



### Check the Order

Make sure that all of the parts required are included in your shipment BEFORE going to the job site. A packing slip is included with your order. Please take the time to check that all of the parts arrived and are in good condition. If you have any damaged or missing parts that are listed on the packing slip, IMMEDIATELY call the carrier that delivered your order and note the damaged or missing parts.

### Read the Instructions

Take time to completely read the instructions on how to assemble the ramping system. It may answer some questions you have before you get to the job site. If you have any questions concerning the construction or installation of the ramping system, please feel free to call us at the factory 1-800-800-3864.

### Tools Recommended for Ramp Installation

Battery Powered Drill, Phillips Bit, Hex Bit  
3/8" Drive Sockets : 1/2", 9/16"  
3/8", 1/2", 9/16" Ratchet  
1/2", 9/16" Wrenches  
Drill Bits : 1/4", 5/16", 3/8"  
Masonry Bit : 5/16"  
Tape Measure  
Level  
"C" type Vice Grips (3 recommended), 4" minimum grip required  
Dead Blow Hammer or Rubber Mallet  
Can of Spray Lubricant (similar to WD-40)  
Safety Glasses  
Flat File

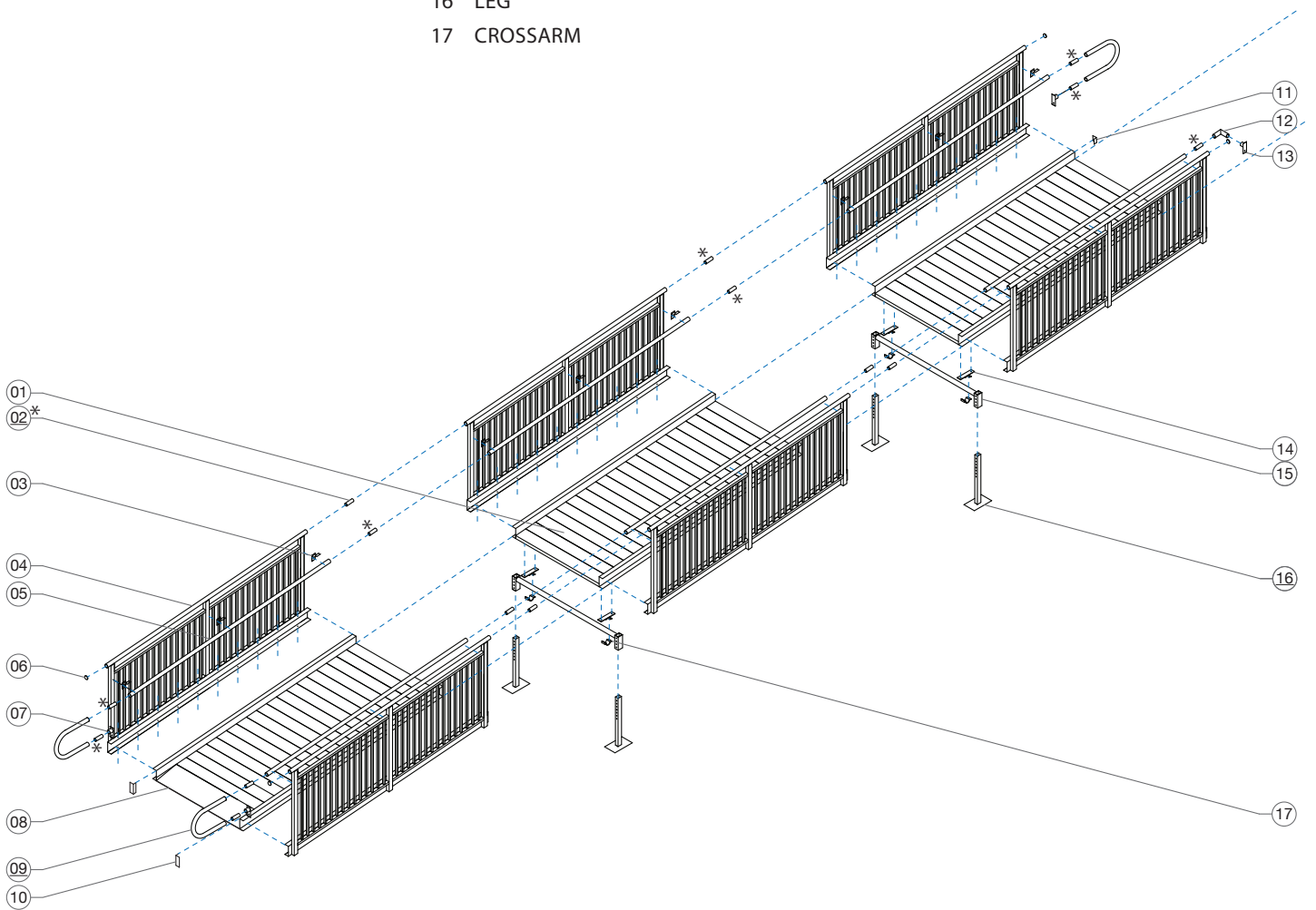
### Optional Tools

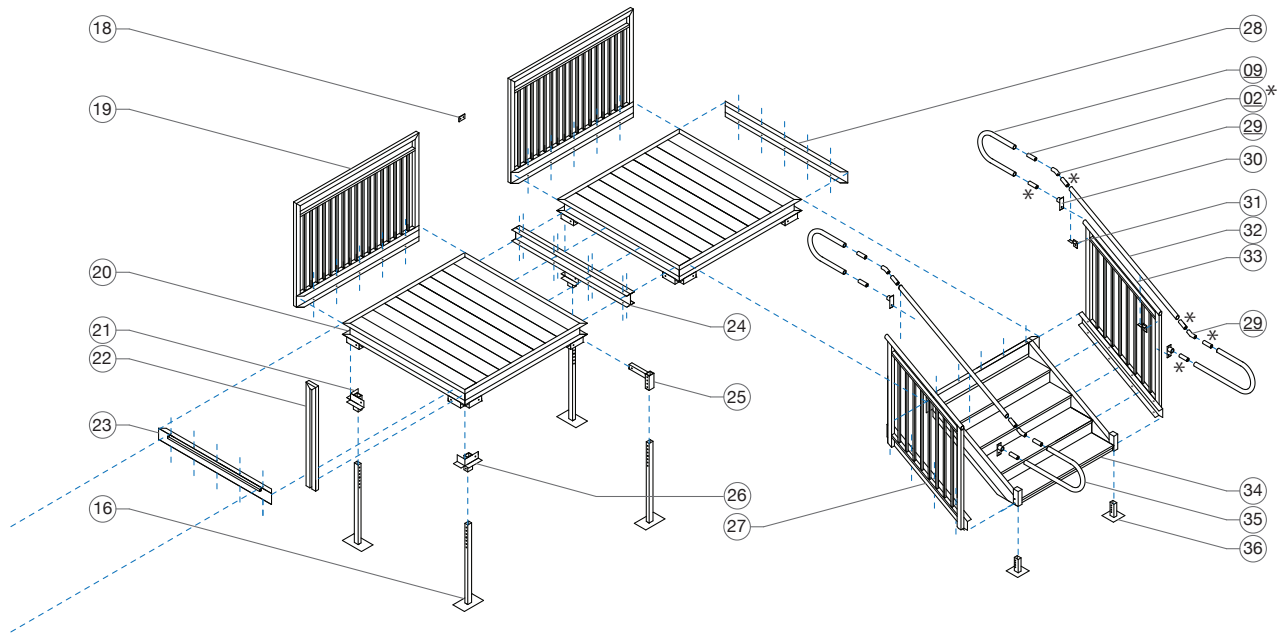
Shovel  
Reciprocating Saw (just in case)  
Pry Bar  
Broom (for clean up)  
Pencil or Marker  
Extension Cord

### Hints and Tips

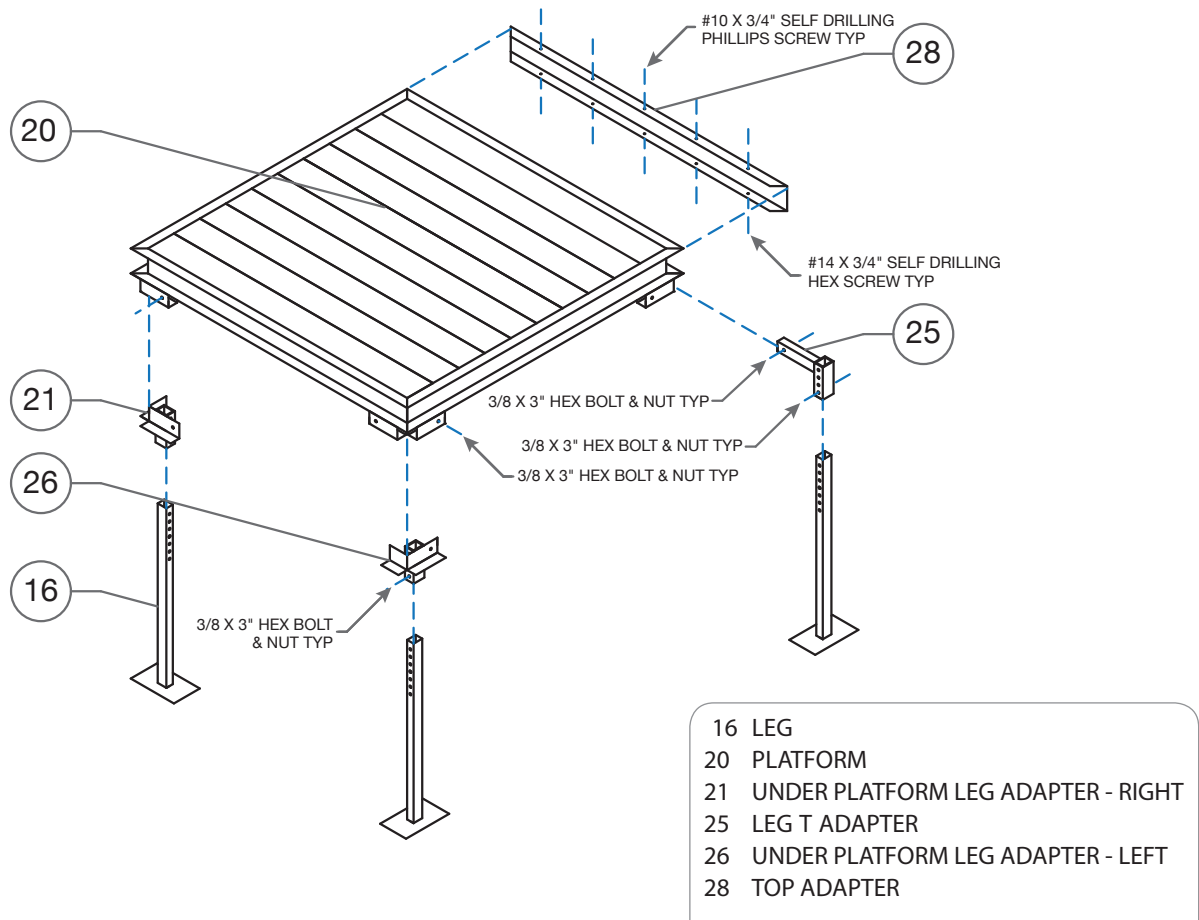
- Mating of stringers can be made easier by spraying the lips with WD40 and then using a rubber mallet or C Clamps to connect them.
- When using the self drilling screws it is recommended to use a battery powered drill with a clutch set at 6. Drilling too fast can shear the screws.

- 01 RAMP
- \*02 RAIL INSERT (1057)
- 03 RAIL BRACKET RAMP (100043 RIGHT / 100044 LEFT)
- 04 RAMP RAIL (RIGHT / LEFT)
- 05 GRASPING RAIL
- 06 CAP (CAPR16GY)
- 07 LOOP CONNECTOR 1-3/4"(100047)
- 08 RAMP STARTER
- 09 LOOP RAMP / STEP TOP (100033)
- 10 STRINGER CAP BOTTOM 4 5/8" (100031)
- 11 STRINGER CAP TOP 2 - 1/2" (100032)
- 12 ELBOW 90 DEG (100046)
- 13 RAIL CONNECTOR 5 - 1/2" (100048)
- 14 EXTRUDED BRACKET BASE (EB)
- 15 EXTRUDED BRACKET CAP (EB)
- 16 LEG
- 17 CROSSARM





- 18 GUARDRAIL BRACKET (100050)
- 19 PLATFORM RAIL
- 20 PLATFORM
- 21 UNDER PLATFORM LEG ADAPTER (100008R RIGHT)
- 22 PLATFORM GUARDRAIL 5"
- 23 RAMP TO PLATFORM ADAPTER
- 24 I BEAM CONNECTOR
- 25 LEG T ADAPTER (100007)
- 26 UNDER PLATFORM LEG ADAPTER (100008L LEFT)
- 27 STEP RAIL (LEFT)
- 28 TOP ADAPTER
- 29 LOOP CONNECTOR 30 DEG (100035)
- 30 LOOP CONNECTOR 3-3/4" (100036)
- 31 RAIL BRACKET STEP (100060 RIGHT / 100061 LEFT)
- 32 GRASPING RAIL
- 33 STEP RAIL (RIGHT)
- 34 STEP
- 35 LOOP STEP BOTTOM (100034)
- 36 LEG STEP (100057)



Begin the installation at the top of the system. In most cases this will involve installing one or more **PLATFORMS**.

If you are using an existing porch or landing you will only need to attach the **RAMP TO PORCH ADAPTER** and then move on to installing the **RAMPS**.

Choose which **PLATFORM** will connect to the building and install the **TOP ADAPTER** on the side touching the building using:

- #10 x 3/4" self drilling phillips screws on top
- #14 x 3/4" self drilling hex screws on bottom

Screws should be spaced 2.5" from each end with a maximum spacing of 17" on center.

Install the **UNDER PLAT LEG ADAPTER** (or **LEG T ADAPTER**) in each corner of the **PLATFORM** using:

- 3/8 x 3" hex bolts and nuts

Make sure to plan the **LEG** placement around any obstacles and position the **LEGS** so they do not hit the building.

Measure the desired height of the **PLATFORM** and install the **LEGS** to this height using:

- 3/8 x 3" hex bolts and nuts

**LEGS** may need to be trimmed to length to fit under the **PLATFORM**.

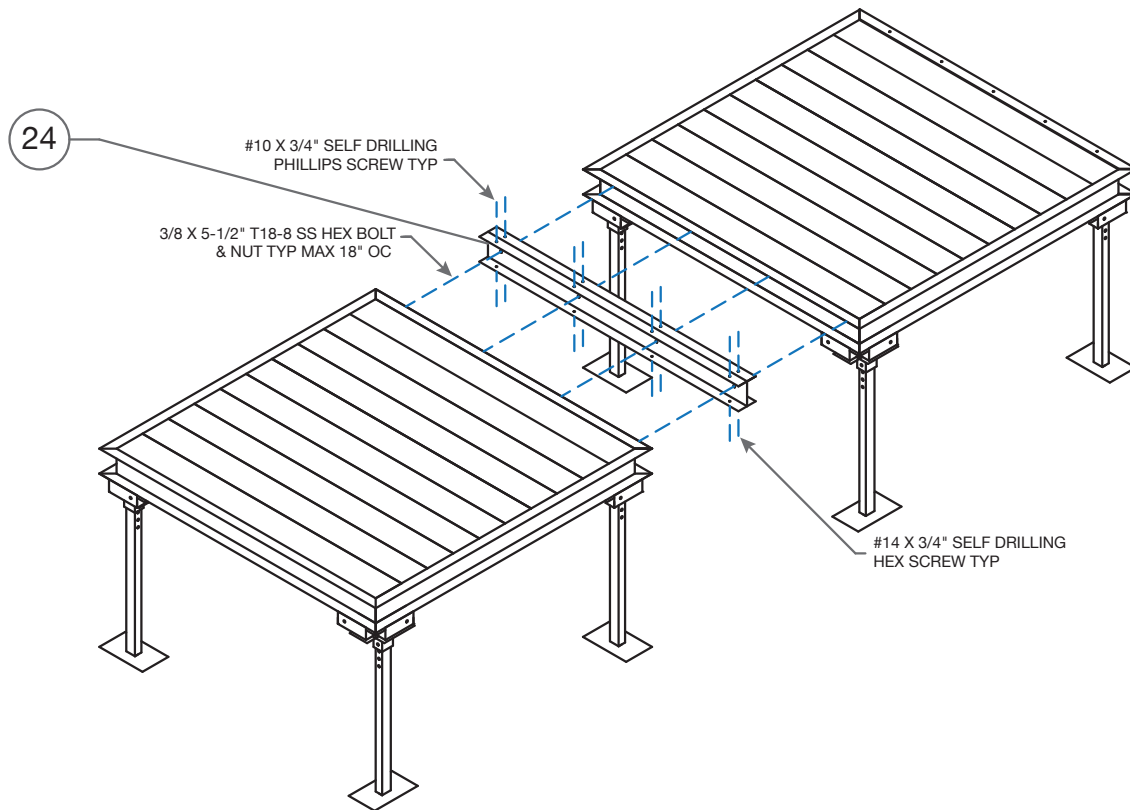
Move **PLATFORM** into position and attach securely to building using:

- 5/16 x 4 1/2" hex bolts and nuts (CAP.PLT)

Additional anchors or special attachment may be required depending on the condition of the building.

If there are multiple **PLATFORMS** being used as a Top **PLATFORM** then install the **TOP ADAPTERS** on all **PLATFORMS** before joining **PLATFORMS** together.

Screws are located in the **PLATFORM PACK** (CAP.PLM).



24 I BEAM CONNECTOR

To connect two **PLATFORMS** together first install the **I BEAM CONNECTOR** on one **PLATFORM** using a rubber mallet and screw in place using:

- #10 x 3/4" self drilling phillips screws on top
- #14 x 3/4" self drilling hex screws on bottom

Then place the second **PLATFORM** in place and connect using:

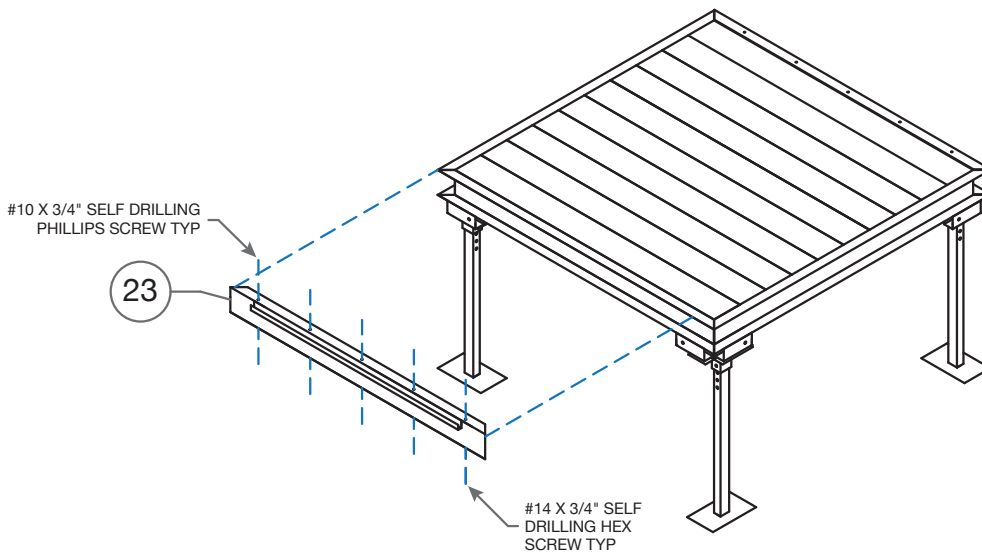
- 3/8 x 5-1/2" hex bolts and nuts

Tighten bolts to pull the **PLATFORMS** firmly together with bolts spaced a maximum of 28" on center.

Bolts are located in the **I BEAM PACK (CAP.PLC)**.

# 1C RAMP TO PLATFORM ADAPTER INSTALLATION

PLAT TO RAMP ADAPTER IS THE SAME PROCEDURE



## 23 RAMP TO PLATFORM ADAPTER

Install the **RAMP TO PLAT ADAPTER** on the side that the **RAMP** will descend from. Make sure to align it to one side so there is room for the 5" **GUARDRAIL**. Install with a rubber mallet and fasten in place using:

#10 x 3/4" self drilling phillips screws on top

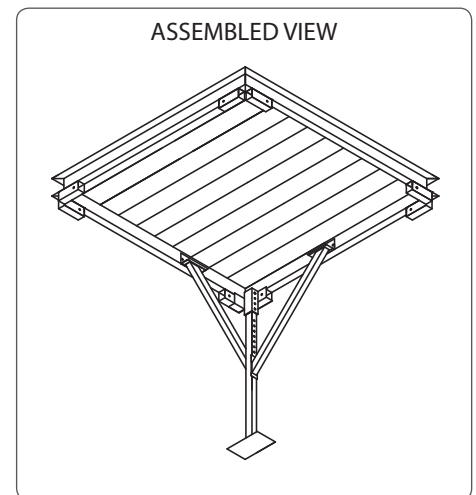
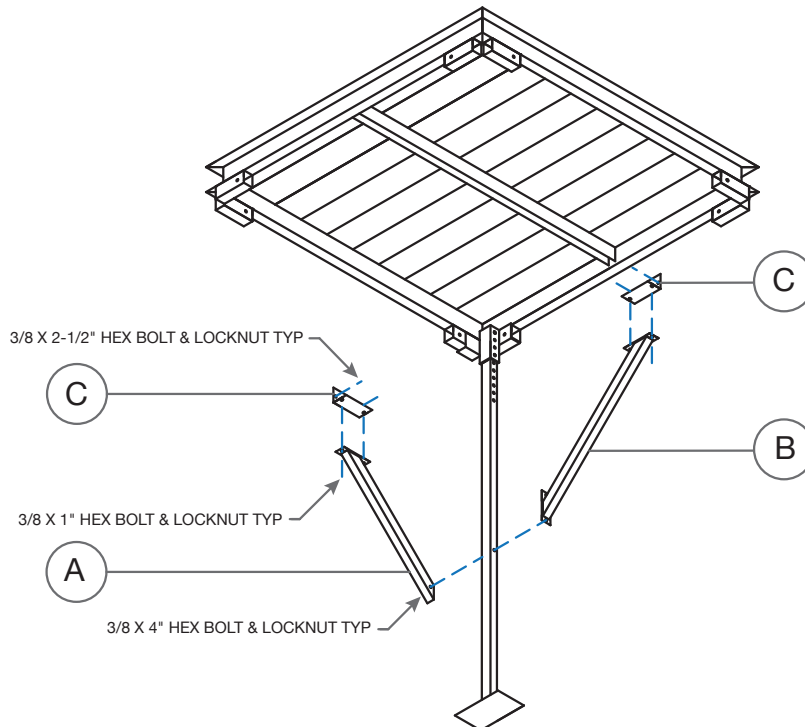
#14 x 3/4" self drilling hex screws on bottom

Screws should be spaced 2.5" from each end with a maximum spacing of 17" on center.

Screws are located in the **PLATFORM PACK** (CAP.PLM).

VIEW IS FROM BELOW

UNDERPLAT ADAPTERS MUST BE USED.



- A DIAGONAL BRACE A
- B DIAGONAL BRACE B
- C DIAGONAL ANGLE

If **DIAGONAL BRACING** is required for the **PLATFORMS** select which legs to install the bracing on. Bolt the **ANGLES** to the plates on the **DIAGONAL BRACES** using:

- 2 - 3/8 x 1" hex bolt
- 2 - 3/8 nylon locknut

Then position each **DIAGONAL BRACE** against the chosen **LEG** so the **ANGLE** aligns with the inside of the Platform Stringer. Drill holes and bolt in place using:

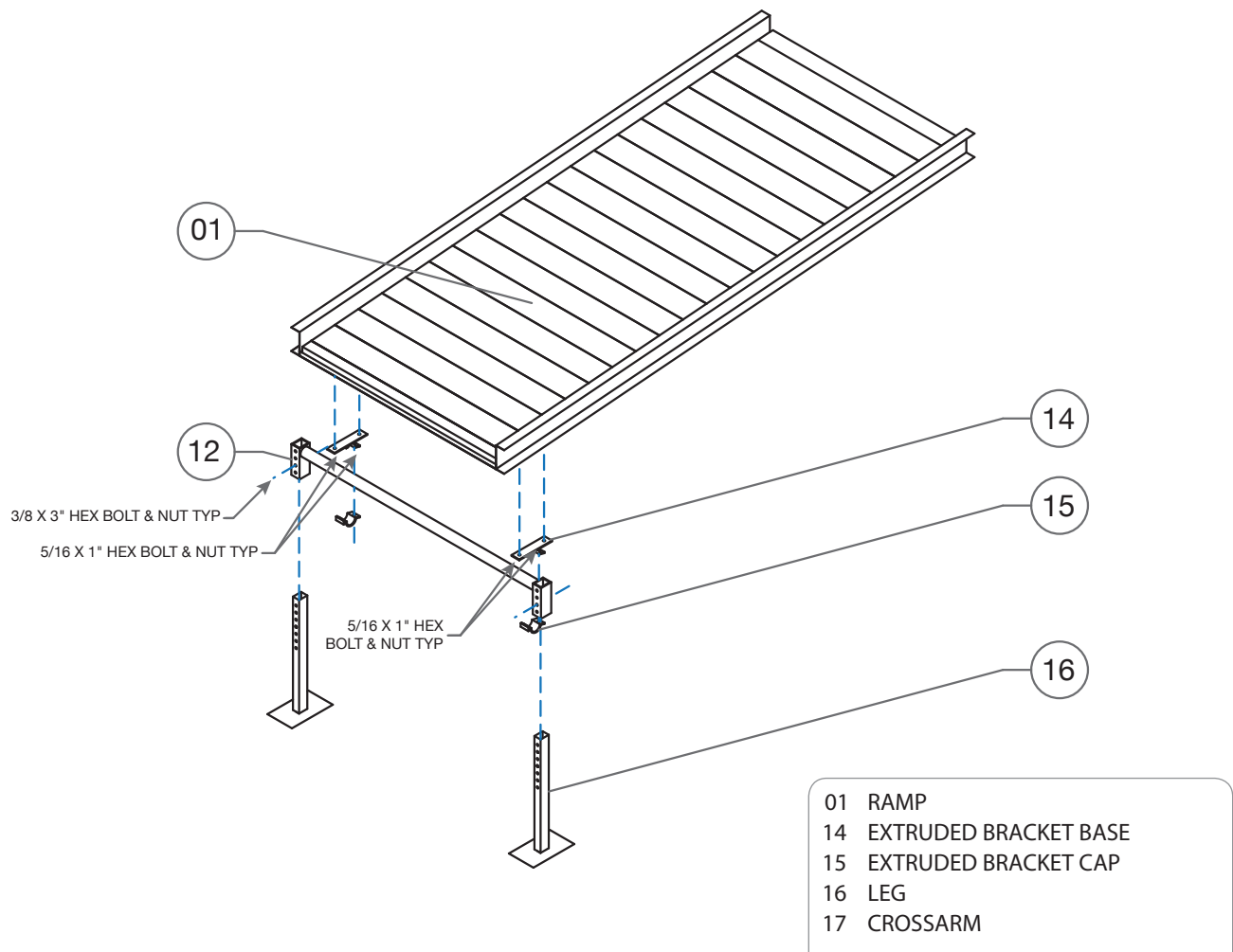
- 2 - 3/8 x 2-1/2" hex bolts
- 2 - 3/8 nylon locknuts

for the **ANGLES** and:

- 1 - 3/8 x 4" hex bolt
- 1 - 3/8 nylon locknut

for the **BRACES**.

Screws are located in the **DIAGONAL PACK (CAP.DIA)**.



Identify the top **RAMP** and install the 2 **EXTRUDED BRACKETS** to the Plates on the underside of the **RAMP** using:  
4 - 5/16 x 1" hex bolts and nuts

Tighten. Remove the **EXTRUDED BRACKET CAPS** and place the **CROSSARM** in the **EXTRUDED BRACKET BASE**. Make sure to center the **CROSSARM** on the **RAMP** and tighten in place.

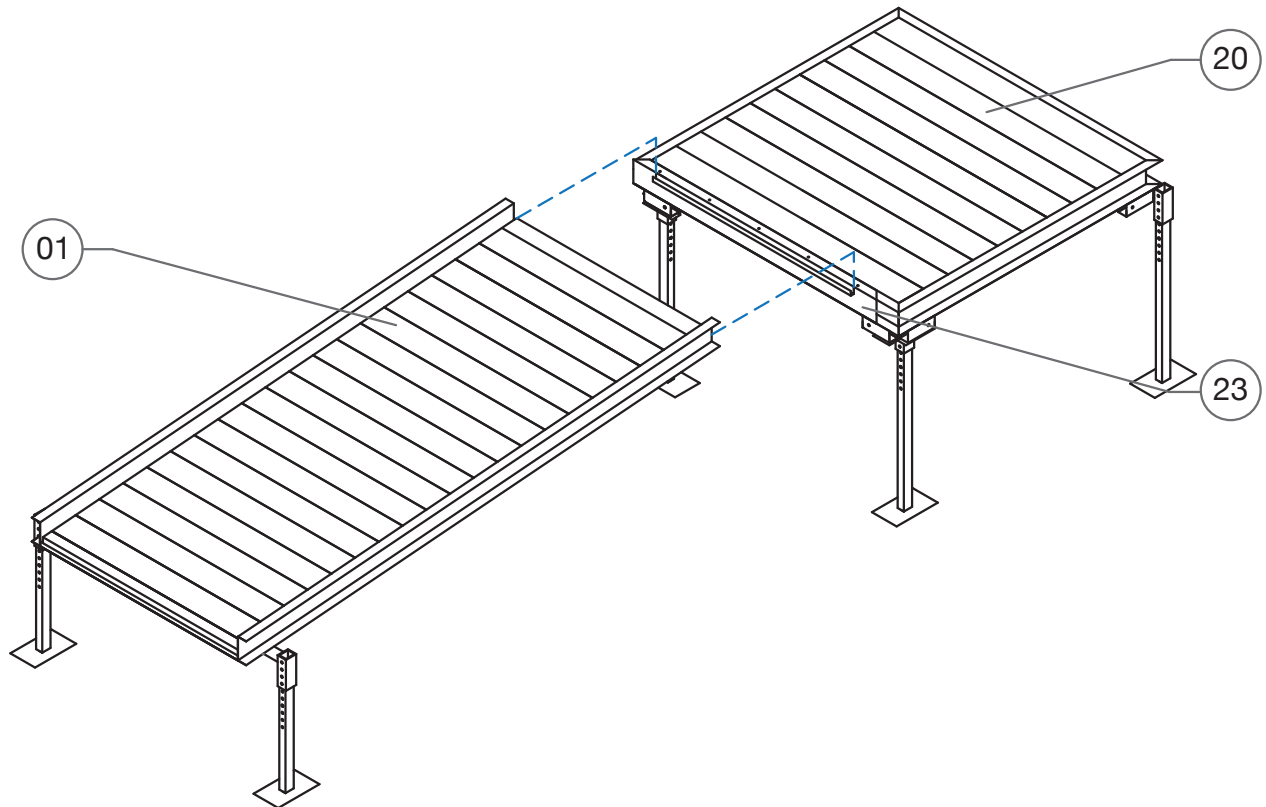
Insert **LEGS** into sockets and bolt in place using  
2 - 3/8 x 3" hex bolts and nuts

Wait to tighten after adjusting and checking slope of system.

Bolts are located in the ramp **RAMP PACK** (100059).



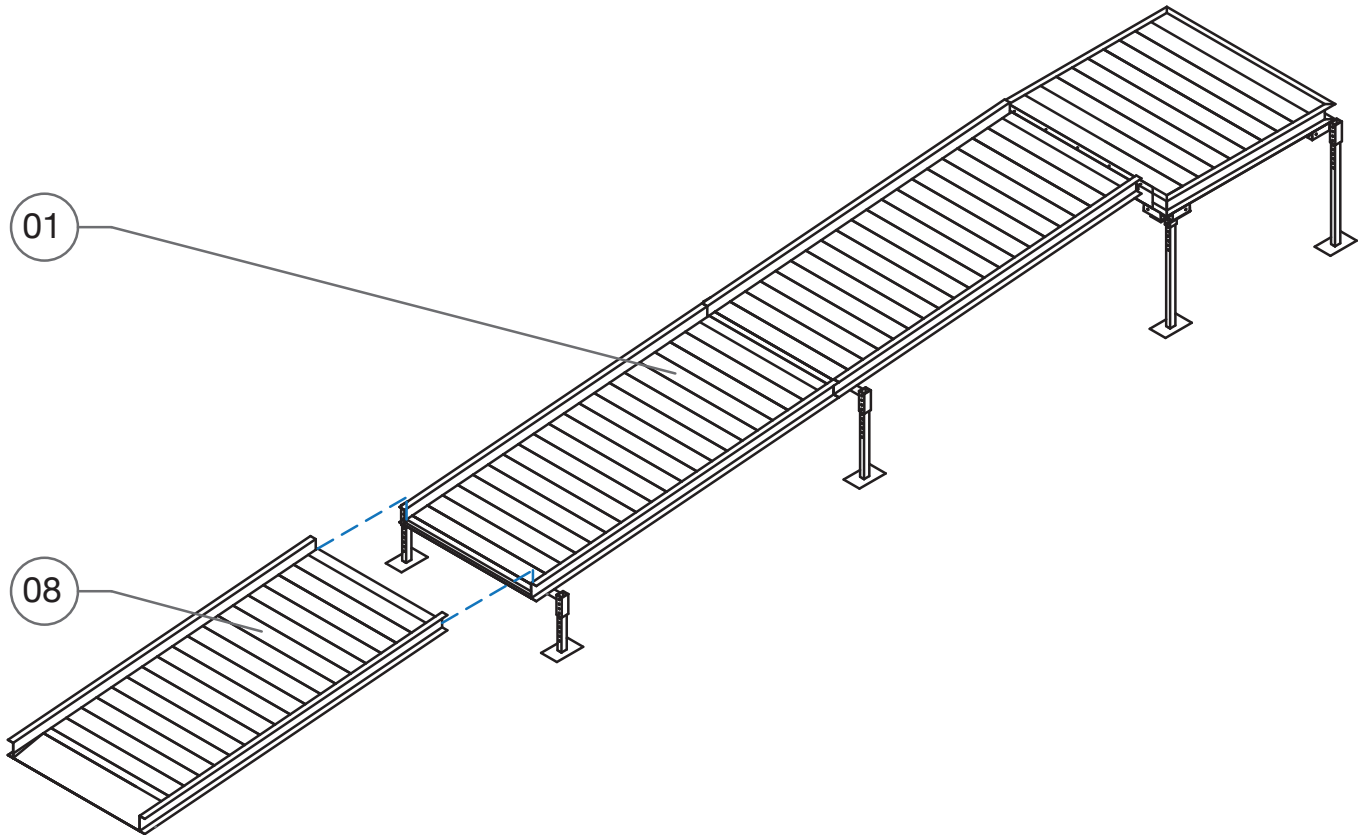
## 2B RAMP TO PLATFORM INSTALLATION



- 01 RAMP
- 20 PLATFORM
- 23 RAMP TO PLATFORM ADAPTER

Move top **RAMP** into place and lower into groove to mate the **RAMP** to the **RAMP TO PLAT ADAPTER**. Check and adjust slope as needed.

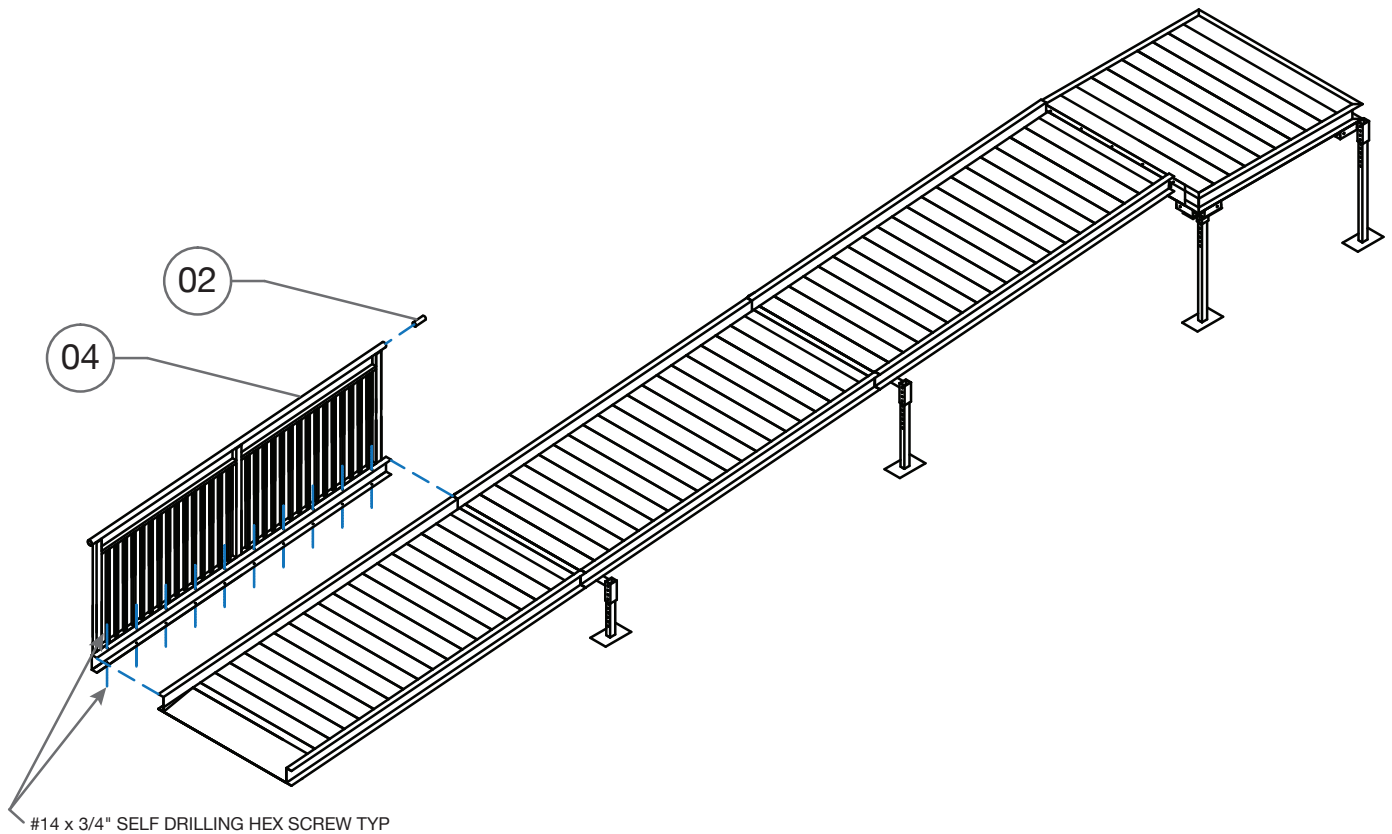
Repeat Steps 2A and 2B for remaining **RAMPS**.



- 01 RAMP
- 08 RAMP STARTER

The last RAMP will be a STARTER RAMP with a Starter Plate at the bottom. This RAMP will not require a CROSSARM or LEGS as it rests directly on the Ground.

If the System has more than one ramp run and the last RAMP is ending in a PLATFORM it will connect with a PLAT TO RAMP ADAPTER. Please see Step 1C for installation instructions.



- 02 RAIL INSERT (1057)
- 04 RAMP RAIL

Begin installing **HANDRAILS** from the **STARTER RAMP**.

Select a **RAMP HANDRAIL** (Ramps and Starter Ramps use the same Handrails) and position it so the channel aligns with the **RAMP** making sure the ends are flush and that the Handrail channel is on top of the Ramp channel. Mate the two channels together using a rubber mallet.

Secure **HANDRAIL** using:

#14 x 3/4" self drilling hex screw  
in each pilot hole.

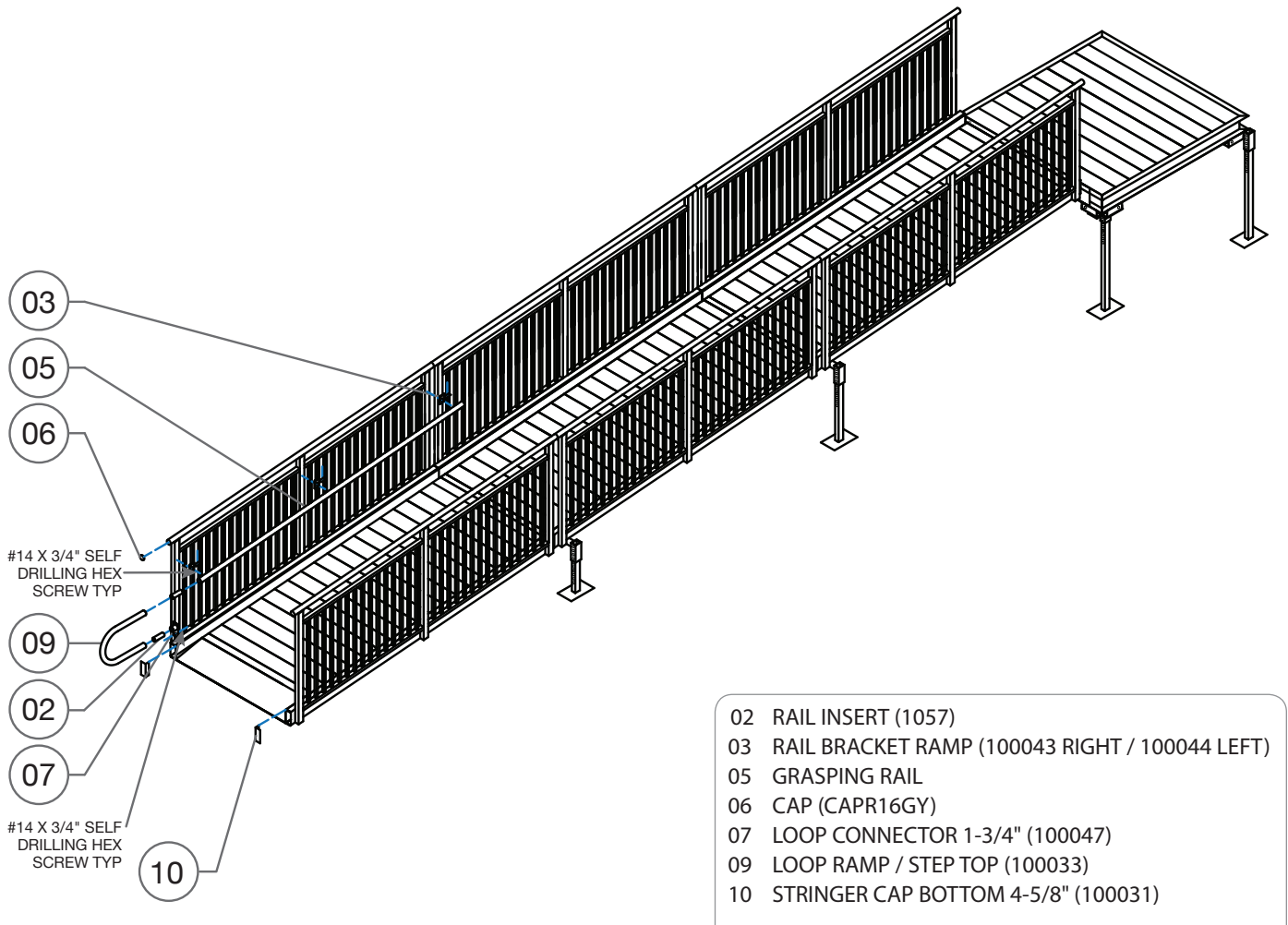
Place **RAIL INSERT** halfway into top of **HANDRAIL** tube and secure using:

#10 x 3/4" self drilling phillips screw  
on the underside of the tube.

Repeat for other side and then other **RAMPS** moving towards the top of the system. Make sure **HANDRAILS** capture **RAIL INSERTS**.

Double check slope to make sure **HANDRAILS** align correctly.

Bolts are located in the ramp **RAMP PACK** (100059).



Measure to your desired height and position a **RAIL BRACKET RAMP** against each post and clamp in position. Take the **GRASPING RAIL** and lay it in the cup.

Check that the **GRASPING RAIL** is at the correct height from the ramp surface and then attach the **RAIL BRACKETS** using:  
#14 x 3/4" self drilling hex screw

Attach the **GRASPING RAIL** using:  
#10 x 3/4" self drilling phillips screw  
on the underside at each bracket.

Insert a **RAIL INSERT** halfway into the top of the **GRASPING RAIL** and hold in place with:  
#10 x 3/4" self drilling phillips screw

Repeat for each length of **GRASPING RAIL** moving towards the top and then the other side.

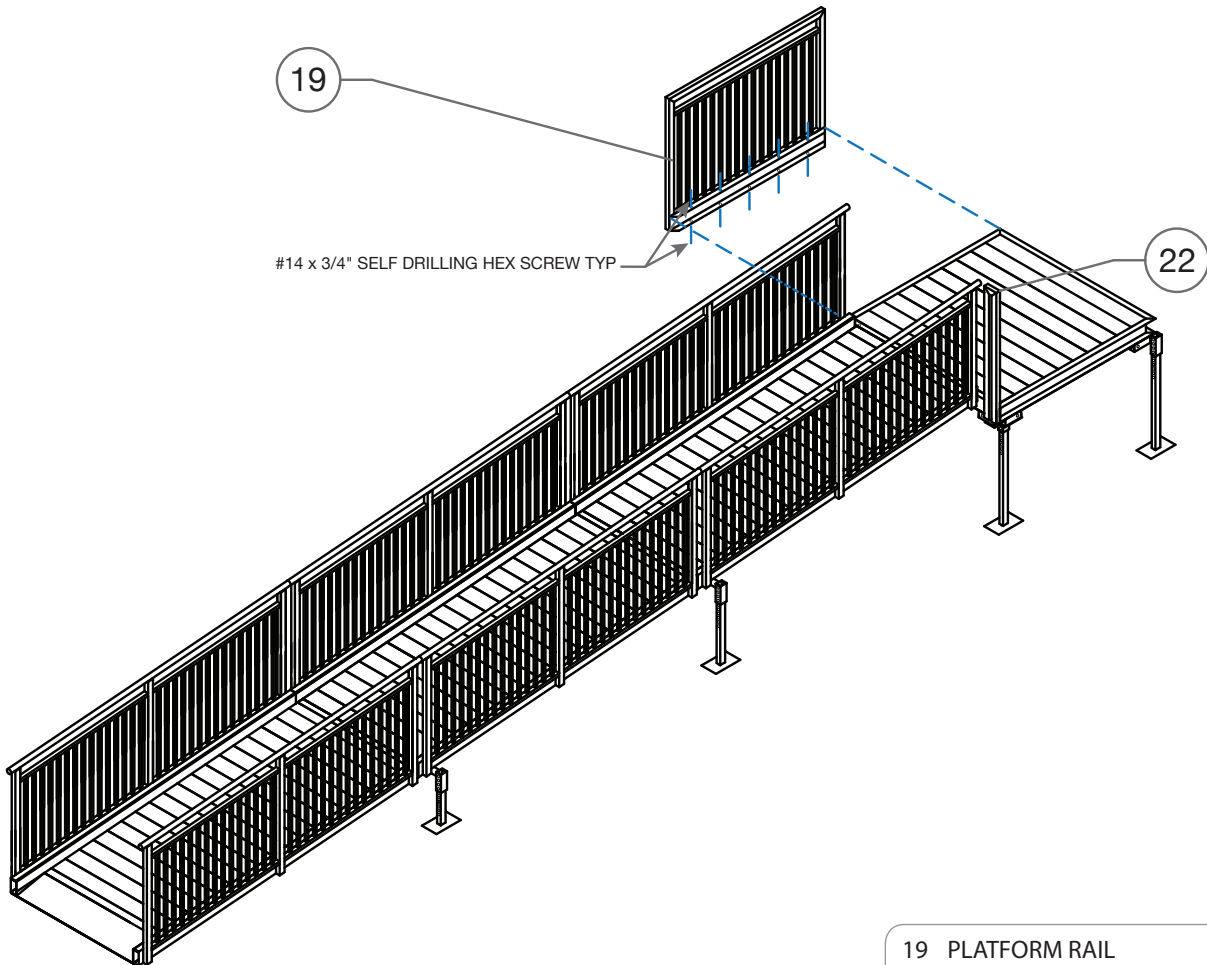
To attach **LOOPS** at top or bottom of **RAMP** insert a **RAIL INSERT** halfway into both arms of the **LOOP** and attach with:  
#10 x 3/4" self drilling phillips screw

Slide one arm of the **LOOP** into the **GRASPING RAIL** and the lower end into a **LOOP CONNECTOR** (1-3/4" in length). Pivot the **LOOP** until the **LOOP CONNECTOR** aligns with the **RAIL** post and clamp in position. Secure to post with:  
#14 x 3/4" self drilling hex screw

Secure both arms of **LOOP** with:  
#14 x 3/4" self drilling hex screw

Close any open tubes on the **RAIL** with the **CAPS**.

Use **STRINGER CAPS** to close the opening at the top and bottom of the **RAMP** stringers. The 4-5/8" caps are for the bottom and the 2-1/2" are for the top. Install each one using:  
2 - #14 x 3/4" self drilling hex screw



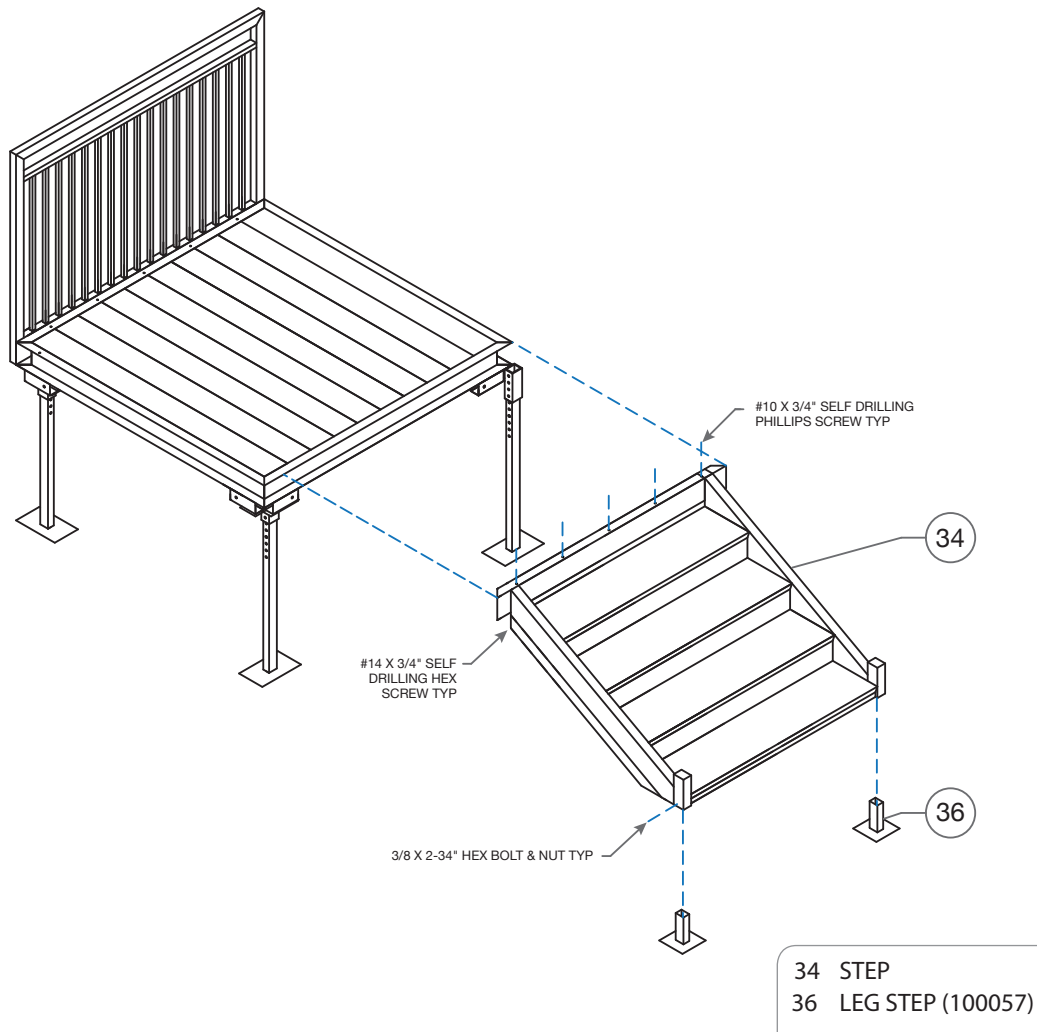
Select a **PLATFORM GUARDRAIL** and position it so the channel aligns with the **PLATFORM** making sure the ends are flush and that the guardrail channel is on top of the Platform channel. Mate the two channels together using a rubber mallet.

Secure **GUARDRAIL** using:

#14 x 3/4" self drilling hex screw  
in each pilot hole.

Repeat for other sides of the **PLATFORM**. The 5" **PLATFORM GUARDRAIL** is used on the side of the **PLATFORM** where a **RAMP** or **STEP** is attached. If you have a system with custom sizes the **GUARDRAILS** will be sized differently.

Use **BRACKET ANGLES** to secure the corners and **BRACKET PLATES** where two **GUARDRAILS** meet in line. Secure using:  
#10 x 3/4" self drilling phillips screw



Move **STEP** into place and align the step stringer with the platform stringer, the step stringer should be on top. Make sure to align it to one side so there is room for the 5" **GUARDRAIL**.

Mate the stringers together using a rubber mallet and fasten in place using:

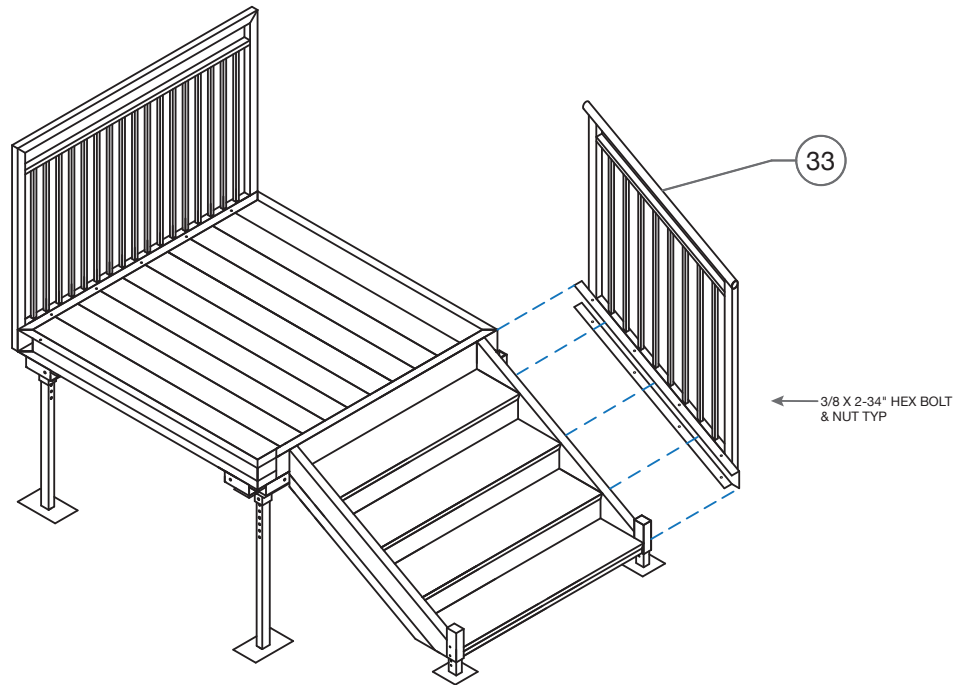
- #10 x 3/4" self drilling phillips screws on top
- #14 x 3/4" self drilling hex screws on bottom

Screws should be spaced 2.5" from each end with a maximum spacing of 17" on center.

Insert step **LEGS** into sockets at bottom of **STEP**. Adjust so **STEP** is level and bolt in place using:

- 3/8 x 2-3/4" hex bolts and nut

Screws are located in the **STEP PACK (CAP.SXX)**.



33 STEP RAIL (RIGHT)

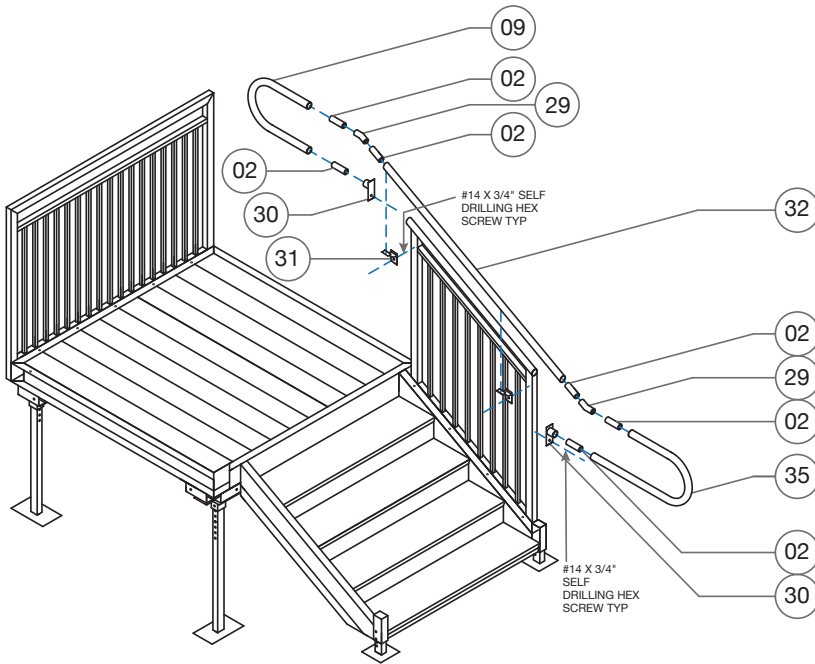
Select a **STEP HANDRAIL** and position it so the channel aligns with the **STEP** making sure the ends are flush and that the handrail channel is on top of the step channel. Mate the two channels together using a rubber mallet.

Secure **HANDRAIL** using:

3/8 x 2-3/4" hex bolt and nuts  
in each pilot hole.

Repeat for other side.

Screws are located in the **STEP PACK (CAP.SXX)**.



- 02 RAIL INSERT (1057)
- 09 LOOP RAMP / STEP TOP (100033)
- 29 LOOP CONNECTOR 30 deg (100035)
- 30 LOOP CONNECTOR 3-3/4" (100036)
- 31 RAIL BRACKET STEP  
(100060 right/100061 left)
- 32 GRASPING RAIL
- 35 LOOP STEP BOTTOM (100034)

Decide on the height of your **GRASPING RAIL** and mount the **RAIL BRACKETS** accordingly by drilling the post and using:  
 1 3/8 x 2 1/2" hex bolt and nut  
 for each bracket.

Measure to your desired height and position a **RAIL BRACKET STEP** (left or against each post and clamp in position. Take the **GRASPING RAIL** and lay it in the cup. Check that the **GRASPING RAIL** is at the correct height from the ramp surface and then attach the **RAIL BRACKETS** using:

#14 x 3/4" self drilling hex screw

Attach the **GRASPING RAIL** using:

#10 x 3/4" self drilling phillips screw  
 on the underside at each bracket.

To attach **LOOPS** at top insert a **RAIL INSERT** halfway into both arms of the **LOOP** and attach with:

#10 x 3/4" self drilling phillips screw

Insert a third **RAIL INSERT** halfway into the **GRASPING RAIL** and attach with:

#10 x 3/4" self drilling phillips screw

Slide one arm of the **LOOP** into the **LOOP CONNECTOR 30°** and then onto the **RAIL INSERT** attached to the **GRASPING RAIL**. Slide the other arm into the **LOOP CONNECTOR 3-3/4"** and check for correct alignment. Attach to the post using:

#14 x 3/4" self drilling hex screw

and attach the **RAIL INSERTS** using:

#10 x 3/4" self drilling phillips screws

To attach **LOOPS** at bottom insert a **RAIL INSERT** halfway into both arms of the **LOOP** and attach with:

#10 x 3/4" self drilling phillips screw

Insert a third **RAIL INSERT** halfway into the **GRASPING RAIL** and attach with:

#10 x 3/4" self drilling phillips screw

Slide the short arm of the **LOOP** into the **LOOP CONNECTOR 30°** and then onto the **RAIL INSERT** attached to the **GRASPING RAIL**. Slide the other arm into the **LOOP CONNECTOR 3-3/4"** and check for correct alignment. Attach to the post using:

#14 x 3/4" self drilling hex screw

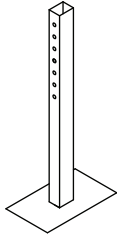
and attach the **RAIL INSERTS** using:

#10 x 3/4" self drilling phillips screws

Close any open tubes on the **RAIL** with the **CAPS**.

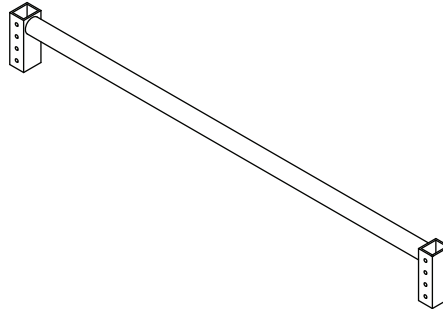


16 exploded view ref. number



LEG FOR RAMP AND PLATFORMS  
100000 12"  
100001 24"  
100002 36"  
100003 48"  
100062 HD

17



CROSSARM FOR RAMP  
100012 48"

36



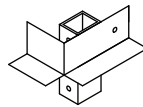
LEG STEP  
FOR STEPS  
100057 6"

14 15



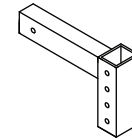
EXTRUDED BRACKET  
FOR RAMPS  
EB

21



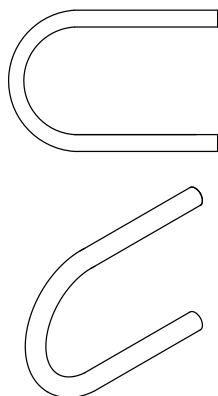
UNDER PLAT LEG ADAPTER  
FOR PLATFORMS  
100008R/L RIGHT AND LEFT

25



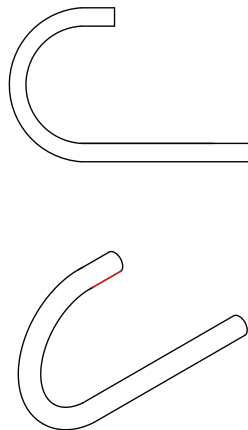
LEG T ADAPTER  
FOR PLATFORMS  
100007

09



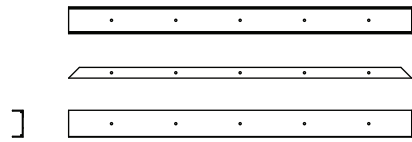
LOOP  
FOR RAMPS AND STEP TOP  
100033 1.66"D X 18.5"L

35



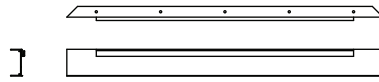
LOOP  
FOR STEP BOTTOM  
100034 1.66"D X 22.25"L

28 exploded view ref. number

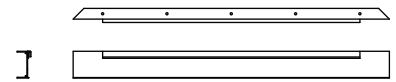


**TOP ADAPTER  
FOR ATTACHING PLATFORM TO BUILDING  
100027 64"**

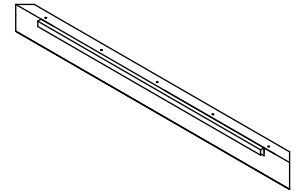
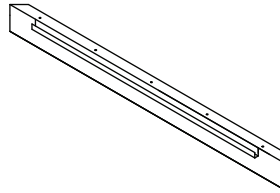
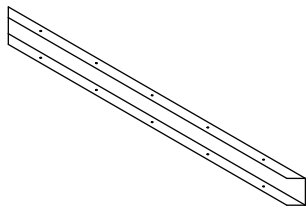
23



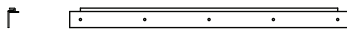
**RAMP TO PLAT ADAPTER  
FOR ATTACHING TOP OF RAMP TO PLATFORM  
100016 59"**



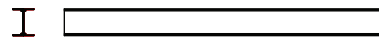
**PLAT TO RAMP ADAPTER FOR  
ATTACHING BOTTOM OF RAMP TO PLATFORM  
100024 59"**



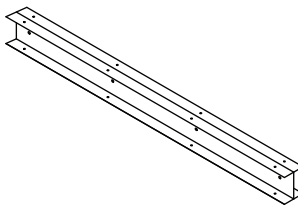
24



**RAMP TO PORCH ADAPTER  
FOR ATTACHING TOP OF RAMP TO  
EXISTING PORCH  
100020 52"**



**I BEAM CONNECTOR  
FOR JOINING TWO PLATFORMS TOGETHER  
100029 60"**



02 exploded view ref. no.



RAIL INSERT  
FOR RAMP & STEP RAILS  
**1057**  
1.33"D X 4"L

07



LOOP CONNECTOR  
FOR RAMP LOOPS  
**100047**  
1.66"D X 1.75"L

13



HANDRAIL CONNECTOR  
FOR RETURNING GRASPING  
HANDRAILS  
**100048** 1.66"D X 5.5"L

30



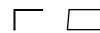
LOOP CONNECTOR  
FOR STEP LOOPS  
**100036** 1.66"D X 3.8"L

18



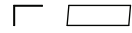
BRACKET ANGLE  
FOR PLATFORM CORNER  
GUARDRAILS  
**100049** 1" X 1"

11



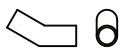
STRINGER CAP TOP  
FOR RAMPS  
**100032** 2-1/2"

10



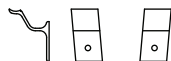
STRINGER CAP BOTTOM  
FOR RAMPS  
**100031** 4-5/8"

29



LOOP CONNECTOR 30°  
FOR STEP LOOPS  
**100035** 1.66"D X "L

03



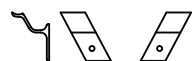
HANDRAIL BRACKET  
FOR RAMPS  
**100043/4** RIGHT/LEFT

12



90 CASTING  
FOR RAMP GRASPING  
HANDRAILS  
**100046**

31



HANDRAIL BRACKET  
FOR STEPS  
**100060/1** RIGHT/LEFT

**RAMP PACK: 100059**

ZN03	#14 x 3/4" self drilling hex screw . . . . .	50
ZJ03	#10 x 3/4" self drilling phillips screw . . .	15
X304	5/16 x 1" hex bolt . . . . .	4
Z350	5/16 nut . . . . .	4
X412	3/8 x 3" hex bolt . . . . .	2
Z450	3/8 nut . . . . .	2

**STEP PACK: CAP.SXX**

ZN03	#14 x 3/4" self drilling hex screw . . . . .	8
ZJ03	#10 x 3/4" self drilling phillips screw . . .	28
X411	3/8 x 2-3/4" hex bolt . . . . .	2 (XX-1)
Z450	3/8 nut . . . . .	2 (XX-1)

\* XX = number of risers

**STARTER RAMP PACK: CAP.RMS**

ZN03	#14 x 3/4" self drilling hex screw . . . . .	50
ZJ03	#10 x 3/4" self drilling phillips screw . . .	15

**PLATFORM PACK: CAP.PLM**

ZN03	#14 x 3/4" self drilling hex screw . . . . .	40
ZJ03	#10 x 3/4" self drilling phillips screw . . .	10
X412	3/8 x 3" hex bolt . . . . .	8
Z450	3/8 nut . . . . .	8

**TOP PLATFORM PACK: CAP.PLT**

X314L	5/16 x 4-1/2" lag bolt . . . . .	4
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**I BEAM PACK: CAP.PLC**

ZN03	#14 x 3/4" self drilling hex screw . . . . .	10
ZJ03	#10 x 3/4" self drilling phillips screw . . .	10
X422	3/8 x 5-1/2" hex . . . . .	4
Z450	3/8 nut . . . . .	4

**DIAGONAL PACK: CAP.DIA**

X404	3/8 x 1" hex . . . . .	4
X410	3/8 x 2-1/2" hex . . . . .	6
X416	3/8 x 4" hex . . . . .	1
Z451	3/8 lock nut . . . . .	4