

Large Capacity Aluminum Piping Systems



ELEVATION™



applied system technologies™

Elevation from Applied System Technologies (AST), has taken large diameter piping systems to a new level.

TEN TIMES LIGHTER THAN STEEL, without compromising structural strength. The System is safer and easier to install than plastic, with the quality of Stainless Steel.

Secrets of the Elevation System

1. Manufactured from Marine Grade Aluminum:

High Quality Aluminum Alloy provides the highest level of protection against corrosion. This ensures that the media traveling through a system encounters very little turbulence, while enabling high flow rates with minimal pressure losses compared to conventional steel systems.

2. Uses world's most highly accepted grooved fitting design:

Mechanical firms already use and understand our coupling technology ensuring installations can be done by any qualified contractor. Zero contamination is a priority; it is the only solution to achieve the lowest cost of ownership when operating a piping system.

Elevation provides a simple solution for large air/gas/vacuum users and is, without a doubt, the easiest and fastest system to install. It has the lowest cost of ownership and the best quality of media delivery available.

Connect Elevation to Infinity for maximum advantage.

Once you've installed an Elevation header, it's common to have smaller diameter piping for drops and solid line hook ups to machines and equipment.

Infinity, like Elevation, is comprised of an all metal, non-corrosive system with bore sizes from 20mm (3/4") up to 63mm (2 1/2"). The piping is manufactured in the same **MARINE GRADE ALUMINUM** as Elevation but promotes a different range and style of fittings.

Infinity fittings are made from solid brass and nickel-plated to provide a **STRONG AND NON-CORROSIVE** solution. The fitting design is a simple "push to connect" system and requires minimal skill, effort or tooling to install.

It couldn't be easier.

Simply drill a hole in the Elevation piping and fix an outlet saddle clamp around the tubing to leave a female threaded connection that allows for the simple conversion between Elevation and Infinity.



It couldn't be easier.



INFINITY

1. Attach saddle clamp to Elevation pipe with female threaded connection.

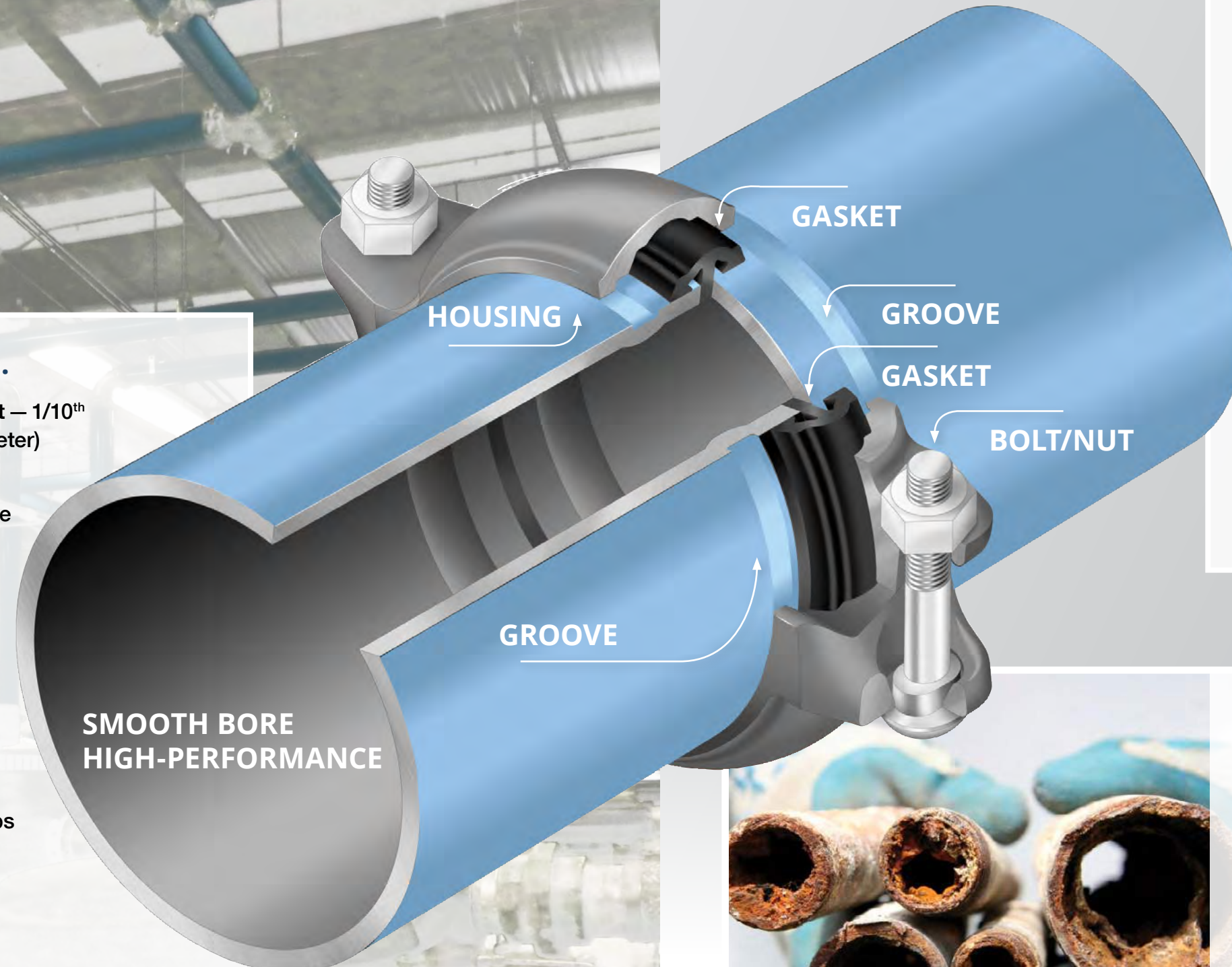
2. Screw male thread connector into female connector.

3. Attach Infinity piping to fitting.



Elevation works for you.

- Lightest product in the market — 1/10th the weight of steel (same diameter)
- Fastest installed system — compared to all others available
- Structurally as strong as carbon steel
- Manufactured from non-corrosive marine grade aluminum — guaranteed highest quality air delivery
- Superior construction and design — allows highest flow rates and lowest pressure drops
- System flexibility — simple modifications and/or additions
- Ten year leak free guarantee
- Manufactured from 100% recyclable materials



Non Corrosive Marine Grade Aluminum Tubing

- Marine grade aluminum construction — prevents rust and system deterioration.
- Zero corrosion — eliminates expensive production downtime and dramatically reduces maintenance costs.
- Smooth internal diameter — insuring higher flow rates with less turbulence than traditional black iron pipe, throughout the life of the system.
- Lowest cost of ownership available.



Don't jeopardize efficiency.

Piping is responsible for the delivery of compressed air to the point of use. Material, age and condition impact both system reliability and air quality. Compressed air piping made from iron will rust and corrode, creating buildup on the interior and reducing the functional diameter. This buildup results in increasing pressure losses as well as contamination contributing to poor quality air.

Components

		Part Number	
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">TUBING</p>	BLUE Compressed Air Piping <i>Stock Item</i>	70mm	10000-70-AIR-BLUE
		90mm	10000-90-AIR-BLUE
		115mm	10000-115-AIR-BLUE
		168mm	10000-168-AIR-BLUE
		220mm	10000-220-AIR-BLUE
	GRAY Vacuum Air Piping <i>Special Order</i>	70mm	10000-70-VAC-GREY
		90mm	10000-90-VAC-GREY
		115mm	10000-115-VAC-GREY
		168mm	10000-168-VAC-GREY
		220mm	10000-220-VAC-GREY
	BLACK Inert Gases Piping <i>Special Order</i>	70mm	10000-70-GAS-BLACK
		90mm	10000-90-GAS-BLACK
		115mm	10000-115-GAS-BLACK
		168mm	10000-168-GAS-BLACK
		220mm	10000-220-GAS-BLACK

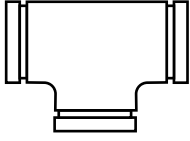
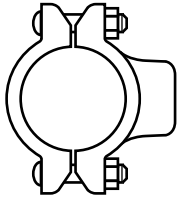
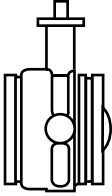
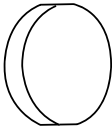
<p>Adapter, Male</p> <p>Adapter, Female</p> <p>Reducer</p>	ADAPTERS NPT Male (M) or NPT Female (F) <i>Supplied without Coupling</i>	70mm tube > 1-1/2"	M	100011-70-24
		70mm tube > 2"	M	100011-70-32
		70mm tube > 2-1/2"	M	100011-70-40
		70mm tube > 2-1/2"	F	100011-70-40-F
		90mm tube > 1-1/2"	M	100011-90-24
		90mm tube > 2"	M	100011-90-32
		90mm tube > 2-1/2"	M	100011-90-40
		90mm tube > 3"	M	100011-90-48
		90mm tube > 3"	F	100011-90-48-F
		115mm tube > 2"	M	100011-115-32
		115mm tube > 2-1/2"	M	100011-115-40
		115mm tube > 3"	M	100011-115-48
		115mm tube > 4"	M	100011-115-64
		115mm tube > 4"	F	100011-115-64-F
		REDUCERS <i>Supplied without Coupling</i>	90mm tube > 70mm tube	
115mm tube > 70mm tube			100014-115-70	
115mm tube > 90mm tube			100014-115-90	
168mm tube > 90mm tube			100014-96-48	
168mm tube > 115mm tube			100014-96-64	
220mm tube > 115mm tube			100014-220-115	
220mm tube > 168mm tube		100014-220-168		

Components

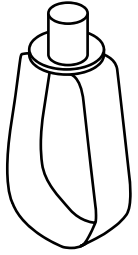
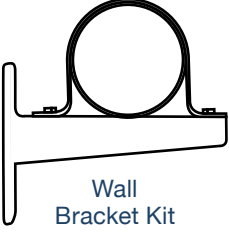
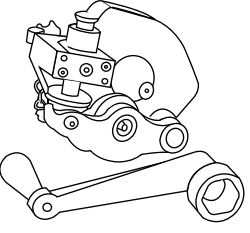
		Part Number	
<p>ANSI Flange</p>	ANSI 150 FLANGES <i>Available in additional sizes by Special Order</i>	90mm to ANSI 3"	100012-48
		115mm to ANSI 4"	100012-64
		168mm to ANSI 6"	100012-96
		220mm to ANSI 8"	100012-128
		ANSI 150 FLANGE ADAPTER KIT <i>Includes Flange, Reducer & Coupling</i> <i>(Additional kit flange sizes available by Special Order)</i>	
	90mm to ANSI 6"	100235-90-96	
	90mm to ANSI 4"	100235-90-64	
	90mm to ANSI 2-1/2"	100235-90-40	
	90mm to ANSI 2"	100235-90-32	
	115mm to ANSI 6"	100235-115-96	
115mm to ANSI 3"	100235-115-48		
115mm to ANSI 2-1/2"	100235-115-40		
115mm to ANSI 2"	100235-115-32		

<p>Straight Union Coupling</p> <p>Reducer Union Coupling</p> <p>90° Union Elbow</p> <p>45° Union Elbow</p>	STRAIGHT UNION COUPLINGS Rigid	70mm	100040-70-R
		90mm	100040-90-R
		115mm	100040-115-R
		168mm	100040-168R
	220mm	100040-220R	
	STRAIGHT UNION COUPLINGS Flexible <i>Special Order</i>	70mm	100040-70F
		90mm	100040-90F
		115mm	100040-115F
		168mm	100040-168F
		220mm	100040-220F
REDUCER UNION COUPLING	90mm > 70mm	100620-90-70	
	115mm > 70mm	100620-115-70	
	115mm > 90mm	100620-115-90	
	168mm > 115mm	100620-168-115	
	220mm > 168mm	100620-220-168	
90° UNION ELBOW <i>Includes 2 Couplings</i>	70mm	100130-70	
	90mm	100130-90	
	115mm	100130-115	
	168mm	100130-168	
	220mm	100130-220	
45° UNION ELBOW <i>Includes 2 Couplings</i>	70mm	100140-70	
	90mm	100140-90	
	115mm	100140-115	
	168mm	100140-168	
	220mm	100140-220	

Components

		Part Number		
 <p>Equal Tee with Couplings</p>	<p>Equal Tee <i>Includes 3 Couplings</i></p>	70mm	100230-70	
		90mm	100230-90	
		115mm	100230-115	
		168mm	100230-168	
		220mm	100230-220	
 <p>Outlet Saddle Clamp</p>	<p>OUTLET SADDLE CLAMP NPT Female (F) or Grooved (G) <i>Supplied without Coupling</i></p>	70mm tube > 1/2"	F	100234-70-08
		70mm tube > 3/4"	F	100234-70-12
		70mm tube > 1"	F	100234-70-16
		70mm tube > 1-1/2"	F	100234-70-24
		90mm tube > 3/4"	F	100234-90-12
		90mm tube > 1"	F	100234-90-16
		90mm tube > 1-1/2"	F	100234-90-24
		90mm tube > 2"	F	100234-90-32
		115mm tube > 3/4"	F	100234-115-12
		115mm tube > 1"	F	100234-115-16
		115mm tube > 1-1/2"	F	100234-115-24
		115mm tube > 2"	F	100234-115-32
		168mm tube > 1-1/2"	F	100234-168-24
		168mm tube > 2"	F	100234-168-32
		168mm tube > 115mm	G	100234-168-115
168mm tube > 90mm	G	100234-168-90		
 <p>Butterfly Valve, Tube to Tube with Two Couplings</p>	<p>BUTTERFLY VALVE Tube to Tube (Ten Position) <i>Supplied with 2 Couplings</i></p>	70mm tube		100700-70
		90mm tube		100700-90
		115mm tube		100700-115
		168mm tube		100700-168
		220mm tube		100700-220
		 <p>Plug, Cap End Fitting</p>	<p>PLUG - CAP END FITTING Ductile Galv. (DG) or Aluminum (A) <i>Supplied without Coupling</i></p>	70mm
90mm	A			100610-90-A
90mm	DG			100610-90-D
115mm	A			100610-115-A
115mm	DG			100610-115-D
168mm	DG			100610-168-D
220mm	DG			100610-220-D

Components

		Part Number	
 <p>Hanging Bracket</p>	<p>HANGING BRACKETS <i>(Galvanized Steel, Threaded Insert)</i></p>	70mm-3/8" insert	100820-70
		90mm-3/8" insert	100820-90
		115mm-3/8" insert	100820-115
		168mm - 1/2" insert <i>includes 3/8" insert adapter</i>	100820-168
		220mm - 1/2" insert <i>includes 3/8" insert adapter</i>	100820-220
 <p>Wall Bracket Kit</p>	<p>WIRE HANGING SYSTEM <i>(15' length)</i> 3/8" threaded end <i>(replaces need for threaded rod)</i></p>	70mm – 220mm pack of 10 <i>includes cutters</i>	90832-15
		 <p>Manual Grooving Tool</p>	<p>CANTILEVER WALL BRACKET <i>Includes Bracket, Pipe Strap & Bolts</i></p>
90mm	100835-90		
115mm	100835-115		
	<p>REPLACEMENT SEALS</p>	70mm	100921-70-T
		90mm	100921-90-T
		115mm	100921-115-T
		168mm	100921-168-T
		220mm	100921-220-T
	<p>TOOLS</p>	Grooving Tool (70mm-168mm)	100950-M
		Grooving Tool (220mm)	Special Order (call)
		Grooving Tool Rental (70mm-168mm) (Weekly Rental)	100950-M-R
		Groove Gage	100952-G



Elevation Technical Specifications

Max Working Pressure	220 PSI (15 BAR)
Max Working Temperature	-4°F to 176° F (100% Duty)
Tubing Material	Aluminum 6063 T-5 (<i>Marine Grade</i>) Manufactured and certified to ASTM standards
Tubing Weight	70 mm - 0.86 lbs./ft 90 mm - 1.04 lbs./ft 115 mm - 1.15 lbs./ft 168 mm - 3.12 lbs./ft 220 mm - 4.95 lbs./ft
Standard Seals	(-4° F to 176° F) Nitrile Rubber
High Temperature Seals	(-4° F to 300° F) Fluoroelastomer
Fittings	Aluminum, B-26, 356-T6
Couplings	Ductile Iron, Galvanized, grade 65-45-12
Standards & Approvals	ASME B31.1 Power Piping ASTM F-1476 BOCA CSA B-242 SBCCI

Elevation System Flow Rates:

	Cu Ft/min				
	70 mm	90 mm	115 mm	168 mm	220 mm
100 PSI	948	1955	3844	10078	20944
125 PSI	1064	2162	4205	11194	23169
150 PSI	1169	2364	4591	12153	25279
220 PSI	1417	2937	5568	14740	30418

Above flow rates are based on straight line flow allowing for a 1psi pressure drop per/100ft over pipe and couplings. For loop systems, flow rates are doubled, i.e. 90mm tubing at 100 psi flows 3910 cfm.



Inside or out... old or new... Elevation provides the ideal solution.



High Quality Aluminum Piping Systems

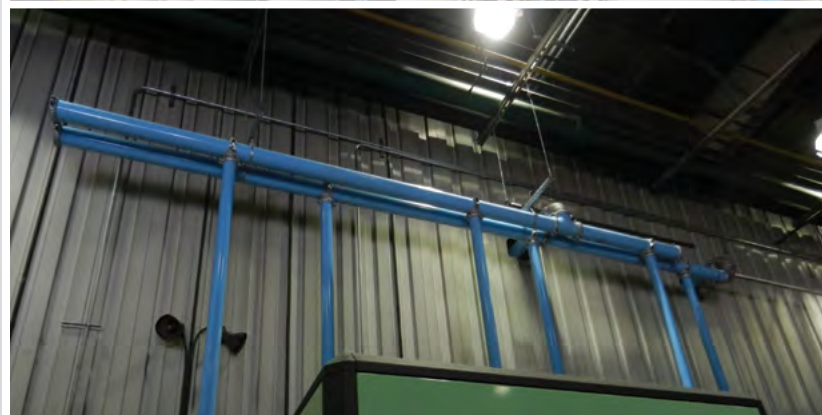


10 Year Guarantee

Applied System Technologies warrants its pipe and fitting components to be free of leaks due to manufacturing defects for a period of 10 years from date of sale. This Express warranty is in lieu of and excludes all other warranties, guarantees or representations, express or implied, by operation of law or otherwise, including any warranty that the materials are suitable for the buyer's requirements or special use. System must be installed by an AST approved technician.

Applied System Technologies agrees to replace any component proven to have a manufacturing defect.

Applied System Technologies shall not be liable for any consequential damages nor for loss, damage or expenses directly or indirectly arising from the use of the product



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