



Elkhart Products Corporation

XPRESS™
THE FASTER FIT

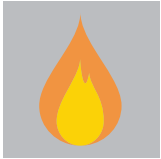


The Press-Fit Joining System



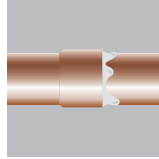
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Heat Free

Reduces fire hazard
Eliminates related insurance costs
No "smolder watch" needed after soldering



Clean

No flux or solder to remain in bore
No foreign materials for microbes to attach to
No carbon, flux, solder buildup or heat discoloration



Fast and Simple

Easy installation
Quicker preparation time
Fast pressing cycle
 Under 8 seconds, compared to
 20-30 minutes to braze 3" and 4"
 sweat fittings
Dry system not needed for pressing or repairs



No Consumable Materials

Reduces material cost and storage
Flux
Solder
Gas or tank refills



Guaranteed

Our 50-year warranty ensures that your press-fit connection will stay perfect. Designed and manufactured to last for years on installations ranging in size from 1/2" to 4".

XPRESS SYSTEM ADVANTAGES

The heat-free principle of the joining process is one of the major benefits of the XPress System. Removing the need to obtain "Hot Work" permits, which can have costly insurance implications, and eliminating the potential of flame damage is another benefit of the Xpress system. XPress combines all the known advantages of copper with clean, rapid, heat-free joining technology. XPress avoids complicated clamping techniques, long preparation procedures and adhesive curing times which, all lead to increased installation times.

Another primary concern for the contractor is the amount of time spent on the job site fitting and commissioning plumbing and heating services.

With the XPress range, the time required to join copper tubes in sizes up to 4" is significantly reduced. The joining process is simple and tube preparation requires no more than the application of good plumbing practices, both of which contribute to installation time savings.

The cost benefits of the system do not end with time and insurance.

The creation of a sound joint requires only the use of a press-fit tool. The need to purchase and store gases, adhesives, fluxes, solders, threading machines or any other equipment is avoided.

XPress fittings continue to save time and cost immediately after installation.

The XPress System is intrinsically clean, therefore eliminating the need to spend additional time on-site for adhesive curing or flushing to remove flux residue.

The whole XPress range guarantees electrical continuity once the joints are pressed.



The Principle of the XPress Joint

XPress fittings achieve a sound joint through the exertion of pressure from a press-fit tool; a purpose designed O-ring provides the mechanism by which a perfect seal is created. Ensuring that the tube is fully inserted into the fitting, the jaws of the press-fit tool are placed around the collar of the fitting, which contains an EPDM O-ring. With the jaws at a 90° angle to the fitting, the press-fit tool is activated and the jaws compress the O-ring tightly onto the tube creating a strong and reliable joint.

Reduce Installation Time by 1/3!

Save 20% on total installation cost*



Potable Water System Installation

* Total installation cost is calculated as copper, labor, and fittings. Actual savings may vary.

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XPRESS Service Guidelines

Type of Service	System Operating Conditions
FLUIDS	
Hot and Cold Potable Water	32° F to 200° F, max. 200 PSI
Potable Water System Flushing	Compliant with major plumbing codes
Chilled Water w/corrosion inhibitors	0° F to 250° F, max. 200 PSI Ethylene Glycol - 50% max. concentration Propylene Glycol - 50% max. concentration
Hydronic Heating	0° F to 250° F, max. 200 PSI Ethylene Glycol - 50% max. concentration Propylene Glycol - 50% max. concentration
Rainwater/Greywater	32° F to 250° F, max. 200 PSI

Fitting Spacing

Size	Minimum Gap Between Fittings
1/2"	1 7/8"
3/4"	2 5/8"
1"	3 3/8"
1 1/4"	4 1/8"
1 1/2"	4 7/8"
2"	6 3/8"
2 1/2"	7 7/8"
3"	9 3/8"
4"	12 3/8"

Fitting Socket Depths

Size	XPress Copper
1/2"	13/16"
3/4"	27/32"
1"	59/64"
1 1/4"	1 1/32"
1 1/2"	1 7/32"
2"	1 13/32"
2 1/2"	1 31/32"
3"	2"
4"	2 1/4"



For the Perfect Fit.

Maximum Horizontal Pipe Hanger and Support Spacing for Copper Tube to ANSI/MSS SP69 (Water Service)

Size	Horizontal Spacing
1/2"	5 ft.
3/4"	5 ft.
1"	6 ft.
1 1/4"	7 ft.
1 1/2"	8 ft.
2"	8 ft.
2 1/2"	9 ft.
3"	10 ft.
4"	12 ft.

Copper Tube Expansion

Temperature	Expansion									
	10 ft.	13 ft.	16 ft.	20 ft.	23 ft.	26 ft.	30 ft.	33 ft.	39 ft.	82 ft.
50°F	1/64"	1/32"	3/64"	3/64"	3/64"	3/64"	1/16"	1/16"	5/64"	11/64"
68°F	3/64"	3/64"	1/16"	5/64"	3/32"	7/64"	1/8"	1/8"	5/32"	21/64"
86°F	1/16"	5/64"	3/32"	1/8"	9/64"	5/32"	3/16"	13/64"	15/64"	1/2"
104°F	5/64"	7/64"	1/8"	5/32"	3/16"	13/64"	15/64"	17/64"	5/16"	43/64"
122°F	3/32"	1/8"	11/64"	13/64"	15/64"	17/64"	19/64"	21/64"	13/32"	53/64"
140°F	1/8"	11/64"	13/64"	15/64"	9/32"	5/16"	23/64"	13/32"	1/2"	1 1/64"
158°F	9/64"	13/64"	15/64"	9/32"	21/64"	3/8"	27/64"	15/32"	37/64"	1 3/16"
176°F	5/32"	7/32"	17/64"	5/16"	3/8"	7/16"	1/2"	17/32"	41/64"	1 11/32"
194°F	3/16"	15/64"	19/64"	23/64"	27/64"	1/2"	35/64"	39/64"	23/32"	1 1/2"
212°F	13/64"	17/64"	21/64"	13/32"	15/32"	17/32"	39/64"	43/64"	51/64"	1 45/64"

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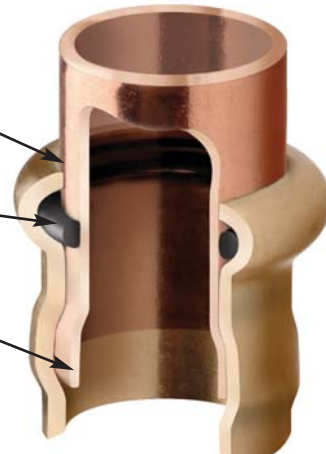
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1/2" thru 2"

Specially designed forward seal to leak at low pressure if joint not pressed

Visible EPDM O-ring for visual seal confirmation

Rear crimp causes tube flair for mechanical grip



1. Assemble the joint.



2. Insert jaw into press tool and place over fitting's mouth.



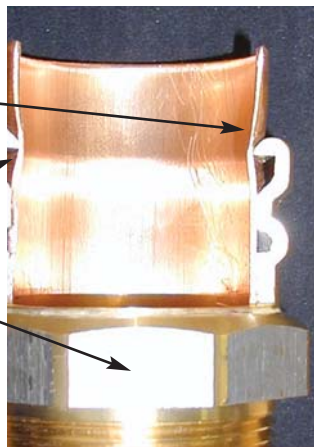
3. Press button until jaws enclose fitting mouth. Release jaws.

2-1/2" thru 4"

Specially designed grip edge

Deep press for added pressure resistance

Continuous cast GM bar construction



1. Assemble the joint.



2. Open and position press ring.



3. Attach ring actuator to press tool.

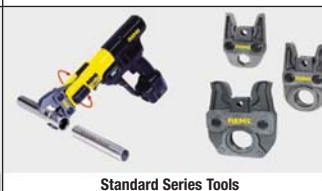


4. Depress the tool trigger switch.



**Compatible with Most
Commercially-available Tools**

Check our website or our factory for latest approved tool listing.



Elkhart: A Proud History, An Exciting Future

The company started in 1940 as a small manufacturer of screw machine products. We expanded in the early 1950s and became a fabricator of various copper and aluminum tubular components.

The purchase of machinery in the late '50s brought wrought copper tube fittings for the plumbing, air conditioning and refrigeration industries to the product line. New plants in Fayetteville, Arkansas, and in Geneva, Indiana, were added in the early 1960s. A Canadian Distribution Center in Toronto, Ontario was added in 1990.

Today, EPC is one of the world's largest manufacturers of wrought copper fittings for plumbing. It's also recognized as a supplier of custom fabricated tubular products to original equipment manufacturers in industries including automotive and air conditioning and refrigeration.



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Visit our website at www.elkhartproducts.com for more Elkhart product information and catalogs.



Solder

XPress™

QTite™

TecTite™



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