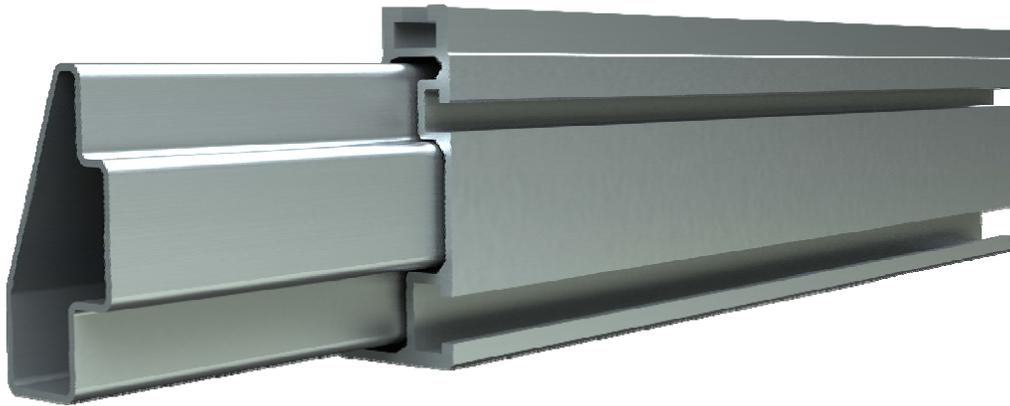


# Standard Rail Splice Installation Guide Addendum



Standard Rail Splice bars are structural elements that may be used to join two or more of the IronRidge Standard 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 single splice kit:

- Splice Bar (1), 51-7000-000
- 10-16x1/2", Self-drilling/tapping screws (4), 48-1016-500



## Tools Required

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

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

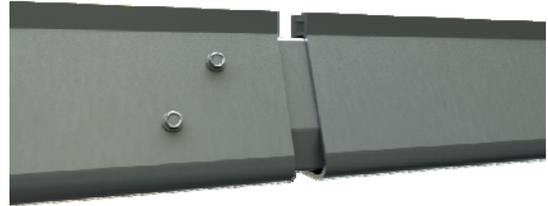
## Installation Instructions

- 1) Slide the internal splice halfway into the internal cavity of the rail. It should extend approximately six (6) inches into the cavity of the Standard Rail.
- 2) Using two of the self-drilling, self-tapping screws, secure the internal splice into the rail utilizing the screw pattern shown on the right.
- 3) The screws will drill through both the Standard Rail and the splice into the cavity of the internal splice. In the cross-section diagram on the right, you'll notice how the screws pierce both the wall of the rail and the splice, securing the splice to the rail.
- 4) Slip the second rail over the internal splice until the two Standard Rails are butting tightly and evenly together.
- 5) Drive two self-tapping screws through the second rail utilizing the same pattern from 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 ½" 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 (see diagram below).
- 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.

For product and purchasing inquiries contact:

**ecodirect**

CLEAN ENERGY SOLUTIONS

[www.ecodirect.com](http://www.ecodirect.com)