RAKtherm® GLOBAL

DWV-RNP Technology

First Reinforced Multi-layer PVC-U in the Region



RAKtherm launches the New Generation
DWV Systems Technology


RAKtherm
Ultimate Piping Solutions

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RAKtherm's manufacturing technical hub produces the world's most versatile and comprehensive piping solutions to support major MEP projects worldwide.

Tested, conformed, and certified by international certifying bodies from Germany, France, and UK.

CHAIRMAN'S MESSAGE



Gulf Plastic and Converting Industries is a multifaceted manufacturing company based in the United Arab Emirates, supplying various engineering systems for the construction sector.

With over 50 years of experience in plastic pipe and fitting manufacturing in Saudi Arabia, Egypt and Jordan, has launched it's first integrated PP-R and PE-X pipes & fittings system for servicing a booming construction sector worldwide and in

the Middle East in particular under the trade name of RAKtherm® with 40,000 m2 manufacturing complex based in Ras Al Khaimah and sales branch office based in Sharjah, is well on its way to become the regional leader in water supply and drainage systems.

RAKtherm is a versatile, and comprehensive system for delivery of water and other fluids, used in applications of pressurized hot and cold water delivery as well as under floor heating in all modern residential, commercial, and industrial buildings.

We believe the quality of products and the support services provided at RAKthem are our main advantages.

RAKtherm® offers the widest range of PP-R and it's complimentary PE-X piping systems in the Middle East and North Africa, including Multilayer oxygen barrier pipes and Aluminum composite pipes in addition to the conventional piping systems.

We believe the quality of products and the support services provided at RAKthem® are our main advantages. This is translated in a very wide range of products that are produced with state-of-the-art machinery from the most reputed sources, and a very high-tech quality control system which ensures that this quality is always maintained in addition to well trained and highly motivated staff on all levels of the company that are always committed to premium service at any time.

Ali Hashim

Hashim Industry Group President

RAKtherm Ultimate Piping Solutions' Profile

RAKtherm – Gulf Plastics and Converting Industries, is under the flourishing arm of renowned group Hashim Industry since 1963; RAKtherm is the flagship division and pioneer of integrated PPR, PEX, and DWV piping systems. The corporate sales headquarter is in Ras Al Khaimah, United Arab Emirates with global distribution through a network of stockists in 40 countries across GCC, North and South Africa, South and East Asia, and Europe.

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For more information please visit our website at www.raktherm.com



OUR LEADERSHIP

"The most eminent high-end global manufacturer of piping systems technology"

Throughout the years, RAKtherm is known for its world-class brand delivering effective and efficient piping systems. With continuous pursuance in finding solutions to the major challenges in the MEP industry, we established ourselves highly recognized in the piping industry. Our understanding to the technological quest in plastic piping systems enables us to address these demanding challenges.

We are committed to making a real difference in providing hi-technological piping innovations that are breakthrough in the industry.

OUR LEADERSHIP

- **The source for the widest range of plumbing solutions**

RAKtherm manufactures the world's most versatile and comprehensive piping solutions suitable for a wide range of applications from potable water systems including drainage and sewage systems, and other fluid network installations. Our manufacturing technical hub is fully equipped with the most advance engineering machineries to produce vast of competent piping solutions to support projects in 40 countries around the world.

- **The leading international brand with global market acceptance**

We deliver global brand integrity. With strong network of stockists in 40 international countries to support major developments in the construction industry, we partner with local and international clients in building countless iconic projects throughout the world!

- **Our cornerstone is quality integrity**

RAKtherm is certified by globally recognized certifying bodies from Germany, France, UK, and Saudi. The strong adherence to quality management systems brings innovation breakthroughs to support plumbing developments in the construction industry. Our engineering teams of experts are dedicated to tackling the industry's toughest MEP challenges. A comprehensive quality system beginning from devising the required specification, sourcing the highest quality raw materials, production phase, packing, storage, until delivery.

- **A dedicated support-driven customer service**

Our dedicated customer service associates are available to support and assist you. Since piping is one of the vital parts of every structure, our commitment is to ensure that we resolve to fulfill your plumbing requirements.

- **Global distribution networks**

We make sure that RAKtherm piping systems will reach you. Our global operational hubs are available all across the 40 countries in GCC, North and South Africa, South and East Asia, and Europe.

RAKTHERM QUALITY

RAKtherm's quality management system is defined to ensure consistent high-quality production to intensify product integrity. We have developed a successful quality management principles based on the concept of premium quality that comprises of planning, quality control, quality assurance, and quality improvement. This principle involves processes that meet engineering requirements to withstand technical competitiveness in the global market.

Raktherm Continues To Unleash The Potential In Piping Solutions With Its Ground-Breaking Engineered Dwv Systems!

RAKtherm Launches the New Generation DWV Systems Technology…

RAKtherm's technical acumen for over 5 decades in wide range of integrated systems solutions, our expertise and commitment to innovation drives to develop high-performance piping solutions that will elevate the performance level even further. The DWV system is an

integral part of the piping structure, therefore the contractors and engineers' demands for the best system with the best performance.

As the construction technology become more complex and more technically demanding, our proficiency in pipe engineering can address to resolve these demands.

When the application gets tough, RAKtherm gets going: with the latest systems range, RAKtherm DWV piping systems now provides a top-notch solution for challenging applications.

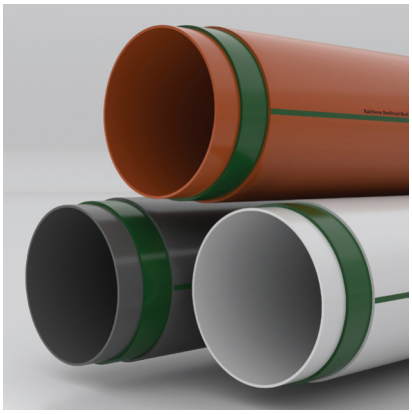
RAKtherm experts have developed the DWV piping systems with higher degree of strength, long-term stability, resists abrasions and aggressive chemicals, corrosion, and easy installation.

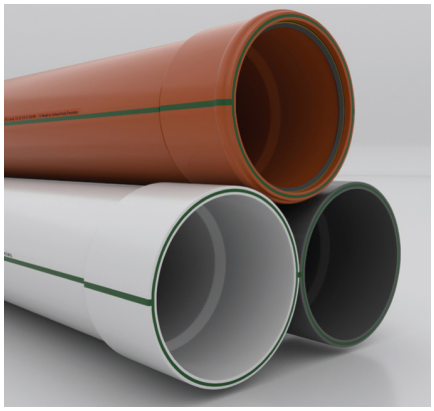
DWV Systems (Drain, sewerage, waste, and vent) is the latest development of RAKtherm.

A state of the art three-layers-pipe with solid-wall-construction, made from the new generation premium materials which significantly improves its' durability compared to the conventional pipes.

• RAKtherm's Groundbreaking RNP Technology

The pipes' uniform middle-layer-construction is based on special cells to ensure increased in mechanical properties, wherein the inner-layer and outer-layer are combined forming like a 'sandwich construction' which results to exceed the requirement for noise reduction, durability, flexibility, and longer-service-life





• Green Initiative

The increased resistance of pipe systems is in conjunction with RAKtherm's Green Initiative Program to create a more sustainable future. It aims to slow the consumption of raw materials and reduce the amount of waste entering landfills. RAKtherm's own special formula gives pipe systems both flexibility and rigidity properties, at the same time without affecting each other or affecting any other mechanical properties.

It also supports in helping to minimize other indirect environmental factors such as less CO2 emissions during transport, as well as reduced CO2 consumption during recycling, reuse, and disposal. A lead-free system can create a healthy working condition and protects the environment. When using new technologies, it is imperative that environment should not be compromised unlike the conventional products that damage our ecosystem.

• The Rarefied Concept for Noise-Reduction Technology of RAKtherm

SOUNDPROOF (TEXT, PIC PLYTRON-19PG)

To assess the noise, which the system will generate under the real operating conditions, test under EN 14366 are conducted, in which a portion of Multi-apartment building is simulated.

WHY RAKTHERM DWV (Drain, Waste, Vent) SYSTEMS?

The test bench has two storey's, basement and garret premises, through which the sewage system standpipe runs being attached to one of the walls. The noise level is measured both inside the premise where this pipe is installed, and in the so-called 'protected' premise located on the other side of this wall. Actual similarity of the test premise in multi-apartment and residential buildings is the restroom, and the common residential rooms are similar to the protected premise.

According to German standard DIN 4109, NOISE LEVEL IN THESE PREMISES AT NIGHT SHALL NOT EXCEED 30dB.

German Standard VDI 4100 establishes more stringent requirements i.e. according to this standard, to reach the maximum acoustic comfort, the noise level shall be maximum 24 dB for a multi-apartment building,and maximum 22 dB for a single-family home.

CONDITIONS		Waste water flow rate, L/s			
		0.5	1.0	2.0	4.0
Test as per EN 14366	Test premise	43	45	47	49
	Protected premise	<10	10	12	17
Test as per VDI 4100	Test premise	41	43	44	47
	Protected premise	<10	10	12	17

RAKtherm's RNP pipe system has confirmed its' high efficiency in management of noises in the sewage system.

Application of these pipes and fittings allows for making internal sewage of a single-family house or apartment in a multi-storey building really noiseless.

ENGINEERED RAW MATERIALS & STANDARDS

Specially formulated PVC-U resins by RAKtherm from the main raw materials sourced in the USA.

Type: Polyvinyl Chloride Homo polymer.

Polymerization Process: Suspension.

Appearance: White, free flowing powder resin is often converted into a wide range of pipe sizes and types, which meet the most stringent standards for water supply and distribution. Its medium molecular weight provides excellent processing characteristics in both single and multi-screw extruders.

TYPICAL PROPERTY VALUES

PROPERTY	TYPICAL VALUES	UNITS
K-value	67	-
Apparent Bulk Density	570	kg/m³
Retained on mesh 60 (250)	15	% max
Passing through mesh 200	4	% max
Volatile content	0.3	% max

RAKtherm PVC-U System Produced According to the Following Standards

PVC Standards:

BS EN 1329-1 :
Plastics piping systems for soil and waste discharge
Unplasticized poly (vinyl chloride) (PVC-U) Pipes and fittings.

Scope :

PVC-U Piping system in the field of Soil and Waste discharge (low and high temperature) inside building (marked with "B") and for soil & waste discharge systems for both inside building and buried in ground within the building structure (marked with "BD").

Also this standard applicable for Ventilation pipe work associated and rainwater pipe work within the building structure

System Range:
BS EN 1329 STD covering the size range from 32 mm up to 315 mm for both pipes and fittings

PVC Standards:

Application area code:

A code used in the marking of pipes and fittings to indicate the application area(s) for which they are intended, as follows;

B : application area code for components intended for use above ground inside the building, or for components outside buildings fixed onto the wall

D : application code for the area under and within 1 mt from the building where the pipes and fittings are buried in ground and are connected to the underground soil and waste system.

BD : application area code for components intended for use for both code B and D application area.

BS EN 1401-1 :
Plastics piping systems for non-pressure underground drainage and sewerage
Unplasticized poly (vinyl chloride) (PVC-U).

Scope :

EN 1401 specifies the requirements for pipes, fittings and the system of (PVC-U) piping systems in the field of non-pressure underground drainage and sewerage:

Outside the building structure (application area code ``U''); and both buried in ground within the building structure (application area code ``D'') and outside the building. This is reflected in the marking of products by ``U'' and ``UD''. It also specifies the test parameters for the test methods referred to in this standard.

System Range:

BS EN 1401 STD covering the size range from 110 up to 1000 mm for both pipes and fittings

Application area code:

A code used in the marking of pipes and fittings to indicate the application area(s) for which they are intended, as follows;

U : application area code for the area more than 1 m from the building to which the buried piping system is connected

D : application area code for the area under and within 1 m from the building where the pipes and the fittings are buried in ground and are connected to the drainage and sewerage of the building.

Note : In code D application areas, the existence of hot water discharge in addition to the external forces from the surroundings is usual.

UD : application area code for components intended for use for both code U and D application area.

STOP using yesterday's solutions for Today's plumbing challenges!

Why RAKtherm Reinforced DWV system?

DWV Systems (Drain, Waste, and Vent) is the latest development of RAKtherm. A state-of-the-art pipes made up of three layers from the new generation premium materials, which improves the durability of pipes more significantly than conventional pipes with solid wall construction. RAKtherm is proud to be the first manufacturer to unveil the secret in the new and groundbreaking reinforced (RNF) technology.

A uniform middle layer construction based on special cells to ensure increased in mechanical properties of the pipe combined with the inner and outer layer 'sandwich' construction of virgin raw material, resulting in a pipe that exceeds all the requirements for Noise Reduction, Durability and Longer service life.

RAKtherm's Performance at its Best!

RAKtherm multi-layer technology is the perfect choice; it has been used successfully for diverse site applications.

In today's fast-paced technological advancements, the industry is in need for a breakthrough. Traditional pipe systems must be developed to raise the efficiency level even further than previous. Therefore, existing pipe systems are engineered by RAKtherm to cope with the challenging wide range of future projects to come. As contractors, engineers, plumbing professionals faced with such MEP innovation challenges, we at RAKtherm are exploring all avenues to comply with the new requirements of the piping industry. The dedicated functionality of each individual layers improves the characteristics of the total pipe, and the cell structure of the core of the pipes increases its resistance to abrasion, corrosion, and physical and chemical impacts.

Go Green Best Practices' Initiatives!

The increased resistance of pipe systems is in conjunction with the RAKtherm's Green Initiative program to create a more sustainable future. It aims to slow the consumption of raw materials and reduce the amount of waste entering landfills.

It also supports in helping to minimize other indirect environmental factors such as, less CO2 emissions during transport, as well as reduced CO2 consumption during recycling, reuse and disposal.

A lead-free system can create a healthy working condition and protects the environment. When using new technologies, it is imperative that environment should not be compromised unlike the conventional products that damaged our ecosystem.

Does your health matter?… Definitely YES!

With over 50 years of experience in the industry, RAKtherm systems are trusted by builders, contractors, and design engineers, and are rated as the best in health and safety.

RAKtherm ML-PVC products are in line with EU lead-free legislation and therefore contribute to a better HSE policy and CSR aspects. They are stimulated and supported by TEPPFA. RAKtherm ML-PVC technology enables producers to participate in voluntary programs such as Vinyl-Plus (following the successful Vinyl 2000 program). RAKtherm ML-PVC products are rated as a 'greener' product compared to conventional products, which enables RAKtherm to win tenders in many countries as per global market demand.

Let's make it simple… We made it easy to install!

PVC-u, or polyvinyl chloride unplasticised, also known as PVCu, uPVC, and u-PVC is a lightweight pipe material which offers easy installation with up to 50 years' service life when used under correct conditions.

The easy jointing technique makes it hassle-free to make the installation process simple, using RAKtherm solvent cement to complement the full systems of DWV.

Your trusted system… RELIABILITY is our priority

Pipe and fittings PVC products have a temperature range of 5°C to 60°C and are sturdy and durable. All products across our PVC product range have good resistance to abrasion, chemical attack and corrosion.

Engineered for Higher Resilience

Imperial PVC-u products:

Pipe	:	EN1452-2, EN 1329-1
Fittings	:	EN1452-2
Threaded Fittings	:	BS21, DIN2999, ISO7

How do we take care of our consumers?.....

We demonstrate the importance of product compliance in your everyday life!

At RAKtherm, we do not compromise! As we aim to protect the interest of our customers, we ensure that their health and safety are not at risk. RAKtherm has gained the trust of 35 countries worldwide across GCC, North and South Africa, South and East Asia, and Europe. Its' product compliance is affirmed by the experts in the water industry and accepted by third-party water suppliers.

We use only the premium resins that are selected from the highest grade of materials to manufacture the most durable and reliable pipe systems. It is safe and its non-hazardous properties do not contaminate the water, therefore it complies to the certain requirements and regulations as specified by laws.

We'll guide you to the installation process…

- Ensure a safe working environment by avoiding exposure to naked flames (such as a lighter or candle or match) or smoking in the jointing area.
- PVC cement must be used prior to its expiry date (shown on bottom of tin).
- Always wear rubber or latex gloves when applying MEK cleaner and PVC cement.
- Never dilute PVC cement.
- Always replace lids on tins when not in use.
- Always use clean brushes.
- Always use lint-free cloth or absorbent paper.
- When doing the jointing outside, use a shelter to keep jointing surfaces dry especially when doing under wet weather environments.

How to achieve a stable piping network?... Pipe support and spacing is the key!

On above ground installations, it is essential to provide a support to ensure that the weight of the pipe and its contents are adequately supported.

The recommended maximum support spacing for horizontal runs of PVC pipe OD>50 each 80cm & OD<50mm each 100cm.

Spacing's are calculated assuming the pipes are carrying water.

Specifications and Fields of Application

This specification aims to regulate the modalities of delivery and testing of UPVC pipes for drain of water, conforming to Dlgs 06/04/2004 n. 174 "regulation concerning the materials and objects which can be used within fixed plants of purification, treatment, conduction, and distribution of drain water used for human consumption.

Made from the New Generation Materials for Long-Service Life

The blend has mainly to be made of PVC (polyvinyl-chloride) with the sole addition of non-toxic fluidification materials and stabilizers. Inert charges and other additives in quantities are necessary to extrusion and to give a guarantee of stability of the characteristics of the polymer both during the working process and the life of the product. The blend used in the production of pipes are either in granules or powder, must not be used for any other utilisation or working process than the required for the production of pipes.

Characteristics of PVC Resins (Powder)

Characteristics	*Requirements*
K Value	65 ÷ 70
Apparent specific weight	0,5 ÷0,6
Particle size measurement	> 250 mm 5% max. < 63 mm 5% max.
Residual VCM	< 1 ppm (1mg/kg max.)
Volatile substances	≤ 0,3%

Suggested Applications of RAKtherm DWV Pipes

DWV wastewater inside and outside the building are used for pipes laid to drain the water. PVC wastewater pipes TS 275-1 EN 1326-1 standards DIN 19 531 due to the smooth inner and outer surfaces that do not allow the formation of deposits, bacteria produce odor making PVC wastewater pipes, it is used in terms of ecological, economical ideal and for safety. Rigid PVC wastewater pipes and fittings made of PVC material is resistant to different weather conditions. Fireproof, PVC wastewater pipes it is the most preferred type of pipe construction sector thanks to its highly resistant and rigid structure.

Application:

B: for use on land or in the building element can include elements to a building wall.

D: Under the building and the building include elements used in pipes and buried under the ground in the first meters.

BD: Includes both application class elements.

DWV Wastewater Pipes are made suitable for the following applications:

- The groundwater and surface water transport systems in various areas (city, indus trial areas, and wastewater systems).

- The electricity and communication systems.
- Drainage, sewage, and waste discharge systems.
- DWV wastewater pipe is the ideal solution for chemical and industrial plants under pressurized lines.

Physical Properties of DWV Pipe and Fittings:

1. Vicat Softening Temperature (min 79°C) (EN 727).
2. Influence of temperature (150 ° C - 30 minutes)

   a. PVC wastewater pipes the injection point around a radius of 15 times the thickness of the gap in the area, depth of the peeling or bubbles should not be more than 50% of the wall thickness at that point.

   b. PVC wastewater pipes Ring length of the cracks of the housing wall thickness in a distance 10 times, should be no more than 50% of the wall thickness at that point.

   c. PVC wastewater pipes opening in the connecting line should not exceed 50% of the thickness of the line.

   d. PVC wastewater pipes 30% of the meat depth of peelings in any other area of the part thickness, while the height of the wall thickness It should not exceed 10%.

Mechanical Properties of PVC Fittings:

It must be in accordance with EN 1401-1 and TS 2171 standards.

1. Impact Strength (TS prEN 12061).
2. Mechanical strength or flexibility (EN 12256).

Quality, Reliability, and Performance…

With more than 50 years of proven performance, DWV water pipes are demanded by the specialists in the constructions industry.

The Advantage of using DWV wastewater pipes:

- NOISE reduction By RNF Technology from RAKtherm
- Pipes and fittings are non-flammable.
- Does not rust, therefore it does not contribute to contaminate the rainwater.
- Longer Service life.
- Decay and corrosion resistant; it is also leak proof.
- Light in weight, therefore installation and transport is easy
- less pressure loss
- Smooth surface for better flow.
- High impact strength.
- Have high-resistance to chemical inputs.
- It has noise-reducing properties; therefore, it provides the best performance and comfort to its users.
- It does not react with the mineral diameter shrinks.
- Below -0 ° C, ice crack elastic structure.

Know the Difference….
Take a look on the PVC materials and its features

More than 50% of the products produced by PVC raw materials are used in the building industry in the world. PVC raw materials are environment friendly; it does not harm the environment and these products help preserve the environment by reducing the pollution or waste they produce. PVC raw material is also used in PVC wastewater pipes water color; the smell and taste does not change and also does not harm human health. In the

absence of filler material, it retains its' original state. In fluid flow especially in vertical line, it does not produce high levels of sound like the rigid pipes; therefore, it reduces the impact of noise. PVC raw materials are white and offer many advantages.

PVC-U pipes and fittings produced in BD application class thickness (B and BD mark) is used for the following purposes:

- Hot and cold domestic wastewater.
- Ventilation systems for domestic wastewater lines.
- Building rainwater supplies.

What is the difference in wastewater and pressure systems between PP and PVC?

- The main difference between PVC and PP is the hardness. PVC pipes are superior in terms of harness which is more resistant than PP materials in underground applications.
- But PVC PP in accordance to temperature impact strength is also lower. In terms of flammability, PP pipes in PVC pipe while burning flame burning as would be in the form of soot formation.

DWV Wastewater Pipes Laying Rules

- WV wastewater pipes must be carefully laid in the pipeline. Correct laying of the pipe improves the pipe's quality and service life. The base of the trench must be dug before doing the pipe-laying operation. It must also be flat and stone free.
- Before laying DWV wastewater pipes, the type and quality of soil must be considered before filling it in. Another factor to consider is the season and climate. And the distance must be 1 – 1.5 meters.
- Before laying DWV wastewater pipes, the type and quality of soil must be considered before filling it in. Another factor to consider is the season and climate. And the distance must be 1 – 1.5 meters.
- The base will be poured into the ditch and should be properly placed near the bed with 15 cm of sand and would be hard to stop the pipe.
- Checking and testing process must be done to where it will be installed to seal the seams.
- DWV wastewater pipes and fittings in muff bed, a damaged condition must be determined and in case of extreme damage it should not be used.
- DWV wastewater pipes and fittings will be made in each assembly, and a liquid soap must be applied to the ends for easy installation.
- Any iron clamps should be used except in DWV wastewater pipes, steel, etc. should not be the material.
- After closing the floor, it is performed with the top of the PVC wastewater pipes should be laid on top of the sand and off the ground.
- During winter, the pipes and fittings should be avoided especially from shock.

RAKtherm's MULTI-LAYER REINFORCED PVC-U SYSTEMS

PVC-U Reinforced Pipes And Fittings Enhanced System (White)

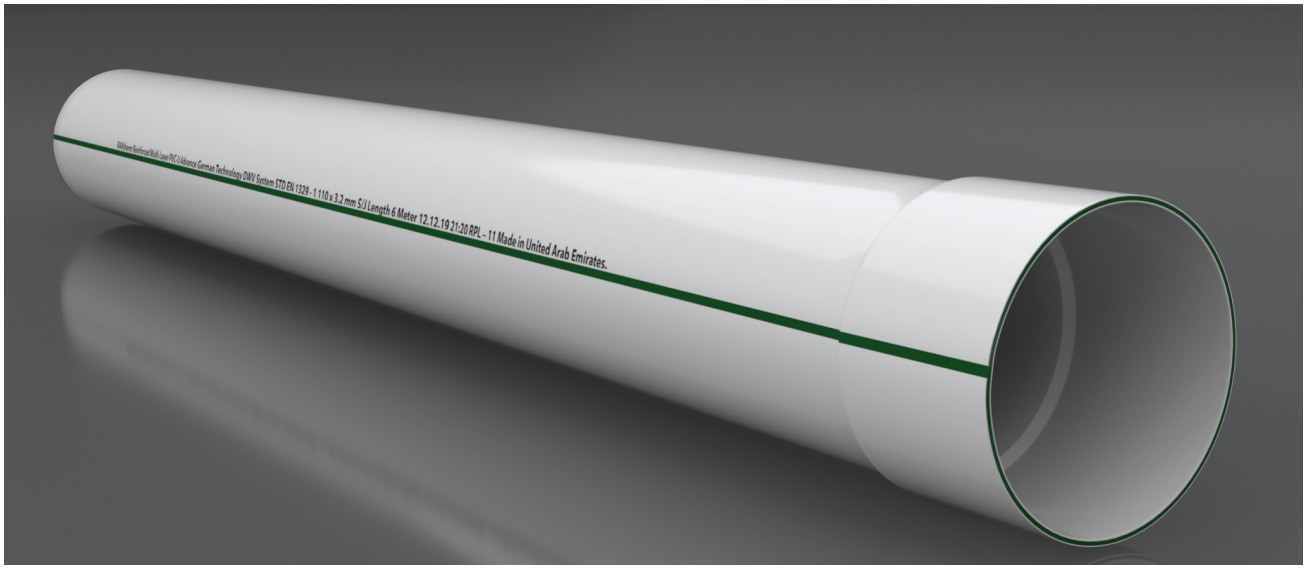
Underground / Aboveground (Solvent joint)

The enhanced systems with high corrosion resistance properties that is perfect for underground and aboveground piping installations.



Pipes

PVC-U REINFORCED ENHANCED PIPES (White)



Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV1-50x1.8x5.5	50	1.8	5.5
PRF-PV1-50x2.4x5.5	50	2.4	5.5
PRF-PV1-50x3.7x5.5	50	3.7	5.5
PRF-PV1-50x3.0x3	50	3	3
PRF-PV1-50x3.0x5.8	50	3	5.8
PRF-PV1-50x3.0x6	50	3	6
PRF-PV1-50x4.0x6	50	4	6
PRF-PV1-50x5.0x6	50	5	6
PRF-PV1-63x3.0x6	63	3	6
PRF-PV1-63x3.0x5.5	63	3	5.5
PRF-PV1-75x3.0x5.8	75	3	5.8
PRF-PV1-75x3.0x3	75	3	3
PRF-PV1-75x3.0x6	75	3	6
PRF-PV1-75x4.0x5.5	75	4	5.5
PRF-PV1-75x4.0x6	75	4	6
PRF-PV1-75x5.0x6	75	5	6
PRF-PV1-90x3.2x6	90	3.2	6
PRF-PV1-90x4.0x6	90	4	6
PRF-PV1-110x2.2x5.5	110	2.2	5.5
PRF-PV1-110x3.2x5.5	110	3.2	5.5
PRF-PV1-110x3.0x3	110	3	3
PRF-PV1-110x3.0x5.95	110	3	5.95
PRF-PV1-110x4.5x5.5	110	4.5	5.5
PRF-PV1-110x4.0x3	110	4	3
PRF-PV1-110x4.0x5.5	110	4	5.5
PRF-PV1-110x4.0x5.8	110	4	5.8
PRF-PV1-110x4.0x5.95	110	4	5.95

Pipes

Item Code	Dimension (mm)	Thick(mm)	Len. mt
PRF-PV1-110x5.3x5.5	110	5.3	5.5
PRF-PV1-110x5.0x5.95	110	5	5.95
PRF-PV1-160x3.2x5.5	160	3.2	5.5
PRF-PV1-160x3.0x6	160	3	6
PRF-PV1-160x4.7x5.5	160	4.7	5.5
PRF-PV1-160x4.0x6	160	4	6
PRF-PV1-160x5.0x3	160	5	3
PRF-PV1-160x5.0x5.8	160	5	5.8
PRF-PV1-160x5.0x6	160	5	6
PRF-PV1-160x7.7x5.5	160	7.7	5.5
PRF-PV1-160x7.0x5.5	160	7	5.5

SOLVENT WHITE PIPE WITH SOCKETING V2

Item Code	Dimension (mm)	Thick(mm)	Len. mt
PRF-PV2-32x1.5x6	32	1.5	6
PRF-PV2-32x1.8x4	32	1.8	4
PRF-PV2-32x1.8	32	1.8	6
PRF-PV2-32x2.0x4	32	2	4
PRF-PV2-32x2.0x5.8	32	2	5.8
PRF-PV2-32x2.0x6	32	2	6
PRF-PV2-32x2.2x4	32	2.2	4
PRF-PV2-32x2.2x5.95	32	2.2	5.95
PRF-PV2-32x2.2x6	32	2.2	6
PRF-PV2-50x1.8x5.5	50	1.8	5.5
PRF-PV2-50x2.4x5.5	50	2.4	5.5
PRF-PV2-50x3.7x5.5	50	3.7	5.5
PRF-PV2-63x1.8x5.8	63	1.8	5.8
PRF-PV2-63x2.0x5.8	63	2	5.8
PRF-PV2-63x2.4x5.5	63	2.4	5.5
PRF-PV2-63x3.0x5.5	63	3	5.5
PRF-PV2-63x3.0x5.5	63	3	5.5
PRF-PV2-63x4.0x5.8	63	4	5.8
PRF-PV2-63x5.0x5.8	63	5	5.8
PRF-PV2-63x3.0x5.8	63	3	5.8
PRF-PV2-63x3.0x6	63	3	6
PRF-PV2-63x3.7x5.5	63	3.7	5.5
PRF-PV2-63x4.0x5.8	63	4	5.8
PRF-PV2-63x4.7x5.8	63	4.7	5.8
PRF-PV2-75x3.0x5.5	75	3	5.5
PRF-PV2-90x2.0x5.85	90	2	5.85
PRF-PV2-90x3.0x5.85	90	3	5.85
PRF-PV2-90x4.0x5.5	90	4	5.5

SOLVENT WHITE PIPE WITH SOCKETING V2

Item Code	Dimension (mm)	Thick(mm)	Len. mt
PRF-PV2-110x2.2x5.5	110	2.2	5.5
PRF-PV2-110x3.2x5.5	110	3.2	5.5
PRF-PV2-110x4.5x5.5	110	4.5	5.5
PRF-PV2-110x4.0x5.5	110	4	5.5
PRF-PV2-110x5.3x5.5	110	5.3	5.5
PRF-PV2-160x3.0x5.5	160	3	5.5
PRF-PV2-160x3.2x5.5	160	3.2	5.5
PRF-PV2-160x4.7x5.5	160	4.7	5.5
PRF-PV2-160x6.0x5.5	160	6	5.5
PRF-PV2-160x7.0x5.5	160	7	5.5
PRF-PV2-160x7.7x5.5	160	7.7	5.5



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Swept Elbow 87.5°	E1-PV2-32	32	240
	E1-PV2-50	50	60
	E1-PV2-63	63	96
	E1-PV2-75	75	48
	E1-PV2-90	90	50
	E1-PV2-110	110	28
	E1-PV2-160	160	9



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Swept Elbow 87.5° with door	E2D-PV2-63	63	80
	E2D-PV2-75	75	40
	E2D-PV2-90	90	48
	E2D-PV2-110	110	24
	E2D-PV2-160	160	8



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Swept Bend 87.5° 110mm	BE1-PV2-110	110	25
	BE1-PV2-160	160	8



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Swept Bend 45° 110mm	BE3-PV2-110	110	27

Fittings



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Elbow 45°	E3-PV2-32	32	320
	E3-PV2-50	50	60
	E3-PV2-63	63	105
	E3-PV2-75	75	60
	E3-PV2-90	90	60
	E3-PV2-110	110	37
	E3-PV2-160	160	10



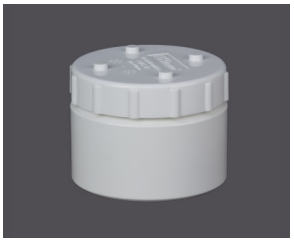
Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Swept Tee 87.5°	T1-PV2-32	32	120
	T1-PV2-50	50	35
	T1-PV2-63	63	60
	T1-PV2-75	75	24
	T1-PV2-90	90	32
	T1-PV2-110	110	14
	T1-PV2-160	160	5



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Swept Tee 87.5° with door	T2D-PV2-63	63	56
	T2D-PV2-75	75	22
	T2D-PV2-90	90	31
	T2D-PV2-110	110	14
	T2D-PV2-160	160	4



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Swept Reducer Tee	TR1-PV2-11050	110 x 50	27
	TR1-PV2-11075	110 x 75	18
	TR1-PV2-160110	160 x 110	7



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Socket with Door	S2D-PV2-50	50	165
	S2D-PV2-75	75	120
	S2D-PV2-110	110	60
	S2D-PV2-160	160	24



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Pipe End Cap	C2-PV2-32	32	1000
	C2-PV2-50	50	280
	C2-PV2-63	63	400
	C2-PV2-75	75	230
	C2-PV2-90	90	210
	C2-PV2-110	110	90
	C2-PV2-160	160	40



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
End Plug	C1-PV2-50	50	550
	C1-PV2-110	110	35
	C1-PV2-75	75	200



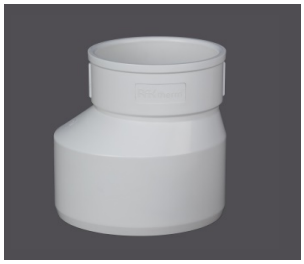
Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Floor Trap Multi Branch	MB-PV2-11050	110 x 50 x 50	18
	MB-PV2-11075	110 x 75 x 75	14



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Floor Trap Multi Branch	MB-PV2-1107550	110 x 75 x 50	16



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Floor Trap Multi Branch	FT2-PV2-200110	200 x 110 x 110	6

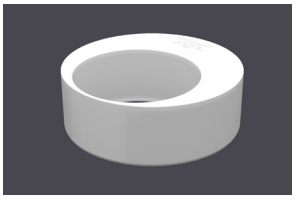


Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Reducer Socket	R1-PV2-7550	75 x 50	160
	R1-PV2-7556	75 x 56	160
	R1-PV2-11050	110 x 50	88
	R1-PV2-11075	110 x 75	70
	R1-PV2-160110	160 x 110	21



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
name	RB-PV2-11063	110x63	114
	RB-PV2-5032	50x32	400

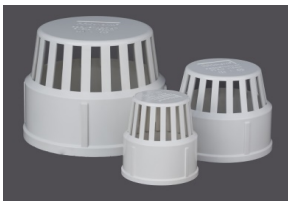
Fittings



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Reducer Bush	RB-PV4-11050(W)	110x50	50
	RB-PV4-11075(W)	110x75	50
	RB-PV4-160110(W)	160x110	39
	RB-PV4-11043	110x43	105
	RB-PV4-11050	110x50	50
	RB-PV4-11056	110x56	88
	RB-PV4-11075	110x75	114
	RB-PV4-11075 (W)	110x75	50
	RB-PV4-11082	110x82	88
	RB-PV4-160110	160x110	39
	RB-PV4-160110 (W)	160x110	39
	RB-PV4-4332	43x32	650
	RB-PV4-5032	50x32	400
	RB-PV4-5043	50x43	650
	RB-PV4-5643	56x43	800
	RB-PV4-8243	82x43	220
	RB-PV4-8256	82x56	220



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Socket	S1-PV2-32	32	360
	S1-PV2-50	50	120
	S1-PV2-63	63	162
	S1-PV2-75	75	90
	S1-PV2-90	90	72
	S1-PV2-110	110	60
	S1-PV2-160	160	20



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Ventilation Cap	V-PV2-75	75	56
	V-PV2-110	110	56
	V-PV2-160	160	18



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Y (Tee 45°)	Y1-PV2-32	32	120
	Y1-PV2-50	50	30
	Y1-PV2-75	75	24
	Y1-PV2-110	110	14
	Y1-PV2-160	160	4



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Reducer Y (Tee 45°)	YR1-PV2-11050	110 x 50	27
	YR1-PV2-11075	110 x 75	22
	YR1-PV2-160110	160 x 110	8



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Syphon P-Trap	SY-PV2-50	50	70
	SY-PV2-75	75	40
	SY-PV2-110	110	16



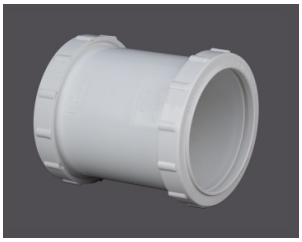
Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton(pcs)
Syphon P-Trap with Door	SY2D-PV2-110	110	13



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Double Y (TREE 45°)	YT1-PV2-110	110 x110 x 110	8



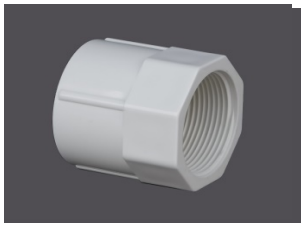
Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton(pcs)
Double TEE Cross 87.5°	TX-PV2-110	110 x 110 x 110	10
	TX-PV2-160	160 x160 x 160	4



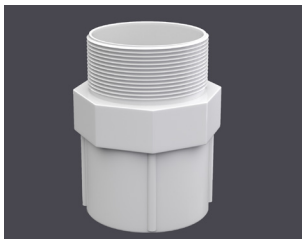
Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Expansion Coupler with Door	EXD-PV2-110	110	24



Fitting Item description	Item Code	Size	Std.Qty/ Carton (pcs)
Female Elbow	EF-PV2-5011/2	50mm x 11/2''	60



Fitting Item description	Item Code	Size	Std.Qty/ Carton (pcs)
Female Socket	SF-PV2-5011/2	50mm x 11/2''	100



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Male Thread Socket	SM-PV2-903	90mm x 3''	110

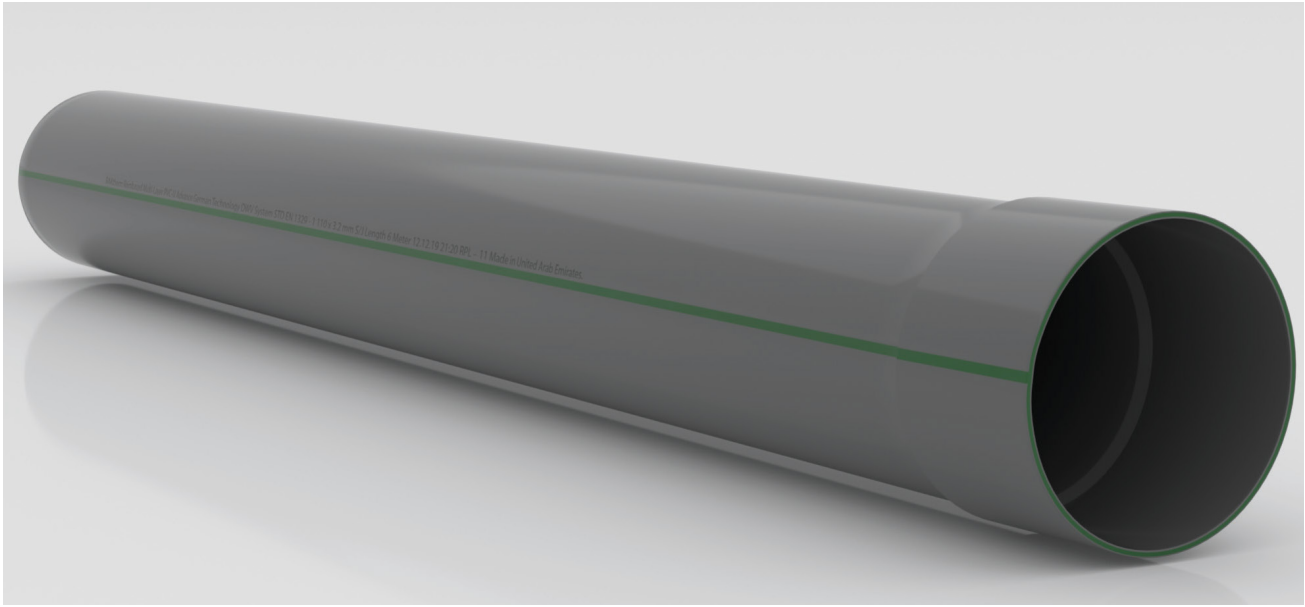
PVC-U Reinforced Pipes And Fittings Intensified System (Gray)

Aboveground (Solvent joint)

Engineered solution and easy to work on by easy jointing technique using the solvent-cement specifically manufactured by RAKtherm to complement the complete gray systems which creates a highly-reliable piping networks.



Pipe solvent gray.



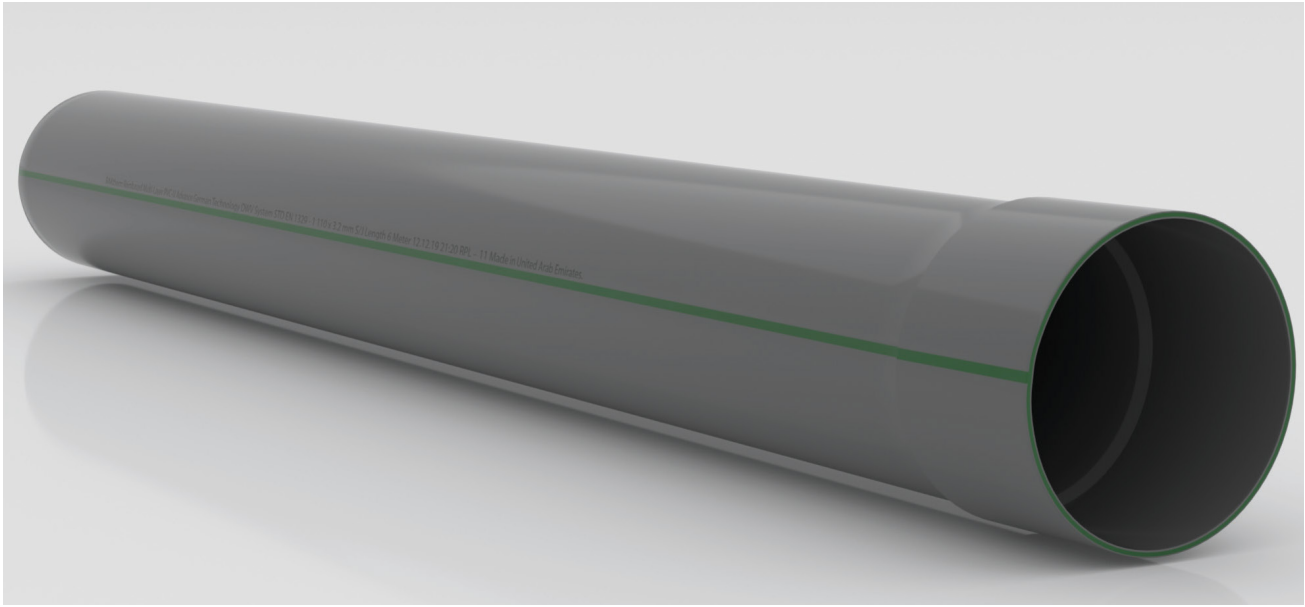
Item Code	Dimension (mm)	Weight per Meter	Len. mt
PRF-PV4L-32x1.5x6	32	0.28	6
PRF-PV4L-32x1.8x6	32	0.28	6
PRF-PV4L-32x1.9x6	32	0.29	6
PRF-PV4L-32x2.0x6	32	0.3	6
PRF-PV4L-32x2.2x6	32	0.35	6
PRF-PV4L-32x2.4x6	32	0.38	6
PRF-PV4L-32x3.0x6	32	0.5	6
PRF-PV4L-43x1.8x6	43	0.4	6
PRF-PV4L-43x2.0x6	43	0.42	6
PRF-PV4L-43x2.2x6	43	0.45	6
PRF-PV4L-43x2.3x6	43	0.46	6
PRF-PV4L-43x2.4x6	43	0.5	6
PRF-PV4L-43x2.5x6	43	0.52	6
PRF-PV4L-43x3.0x6	43	0.6	6
PRF-PV4L-50x1.5x6	50	0.4	6
PRF-PV4L-50x1.8x6	50	0.45	6
PRF-PV4L-50x2.0x6	50	0.5	6
PRF-PV4L-50x2.2x6	50	0.55	6
PRF-PV4L-50x2.4x6	50	0.6	6
PRF-PV4L-50x2.5x6	50	0.63	6
PRF-PV4L-50x2.8x6	50	0.67	6
PRF-PV4L-50x3.0x6	50	0.7	6
PRF-PV4L-50x3.5x6	50	0.8	6
PRF-PV4L-50x3.7x6	50	0.85	6
PRF-PV4L-50x3.9x6	50	0.9	6
PRF-PV4L-50x4.0x6	50	0.93	6

Item Code	Dimension (mm)	Weight per Meter	Len. mt
PRF-PV4L-50x4.5x5.8	50	0.98	5.8
PRF-PV4L-50x5.0x5.8	50	1.15	5.8
PRF-PV4L-56x1.8x5.8	56	0.52	5.8
PRF-PV4L-56x2.0x5.8	56	0.55	5.8
PRF-PV4L-56x2.2x5.8	56	0.6	5.8
PRF-PV4L-56x2.4x5.8	56	0.65	5.8
PRF-PV4L-56x3.0x5.8	56	0.8	5.8
PRF-PV4L-56x3.9x5.8	56	1.1	5.8
PRF-PV4L- 63x1.8x5.8	63	0.58	5.8
PRF-PV4L-63x1.9x5.8	63	0.6	5.8
PRF-PV4L-63x2.0x5.8	63	0.61	5.8
PRF-PV4L- 63x2.4x5.8	63	0.72	5.8
PRF-PV4L-63x2.5x5.8	63	0.76	5.8
PRF-PV4L-63x3.0x5.8	63	0.9	5.8
PRF-PV4L-63x3.7x5.8	63	1.18	5.8
PRF-PV4L-63x4.0x5.8	63	1.3	5.8
PRF-PV4L-63x4.7x5.8	75	1.5	5.8
PRF-PV4L-75x1.8x5.8	75	0.7	5.8
PRF-PV4L-75x2.0x5.8	75	0.81	5.8
PRF-PV4L-75x2.2x5.8	75	0.85	5.8
PRF-PV4L-75x2.3x5.8	75	0.87	5.8
PRF-PV4L-75x2.4x5.8	75	0.9	5.8
PRF-PV4L-75x2.5x5.8	75	0.95	5.8
PRF-PV4L-75x2.7x5.8	75	1	5.8
PRF-PV4L-75x2.9x5.8	75	1.05	5.8
PRF-PV4L-75x3.0x5.8	75	1.1	5.8
PRF-PV4L-75x3.3x5.8	75	1.25	5.8
PRF-PV4L-75x3.6x5.8	75	1.35	5.8
PRF-PV4L-75x4.0x5.8	75	1.45	5.8
PRF-PV4L-75x5.0x5.8	75	1.8	5.8
PRF-PV4L-75x5.6x5.8	75	2	5.8
PRF-PV4L-82x1.8x5.8	82	0.8	5.8
PRF-PV4L-82x1.9x5.8	82	0.82	5.8
PRF-PV4L-82x2.0x5.8	82	0.85	5.8
PRF-PV4L-82x2.2x5.8	82	0.91	5.8
PRF-PV4L- 82x2.5x5.8	82	1.05	5.8
PRF-PV4L- 82x2.9x5.8	82	1.15	5.8
PRF-PV4L- 82x3.0x5.8	82	1.2	5.8
PRF-PV4L-82x3.2x5.8	82	1.3	5.8
PRF-PV4L-82x3.5x5.8	82	1.45	5.8
PRF-PV4L-82x3.8x5.8	82	1.5	5.8
PRF-PV4L-82x4.0x5.8	82	1.6	5.8

Item Code	Dimension (mm)	Weight per Meter	Len. mt
PRF-PV4L- 82x4.1x5.8	82	1.6	5.8
PRF-PV4L- 90x1.8x5.8	90	0.85	5.8
PRF-PV4L- 90x2.0x5.8	90	0.9	5.8
PRF-PV4L- 90x2.7x5.8	90	1.2	5.8
PRF-PV4L- 90x3.0x5.8	90	1.4	5.8
PRF-PV4L- 90x3.2x5.8	90	1.45	5.8
PRF-PV4L- 90x4.0x5.8	90	1.82	5.8
PRF-PV4L- 90x4.3x5.8	90	2	5.8
PRF-PV4L- 90x6.7x5.8	90	2.95	5.8
PRF-PV4L- 110x1.8x5.8	110	0.98	5.8
PRF-PV4L- 110x2.1x5.8	110	1.15	5.8
PRF-PV4L- 110x2.2x5.8	110	1.2	5.8
PRF-PV4L- 110x2.4x5.8	110	1.46	5.8
PRF-PV4L- 110x2.5x5.8	110	1.43	5.8
PRF-PV4L- 110x2.6x5.8	110	1.48	5.8
PRF-PV4L- 110x2.7x5.8	110	1.49	5.8
PRF-PV4L- 110x2.8x5.8	110	1.5	5.8
PRF-PV4L- 110x2.9x5.8	110	1.55	5.8
PRF-PV4L- 110x3.0x5.8	110	1.6	5.8
PRF-PV4L- 110x3.2x5.8	110	1.7	5.8
PRF-PV4L- 110x3.4x5.8	110	1.8	5.8
PRF-PV4L- 110x3.8x5.8	110	2.03	5.8
PRF-PV4L- 110x4.0x5.8	110	2.1	5.8
PRF-PV4L- 110x4.1x5.8	110	2.15	5.8
PRF-PV4L- 110x4.2x5.8	110	2.2	5.8
PRF-PV4L- 110x4.3x5.8	110	2.3	5.8
PRF-PV4L- 110x4.5x5.8	110	2.36	5.8
PRF-PV4L- 110x5.0x5.8	110	2.66	5.8
PRF-PV4L- 110x5.2x5.8	110	2.7	5.8
PRF-PV4L- 110x5.3x5.8	110	2.8	5.8
PRF-PV4L- 110x5.5x5.8	110	2.9	5.8
PRF-PV4L- 110x6.0x5.8	110	3.2	5.8
PRF-PV4L- 110x6.5x5.8	110	3.4	5.8
PRF-PV4L- 110x6.8x5.8	110	3.5	5.8
PRF-PV4L- 110x8.1x5.8	110	4.25	5.8
PRF-PV4L- 110x8.2x5.8	110	4.4	5.8
PRF-PV4L- 125x4.3x5.8	125	2.6	5.8
PRF-PV4L- 160x11.8x5.8	160	8.8	5.8
PRF-PV4L- 160x11.9x5.8	160	9	5.8
PRF-PV4L- 160x2.2x5.8	160	1.8	5.8
PRF-PV4L- 160x2.5x5.8	160	1.95	5.8

Item Code	Dimension (mm)	Weight per Meter	Len. mt
PRF-PV4L- 160x3.0x6	160	2.5	6
PRF-PV4L- 160x3.2x6	160	2.55	6
PRF-PV4L- 160x3.6x6	160	2.98	6
PRF-PV4L- 160x3.8x6	160	3.1	6
PRF-PV4L- 160x4.0x6	160	3.15	6
PRF-PV4L- 160x4.1x6	160	3.3	6
PRF-PV4L- 160x4.5x6	160	3.55	6
PRF-PV4L- 160x4.7x6	160	3.65	6
PRF-PV4L- 160x4.9x6	160	3.8	6
PRF-PV4L- 160x5.0x6	160	3.9	6
PRF-PV4L- 160x5.4x6	160	4.5	6
PRF-PV4L- 160x6.0x6	160	4.8	6
PRF-PV4L- 160x6.2x6	160	4.9	6
PRF-PV4L- 160x6.5x6	160	5.2	6
PRF-PV4L- 160x7.0x6	160	5.61	6
PRF-PV4L- 160x7.6x6	160	5.82	6
PRF-PV4L- 160x7.7x6	160	5.9	6
PRF-PV4L- 160x9.5x6	160	7.3	6
PRF-PV4L- 200x3.2x6	200	0	6
PRF-PV4L- 200x3.8x6	200	3.75	6
PRF-PV4L- 200x3.9x6	200	3.8	6
PRF-PV4L- 200x4.0x6	200	3.85	6
PRF-PV4L- 200x4.9x6	200	4.85	6
PRF-PV4L- 200x5.0x6	200	5	6
PRF-PV4L- 200x5.9x6	200	5.7	6
PRF-PV4L- 200x6.0x6	200	5.8	6
PRF-PV4L- 200x7.0x6	200	6.7	6
PRF-PV4L- 200x7.7x6	200	7.3	6
PRF-PV4L- 200x9.0x6	200	8.7	6
PRF-PV4L- 200x9.6x6	200	8.95	6

Pipe solvent gray.



Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV4-32x1.8x4	32	1.8	4
PRF-PV4-32x2.0x4	32	2	4

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV4-43x1.8x4	43	1.8	4
PRF-PV4-43x2.0x4	43	2	4
PRF-PV4-43x3.0x4	43	3	4

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV4-50x1.8x4	50	1.8	4
PRF-PV4-50x2.0x4	50	2	4
PRF-PV4-50x2.4x4	50	2.4	4
PRF-PV4-50x3.0x4	50	3	4

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV4-50x2.0	50	2	6
PRF-PV4-50x2.4	50	2.4	6
PRF-PV4-50x3.0	50	3	6

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV4-56x2.0x4	56	2	4
PRF-PV4-56x2.4x4	56	2.4	4
PRF-PV4-56x3.0x4	56	3	4

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV4-56x2.0	56	2	6
PRF-PV4-56x2.4	56	2.4	6
PRF-PV4-56x3.0	56	3	6

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV4-63x2.0x4	63	2	4
PRF-PV4-63x2.4x4	63	2.4	4
PRF-PV4-63x3.0x4	63	3	4

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV4-63x2.0	63	2	6
PRF-PV4-63x2.4	63	2.4	6
PRF-PV4-63x3.0	63	3	6

Pipe solvent gray.

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV4-75x1.8x4.0	75	1.8	4
PRF-PV4-75x2.2x4.0	75	2.2	4
PRF-PV4-75x2.2x5.8	75	2.2	5.8
PRF-PV4-75x2.4x4	75	2.4	4
PRF-PV4-75x3.0x4	75	3	4
PRF-PV4-75x3.6x4.0	75	3.6	4
PRF-PV4-75x4.0x4	75	4	4

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV4-75x2.4	75	2.4	6
PRF-PV4-75x3.0	75	3	6
PRF-PV4-75x4.0	75	4	6

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV4-82x3.0x4	82	3	4
PRF-PV4-82x3.2x4	82	3.2	4
PRF-PV4-82x4.0x4	82	4	4

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV4-82x3.0	82	3	6
PRF-PV4-82x3.2	82	3.2	6
PRF-PV4-82x4.0	82	4	6

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV4-90x4.3x5.8	90	4.3	5.8
PRF-PV4-90x4.3	90	4.3	6

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV4-110x1.8x4.0	110	1.8	4
PRF-PV4-110x2.2x4.0	110	2.2	4
PRF-PV4-110x3.0x5.8	110	3	5.8
PRF-PV4-110x3.2x4	110	3.2	4
PRF-PV4-110x3.8x4	110	3.8	4
PRF-PV4-110x4.0x4	110	4	4
PRF-PV4-110x4.5x4	110	4.5	4
PRF-PV4-110x5.0x4	110	5	4
PRF-PV4-110x5.3x4.0	110	5.3	4
PRF-PV4-110x5.5x4.0	110	5.5	4

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV4-110x3.2	110	3.2	6
PRF-PV4-110x3.8	110	3.8	6
PRF-PV4-110x4.0	110	4	6
PRF-PV4-110x5.0	110	5	6

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV4-160x1.8x4.0	160	1.8	4
PRF-PV4-160x2.8x5.8	160	2.8	5.8
PRF-PV4-160x3.0x4	160	3	4
PRF-PV4-160x3.2x4	160	3.2	4
PRF-PV4-160x3.8x4	160	3.8	4
PRF-PV4-160x4.0x4	160	4	4
PRF-PV4-160x4.7x4	160	4.7	4
PRF-PV4-160x5.4x5.8	160	5.4	5.8
PRF-PV4-160x7.7x4	160	7.7	4

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV4-160x3.2	160	3.2	6
PRF-PV4-160x3.8	160	3.8	6
PRF-PV4-160x4.0	160	4	6
PRF-PV4-160x4.7	160	4.7	6
PRF-PV4-160x5.0	160	5	6
PRF-PV4-160x7.7	160	7.7	6

Solvent Gray Fitting V4

Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Swept Elbow 87.5°	E1-PV4-32	32	240
	E1-PV4-43	43	290
	E1-PV4-50	50	155
	E1-PV4-56	56	120
	E1-PV4-75	75	55
	E1-PV4-82	82	42
	E1-PV4-110	110	25
	E1-PV4-160	160	8



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Swept Elbow 87.5° with door	E2D-PV4-82	75	42
	E2D-PV4-110	82	30
	E2D-PV4-160	110	20
	E2D-PV4-75 (W)	160	8



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Elbow 45°	E3-PV4-32	32	320
	E3-PV4-43	43	400
	E3-PV4-50	50	220
	E3-PV4-56	56	140
	E3-PV4-75	75	75
	E3-PV4-82	82	60
	E3-PV4-110	110	40
	E3-PV4-160	160	10



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Swept Tee 87.5°	T1-PV4-32	32	300
	T1-PV4-43	43	170
	T1-PV4-50	50	95
	T1-PV4-56	56	50
	T1-PV4-75	75	31
	T1-PV4-82	82	24
	T1-PV4-110	110	14
	T1-PV4-160	160	5



Solvent Gray Fitting V4

Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Swept Tee 87.5° with door	T2D-PV4-75	75	28
	T2D-PV4-82	82	22
	T2D-PV4-110	110	14
	T2D-PV4-160	160	5



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Swept Reducer Tee	TR1-PV4-11050	110 x 50	30
	TR1-PV4-11075	110 x 75	25
	TR1-PV4-11082	110 x 82	20
	TR1-PV4-160110	160 x 110	7



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Socket with Door	S2D-PV4-50	50	400
	S2D-PV4-56	56	160
	S2D-PV4-75	75	140
	S2D-PV4-82	82	104
	S2D-PV4-110	110	60
	S2D-PV4-160	160	28



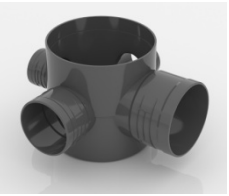
Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Pipe End Cap	C2-PV4-43	43	650
	C2-PV4-50	50	420
	C2-PV4-56	56	600
	C2-PV4-75	75	350
	C2-PV4-82	82	230
	C2-PV4-110	110	90
	C2-PV4-160	160	40



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
End Plug	C1-PV4-50	50	700
	C1-PV4-56	56	600

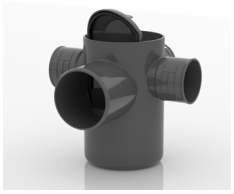


Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Floor Trap	FT2-PV4-1108256	110 x 82 x 56	24

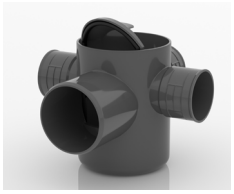


Solvent Gray Fitting V4

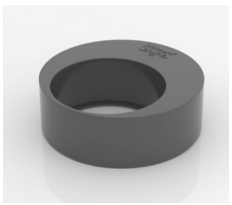
Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Floor Trap 110 x 82/75 x 43 H:162	FT2-PV4-11082/7543 H162	110x82/75x43	18
Floor Trap 110x82/75x50 H:162	FT2-PV4-11082/7550 H162	110x82/75x50	18
Floor Trap 110x82/75x56 H:162	FT2-PV4-11082/7556 H162	110x82/75x56	18



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Floor Trap 110x82/75x50 S:139	FT2-PV4-11082/7550 S139	110×82/75×50	20
Floor Trap 110x82/75x56 S:139	FT2-PV4-11082/7556 S139	110x82/75x56	20



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Reducer Bush	RB-PV4-4332	43 x 32	650
	RB-PV4-5032	50 x 32	400
	RB-PV4-5043	50 x 43	650
	RB-PV4-5643	56 x 43	800
	RB-PV4-8243	82 x 43	220
	RB-PV4-8256	82 x 56	220
	RB-PV4-11043	110 x 43	105
	RB-PV4-11050	110 x 50	114
	RB-PV4-11056	110 x 56	88
	RB-PV4-11075	110 x 75	114
	RB-PV4-11082	110 x 82	88
	RB-PV4-160110	160 x 110	39



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Socket	S1-PV4-32	32	900
	S1-PV4-43	43	550
	S1-PV4-50	50	290
	S1-PV4-56	56	200
	S1-PV4-75	75	100
	S1-PV4-82	82	72
	S1-PV4-110	110	60
	S1-PV4-160	160	20



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Ventilation Cap	V-PV4-50	50	275
	V-PV4-56	56	270
	V-PV4-82	82	176
	V-PV4-110	110	96
	V-PV4-160	160	24



Solvent Gray Fitting V4

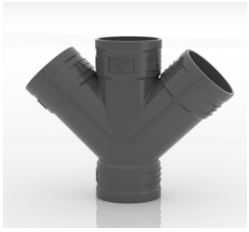
Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Y (Tee 45°)	Y1-PV4-32	32	275
	Y1-PV4-43	43	150
	Y1-PV4-50	50	80
	Y1-PV4-56	56	50
	Y1-PV4-75	75	30
	Y1-PV4-82	82	24
	Y1-PV4-110	110	14
	Y1-PV4-160	160	4



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Reducer Y (Tee 45°)	YR1-PV4-8256	82 x 56	36
	YR1-PV4-11050	110x50	27
	YR1-PV4-11075	110x75	22
	YR1-PV4-11082	110 x 82	16
	YR1-PV4-160110	160 x 110	8



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Double Y (TREE 45°)	YT1-PV4-110	110 x110 x 110	9



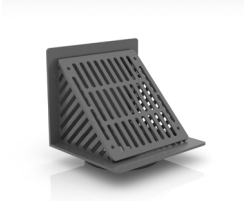
Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Double TEE (Cross 87.5°)	TX-PV4-110	110 x110 x 110	13



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Rain Water Outlet	RWO-PV4-82	82	30
	RWO-PV4-110	110	21



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Corner Rain Water Outlet	RWOA-PV4-110	110	20
	RWOA-PV4-82	82	44



Solvent Gray Fitting V4

Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Gully Trap Bottle	GT2-PV4-160110	160 x 110	8



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Gully Trap Bottle (Two Way)	GT3-PV4-160110	160 x 110	7





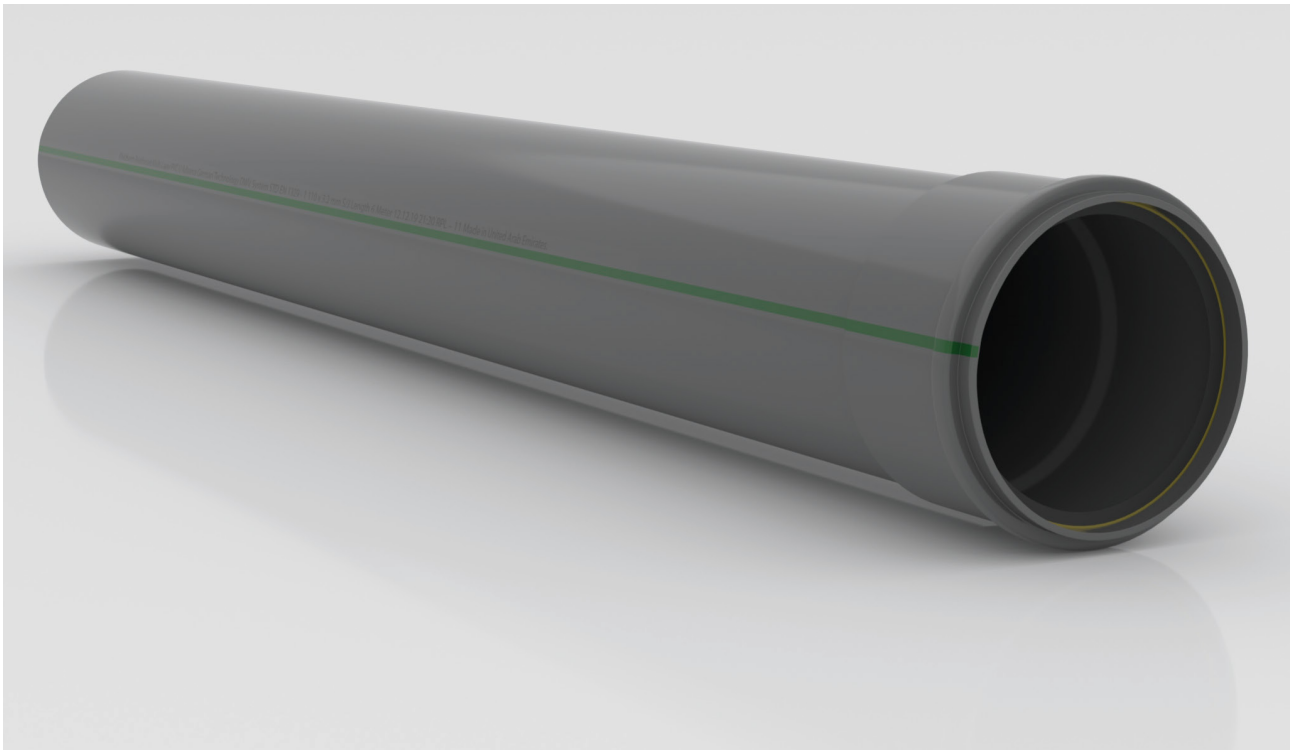
PVC-U Reinforced Pipes And Fittings Intensified System (Gray)

Aboveground (Push-fit)

The intensified PVC-U system of RAKtherm with exceptional multi-layer reinforced rubber joint, that can withstand up to 70°C. This system can significantly provide seamless water tight connection for leak-proof service.



Pipe Push-fit gray. (BS EN 1329)



Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV3-50x2.0x4	50	2	4
PRF-PV3-50x2.4x4	50	2.4	4
PRF-PV3-50x3.0x4	50	3	4

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV3-50x2.0	50	2	6
PRF-PV3-50x2.4	50	2.4	6
PRF-PV3-50x3.0	50	3	6

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV3-56x2.0x4	56	2	4
PRF-PV3-56x2.2x4	56	2.2	4
PRF-PV3-56x2.4x4	56	2.4	4
PRF-PV3-56x3.0x4	56	3	4

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV3-56x2.0	56	2	6
PRF-PV3-56x2.2	56	2.2	6
PRF-PV3-56x2.4	56	2.4	6
PRF-PV3-56x3.0	56	3	6

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV3-63x2.0x4	63	2	4
PRF-PV3-63x2.4x4	63	2.4	4
PRF-PV3-63x3.0x4	63	3	4

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV3-63x2.0	63	2	6
PRF-PV3-63x2.4	63	2.4	6
PRF-PV3-63x3.0	63	3	6

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV3-75x2.4x4	75	2.4	4
PRF-PV3-75x3.0x4	75	3	4
PRF-PV3-75x4.0x4	75	4	4

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV3-75x2.4	75	2.4	6
PRF-PV3-75x3.0	75	3	6
PRF-PV3-75x4.0	75	4	6

Pipe Push-fit gray. (BS EN 1329)

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV3-82x3.0x4	82	3	4
PRF-PV3-82x3.2x4	82	3.2	4
PRF-PV3-82x3.8x4	82	3.8	4
PRF-PV3-82x4.0x4	82	4	4

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV3-82x3.0	82	3	6
PRF-PV3-82x3.2	82	3.2	6
PRF-PV3-82x3.8	82	3.8	6
PRF-PV3-82x4.0	82	4	6

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV3-110x2.7x5.8	110	2.7	5.8
PRF-PV3-110x3.2x4	110	3.2	4
PRF-PV3-110x3.8x4	110	3.8	4
PRF-PV3-110x4.0x4	110	4	4
PRF-PV3-110x5.0x4	110	5	4

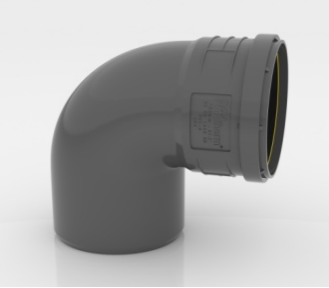
Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV3-110x3.2	110	3.2	6
PRF-PV3-110x3.8	110	3.8	6
PRF-PV3-110x4.0	110	4	6
PRF-PV3-110x5.0	110	5	6

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV3-160x3.2x4	160	3.2	4
PRF-PV3-160x3.8x4	160	3.8	4
PRF-PV3-160x4.0x4	160	4	4
PRF-PV3-160x4.0x5.8	160	4	5.8
PRF-PV3-160x4.7x4	160	4.7	4
PRF-PV3-160x7.7x4	160	7.7	4

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV3-160x3.2	160	3.2	6
PRF-PV3-160x3.8	160	3.8	6
PRF-PV3-160x4.0	160	4	6
PRF-PV3-160x4.7	160	4.7	6
PRF-PV3-160x7.7	160	7.7	6

Fittings Push-fit gray

Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Swept Elbow 87.5°	E1-PV3-50	50	140
	E1-PV3-56	56	110
	E1-PV3-75	75	50
	E1-PV3-82	82	36
	E1-PV3-110	110	27
	E1-PV3-160	160	8



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Elbow 87.5° with door Swept	E2D-PV3-75	75	40
	E2D-PV3-82	82	35
	E2D-PV3-110	110	22
	E2D-PV3-160	160	8



Fittings Push-fit gray

Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Elbow 45°	E3-PV3-50	50	165
	E3-PV3-56	56	130
	E3-PV3-75	75	60
	E3-PV3-82	82	48
	E3-PV3-110	110	35
	E3-PV3-160	160	11



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Tee 87.5° Swept	T1-PV3-50	50	75
	T1-PV3-56	56	60
	T1-PV3-75	75	25
	T1-PV3-82	82	22
	T1-PV3-110	110	14
	T1-PV3-160	160	5



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Swept Tee 87.5° with door	T2D-PV3-56	56	60
	T2D-PV3-75	75	25
	T2D-PV3-82	82	20
	T2D-PV3-110	110	14



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Swept Reducer Tee	TR1-PV3-11050	110 x 50	30
	TR1-PV3-11075	110 x 75	24
	TR1-PV3-11082	110 x 82	22
	TR1-PV3-160110	160 x 110	7



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Floor Trap Multi Branch	FT2-PV3-1107550	110 x 75 x 50	24
	FT2-PV3-1108256	110 x 82 x 56	24



Fittings Push-fit gray

Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Reducer Socket	R1-PV3-7550	75 x 50	160
	R1-PV3-8256	82 x 56	130
	R1-PV3-11050	110 x 50	54
	R1-PV3-11075	110 x 75	54
	R1-PV3-11082	110 x 82	42
	R1-PV3-160110	160 x 110	20



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Socket	S1-PV3-50	50	180
	S1-PV3-56	56	150
	S1-PV3-75	75	72
	S1-PV3-82	82	64
	S1-PV3-110	110	44
	S1-PV3-160	160	14
	S1-PV3-4-50	50	225
	S1-PV3-4-75	75	96
	S1-PV3-4-110	110	54
	S1-PV3-4-160	160	16



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Syphon P trap	ST2-PV3-110	110	9



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Syphon S trap	SS2-PV3-110	110	12



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Y (Tee 45°)	Y1-PV3-50	50	65
	Y1-PV3-56	56	50
	Y1-PV3-75	75	25
	Y1-PV3-82	82	20
	Y1-PV3-110	110	14
	Y1-PV3-160	160	4

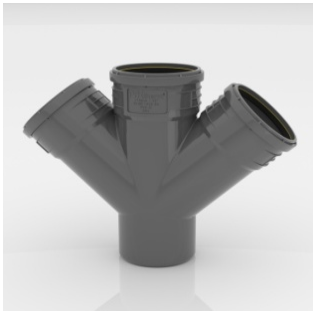


Fittings Push-fit gray

Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Reducer Y (Tee 45°)	YR1-PV3-11050	110 x 50	27
	YR1-PV3-11075	110 x 75	20
	YR1-PV3-11082	110 x 82	20
	YR1-PV3-160110	160 x 110	7



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Double Y (TREE 45°)	YT1-PV3-110	110 x110 x 110	8



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Inspection Socket with door	IS2-PV3-110	110	20



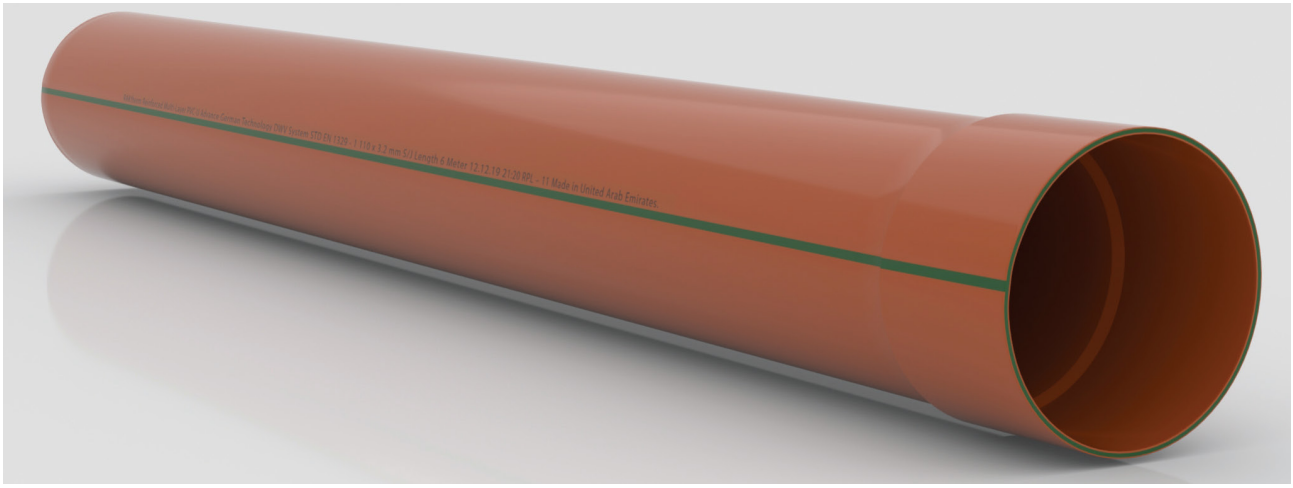
PVC-U Reinforced Pipes And Fittings Heightened System (Terracotta Orange)

Underground (Solvent Joint)

Engineered solution and easy to work on by easy jointing technique using the solvent-cement specifically manufactured by RAKtherm to complement the complete orange systems which creates a highly-reliable piping networks.



Solvent Orange Pipe V6 (BS EN 1401)



Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV6-32x1.8x4	32	1.8	4
PRF-PV6-32x2.0x4	32	2	4

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV6-43x1.8x4	43	1.8	4
PRF-PV6-43x2.0x4	43	2	4
PRF-PV6-43x3.0x4	43	3	4

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV6-50x1.8x4	50	1.8	4
PRF-PV6-50x2.0x4	50	2	4
PRF-PV6-50x2.4x4	50	2.4	4
PRF-PV6-50x3.0x4	50	3	4

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV6-50x2.0	50	2	6
PRF-PV6-50x2.4	50	2.4	6
PRF-PV6-50x3.0	50	3	6

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV6-56x2.0x4	56	2	4
PRF-PV6-56x2.4x4	56	2.4	4
PRF-PV6-56x3.0x4	56	3	4

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV6-56x2.0	56	2	6
PRF-PV6-56x2.4	56	2.4	6
PRF-PV6-56x3.0	56	3	6

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV6-63x2.0x4	63	2	4
PRF-PV6-63x2.4x4	63	2.4	4
PRF-PV6-63x3.0x4	63	3	4

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV6-63x2.0	63	2	6
PRF-PV6-63x2.4	63	2.4	6
PRF-PV6-63x3.0	63	3	6

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV6-75x1.8x4.0	75	1.8	4
PRF-PV6-75x2.2x4.0	75	2.2	4
PRF-PV6-75x2.2x5.8	75	2.2	5.8
PRF-PV6-75x2.4x4	75	2.4	4
PRF-PV6-75x3.0x4	75	3	4
PRF-PV6-75x3.6x4.0	75	3.6	4
PRF-PV6-75x4.0x4	75	4	4

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV6-75x2.4	75	2.4	6
PRF-PV6-75x3.0	75	3	6
PRF-PV6-75x4.0	75	4	6

Solvent Orange Fitting V6

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV6-82x3.0x4	82	3	4
PRF-PV6-82x3.2x4	82	3.2	4
PRF-PV6-82x4.0x4	82	4	4

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV6-82x3.0	82	3	6
PRF-PV6-82x3.2	82	3.2	6
PRF-PV6-82x4.0	82	4	6

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV6-90x2.0x5.85	90	2	5.85
PRF-PV6-90x3.0x5.85	90	3	5.85
PRF-PV6-90x4.0x5.5	90	4	5.5

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV6-110x1.8x4.0	110	1.8	4
PRF-PV6-110x2.2x4.0	110	2.2	4
PRF-PV6-110x3.0x5.8	110	3	5.8
PRF-PV6-110x3.2x4	110	3.2	4
PRF-PV6-110x3.8x4	110	3.8	4
PRF-PV6-110x4.0x4	110	4	4
PRF-PV6-110x4.5x4	110	4.5	4
PRF-PV6-110x5.0x4	110	5	4
PRF-PV6-110x5.3x4.0	110	5.3	4
PRF-PV6-110x5.5x4.0	110	5.5	4

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV6-110x3.2	110	3.2	6
PRF-PV6-110x3.8	110	3.8	6
PRF-PV6-110x4.0	110	4	6
PRF-PV6-110x5.0	110	5	6

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV6-160x1.8x4.0	160	1.8	4
PRF-PV6-160x2.8x5.8	160	2.8	5.8
PRF-PV6-160x3.0x4	160	3	4
PRF-PV6-160x3.2x4	160	3.2	4
PRF-PV6-160x3.8x4	160	3.8	4
PRF-PV6-160x4.0x4	160	4	4
PRF-PV6-160x4.7x4	160	4.7	4
PRF-PV6-160x5.4x5.8	160	5.4	5.8
PRF-PV6-160x7.7x4	160	7.7	4

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV6-160x3.2	160	3.2	6
PRF-PV6-160x3.8	160	3.8	6
PRF-PV6-160x4.0	160	4	6
PRF-PV6-160x4.7	160	4.7	6
PRF-PV6-160x5.0	160	5	6
PRF-PV6-160x7.7	160	7.7	6

Solvent Orange Fitting V6

Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Swept Elbow 87.5°	E1-PV6-32	32	240
	E1-PV6-43	43	290
	E1-PV6-50	50	155
	E1-PV6-56	56	120
	E1-PV6-75	75	55
	E1-PV6-82	82	42
	E1-PV6-110	110	25
	E1-PV6-160	160	8



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Swept Elbow 87.5° with door	E2D-PV6-75	75	42
	E2D-PV6-82	82	30
	E2D-PV6-110	110	20
	E2D-PV6-160	160	8



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Elbow 45°	E3-PV6-32	32	320
	E3-PV6-43	43	400
	E3-PV6-50	50	220
	E3-PV6-56	56	140
	E3-PV6-75	75	75
	E3-PV6-82	82	60
	E3-PV6-110	110	40
	E3-PV6-160	160	10



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Swept Tee 87.5°	T1-PV6-32	32	300
	T1-PV6-43	43	170
	T1-PV6-50	50	95
	T1-PV6-56	56	50
	T1-PV6-75	75	31
	T1-PV6-82	82	24
	T1-PV6-110	110	14
	T1-PV6-160	160	5



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Swept Tee 87.5° with door	T2D-PV6-75	75	28
	T2D-PV6-82	82	22
	T2D-PV6-110	110	14
	T2D-PV6-160	160	5



Solvent Orange Fitting V6

Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Swept Reducer Tee	TR1-PV6-11050	110x50	30
	TR1-PV6-11075	110x75	25
	TR1-PV6-11082	110 x 82	20
	TR1-PV6-160110	160 x 110	7



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Socket with Door	S2D-PV6-50	50	400
	S2D-PV6-56	56	160
	S2D-PV6-75	75	140
	S2D-PV6-82	82	104
	S2D-PV6-110	110	60
	S2D-PV6-160	160	28



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
End Cap	C2-PV4-43	43	650
	C2-PV6-50	50	420
	C2-PV6-56	56	600
	C2-PV6-75	75	350
	C2-PV6-82	82	230
	C2-PV6-110	110	90
	C2-PV6-160	160	40



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
End Plug	C1-PV6-50	50	700
	C1-PV6-56	56	600



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Floor Trap Multi Branch	FT2-PV6-1108256	110 x 82 x 56	24



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Floor Trap 110x82/75x43 H:162	FT2-PV6-11082/7543 H162	110x82/75×43	18
Floor Trap 110x82/75x50 H:162	FT2-PV6-11082/7550 H162	110×82/75×50	18
Floor Trap 110x82/75x56 H:162	FT2-PV6-11082/7556 H162	110x82/75x56	18



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Floor Trap 110x82/75x50 S:139	FT2-PV6-11082/7550 S139	110×82/75×50	20
Floor Trap 110x82/75x56 S:139	FT2-PV6 - 11082/7556 S139	110x82/75x56	20



Solvent Orange Fitting V6

Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Reducer Bush	RB-PV6-4332	43 x 32	650
	RB-PV6-5032	50 x 32	400
	RB-PV6-5043	50 x 43	650
	RB-PV6-5643	56 x 43	800
	RB-PV6-8243	82 x 43	220
	RB-PV6-8256	82 x 56	220
	RB-PV6-11043	110 x 43	105
	RB-PV6-11050	110 x 50	114
	RB-PV6-11056	110 x 56	88
	RB-PV6-11075	110 x 75	114
	RB-PV6-11082	110 x 82	88
	RB-PV6-160110	160 x 110	39



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Socket	S1-PV6-32	32	900
	S1-PV6-43	43	550
	S1-PV6-50	50	290
	S1-PV6-56	56	200
	S1-PV6-75	75	100
	S1-PV6-82	82	72
	S1-PV6-110	110	60
	S1-PV6-160	160	20



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Ventilation Cap	V-PV6-50	50	275
	V-PV6-56	56	270
	V-PV6-82	82	176
	V-PV6-110	110	96
	V-PV6-160	160	24



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Y (Tee 45°)	Y1-PV6-32	32	275
	Y1-PV6-43	43	150
	Y1-PV6-50	50	80
	Y1-PV6-56	56	50
	Y1-PV6-75	75	30
	Y1-PV6-82	82	24
	Y1-PV6-110	110	14
	Y1-PV6-160	160	4



Solvent Orange Fitting V6

Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Reducer Y (Tee 45°)	YR1-PV6-11050	110 x 50	27
	YR1-PV6-11075	110 x 75	22
	YR1-PV6-11082	110 x 82	16
	YR1-PV6-160110	160 x 110	8
	YR1-PV6-8256	82 x 56	36



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Double Y (TEE 45°)	YT1-PV6-110	110 x110 x 110	9



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Double TEE (Cross 87.5°)	TX-PV6-110	110 x110 x 110	13



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Rain Water Outlet	RWO-PV6-82	82	30
	RWO-PV6-110	110	21



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Corner Rain Water Outlet	RWOA-PV6-82	82	44
	RWOA-PV6-110	110	20



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Gully Trap Bottle	GT2-PV6-160110	160 x 110	8



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Gully Trap Bottle (Two way)	GT3-PV6-160110	160 x 110	7

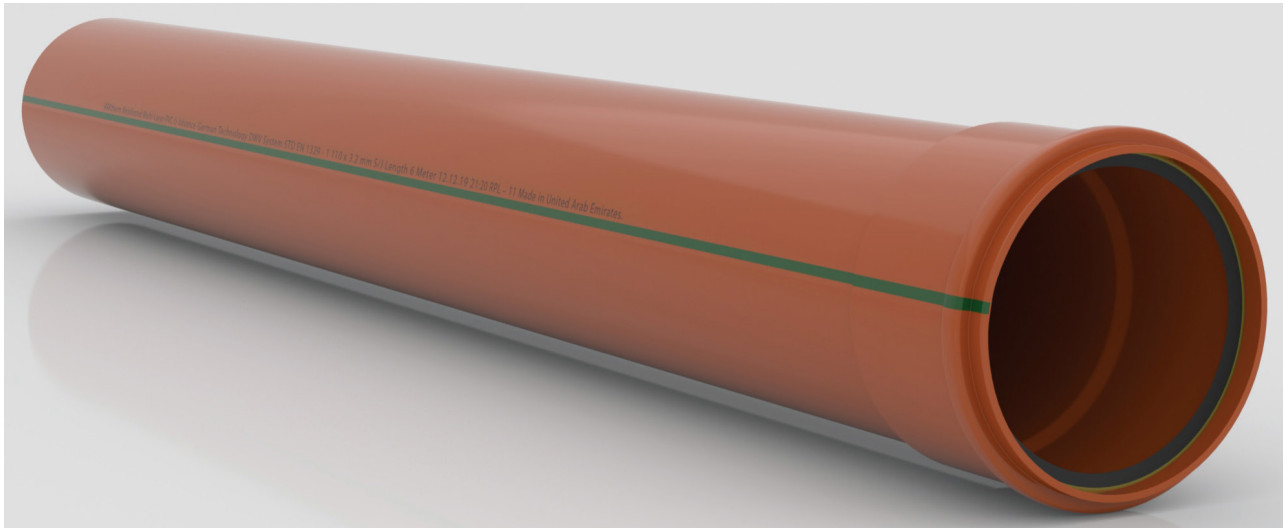
PVC-U Reinforced Pipes And Fittings Heightened System (Terracotta Orange)

Underground (Push-fit)

The heightened PVC-U system of RAKtherm with exceptional multi-layer reinforced rubber joint, that can withstand up to 70°C. This system can significantly provide seamless water tight connection for leak-proof service.



Rubber Orange Pipe V5 (BS EN 1401)



Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV5-50x2.0x4	50	2	4
PRF-PV5-50x2.4x4	50	2.4	4
PRF-PV5-50x3.0x4	50	3	4

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV5-50x2.0	50	2	6
PRF-PV5-50x2.4	50	2.4	6
PRF-PV5-50x3.0	50	3	6

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV5-56x2.0x4	56	2	4
PRF-PV5-56x2.2x4	56	2.2	4
PRF-PV5-56x2.4x4	56	2.4	4
PRF-PV5-56x3.0x4	56	3	4

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV5-56x2.0	56	2	6
PRF-PV5-56x2.2	56	2.2	6
PRF-PV5-56x2.4	56	2.4	6
PRF-PV5-56x3.0	56	3	6

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV5-63x2.0x4	63	2	4
PRF-PV5-63x2.4x4	63	2.4	4
PRF-PV5-63x3.0x4	63	3	4

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV5-63x2.0	63	2	6
PRF-PV5-63x2.4	63	2.4	6
PRF-PV5-63x3.0	63	3	6

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV5-75x2.4x4	75	2.4	4
PRF-PV5-75x3.0x4	75	3	4
PRF-PV5-75x4.0x4	75	4	4

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV5-75x2.4	75	2.4	6
PRF-PV5-75x3.0	75	3	6
PRF-PV5-75x4.0	75	4	6

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV5-82x3.0x4	82	3	4
PRF-PV5-82x3.2x4	82	3.2	4
PRF-PV5-82x3.8x4	82	3.8	4
PRF-PV5-82x4.0x4	82	4	4

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV5-82x3.0	82	3	6
PRF-PV5-82x3.2	82	3.2	6
PRF-PV5-82x3.8	82	3.8	6
PRF-PV5-82x4.0	82	4	6

Rubber Orange Fitting V5

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV5-110x2.7x5.8	110	2.7	5.8
PRF-PV5-110x3.2x4	110	3.2	4
PRF-PV5-110x3.8x4	110	3.8	4
PRF-PV5-110x4.0x4	110	4	4
PRF-PV5-110x5.0x4	110	5	4

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV5-110x3.2	110	3.2	6
PRF-PV5-110x3.8	110	3.8	6
PRF-PV5-110x4.0	110	4	6
PRF-PV5-110x5.0	110	5	6

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV5-160x3.2x4	160	3.2	4
PRF-PV5-160x3.8x4	160	3.8	4
PRF-PV5-160x4.0x4	160	4	4
PRF-PV5-160x4.0x5.8	160	4	5.8
PRF-PV5-160x4.7x4	160	4.7	4
PRF-PV5-160x7.7x4	160	7.7	4

Item Code	Dimension (mm)	Thick (mm)	Len. mt
PRF-PV5-160x3.2	160	3.2	6
PRF-PV5-160x3.8	160	3.8	6
PRF-PV5-160x4.0	160	4	6
PRF-PV5-160x4.7	160	4.7	6
PRF-PV5-160x7.7	160	7.7	6

Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Swept Elbow 87.5°	E1-PV5-50	50	140
	E1-PV5-56	56	110
	E1-PV5-75	75	50
	E1-PV5-82	82	36
	E1-PV5-110	110	27
	E1-PV5-160	160	8



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Elbow 87.5° with door Swept	E2D-PV5-75	75	40
	E2D-PV5-82	82	35
	E2D-PV5-110	110	22
	E2D-PV5-160	160	8



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Elbow 45°	E3-PV5-50	50	165
	E3-PV5-56	56	130
	E3-PV5-75	75	60
	E3-PV5-82	82	48
	E3-PV5-110	110	35
	E3-PV5-160	160	11



Rubber Orange Fitting V5

Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Tee 87.5° Swept	T1-PV5-50	50	75
	T1-PV5-56	56	60
	T1-PV5-75	75	25
	T1-PV5-82	82	22
	T1-PV5-110	110	14
	T1-PV5-160	160	5



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Swept Tee 87.5° with door	T2D-PV5-56	56	60
	T2D-PV5-75	75	25
	T2D-PV5-82	82	20
	T2D-PV5-110	110	14



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Swept Reducer Tee	TR1-PV5-11050	110 x 50	30
	TR1-PV5-11075	110 x 75	24
	TR1-PV5-11082	110 x 82	22
	TR1-PV5-160110	160 x 110	7



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Floor Trap Multi Branch	FT2-PV5-1107550	110 x 75 x 50	24
	FT2-PV5-1108256	110 x 82 x 56	24



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Reducer Socket	R1-PV5-7550	75 x 50	160
	R1-PV5-8256	82 x 56	130
	R1-PV5-11050	110 x 50	54
	R1-PV5-11075	110 x 75	54
	R1-PV5-11082	110 x 82	42
	R1-PV5-160110	160 x 110	20



Rubber Orange Fitting V5

Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Socket	S1-PV5-50	50	180
	S1-PV5-56	56	150
	S1-PV5-75	75	72
	S1-PV5-82	82	64
	S1-PV5-110	110	44
	S1-PV5-160	160	14



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Syphon P trap	ST2-PV5-110	110	9



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Syphon S trap	SS2-PV5-110	110	12



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Y (Tee 45°)	Y1-PV5-50	50	65
	Y1-PV5-56	56	50
	Y1-PV5-75	75	25
	Y1-PV5-82	82	20
	Y1-PV5-110	110	14
	Y1-PV5-160	160	4



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Reducer Y (Tee 45°)	YR1-PV5-11050	110 x 50	27
	YR1-PV5-11075	110 x 75	20
	YR1-PV5-11082	110 x 82	20
	YR1-PV5-160110	160 x 110	7



Rubber Orange Fitting V5

Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Double Y (TEE 45°)	YT1-PV5-110	110 x110 x 110	8



Fitting Item description	Item Code	Size (mm)	Std.Qty/ Carton (pcs)
Inspection socket with door	IS2-PV3-110	110	20



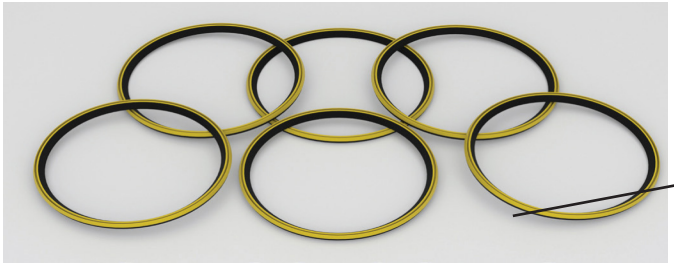
RAKtherm's TRIPLE-SEALING-LIP SOLUTIONS, Engineered Perfection for PVC Sewer Pipe Systems

The multi-layer reinforced rubber joint, is an integrated seal for plastic pipe systems for aboveground and underground applications of drainage sewerage systems.

RAKtherm's triple-sealing-lip solutions is now the industry-beating performance, it is highly effective seal which requires low-jointing force while ensuring a secure seal across wide range of pipe-joint level tolerances



RAKtherm Triple-Sealing-Lip

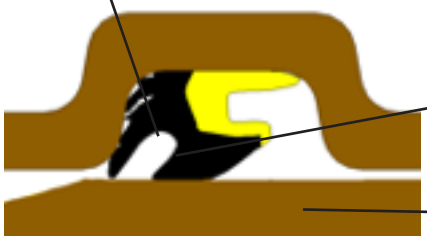


Linear Expansion resistance

Geometric Design for Functionality

The unique design has a flexible thermoplastic elastomeric sealing element bonded to a polypropylene retaining ring which holds the seal firmly in the correct position during pipe transportation and joint assembly.

RAKtherm triple-sealing-lip seal is designed to have a low assembly force in minimum gap and on maximum gap, which is able to have a good compression on its 3 different lips. The assembly can be done at maximum compression without any problem.



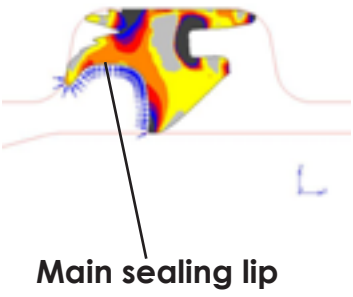
Contact sealing pressure bottom of the seal

Contact sealing pressure top of the seal

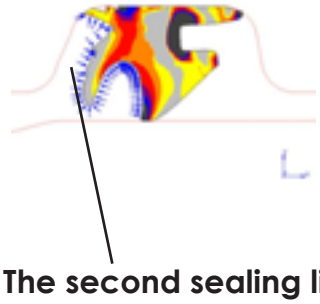
Assembly force

The Concept of Triple-Sealing-Lip from RAKtherm

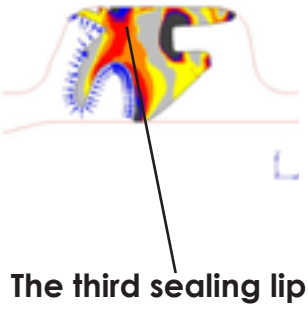
DIN lock™ is a combined lip and compression seal that is positioned in the socket by the pipe manufacturer. The seal is designed to absorb any permissible variation in the groove.



Main sealing lip



The second sealing lip



The third sealing lip

EXCELLENT ENGINEERING ADVANTAGE :

ENGINEERED TO LAST

- Non-corrosive that combats deterioration caused by chemical action
- Dimension Stability to maintain its original shape and dimension at certain application conditions.
- Environmental Stress Crack Ability to stand when the subjected to aggressive chemicals and put under stress.
- Flexibility Strength to withstand deformation under load.
- Greater Impact Strength on ability to withstand the effects of dropping and/ or striking which determine the toughness.
- Stress crack resistance properties that resists tensile stresses less than its short-time mechanical strength.
- Excellent thermal expansion at a given extreme temperature conditions.



EASE OF INSTALLATION

One of the cost savers in using DWV fittings is the installation speed because it is light in weight with flexibility properties. It is easy to work on by easy jointing technique using solvent cement making the jointing process and installation simple. Furthermore, the solvent cement is readily available in the market.

VALUE FOR INVESTMENT

It is highly durable and prevents premature breakage, which minimizes expensive replacements and maintenance costs. The service life performance is guaranteed to last for long years because it provides leak-free service.

SAFETY FACTORS

- DWV fittings are bacteria and fungi resistant; even chemical and fire resistant.
- Supports the green building advocacy in compliance with non-harmful effects in the ecosystem.

GUIDELINES IN TRANSPORTING AND INSTALLATION

PROPER TRANSPORTING AND STORAGE OF PVC-U PIPES AND FITTINGS

The pipes and Fittings are to be transported with suitable vehicles and are to be properly loaded and unloaded. During transport, the entire length of the pipes should be supported if possible, in order to avoid sagging. Severe impact stress is to be avoided, particularly in high cold temperatures. Pipes and fittings may be stored outdoors. The following measures must be observed on storing pipes:

- The pipes must be stored in such a manner that perfect support is ensured and that no deformation can occur.
- The stored place should be protected from the sunlight.
- The layers of pipes can be stored either with or without wood in between the layers.
- When storing, pipe sockets should be horizontally and vertically unhampered.
- The stack height should not exceed 2 m. Rubber sealing elements, insofar as these are not protected by a coat of finishing varnish, may not be stored outdoors for a long period.

SUPPORTING AND EMBEDDING

The supporting and embedding of pipes and fittings made of PVC-U in the case of buried ground piping are of vital significance and must therefore be carried out with great care in accordance with DIN EN 1610. In the case of concrete casings of PVC pipes, it must be ensured that the casing is produced in such a manner that it can support itself alone without the pipe

When bedding the pipes in the region of ground water, care must be taken that the filling material does not move (e.g. embedding in a gravel filter layer or in concrete).

1. On bedding in soil under foundations, there must be a minimum cover of 150 mm over the socket. In the case of direct burdening by construction components, protective pipes must be laid if necessary.

INSTALLATION PROCEDURE

Each pipe and fitting is to be leveled according to drop and direction. A straight, continuous path in the stipulated slope is to be observed. In exceptional cases DN (OD) 110 to 200 pipes can be installed as indicated in the following diagram. The data indicated on the following tables, may, however not be exceeded.

THE CORRECT CUTTING TO LENGTH AND SLANTED CUTTING

If necessary, the pipes may be cut to length (fittings may not be shortened since there is no guarantee that they will still be watertight) with suitable plastic cutter or a fine-toothed saw. By means of guiding the saw through a cutting frame as illustrate, a right-angled cut can be achieved. For larger pipe cuttings, a cutting disc suitable for PVC can be used. The cutting edges must be trimmed. The pipe ends must be slanted at an angle of approx. 15° in accordance with the diagram, using suitable tools for slanting or a coarse file.

CHECKING OF WATERPROOFNESS FOR WATER-TIGHTNESS

Vertical pipes or suitable pressure meters are to be used in order to carry out checks. Readings are to be taken at the lowest point on the area to be tested. Non-pressure pipes are to be tested with 0.5 bar excess pressure, measured at the lowest point in the area of piping to be tested which is covered by water. Testing time is 15 minutes. The test is to be carried out on piping which has not yet been covered.

In order to secure location, the piping can be embedded and partly covered (filling cone0), with pipe connections remaining uncovered. If necessary, the piping is to be protected against floating. All opening of the section of piping to be checked in such a manner those they are watertight and secure against pressure.

FILLING AND SEALING

On both sides of the piping, stone-free, compressible soil (maximum granule size 20 mm Ø) is to be layered up to 0.30 m and compressed either manually or with the help of light machines. The piping may not be pushed to the side. If necessary, soil should be filled in and compressed simultaneously from both sides. The vertical position of smaller DN (OD) pipes is to be secured during the embedding procedure. The degree of compaction of the soil in the region of the pipes presumed in the structural analysis is to be produced by means of adequate compression. This is to be proved on request (for example, by means of gauging the Proctor density of by means of driving bores). In exceptional cases, for example when ditches are narrow and do not permit sufficient compressing of the embedding in the supporting are, the piping can be partly or fully installed with concrete or similar materials. Further filling in is then to take place layer-by-layer up to a height of 0.30 m over the pipe crown.

SUBSEQUENT CONNECTION TO PVC SEWER PIPES

In order to install a branch, a sufficiently long piece of pipe (length of the fittings+2 d) is removed the pipe-ends are trimmed, cut at an angle and the branch is inserted . Sleeve sockets, with which the piping is once again closed, are pushed over both the other half of the pipe and over the adjusting piece to be inserted




RAKtherm
Ultimate Piping Solutions
Pioneered
PP-R&PEX Systems
RAKtherm

RAKtherm® GLOBAL

DWV-RNP Technology

First Reinforced Multi-layer PVC-U in the Region



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