

LAPEYRE STAIR INSTALLATION INSTRUCTIONS FOR IBC COMMERCIAL STAIRS and PLATFORMS

I. Prior to Assembling and Installing:

Included with these Installation Instructions should be the following:

- Required Tools List
- Installation Sketches
- Platform Assembly Drawings
- Design Drawings (as required)

Field Check and verify that all components of the structure required for installation are in place per the approved assembly drawings. Verify that identification markings shown on assembly drawings exist on stair components. Report any discrepancies to the Architect or contractor for corrective action by responsible parties prior to erection of stair.

II. Assembly Steps:

Refer to composite assembly sheet for overall picture of stair and platform installation.

Stair assembly should use the following basic steps:

- Pre-assembly of stairs and platforms
- Erection of platform legs
- Platform installation
- Stair installation
- Installation of remaining platform components
- Installation of remaining stair components

A. Stair Pre-assembly (Refer to Drawing/Installation Sheet (later))

Recommended Pre-assembly for the stairs is to attach the top 4 inch landing and all treads to the stringers. Guard balusters, top guard rail and handrails should not be attached until after the stair is set in place.

Note:

All 3/8-16 tread, guard rail and hand rail fasteners should be tightened to a minimum torque value of 25-35 foot-pound.

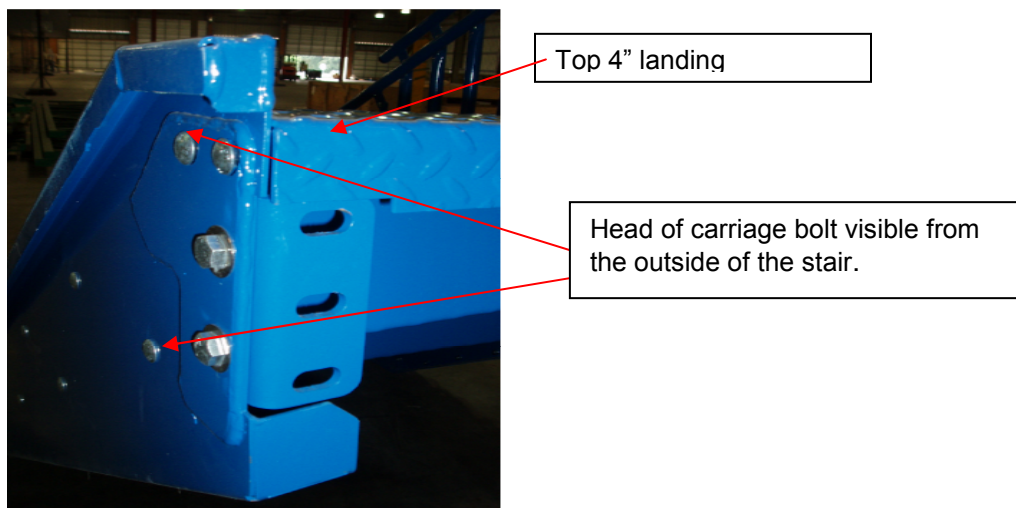
Install the mounting bracket using the ½-13X 1-1/2" Hex Head Bolts, flat washers and locknut provided. Remove top or bottom tread if required to access bolts or nuts for tightening.

Re-install top and bottom tread at their respective locations if removed for installation.



Assemble the top 4" landing of stair and all treads to stringers, utilizing the 3/8-16 X 1" carriage bolts and 3/8-16 serrated flange nuts. Attach landing and all treads with fasteners loosely prior to tightening any single tread. After all treads are installed, torque all fasteners (including back pan fasteners if so equipped) to 25-35 foot-pounds. (Note: The top and bottom treads of the stair may be left unassembled at this time in order to facilitate installation of mounting brackets at a later stage.

Note: All tread attachment carriage bolts should be installed from the outside such that the bolt heads are visible and appear on the outside/outboard sides of the stair stringer.



B. Platform Pre-Assembly (Refer to Drawing/Installation Sketches ..later)

Refer to the Platform Assembly drawing(s) for an overall 3-D view of the platform assembly.

Connect Platform support beams to each other as shown on the Typical Platform Assembly detail shown on Installation Sheet **CS10**.

Connect inverted U cross channel mounts to support beams as shown on the Typical Cross Channel mount detail shown on Installation Sheet **CS12**.

Attach stair mount brackets to platform support beams as shown on Platform assembly drawing(s). Ensure that these mounting brackets are installed on the correct sides of the platform.

Platform types covered here include: solid steel diamond tread, concrete pan, bar grating and serrated grating.

Place platform onto support structure. For diamond tread platforms, the notched L members welded to the platform bottom will mount to the slotted holes on top the cross channel mounts. Refer to Platform assembly drawings (sheet 4). For concrete pan platforms.....(later). For bar grating and serrated grating attached studs through grating to cross channel mounts as shown on Installation Sheets **CS13** and **CS14** respectively.

C. Platform Leg Erection (Refer to Drawing/Installation Sketches ... later)

Ensure layout of the platform legs exists on floor or grade surface as applicable. Verify that the mounting elevations for the lower end of the legs match the design drawings. If platform legs are different lengths, ensure that each leg is placed in its' proper position.

Mounting plates on the top of legs may differ from the mounting plates on the bottom of the legs. Verify correct orientation of the legs to ensure the leg bottom mounting plate is at ground level and the top connection plate is at platform level. Refer to stamped ID markings on the pads.

Erect legs and fasten bottom mounting plates using specified bolts or anchors. Grout under bottom legs plates as required to achieve correct elevation. Provide lateral stability of legs as necessary for placement of platform.

D. Platform Installation (Refer to Drawing/Installation Sketches ... later)

Set pre-assembled platform onto support legs. Mount the platform to the support legs using the Typical Support Leg to Platform mount detail shown on Installation Sheet **CS9**

Continue to provide lateral stability as necessary for the leg and platform unit until the entire installation is complete.

If platform is designed with cross bracing between the column legs, install cross bracing as shown on Installation Sheet **CS8**, Typical Support Bracing Assembly.

If platform is designed to be connected to a building or structure next to it, this connection may be installed at this time in accordance with the design details. (This connection may be installed after the stairs are installed, however, care should be taken to ensure the lateral stability of the platform).

E. Stair Installation (Refer to Drawing/Installation Sketches ... later)

Position stair with top landing tread, at same elevation as upper finished floor surface and attach top of stair to platform using details shown on Installation Sheet **CS6**, Commercial Stair to Platform mount.

Attach bottom of stair to platform using details shown on the design drawings (If bottom of stair attaches to ground, concrete or other surface, attach bottom of stair to surface using details shown on the design drawings).

Secure stair assembly with the required hardware but with never less than four fasteners at the top and bottom-mounting surfaces. A minimum of two fasteners are to be used at each end of each respective stringer.

F. Platform Rail and Stair Rail Installation

Note: Platform rails and balusters, and Stair rails and balusters may or may not be usable only in one location on the stair or platform. (Some balusters or rails may be interchangeable with other balusters or rails depending on the particular design).

Note: Extra care used be used in the order of guard rail and handrail assembly, in order to ensure handrail joiners can be installed.

Each baluster and rail is tagged to identify its' specific location(s) on the stair or platform. Refer to the Platform assembly drawings. Components are labeled with the following prefixes:

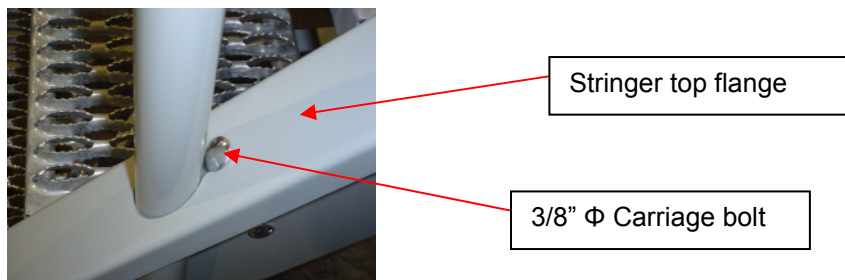
B	Ballusters (Vertical guard rails)
FP	Filler Panels
G	Guardrail (Horizontal top rail of guard)
H	Handrails
P	Platforms

1. Baluster installation:

Identify locations for each baluster to be installed by matching tag IDs on the balusters to the locations shown on the platform assembly and stair assembly drawings.

Place all 3/8-16 X 1" baluster clamp carriage bolts in the rectangular slots at each baluster hole in the stringer top flange prior to inserting balusters. *(note: In future Installation Sheet **CS11** will be used)*

Note: Baluster clamp carriage bolts heads should appear on the top surface of the stringer flange.

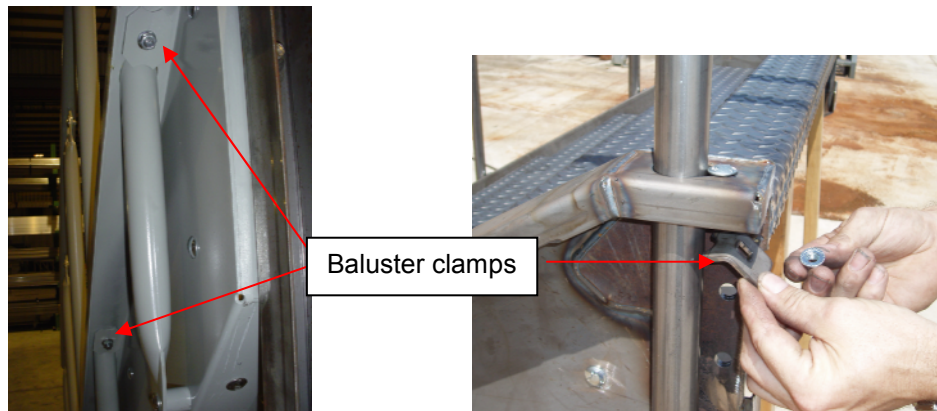


Insert balusters through the holes in the stringer top flange and then attach the baluster at bottom anchor point with the 3/8-16 X 2" carriage bolt, baluster spacer and serrated flange nut, and torque to 25-35 foot-pounds. Leave all baluster fasteners loose until rail assemble is complete. *(note: In future Installation Sheet **CS11** will be used)*



Install the baluster clamps to the underside of the top stringer flange; **be sure to orient the clamp so that the radius on the clamp contacts the baluster**. Install 3/8-16 serrated flange nut and torque to 25-35 foot-pounds.

Note: The top baluster clamp is different and has a bend to allow for clearance.

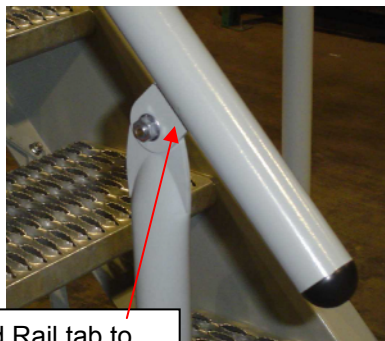


2. Top Guard Rail and Handrail Installation

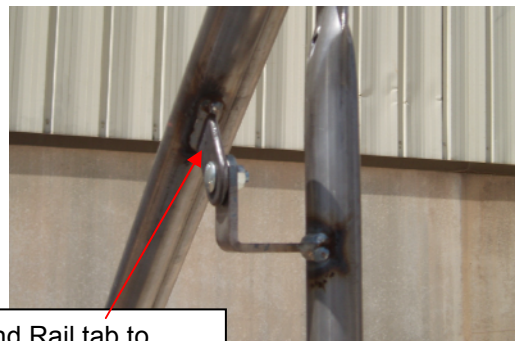
Identify locations for each guard rail and handrail to be installed by matching tag IDs on the rails to the locations shown on the platform assembly and stair assembly drawings.

Install the platform and stair guard rails (top horizontal rail) to each baluster with the tab on the rail to the outside of the baluster using the 3/8-16 X 3/4" carriage bolts and serrated flange nuts. Insert the carriage bolt from the inside of the stair (walking surface) with the serrated nut to the outside of the stair rail.

Mount the hand rail with the tab to the inside of the stair on its mounting bracket. (See illustrations below). Torque to 25-35 foot-pounds.



Guard Rail tab to outside of baluster.



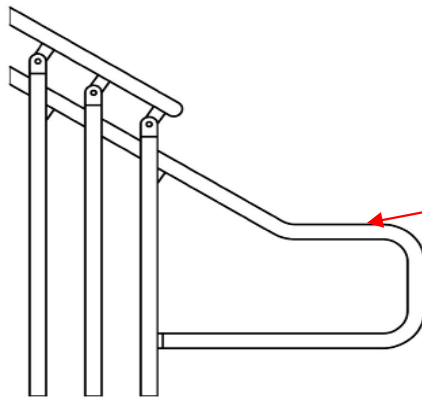
Hand Rail tab to inside of baluster.

Attach top and bottom and bottom handrail extensions to the stair handrail using the handrail joiner as shown on Installation Sheet **CS17**.

Note: For stairs with ADA handrail extensions, be sure that the rail end with the smaller extension is placed to the top of the stair.



The end with the smaller handrail extension goes to the top of the stair.



Handrail Extension at bottom of ADA stair

3. Handrail Joiner Installation

Refer to the Handrail Joiner Assembly shown on Installation Sheet **CS17** for connection of handrail sections with the handrail joiner.

Insert set screws and tighten until handrail ends are snug.

III. JOB COMPLETION

Touch up with matching paint any chipped or abraded damage to factory finish or touch up any damage to galvanized surfaces using galvanized repair paint in accordance with ASTM A780.

Ensure all bolts are tightened.

Inspect stair and platform assembly for any obvious deficiencies.