

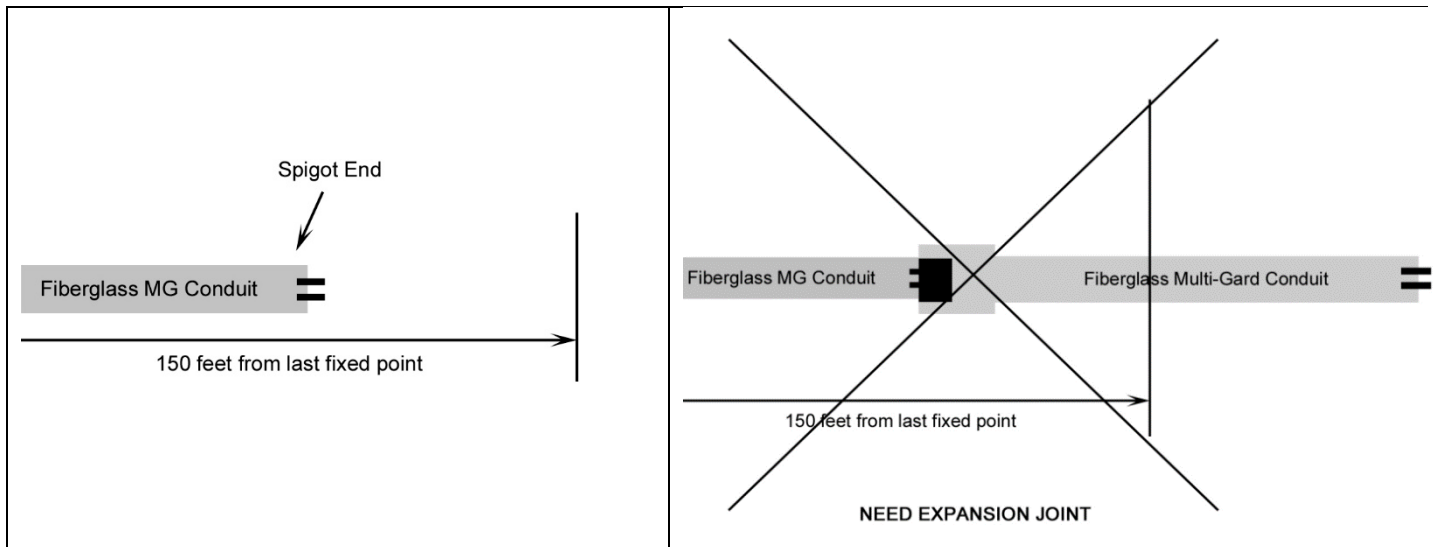
Fiberglass Multi-Gard® Expansion Joint Installation Instructions

Expansion joints are designed to compensate for length changes due to temperature variations in exposed conduit runs and consists of two sections of conduit, one telescoping inside another. Expansion joints are not required for underground applications.

Like all construction materials, fiberglass will expand or contract with variations in temperatures. In a Multi-Gard fiberglass installation, a fiberglass expansion joint is to be installed once anywhere within every 150 feet of conduit run, while also creating fixed points every 150 feet to control overall conduit expansion. When assembling the Multi-Gard fiberglass conduit and expansion joints, always check for alignment and apply epoxy to the outside of the spigot ends. Do not epoxy the PVC innerducts. Push sections together until the spigot end seats fully into the belled end.

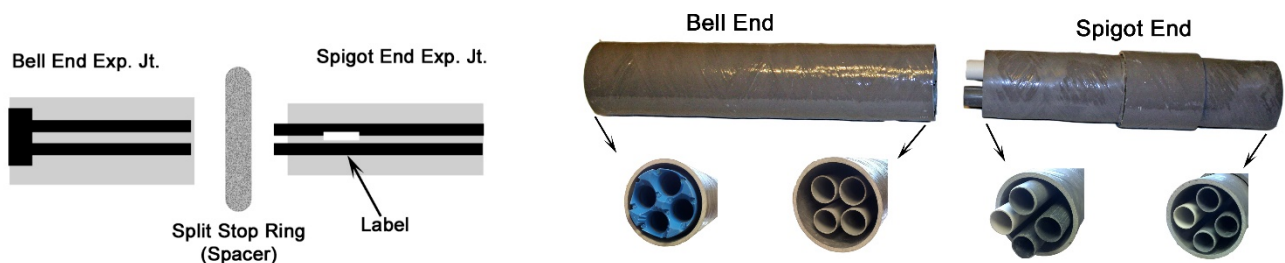
Fiberglass expansion joints are typically installed on bridge applications.

Starting at a fixed point, the Multi-Gard fiberglass conduit comes out of the ground to go across a bridge. When your next piece of installed Multi-Gard increases the overall length from the last fixed point to greater than 150 feet, it is time to install an expansion joint and a fixed point.



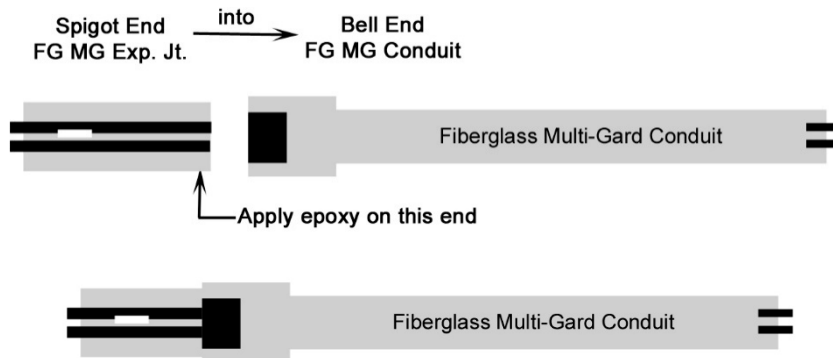
The following explains how to install an expansion joint if the spigot end of the last installed piece of Multi-Gard is exposed.

1. Disassemble the expansion joint. There will be a bell end, spigot end, and a split stop ring (used as a spacer to maintain separation between the two during installation).



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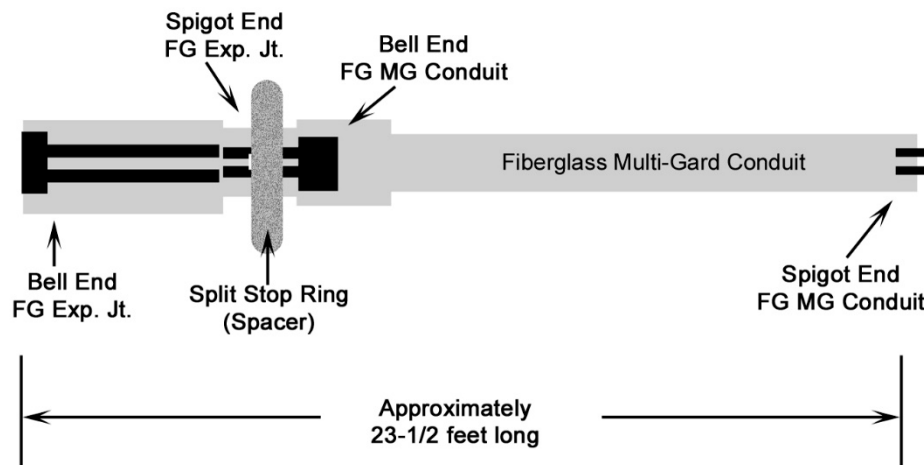
2. Apply epoxy to the outside of the spigot end of the expansion joint that will be inserted into the bell end of the Multi-Gard fiberglass conduit. It is recommended to use a piece of wood and a hammer to drive the spigot end of the fiberglass expansion joint into the bell end of the next length of Multi-Gard fiberglass conduit to be installed. The inner ducts of the expansion joint must penetrate into blue coupling body of the Multi-Gard fiberglass conduit.



3. Then install the other half of expansion joint.

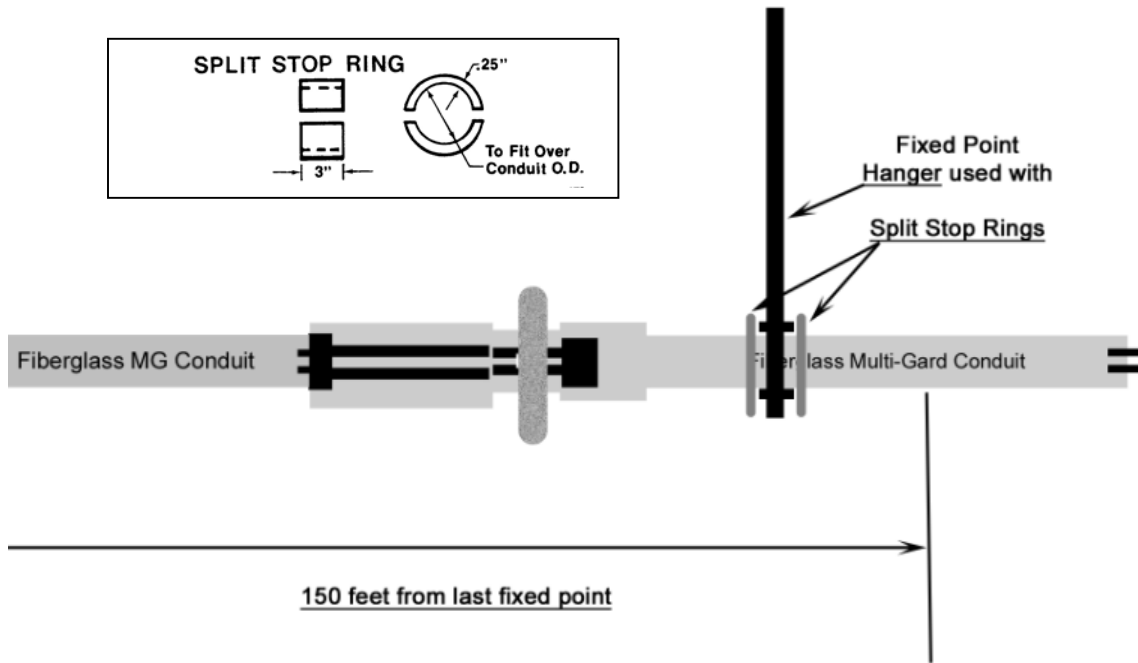


4. Install the split stop ring spacer (included with the expansion coupling) approximately over the temperature label. This will guarantee the expansion joint will not close completely and provide the expansion/contraction length needed for varying temperatures. **This split stop ring spacer MUST be removed AFTER the expansion joint + conduit is installed between 2 fixed points.**



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- Apply epoxy to the outside of the spigot end of the installed Multi-Gard fiberglass conduit. Install 23-1/2' length of expansion joint + Multi-Gard into last installed piece of Multi-Gard fiberglass conduit. Attach it to a fixed point. If the fixed point is a hanger (or any type of support anchor), epoxy split stop rings to the Multi-Gard on either side hanger to create a fixed point. This will ensure the conduit will not slide through the hanger.



- Continue on your run. You may install the next expansion joint anywhere within the next 150 feet.
- You can remove the spacer after the fixed point is installed & reuse it on the next expansion joint assembly.

Part Numbers:

Fiberglass Multi-Gard Conduit:

MHSS4S-020 – 4-Way Heavy Wall Fiberglass Multi-Gard Conduit
 MHSS3S-020 – 3-Way Heavy Wall Fiberglass Multi-Gard Conduit
 MBSS4S-020 – 4-Way Bullet Resistance Fiberglass Multi-Gard Conduit
 MBSS3S-020 – 3-Way Bullet Resistance Fiberglass Multi-Gard Conduit

Expansion Joints: M_EC_

Pos.1	Pos. 2	Pos. 3	Pos. 4	Pos. 5
Product	Outerduct	Description	Type	Innerducts
M = Multi-Cell	H = Heavy Wall B = Bullet Res	E = Expansion	C = Coupling	4 = 4-Way 3 = 3-Way

Epoxy Kits: MA30EK (30 oz. w/mixing tip)

Split Stop Rings:

MSSRH – Heavy Wall Split Stop Ring
 MBSSR – Bullet Resistant Split Stop Ring