# Press and Brazed Fittings

What's the difference?

## Materials

Press fittings and brazed fittings are both made from copper or copper alloys. Press fittings use mechanical pressing tools to compress fittings onto pipes with a sealing O-ring, while brazed fittings are joined using brazing techniques with copper-phosphorus alloy filler metal.

## Installation

Press fittings streamline installation with mechanical pressing tools, ensuring swift and straightforward application. Conversely, brazed fittings demand meticulous brazing techniques and specialized equipment, lengthening the installation process.

## Reliability

Press fittings create a strong mechanical joint, while brazed fittings form a metallurgical bond. Both types are reliable when installed correctly, enduring high pressure and temperature variations common in plumbing systems.

## Cost

Press fittings may have a lower initial cost due to simpler installation, but their fittings are generally more expensive than brazed fittings. Overall cost varies based on project size, labor, and material availability.

## Flexibility

Press fittings offer flexibility during installation, allowing for adjustments before final compression, beneficial in complex plumbing systems.

Brazed fittings require precise alignment and heat control.

## Protection

Both types are corrosion-resistant due to copper material. Press fittings eliminate fire risks associated with brazing torches.

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*Press fittings and brazed fittings are both commonly used in plumbing systems, but they differ significantly in their materials, installation methods, and other characteristics. Understanding the differences between the two is essential for making informed decisions tailored to the unique needs of various plumbing applications.*