

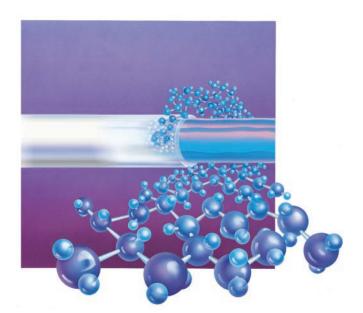
THE PROPEX™ ADVANTAGE

CSA system certification of Uponor PEX





Uponor first introduced the world to crosslinked polyethylene (PEX) pipe in the early 1970s. PEX is an acronym for crosslinked polyethylene across its molecular chains.



With more than 40 years of service – longer than any other PEX manufacturer in North America – Uponor PEX is the fastest-growing choice for residential and commercial plumbing systems, thanks to its powerful, inherent advantages over metallic and rigid-plastic piping.

Features

- Tested and proven for more than 40 years
- · Most flexible piping
- · Least likely to kink
- Maintenance free
- · Highest degree of crosslinking

The **ProPEX** system testing

The Canadian Standards Association (CSA) tested and listed the Uponor ProPEX fitting system (which conforms to the ASTM F1960 standard). The testing included Uponor PEX-a pipe, Uponor ProPEX rings and Uponor ProPEX fittings.

The testing program includes sustained pressure testing, bent-tube pressure testing, excessive temperature and pressure capability testing, as well as other tests that include weekly and yearly follow-up procedures. Uponor's unique cold flare expansion fitting system is highly reliant on the elastic memory of the product and the unique material properties in its formulation. CSA will only provide a system certification if warranted; properties of each of the components are proven to be required to form a fully functional system.





Frequently asked questions

What happens if a plumbing inspector accepts the use of Uponor ProPEX rings and fittings with another manufacturer's PEX pipe?

Per sentence 2.2.5.7.(1) of the 2005 and 2010 National Plumbing Code (NPC), "Crosslinked polyethylene pipe and its associated fittings used in hot and cold potable water systems shall conform to CAN/CSA-B137.5". In the event of a connection failure, the liability can be far reaching, including engineering consultants, general contractors, plumbing contractors and even inspection authorities. Inspector oversights are neither limited nor excusable in respective jurisdictions. It is inspectors' responsibility to ensure installed components meet the requirements of standards adopted according to their respective legislation.

What is the significance of CSA system certifications for the Uponor ProPEX fitting system?

With the CSA system certification, building and plumbing officials, contractors and other customers will have the confidence that the system has been vigorously tested by CSA to meet the requirements of the National Plumbing Code of Canada (NPCC) and all subsequent provincial plumbing codes.

What is the benefit of installing a complete Uponor system?

The standard Uponor warranty covers not only the Uponor PEX pipe, ProPEX rings and fittings, but also offers a consequential damages warranty in the extremely rare event that a fitting fails at the connection. This warranty provides plumbers with the peace of mind they are installing a premium, worry-free system.

Can a plumber be held liable for connection failures in cases where Uponor ProPEX fittings are used with another manufacturer's PEX pipe?

Yes. In cases where a plumber uses Uponor ProPEX fittings with another manufacturer's PEX pipe, Uponor's warranty can be limited to replacement of the fitting where defects in materials or workmanship is shown to have caused the failure. Plumbers, plumbing companies or the municipality that approved the use of the combination of Uponor ProPEX fittings, rings and non-Uponor pipe can recover consequential damages.

Most manufacturers use the F1960 designation on their pipe. Does the F1960 designation mean that their pipe is suitable for use with Uponor ProPEX fittings?

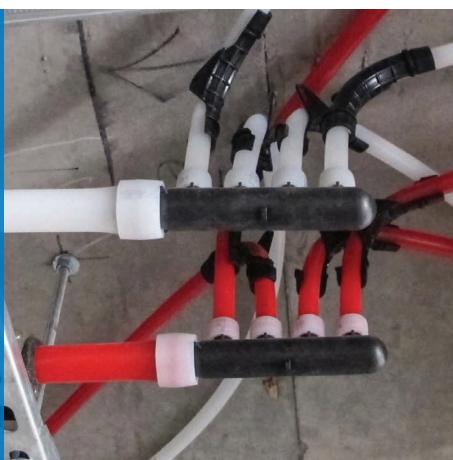
No. Based on the CSA certificate of compliance, Uponor ProPEX fittings are certified for use with CSA-certified Uponor PEX-a pipe only. Currently, Uponor is the only manufacturer with a PEX pipe and ASTM F1960 fitting system listed to CSA Standard B137.5. This means Uponor is the only manufacturer that is able to warranty the connection and will confidently stand behind all properly installed ProPEX connections with a 25-year transferable limited warranty.

Will Uponor's warranty cover connections made with other manufacturer's PEX pipe?

Uponor's warranty will not cover the connection; it will only cover the Uponor material itself.

UPONOR IS THE ONLY

manufacturer with a PEX pipe and ASTM F1960 fitting system listed to CSA Standard B137.5.





Endorsement

Message from the government of Ontario's building code advisor

The following endorsement is an excerpt of the message provided by Danny Hui, building code advisor and building services specialist, Code Advisory Unit, Building and Development Brand for the government of Ontario's Ministry of Municipal Affairs and Housing:

Please be informed that, CSA has provided the Uponor-system certification and the following are for your information purposes.

This information is intended to increase the awareness among the inspectors when they are facing a plumbing system composed of a "mixed use" of piping and fittings. We would like to minimize any potential system failure based on "mixed use" conditions.

Although each piping and fitting component bears markings from CSA and other reputable associations, it doesn't imply the overall stability of system as a combined unit has been certified. For instance, the Uponor fitting system is highly relied upon thermal and elastic memory of base polymer. If an F1960 fitting is connected to piping with a less elastic memory capability, it is more likely to cause a system failure in the field.

CSA recognized the importance of stability of a plumbing system and developed a baseline requirement for a plumbing system certification. If the overall functionality of system is highly dependent upon unique characteristics of each component, test results on "system" should be required in order to assure the overall safety of the "system." More inspectors will consider the test results followed by certification, which is provided by third-party testing and listing agencies, including CSA, NSF, etc.

The local authority having jurisdiction (AHJ) can accept either an applicable acceptable solution in Division B, or an applicable alternative solution that will achieve the level of performance required by the applicable acceptable solution in respect to the objectives and functional statements attributed to the applicable acceptable solutions in Supplementary Standard SA-1.

Under the Building Code Act, the local municipality is the AHJ for enforcing the act and its regulations, and the permit applications should contact the appropriate official with respect to any specific proposal.

Uponor Ltd. limited warranty

This Warranty is effective for installations made after October 1, 2019.

Subject to the terms and conditions of this Limited Warranty ("Warranty"), Uponor Ltd. ("Uponor") warrants to the owner of the applicable real property in Canada that the Uponor products listed below shall be free from defects in material and workmanship, and the connection using Uponor pipe, an Uponor ProPEX™ fitting, and an Uponor ring, will provide a leak-free seal for 25 years when installed by an Uponor-certified installer, under normal conditions of use when installed as part of the applications listed below.

Scope

The scope of this Warranty includes the products listed in Uponor's catalogue. The combination of Uponor pipe, Uponor ProPEX fittings, and Uponor rings form an Uponor System ("System"). The ProPEX connections in the system are Canadian Standards Association (CSA) certified. The terms of this Warranty depend on whether the Uponor products are installed as a System, or if the Uponor products are installed in conjunction with non-Uponor products. The Term of Warranty begins on the Commencement Date, defined as the date when the building or facility wherein the applicable Uponor products are installed is ready for occupancy or its intended use. The term for the products listed in the Product Category column below will be in effect for the number of years shown in the Term of Warranty column below:

Product category	When used in combination with	Term of warranty
Uponor pipe (AquaPEX [®] , helioPEX™)	Uponor fittings and rings	25 years
	Non-Uponor fittings or rings	10 years
Uponor pipe (Wirsbo hePEX™)	Uponor fittings and rings	30 years
	Non-Uponor fittings or rings	10 years
Uponor ProPEX fittings and rings	Uponor pipe (all types)	25 years
	Non-Uponor pipe	1 year
Product category		Term of warranty
Manifolds, manifold accessories, ball valves, and stubouts		10 years
Non-ball Valves, all fittings, jacketing a D'MAND® pumps	5 years	
Fire sprinkler com	1 year	
All other products	2 years	

After the Date of Installation, but prior to the Commencement Date, this Limited Warranty is in effect providing that all Conditions

and Exclusions have been met.

Claim process and remedies

In order to file a claim under the terms of this Warranty, a claimant must send written notification to Uponor that a product may be defective within 30 days of the suspected failure or defect and within the applicable warranty period via surface mail or follow the procedure outlined at the link shown below:

Surface mail	Link to claim procedure
Uponor Ltd. Attn: Warranty Department 6510 Kennedy Road Mississauga, Ontario L5T 2X4, Canada	uponorpro.com/warrantyclaims

All products alleged to be defective must be sent to Uponor for inspection and testing for determination of the cause of the alleged failure or defect.

Exclusive remedies

If Uponor determines that a product identified above has failed or is defective within the scope of this Warranty, Uponor's liability is limited, at the option of Uponor, to: issue a refund of the purchase price paid for, or to repair or replace the defective product.

Notwithstanding anything to the contrary in this Warranty, if Uponor determines that any damages to the real property in which an Uponor System installed by an Uponor-certified installer directly resulted from a leak or failure caused by defects in material or workmanship in an Uponor product covered by this Warranty and occurs within the first ten (10) years after the applicable Commencement Date or during the applicable Limited Warranty period, whichever is shorter, and the claimant took reasonable steps to promptly mitigate (i.e., limit or stop) any damage resulting from such failure, then Uponor may at its discretion, reimburse claimant for the reasonable costs of repairing or replacing such damaged real property, including flooring, drywall, painting, and certain other real property damaged by the leak or failure. Uponor shall not pay for any other additional costs or expenses, including but not limited to, lost profits and revenue, transportation, relocation, labour, repairs or any other unapproved work associated with removing and/or returning failed or defective products, installing replacement products, damage resulting from mold.

Conditions and exclusions

In order for the Warranty to be in effect, the applicable Uponor products must be:

- Installed in accordance with the installation instructions provided by Uponor;
- · Installed by an Uponor-certified installer;
- Not exposed to temperatures and/or pressures that exceed the limitations found on specifications for the Uponor product;
- · In their originally installed location;
- Installed in an end-use environment as intended for the product;
 and
- Installed in accordance with then-applicable building, mechanical, plumbing, electrical, or other applicable code requirements

In addition to the conditions above, the Warranty does not apply when product failure or resulting damages are caused by:

- Exposure to temperatures and/or pressures that exceed the limitations for the product;
- Faulty installation;
- · Misuse, tampering, mishandling, neglect, or accidental damage;
- · Components not manufactured or sold by Uponor;
- Exposure to ultra violet light;
- · External and internal physical or chemical conditions;
- Abnormal operating conditions; or
- Modifications or repair unless previously approved in writing by an authorized Uponor representative

Warranty claim dispute process

In the event the claimant and Uponor are unable to resolve a dispute through informal means, the dispute shall be submitted to final arbitration. Arbitration shall be commenced in accordance with the then present version of the Arbitration Rules of the ADR Institute of Canada Inc., or its successor. If it is no longer possible to commence an arbitration in accordance with Arbitration Rules of the ADR Institute of Canada Inc. or its successor, then arbitration shall be commenced in accordance with the law concerning commercial arbitration in the Province or Territory where the loss occurred. The Seat of Arbitration shall be Toronto. The Language of Arbitration shall be English. For products sold in the province of Quebec, the Seat of the Arbitration shall be Toronto or Montreal, and the language shall be English or French. The Arbitration shall proceed before a single arbitrator. The law of the Arbitration shall be the law of the Province or Territory where the loss occurred. NOTWITHSTANDING THE FOREGOING. NEITHER THE CLAIMANT NOR UPONOR SHALL BE ENTITLED TO ARBITRATE ANY CLAIMS AS A REPRESENTATIVE OR MEMBER OF A CLASS AND NEITHER THE CLAIMANT NOR UPONOR SHALL BE ENTITLED TO JOIN OR CONSOLIDATE CLAIMS WITH ANY OTHER PARTIES IN ARBITRATION, NO LITIGATION SHALL BE COMMENCED IN ANY FORM WITH RESPECT TO UPONOR'S PRODUCTS EXCEPT AS DESCRIBED ABOVE.

To the extent that the claimant is not otherwise bound to commence any claim against Uponor in arbitration as set forth elsewhere in this Limited Warranty, whether because of consumer legislation or otherwise, the claimant accepts the terms and conditions of the Warranty Claim Dispute Process and the Limited Warranty, including terms concerning arbitration and choice of laws, by initiating

dispute resolution, arbitration or litigation which in whole or in part references or relies upon the warranties and conditions set forth in this Limited Warranty. By so invoking the terms of this Limited Warranty in whole or in part, the claimant agrees to stay any dispute resolution, arbitration or litigation in favour of arbitration as set forth in the Warranty Claim Dispute Process section of this Limited Warranty.

Miscellaneous

By the mutual agreement of the parties, it is expressly agreed that this Limited Warranty and any claims arising from breach of contract, breach of warranty, tort, or any other claim arising from the sale or use of Uponor's products shall be governed and construed under the laws of the Province or Territory where the loss occurred. It is expressly understood that authorized Uponor sales representatives, distributors, and plumbing professionals have no express or implied authority to bind Uponor to any agreement or warranty of any kind without the express written consent of Uponor.

THIS LIMITED WARRANTY IS THE FULL EXTENT OF EXPRESS WARRANTIES PROVIDED BY UPONOR, AND UPONOR HEREBY DISCLAIMS ANY WARRANTY NOT EXPRESSLY PROVIDED HEREIN, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE PRODUCTS COVERED HEREUNDER. UPONOR FURTHER DISCLAIMS ANY STATUTORY OR IMPLIED WARRANTY OF HABITABILITY. WHERE THIS DISCLAIMER OR ANY PORTION OF IT IS NOT VALID AT LAW, THOSE INVALID PORTIONS MAY BE SEVERED FROM THE REST OF THIS LIMITED WARRANTY.

EXCEPT AS OTHERWISE EXPRESSLY STATED IN THIS LIMITED WARRANTY, UPONOR FURTHER DISCLAIMS ANY RESPONSIBILITY FOR LOSSES, EXPENSES, INCONVENIENCES, AND SPECIAL, INDIRECT, SECONDARY, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OR RESULTING IN ANY MANNER FROM THE PRODUCTS COVERED HEREUNDER WHERE PROVINCIAL OR TERRITORIAL LAW DOES NOT PERMIT THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY.

FOR THE GREATEST CLARITY, UPONOR DISCLAIMS ANY AND ALL LIABILITY FOR LOST PROFITS, WHETHER THEY CONSTITUTE DIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, EVEN WHERE THEY WOULD OTHERWISE BE COVERED BY SOME TERM OF THIS WARRANTY

THIS LIMITED WARRANTY GIVES THE CLAIMANT SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS IN ACCORDANCE WITH PROVINCIAL OR TERRITORIAL LEGISLATION.

*Glossary

- Uponor pipe (all types): AquaPEX[®], Wirsbo hePEX[™], helioPEX[™], and HDPE either as neat pipe or in a pre-insulated or pre-sleeved configuration.
- Uponor ProPEX[™] fittings: All configurations made from Engineered Polymer (EP) and brass in conjunction with Uponor rings.
- Uponor-certified installer: Installer who has successfully completed the Uponor Certification Course and possesses an assigned Uponor installer ID#.



moving water where it needs to be

Uponor is an international market leader, striving to provide better plumbing, indoor climate and infrastructure solutions across Europe, North America and in other international markets. In close partnership with building industry professionals, we are continuously seeking out innovative ways to ensure our systems offer the most efficient, reliable and high-performing solutions available to residential and commercial structures around the globe.

All our solutions are designed to enrich people's way of life: fast and easy to install, conserving water and energy, providing comfort and health, and giving peace of mind.

Advantages of Uponor PEX-a piping systems



PROVEN

More than 40 years of use in structures around the world.



LEAK-RESISTANT CONNECTIONS

Instant visual verification, no chemicals, open flame or gauges required.



EFFICIENT

Most flexible pipe for fewer fittings to bring greater efficiencies and reduced liability to installs.



RELIABLE

Won't pit, scale or corrode like copper; Water Quality Association (WQA) Gold Seal freeze/ thaw approved.



QUIET

Greatly reduces water hammer and noise from fluid transmission.



GUARANTEED

Backed by a 25-year or 30-year limited warranty on Uponor complete systems featuring pipe, rings and fittings.

Learn more about how Uponor can help drive your business forward at **uponorpro.com.**

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