

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



CITY OF PORTLAND

BUILDING PERMIT

This is to certify that
FAUCHER, STEVE
134 SOUTH ST
BIDDEFORD, ME 04005

For installation at
42 BALLPARK DR
SINGLE-FAMILY HOME

Job ID: **2012-06-4256-SF**

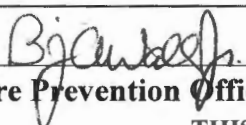
CBL: **371- A-034-001**

has permission to **install NFPA 13D sprinkler system**

provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statutes of Maine and of the Ordinances of the City of Portland regulating the construction, maintenance and use of the buildings and structures, and of the application on file in the department.

Notification of inspection and written permission procured before this building or part thereof is lathed or otherwise closed-in. 48 HOUR NOTICE IS REQUIRED.

A final inspection must be completed by owner before this building or part thereof is occupied. If a certificate of occupancy is required, it must be

 (58)

Fire Prevention Officer

Code Enforcement Officer / Plan Reviewer

THIS CARD MUST BE POSTED ON THE STREET SIDE OF THE PROPERTY
PENALTY FOR REMOVING THIS CARD

BUILDING PERMIT INSPECTION PROCEDURES

Please call 874-8703 or 874-8693 (ONLY)

or email: buildinginspections@portlandmaine.gov

With the issuance of this permit, the owner, builder or their designee is required to provide adequate notice to the city of Portland Inspections Services for the following inspections. Appointments must be requested 48 to 72 hours in advance of the required inspection. The inspection date will need to be confirmed by this office.

- **Please read the conditions of approval that is attached to this permit!! Contact this office if you have any questions.**
- **Permits expire in 6 months. If the project is not started or ceases for 6 months.**
- **If the inspection requirements are not followed as stated below additional fees may be incurred due to the issuance of a "Stop Work Order" and subsequent release to continue.**

Final Fire

The project cannot move to the next phase prior to the required inspection and approval to continue, REGARDLESS OF THE NOTICE OF CIRCUMSTANCES.

IF THE PERMIT REQUIRES A CERTIFICATE OF OCCUPANCY, IT MUST BE PAID FOR AND ISSUED TO THE OWNER OR DESIGNEE BEFORE THE SPACE MAY BE OCCUPIED.

City of Portland, Maine - Building or Use Permit Application

389 Congress Street, 04101 Tel: (207) 874-8703, FAX: (207) 8716

Job No: 2012-06-4256-SF #2012-47835 FAFS	Date Applied: 9/4/2012	CBL: 371- A-034-001	
Location of Construction: 42 BALLPARK DR	Owner Name: SEBAGO HEIGHTS, LLC	Owner Address: 97A EXCHANGE STREET PORTLAND, ME 04101	Phone:
Business Name:	Contractor Name: Steve Faucher	Contractor Address: 134 SOUTH STREET, BIDDEFORD, ME 04005	Phone: 590-2989
Lessee/Buyer's Name:	Phone:	Permit Type: FAFS	Zone: R-2
Past Use: Single Family Dwelling (under construction)	Proposed Use: Same: Single Family Dwelling - to install fire suppression system	Cost of Work: \$6,000.00	CEO District:
		Fire Dept: 9/7/12 <input checked="" type="checkbox"/> Approved w/ conditions <input type="checkbox"/> Denied <input type="checkbox"/> N/A Signature: <i>Björn</i> (58)	Inspection: Use Group: Type: Signature:
Proposed Project Description: Fire Suppression		Pedestrian Activities District (P.A.D.)	

Permit Taken By: Lannie	Zoning Approval		
<p>1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.</p> <p>2. Building Permits do not include plumbing, septic or electrical work.</p> <p>3. Building permits are void if work is not started within six (6) months of the date of issuance. False informatin may invalidate a building permit and stop all work.</p>	Special Zone or Reviews <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetlands <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan <input type="checkbox"/> Maj <input type="checkbox"/> Min <input checked="" type="checkbox"/> MM Date: <i>OK 9/6/12</i>	Zoning Appeal <input type="checkbox"/> Variance <input type="checkbox"/> Miscellaneous <input type="checkbox"/> Conditional Use <input type="checkbox"/> Interpretation <input type="checkbox"/> Approved <input type="checkbox"/> Denied Date:	Historic Preservation <input checked="" type="checkbox"/> Not in Dist or Landmark <input type="checkbox"/> Does not Require Review <input type="checkbox"/> Requires Review <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied Date: <i>S</i>
	CERTIFICATION		

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

SIGNATURE OF APPLICANT	ADDRESS	DATE	PHONE
RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE		DATE	PHONE



PORTLAND MAINE

Strengthening a Remarkable City, Building a Community for Life • www.portlandmaine.gov

Director of Planning and Urban Development
Jeff Levine

Job ID: 2012-06-4256-SF
install NFPA 13D sprinkler system

For installation at:
42 BALLPARK DR
SINGLE-FAMILY HOME

CBL: 371- A-034-001

Conditions of Approval:

Fire

The sprinkler system shall be installed in accordance with NFPA 13D. A compliance letter is required.

Application requires State Fire Marshal approval.

R-2 371 A 034

One- or Two-family Fire Sprinkler Permit

If you or the property owner owes real estate or property taxes or user charges on any property within the city, payment arrangements must be made before permits of any kind are accepted.

2012-06-4256

2012 46785

Installation address: 24⁴² Ball Park Dr

Building owner: Sebago Heights, LLC 97A Exchange St
Gregg Molken Phone: 207 617 0234

Installer: Steve Faucher Phone: 207-590-2989

Total sq/ft of building floor space per unit: 4242 Single-family home

or

Sq/ft of sprinklered floor space per unit: _____ Two-family home

Is this a multipurpose piping system? Y / N Sprinkler piping uses Pex? Y / N

Water supply: Municipal Water Well pump Stored water Other

Include electronic copy of approved State Sprinkler Permit plans:

Additional cost to the owner for the home fire sprinkler system for each dwelling unit minus costs necessary for domestic needs (See below): **A=** _____

Attach cost breakdown: A City plumbing permit has been pulled:

<p>COST OF WORK: <u>\$5,500.00</u> (A times number of units)</p> <p>NO FEE REQUIRED</p>

RECEIVED
SEP 04 2012
Dept. of Building Inspections
City of Portland Maine

Additional information and Frequently asked questions about home fire sprinkler systems may be found at www.portlandmaine.gov/fireprevention.

Sprinkler system cost must deduct costs that would have been incurred if the system did not provide sprinkler service. In a well pump system it would include the difference between the well pump to be installed and the one that would have been installed if there were no sprinkler demand on the system. Includes additional piping and valves that are required only because of NFPA Standard 13D, and not already required for domestic needs. Includes cost of sprinkler heads and additional installation costs.



State of Maine
Department of Public Safety
Fire Sprinkler System Permit



10149

Sebageo Heights LLC

Located at: 42 Ballpark Drive
 In the Town of: Portland
 Occupancy/Use: Residential
 Type of System: NFPA 13D

Permission is hereby given to:

SF Plumbing & Heating

134 South Street
 Biddeford, ME 04005
 Contractor License # 567

to begin installation according to plans submittal approved by the Office of State Fire Marshal. The submittal is filed under log # 2121342 , and no departure from the application submittal shall be made without prior approval in writing. This permit is issued under the provisions of Title 32, Chapter 20, Section 12004-I. Nothing herein shall excuse the holder of this permit from failure to comply with local ordinances, zoning laws, or other pertinent legal restrictions. This permit shall be displayed at the construction site or be made readily available.

This permit was issued on 8/1/2012 for a fee paid of \$25.00

This permit will expire at midnight on Monday, January 28, 2013

The expiration date applies only if the installation has not begun by that date and no permission has been granted to extend the date. Once installation begins, then the permit is valid for however long it takes to complete the installation, assuming that the work is fairly continuous.

John E. Morris
 Commissioner

The type of Fire Department Connection and its location is to be according to the Local Fire Department

Within 30 days of the completion of a new fire sprinkler system or an addition to an existing fire sprinkler system, a fire sprinkler system contractor shall provide to the Office of State Fire Marshal a copy of this permit signed and dated by the certified Responsible Managing Supervisor representing that the fire sprinkler system has been installed according to specifications of the approved plan to the best of the supervisor's knowledge, information, and belief. This requirement is part of the sprinkler law, and neglect of this duty is grounds to not renew the contractor's license to do work in the State of Maine. All renewed sprinkler licenses are good for two years and expire on a June 30th.

Job completed, tested and verified by date of _____

RMS for this job: Hubbard Daniel P

RMS Signature: _____



AquaSAFE™ FIRE SAFETY SYSTEM

Uponor
5925 148th Street West

Apple Valley, MN 55124
800-321-4739

Job Name : SEBAGEO HEIGHTS LLC - Two Head Calculation (H.28 & H.29)
Drawing : RESIDENTIAL
Location : 42 BALLPARK DRIVE PORTLAND ME 04103
Remote Area : 1
Contract : 120718-40L
Data File : 120718-40L Sebageo Heights LLC.wx2

HYDRAULIC DESIGN INFORMATION SHEET

Name - SEBAGEO HEIGHTS LLC Date - 7/26/12
Location - PORTLAND ME 04103
Building - RESIDENTIAL System No. - 1
Contractor - SF PLUMBING & HEATING Contract No. - 120718-40L
Calculated By - BRENT KOTULA SET IV Drawing No. - 1
Construction: (X) Combustible () Non-Combustible Ceiling Height VARIES
OCCUPANCY - RESIDENTIAL

S Type of Calculation: () NFPA 13 Residential () NFPA 13R (X) NFPA 13D

Y Number of Sprinklers Flowing: () 1 (X) 2 () 4 ()

S () Other

T () Specific Ruling

Made by

Date

E

M Listed Flow at Start Point - 13 Gpm System Type

Listed Pres. at Start Point - 7.04 Psi (X) Wet () Dry

D MAXIMUM LISTED SPACING 16 x 16 () Deluge () PreAction

E Domestic Flow Added - 0 Gpm Sprinkler or Nozzle

S Additional Flow Added - Gpm Make RELIABLE Model RFC49

I Elevation at Highest Outlet - 119 Feet Size 3/8 K-Factor 4.9

G Note: Temperature Rating 165

N

Calculation Gpm Required 26.0032 Psi Required 57.63 At Ref Pt STR
Summary C-Factor Used: Overhead 150 Underground 150

W Water Flow Test: Pump Data: Tank or Reservoir:
A Date of Test - x Rated Cap. Cap.
T Time of Test - x @ Psi Elev.
E Static (Psi) - 60 Elev.
R Residual (Psi) - 55 Other Well
Flow (Gpm) - 300 Proof Flow Gpm
S Elevation - 95

P Location: x

P

L Source of Information: CONTRACTOR

Y

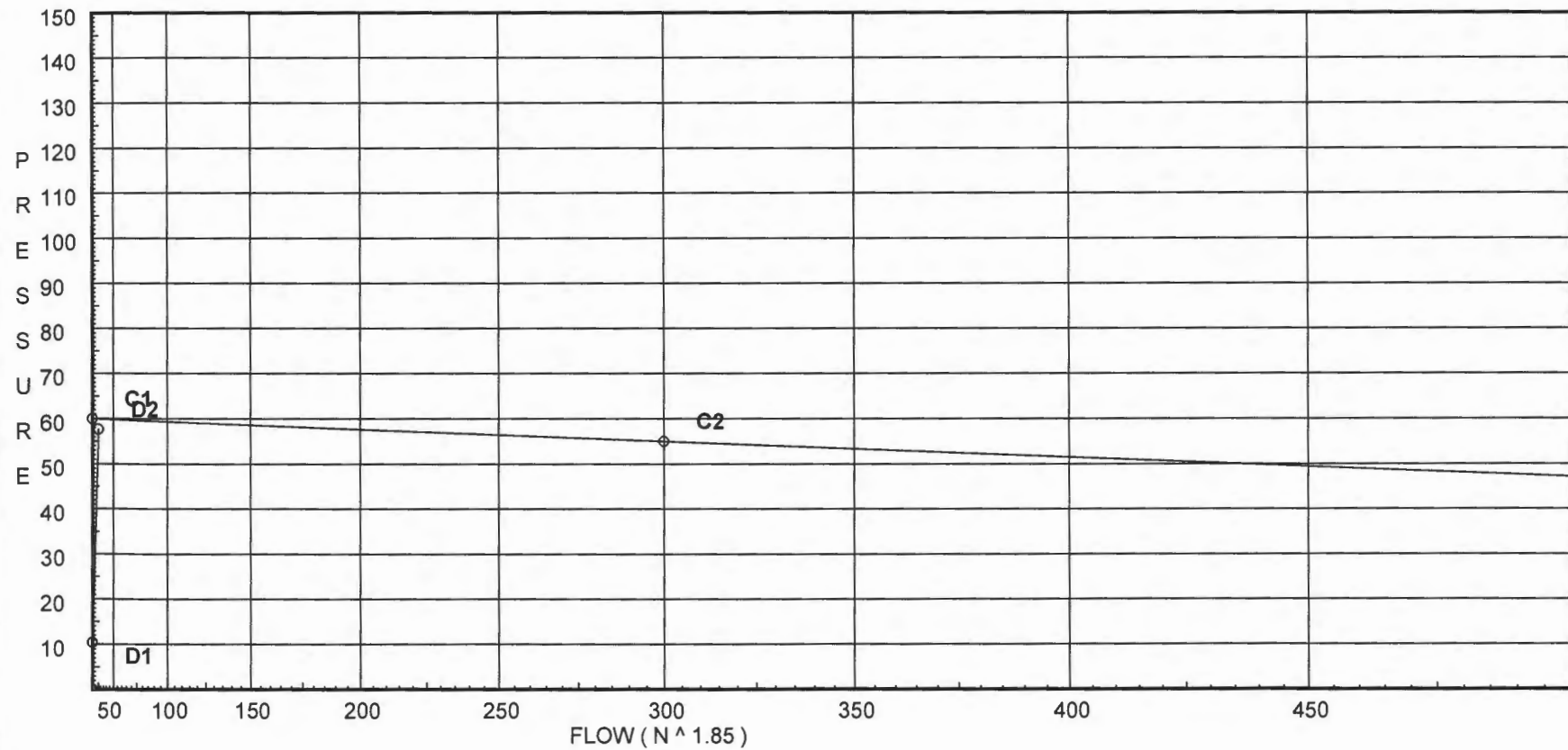
Water Supply Curve (C)

Uponor
SEBAGEO HEIGHTS LLC - Two Head Calculation (H.28 & H.29)

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Date 7/31/2012

City Water Supply:
C1 - Static Pressure : 60
C2 - Residual Pressure: 55
C2 - Residual Flow : 300

Demand:
D1 - Elevation : 10.394
D2 - System Flow : 26.0032
D2 - System Pressure : 57.633
Hose (Adj City) : _____
Hose (Demand) : _____
D3 - System Demand : 26.0032
Safety Margin : 2.312



Fittings Used Summary

Uponsor
 SEBAGEO HEIGHTS LLC - Two Head Calculation (H.28 & H.29)

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 Date 7/31/2012

Fitting Legend

Abbrev.	Name	½	¾	1	1¼	1½	2	2½	3	3½	4	5	6	8	10	12	14	16	18	20	24
E	90' Standard Elbow	2	2	2	3	4	5	6	7	8	10	12	14	18	22	27	35	40	45	50	61
G	Generic Gate Valve	1	1	1	1	1	1	1	1	1	2	2	3	4	5	6	7	8	10	11	13
T	90' Flow thru Tee	3	4	5	6	8	10	12	15	17	20	25	30	35	50	60	71	81	91	101	121
Utb	Aquapex Tee - Branch	2	17	14	9	12	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Utr	Aquapex Tee - Run	1	2	2	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Units Summary

Diameter Units Inches
 Length Units Feet
 Flow Units US Gallons per Minute
 Pressure Units Pounds per Square Inch

Flow Summary - NFPA 2007

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SEBAGEO HEIGHTS LLC - Two Head Calculation (H.28 & H.29)

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SUPPLY ANALYSIS

<i>Node at Source</i>	<i>Static Pressure</i>	<i>Residual Pressure</i>	<i>Flow</i>	<i>Available Pressure</i>	<i>Total Demand</i>	<i>Required Pressure</i>
STR	60.0	55	300.0	59.946	26.0	57.633

NODE ANALYSIS

<i>Node Tag</i>	<i>Elevation</i>	<i>Node Type</i>	<i>Pressure at Node</i>	<i>Discharge at Node</i>	<i>Notes</i>
H.28	119.0	4.9	7.04	13.0	
H.26	119.0		8.22		
T.59	119.0		10.77		
T.58	109.0		15.51		
T.51	99.0		20.64		
T.52	99.0		20.89		
S.1	95.0		23.72		
MTR	95.0		39.25		
STR	95.0		57.63		
H.29	119.0	4.9	7.04	13.0	
H.27	119.0		8.32		
T.60	119.0		10.76		
T.61	109.0		15.39		
T.57	109.0		15.59		
H.24	119.0		10.92		
T.50	119.0		11.01		
T.43	119.0		11.07		
T.48	109.0		15.63		
T.38	99.0		20.24		
T.44	99.0		20.51		
H.22	119.0		10.85		
H.16	119.0		10.91		
H.9	119.0		10.95		
H.11	119.0		10.98		
H.5	119.0		11.01		
H.2	119.0		11.05		
T.30	119.0		11.06		
T.31	119.0		11.07		
T.33	109.0		15.56		
H.7	109.0		15.58		
H.6	109.0		15.6		
H.12	109.0		15.63		
T.35	109.0		15.65		
T.36	99.0		20.23		
H.13	99.0		20.25		
H.3	99.0		20.28		
H.4	99.0		20.34		
T.37	99.0		20.4		
T.42	99.0		20.44		
H.19	99.0		20.45		
T.41	99.0		20.45		
H.21	99.0		20.5		

Flow Summary - NFPA 2007

Uponsor
SEBAGEO HEIGHTS LLC - Two Head Calculation (H.28 & H.29)

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NODE ANALYSIS (cont.)

Node Tag	Elevation	Node Type	Pressure at Node	Discharge at Node	Notes
H.1	119.0		11.07		
H.10	119.0		11.07		
H.14	119.0		11.07		
H.17	119.0		11.07		
T.55	109.0		15.57		
T.56	109.0		15.59		
H.23	109.0		15.59		
T.54	109.0		15.61		
T.49	109.0		15.62		
T.34	109.0		15.56		
H.8	109.0		15.56		
H.20	109.0		15.57		
T.46	109.0		15.63		
T.45	109.0		15.63		
H.18	109.0		15.63		
T.40	99.0		20.23		
T.39	99.0		20.23		
H.15	99.0		20.23		
H.25	99.0		20.43		

Final Calculations - Hazen-Williams

Uponor
SEBAGEO HEIGHTS LLC - Two Head Calculation (H.28 & H.29)

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Hyd. Ref. Point	Qa Qt	Dia. "C" Pf/Ft	Fitting or Eqv.	Ln.	Pipe Ftnng's Total	Pt Pe Pf	Pt Pv Pn	*****	Notes	*****
H.28 to H.26	12.72	0.86 150.0	1Utr	2.0 0.0	10.000 2.000	7.040 0.0			K Factor = 4.90	
	12.72	0.0982		0.0	12.000	1.178			Vel = 7.03	
H.26 to T.59	0.0	0.86 150.0	1Utr 1Utb	2.0 14.0	10.000 16.000	8.218 0.0				
	12.72	0.0982		0.0	26.000	2.552			Vel = 7.03	
T.59 to T.58	-2.18	1.069 150.0		0.0 0.0	17.000 0.0	10.770 4.331				
	10.54	0.0241		0.0	17.000	0.409			Vel = 3.77	
T.58 to T.51	-1.48	1.069 150.0	1Utb 1Utr	14.0 2.0	31.000 13.000	15.510 4.331				
	9.06	0.0181		0.0	44.000	0.798			Vel = 3.24	
T.51 to T.52	6.63	1.069 150.0	1Utr	2.0 0.0	1.000 4.000	20.639 0.0				
	15.69	0.0502		0.0	5.000	0.251			Vel = 5.61	
T.52 to S.1	10.31	1.069 150.0	1T	8.283 0.0	6.000 2.614	20.890 1.732				
	26.0	0.1277		0.0	8.614	1.100			Vel = 9.29	
S.1 to MTR	0.0	0.911 150.0	2E	3.041 0.0	42.000 3.041	23.722 3.000			* Fixed loss = 3	
	26.0	0.2782		0.0	45.041	12.529			Vel = 12.80	
MTR to STR	0.0	0.911 150.0	1E 1T	1.521 3.801	60.000 6.082	39.251 0.0				
	26.0	0.2782	1G	0.76	66.082	18.382			Vel = 12.80	
	0.0 26.00					57.633			K Factor = 3.42	
H.28 to H.29	0.28	0.86 150.0		0.0 0.0	11.000 0.0	7.040 0.0				
	0.28	0.0001		0.0	11.000	0.001			Vel = 0.15	
H.29 to H.27	13.00	0.86 150.0	1Utr	2.0 0.0	10.000 2.000	7.041 0.0			K Factor = 4.90	
	13.28	0.1062		0.0	12.000	1.275			Vel = 7.33	
H.27 to T.60	0.0	0.86 150.0	1Utr 1Utb	2.0 14.0	7.000 16.000	8.316 0.0				
	13.28	0.1062		0.0	23.000	2.443			Vel = 7.33	
T.60 to T.61	-3.30	1.069 150.0		0.0 0.0	14.000 0.0	10.759 4.331				
	9.98	0.0217		0.0	14.000	0.304			Vel = 3.57	
T.61 to T.57	0.0	1.069 150.0	1Utr	2.0 0.0	5.000 4.000	15.394 0.0				
	9.98	0.0217		0.0	9.000	0.195			Vel = 3.57	
T.57 to T.52	0.34	1.069 150.0	2Utb	28.0 0.0	24.000 18.000	15.589 4.331				
	10.32	0.0231		0.0	42.000	0.970			Vel = 3.69	
	0.0 10.32					20.890			K Factor = 2.26	
T.60 to H.24	3.30	0.86 150.0	1Utb	14.0 0.0	6.000 14.000	10.759 0.0				
	3.3	0.0080		0.0	20.000	0.161			Vel = 1.82	

Final Calculations - Hazen-Williams

Uponsor
SEBAGEO HEIGHTS LLC - Two Head Calculation (H.28 & H.29)

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Hyd. Ref. Point	Qa Qt	Dia. "C" Pf/Ft	Fitting or Eqv.	Ln.	Pipe Ftng's Total	Pt Pe Pf	Pt Pv Pn	*****	Notes	*****
H.24 to T.50	0.0 3.3	0.86 150.0 0.0081	1Utr	2.0 0.0	9.000 2.000 11.000	10.920 0.0 0.089			Vel = 1.82	
T.50 to T.43	0.0 3.3	0.86 150.0 0.0081	1Utr	2.0 0.0	6.000 2.000 8.000	11.009 0.0 0.065			Vel = 1.82	
T.43 to T.48	-0.03 3.27	0.86 150.0 0.0080	1Utb 1Utr	14.0 2.0 0.0	12.000 16.000 28.000	11.074 4.331 0.223			Vel = 1.81	
T.48 to T.38	0.56 3.83	0.86 150.0 0.0107	1Utb	14.0 0.0	12.000 14.000 26.000	15.628 4.331 0.277			Vel = 2.12	
T.38 to T.44	0.79 4.62	0.86 150.0 0.0151	1Utb	14.0 0.0	4.000 14.000 18.000	20.236 0.0 0.271			Vel = 2.55	
T.44 to T.51	2.00 6.62	1.069 150.0 0.0102	1Utr	2.0 0.0	9.000 4.000 13.000	20.507 0.0 0.132			Vel = 2.37	
	0.0 6.62					20.639			K Factor = 1.46	
T.59 to H.22	2.18 2.18	0.86 150.0 0.0037	1Utb	14.0 0.0	8.000 14.000 22.000	10.770 0.0 0.082			Vel = 1.20	
H.22 to H.16	0.0 2.18	0.86 150.0 0.0038	1Utr	2.0 0.0	13.000 2.000 15.000	10.852 0.0 0.057			Vel = 1.20	
H.16 to H.9	0.0 2.18	0.86 150.0 0.0037	1Utr	2.0 0.0	8.000 2.000 10.000	10.909 0.0 0.037			Vel = 1.20	
H.9 to H.11	0.0 2.18	0.86 150.0 0.0038	1Utr	2.0 0.0	6.000 2.000 8.000	10.946 0.0 0.030			Vel = 1.20	
H.11 to H.5	0.0 2.18	0.86 150.0 0.0038	1Utr	2.0 0.0	8.000 2.000 10.000	10.976 0.0 0.038			Vel = 1.20	
H.5 to H.2	0.0 2.18	0.86 150.0 0.0037	1Utr	2.0 0.0	8.000 2.000 10.000	11.014 0.0 0.037			Vel = 1.20	
H.2 to T.30	0.0 2.18	0.86 150.0 0.0040	1Utr	2.0 0.0	1.000 2.000 3.000	11.051 0.0 0.012			Vel = 1.20	
T.30 to T.31	0.0 2.18	0.86 150.0 0.0037	1Utr	2.0 0.0	1.000 2.000 3.000	11.063 0.0 0.011			Vel = 1.20	
T.31 to T.33	0.02 2.2	0.86 150.0 0.0038	2Utb	28.0 0.0	12.000 28.000 40.000	11.074 4.331 0.153			Vel = 1.22	
T.33 to H.7	-0.57 1.63	0.86 150.0 0.0022	1Utr	2.0 0.0	7.000 2.000 9.000	15.558 0.0 0.020			Vel = 0.90	

Final Calculations - Hazen-Williams

Uponsor
SEBAGEO HEIGHTS LLC - Two Head Calculation (H.28 & H.29)

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Hyd. Ref. Point	Qa Qt	Dia. "C" Pf/Ft	Fitting or Eqv.	Ln.	Pipe Ftng's Total	Pt Pe Pf	Pt Pv Pn	*****	Notes	*****
H.7 to H.6	0.0 1.63	0.86 150.0 0.0022	1Utr	2.0 0.0 0.0	10.000 2.000 12.000	15.578 0.0 0.026			Vel = 0.90	
H.6 to H.12	0.0 1.63	0.86 150.0 0.0022	1Utr	2.0 0.0 0.0	10.000 2.000 12.000	15.604 0.0 0.027			Vel = 0.90	
H.12 to T.35	0.0 1.63	0.86 150.0 0.0021	1Utr	2.0 0.0 0.0	5.000 2.000 7.000	15.631 0.0 0.015			Vel = 0.90	
T.35 to T.36	1.16 2.79	0.86 150.0 0.0059	2Utb	28.0 0.0 0.0	14.000 28.000 42.000	15.646 4.331 0.249			Vel = 1.54	
T.36 to H.13	-0.78 2.01	0.86 150.0 0.0033	1Utr	2.0 0.0 0.0	5.000 2.000 7.000	20.226 0.0 0.023			Vel = 1.11	
H.13 to H.3	0.0 2.01	0.86 150.0 0.0032	1Utr	2.0 0.0 0.0	9.000 2.000 11.000	20.249 0.0 0.035			Vel = 1.11	
H.3 to H.4	0.0 2.01	0.86 150.0 0.0032	1Utr	2.0 0.0 0.0	16.000 2.000 18.000	20.284 0.0 0.058			Vel = 1.11	
H.4 to T.37	0.0 2.01	0.86 150.0 0.0032	1Utr	2.0 0.0 0.0	17.000 2.000 19.000	20.342 0.0 0.061			Vel = 1.11	
T.37 to T.42	-0.43 1.58	0.86 150.0 0.0021	1Utb	14.0 0.0 0.0	2.000 14.000 16.000	20.403 0.0 0.033			Vel = 0.87	
T.42 to H.19	0.43 2.01	0.86 150.0 0.0033	1Utr	2.0 0.0 0.0	1.000 2.000 3.000	20.436 0.0 0.010			Vel = 1.11	
H.19 to T.41	0.0 2.01	0.86 150.0 0.0030		0.0 0.0 0.0	1.000 0.0 1.000	20.446 0.0 0.003			Vel = 1.11	
T.41 to H.21	0.0 2.01	0.86 150.0 0.0032	1Utr	2.0 0.0 0.0	13.000 2.000 15.000	20.449 0.0 0.048			Vel = 1.11	
H.21 to T.44	0.0 2.01	0.86 150.0 0.0033	1Utr	2.0 0.0 0.0	1.000 2.000 3.000	20.497 0.0 0.010			Vel = 1.11	
	0.0 2.01					20.507			K Factor = 0.44	
T.31 to H.1	-0.02 -0.02	0.86 150.0 0.0	1Utr	2.0 0.0 0.0	15.000 2.000 17.000	11.074 0.0 0.0			Vel = 0.01	
H.1 to H.10	0.0 -0.02	0.86 150.0 0.0	1Utr	2.0 0.0 0.0	12.000 2.000 14.000	11.074 0.0 0.0			Vel = 0.01	
H.10 to H.14	0.0 -0.02	0.86 150.0 0.0	1Utr	2.0 0.0 0.0	7.000 2.000 9.000	11.074 0.0 0.0			Vel = 0.01	

Final Calculations - Hazen-Williams

Uponor
SEBAGEO HEIGHTS LLC - Two Head Calculation (H.28 & H.29)

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Hyd. Ref. Point	Qa Qt	Dia. "C" Pf/Ft	Fitting or Eqv. Ln.	Pipe Ftng's Total	Pt Pe Pf	Pt Pv Pn	*****	Notes	*****
H.14 to H.17	0.0 -0.02	0.86 150.0 0.0	1Utr 2.0 0.0	7.000 2.000 9.000	11.074 0.0 0.0			Vel = 0.01	
H.17 to T.43	0.0 -0.02	0.86 150.0 0.0	1Utr 2.0 0.0	5.000 2.000 7.000	11.074 0.0 0.0			Vel = 0.01	
	0.0 -0.02				11.074			K Factor = -0.01	
T.58 to T.55	1.48 1.48	0.86 150.0 0.0018	2Utb 28.0 0.0	5.000 28.000 33.000	15.510 0.0 0.060			Vel = 0.82	
T.55 to T.56	0.58 2.06	0.86 150.0 0.0034	1Utr 2.0 0.0	3.000 2.000 5.000	15.570 0.0 0.017			Vel = 1.14	
T.56 to H.23	-0.34 1.72	0.86 150.0 0.0023	0.0 0.0	3.000 0.0 3.000	15.587 0.0 0.007			Vel = 0.95	
H.23 to T.54	0.0 1.72	0.86 150.0 0.0024	1Utr 2.0 0.0	3.000 2.000 5.000	15.594 0.0 0.012			Vel = 0.95	
T.54 to T.49	0.0 1.72	0.86 150.0 0.0026	1Utr 2.0 0.0	3.000 2.000 5.000	15.606 0.0 0.013			Vel = 0.95	
T.49 to T.48	-1.16 0.56	0.86 150.0 0.0003	2Utb 28.0 0.0	2.000 28.000 30.000	15.619 0.0 0.009			Vel = 0.31	
	0.0 0.56				15.628			K Factor = 0.14	
T.33 to T.34	0.57 0.57	0.86 150.0 0.0004	1Utr 2.0 0.0	3.000 2.000 5.000	15.558 0.0 0.002			Vel = 0.31	
T.34 to H.8	0.0 0.57	0.86 150.0 0.0003	1Utr 2.0 0.0	1.000 2.000 3.000	15.560 0.0 0.001			Vel = 0.31	
H.8 to H.20	0.0 0.57	0.86 150.0 0.0003	1Utr 2.0 0.0	16.000 2.000 18.000	15.561 0.0 0.005			Vel = 0.31	
H.20 to T.55	0.0 0.57	0.86 150.0 0.0003	1Utr 2.0 0.0	11.000 2.000 13.000	15.566 0.0 0.004			Vel = 0.31	
	0.0 0.57				15.570			K Factor = 0.14	
T.56 to T.57	0.34 0.34	0.86 150.0 0.0001	1Utb 14.0 1Utr 2.0 0.0	1.000 16.000 17.000	15.587 0.0 0.002			Vel = 0.19	
	0.0 0.34				15.589			K Factor = 0.09	
T.49 to T.46	1.16 1.16	0.86 150.0 0.0012	1Utr 2.0 0.0	4.000 2.000 6.000	15.619 0.0 0.007			Vel = 0.64	

Final Calculations - Hazen-Williams

Uponor
SEBAGEO HEIGHTS LLC - Two Head Calculation (H.28 & H.29)

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Hyd. Ref. Point	Qa Qt	Dia. "C" Pf/Ft	Fitting or Eqv.	Ln.	Pipe Ftng's Total	Pt Pe Pf	Pt Pv Pn	*****	Notes	*****
T.46 to T.45	-0.13 1.03	0.86 150.0 0.0007	1Utr	2.0 0.0 0.0	1.000 2.000 3.000	15.626 0.0 0.002			Vel = 0.57	
T.45 to T.35	0.13 1.16	0.86 150.0 0.0012	1Utr	2.0 0.0 0.0	13.000 2.000 15.000	15.628 0.0 0.018			Vel = 0.64	
	0.0 1.16					15.646			K Factor = 0.29	
T.46 to H.18	0.13 0.13	0.67 150.0 0.0	1Utr 1Utb	2.0 17.0 0.0	2.000 19.000 21.000	15.626 0.0 0.001			Vel = 0.12	
H.18 to T.45	0.0 0.13	0.67 150.0 0.0	1Utb	17.0 0.0 0.0	3.000 17.000 20.000	15.627 0.0 0.001			Vel = 0.12	
	0.0 0.13					15.628			K Factor = 0.03	
T.36 to T.40	0.79 0.79	0.86 150.0 0.0006	1Utr	2.0 0.0 0.0	10.000 2.000 12.000	20.226 0.0 0.007			Vel = 0.44	
T.40 to T.39	-0.09 0.7	0.86 150.0 0.0003	1Utr	2.0 0.0 0.0	1.000 2.000 3.000	20.233 0.0 0.001			Vel = 0.39	
T.39 to T.38	0.09 0.79	0.86 150.0 0.0007	1Utr	2.0 0.0 0.0	1.000 2.000 3.000	20.234 0.0 0.002			Vel = 0.44	
	0.0 0.79					20.236			K Factor = 0.18	
T.40 to H.15	0.09 0.09	0.67 150.0 0.0001	1Utb	17.0 0.0 0.0	2.000 17.000 19.000	20.233 0.0 0.001			Vel = 0.08	
H.15 to T.39	0.0 0.09	0.67 150.0 0.0	1Utr 1Utb	2.0 17.0 0.0	3.000 19.000 22.000	20.234 0.0 0.0			Vel = 0.08	
	0.0 0.09					20.234			K Factor = 0.02	
T.37 to H.25	0.43 0.43	0.67 150.0 0.0006	1Utr 1Utb	2.0 17.0 0.0	17.000 19.000 36.000	20.403 0.0 0.023			Vel = 0.39	
H.25 to T.42	0.0 0.43	0.67 150.0 0.0006	1Utr	2.0 0.0 0.0	15.000 2.000 17.000	20.426 0.0 0.010			Vel = 0.39	
	0.0 0.43					20.436			K Factor = 0.10	

June 6, 2012

Dear Professional Partner:

We are pleased to announce that the vast majority of our engineered polymer (EP) fittings as well as our larger-diameter Uponor AquaPEX® (up to 2") are now listed to UL 1821 and ULC/ORD-C199P for use in AquaSAFE™ Residential Fire Sprinkler Systems.

This listing allows even more efficiency and alternatives in AquaSAFE™ designs, providing the most comprehensive offering of both EP fittings and larger-dimension PEX for multipurpose residential fire sprinkler systems.

The following table offers an overview of all the Uponor products now listed to UL 1821 and ULC/ORD-C199P. For a comprehensive list of part numbers and part descriptions, refer to the following two pages.

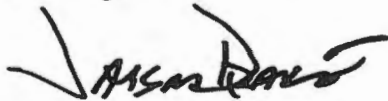
Item	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
Uponor AquaPEX Tubing, White	X	X	X	X	X	X
ProPEX Rings	X	X	X	X	X	X
EP Couplings	X	X	X	X	X	X
EP Elbows	X	X	X	X	X	X
EP Tees	X	X	X	X	X	X
EP Reducing Tees	X	X	X	X	X	X
EP Plugs	X	X	X	X	X	X
Male Adapters	N/A	X	X	X	X	X
Female Adapters	N/A	X	X	X	X	X
Sweat Adapters	N/A	X	X	X	X	X

X = Existing listing

X = New listing

If you have further questions, please feel free to contact me at 800.321.4739, ext. 5387 or jayson.drake@uponor.com.

Best regards,



Jayson Drake
Director of Plumbing and Fire Safety

Uponor North America

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The following items are now listed to UL 1821 and ULC/ORD-C199P for use in Uponor AquaSAFE™ residential fire protection systems. For additional product and pricing information, refer to the Uponor Product Catalog online at www.uponorpro.com.

Part No.	Part Description
Tubing	
Multiple	1¼" Uponor AquaPEX White
Multiple	1½" Uponor AquaPEX White
Multiple	2" Uponor AquaPEX White
ProPEX Rings	
Q4691250	1¼" ProPEX Ring
Q4691500	1½" ProPEX Ring
Q4682000	2" ProPEX Ring
Couplings	
Q4775050	ProPEX EP Coupling, 1/2" PEX x 1/2" PEX
Q4775075	ProPEX EP Coupling, 1/2" PEX x 3/4" PEX
Q4777510	ProPEX EP Coupling, 3/4" PEX x 1" PEX
Q4777575	ProPEX EP Coupling, 3/4" PEX x 3/4" PEX
Q4771010	ProPEX EP Coupling, 1" PEX x 1" PEX
Q4771307	ProPEX EP Coupling, 1-1/4" PEX x 3/4" PEX
Q4771310	ProPEX EP Coupling, 1-1/4" PEX x 1" PEX
Q4771313	ProPEX EP Coupling, 1-1/4" PEX x 1-1/4" PEX
Q4771507	ProPEX EP Coupling, 1-1/2" PEX x 3/4" PEX
Q4771510	ProPEX EP Coupling, 1-1/2" PEX x 1" PEX
Q4771513	ProPEX EP Coupling, 1-1/2" PEX x 1-1/2" PEX
Q4771515	ProPEX EP Coupling, 1-1/2" PEX x 1-1/4" PEX
Q4772015	ProPEX EP Coupling, 2" PEX x 1-1/2" PEX
Q4772020	ProPEX EP Coupling, 2" PEX x 2" PEX
Elbows	
Q4760500	ProPEX EP Elbow, 1/2" PEX x 1/2" PEX
Q4760750	ProPEX EP Elbow, 3/4" PEX x 3/4" PEX
Q4761000	ProPEX EP Elbow, 1" PEX x 1" PEX
Q4761250	ProPEX EP Elbow, 1-1/4" PEX x 1-1/4" PEX
Q4761500	ProPEX EP Elbow, 1-1/2" PEX x 1-1/2" PEX
Q4762000	ProPEX EP Elbow, 2" PEX x 2" PEX
Tees	
Q4755050	ProPEX EP Tee, 1/2" PEX x 1/2" PEX x 1/2" PEX
Q4757575	ProPEX EP Tee, 3/4" PEX x 3/4" PEX x 3/4" PEX
Q4751010	ProPEX EP Tee, 1" PEX x 1" PEX x 1" PEX
Q4751313	ProPEX EP Tee, 1-1/4" PEX x 1-1/4" PEX x 1-1/4" PEX
Q4751515	ProPEX EP Tee, 1-1/2" PEX x 1-1/2" PEX x 1-1/2" PEX
Q4752000	ProPEX EP Tee, 2" PEX x 2" PEX x 2" PEX

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Reducing Tees	
Q4755575	ProPEX EP Reducing Tee, 1/2" PEX x 1/2" PEX x 3/4" PEX
Q4757550	ProPEX EP Reducing Tee, 3/4" PEX x 3/4" PEX x 1/2" PEX
Q4757555	ProPEX EP Reducing Tee, 3/4" PEX x 1/2" PEX x 1/2" PEX
Q4757557	ProPEX EP Reducing Tee, 3/4" PEX x 1/2" PEX x 3/4" PEX
Q4757710	ProPEX EP Reducing Tee, 3/4" PEX x 3/4" PEX x 1" PEX
Q4751150	ProPEX EP Reducing Tee, 1" PEX x 1" PEX x 1/2" PEX
Q4751175	ProPEX EP Reducing Tee, 1" PEX x 1" PEX x 3/4" PEX
Q4751311	ProPEX EP Reducing Tee, 1-1/4" PEX x 1" PEX x 3/4" PEX
Q4751317	ProPEX EP Reducing Tee, 1-1/4" PEX x 1" PEX x 1" PEX
Q4751331	ProPEX EP Reducing Tee, 1-1/4" PEX x 1-1/4" PEX x 1" PEX
Q4751337	ProPEX EP Reducing Tee, 1-1/4" PEX x 1-1/4" PEX x 3/4" PEX
Q4751511	ProPEX EP Reducing Tee, 1-1/2" PEX x 1" PEX x 1" PEX
Q4751517	ProPEX EP Reducing Tee, 1-1/2" PEX x 1" PEX x 3/4" PEX
Q4751531	ProPEX EP Reducing Tee, 1-1/2" PEX x 1-1/4" PEX x 1" PEX
Q4751533	ProPEX EP Reducing Tee, 1-1/2" PEX x 1-1/4" PEX x 1-1/4" PEX
Q4751537	ProPEX EP Reducing Tee, 1-1/2" PEX x 1-1/4" PEX x 3/4" PEX
Q4751551	ProPEX EP Reducing Tee, 1-1/2" PEX x 1-1/2" PEX x 3/4" PEX
Q4751553	ProPEX EP Reducing Tee, 1-1/2" PEX x 1-1/2" PEX x 1-1/4" PEX
Q4751557	ProPEX EP Reducing Tee, 1-1/2" PEX x 1-1/2" PEX x 1" PEX
Q4751751	ProPEX EP Reducing Tee, 1" PEX x 3/4" PEX x 1" PEX
Q4751775	ProPEX EP Reducing Tee, 1" PEX x 3/4" PEX x 3/4" PEX
Q4752051	ProPEX EP Reducing Tee, 2" PEX x 1-1/2" PEX x 1" PEX
Q4752053	ProPEX EP Reducing Tee, 2" PEX x 1-1/2" PEX x 1-1/4" PEX
Q4752055	ProPEX EP Reducing Tee, 2" PEX x 1-1/2" PEX x 1-1/2" PEX
Q4752210	ProPEX EP Reducing Tee, 2" PEX x 2" PEX x 1" PEX
Q4752213	ProPEX EP Reducing Tee, 2" PEX x 2" PEX x 1-1/4" PEX
Q4752215	ProPEX EP Reducing Tee, 2" PEX x 2" PEX x 1-1/2" PEX
Q4752275	ProPEX EP Reducing Tee, 2" PEX x 2" PEX x 3/4" PEX
Q4752575	ProPEX EP Reducing Tee, 2" PEX x 1-1/2" PEX x 3/4" PEX
Plugs	
Q4350500	ProPEX EP Plug, 1/2" PEX
Q4350750	ProPEX EP Plug, 3/4" PEX
Q4351000	ProPEX EP Plug, 1" PEX
Q4351250	ProPEX EP Plug, 1-1/4" PEX
Q4351500	ProPEX EP Plug, 1-1/2" PEX
Q4352000	ProPEX EP Plug, 2" PEX
Male Adapters	
LF4521313	ProPEX LF Brass Male Threaded Adapter, 1-1/4" PEX x 1-1/4" NPT
LF4521515	ProPEX LF Brass Male Threaded Adapter, 1-1/2" PEX x 1-1/2" NPT
LF4522020	ProPEX LF Brass Male Threaded Adapter, 2" PEX x 2" NPT
Female Adapters	
LF4571313	ProPEX LF Brass Female Threaded Adapter, 1-1/4" PEX x 1-1/4" NPT
LF4571515	ProPEX LF Brass Female Threaded Adapter, 1-1/2" PEX x 1-1/2" NPT
LF4572020	ProPEX LF Brass Female Threaded Adapter, 2" PEX x 2" NPT
Sweat Adapters	
LF4511313	ProPEX LF Brass Sweat Adapter, 1-1/4" PEX x 1-1/4" Copper
LF4511515	ProPEX LF Brass Sweat Adapter, 1-1/2" PEX x 1-1/2" Copper
LF4512020	ProPEX LF Brass Sweat Adapter, 2" PEX x 2" Copper

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Uponor AquaPEX® White

Submittal Information
Revision D: July 6, 2010

Project Information

Job Name:	
Location:	Part No. Ordered:
Engineer:	Date Submitted:
Contractor:	Submitted By:
Manufacturer's Representative:	Approved By:

Technical Data

Material:	Crosslinked polyethylene PEX-a Engel Method; PEX 5006
Standard Grade Hydrostatic Ratings (PPI):	200°F (93°C) at 80 psi 180°F (82°C) at 100 psi 73.4°F (23°C) at 160 psi ½", ¾", and 1" AquaPEX® White only: 120°F (49°C) at 130 psi
Linear Expansion Rate:	1.1"/10°F (12°C)/100'



Product Information and Application Use

Uponor AquaPEX White is tubing used for hot and cold domestic potable water distribution, residential fire safety and radiant heating systems containing no ferrous corrodible components or where ferrous components are isolated from the tubing.

✓	Description	Part Number	I.D. (A)	O.D. (B)	Weight
<input type="checkbox"/>	¼" Uponor AquaPEX White, 100-ft. coil	F1040250	0.241"	0.375"	4.0 lbs.
<input type="checkbox"/>	⅜" Uponor AquaPEX White, 400-ft. coil	F1090375	0.350"	0.500"	20.0 lbs.
<input type="checkbox"/>	⅜" Uponor AquaPEX White, 1,000-ft. coil	F1120375	0.350"	0.500"	44.0 lbs.
<input type="checkbox"/>	½" Uponor AquaPEX White, 100-ft. coil*	F1040500	0.475"	0.625"	6.0 lbs.
<input type="checkbox"/>	½" Uponor AquaPEX White, 300-ft. coil*	F1060500	0.475"	0.625"	18.0 lbs.
<input type="checkbox"/>	½" Uponor AquaPEX White, 1,000-ft. coil*	F1120500	0.475"	0.625"	54.0 lbs.
<input type="checkbox"/>	⅝" Uponor AquaPEX White, 300-ft. coil	F1060625	0.574"	0.750"	28.0 lbs.
<input type="checkbox"/>	⅝" Uponor AquaPEX White, 1000-ft. coil	F1120625	0.574"	0.750"	86.0 lbs.
<input type="checkbox"/>	¾" Uponor AquaPEX White, 100-ft. coil*	F1040750	0.671"	0.875"	10.0 lbs.
<input type="checkbox"/>	¾" Uponor AquaPEX White, 300-ft. coil*	F1060750	0.671"	0.875"	34.0 lbs.
<input type="checkbox"/>	¾" Uponor AquaPEX White, 500-ft. coil*	F1100750	0.671"	0.875"	54.0 lbs.
<input type="checkbox"/>	1" Uponor AquaPEX White, 100-ft. coil*	F1041000	0.862"	1.125"	20.0 lbs.
<input type="checkbox"/>	1" Uponor AquaPEX White, 300-ft. coil*	F1061000	0.862"	1.125"	56.0 lbs.
<input type="checkbox"/>	1" Uponor AquaPEX White, 500-ft. coil*	F1101000	0.862"	1.125"	93.0 lbs.
<input type="checkbox"/>	1¼" Uponor AquaPEX White, 100-ft. coil	F1061250	1.054"	1.375"	34.0 lbs.
<input type="checkbox"/>	1¼" Uponor AquaPEX White, 300-ft. coil	F1021250	1.054"	1.375"	106.0 lbs.
<input type="checkbox"/>	1½" Uponor AquaPEX White, 100-ft. coil	F1061500	1.244"	1.625"	44.0 lbs.
<input type="checkbox"/>	1½" Uponor AquaPEX White, 300-ft. coil	F1021500	1.244"	1.625"	133.0 lbs.
<input type="checkbox"/>	2" Uponor AquaPEX White, 100-ft. coil	F1062000	1.629"	2.125"	68.2 lbs.
<input type="checkbox"/>	2" Uponor AquaPEX White, 200-ft. coil	F1052000	1.629"	2.125"	136.4 lbs.
<input type="checkbox"/>	2" Uponor AquaPEX White, 300-ft. coil	F1022000	1.629"	2.125"	204.6 lbs.
<input type="checkbox"/>	3" Uponor AquaPEX White, 100-ft. coil	F1063000	2.400"	3.125"	128.0 lbs.
<input type="checkbox"/>	3" Uponor AquaPEX White, 350-ft. coil	F1023000	2.400"	3.125"	442.0 lbs.

Installation

Approved fittings are ProPEX® fittings¹ for sizes ⅜" through 2" AquaPEX. Use WIPEX™ fittings for 3" AquaPEX. Refer to the Uponor Professional Plumbing Installation Guide, Radiant Floor Heating Installation Handbook or AquaSAFE™ Residential Fire Sprinkler Installation Guide for more information.

Standards	Codes	Listings
CSA B137.5; ASTM F876; ASTM F877; ASTM F1960; ASTM-E84; ASTM-E119/UL 263	IPC; UPC; NSPC; NPC of Canada	*½", ¾", 1" UL 1821; *ULC/ORD - C 199 P; IAPMO; CSA; HUD; WARNOCK HERSEY; NSF; ITS; UL; ICC; ANSI/NSF 14- and 61-certified; AWWA C904 ² ; CAN/ULC S102.2 (U.S.: ¾" diameter and smaller; Canada: 1" diameter and smaller)

Related Applications

PEX-a Plumbing Systems
Radiant Heating and Cooling Systems
AquaSAFE Fire Safety Systems





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¹ProPEX® is a registered trademark of Uponor, Inc. ProPEX™ is a trademark of Uponor Ltd.

²This listing is for ¾" AquaPEX tubing and larger.

Print Stream on Tubing	Explanation
UPONOR AquaPEX	Brand Name
PEX 5006	ASTM F2023 Testing I/A/W ASTM F876
½ IN	Tubing Size (Example: ½")
SDR9	Standard Dimensional Ratio of 9
 B137.5 POTABLE	Potable Water Listing by CSA
 130PSI 120° F (49° C) UL1821	Rating I/A/W UL 1821 (½", ¾" and 1" only)
ULC-ORD C199P ¹	Canadian Rating I/A/W UL1821 and C199P
 ASTM F876/F877/F2023	ASTM Tubing Standards Listed by NSF
ASTM F1960/F2080/F1807	ASTM Fitting Standards Listed by NSF
	IAPMO Reports 3558, 3960
ICC ESR-1099	ICC Evaluation Services Report ESR-1099
ICC ESR1529	ICC Evaluation Services Report ESR 1529
HUD MR1269d	HUD Material Release Report 1269d
WHI-LISTED CAN/US FS25/SD50	Warnock Hersey Listing for 25/50 Plenum Rating
160PSI 73.4°F (23°C)/100PSI 180°F (82°C)/80PSI 200°F (93°C)	Hydrostatic Ratings from PPI in Accordance with ASTM F876
UPONOR PEX-a TUBING	Type of Crosslinking (PEX-a)
UN04950127 ²	Manufacturing Code to Audit Material Source
xxxxxx ³	Footage Marker in Increments of 3' (three feet)

¹ For ½-inch tubing only

² USA, Material Type, Extruder No., Year, Month, Day

³ Footage marking in increments of three feet (3')

Table 1-1: Print Stream Identification

ProPEX® Sprinkler Adapters and Fittings

Uponor offers sprinkler adapter fittings specifically designed for the AquaSAFE Fire Safety system. These fittings feature ProPEX connections and a standard ½" NPT outlet for connecting fire sprinklers.

Table 1-2 shows the required tubing length needed to approximate the equivalent pressure resistance of the different types of Uponor ProPEX fittings.

Calculated Equivalent Tubing Length

Fitting Type	Tubing Size	
	¾"	1"
Tee - Run	2'	2'
Tee - 90°	6'	6'
90° Elbow	5'	6'
Coupling	2'	2'

**Table 1-2: Pressure Resistance
(Fittings/Tubing)**

ProPEX Lead-free (LF) Brass Fire Sprinkler Adapter Tee

Submittal Information
Revision A: Nov. 20, 2009

Project Information

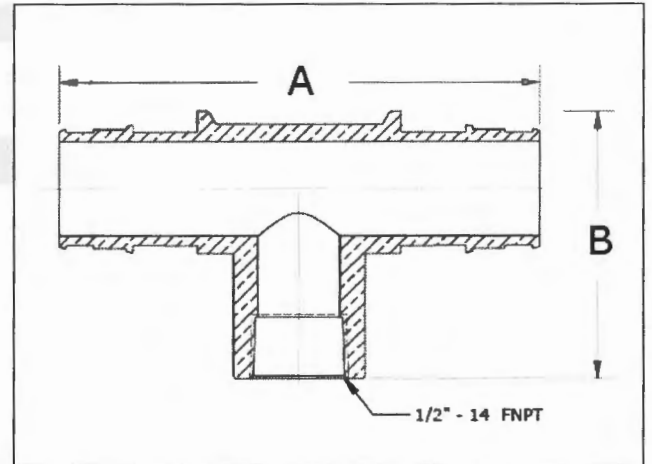
Job Name:	
Location:	Part No. Ordered:
Engineer:	Date Submitted:
Contractor:	Submitted By:
Manufacturer's Representative:	Approved By:

Technical Data

Material: C69300 Brass

Product Information and Application Use

Designed for use with 3/4" or 1" Uponor AquaPEX® tubing, the ProPEX® Lead-free Brass Fire Sprinkler Adapter Tee connects fire sprinklers to the Uponor residential AquaSAFE™ Looped multipurpose fire safety system, which combines fire sprinklers with a home's potable cold-water plumbing system. Use Uponor ProPEX fittings for the connections.



✓ Description	Part Number	A	B	Weight
<input type="checkbox"/> ProPEX LF Brass Fire Sprinkler Adapter Tee, 1" PEX x 1" PEX x 1/2" FNPT	LF7701010	4.09"	2.325"	0.62 lbs.
<input type="checkbox"/> ProPEX LF Brass Fire Sprinkler Adapter Tee, 3/4" PEX x 3/4" PEX x 1/2" FNPT	LF7707575	3.62"	2.325"	0.64 lbs.

Installation

Use the appropriate Uponor ProPEX Ring for the tubing. Install the tee using the Fire Sprinkler Adapter Mounting Bracket (A7750700) and Fire Sprinkler Adapter Push-on Nut (F7000005). For more information, refer to the Uponor AquaSAFE Looped System Installation Guide.

Related Products

A7750700: Fire Sprinkler Adapter Mounting Bracket, 3/4" and 1"
F7000005: Fire Sprinkler Adapter Push-on Nut

Standards

CAN/CSA B137.5; ASTM F877; ASTM F1960; UL 1821; ULC/ORD - C199P

Codes

IPC; UPC; NSPC; IRC; IMC; NPC of Canada

Listings

ANSI/NSF 14- and 61-certified; ICC ESR 1099; HUD MR 1269; IAPMO

Related Applications

PEX-a Plumbing Systems
AquaSAFE Fire Safety Systems

Contact Information

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¹ProPEX® is a registered trademark of Uponor, Inc. ProPEX™ is a trademark of Uponor Ltd.

Fire Sprinkler Adapter Mounting Bracket

Submittal Information
Revision A: Nov. 17, 2009

Project Information

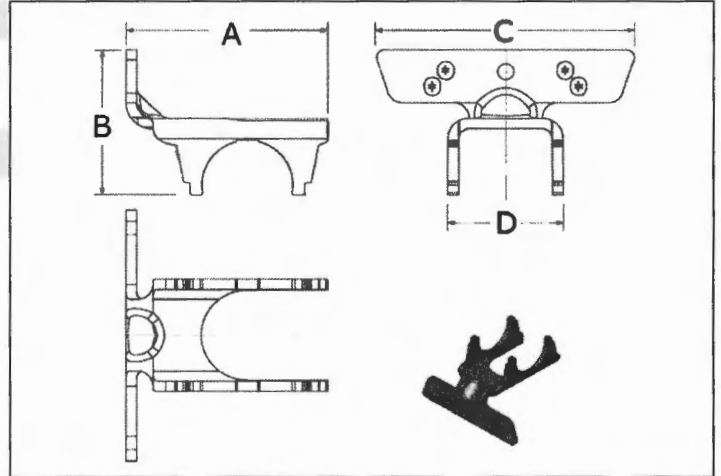
Job Name:	
Location:	Part No. Ordered:
Engineer:	Date Submitted:
Contractor:	Submitted By:
Manufacturer's Representative:	Approved By:

Technical Data

Material: 1050 Annealed (spheroidized) spring steel

Product Information and Application Use

Uponor's Fire Sprinkler Adapter Mounting Bracket is designed to rigidly mount ProPEX® Lead-free Brass Fire Sprinkler Adapter Tees (LF7701010 and LF7707575) in Uponor AquaSAFE™ multi-purpose residential fire sprinkler systems.¹



✓	Description	Part Number	A	B	C	D	Weight
<input type="checkbox"/>	Fire Sprinkler Adapter Mounting Bracket, 3/4" and 1"	A7750700	2.48"	1.84"	3.16"	1.42"	0.21 lbs.

Installation

Attach the sprinkler-mounting bracket or sprinkler adapter to the structure with two #10 x 1½" Pan Head, Full Thread Screws (F7001500) or equivalent. Refer to the sprinkler plan mounting details for correct placement of brackets and adapters, taking into account the ceiling type and sprinkler model. When installing adapter tee into bracket, use Fire Sprinkler Adapter Push-on Nut (F7000005). For more information, refer to the Uponor AquaSAFE Looped System Installation Guide.

Related Products

LF7701010: ProPEX Brass Fire Adapter Tee, 1" PEX x 1" PEX x ½" FNPT
LF7707575: ProPEX Brass Fire Adapter Tee, ¾" PEX x ¾" PEX x ½" FNPT

Standards

UL1821; ULC/ORD - C199P (for use with brass sprinkler adapter tees)

Codes

N/A

Listings

N/A

Related Applications

PEX-a Plumbing Systems
AquaSAFE Fire Safety Systems

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¹ProPEX® is a registered trademark of Uponor, Inc. ProPEX™ is a trademark of Uponor Ltd.

ProPEX® Fire Sprinkler Adapter

Submittal Information
Revision B: March 17, 2009

Project Information

Job Name:

Location:

Part No. Ordered:

Engineer:

Date Submitted:

Contractor:

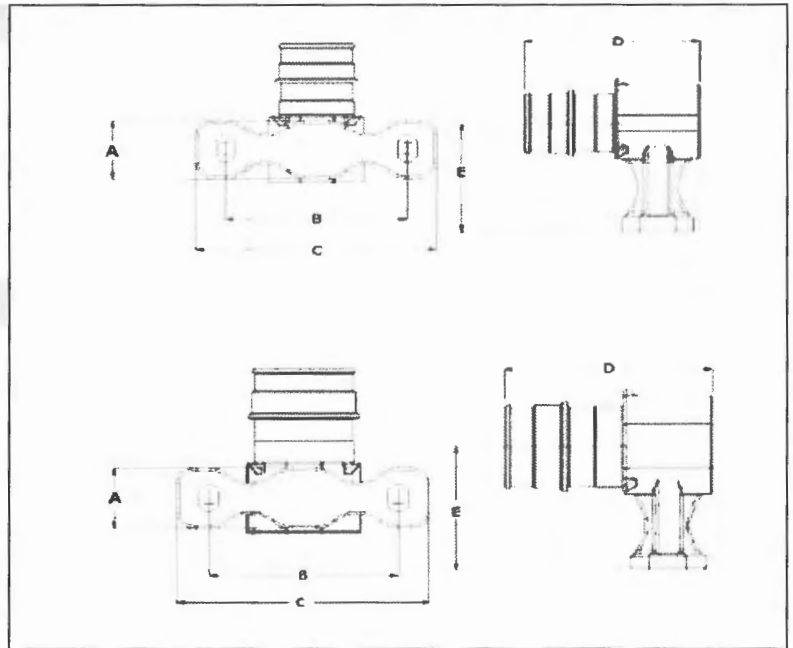
Submitted By:

Manufacturer's Representative:

Approved By:

Technical Data

Material: 300 Series Stainless Steel



Product Information and Application Use

Use the ProPEX® Fire Sprinkler Adapter in conjunction with the appropriate sprinkler to provide a multi-purpose residential fire sprinkler system¹. For residential applications, the system is installed with the cold-potable portion of the Uponor plumbing system. Make connections with Uponor ProPEX fittings. These fittings are designed for use only with ¾" or 1" AquaPEX® White tubing in the Uponor AQUASAFE® Looped System.

✓ Description

	Part Number	A	B	C	D	E	Weight	
<input type="checkbox"/>	ProPEX Fire Sprinkler Adapter, ¾" PEX x ½" FNPT	Q7517550	0.75"	1.88"	2.50"	1.82"	1.41"	0.268 lbs.
<input type="checkbox"/>	ProPEX Fire Sprinkler Adapter, 1" PEX x ½" FNPT	Q7511050	0.75"	1.88"	2.50"	2.06"	1.54"	0.408 lbs.

Installation

Use appropriate ProPEX Ring for connecting the tubing. Refer to the AquaPEX Installation Handbook or the Uponor AQUASAFE® Installation Guide for additional information.

Standards

CAN/CSA B137.5; ASTM F877; ASTM F 1960

Codes

IPC; UPC; NSPC; IRC; IMC; NPC of Canada

Listings

ANSI/NSF 14- and 61-certified; U.P. Code; ICC ESR 1099; HUD MR 1269; UL 1821; ULC/ORD - C 199 P

Related Applications

PEX-a Plumbing Systems
AQUASAFE Fire Safety Systems

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¹ProPEX® is a registered trademark of Uponor, Inc. ProPEX™ is a trademark of Uponor Ltd.

ProPEX[®] Fire Sprinkler Adapter Elbow

Submittal Information
Revision B: March 17, 2009

Project Information

Job Name:

Location: _____ Part No. Ordered: _____

Engineer: _____ Date Submitted: _____

Contractor: _____ Submitted By: _____

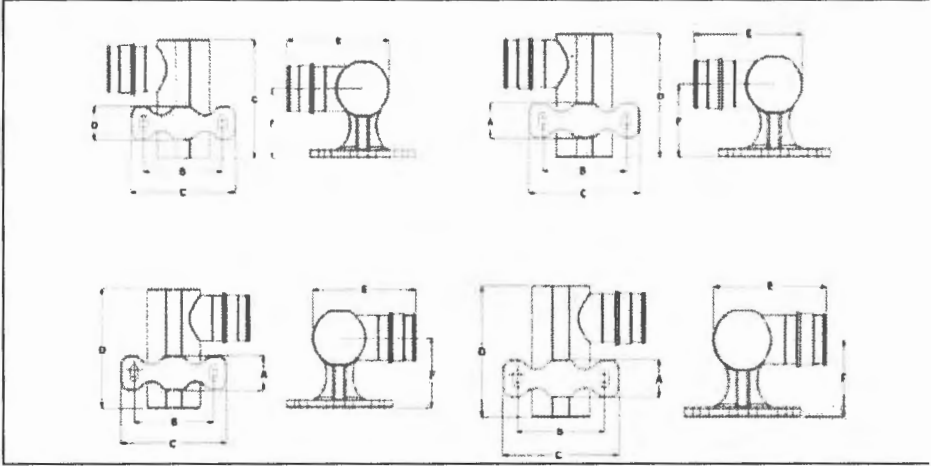
Manufacturer's Representative: _____ Approved By: _____

Technical Data

Material: 300 Series Stainless Steel

Product Information and Application Use

Use the ProPEX[®] Fire Sprinkler Adapter Elbow in conjunction with the appropriate sprinkler to provide a multipurpose residential fire sprinkler system¹. The system is installed with the cold-potable portion of the Uponor plumbing system for residential applications. Make connections using Uponor ProPEX fittings. The fittings are designed for use only with 3/4" or 1" AquaPEX[®] White tubing in the Uponor AQUASAFE[®] Looped System.



✓ Description	Part Number	A	B	C	D	E	F	Weight
<input type="checkbox"/> ProPEX Fire Sprinkler Adapter Right Elbow, 3/4" PEX x 1/2" FNPT	Q7537550	2.25"	1.95"	1.41"	2.25"	1.95"	1.41"	0.410 lbs.
<input type="checkbox"/> ProPEX Fire Sprinkler Adapter Right Elbow, 1" PEX x 1/2" FNP	Q7531050	2.63"	2.43"	1.54"	2.63"	2.43"	1.54"	0.783 lbs.
<input type="checkbox"/> ProPEX Fire Sprinkler Adapter Left Elbow, 3/4" PEX x 1/2" FNPT	Q7547550	2.25"	1.95"	1.41"	2.25"	1.95"	1.41"	0.410 lbs.
<input type="checkbox"/> ProPEX Fire Sprinkler Adapter Left Elbow, 1" PEX x 1/2" FNPT	Q7541050	2.63"	2.43"	1.54"	2.63"	2.43"	1.54"	0.783 lbs.

Installation

Use appropriate ProPEX Ring when connecting the tubing. Refer to the AquaPEX Installation Handbook or the Uponor AQUASAFE Installation Guide for additional information.

Standards

CAN/CSA B137.5; ASTM F877; ASTM F1960

Codes

IPC; UPC; NSPC; IRC; IMC; NPC of Canada

Listings

ANSI/NSF 14- and 61-certified; ICC ESR 1099; HUD MR 1269; IAPMO 3558; UL 1821; ULC/ORD - C 199 P

Related Applications

PEX-a Plumbing Systems
AQUASAFE Fire Safety Systems

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www.uponor.ca

¹ProPEX[®] is a registered trademark of Uponor, Inc. ProPEX[™] is a trademark of Uponor Ltd.

ProPEX® Ring

Submittal Information
Revision B: April 13, 2011

Project Information

Job Name:

Location:

Part No. Ordered:

Engineer:

Date Submitted:

Contractor:

Submitted By:

Manufacturer's Representative:

Approved By:

Technical Data

Material: PEX-a (Engel Method)

Density: 926 to 940 kg/m³

Degree of Crosslinking: 70% to 89%

Product Information and Application Use

Manufactured from PEX-a material, Uponor ProPEX® Rings are required to make a proper ProPEX connection.¹ Red print on the rings indicates hot lines. The ½", ¾" and 1" ProPEX Ring with Stop includes a leading edge chamfer and stop edge.



✓ Description	Part Number	Length	i.d.	o.d.	Weight
<input type="checkbox"/> ProPEX Ring, ¾"	Q4690302	0.54"	0.49"	0.74"	0.005 lbs.
<input type="checkbox"/> ProPEX Ring with Stop, ½" (red print)	Q4690511	0.63"	0.63"	0.87"	0.006 lbs.
<input type="checkbox"/> ProPEX Ring with Stop, ½"	Q4690512	0.63"	0.63"	0.87"	0.006 lbs.
<input type="checkbox"/> ProPEX Ring, ⅝"	Q4680625	0.79"	0.75"	1.00"	0.008 lbs.
<input type="checkbox"/> ProPEX Ring with Stop, ¾"	Q4690756	0.87"	0.88"	1.13"	0.012 lbs.
<input type="checkbox"/> ProPEX Ring, 1"	Q4681000	1.10"	1.13"	1.42"	0.020 lbs.
<input type="checkbox"/> ProPEX Ring with Stop, 1"	Q4691000	1.10"	1.13"	1.42"	0.020 lbs.
<input type="checkbox"/> ProPEX Ring, 1¼"	Q4681250	1.35"	1.38"	1.66"	0.030 lbs.
<input type="checkbox"/> ProPEX Ring, 1½"	Q4681500	1.61"	1.63"	1.91"	0.040 lbs.
<input type="checkbox"/> ProPEX Ring, 2"	Q4682000	1.97"	2.14"	2.61"	0.133 lbs.

Installation

Square cut the Uponor ProPEX tubing. Remove excess material. Slide the ProPEX Ring over the end of the tubing (maximum 1/16" over-hang). When using the ½" ProPEX Ring with stop edge, slide the ring on (i.e., chamfered edge first) until the end of the tubing contacts the stop edge. Expand tubing and ring. Rotate tool a quarter turn after each expansion to prevent the formation of grooves. Remove the expansion tool and fully seat the tubing and ring against the shoulder of the fitting. You should make ProPEX connections at temperatures above 5°F / -15°C. For more information, refer to the AquaPEX® Professional Plumbing Installation Handbook, AquaSAFE™ Fire Safety Installation Guide or the Uponor Radiant Installation Handbook.

Standards

ASTM F1960

Codes

IPC; UPC; NSPC; NPC of Canada

Listings

UL 1821 (½", ¾" and 1"); ULC/ORD - C 199 P (½", ¾" and 1"); HUD MR 1269; ICC ESR 1099; ANSI/NSF 14- and 61-certified

Related Applications

PEX-a Plumbing Systems
Radiant Heating and Cooling Systems
AquaSAFE Fire Safety Systems

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¹ProPEX® is a registered trademark of Uponor, Inc. ProPEX™ is a trademark of Uponor Ltd.

ProPEX® Lead-free (LF) Brass Sweat Adapter

Submittal Information
Revision A: Jan. 20, 2010

Project Information

Job Name:

Location:

Part No. Ordered:

Engineer:

Date Submitted:

Contractor:

Submitted By:

Manufacturer's Representative:

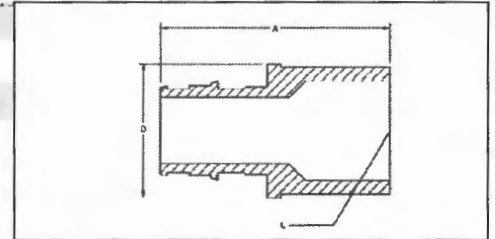
Approved By:

Technical Data

Material: C69300 Brass

Product Information and Application Use

ProPEX® Lead-free Brass Sweat Adapters transition Uponor PEX tubing to copper pipe.¹ Adapters are approved for use in hot and cold potable water systems, hydronic radiant heating systems and the AquaSAFE™ Residential Fire Safety System. These adapters are safe for direct burial in soil.



✓	Description	Part Number	A	B	C	Weight
<input type="checkbox"/>	ProPEX LF Brass Sweat Adapter, 3/8" PEX x 1/2" Copper	LF4513850	1.32"	0.721"	0.50"	CU 0.08 lbs.
<input type="checkbox"/>	ProPEX LF Brass Sweat Adapter, 1/2" PEX x 1/2" Copper	LF4515050	1.44"	0.750"	0.50"	CU 0.08 lbs.
<input type="checkbox"/>	ProPEX LF Brass Sweat Adapter, 1/2" PEX x 3/4" Copper	LF4515075	1.63"	0.989"	0.75"	CU 0.16 lbs.
<input type="checkbox"/>	ProPEX LF Brass Sweat Adapter, 3/4" PEX x 1/2" Copper	LF4517550	1.67"	1.070"	0.50"	CU 0.16 lbs.
<input type="checkbox"/>	ProPEX LF Brass Sweat Adapter, 3/4" PEX x 3/4" Copper*	LF4517575	2.04"	1.070"	0.75"	CU 0.30 lbs.
<input type="checkbox"/>	ProPEX LF Brass Sweat Adapter, 3/4" PEX x 1" Copper	LF4517510	2.17"	1.258"	1.00"	CU 0.31 lbs.
<input type="checkbox"/>	ProPEX LF Brass Sweat Adapter, 1" PEX x 1" Copper*	LF4511010	2.40"	1.345"	1.00"	CU 0.30 lbs.
<input type="checkbox"/>	ProPEX LF Brass Sweat Adapter, 1 1/4" PEX x 1 1/4" Copper	LF4511313	2.63"	1.640"	1.25"	CU 0.50 lbs.
<input type="checkbox"/>	ProPEX LF Brass Sweat Adapter, 1 1/2" PEX x 1 1/2" Copper	LF4511515	2.75"	1.875"	1.50"	CU 0.50 lbs.
<input type="checkbox"/>	ProPEX LF Brass Sweat Adapter, 2" PEX x 2" Copper	LF4512020	3.53"	3.00"	2.00"	CU 2.00 lbs.

Installation

Use the appropriate Uponor ProPEX Ring for the tubing (sold separately). Do not solder within 18 inches of the ProPEX Fitting. Refer to AquaPEX® Professional Plumbing Installation Guide, Radiant Floor Heating Installation Handbook or AquaSAFE™ Residential Fire Sprinkler Installation Guide for additional information.

Standards

CAN/CSA B137.5; ASTM F877; ASTM F1960

Codes

IPC; UPC; NSPC; NPC of Canada

Listings

HUD MR 1269; ICC ESR 1099; ANSI/NSF 14- and 61-certified; U.P. Code, Annex G; *UL 1821; *ULC/ORD C199P

Related Applications

PEX-a Plumbing Systems
Uponor Residential Fire Safety Systems
Radiant Heating and Cooling Systems
Snow and Ice Melting Systems
Permafrost Protection Systems
Turf Conditioning Systems

Contact Information

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¹ProPEX® is a registered trademark of Uponor, Inc. ProPEX™ is a trademark of Uponor Ltd.

ProPEX® Lead-free (LF) Brass Female Threaded Adapter

Submittal Information
Revision A: Jan. 20, 2010

Project Information

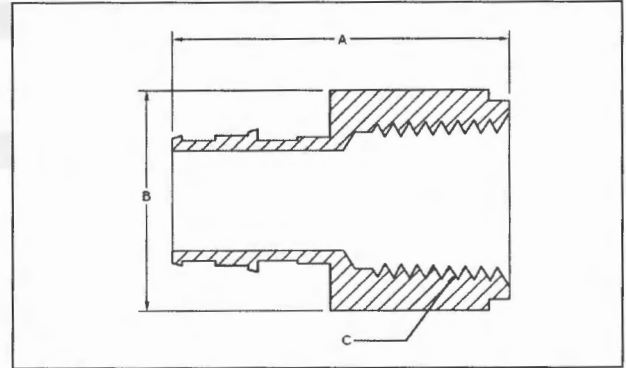
Job Name:	
Location:	Part No. Ordered:
Engineer:	Date Submitted:
Contractor:	Submitted By:
Manufacturer's Representative:	Approved By:

Technical Data

Material: C69300 Brass

Product Information and Application Use

The ProPEX® Lead-free Brass Female Threaded Adapter connects Uponor PEX tubing to female NPT threads.¹ Use these fittings in hot and cold domestic potable water systems or in any radiant heating system. One end of the adapter is manufactured with the Uponor ProPEX Fitting for connections to Wirsbo hePEX™ tubing or Uponor AquaPEX® tubing. The other end of the adapter connects to copper. These adapters are safe for direct burial in soil.



✓	Description	Part Number	A	B	C	Weight
<input type="checkbox"/>	ProPEX LF Brass Female Threaded Adapter, 1/2" PEX x 1/2" NPT	LF4575050	1.57"	1" HEX	1/2" NPT	0.20 lbs.
<input type="checkbox"/>	ProPEX LF Brass Female Threaded Adapter, 1/2" PEX x 3/4" NPT	LF4575075	1.75"	1 3/16" HEX	3/4" NPT	0.40 lbs.
<input type="checkbox"/>	ProPEX LF Brass Female Threaded Adapter, 3/4" PEX x 3/4" NPT*	LF4577575	1.87"	1 3/8" HEX	3/4" NPT	0.20 lbs.
<input type="checkbox"/>	ProPEX LF Brass Female Threaded Adapter, 3/4" PEX x 1" NPT	LF4577510	2.21"	1 1/2" HEX	1" NPT	0.40 lbs.
<input type="checkbox"/>	ProPEX LF Brass Female Threaded Adapter, 1" PEX x 1" NPT	LF4571010	2.44"	1 1/2" HEX	1" NPT	0.45 lbs.
<input type="checkbox"/>	ProPEX LF Brass Female Threaded Adapter, 1 1/4" PEX x 1 1/4" NPT	LF4571313	2.57"	2" HEX	1 1/4" NPT	1.00 lbs.
<input type="checkbox"/>	ProPEX LF Brass Female Threaded Adapter, 1 1/2" PEX x 1 1/2" NPT	LF4571515	2.75"	2 1/2" HEX	1 1/2" NPT	2.20 lbs.
<input type="checkbox"/>	ProPEX Brass Female Threaded Adapter, 2" PEX x 2" NPT	LF4572020	3.53"	3" HEX	2" NPT	2.20 lbs.

Installation

ProPEX Tool and ProPEX Rings (sold separately) are required for connecting the PEX tubing. For more information, refer to the AquaPEX Professional Plumbing Installation Guide or the Radiant Floor Heating Installation Handbook.

Standards

CAN/CSA B137.5; ASTM F877; ASTM F1960

Codes

IPC; UPC; NSPC; NPC of Canada

Listings

ANSI/NSF 14- and 61-certified; ICC ESR 1099; HUD MR 1269; U.P. Code, Annex G; *UL 1821; *ULC/ORD C199P

Related Applications

PEX-a Plumbing Systems
Radiant Heating and Cooling Systems
Snow and Ice Melting Systems
Permafrost Protection Systems
Turf Conditioning Systems

Contact Information

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ProPEX® Lead-free (LF) Brass Male Threaded Adapter

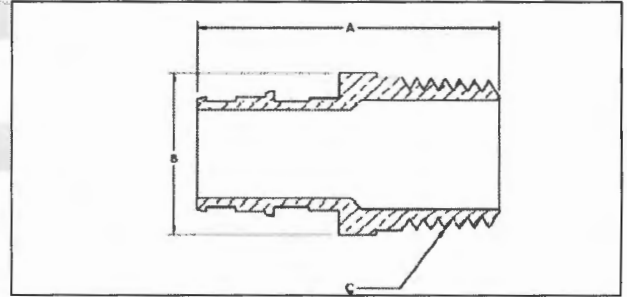
Submittal Information
Revision A: Jan. 28, 2010

Project Information

Job Name:	
Location:	Part No. Ordered:
Engineer:	Date Submitted:
Contractor:	Submitted By:
Manufacturer's Representative:	Approved By:

Technical Data

Material: C69300 Brass



Product Information and Application Use

ProPEX® Lead-free Male Threaded Adapters connect Uponor PEX tubing to male NPT threads.¹ These adapters are safe for direct burial in soil.

✓ Description	Part Number	A	B	C	Weight
<input type="checkbox"/> ProPEX LF Brass Male Threaded Adapter, 3/8" PEX x 1/2" NPT	LF4523850	1.62"	7/8" HEX	1/2" NPT	0.11 lbs.
<input type="checkbox"/> ProPEX LF Brass Male Threaded Adapter, 1/2" PEX x 1/2" NPT	LF4525050	1.73"	7/8" HEX	1/2" NPT	0.32 lbs.
<input type="checkbox"/> ProPEX LF Brass Male Threaded Adapter, 1/2" PEX x 3/4" NPT	LF4525075	1.78"	1 1/8" HEX	3/4" NPT	0.18 lbs.
<input type="checkbox"/> ProPEX LF Brass Male Threaded Adapter, 3/4" PEX x 3/4" NPT*	LF4527575	2.02"	1 1/8" HEX	3/4" NPT	0.20 lbs.
<input type="checkbox"/> ProPEX LF Brass Male Threaded Adapter, 3/4" PEX x 1" NPT*	LF4527510	2.22"	1 3/8" HEX	1" NPT	0.35 lbs.
<input type="checkbox"/> ProPEX LF Brass Male Threaded Adapter, 1" PEX x 3/4" NPT	LF4521075	2.25"	1 1/4" HEX	3/4" NPT	0.30 lbs.
<input type="checkbox"/> ProPEX LF Brass Male Threaded Adapter, 1" PEX x 1" NPT*	LF4521010	2.46"	1 3/8" HEX	1" NPT	0.44 lbs.
<input type="checkbox"/> ProPEX LF Brass Male Threaded Adapter, 1 1/4" PEX x 1 1/4" NPT	LF4521313	2.72"	1 3/4" HEX	1 1/4" NPT	0.75 lbs.
<input type="checkbox"/> ProPEX LF Brass Male Threaded Adapter, 1 1/2" PEX x 1 1/2" NPT	LF4521515	3.00"	2 1/4" HEX	1 1/2" NPT	0.80 lbs.
<input type="checkbox"/> ProPEX Brass Male Threaded Adapter, 2" PEX x 2" NPT	LF4522020	3.86"	2 1/2" HEX	2" NPT	1.90 lbs.

Installation

ProPEX Tool and ProPEX Rings (sold separately) are required for connecting the PEX tubing. Refer to the AquaPEX® Professional Plumbing Installation Guide or Radiant Floor Heating Installation Handbook for additional information.

Standards

CAN/CSA B137.5; ASTM F877; ASTM F1960

Codes

IPC; UPC; NSPC; NPC of Canada

Listings

ANSI/NSF 14- and 61-certified; HUD MR 1269; ICC ESR 1099; IAPMO 3558; U.P. Code, Annex G; *UL 1821; *ULC/ORD C199P

Related Applications

PEX-a Plumbing Systems
Radiant Heating and Cooling Systems
Snow and Ice Melting Systems
Permafrost Protection Systems
Turf Conditioning Systems

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¹ProPEX® is a registered trademark of Uponor, Inc. ProPEX™ is a trademark of Uponor Ltd.

ProPEX® Lead-free (LF) Brass Coupling

Submittal Information
Revision A: Jan. 28, 2010

Project Information

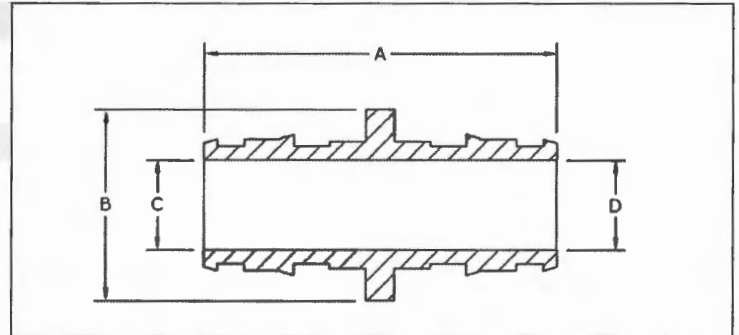
Job Name:	
Location:	Part No. Ordered:
Engineer:	Date Submitted:
Contractor:	Submitted By:
Manufacturer's Representative:	Approved By:

Technical Data

Material: C69300 Brass

Product Information and Application Use

ProPEX® Lead-free Brass Couplings are available for use in hot and cold domestic potable water systems.¹ Also approved for use in any radiant heating system. The coupling features the Uponor ProPEX Fitting for connections to Wirsbo hePEX™ tubing or Uponor AquaPEX® tubing. Couplings are safe for direct burial in soil.



✓ Description	Part Number	A	B	C	D	Weight
<input type="checkbox"/> ProPEX LF Brass Coupling, 3/8" PEX x 1/2" PEX	LF4543850	1.42"	0.740"	0.398"	0.280"	0.05 lbs
<input type="checkbox"/> ProPEX LF Brass Coupling, 1/2" PEX x 1/2" PEX*	LF4545050	1.54"	0.740"	0.398"	N/A	0.07 lbs
<input type="checkbox"/> ProPEX LF Brass Coupling, 3/4" PEX x 3/4" PEX*	LF4547575	2.02"	1.187"	0.595"	N/A	0.13 lbs
<input type="checkbox"/> ProPEX LF Brass Coupling, 3/4" PEX x 1" PEX*	LF4547510	2.25"	1.345"	0.795"	0.595"	0.16 lbs
<input type="checkbox"/> ProPEX LF Brass Coupling, 1" PEX x 1" PEX*	LF4541010	2.49"	1.345"	0.818"	N/A	0.20 lbs

Installation

ProPEX Tool and ProPEX Rings (sold separately) are required for connecting the PEX tubing. Use the appropriately sized Uponor ProPEX Ring for tubing connections. For more information, refer to the AquaPEX Professional Plumbing Installation Guide, the AquaSAFE™ Residential Fire Sprinkler Installation Guide or the Radiant Floor Heating Installation Handbook.

Standards

CAN/CSA B137.5; ASTM F877; ASTM F1960

Codes

IPC; UPC; NSPC; NPC of Canada

Listings

IAMPO 3558; HUD MR 1269; ICC ESR 1099; NSF 14- and 61-certified; U.P. Code, Annex G; *UL 1821; *ULC/ORD C199P

Related Applications

PEX-a Plumbing Systems
Uponor Residential Fire Safety Systems
Radiant Heating and Cooling Systems
Snow and Ice Melting Systems
Permafrost Protection Systems
Turf Conditioning Systems

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ProPEX® Brass Elbow

Submittal Information
Revision B: March 17, 2009

Project Information

Job Name:

Location:

Part No. Ordered:

Engineer:

Date Submitted:

Contractor:

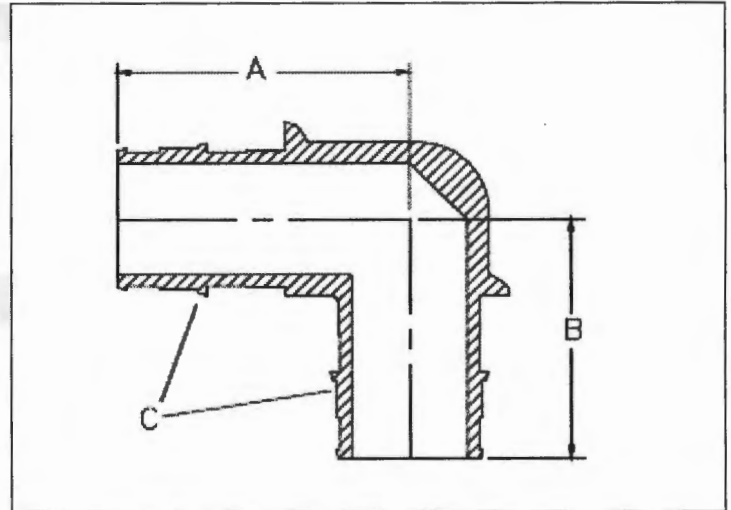
Submitted By:

Manufacturer's Representative:

Approved By:

Technical Data

Material: B16 Copper Alloy UNS C36000



Product Information and Application Use

The brass ProPEX® Elbow is available for use in hot and cold domestic potable water systems, and in the AQUASAFE® Residential Fire Safety systems. Also approved for use in any hydronic heating and AquaPEX® plumbing systems, each end of the elbow is manufactured with the ProPEX fitting for connections to hePEX™ or any AquaPEX tubing.

✓ Description	Part Number	A	B	C	Weight
<input type="checkbox"/> ProPEX Brass Elbow, ½" PEX x ½" PEX*	Q4710500	1.45"	1.48"	0.500"	0.10 lbs.
<input type="checkbox"/> ProPEX Brass Elbow, ⅝" PEX x ⅝" PEX	Q4710625	1.77"	1.57"	0.625"	0.15 lbs.
<input type="checkbox"/> ProPEX Brass Elbow, ¾" PEX x ¾" PEX*	Q4710750	2.04"	1.75"	0.750"	0.20 lbs.
<input type="checkbox"/> ProPEX Brass Elbow, 1" PEX x 1" PEX*	Q4711000	2.61"	2.28"	1.000"	0.30 lbs.
<input type="checkbox"/> ProPEX Brass Elbow, 2" PEX x 2" PEX	Q4712000	4.66"	4.36"	2.000"	2.20 lbs.

Installation

Use appropriate ProPEX Ring for connecting the tubing. Refer to the AquaPEX Installation Handbook, the Radiant Floor Installation Handbook or the Uponor AQUASAFE® Installation Guide for additional information.

Standards

CAN/CSA B137.5; ASTM F877; ASTM F 1960

Codes

IPC; UPC; NSPC; NPC of Canada

Listings

ANSI/NSF 14- and 61-certified; U.P. Code; ICC ESR 1099; HUD MR 1269; *UL 1821; *ULC/ORD C199P

Related Applications

PEX-a Plumbing Systems
AQUASAFE Fire Safety Systems
Uponor Radiant Floor heating Systems

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ProPEX® Lead-free (LF) Brass Tee

Submittal Information
Revision B: Jan. 28, 2010

Project Information

Job Name:	
Location:	Part No. Ordered:
Engineer:	Date Submitted:
Contractor:	Submitted By:
Manufacturer's Representative:	Approved By:

Technical Data

Material: C69300 Brass

Product Information and Application Use

Uponor's ProPEX® Lead-free Brass Tees are ideal for use in hot and cold domestic potable water systems.¹

This product is approved for use in the AquaSAFE™ Residential Fire Safety System. Also approved for any hydronic heating system application.

Each end of the ProPEX LF Brass Tee is manufactured with the Uponor ProPEX Fitting for connections to Wirsbo hePEX™ or Uponor AquaPEX® tubing. This product is safe for direct burial in soil.



✓	Description	Part Number	Length	Width	Weight
<input type="checkbox"/>	ProPEX LF Brass Tee, ½" PEX x ½" PEX x ½" PEX	LF4705050	2.52"	1.45"	0.20 lbs.
<input type="checkbox"/>	ProPEX LF Brass Tee, ¾" PEX x ¾" PEX x ¾" PEX	LF4707575	3.27"	1.93"	0.40 lbs.
<input type="checkbox"/>	ProPEX LF Brass Tee, 1" PEX x 1" PEX x 1" PEX	LF4701010	4.09"	2.42"	0.40 lbs.

Installation

ProPEX Tool and ProPEX Rings (sold separately) are required for connecting the PEX tubing. Do not solder within 18 inches of the ProPEX connection. Refer to the AquaPEX Professional Plumbing Installation Guide, AquaSAFE Homeowner Handbook or Radiant Floor Heating Installation Handbook for additional information.

Standards

CSA B137.5; ASTM F877; ASTM F1960

Codes

IPC; UPC; NSPC; NPC of Canada

Listings

IAPMO 3558; ANSI/NSF 14- and 61-certified; HUD MR 1269; ICC ESR 1099; UL 1821; ULC/ORD C 199P; U.P. Code, Annex G

Related Applications

PEX-a Plumbing Systems
Uponor Residential Fire Safety Systems
Radiant Heating and Cooling Systems

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ProPEX® Lead-free (LF) Brass Reducing Tee

Submittal Information
Revision B: Jan. 28, 2010

Project Information

Job Name:	
Location:	Part No. Ordered:
Engineer:	Date Submitted:
Contractor:	Submitted By:
Manufacturer's Representative:	Approved By:

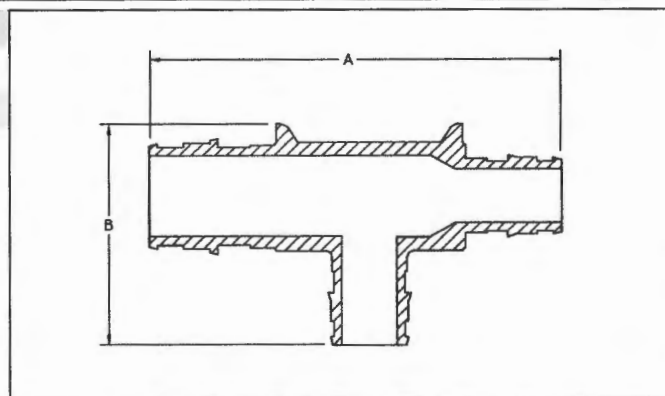
Technical Data

Material: C69300 Brass

Product Information and Application Use

Uponor's ProPEX® LF Brass Reducing Tee makes diverting connections for Uponor PEX tubing in supply and return mains.¹ This product is available for use in hot and cold domestic potable water systems, in any hydronic heating system and in the AquaSAFE™ Residential Fire Safety System. Uponor manufactures each end of the tee with the ProPEX Fitting for easy connections to Wirsbo hePEX™ or Uponor AquaPEX® tubing. This product is safe for direct burial in soil.

Note: Branch size is listed last in the part description.



✓	Description	Part Number	A	B	Weight
<input type="checkbox"/>	ProPEX LF Brass Reducing Tee, ¾" PEX x ¾" PEX x ½" PEX	LF4707550	3.27"	1.69"	0.40 lbs.
<input type="checkbox"/>	ProPEX LF Brass Reducing Tee, ¾" PEX x ¾" PEX x 1" PEX	LF4707710	3.62"	2.42"	0.50 lbs.
<input type="checkbox"/>	ProPEX LF Brass Reducing Tee, 1" PEX x ¾" PEX x ¾" PEX	LF4701775	3.86"	2.18"	0.30 lbs.
<input type="checkbox"/>	ProPEX LF Brass Reducing Tee, 1" PEX x ¾" PEX x 1" PEX	LF4701751	3.86"	2.42"	0.40 lbs.
<input type="checkbox"/>	ProPEX LF Brass Reducing Tee, 1" PEX x 1" PEX x ½" PEX	LF4701150	4.09"	1.95"	0.40 lbs.
<input type="checkbox"/>	ProPEX LF Brass Reducing Tee, 1" PEX x 1" PEX x ¾" PEX	LF4701175	4.09"	2.18"	0.40 lbs.

Installation

ProPEX Tool and ProPEX Rings (sold separately) are required for connecting PEX tubing. Refer to the AquaPEX Professional Plumbing Installation Guide, the AquaSAFE Residential Fire Sprinkler Installation Guide or the Radiant Floor Heating Installation Handbook for additional information.

Standards

CAN/CSA B137.5; ASTM F877; ASTM F1960

Codes

IPC; UPC; NSPC; NPC of Canada

Listings

IAPMO 3558; ANSI/NSF 14- and 61-certified; HUD MR 1269; ICC ESR 1099; UL 1821; ULC/ORD C 199P; U.P. Code, Annex G

Related Applications

PEX-a Plumbing Systems
Uponor Residential Fire Safety Systems
Radiant Heating and Cooling Systems
Snow and Ice Melting Systems
Permafrost Protection Systems
Turf Conditioning Systems

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1" Branch Manifold with 1/2" ProPEX® Lead-free (LF) Outlets

Submittal Information
Revision A: Jan. 28, 2010

Project Information

Job Name:

Location:

Part No. Ordered:

Engineer:

Date Submitted:

Contractor:

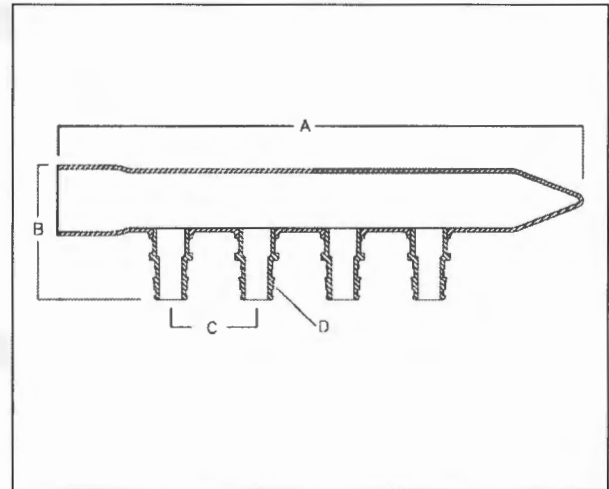
Submitted By:

Manufacturer's Representative:

Approved By:

Technical Data

Material:	Type L Copper; C69300 Brass
Maximum Temperature (no pressure):	320°F (160°C)
Maximum Working Temperature/Pressure:	210°F at 150 psi (99°C at 10 bar)
Maximum Flow Rate at 5 fps:	12.8 gpm
Maximum Flow Rate at 8 fps:	20.5 gpm



Product Information and Application Use

The Uponor 1" Copper Branch Manifold with 1/2" ProPEX® Lead-free outlets is used for hot and cold domestic potable water distribution systems.¹ The manifold has a 1" copper sweat fitting adapter supply connection. All outlets are configured with 1/2" ProPEX Lead-free brass connections.

✓ Description	Part Number	A	B	C	D	Weight
<input type="checkbox"/> 1" Branch Manifold with 1/2" ProPEX LF outlets, 4 outlets	LF2801050	8.95"	2.40"	1.50"	1/2"	0.80 lbs.
<input type="checkbox"/> 1" Branch Manifold with 1/2" ProPEX LF outlets, 6 outlets	LF2811050	11.95"	2.40"	1.50"	1/2"	1.10 lbs.
<input type="checkbox"/> 1" Branch Manifold with 1/2" ProPEX LF outlets, 8 outlets	LF2821050	14.95"	2.40"	1.50"	1/2"	1.40 lbs.
<input type="checkbox"/> 1" Branch Manifold with 1/2" ProPEX LF outlets, 10 outlets	LF2831050	17.95"	2.40"	1.50"	1/2"	1.70 lbs.
<input type="checkbox"/> 1" Branch Manifold with 1/2" ProPEX LF outlets, 12 outlets	LF2841050	20.95"	2.40"	1.50"	1/2"	1.90 lbs.

Installation

Use any product designed to mount 1" copper pipe as a mounting bracket. Any bend within 6 inches of the ProPEX connection to the manifold requires the use of a Tube Talon (F7050750) or Bend Support (A5110500 and A5150500). Refer to the AquaPEX® Professional Plumbing Installation Guide or the AquaSAFE™ Residential Fire Sprinkler Installation Guide for additional information.

Standards

CAN/CSA B137.5; ASTM F877; ASTM F1960

Codes

IPC; UPC; NSPC; NPC of Canada

Listings

UL 1821; ULC/ORD - C 199P; ICC ESR 1099; ANSI/NSF 14- and 61-certified; IAPMO; U.P. Code, Annex G

Related Applications

PEX-a Plumbing Systems
Uponor Residential Fire Safety Systems
Radiant Heating and Cooling Systems

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