

# Light Rail Splice Installation Guide Addendum



Light Rail Splice bars are structural elements that may be used to join two or more of the IronRidge Light Rails together to create a single, longer rail. Although the splice is structural, the installer must note that the joint will not be as strong as the rail itself.

## Component List

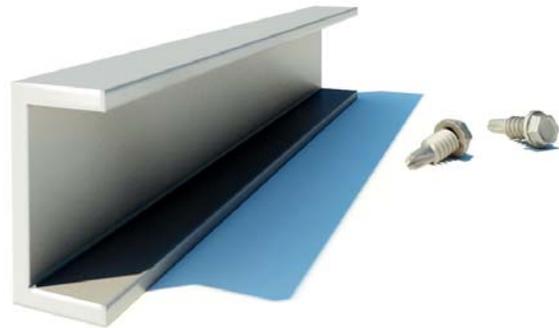
The component list is indicated here for a Light Rail Splice Kit (#29-7000-000):

- Splice Bar (1)
- #12-14x5/8", Self-drilling/tapping screws (2)

## Tools Required

The following tools are required to install the Light Rail splice correctly:

- Screw gun (cordless drill); 5/16 socket
- Tape measure (or Ruler)



## Installation Instructions

- 1) Slide the internal splice halfway into the internal cavity of the rail. It should extend approximately three (3) inches into the cavity of the Light Rail.
- 2) Using one (1) self-drilling, self-tapping screw, one (1") inch from the edge of the rail, secure the internal splice into the rail as shown on the right.
- 3) The screws will drill through both the Light Rail and the splice into the cavity of the internal splice.
- 4) Slip the second rail over the internal splice until the two Light Rails are butting tightly and evenly together.
- 5) Drive one (1) self-tapping screws through the second rail, one (1") inch from the edge utilizing the same horizontal location as the first rail.
- 6) Repeat this procedure for any remaining splices.



## Expansion Joints

For rows of panels exceeding 50 feet of rail, IronRidge recommends the utilization of expansion joints. Expansion joints prevent the potential buckling of rails due to thermal expansion. To create a thermal expansion joint, secure the splice bar into one of the rails as described above. Then slide the other rail over the splice bar, and leave the splice bar secured on one side only. Leave a 1/2" gap between the ends of the rails to allow for thermal expansion.

## Installation Notes

- 1) Take care to make sure the splice does not occur in the middle 1/3 of the span between attachments. In situations where the actual span is less than the maximum allowable span, there may be more flexibility with the location of the splice bar. Please contact your local distributor for more information.
- 2) No splices are permitted in the end spans of a row. In other words, splices must be placed on the inside of the 2<sup>nd</sup> attachment.
- 3) Thermal expansion joints are not structural connections and should not be treated as such. It is recommended that modules not span over a thermal expansion joint. Panels should have end clamps on each side of the expansion joint. In addition, an extra attachment will need to be added to the long portion of the rail created by the break. This layout will allow for maximum density while allowing for thermal expansion.

