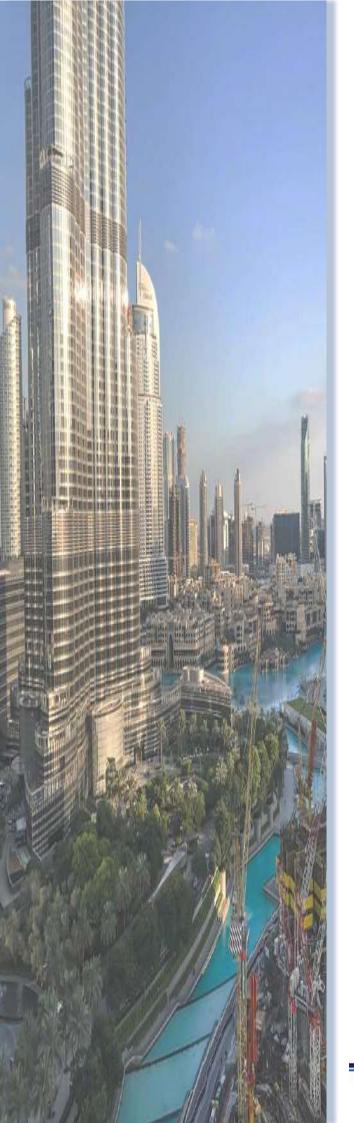
TECHNICAL / PRODUCT GUIDE



MARLEY UAE

MARLEY UAE





INTRODUCTION

MARLEY UAE UPVC DRAINAGE SYSTEM

MARLEY UAE Plumbing & Drainage offer a complete range of Soil and Waste uPVC Drainage System as above and below ground Drainage System, manufactured in UAE in line with BSEN standards, Marley UAE designed for commercial and large-scale developments as well as smaller projects, Products are produced under strict Quality Control.

BELOW GROUND



ABOVED GROUND





MARLEY UAE uPVC Soil and Waste System

The uPVC soil system is available in **43**, **56**, **82**, **110**, **160** and **200mm** diameters, with push-fit type and solvent type.

110 and 160mm pipe support components have been designed specifically to support horizontal or vertical suspended uPVC pipework.

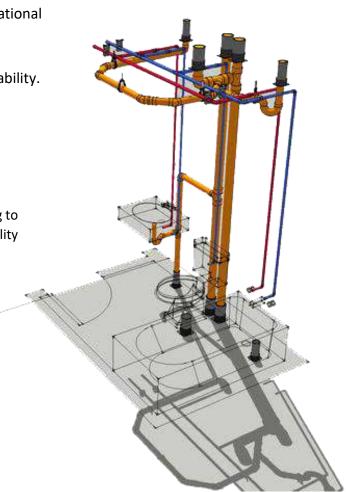
Pipes and fittings are also suitable for use as internal and external rainwater pipes to drain flat roofs and metal gutter systems on commercial and industrial buildings.

Advantages of MARLEY UAE uPVC Drainage System

- All product Supplied are manufactured to a constant high standard
- Precise manufacturing according to international standards.
- Assured timely deliveries
- Maintenance free system and long term reliability.

Quality Assured Products

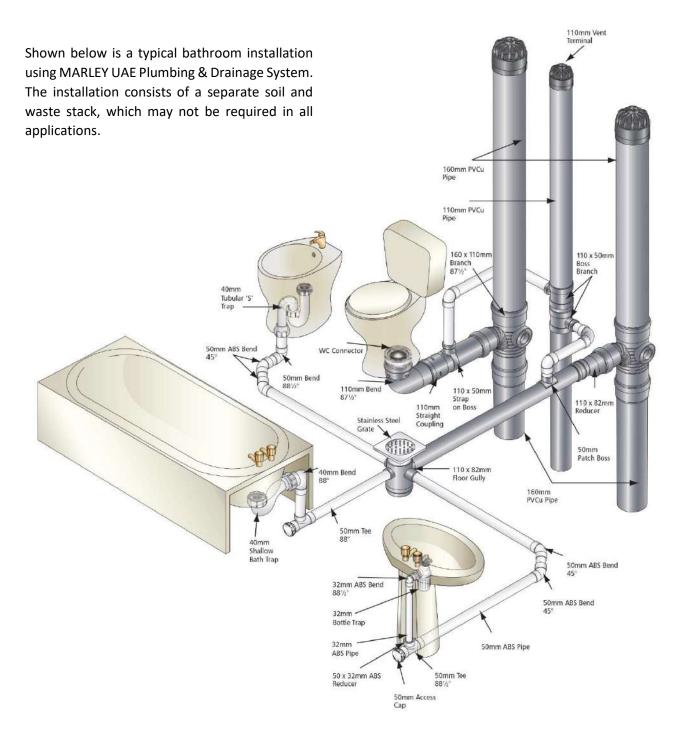
MARLEY UAE Drainage system are manufactured according to the latest European Standards and a very strict Quality Control.





Installation Guidance

Typical soil & waste layout



This diagram shows a range of ways of connecting MARLEY UAE waste and soil stack and the typical connections.



Soil and Waste

Rubber Ring Joints (Push Fits)

The rubber ring joint is integrally molded on one end of the pipe. The joint incorporates a factory fitted rubber sealing ring which is retained in position by a polypropylene lock ring. The opposite (spigot) end of the pipe is chamfered and has a "depth of entry" mark near the end. Each joint is capable of handling some expansion and contraction as well as angular deflection. The seal ring is designed to provide a watertight joint at high and low pressures.

Solvent Joint

Solvent cement jointing is a welding process and not a gluing process. If done correctly, separation will not be possible after the curing period. Jointing pipes should be an interference fit between the components before solvent cement is applied. There are different solvent cements available for applications. Be sure to use the correct cement and that it has not "dried out" prior to use.

Solvent in Hot weather conditions

During hot weather conditions of 35°C and above, special consideration should be given to the process of solvent welding if uPVC pipes and fittings to ensure a leak proof joint.

Solvent cements contains high strength chemical solvent which evaporate faster at elevated temperatures and in windy conditions.

When PVC pipes are stored in open areas or under direct sunlight, the pipe surface temperature will be around 15°C higher than the ambient temperature. the solvent cement attacks the hot surface faster and deeper. Therefore, it is very important to avoid using excess cement during the jointing process to avoid creating pools of cement inside the fitting and pipe sockets. Excess solvent cement should be wiped off the joined surface quickly.

Recommendations for the solvent welding during hot weather conditions

- 1. Solvent Cement and cleaners should be stored in a cool or shady areas.
- 2. Pipes and fittings should be stored in a shady area before solvent welding.
- 3. The surface to be joined should be cooled by wiping with a wet cloth. The surface should be dry before applying the solvent cement.
- 4. Solvent welding is recommended to be done during the cooler morning hours.
- 5. The two surface should be joined quickly while they are still wet with cement.
- 6. Shake or stir the solvent cement well before use.
- 7. Allow at least 24 hours for the joints to cure before pressurizing the system. For sizes above 8" you should allow at least 48hours.



Rubber Ring Joint



Solvent Weld Joint



Pipe Support and Expansion

- All pipework must be adequately supported whether vertical or horizontal.
- Plastic pipe work expands and contracts with changes in temperature whether ambient temperature or from the nature of the discharge through the pipe. Expansion joints must therefore be provided to accommodate such thermal movement.
- Horizontal pipework requires more frequent support than vertical pipe work for example, soil stocks)
- Suitable sound absorbing brackets with rubber lining should be used to support pipes. Those brackets must be dimensionally compatible to the pipe diameter. The fixed bracket creates fixed point in the pipe system.
- With fixed brackets the pipe or fitting cannot be moved through the bracket after screws are tightened. In order to prevent sliding down of vertical pipes, each individual pipe must be secure on one point by a fixed bracket creates fixed points in the pipe system.
- Every horizontally installed pipe should pipe should always be fixed with one fixed bracket. All remaining pipe brackets in horizontal as well as in vertical installation must be tightened in such a way to allow sliding.
- Fixed brackets must be installed directly above the fitting at the bottom of the pipe end. The sliding brackets must be installed at a distance of maximum of two meters above the fixed bracket.
- Pipe brackets should not be installed is areas of diameter reduction and change of directions in the systems, this is required to allow for the thermal expansion.
- Pipe brackets should be fixed on building materials with high strength in order to assure strong and durable pipe fixing.
- It is recommended that only steel brackets (ei. Not plastic brackets) be used on interior soil stacks which are subject to fire regulations.
- Any point where pipework passes through a floor or wall and is made as a fire stop, it must be treated as a fixed point for the purposes of determining positions of expansion joints.



| SUPPRORT DISTANCE | | | | | | | | |
|-------------------|------------|--------------------------|--|--|--|--|--|--|
| | Maximum Sı | Maximum Support Distance | | | | | | |
| | Vertical | Horizontal | | | | | | |
| Pipe Size – Soil | | | | | | | | |
| 82mm | 2 m | 1 m | | | | | | |
| 110mm | 2 m | 1 m | | | | | | |
| 160mm | 2 m | 1.2 m | | | | | | |
| Pipe Size – V | Waste | | | | | | | |
| 32 mm | 1.2 m | 0.5 m | | | | | | |
| 40 mm | 1.2 m | 0.5 m | | | | | | |
| 50 mm | 1.2 m | 0.5 m | | | | | | |

Expansion in uPVC Pipes

The PVC piping system expand and contract with changes in the temperature, both from ambient and from the temperature of the fluid passing through the pipework.

The flowing section explain the techniques of estimating and treating the expansion in PVC pipes.

Calculation of Expansion

The co-efficient liner expansion of PVC pipes is relatively small compared to other plastic materials. However, the effects of thermal expansion in the system should be compensated wherever necessary.

The thermal expansion in PVC straight section can be calculated using the below formula:

$\Delta L = \alpha \times L \times \Delta T$

Where:

- ΔL = expansion (mm)
- α = Coefficient of liner expansion (mm/m/°C) = 0.08
- **L** = pipe length in (m)
- **ΔT**= Difference in temperature in (°C)



Material Properties

| Material Un – Plasticized Poly Vinyl Chloride | | | | | |
|---|---|--|--|--|--|
| Color | Orange / Terracotta | | | | |
| Sizes | 40mm to 82mm (BS EN 4514) 110mm to 200mm (per BS EN 1401) | | | | |
| Standard Lengths | 1 ½" – 2" (4mtr.) 3"- 8" (6mtr.) | | | | |
| Joint type | Rubber Ring Joint (Push fit) as per BS EN 681 Solvent Weld Joint | | | | |



| Material | Un – Plasticized Poly Vinyl Chloride |
|---------------------|---|
| Color | Grey |
| Sizes | 40mm to 82mm (BS EN 4514) 110mm to 200mm (per BS EN 1401) |
| Standard Lengths | 1 ½" – 2" (4mtr.) 3"- 8" (6mtr.) |
| Joint type | Rubber Ring Joint (Push fit) as per BS EN 681 Solvent Weld Joint |



1. Corrosion Resistance:

MARLEY UAE uPVC being a non – conductor is totally resistant to all types of galvanic and electromechanical influences which might corrode it. Being nonmetallic, uPVC is resistant to any type of corrosion caused by water as well as a large range of industrial liquids and chemicals. Seepage from high sulphate soils as well as low hardness waters also do not threaten it. This in turn translate into a longer installed life of the uPVC pipe systems.

2. Resistance to Abrasion:

MARLEY UAE uPVC pipes are highly resistant to abrasion due to stress from abrasion fluids of excessive pressure. Test have shown that uPVC pipes are up to 2.5 time more resistant to abrasions when compared to steel.

3. Thermal Expansion:

The coefficient of liner expansion for uPVC in 0.08 mm/m/°K which means less than 1mm per each 1m length is case of a temperature rise of 10°C.

The thermal expansion in drainage system should be treated by using push fit (rubber rings) fittings and sockets which should be located in suitable locations.



4. Effect of frost:

Frost does not affect the performance of the system, however, impact strength is reduced during subzero temperatures.

5. Effect of Sunlight:

Long exposure to sunlight causes the color of uPVC to fade, in addition to the reduction of impact strength. The effect of sunlight does not seriously affect the performance of the system; however, it is always advisable to protect the system from the direct exposure to sunlight by painting the exposed parts with any exterior glass paint.

6. Fire Hazard of uPVC Material:

MARLEY UAE uPVC pipes and fittings as finished product are not classified as hazardous to health as they exhibit no chemical hazard when used under normal conditions and applications.

7. Flammability:

Due to its flame retardant property, uPVC finished products do not participate in fire. uPVC products have a higher ignition temperature than most of the other thermoplastic and organic materials.

8. Fire Fighting:

All common fire extinguishers can be used effectively for fighting involving PVC.

Area of Applications:

- Hotels
- Hospitals
- Commercial Buildings
- Villas
- Schools & University's
- Strom Drainage
- Sewer applications





Standards

MARLEY UAE uPVC Drainage system are manufactured according to the latest European Standards, subjected to very strict Quality Control Policy.

MARLEY UAE PRODUCTION STANDARDS

| REFER To: | No. | STANDARD No. | CONCERN To: |
|--------------------|-----|-------------------------|---|
| | 1 | BS EN 1329-1 | Plastic piping system for soil and waste discharge (low and high temperature) with in building structure – PVCu. |
| | 2 | BS EN 1451-1 | Plastic piping system for soil and waste discharge (low and high temperature) with in building structure – PVCu. |
| | 3 | BS EN 1591-1 | Plastic piping system for soil and waste discharge (low and high temperature) within the building structurer – polyethylene. |
| S | 4 | BS EN 4514 | Specification for PVCu soil and ventilating pipes, fittings and accessories. |
| ğ | 5 | BS EN 1566-1 | Specification for thermoplastics waste pipe and fittings. |
| a | 6 | BS EN 5255 | Specification for thermoplastics waste pipe and fittings |
| European Standards | 7 | BS EN 14680 | Specification for adhesives for non- pressure thermoplastic pipe systems. |
| St | 8 | BS EN 681-1 | Elastomeric seals. Material requirements for pipe joint seals used in water and drainage applications. Part 1 vulcanized rubber. |
| ean | 9 | BS 4660 & BS EN 1401 | Thermoplastic ancillary fittings of nominal sizes 110 and 160 for below ground gravity drainage and sewerage. |
| d | 10 | BS 4962 | Specification for plastic pipes and fittings for use as subsoil field drains. |
| L Z | 11 | BS EN 14680 | Adhesives for non- pressure thermoplastic pipe systems. |
| Eu | 12 | BS EN 681-1 | Elastomeric seals. Material requirements for pipe joint seals used in water and drainage applications. |
| <u>ি</u> | 13 | BS EN 752 | Drain & Sewer System outside buildings |
| tish & | 14 | BS EN 1295-1 | Structural design of buried pipelines under various conditions of loading. General requirements |
| | 15 | BS EN 1610 | Construction & testing of Drains & Sewers |
| Brit | 16 | BS EN 13476-3 | Plastic piping systems for non-pressure drainage and sewerage, structured wall piping systems with smooth bore and profiled external surface. |
| | 17 | BS EN ISO 9001 | Quality management systems. |
| | 18 | BBA 94/2985 | Plastic piping systems for soil waste (low & High Temperature) within the the building structure - ABS. |
| | 19 | BS EN 295 | Vitrified clay pipes & fittings and pipe joints. |
| | 20 | BS EN ISO 14001 | Environmental management systems requirements with guidance for use. |
| | 21 | BBA 88/1977 | MARLEY UAE Underground Drainage System. |



MARLEY uPVC PRESSURE PIPE SYSTEM

BS 3505 : 1986 / BS 3506 : 1969 Imperial range – BS EN 1452 : 2009

| | | | Wall Thickness | | | | | | | | | |
|--------------------------|-------|-------|--|----------|--------------------|----------|----------------------|----------|----------------------|----------|----------|----------|
| Mean outside Diameter | | | Class O Class B (Non Pressure) 6.0 bar* | | Class C 9.0bar* | | Class D 12.0 bar* | | Class E 15.0 bar* | | | |
| P 2 | | BAAN | Individu | al Value | Individu | al Value | Individu | al Value | Individu | al Value | Individu | al Value |
| | MIN | ΜΑΧ | MIN | МАХ | MIN | ΜΑΧ | MIN | ΜΑΧ | MIN | ΜΑΧ | MIN | ΜΑΧ |
| Inches | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm |
| 1/2 | 21.2 | 21.5 | - | - | - | - | - | - | - | - | 1.7 | 2.1 |
| 3∕4 | 26.6 | 26.9 | - | - | - | - | - | - | - | - | 1.9 | 2.5 |
| 1 | 33.4 | 33.7 | - | - | - | - | - | - | - | - | 2.2 | 2.7 |
| 1 ¼ | 42.1 | 42.4 | - | - | - | - | - | - | 2.2 | 2.7 | 2.7 | 3.2 |
| 1 ½ | 48.1 | 48.4 | 1.8 | 2.2 | - | - | - | - | 2.5 | 3.0 | 3.1 | 3.7 |
| 2 | 60.2 | 60.5 | 1.8 | 2.2 | - | - | 2.5 | 3.0 | 3.1 | 3.7 | 3.9 | 4.5 |
| 2 1⁄2 | 75.0 | 75.3 | 1.8 | 2.2 | - | - | 3.0 | 3.5 | 3.9 | 4.5 | 4.8 | 5.5 |
| 3 | 88.7 | 89.1 | 1.8 | 2.2 | 2.9 | 3.4 | 3.5 | 4.1 | 4.6 | 5.3 | 5.7 | 6.6 |
| 4 | 114.1 | 114.5 | 2.3 | 2.8 | 3.4 | 4.0 | 4.5 | 5.2 | 6.0 | 6.9 | 7.3 | 8.4 |
| 5 | 140.0 | 140.4 | 2.6 | 3.7 | 3.8 | 4.4 | 5.5 | 6.4 | 7.3 | 8.4 | 9.0 | 10.4 |
| 6 | 168.0 | 168.5 | 3.1 | 3.7 | 4.5 | 5.2 | 6.6 | 7.6 | 8.8 | 10.2 | 10.8 | 12.5 |
| 7 | 193.5 | 194.0 | 3.1 | 3.7 | 5.2 | 6.0 | 7.7 | 8.9 | 10.1 | 11.7 | 12.3 | 14.5 |
| 8 | 218.8 | 219.4 | 3.1 | 3.7 | 5.3 | 6.1 | 7.8 | 9.0 | 10.3 | 11.9 | 12.6 | 14.5 |
| 9 | 244.1 | 244.8 | 3.1 | 3.7 | 5.9 | 6.8 | 8.7 | 10.0 | 11.5 | 13.3 | 14.1 | 16.3 |
| 10 | 272.6 | 273.4 | 3.1 | 3.7 | 6.6 | 7.6 | 9.7 | 11.2 | 12.8 | 14.8 | 15.7 | 18.1 |
| 12 | 323.4 | 324.3 | 3.1 | 3.7 | 7.8 | 9.0 | 11.5 | 13.3 | 15.2 | 17.5 | 18.7 | 21.6 |
| 14 | 355.0 | 356.0 | 3.6 | 4.2 | 8.5 | 9.8 | 12.6 | 14.5 | 16.7 | 19.2 | 20.5 | 23.6 |
| 16 | 405.9 | 406.9 | 4.1 | 4.8 | 9.7 | 11.2 | 14.5 | 16.7 | 19.0 | 21.9 | 23.4 | 27.0 |

Standard Length of Pipes are Six (6) Meter.



MARLEY UAE PIPES Drainage Systems

| MARLEY UAE Soil & Waste Pipe BS EN 1329-1 (BS 5255 : 1989) | | | | | | | | | |
|--|-------|-------------|-------------|--------|---------|---------|---------|--|--|
| | Code | Nominal O.D | Nominal O.D | Mean O | .D (mm) | Wall Th | ickness | | |
| | Coue | (inch) | (mm) | Min. | Max. | Min. | Max. | | |
| | MDGP1 | 1 ½" | 43 | 42.75 | 43.05 | 1.9 | 2.3 | | |
| | MDGP2 | 2″ | 56 | 55.75 | 56.05 | 2.0 | 2.4 | | |
| | | | | | | | | | |

| MARLEY UAE Soil, Waste & Ventilation Pipe (BS EN 1329-1) & (BS EN 4514) | | | | | | | | | |
|---|-------|-------------|-------------|--------|----------|---------|---------|--|--|
| | Code | Nominal O.D | Nominal O.D | Mean O |).D (mm) | Wall Th | ickness | | |
| | Coue | (inch) | (mm) | Min. | Max. | Min. | Max. | | |
| | MDGP3 | 3″ | 82 | 82 | 82.3 | 3.0 | 3.5 | | |
| | MDGP4 | 4″ | 110 | 110 | 110.3 | 3.2 | 3.8 | | |
| | MDGP6 | 6″ | 160 | 160 | 106.4 | 3.2 | 3.8 | | |
| | MDGP8 | 8″ | 200 | 200 | 200.5 | 3.9 | 4.5 | | |

MARLEY UAE Sleeve Pipe - Gray

| | Code | Nominal O.D Nominal O.D | | Mean O.D (mm) | | Wall Thickness | | | |
|--|--------|-------------------------|------|---------------|-------|----------------|------|--|--|
| | coue | (inch) | (mm) | Min. | | Min. | Max. | | |
| | MDSP3 | 3″ | 82 | 82 | 82.3 | 1.6 | 1.8 | | |
| | MDSP4 | 4" | 110 | 110 | 110.3 | 1.6 | 1.8 | | |
| | MDSP4 | 6″ | 160 | 160 | 160.3 | 2.0 | 2.2 | | |
| | MDSP8 | 8″ | 200 | 200 | 200.5 | 3.0 | 3.2 | | |
| | MDSP10 | 10" | 250 | 250 | 250.5 | 3.0 | 3.2 | | |

MARLEY UAE Gray UPVC Pipe (Class E / 16) (BS 3505)

| | Code | Nominal O.D | Nominal O.D | Wall Thickness | Wall Thickness |
|---|----------|-------------|-------------|----------------|----------------|
| | couc | (inch) | (mm) | Min. | Max. |
| | MDGP3EL | 3″ | 82 | 5.7 | 6.6 |
| | MDGP4EL | 4″ | 110 | 7.3 | 8.4 |
| | MDGP6EL | 6″ | 160 | 10.8 | 12.5 |
| | MDGP8EL | 8″ | 200 | 12.6 | 14.5 |
| | MDGP10EL | 10" | 250 | 15.7 | 18.1 |
| · | MDGP12EL | 12" | 300 | 18.7 | 21.6 |

MARLEY UAE Black UPVC Pipe (Class C / 10) (BS 3506)

| Code | Nominal O.D | Nominal O.D | Wall Thickness | Wall Thickness |
|----------|-------------|-------------|----------------|----------------|
| coue | (inch) | (mm) | Min. | Max. |
| MDBP3CL | 3″ | 82 | 3.5 | 4.1 |
| MDBP4CL | 4″ | 110 | 4.5 | 5.2 |
| MDBP6CL | 6″ | 160 | 6.6 | 7.6 |
| MDBP8CL | 8″ | 200 | 7.8 | 9.0 |
| MDBP10CL | 10″ | 250 | 9.7 | 11.2 |
| MDBP12CL | 12″ | 300 | 11.5 | 13.3 |

| MARLEY UAE Underground & Sewerage (BS EN 1401-1), (BS EN 4514) & (BS 5481) | | | | | | | | | |
|--|-------|-------------|-------------|--------|----------|---------|---------|--|--|
| - | Code | Nominal O.D | Nominal O.D | Mean C |).D (mm) | Wall Th | ickness | | |
| | Code | (inch) | (mm) | Min. | Max. | Min. | Max. | | |
| | MDOP3 | 3″ | 82 | 82 | 82.3 | 3.0 | 3.5 | | |
| | MDOP4 | 4" | 110 | 110 | 110.3 | 3.2 | 3.8 | | |
| | MDOP6 | 6″ | 160 | 160 | 160.4 | 3.2 | 3.8 | | |
| | MDOP8 | 8″ | 200 | 200 | 200.5 | 3.9 | 4.5 | | |



MARLEY UAE Fittings for Aboveground Drainage Systems

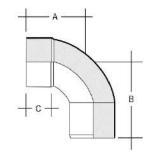
MARLEY UAE Pressure Breaker



| Code | Size | Description | Color |
|-------|------|-------------|-------|
| MDPB4 | 4" | uPVC | G |
| MDPB6 | 6" | uPVC | G |

MARLEY UAE Elbow 90° (Solvent)

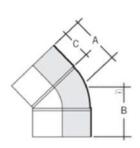




| Code | Size | Description | Color |
|------|-------|-------------|-------|
| MDE1 | 1 ½"" | ABS | G |
| MDE2 | 2″ | ABS | G |
| MDE3 | 3″ | uPVC | G |
| MDE4 | 4" | uPVC | G |
| MDE6 | 6″ | uPVC | G |
| MDE8 | 8″ | uPVC | G |

MARLEY UAE Elbow 45° (Solvent)

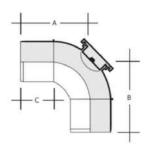




| Code | Size | Description | Color |
|--------|------|-------------|-------|
| MDE145 | 1 ½" | ABS | G |
| MDE245 | 2″ | ABS | G |
| MDE345 | 3″ | uPVC | G |
| MDE445 | 4″ | uPVC | G |
| MDE645 | 6" | uPVC | G |

MARLEY UAE Elbow 90° with Access (Solvent)





| Code | Size | Description | Color |
|-------|------|-------------|-------|
| MDE3A | 3″ | uPVC | G |
| MDE4A | 4" | uPVC | G |



Description

uPVC

uPVC

uPVC

uPVC

Color

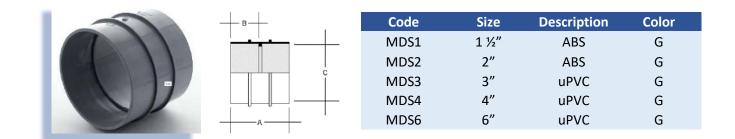
G

G

G

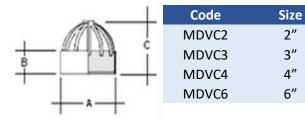
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MARLEY UAE Socket (Solvent)



MARLEY UAE Vent Cowl (Solvent)





MARLEY UAE Reducer Push (Solvent)



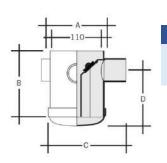
MARLEY UAE Plug & Access Cap (Solvent)

| | | Code | Size | Description | Color |
|-----------------------|----|-------|------|-------------|-------|
| | | MDPA1 | 1 ½" | ABS | G |
| | | MDPA2 | 2″ | ABS | G |
| I DENTIL | | MDPA3 | 3″ | uPVC | G |
| and the second second | H2 | MDPA4 | 4" | uPVC | G |
| | | MDPA6 | 6″ | uPVC | G |



MARLEY UAE Deep Seal Floor Trap (Solvent)





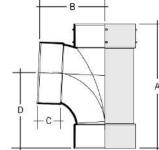
| Size | Description | Color |
|-------------|-------------|-----------|
| 4"X3"X2"X2" | uPVC | G |
| | | · · · · · |

MARLEY UAE "Y" (Solvent)

| | Code | Size | Description | Color |
|--------------------------|------|------|-------------|-------|
| | MDY1 | 1 ½" | ABS | G |
| | MDY2 | 2″ | ABS | G |
| X _o | MDY3 | 3″ | uPVC | G |
| \sim \times \times | MDY4 | 4″ | uPVC | G |
| в | MDY6 | 6″ | uPVC | G |
| \times | | | | |

MARLEY UAE TEE (Solvent)





| Code | Size | Description | Color |
|------|------|-------------|-------|
| MDT1 | 1 ½" | ABS | G |
| MDT2 | 2″ | ABS | G |
| MDT3 | 3″ | uPVC | G |
| MDT4 | 4" | uPVC | G |
| MDT6 | 6" | uPVC | G |
| MDT8 | 8″ | uPVC | G |

MARLEY UAE Testing Opening (Door Socket)

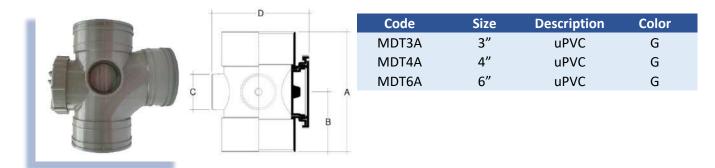




| Code | Size | Description | Color |
|-------|------|-------------|-------|
| MDTO3 | 3″ | uPVC | G |
| MDTO4 | 4″ | uPVC | G |
| MDTO6 | 6″ | uPVC | G |

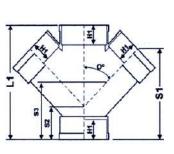


MARLEY UAE TEE with access (Solvent)



MARLEY UAE Cross "Y" (Solvent)

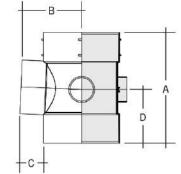




| Code | Size | Description | Color |
|-------|------|-------------|-------|
| MDCY4 | 4″ | uPVC | G |
| | | | |

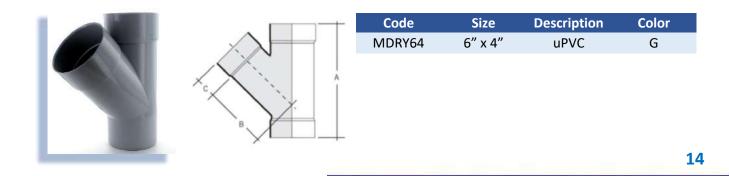
MARLEY UAE Reducer TEE (Solvent)





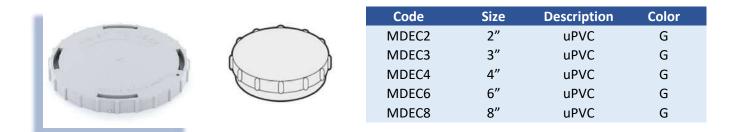
| Code | Size | Description | Color |
|--------|---------|-------------|-------|
| MDRT64 | 6″ x 4″ | uPVC | G |

MARLEY UAE Reducer Y (Solvent)

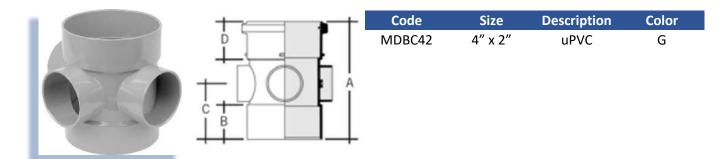




MARLEY UAE End Cap (Solvent)

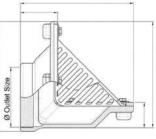


MARLEY UAE Boss Connector (Solvent)



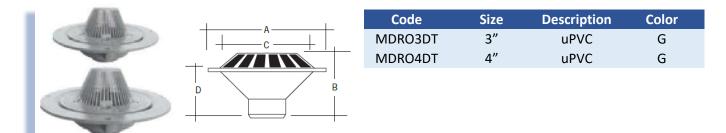
MARLEY UAE Rain Water Outlet (Side Parapet)





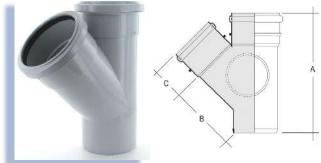
| | Description | Color |
|----|-------------|---------|
| 4" | uPVC | G |
| | | |
| | | |
| | | |
| | 4" | 4" uPVC |

MARLEY UAE Rain Water Outlet (Dome Type)





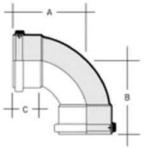
MARLEY UAE "Y" Double Rubber (Push Fit)



| Code | Size | Description | Color |
|--------|------|-------------|-------|
| MDY3R2 | 3″ | uPVC | G |
| MDY4R2 | 4" | uPVC | G |
| | | | |

MARLEY UAE Elbow 90° Double Rubber (Push Fit)

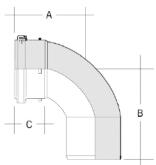




| Code | Size | Description | Color |
|--------|------|-------------|-------|
| MDE4R2 | 4″ | uPVC | G |
| MDE6R2 | 6" | uPVC | G |
| MDE8R2 | 8″ | uPVC | G |

MARLEY UAE Elbow 45° Double Rubber (Push Fit)





| Code | Size | Description | Color |
|----------|------|-------------|-------|
| MDE445R2 | 4" | uPVC | G |
| MDE645R2 | 6" | uPVC | G |
| MDE845R2 | 8″ | uPVC | G |

MARLEY UAE Socket Double Rubber (Push Fit)





| Code | Size | Description | Color |
|--------|------|-------------|-------|
| MDS3R2 | 3″ | uPVC | G |
| MDS4R2 | 4″ | uPVC | G |
| MDS6R2 | 6″ | uPVC | G |
| MDS8R2 | 8″ | uPVC | G |



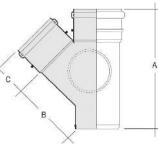
MARLEY UAE REDUCER TEE Double Rubber (Push Fit)



| Code | Size | Description | Color |
|----------|---------|-------------|-------|
| MDRT64R2 | 6″ x 4″ | uPVC | G |
| | | | |

MARLEY UAE REDUCER Y Double Rubber (Push Fit)





D

| | Code | Size | Description | Color |
|-------|----------|---------|-------------|-------|
| | MDRY64R2 | 6″ x 4″ | uPVC | G |
| 0 | | | | |
| A | | | | |
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| | | | | |
| t | | | | |

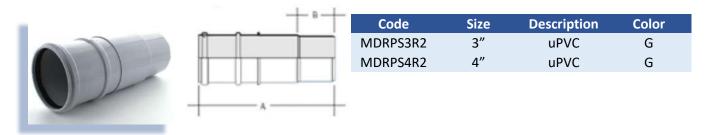
MARLEY UAE TEE Double Rubber (Push Fit)





| Code | Size | Description | Color |
|--------|------|-------------|-------|
| MDT3R2 | 3″ | uPVC | G |
| MDT4R2 | 4″ | uPVC | G |
| MDT6R2 | 6″ | uPVC | G |

MARLEY UAE Repair Socket (Push Fit)





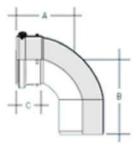
MARLEY UAE Elbow 90° with Access Single Rubber (Push Fit)



| Code | Size | Description | Color |
|---------|------|-------------|-------|
| MDE3AR1 | 3″ | uPVC | G |
| MDE4AR1 | 4" | uPVC | G |

MARLEY UAE Elbow 90° Single Rubber (Push Fit)

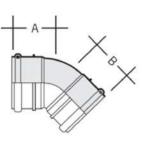




| Code | Size | Description | Color |
|--------|------|-------------|-------|
| MDE3R1 | 3″ | uPVC | G |
| MDE4R1 | 4″ | uPVC | G |

MARLEY UAE Elbow 45° Single Rubber (Push Fit)





| Code | Size | Description | Color |
|----------|------|-------------|-------|
| MDE345R1 | 3″ | uPVC | G |
| MDE445R1 | 4″ | uPVC | G |
| MDE645R1 | 6″ | uPVC | G |
| MDE845R1 | 8″ | uPVC | G |

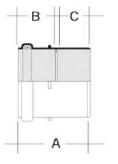
MARLEY UAE Reducer Socket Single Rubber (Push Fit)

| | Code | Size | Description | Color |
|-----|----------|---------|-------------|-------|
| | MDRS43R1 | 4″ x 3″ | uPVC | G |
| | MDRS64R1 | 6" x 4" | uPVC | G |
| | MDRS86R1 | 8″ x 6″ | uPVC | G |
| B B | | | | |
| | | | | |



MARLEY UAE Socket Single Rubber (Push Fit)

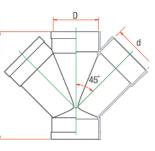




| Code | Size | Description | Color |
|--------|------|-------------|-------|
| MDS3R1 | 3″ | uPVC | G |
| MDS4R1 | 4″ | uPVC | G |
| | | | |

MARLEY UAE Cross Y Triple Rubber (Solvent)

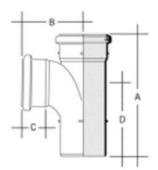




| Code | Size | Description | Color |
|--------|------|-------------|-------|
| MDY4R3 | 4″ | uPVC | G |
| MDY6R3 | 6″ | uPVC | G |

MARLEY UAE TEE Triple Rubber (Push Fit)



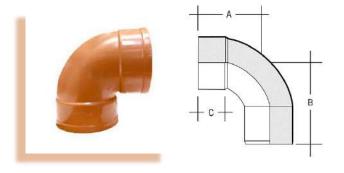


| Code | Size | Description | Color |
|--------|------|-------------|-------|
| MDT4R3 | 4″ | uPVC | G |
| MDT6R3 | 6″ | uPVC | G |



MARLEY UAE Fittings for Belowground Drainage Systems

MARLEY UAE Elbow 90° (Solvent)



| Code | Size | Description | Color |
|-------|------|-------------|-------|
| MDE3O | 3″ | uPVC | 0 |
| MDE4O | 4″ | uPVC | 0 |
| MDE6O | 6" | uPVC | 0 |

MARLEY UAE Elbow with Access 90° (Solvent)

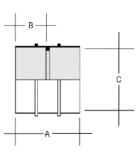




| Code | Size | Description | Color |
|--------|------|-------------|-------|
| MDE3AO | 3″ | uPVC | 0 |
| | | | |
| | | | |
| | | | |
| | | | |

MARLEY UAE Socket (Solvent)

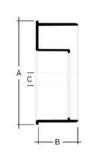




| Code | Size | Description | Color |
|-------|------|-------------|-------|
| MDS30 | 3″ | uPVC | 0 |
| MDS40 | 4″ | uPVC | 0 |
| MDS60 | 6″ | uPVC | 0 |
| MDS80 | 8″ | uPVC | 0 |

MARLEY UAE Reducer Push (Solvent)





| Code | Size | Description | Color |
|---------|---------|-------------|-------|
| MDRP32O | 3″ x 2″ | uPVC | 0 |
| MDRP64O | 6″ x 4″ | uPVC | 0 |



MARLEY UAE Plug and Access (Solvent)

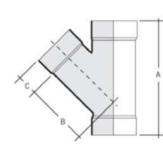


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| | | T | |

| Code | Size | Description | Color |
|--------|------|-------------|-------|
| MDPA4O | 4″ | uPVC | 0 |
| MDPA60 | 6″ | uPVC | 0 |

MARLEY UAE "Y" (Solvent)

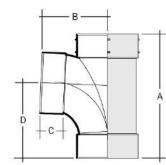




| Code | Size | Description | Color |
|-------|------|-------------|-------|
| MDY30 | 3″ | uPVC | 0 |
| MDY40 | 4" | uPVC | 0 |
| MDY60 | 6" | uPVC | 0 |

MARLEY UAE TEE (Solvent)





| Code | Size | Description | Color |
|-------|------|-------------|-------|
| MDT3O | 3″ | uPVC | 0 |
| MDT4O | 4" | uPVC | 0 |
| MDT6O | 6" | uPVC | 0 |

MARLEY UAE Testing Opening (Door Socket)



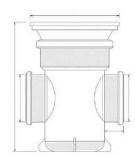


| Code | Size | Description | Color |
|--------|------|-------------|-------|
| MDTO30 | 3″ | uPVC | 0 |
| | | | |
| | | | |
| | | | |
| | | | |



MARLEY UAE Gully Trap (Solvent)

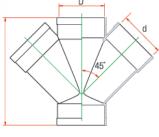




| Code | Size | Description | Color |
|-----------|-----------------------|-------------|-------|
| MDGT64 | 6"x 4" | uPVC | 0 |
| MDGT644 | 6" x 4"x 4" | uPVC | 0 |
| MDGT64444 | 6" x 4" x 4"x 4" x 4" | uPVC | 0 |

MARLEY UAE Cross "Y" (Solvent)

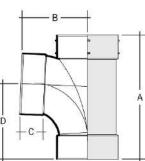




| Code | Size | Description | Color |
|--------|------|-------------|-------|
| MDCY40 | 4" | uPVC | 0 |

MARLEY UAE Reducer TEE (Solvent)

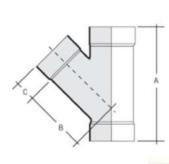




| Code | Size | Description | Color |
|---------|---------|-------------|-------|
| MDRT64O | 6″ x 4″ | uPVC | 0 |
| | | | |

MARLEY UAE Reducer "Y" (Solvent)

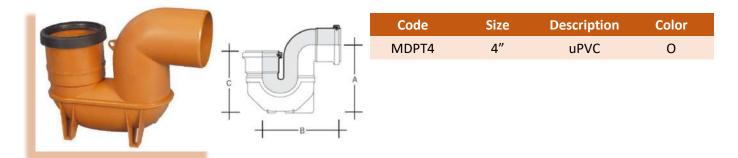




| Code | Size | Description | Color |
|---------|---------|-------------|-------|
| MDRY64O | 6" x 4" | uPVC | 0 |
| | | | |

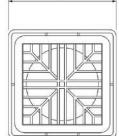


MARLEY UAE 'P' - Trap (Elbow Shap)



MARLEY UAE Square Hopper Grating

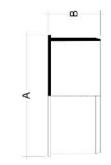




| Code | Size | Description | Color |
|--------|------|-------------|-------|
| MDSHG4 | 4" | uPVC | 0 |

MARLEY UAE End Cap

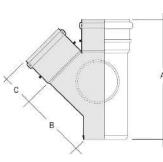




| Code | Size | Description | Color |
|--------|------|-------------|-------|
| MDEC3O | 3″ | uPVC | 0 |
| MDEC40 | 4" | uPVC | 0 |
| MDEC6O | 6″ | uPVC | 0 |

MARLEY UAE "Y" Double Rubber (Push fit)

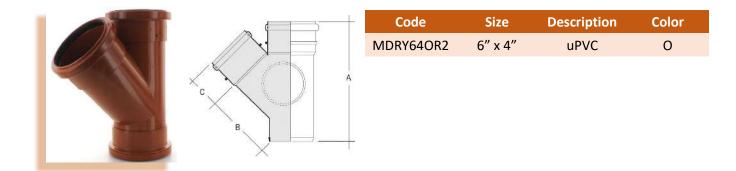




| Code | Size | Description | Color |
|---------|------|-------------|-------|
| MDY3OR2 | 3″ | uPVC | 0 |
| MDY4OR2 | 4" | uPVC | 0 |

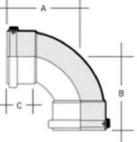


MARLEY UAE Reducer "Y" Double Rubber (Push fit)



MARLEY UAE Elbow 90° Double Rubber (Push Fit)

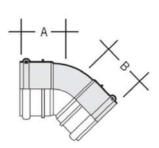




| Code | Size | Description | Color |
|---------|------|-------------|-------|
| MDE4OR2 | 4″ | uPVC | 0 |
| MDE6OR2 | 6″ | uPVC | 0 |

MARLEY UAE Elbow 45° Double Rubber (Push Fit)

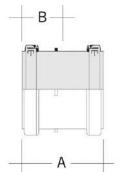




| Code | Size | Description | Color |
|-----------|------|-------------|-------|
| MDE445OR2 | 4″ | uPVC | 0 |
| MDE645OR2 | 6″ | uPVC | 0 |
| MDE845OR2 | 8″ | uPVC | 0 |

Socket Double Rubber (Push Fit)





| Code | Size | Description | Color |
|---------|------|-------------|-------|
| MDS3OR2 | 3″ | uPVC | 0 |
| MDS4OR2 | 4″ | uPVC | 0 |
| MDS6OR2 | 6″ | uPVC | 0 |
| MDS8OR2 | 8″ | uPVC | 0 |

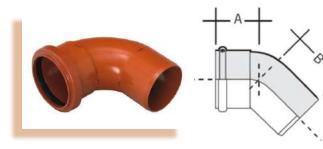


TEE Double Rubber (Push Fit)



| Code | Size | Description | Color |
|---------|------|-------------|-------|
| MDT4OR2 | 4" | uPVC | 0 |
| | | | |

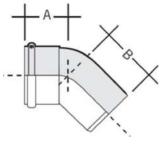
Elbow 90° Single Rubber (Push Fit)



| Code | Size | Description | Color |
|---------|------|-------------|-------|
| MDE3OR1 | 3″ | uPVC | 0 |
| | | | |

MARLEY UAE Elbow 45° Single Rubber (Push Fit)

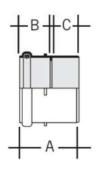




| Size | Description | Color |
|------|-------------|-------|
| 3″ | uPVC | 0 |
| | | |
| | | |
| | | |
| | | |

MARLEY UAE Socket Single Rubber (Push Fit)





| Code | Size | Description | Color |
|---------|------|-------------|-------|
| MDS3OR1 | 3″ | uPVC | 0 |
| | | | |



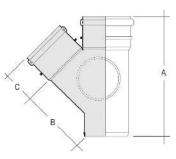
MARLEY UAE Socket Single Rubber (Push Fit)



| Code | Size | Description | Color |
|-----------|---------|-------------|-------|
| MDRS430R1 | 4" X 3" | uPVC | 0 |
| MDRS64OR1 | 6" X 4" | uPVC | 0 |

MARLEY UAE Reducer "Y " Triple Rubber (Push fit)

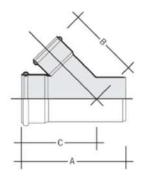




| Code | Size | Description | Color |
|---------|------|-------------|-------|
| MDY4OR3 | 4" | uPVC | 0 |
| MDY6OR3 | 6" | uPVC | 0 |

MARLEY UAE TEE Triple Rubber (Push Fit)





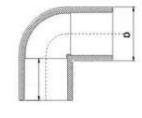
| Code | Size | Description | Color |
|---------|------|-------------|-------|
| MDT4OR3 | 4" | uPVC | 0 |



MARLEY UAE uPVC HIGH PRESSURE FITTINGS (Class - E)

MARLEY UAE uPVC H.P (Class –E) Elbow 90°

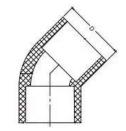




| Code | Size | Description | Color |
|--------|------|-------------|-------|
| MDECE3 | 3″ | Class E | G |
| MDECE4 | 4" | Class E | G |
| MDECE6 | 6″ | Class E | G |
| MDECE8 | 8″ | Class E | G |

MARLEY UAE uPVC H.P (Class –E) Elbow 45°





| Code | Size | Description | Color |
|----------|------|-------------|-------|
| MDECE345 | 3″ | Class E | G |
| MDECE445 | 4" | Class E | G |
| MDECE645 | 6″ | Class E | G |
| MDECE845 | 8″ | Class E | G |

MARLEY UAE uPVC H.P (Class –E) Equal TEE

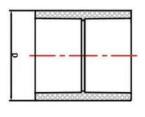


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| | | 8 | | |

| Code | Size | Description | Color |
|--------|------|-------------|-------|
| MDTCE3 | 3″ | Class E | G |
| MDTCE4 | 4" | Class E | G |
| MDTCE6 | 6" | Class E | G |
| MDTCE8 | 8″ | Class E | G |

MARLEY UAE uPVC H.P (Class –E) Socket



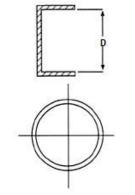


| Code | Size | Description | Color |
|--------|------|-------------|-------|
| MDSCE3 | 3″ | Class E | G |
| MDSCE4 | 4" | Class E | G |
| MDSCE6 | 6″ | Class E | G |
| MDSCE8 | 8″ | Class E | G |



MARLEY UAE uPVC H.P (Class –E) End Cap





| Code | Size | Description | Color |
|-----------|------|-------------|-------|
| MDECCE1.5 | 1 ½" | Class E | G |
| MDECCE3 | 3″ | Class E | G |
| MDECCE4 | 4" | Class E | G |
| MDECCE6 | 6″ | Class E | G |
| MDECCE8 | 8″ | Class E | G |



