

IMPORTANT INFORMATION FOLLOW ALL INSTRUCTIONS

General

These instructions cover PetroTechnik UPP pipework systems for applications involving non-metallic underground pipework for flammable liquids, as:-

Integral Primary / Secondary (PS) - Normal Vent (NV) - Vapor Recovery (VR)

Assembly and installation should only be undertaken by a trained and certified PetroTechnik UPP systems installer using UPP installation procedures.

Any assembly by non trained installers or deviation from PetroTechnik UPP systems installation procedure could result in damage or leakage to the system, invalidation of warranty or personal injury.

For pipework applications as UGN PS, NV & VR, UPP Extra (lined) pipe should be used.

PetroTechnik UPP Product Codes include:

UPP Pipe Codes	Description	Diameter	Type	Length
001.063.019V	UL971 Pipe - Single wall Vent/Vapor pipe	2"	Stick	19'
001.075.063.033PS	UL971 Pipe - Double wall pipe	2"	Stick	33'
001.075.063.038PS	UL971 Pipe - Double wall pipe	2"	Stick	38'
001.075.063.100PS	UL971 Pipe - Double wall pipe	2"	Coil	100'
001.075.063.165PS	UL971 Pipe - Double wall pipe	2"	Coil	165'
001.090.019V	UL971 Pipe - Single wall Vent/Vapor pipe	3"	Stick	19'
001.110.090.019PS	UL971 Pipe - Double wall Vent/Vapor pipe	3"	Stick	19'
001.110.090.038S	UL971 Pipe - Double wall Vent/Vapor pipe	3"	Stick	38'
001.063.050.033PS	UL971 Pipe - Double wall pipe	1 1/2"	Coil	33'
001.063.050.165PS	UL971 Pipe - Double wall pipe	1 1/2"	Coil	165'
001.110.090.019PS	UL971 Pipe - Double wall pipe	3"	Stick	19'
001.110.090.038PS	UL971 Pipe - Double wall pipe	3"	Stick	38'
001.125.110.019PS	UL971 Pipe - Double wall pipe	4"	Stick	19'

UPP Fittings Codes	Description	Code key	Notes
02.XX.ZZ	Weld socket	XXX	Size
03.XX.YY.ZZ	90° Elbow	YYY	Size if applicable
04.XX.ZZ	45° Elbow	ZZZ	Description
05.XX	Stub		
06.XX	Flange		+ NPT (National pipe thread)
07.XX	Gasket		+ SC (Secondary containment)
08.XX.YY.ZZ	Tee		+ TP (Test port)
09.XX.YY.ZZ	Reducer		+ EIF (Electro integrated fusion)
10.XX.ZZ	End cap		+ BSPT (British standard pipe thread)
11.XX.ZZ	Termination		+ PS (Integral Primary/Secondary)
12.XX.ZZ	Coupling		+ V (Normal vent/vapor recovery)
13.XX.YY.ZZ	Reducer with socket		
49-XXX-YYY	SC Termination		

UPP Integral Primary / Secondary Pipe System

UPP Integral Primary / Secondary polyamide

lined polyethylene pipe is designed for use with highly aggressive fuels, achieving zero or near zero permeation.

UPP Normal Vent & Vapor Recovery Pipe System

UPP Extra polyamide lined polyethylene pipe is designed for use as NV & VR lines.

A wide range of fittings are available from PetroTechnik for UGN PS, NV & VR applications with UPP pipework. UPP pipework should only be used with UPP fittings

Ratings

Code	Description	Application	UL Rating	Pressure
001.063.050.XXXPS (1 1/2")	UPP Extra integral Primary/Secondary pipe system	UGN PS, NV,VR	PS: SC:	+ve: 90 psig
001.075.063.XXXPS (2")				-ve: 26.6" Hg
001.110.090.XXXPS (3")				+ve: 58 psig
001.125.110.XXXPS(4")				-ve: 15" Hg
001.110.090.XXXV (3")	UPP Extra normal vent and vapor recovery pipe system	UGN NV & VR	PS: SC:	+ve: 90 psig
				-ve: 26.6" Hg
001.063.XXXV (2")	UPP Extra normal vent and vapor recovery pipe system	UGN NV & VR		+ve: 90 psig
				-ve: 26.6" Hg
01.090.XXXV (3")	UPP Extra normal vent and vapor recovery pipe system	UGN NV & VR		+ve: 90 psig -ve: 26.6" Hg

+ve = Positive pressure, -ve = Negative pressure (vacuum)

Bend Radius

	Coils & Sticks	Coils		Sticks		
	63/50 1 1/2"	63mm 2"	63/75mm 2"	90mm 3"	90/110mm 3"	125/110 4"
Warm weather	0.8m (2ft7")	1m (3ft3")	1m (3ft3")	3m (9ft10")	4m (13ft2")	n/a
Cold weather	1.4m (4ft7")	1.6m (5ft3")	1.6m (5ft3")	5m (16ft5")	6m (19ft8")	n/a
Very cold weather	1.9m (6ft3")	2.2m (7ft2")	2.2m (7ft2")	7m (23ft)	8m (26ft3")	n/a 20m

Introduction

PetroTechnik UPP pipework is for underground use only. It is designed for use with petroleum products, alcohols and alcohol-gasoline mixtures including Motor Vehicle Fuels, Concentrated Fuels, High Blend Fuels, Aviation and Marine Fuels.

UPP pipe work is designed for operation between -20 and 120°F. UPP pipe work system complies with Underwriters Laboratories UL971 standard.

Storage

- Pipes should not be stored in direct sunlight. All product intended to be stored outside in excess of 6 months should be covered.
- Pipes should be kept away from sharp objects
- Drops and impacts during transit and storage may cause damage and leaking.
- UPP pipes are supplied with distinctive color cap to prevent contamination. These caps must be kept in place during storage.
- Individual pipe lengths should be stacked in a pyramid not more than 10 feet high, with the bottom layer fully restrained by wedges. Where possible, the bottom layer of pipes should be laid on timber battens.
- Bundled packs of pipes should be stored on clear level ground, supported by timber battens. Bundles should not be stored more than 10 feet high.
- Coils should be stored flat on firm level ground that has suitable protection for the bottom of the coil. A stack should not exceed 10 feet high. If stored on edge, coils must be secured against a properly anchored support, for a short time period only (particularly in warm weather).

Handling

- A flat bed vehicle, free from sharp objects or projections should be used for transporting pipe lengths or coils. Never drag pipes or coils.
- Wide band non metallic slings should be used when lifting pipe bundles by crane. Do not use chains, hooks or hawsers.
- Coils of small diameter are easily man handled. Forklifts can be used to lift larger diameter coils, but the forks must be protected to avoid damage to the pipe.
- Allow for some bend of pipe during loading and unloading.
- Ensure that lifting points are evenly spread.
- Take extra care when releasing coils. Coils are secured by extra restraining bands, with additional inner bands being provided to protect the inner layers. With coil standing upon ground as shown in photo, remove the bands carefully from the outer layer first so that only the length of pipe required is released. Successive layers of pipe can be released by removing the inner bands as the pipe is drawn away from the coil.



- Exercise special care when handling pipe in wet or frosty conditions. Use gloves for additional grip.
- Visual inspection should be performed on the pipes prior to assembly and installation. Any pipe showing significant signs of damage or cracks should not be used.

Assembly & Installation

PetroTechnik UPP pipe work is designed for use with the latest PetroTechnik fittings, parts and accessories and should be installed using tools, equipment and practices detailed in the latest PetroTechnik Installation Guide Product Catalog- see www.petrotechnik.com/downloads

The preparation of pipe (if electrofusion fittings are used), assembly of fittings, installation and backfilling of trenches should only be undertaken by a trained and certified PetroTechnik UPP systems installer using UPP installation procedures.

Any assembly by non trained installers or deviation from PetroTechnik UPP systems installation procedure could result in damage or leakage to the system, invalidation of warranty or personal injury.

Note! Minimum bend radius of pipes should not be exceeded during installation.

Pipework is intended for use in normal soil applications.

Use

PetroTechnik UPP pipework is designed for use underground and should not be used (without consultation) above ground.

On installation, site owners should be advised of best practices such as keeping sumps free from debris and any fuel spillage.

Maintenance

Prior to burial and use, PetroTechnik UPP pipework systems should be tested for leak tightness. This should be performed by a qualified person.

PetroTechnik recommended method for assessing leak tightness can be found in bulletin 'UPP pipework tightness testing procedure: see www.petrotechnik.com/downloads

Following installation, site owners should be advised of any information concerning inspection periods and leak testing requirements.

Problems

In the event of a leakage the following options should be taken

- If leakage or damage is detected in any part of the system, the problems are to be reported to the site operator
- If leakage or damage to the pipework system is verified, the problems are to be reported to the site operator. The manufacturer must subsequently be informed at the contact address below.
- Under no circumstances should leak detection equipment or alarms be disabled.

Repair and replacement of PetroTechnik's UPP pipework should be performed by a qualified person. The method of repairing pipework can be found in bulletin 'UPP pipework repair and replacement installation procedure' - see www.petrotechnik.com/downloads

PetroTechnik
protecting your liquid assets

**PetroTechnik Ltd.,
PetroTechnik House, Olympus Close,
Whitehouse Industrial Estate,
Ipswich, Suffolk, IP1 5LN, UK
tel: +44 (0) 1473 243300
fax: +44 (0) 1473 243301
www.petrotechnik.com**



Issue code: ULI-A4-03/07
File No: MH25274