

PEX-a Pipe Support instruction sheet

PEX-a Pipe Support is a 23-gauge, galvanized-steel channel for PEX piping with a CTS (copper tube size) controlled outside diameter. It features a profile that is more than half-round, making it self-gripping. It provides continuous support of PEX piping, allowing increased hanger spacing compared to bare PEX.

Product offering

PEX-a Pipe Support is available in 9-foot (3m) lengths in the following sizes:

- ½" • 1¼" • 2½"
- ¾" • 1½" • 3"
- 1" • 2" • 3½"

Nylon-coated stainless-steel straps

Each bundle of PEX-a Pipe Support includes a package of stainless-steel straps. The straps carry a 300-lb. tensile rating and are tested for the appropriate applications.

Insulating PEX-a Pipe Support

The low profile of PEX-a Pipe Support allows insulation with typical CTS pipe insulation.

Important tips for installing PEX-a Pipe Support

- Always follow local code for general piping support requirements.
- All pieces of PEX-a Pipe Support must have a minimum of two supports/hangers.
- Use the included 300-lb., tensile-rated, stainless-steel straps to secure the support channel to the pipe. If the included straps are misplaced, use a stainless-steel strap of equal or greater strength.
- Due to expansion characteristics of Uponor PEX piping, it is important to use a minimum 300-lb., stainless-steel cable tie or equivalent for securing the PEX-a Pipe Support to the piping.

Tips for cutting PEX-a Pipe Support

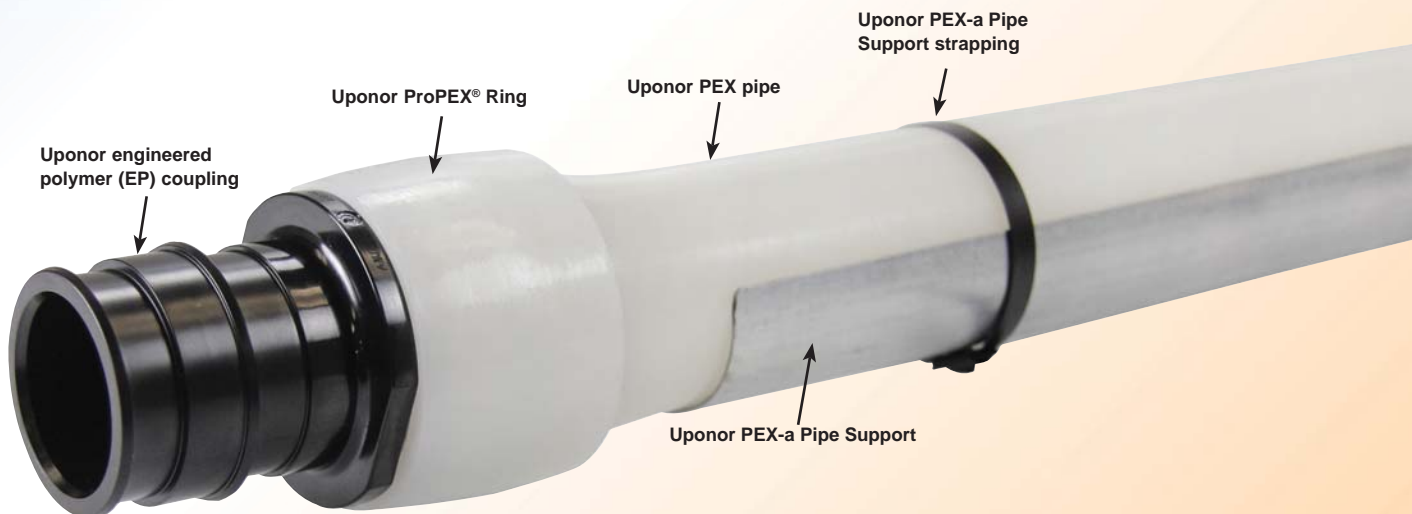
- Always cut the PEX-a Pipe Support starting from the round side.
- When using a reciprocating or band saw to cut the PEX-a Pipe Support, either place the support flat-side down to make a clean cut or place a scrap piece of pipe into the support before cutting.
- When using a hand tool, such as a tin snips, to cut the PEX-a Pipe Support, place the support flat-side down and mark a line on the support to follow.
- When cutting a support, take care not to bend it.
- After cutting PEX-a Pipe Support, taper and smooth any sharp edges.

Hanger and support layouts with PEX-a Pipe Support

In general, the use of Uponor PEX-a Pipe Support will allow for increased hanger and support spacing compared to bare PEX pipe. However, because PEX-a Pipe Support is a secondary support material that is added to the outside of the pipe, the introduction of fittings or joints will interrupt the use of the pipe support, resulting in staggered hanger spacing scenarios.

Designing hanger and support layouts

Uponor recommends detailed hanger and support layouts utilizing the methods outlined in the following pages of this document.



General requirements for PEX-a Pipe Support

- PEX-a Pipe Support can be used to achieve greater spans than those shown in dimension A in **Table 1**.
- Segments of PEX-a Pipe Support that are greater than the distances in dimension A in **Table 1** require a minimum of two supports.

Nominal pipe size	Spacing for bare PEX (dimension A)			Spacing with PEX-a Pipe Support (dimension B)		
	International Plumbing Code (IPC)	Uniform Plumbing Code (UPC)	National Plumbing Code of Canada (NPCC)	International Plumbing Code (IPC)	Uniform Plumbing Code (UPC)	National Plumbing Code of Canada (NPCC)
1/2"	32"	32"	32"	6'-0"	6'-0"	6'-0"
3/4"	32"	32"	32"	6'-0"	6'-0"	6'-0"
1"	32"	32"	32"	8'-0"	8'-0"	8'-0"
1 1/4"	32"	48"	32"	8'-0"	8'-0"	8'-0"
1 1/2"	32"	48"	32"	8'-0"	8'-0"	8'-0"
2"	32"	48"	32"	8'-0"	8'-0"	8'-0"
2 1/2"	32"	48"	32"	8'-0"	8'-0"	8'-0"
3"	32"	48"	32"	8'-0"	8'-0"	8'-0"

Table 1: Maximum allowable support spacing for PEX pipe

Scenario 1: No fittings

The following scenario in **Figure 1** involves Uponor PEX pipe from a coil with PEX-a Pipe Support and no fittings.

- Maximum hanger spacing is 6' for 1/2" and 3/4" pipe and 8' for 1" and larger pipe (per dimension B in **Table 1**).

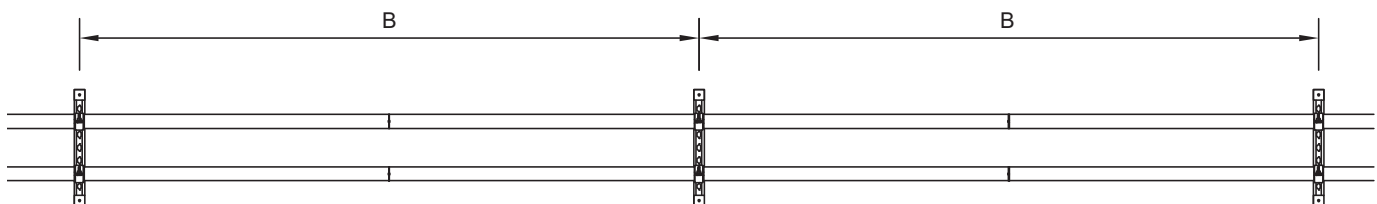


Figure 1: PEX-a Pipe Support without fittings

Scenario 2: Segments with fittings

The scenario in **Figure 2** features Uponor PEX pipe with PEX-a Pipe Support and fittings.

- Maximum hanger spacing is 6' for 1/2" and 3/4" pipe and 8' for 1" and larger full-length pipe segments with PEX-a Pipe Support (per dimension B in **Table 1**).

- Hanger spacing changes to dimension A for fitting segment (spacing for area with no PEX-a Pipe Support).

Note: Simply placing hangers at a consistent on-center distance (e.g., every 6') will not provide the full benefits of PEX-a Pipe Support when using fittings.

- Using the recommended installation methods will allow for the maximum benefit of PEX-a Pipe Support because the designer is able to stagger hanger locations based on the PEX-a Pipe Support lengths.

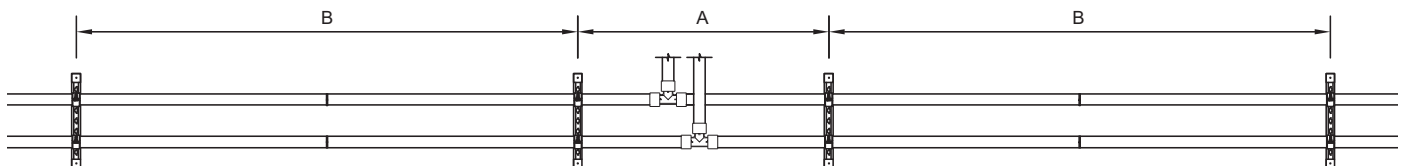


Figure 2: PEX-a Pipe Support with fittings

Nominal pipe size	Maximum support spacing (A)	Maximum cantilever (B)	Minimum overlap (C)	Minimum distance to fitting (D)	Minimum overhang (E)
1/2"	6'-0"	18"	6"	1 1/4"	1"
3/4"				1 3/4"	
1"	2 1/4"				
1 1/4"	2 3/4"				
1 1/2"	3"				
2"	4"				
2 1/2"	5"				
3"	6"				

Table 2: Uponor PEX-a Pipe Support minimum and maximum spacing requirements

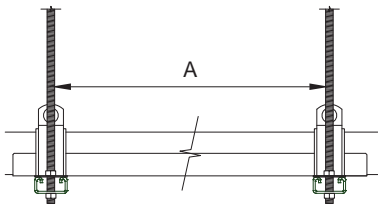


Figure 3: Maximum support spacing

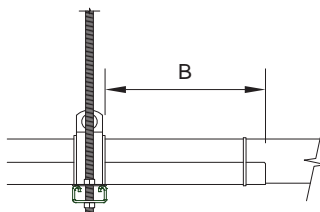


Figure 4: Maximum cantilever

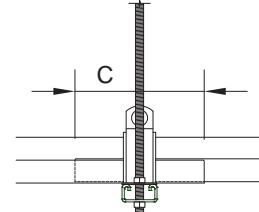


Figure 5: Minimum overlap

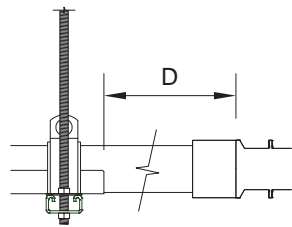


Figure 6: Minimum distance to fitting

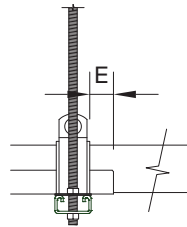


Figure 7: Minimum overhang

Strapping for systems using strut clamps or equivalent

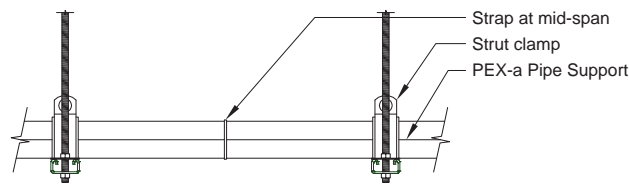


Figure 8: Strapping for systems using strut clamps or equivalent

Strapping for systems using clevis-type hangers or equivalent

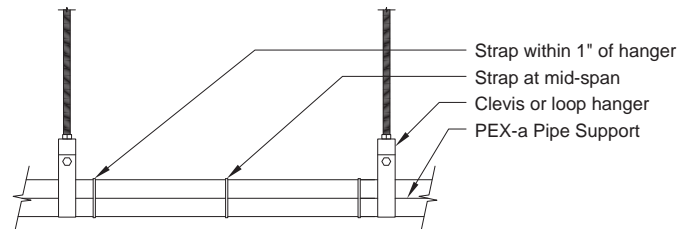


Figure 9: Strapping for systems using clevis-type hangers or equivalent

Application	Maximum distance
Strut-type clamps	Greater than 48" = 1 tie mid-span
Clevis or loop-type hangers	Less than 48" = 2 ties equally spaced Greater than 48" = 3 ties (1 mid-span and 1 on each end placed 2" from end of support)

Table 3: Uponor PEX-a Pipe Support minimum and maximum spacing requirements

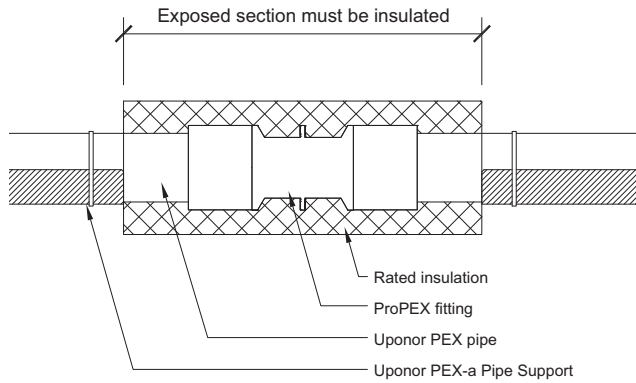


Figure 10: PEX-a Pipe Support installations in ASTM E84 applications

Expansion and contraction control with PEX-a Pipe Support

When properly installed, Uponor PEX-a Pipe Support can reduce linear expansion and contraction by up to 93 percent when compared to bare-PEX pipe. Refer to the following requirements.

- 300-lb., tensile-rated, stainless-steel straps (included)
- Fixed anchor points installed every 65 ft. for domestic hot water, heating hot water and chilled water applications ($\Delta T > 40^\circ F$) and every 150 ft. for domestic cold water applications ($\Delta T > 40^\circ F$)

ASTM E84 requirements for PEX-a Pipe Support

Uponor PEX-a Pipe Support has been tested and approved for use in ASTM E84 applications. To meet the requirements, PEX-a Pipe Support must be installed per the following requirements:

- Pipe or fittings without PEX-a Pipe Support shall be covered with a minimum $\frac{1}{2}$ " thick insulation.
- There is no minimum segment length of PEX-a Pipe Support.

When installed per the requirements, there are no spacing limitations between parallel piping runs.

Note: The requirements also apply to PEX-a Pipe Support installed in a vertical position for ASTM E84 applications.

Note: Exposed sections of $\frac{1}{2}$ " and $\frac{3}{4}$ " Uponor PEX pipe can be installed un-insulated if the pipe runs are separated by a minimum of 18".

Uponor PEX-a Pipe Support product offering

Part no.	Description
F7040500	$\frac{1}{2}$ " PEX-a Pipe Support, 9-ft. length
F7040750	$\frac{3}{4}$ " PEX-a Pipe Support, 9-ft. length
F7041000	1" PEX-a Pipe Support, 9-ft. length
F7041250	$1\frac{1}{4}$ " PEX-a Pipe Support, 9-ft. length
F7041500	$1\frac{1}{2}$ " PEX-a Pipe Support, 9-ft. length
F7042000	2" PEX-a Pipe Support, 9-ft. length
F7042500	$2\frac{1}{2}$ " PEX-a Pipe Support, 9-ft. length
F7043000	3" PEX-a Pipe Support, 9-ft. length
F7043500	$3\frac{1}{2}$ " PEX-a Pipe Support, 9-ft. length
Q7410510	PEX-a Pipe Support Strapping ($\frac{1}{2}$ ", $\frac{3}{4}$ ", 1" PEX)
Q7411220	PEX-a Pipe Support Strapping ($1\frac{1}{4}$ ", $1\frac{1}{2}$ ", 2" PEX)
Q7412540	PEX-a Pipe Support Strapping ($2\frac{1}{2}$ ", 3", $3\frac{1}{2}$ ", 4" PEX)

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