

Sizes and Grip Range

Blind rivets are a common fastening method in FRC used to join sheet metal, gussets, and extrusion when access is only available from one side. Two important factors when selecting rivets are **size** and **grip range**.

3/16" Rivets (Common FRC Size)

3/16" rivets are larger diameter blind rivets used when a stronger joint is needed.

Best uses:

- Structural gusset connections
- High-load or high-vibration joints
- Areas where extra strength is more important than weight

Requirements:

- Correctly sized drilled hole (3/16")
- Proper grip range selection for material thickness

Tradeoffs:

- Heavier than smaller rivets
 - Requires more force to install
 - Takes up more material space
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Grip Range

Grip range is the total thickness of material a rivet can properly clamp.

If grip range is incorrect:

- Too short → rivet may not set correctly or could pull out
- Too long → joint will be loose and weak

Correct grip range ensures:

- Proper rivet expansion

- Strong, tight joints
 - Reliable long-term fastening
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Best Practice

- Measure total material thickness before selecting rivets
 - Always match grip range to your material stack
 - Deburr holes before installation
 - Ensure rivet is fully seated before releasing the tool
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Key Idea

In FRC, 3/16" rivets are used for stronger structural joints, but only work correctly when paired with the proper grip range for the material thickness.

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