



Chemical Drainage Systems

Plenum Plus™ for return air plenums

Blueline® for laboratory applications

Brownline™ for underground use



OrionFittings.com

ORION®

Complete Solution for Chemical Drainage

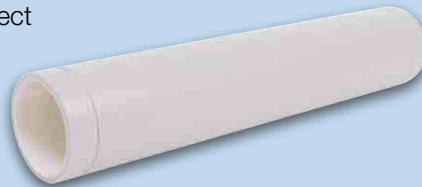
1 In Return Air Plenums

Orion Plenum Plus PVDF

(polyvinylidene fluoride)

- UL-certified to ASTM E84/UL 723 for <25/50 flame spread and smoke values. **(PVDF acid waste systems are the ONLY plastic acid waste piping systems that meet US standards requirements of ASTM E84 and testing requirements of UL 723 without additional insulation and wrapping.)**
- Does not burn. No need to wrap or protect exposed material!

Plenum Plus
PVDF



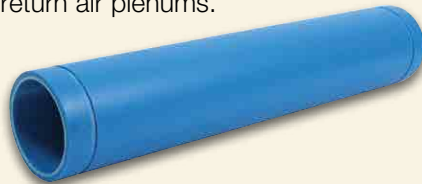
2 In the Laboratory

Orion Blueline FRPP

(flame-retardant polypropylene)

- Pipe and fittings certified to UPC and CAN/CSA B181.3 requirements.
- Easy transition to Plenum Plus PVDF for return air plenums.

Blueline FRPP



3 Underground

Orion Brownline PP

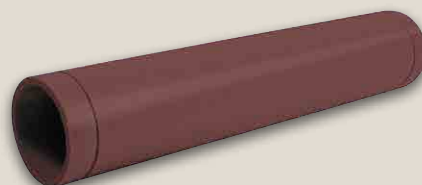
(non-flame-retardant polypropylene)

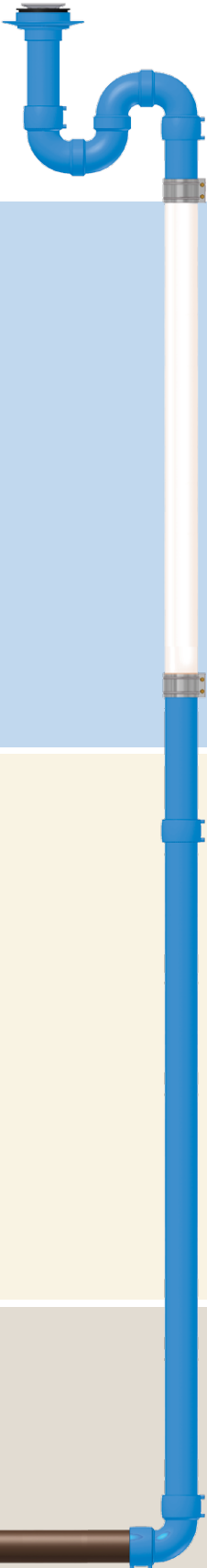
- Realize cost savings using the economical non-flame-retardant Brownline PP pipe underground.
- Use with Blueline fittings.

Tanks and Monitors

- Choose from our wide range of neutralizing tanks and accessories, and pH monitoring and dosing systems.

Brownline PP





Two Fitting Styles, Three Joining Methods

Orion provides three joining methods — No-Hub, Electrofusion, and Socket Fusion for use with three types of chemically resistant pipe. All three types are easy to install.

No-Hub Mechanical Joint

The No-Hub acid waste mechanical joint drainage system is economical and easy to install.

- Fast and easy installation
- All fittings pre-grooved at factory
- Requires no heat or hot water
- Easily assembled with ordinary hand tools
- Easy to clean and maintain
- Stainless steel outer coupling
- No metal in joint
- Suitable for below ground applications



Electrofusion

The Rionfuse® CF clamp-free electrofusion joining system provides unsurpassed ease of installation and joint strength for acid waste drainage piping. Its electrofusion coil is made of heavy gauge wire molded into the coupling.

- Requires no clamps
- Removable pipe stop allows coupling to be used as a slider for tight installations
- Multiple jointing capabilities and both sides of couplings fuse at the same time
- Positive joints made in just a few minutes
- Uses same plain end fittings as Orion No-Hub system
- Easily assembled with Rionfuser® electrofusion machine
- Can be used with polypropylene and PVDF to provide excellent resistance to a wide variety of chemicals and acids
- Available in 1½" - 12" sizes



Socket Fusion

Socket fusion type pipe and fittings for use with acid waste are joined by heat fusing the polypropylene or polyvinylidene fluoride material with an Orion thermostatically controlled heat tool. In a semi-molten state, pipe and fittings are easily joined to form a strong, permanent sealed joint.

- No metal in joint
- Suitable for below-ground applications



Joining Selection Guide

APPLICATION	NO HUB	RIONFUSE CF	SOCKET FUSION
Underground	√	√	√
Aboveground	√	√	√
Very Aggressive Chemicals (need tamperproofing)		√	√
JOINT			
Re-configurable	√		
Permanent Joint		√	√
COST			
Lower Upfront Material Cost/Higher Install Cost			√
Higher Upfront Material Cost/Lower Install Cost		√	

Double Containment Piping System

Series CFX2

Series CFX2 double containment piping system provides an extra layer of protection against leaks in highly sensitive applications.

It uses Orion clamp-free Rionfuse CF couplings to join a variety of piping sizes and materials. It is one of the easiest double containment systems to install, saving time and providing significant labor savings compared with traditional double containment systems.

- Sch 40 IPS x 45 psi rated (Other schedules/SDRs available)
- Proven Technology – worldwide for over 20 years
- Independent Test – Pipe is joined and tested independently of one another, making visual inspection and pressure testing of the carrier joints possible before the containment piping is sealed
- Ease of installation – CFX2 installs faster and easier than other double containment systems. This means big labor savings and on-time project completions.
- Variety of materials – Including PP x PP, PVDF x PP and PVDF x PVDF
- Quality Construction – Orion manufactures to the highest quality standards.



Monitoring/Dosing Systems

Neutralization Tanks

These tanks are used to receive, dilute and neutralize the pH of corrosive and harmful chemical wastes.

- Manufactured by rotationally molding virgin resins to uniform wall thicknesses
- All penetrations are thermally fused to tanks and leak tested before shipping
- Stress and defect free
- Lightweight and easy to install
- Designed to individual customer specifications, with fast delivery direct from factory
- Able to accommodate 1 to 2400 gallons

Monitoring/Dosing Systems

Orion monitoring systems are unequalled in protecting sewer systems and the environment.

- Monitors/records pH data; signals dosing pumps
- Allow local and remote (via a LAN) data retrieval
- Can be connected to building maintenance systems



A Watts Water Technologies Company

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