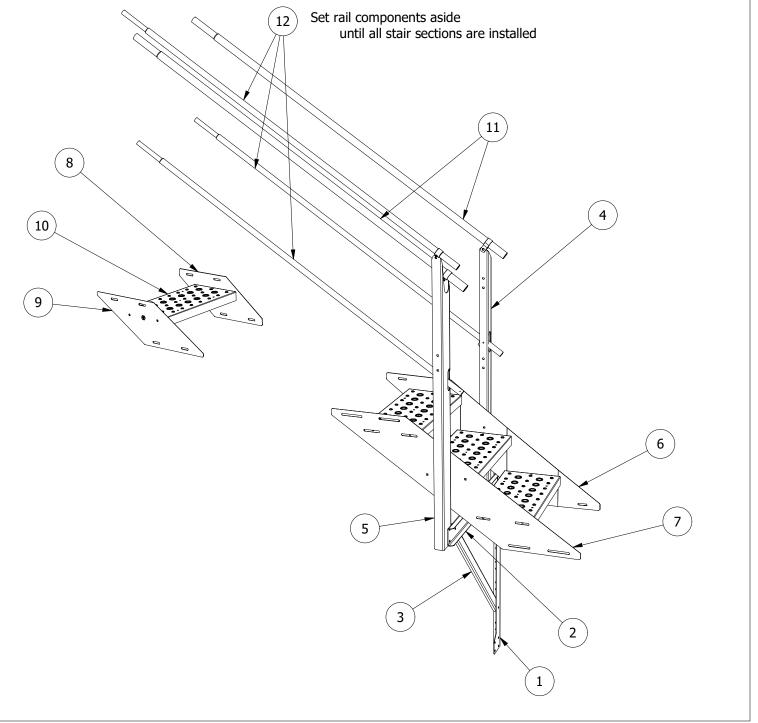
The first stair section uses a split 4-step package to transition the top platforms into the regular 5-step stair sections. See the example below for a visual of the split 4-step in place.



CC3904P 4-step Split Stair Section

This section is used to place a single step between eave platforms and three steps after the manhole platform

PARTS LIST				
ITEM	QTY	PART NUMBER	DESCRIPTION	
1	1	CS-39001	Bracket, Wall, 39.37" Stair	
2	1	CS-40002	Channel, Crossbar	
3	1	CS-32002	Channel, K-Brace, C-Series	
4	1	CS-40001	Post, Inside Stair	
5	1	CS-40011	Post, Stair Rail, Guard Rail Outside	
6	1	CS-39043	39 Stringer, Inside, 3 Step	
7	1	CS-39048	39 Stringer, Outside, 3 Step	
8	1	CS-39041	39 Stringer, Inside, 1 Step	
9	1	CS-39046	39 Stringer, Outside, 1 Step	
10	4	CS41224	Tread 24x12	
11	2	TR1508206	82" x1.5" dia Tubing, 6" swage	
12	3	TR1008206	82" x1" dia Tubing, 6" swage	



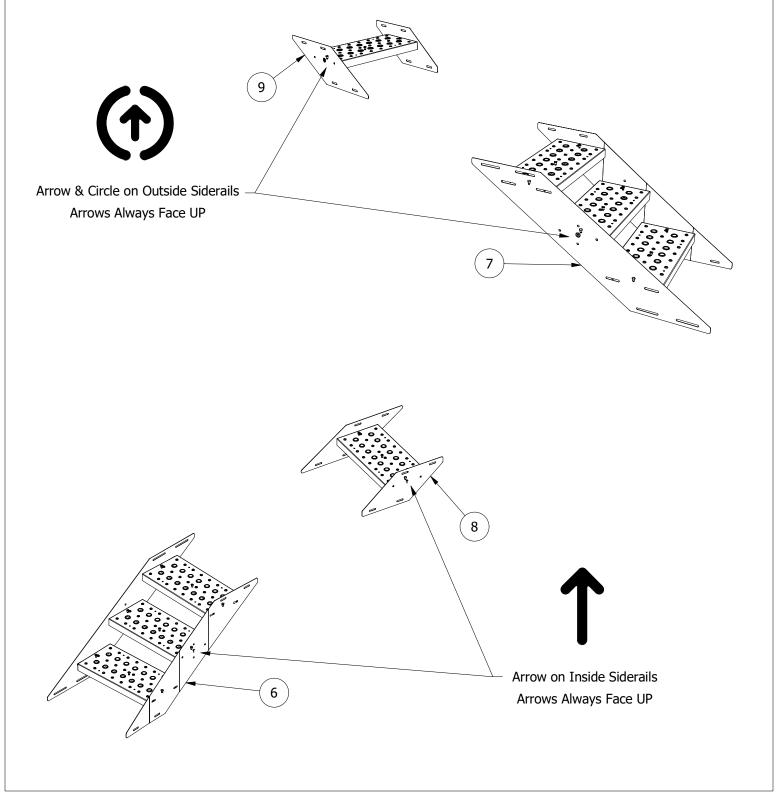
CC3904P 4-step Split Stair Section

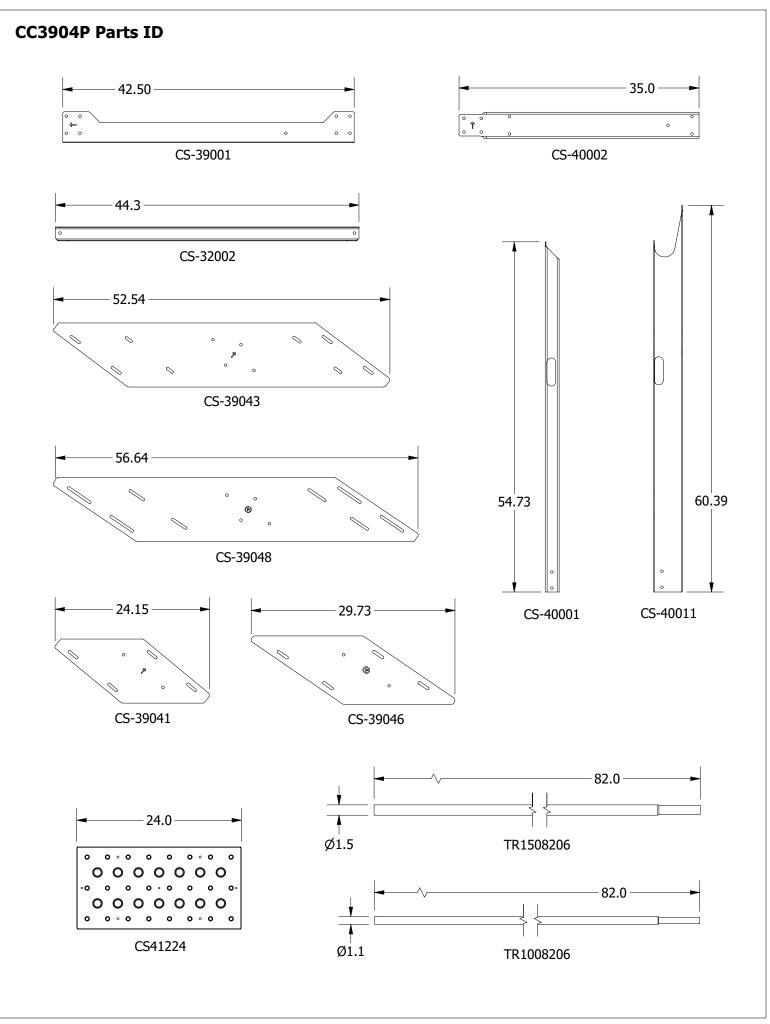
On the CC3904P stair section;

The lower section uses 3-step siderails inside and outside,

The upper section uses 1-step siderails inside and outside.

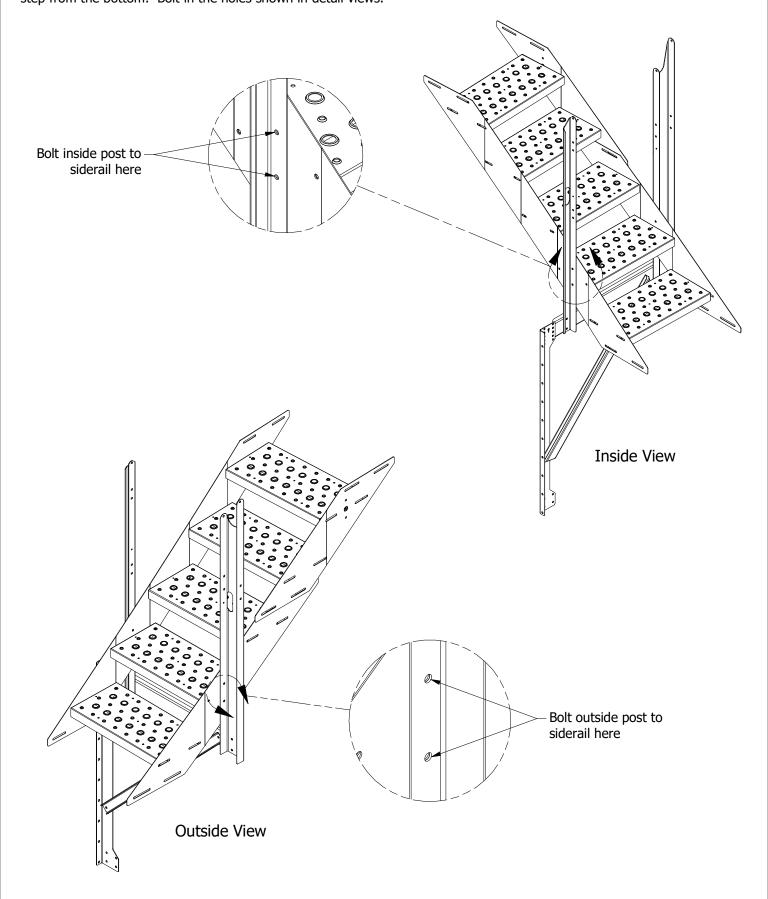
	PARTS LIST			
	ITEM QTY PART NUMBER		PART NUMBER	DESCRIPTION
	6	1	CS-39043	39 Stringer, Inside, 3 Step
	7	1	CS-39048	39 Stringer, Outside, 3 Step
Ī	8	1	CS-39041	39 Stringer, Inside, 1 Step
	9	1	CS-39046	39 Stringer, Outside, 1 Step
	10	4	CS41224	Tread 24x12





Attaching the Stair Section to the A-Frame Assembly

Attach the inside and outside posts to the siderails at the 2nd step from the bottom. Bolt in the holes shown in detail views.

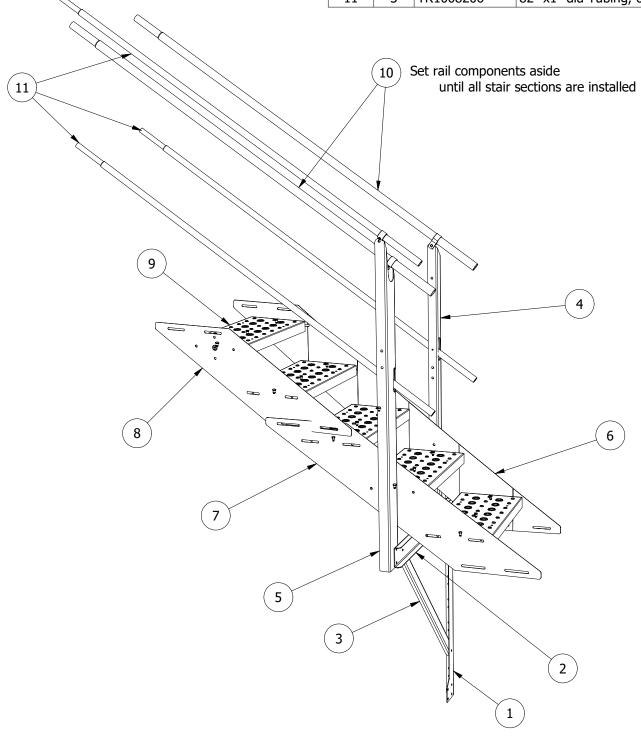


CC3900 5-step Stair Section

This is the standard stair section used after the split 4-step.

The slotted ends of each siderail align with the 39.37" sheet seams and each step has a rise of 7.87"

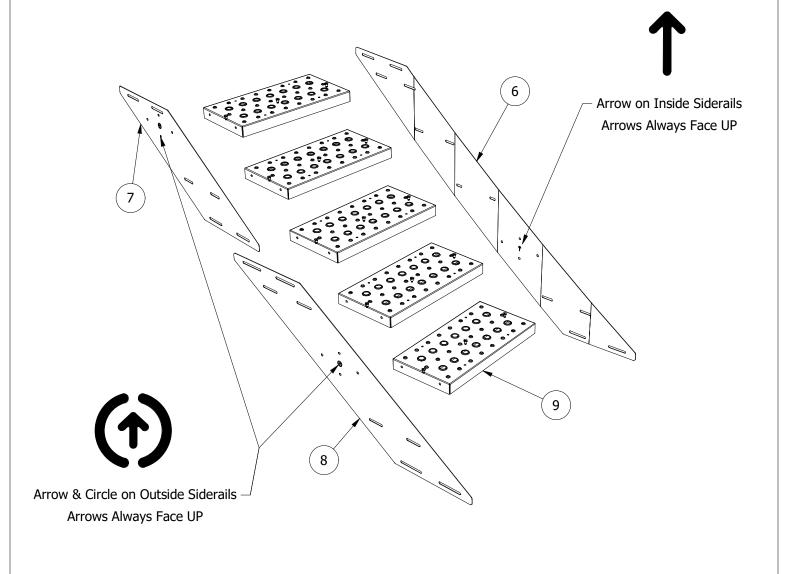
PARTS LIST						
ITEM	QTY	PART NUMBER	DESCRIPTION			
1	1	CS-39001	Bracket, Wall, 39.37" Stair			
2	1	CS-40002	Channel, Crossbar			
3	1	CS-32002	Channel, K-Brace, C-Series			
4	1	CS-40001	Post, Inside Stair			
5	1	CS-40011	Post, Stair Rail, Guard Rail Outside			
6	1	CS-39045	39 Stringer, Inside, 5 Step			
7	1	CS-39048	39 Stringer, Outside, 3 Step			
8	1	CS-39047	39 Stringer, Outside, 2 Step			
9	5	CS41224	Tread 24x12			
10	2	TR1508206	82" x1.5" dia Tubing, 6" swage			
11	3	TR1008206	82" x1" dia Tubing, 6" swage			

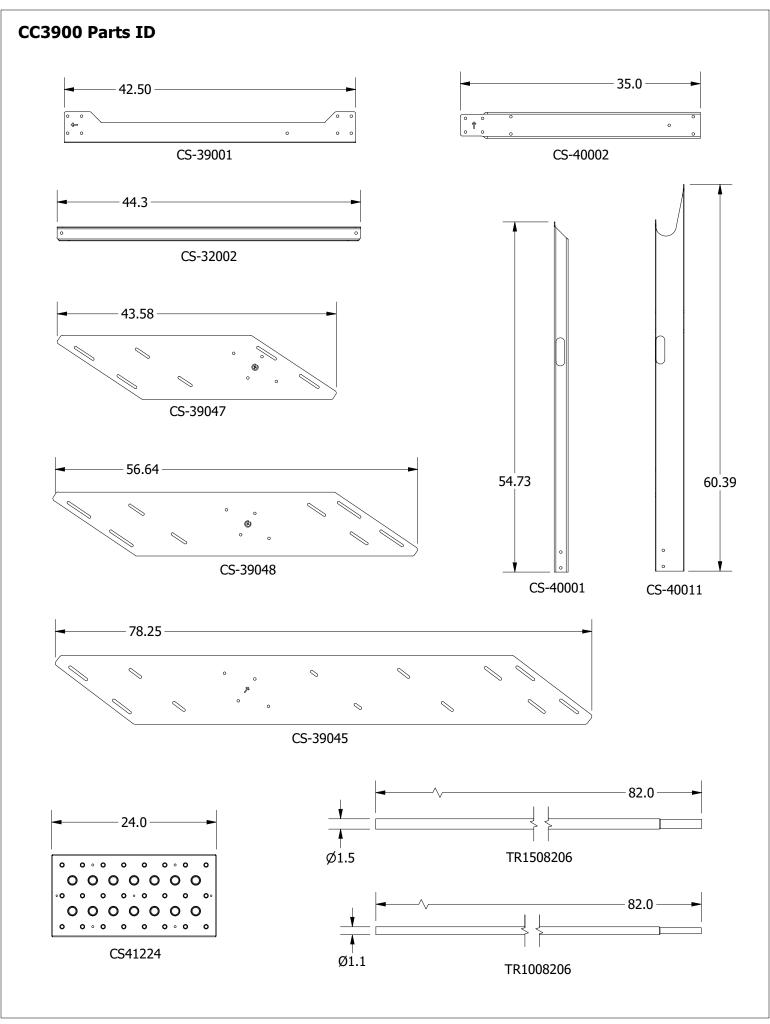


CC3900 5-step Stair Section

On the CC3900 stair section, the inside siderail is a one piece 5-step, the outside siderail is a two piece, 3-step and 2-step.

PARTS LIST				
ITEM QTY PART NUMBER		PART NUMBER	DESCRIPTION	
6	1	CS-39045	39 Stringer, Inside, 5 Step	
7	1	CS-39047	39 Stringer, Outside, 2 Step	
8	1	CS-39048	39 Stringer, Outside, 3 Step	
9	5	CS41224	Tread 24x12	





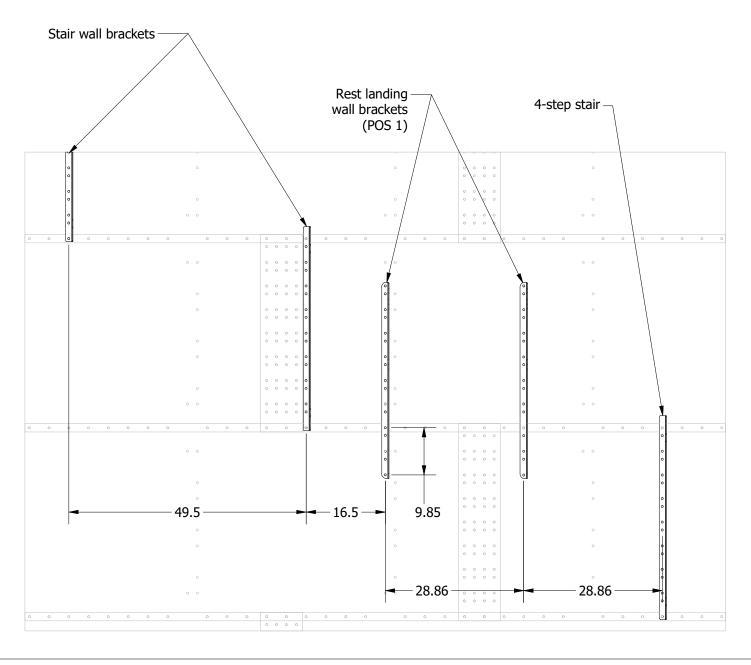
CC3900 Rest Landing Layout - Wall Brackets

The horizontal spacing from the upper stair bracket to the platform bracket is 4 bolt spaces (16.5")

The rest landing wall brackets are separated by 7 bolt spaces (28.86") These brackets are mounted below the seam in POS 1 (see page 6)

The horizontal spacing from the rest landing wall bracket to the 4-step stair wall bracket is 7 bolt spaces (28.86")

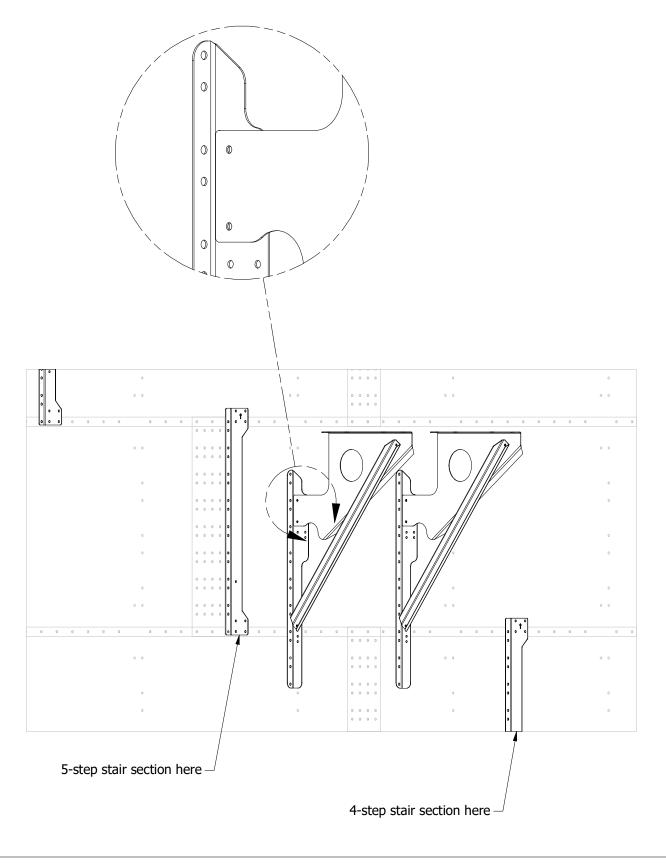
The continuing stair brackets are 12 bolt spaces apart (49.5")



CC3900 Rest Landings - Elevation

The platform supports for the rest landing use the top hole (POS 1)

This elevation allows the rest landing to replace the top step of a regular 5-step section, with a 4-step section used below the platform (see page 32).

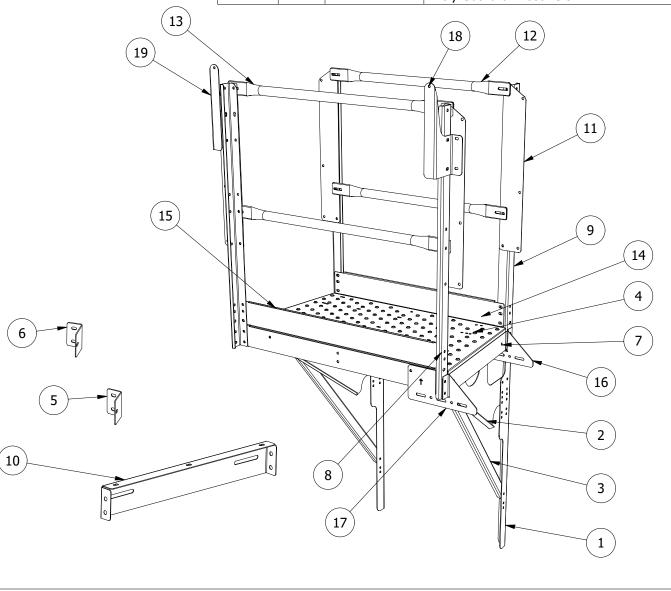


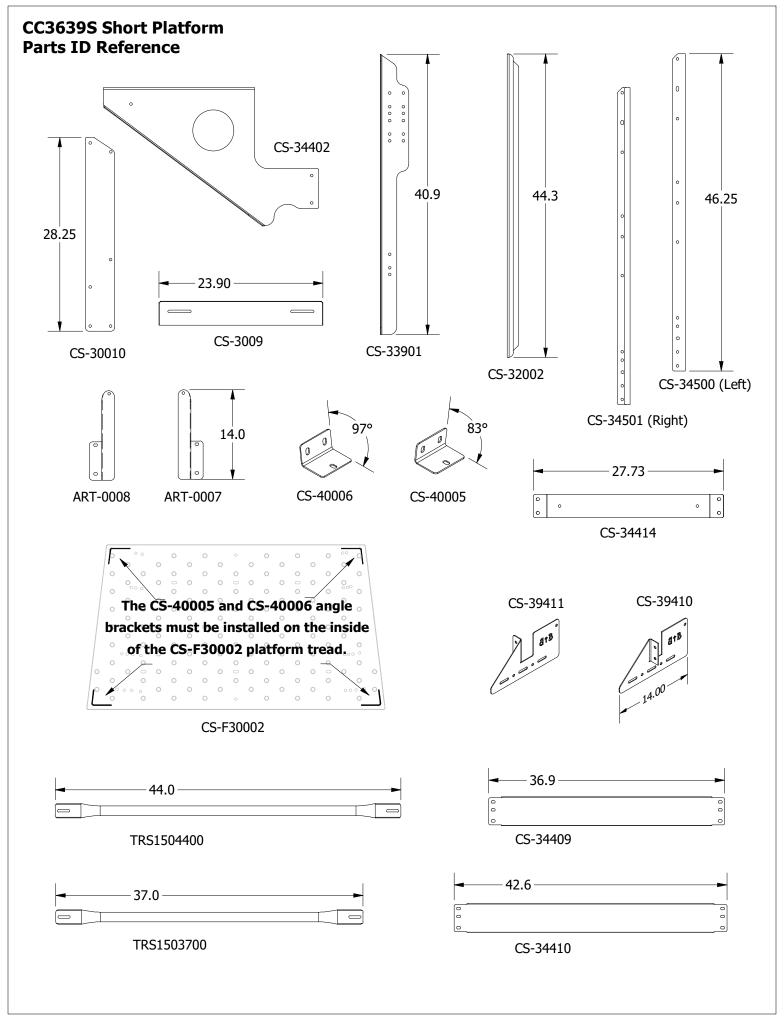
CC3639S Parts List

Rest Landing

Refer to page 12 and repeat instruction process with these components

PARTS LIST				
ITEM	QTY	PART NUMBER	DESCRIPTION	
1	2	CS-33901	Bracket, Wall, 39.37 Platform	
2	2	CS-34402	Brace, Plate, Platform	
3	2	CS-32002	Channel, K-Brace, C-Series	
4	1	CS-F30002	Tread, Platform, Short, Trapezoid, 44x24	
5	2	CS-40006	Bracket, Brace, Angle, Obtuse	
6	2	CS-40005	Bracket, Brace, Angle, Acute	
7	2	CS-34414	Bracket, Faceplate	
8	2	CS-34501	Angle, Post, J-channel, Left	
9	2	CS-34500	Angle, Post, J-channel, Right	
10	1	CS-3009	Bracket, Support, Platfrom	
11	4	CS-30010	Bracket, Plate, Handrail	
12	2	TRS1503700	37 Long 1.5 in tube railing slotted end tabs	
13	2	TRS1504400	44 Long 1.5 in tube railing slotted end tabs	
14	1	CS-34409	Channel, Kickboard, Inside, Short	
15	1	CS-34410	Channel, Kickboard, Outside, Short	
16	1	CS-39410	Lower Stringer Extension	
17	1	CS-39411	Lower Stringer Extension	
18	1	ART-0007	Entry Guardrail Post Right	
19	1	ART-0008	Entry Guardrail Post Left	



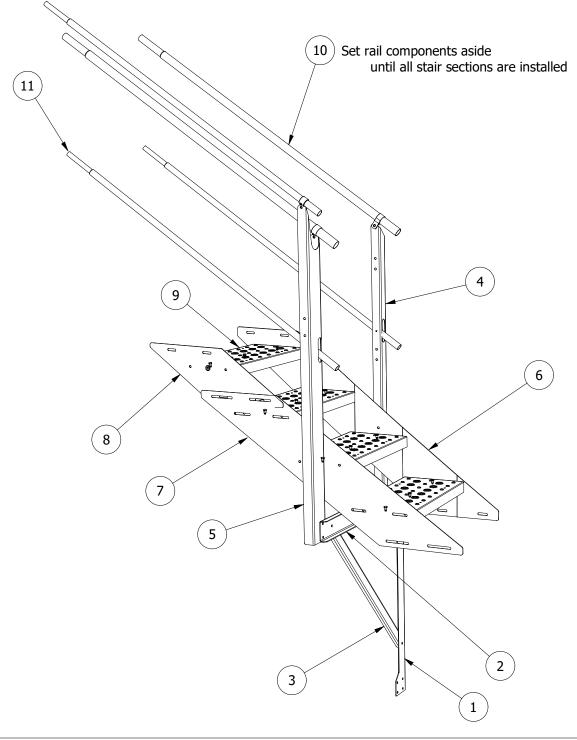


CC3904 4-step Stair Section

This is the stair section used below the rest landings.

The rest landing serves as the "5th step" (top step) in the layout. $\label{eq:control}$

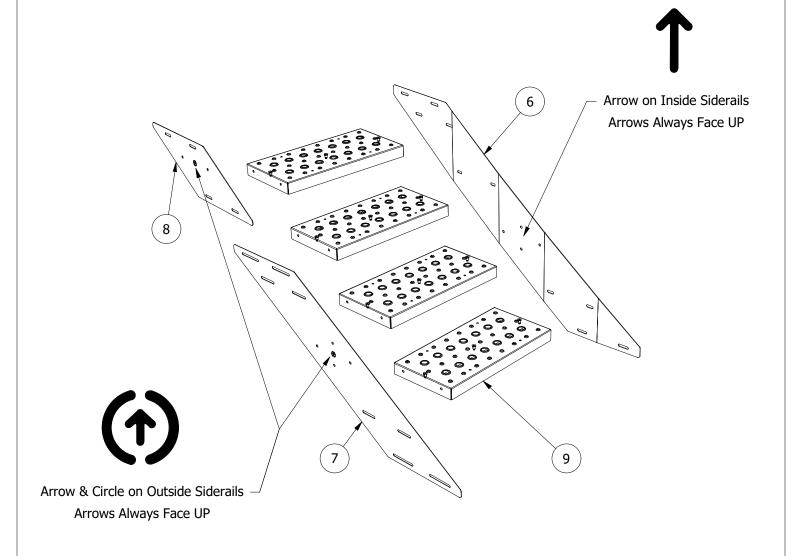
	PARTS LIST				
	ITEM	QTY	PART NUMBER	DESCRIPTION	
İ	1	1	CS-39001	Bracket, Wall, 39.37" Stair	
	2	1	CS-40002	Channel, Crossbar	
	3	1	CS-32002	Channel, K-Brace, C-Series	
ĺ	4	1	CS-40001	Post, Inside Stair	
ĺ	5	1	CS-40011	Post, Stair Rail, Guard Rail Outside	
	6	1	CS-39044	39 Stringer, Inside, 4 Step	
	7	1	CS-39048	39 Stringer, Outside, 3 Step	
	8	1	CS-39046	39 Stringer, Outside, 1 Step	
	9	4	CS41224	Tread 24x12	
	10	2	TR1506706	67" x1.5" dia Tubing, 6" swage	
	11	3	TR1006706	67" x1" dia Tubing, 6" swage	

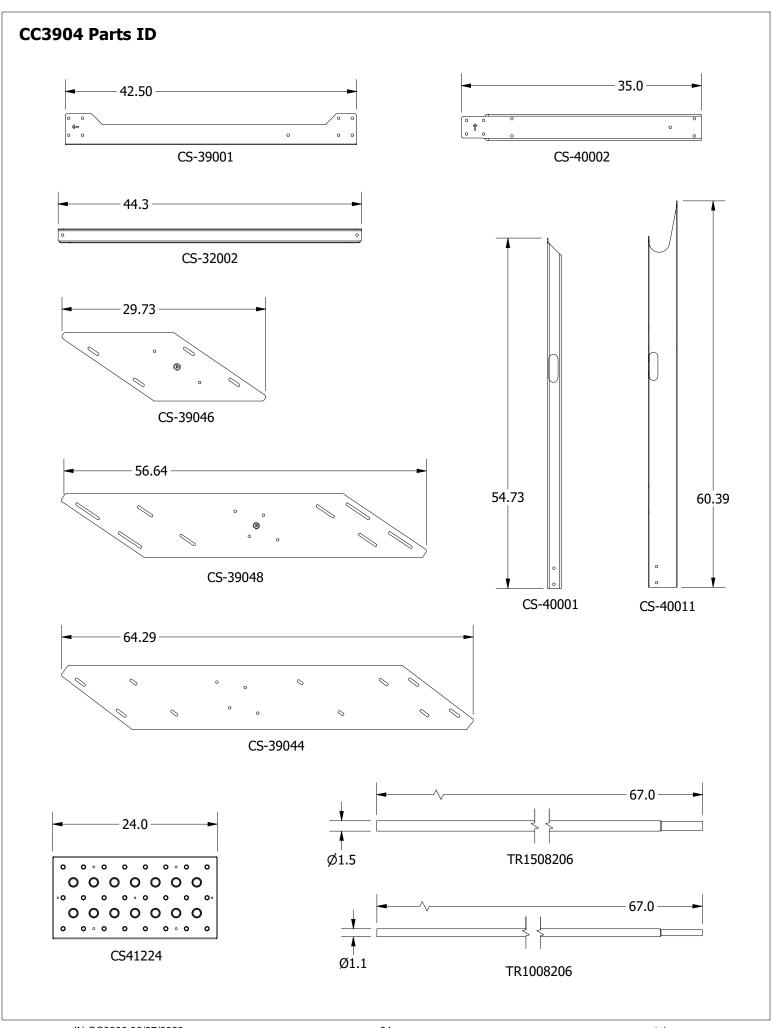


CC3904 4-step Stair Section

On the CC3904 stair section, the inside siderail is a one piece 4-step, the outside siderail is a two piece, 3-step and 1-step.

PARTS LIST				
ITEM	QTY	PART NUMBER	DESCRIPTION	
6	1	CS-39044	39 Stringer, Inside, 4 Step	
7	1	CS-39048	39 Stringer, Outside, 3 Step	
8	1	CS-39046	39 Stringer, Outside, 1 Step	
9	4	CS41224	Tread 24x12	





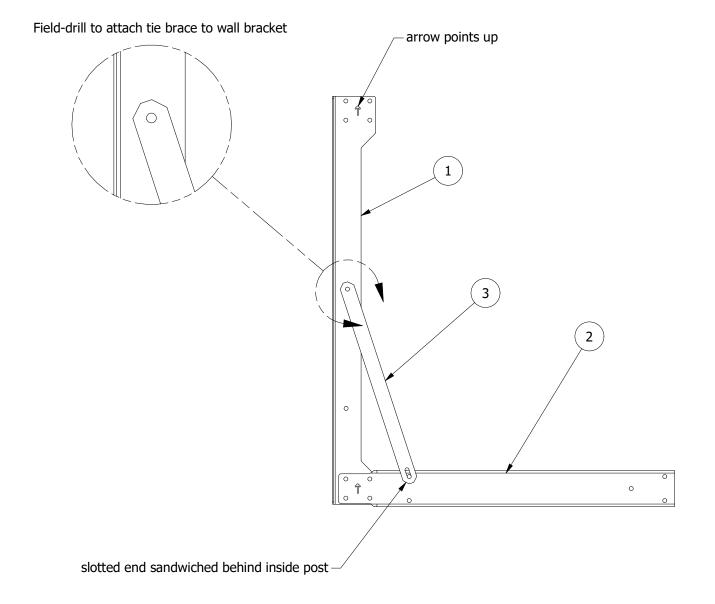
A-Frame Bottom Section

PARTS LIST				
ITEM	QTY	PART NUMBER	DESCRIPTION	
1	1	CS-39001	Bracket, Wall, 39.37" Stair	
2	1	CS-40002	Channel, Crossbar	
3	1	AS-40004	Bracket, Tie Brace	

The bottom stair section is attached to the bottom bin sheet with the same wall bracket (CS-39001) and crossbar (CS-40002), but the crossbar is now bolted at the bottom of the wall bracket.

Use the CS-40004 tie brace from the top platform package (see page 17) to reinforce the crossbar. The slotted end is sandwiched between the crossbar and the inside post in the top hole as shown.

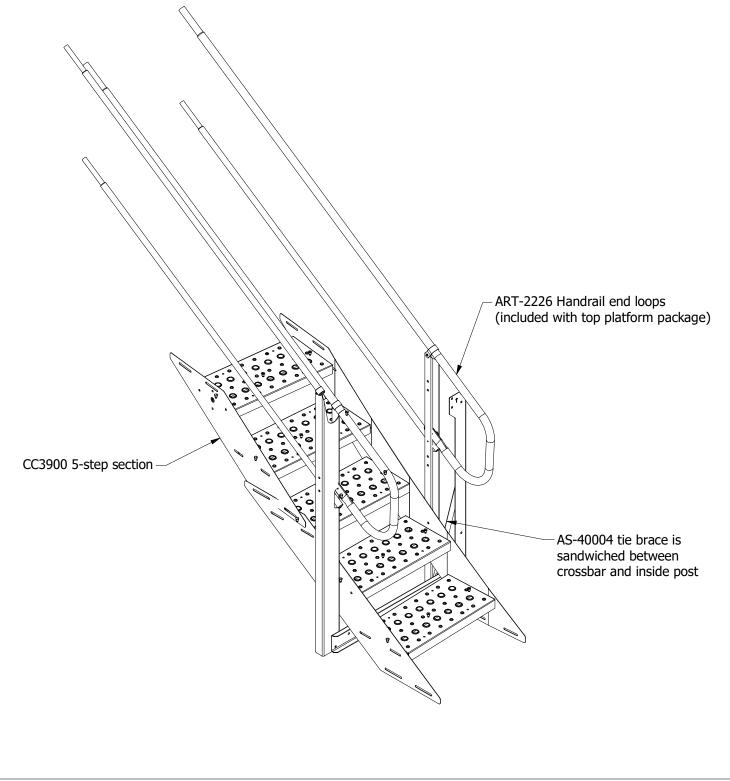
Drill a hole in the wall bracket to attach the other end.



Bottom Stair Section

The bottom section is a regular CC3900 5-step stair section, the posts attach to the crossbar in the same way as before.

Use the ART-2226 handrail end loops to estimate the placement of the first handrail section. Once the handrail is attached, insert the end loops with the swaged end pointed up and bolt the flattened end to the posts near the midrail.

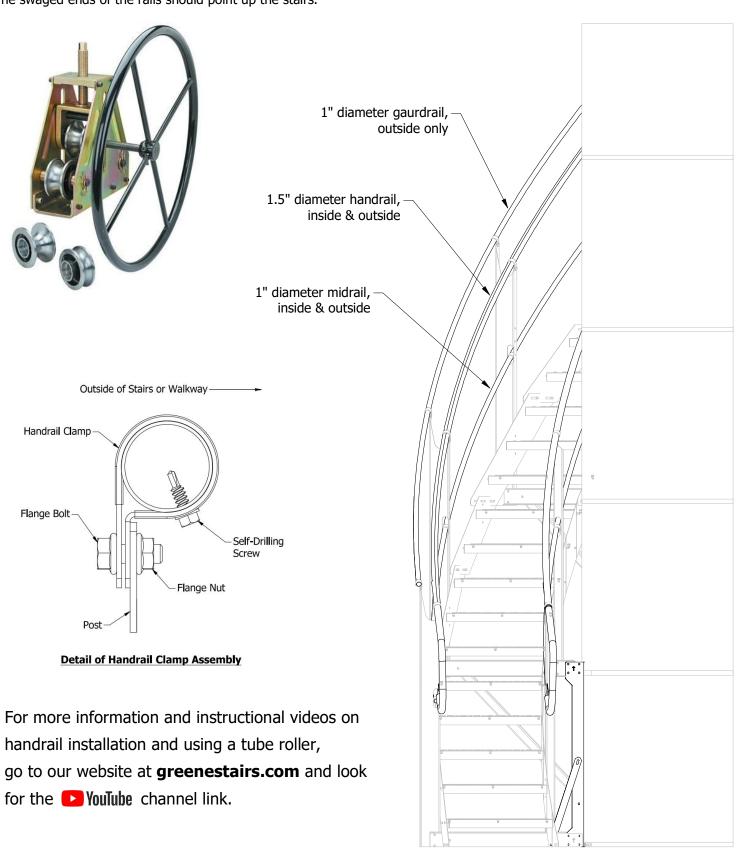


Installing Handrails

It is recommended to use a Tube Roller Former as shown in the picture; form inside rails to match bin sheet curvature, form outside rails with slightly less bend.

Alternatively, use an assembled stair section to brace one end of each tube and bend rails by hand

The swaged ends of the rails should point up the stairs.



C-Series Commercial Platforms Midrail, Handrail, and Guardrail

Use the ART-0007 and ART-0008 to terminate guardrails at platform posts. Attach railing to stairs first, allowing the rail to determine the mounting location of the ART mounts as shown:



Insert pipe caps after cutting pipe sections to length but before attaching to stairs



C-Series Commercial Platforms Midrail, Handrail, and Guardrail

Use the CS-30010 Handrail plate to terminate railing and guarding components

