

U-PVC SOIL AND WASTE SYSTEMS – EN1329

ELYSEE

JOIN THE PROFESSIONALS! The professional's choice for complete solutions in piping systems. Best value for money. Top quality at competitive prices. One-stop shop experience. Elysee offers a complete range with 2500 products.

EXTENSIVE KNOW-HOW. Through 40 years of experience Elysee has a leading presence in the area of Plastic Piping Systems, Water Supply, Irrigation, Sewage Systems and Cable Management Systems.

TRULY INTERNATIONAL. Presence in 60 countries in all 5 continents through an ever-increasing family of distributors.

TOP CLASS MANUFACTURING. Sustainability through solid innovation, growth of people and care for nature.

RELIABILITY & QUALITY ASSURANCE. Elysee is certified by the most reputable international standardization organizations such as DVGW, OVGW, WRAS and KIWA among others.

HIGH-QUALITY USER EXPERIENCE. Elysee products are designed with close cooperation with the end user. Designed for robust handling, ease of installation and long-term performance.

INTERNATIONAL PRESENCE

Elysee has presence in 60 countries in all 5 continents, gained through 40 years of presence in the global markets. Elysee has active involvement in European and International Standards development reflected in our international manufacturing facilities in Cyprus, Austria, Italy, Greece and Lebanon.

VISION

Be a sustainable World Class supplier in piping systems through: Constant profitability, a leading position in our local markets, advanced technology and High-added-value products in worldwide markets.

Love for water led to Elysee conception more than 30 years ago. Commitment to quality and long term vision led to the success of the Company making it the largest production unit in the country on piping systems for Water supply, Irrigation, Sewage and Energy.

TECHNOLOGY AND QUALITY ASSURANCE

Ever since its foundation, quality has been one of the company's top priorities. Thanks to the introduction of a complete quality management system, the company monitors all its activities and their applications, from raw materials to the end product with an aim to optimize overall performance. A well-equipped testing room with qualified and devoted staff, situated on site, ensures that every product is tested according to the standards already set.

Continuous monitoring of the receiving, production and storing processes, ensures that the end products conform to the National and International Quality Standards. Our Research and Development department is responsible for conducting research and experimental study, with an aim to develop new and existing products and to improve all phases of production, in terms of productivity, implementation of procedures and efficiency of operations. The company applies the principles of Lean Manufacturing, according to International Best Practices in Industry.



Introduction

Elysée offers a comprehensive range of pipes and fittings, designed for all soil and waste discharge applications for commercial, industrial, housing and public sector developments. Our Soil, Waste, Underground & Overflow piping systems are available in a complete range of imperial series from Ø1¼" up to Ø4" and straight lengths of 3, 4 and 6 meters. The systems can be found in six different colours of Olive Grey, Black, White, Light Grey and Terracotta to satisfy all tastes.

In order to ensure that all requirements of standards and regulations are fulfilled, Elysée's U-PVC plastics piping systems, are tested according to standards requirements in our well-equipped testing room.

Furthermore, Elysée EN 1329 piping systems are being tested and certified according to EN 1329, by external third party certification body (CERTIF PORTUGAL). Product certification has been obtained, ensuring EN 1329 compliance.

EN 1329 specifies the requirements for U-PVC piping systems regarding: Materials, Appearance, Colour, Geometrical Characteristics, Mechanical Characteristics, Physical Characteristics, Performance requirements, Specifications for the Sealing Ring.

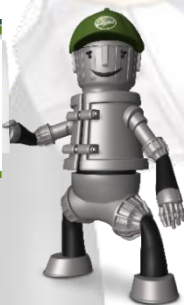
Technical Data

Quality Management

Our Quality management system ensures top-class products in terms of performance, reliability and durability. This is a crucial parameter to ensure customer satisfaction and loyalty. Elysée quality system, ISO 9001, is approved by CCC and IQNet.

Certifications

Elysée's Soil and Waste piping systems comply with the EN 1329 European standard: Plastics piping systems for soil & waste discharge within the building structure. EN 1329 specifies the requirements and characteristics for soil and waste piping systems which are intended for outside the building structure or buried in ground within the building structure and outside the building. In compliance with this standard, Elysée ensures stable supply of reliable products with assured quality.



Materials

Elysée pressure piping systems are produced by U-PVC raw material which can be enhanced with additives in order to optimize its quality performance. The compound and formulation consist of U-PVC resin and the required additives are specified by EN 1329-1 European Standard.

Appearance

The internal and external surface of the U-PVC pipes are smooth, free from grooving and any other surface imperfections so as to comply with the requirements of EN 1329 – 1.

Marking

All pipes are marked at intervals of equal length of 1 meter in consistency and the marking include:

- Manufacturer name
- Number of the International Standard
- Material
- Nominal outside diameter x wall thickness
- Nominal Pressure
- Manufacturer's Information (Date Code)
- The codes presented on pipes and fittings indicate the application area, 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
 - BD: Application area code for components intended for use for both B and D.

Dimensions and Characteristics

Nominal dimensions of the piping systems regarding the mean outside diameters, nominal wall thickness and their tolerances comply with the dimensions determined in the relevant standard of EN 1329-1.

Chemical Resistance

Chemicals can affect the strength, flexibility, surface appearance, colour, dimensions or weight of U-PVC products. The basic modes of interaction which cause these changes are:

- Chemical attack on the polymer chain, which results in reduction of physical properties
- Physical change, including absorption of solvents resulting in softening and swelling of the plastic
- Stress cracking from the interaction of a “stress cracking agent” with internal or external stresses

The following table provides chemical resistance data of U-PVC piping systems:

Whereas: A: Recommended, B: Minor Effect, C: Not Suitable.

| Chemical | Effect | Chemical | Effect | Chemical | Effect |
|------------------------|--------|---------------------|--------|------------------------|--------|
| Acetic Acid | C | Ethyl Chloride, Dry | C | Potassium Chloride | A |
| Acetic Anhydride | C | Ethylene Glycol | A | Potassium Hydroxide | A |
| Acetone | C | Ethylene Oxide M | C | Potassium Nitrate M | A |
| Acetylene, Dry | C | Ferric Chloride | B | Potassium Nitrite M | A |
| Acrolein | C | Ferric Sulfate | A | Potassium Permanganate | B |
| Aluminum Chloride | A | Ferrous Chloride | A | Propane | A |
| Aluminum Sulfate | A | Ferrous Sulfate | A | Rosin | A |
| Ammonia Anhydrous | C | Fluorine, Gas Dry | C | Sea Water | A |
| Ammonium Chloride | A | Fluorosilicic Acid | B | Sewage, Raw | A |
| Ammonium Hydroxide | A | Formaldehyde | A | Silver Nitrate M | A |
| Ammonium Nitrate M | A | Formic Acid | B | Sodium Bicarbonate | A |
| Ammonium Sulfate | A | Furfural | C | Sodium Bisulfate | A |
| Amyl Acetate | C | Gasoline | A | Sodium Bisulfite | A |
| Aniline | B | Glucose | A | Sodium Carbonate | A |
| Benzene | B | Glycerine | A | Sodium Chloride | A |
| Benzidine | A | Hexane, Dry | A | Sodium Cyanide | A |
| Benzoic Acid | A | Hydrobromic Acid | A | Sodium Dichromate | B |
| Black Liquor | A | Hydrochloric Acid | C | Sodium Hydroxide | B |
| Boric Acid | A | Hydrofluosilic Acid | C | Sodium Hydroxide | A |
| Bromine, Dry M | C | Hydrogen | A | Sodium Nitrate | A |
| Bromobenzene | C | Kerosene | A | Sodium Peroxide | A |
| Butadiene | C | Lactic Acid | A | Sodium Phosphate | A |
| Butane | C | Magnesium Chloride | A | Sodium Silicate | A |
| Butyl Alcohol | C | Magnesium Sulfate | A | Sodium Sulfate | A |
| Butyric Acid | C | Mercuric Chloride | A | Sodium Sulfide | A |
| Calcium Chloride | B | Mercury | A | Sodium Thiosulfate | A |
| Calcium Hydroxide | A | Methyl Ethyl Ketone | C | Stannous Chloride | A |
| Calcium Hypochlorite M | A | Milk | B | Stearic Acid | A |
| Chlorinated Water | C | Naphtha | A | Stoddard Solvent | C |
| Chlorine, Dry M | C | Naphthalene | B | Sulfur | C |
| Chlorine, Moist M | C | Nickel Chloride | A | Sulfur Dioxide, Wet | B |
| Chloroacetic Acid | A | Nickel Sulfate | A | Sulfur Trioxide, Dry | A |
| Chloroform, Dry | C | Nitric Acid M | B | Sulfuric Acid <60% M | A |
| Chromic Acid | B | Nitrous Oxide | A | Sulfuric Acid 80-98% M | A |
| Copper Nitrate M | A | Oxalic Acid | A | Tannic Acid | A |
| Creosote | C | Oxygen Gas | A | Tartaric Acid | B |
| Cresol | B | Ozone M | B | Tin Chloride | B |
| Crude Oil - Sour | C | Palmitic Acid | B | Toluene (Toluol) | C |
| Dowtherm A | C | Phenol | A | Trichloroethylene, Dry | C |
| Ethyl Acetate | C | Phosphoric Acid | A | Urea | A |
| Ethyl Alcohol | A | Picric Acid | A | Vinyl Chloride | A |

Nominal Dimensions

No.65

DOMESTIC HOT WATER DISCHARGE PIPES

| Code | Nominal Diameter in(mm) | Outside Diameter (mm) | Wall Thickness (mm) |
|-------------|-------------------------|-----------------------|---------------------|
| 65 100 004* | 1¼" (32) | 36.1 - 36.5 | 1,8 – 2,2 |
| 65 100 005* | 1½" (40) | 42.7 - 43.1 | 1,9 – 2,3 |
| 65 100 006* | 2" (50) | 55.7 - 56.1 | 2,0 – 2,4 |

No.68

DOMESTIC HOT WATER DISCHARGE PIPES

| Code | Nominal Diameter in(mm) | Outside Diameter (mm) | Wall Thickness (mm) |
|-------------|-------------------------|-----------------------|---------------------|
| 68 100 036* | 1¼" (32) | 36.1 - 36.5 | 1,8 |
| 68 100 043* | 1½" (40) | 42.7 - 43.1 | 1,9 |
| 68 100 056* | 2" (50) | 55.7 - 56.1 | 2,0 |

No.69

DOMESTIC HOT WATER DISCHARGE PIPES

| Code | Nominal Diameter in(mm) | Outside Diameter (mm) | Wall Thickness (mm) |
|-----------------|-------------------------|-----------------------|---------------------|
| 69 100 036* | 1¼" (32) | 36.1 - 36.5 | 3,0 |
| 69 100 043* | 1½" (43) | 42.8 - 43.1 | 3,0 |
| 69 100 056* | 2" (56) | 55.7 - 56.1 | 3,0 |
| 67 100 082* (A) | 4" (82) | 82,4 - 82,8 | 3,2 |
| 69 100 110* | 4" (110) | 110.0 - 110.3 | 3,2 |
| 69 100 160* | 6" (160) | 160.0 - 160.4 | 3,2 |

(A) BS4514

WASTE MALE THREADED ADAPTOR SOLVENT (BSPM)




| Code | Size (mm x in) | Colour |
|------------|----------------|------------|
| 6100003204 | 32X1¼ | OLIVE GRAY |
| 6101003204 | 32X1¼ | BLACK |
| 6102003204 | 32X1¼ | WHITE |
| 6104003204 | 32X1¼ | LIGHT GRAY |
| 6100004005 | 40X1½ | OLIVE GRAY |
| 6101004005 | 40X1½ | BLACK |
| 6102004005 | 40X1½ | WHITE |
| 6104004005 | 40X1½ | LIGHT GRAY |
| 6100005006 | 50X2 | OLIVE GRAY |
| 6101005006 | 50X2 | BLACK |
| 6102005006 | 50X2 | WHITE |
| 6104005006 | 50X2 | LIGHT GRAY |


WASTE COUPLER DS SOLVENT





| Code | Size (mm) | Colour |
|------------|-----------|------------|
| 6120032032 | 32 | OLIVE GRAY |
| 6121032032 | 32 | BLACK |
| 6122032032 | 32 | WHITE |
| 6124032032 | 32 | LIGHT GRAY |
| 6120040040 | 40 | OLIVE GRAY |
| 6121040040 | 40 | BLACK |
| 6122040040 | 40 | WHITE |
| 6124040040 | 40 | LIGHT GRAY |
| 6120050050 | 50 | OLIVE GRAY |
| 6121050050 | 50 | BLACK |
| 6122050050 | 50 | WHITE |
| 6124050050 | 50 | LIGHT GRAY |


| WASTE FEMALE THREADED ADAPTOR SOLVENT (BSPF) | |  |
|--|-----------|---|
| Code | Size (mm) | Colour |
| 6110003204 | 32X1½ | OLIVE GRAY |
| 6111003204 | 32X1½ | BLACK |
| 6112003204 | 32X1½ | WHITE |
| 6114003204 | 32X1½ | LIGHT GRAY |
| 6110004005 | 40X1½ | OLIVE GRAY |
| 6111004005 | 40X1½ | BLACK |
| 6112004005 | 40X1½ | WHITE |
| 6114004005 | 40X1½ | LIGHT GRAY |
| 6110005005 | 50X1½ | OLIVE GRAY |
| 6111005005 | 50X1½ | BLACK |
| 6112005005 | 50X1½ | WHITE |
| 6114005005 | 50X1½ | LIGHT GRAY |
| 6110005006 | 50X2 | OLIVE GRAY |
| 6111005006 | 50X2 | BLACK |
| 6112005006 | 50X2 | WHITE |


| WASTE REDUCER SOLVENT | |  |
|-----------------------|-----------|---|
| Code | Size (mm) | Colour |
| 6120040032 | 40X32 | OLIVE GRAY |
| 6121040032 | 40X32 | BLACK |
| 6122040032 | 40X32 | WHITE |
| 6124040032 | 40X32 | LIGHT GRAY |
| 6120050040 | 50X40 | OLIVE GRAY |
| 6121050040 | 50X40 | BLACK |
| 6122050040 | 50X40 | WHITE |
| 6124050040 | 50X40 | LIGHT GRAY |


| WASTE ACCESS CAP SOLVENT | |  |
|--------------------------|-----------|---|
| Code | Size (mm) | Colour |
| 6130000032 | 32 | OLIVE GRAY |
| 6131000032 | 32 | BLACK |
| 6132000032 | 32 | WHITE |
| 6134000032 | 32 | LIGHT GRAY |
| 6130000040 | 40 | OLIVE GRAY |
| 6131000040 | 40 | BLACK |
| 6132000040 | 40 | WHITE |
| 6134000040 | 40 | LIGHT GRAY |
| 6130000050 | 50 | OLIVE GRAY |
| 6131000050 | 50 | BLACK |
| 6132000050 | 50 | WHITE |
| 6134000050 | 50 | LIGHT GRAY |


| WASTE BEND 45° DS SOLVENT | |  |
|---------------------------|-----------|---|
| Code | Size (mm) | Colour |
| 6150032032 | 32 | OLIVE GRAY |
| 6151032032 | 32 | BLACK |
| 6152032032 | 32 | WHITE |
| 6154032032 | 32 | LIGHT GRAY |
| 6150040040 | 40 | OLIVE GRAY |
| 6151040040 | 40 | BLACK |
| 6152040040 | 40 | WHITE |
| 6154040040 | 40 | LIGHT GRAY |
| 6150050050 | 50 | OLIVE GRAY |
| 6151050050 | 50 | BLACK |
| 6152050050 | 50 | WHITE |
| 6154050050 | 50 | LIGHT GRAY |


| WASTE CONVERSION BEND 45° SS SOLVENT | |  |
|--------------------------------------|-----------|--|
| Code | Size (mm) | Colour |
| 615A032 032 | 32 | OLIVE GRAY |
| 615A132 032 | 32 | BLACK |
| 615A232 032 | 32 | WHITE |
| 615A432 032 | 32 | LIGHT GRAY |
| 615A040 040 | 40 | OLIVE GRAY |
| 615A140 040 | 40 | BLACK |
| 615A240 040 | 40 | WHITE |
| 615A440 040 | 40 | LIGHT GRAY |
| 615A050 050 | 50 | OLIVE GRAY |
| 615A150 050 | 50 | BLACK |
| 615A250 050 | 50 | WHITE |
| 615A450 050 | 50 | LIGHT GRAY |


| WASTE BEND 92° DS SOLVENT | |  |
|---------------------------|-----------|---|
| Code | Size (mm) | Colour |
| 6140032032 | 32 | OLIVE GRAY |
| 6141032032 | 32 | BLACK |
| 6142032032 | 32 | WHITE |
| 6144032032 | 32 | LIGHT GRAY |
| 6140040040 | 40 | OLIVE GRAY |
| 6141040040 | 40 | BLACK |
| 6142040040 | 40 | WHITE |
| 6144040040 | 40 | LIGHT GRAY |
| 6140050050 | 50 | OLIVE GRAY |
| 6141050050 | 50 | BLACK |
| 6142050050 | 50 | WHITE |
| 6144050050 | 50 | LIGHT GRAY |


| WASTE KNUCKLE BEND 90° DS SOLVENT | |  |
|-----------------------------------|-----------|--|
| Code | Size (mm) | Colour |
| 6160032032 | 32 | OLIVE GRAY |
| 6161032032 | 32 | BLACK |
| 6162032032 | 32 | WHITE |
| 6164032032 | 32 | LIGHT GRAY |
| 6160040040 | 40 | OLIVE GRAY |
| 6161040040 | 40 | BLACK |
| 6162040040 | 40 | WHITE |
| 6164040040 | 40 | LIGHT GRAY |
| 6160050050 | 50 | OLIVE GRAY |
| 6161050050 | 50 | BLACK |
| 6162050050 | 50 | WHITE |
| 6163050050 | 50 | LIGHT GRAY |

| WASTE CONVERSION KNUCKLE BEND 90° SS SOLVENT | |  |
|---|-----------|---|
| Code | Size (mm) | Colour |
| 616A032 032 | 32 | OLIVE GRAY |
| 616A132 032 | 32 | BLACK |
| 616A232 032 | 32 | WHITE |
| 616A432 032 | 32 | LIGHT GRAY |
| 616A040 040 | 40 | OLIVE GRAY |
| 616A140 040 | 40 | BLACK |
| 616A240 040 | 40 | WHITE |
| 616A440 040 | 40 | LIGHT GRAY |
| 616A050 050 | 50 | OLIVE GRAY |
| 616A150 050 | 50 | BLACK |
| 616A250 050 | 50 | WHITE |
| 616A450 050 | 50 | LIGHT GRAY |

| WASTE BRANCH 45° TS SOLVENT | |  |
|-----------------------------|-----------|--|
| Code | Size (mm) | Colour |
| 6180032032 | 32 | OLIVE GRAY |
| 6181032032 | 32 | BLACK |
| 6182032032 | 32 | WHITE |
| 6184032032 | 32 | LIGHT GRAY |
| 6180040040 | 40 | OLIVE GRAY |
| 6181040040 | 40 | BLACK |
| 6182040040 | 40 | WHITE |
| 6184040040 | 40 | LIGHT GRAY |
| 6180050050 | 50 | OLIVE GRAY |
| 6181050050 | 50 | BLACK |
| 6182050050 | 50 | WHITE |
| 6184050050 | 50 | LIGHT GRAY |

| WASTE BRANCH 92° TS SOLVENT | |  |
|-----------------------------|-----------|---|
| Code | Size (mm) | Colour |
| 6170032032 | 32 | OLIVE GRAY |
| 6171032032 | 32 | BLACK |
| 6172032032 | 32 | WHITE |
| 6174032032 | 32 | LIGHT GRAY |
| 6170040040 | 40 | OLIVE GRAY |
| 6171040040 | 40 | BLACK |
| 6172040040 | 40 | WHITE |
| 6174040040 | 40 | LIGHT GRAY |
| 6170050050 | 50 | OLIVE GRAY |
| 6171050050 | 50 | BLACK |
| 6172050050 | 50 | WHITE |
| 6174050050 | 50 | LIGHT GRAY |

| WASTE FLOOR TRAP SOLVENT | |  |
|--------------------------|-----------|--|
| Code | Size (mm) | Colour |
| 6222050050 | 50/40 | WHITE |
| 6224050050 | 50/40 | LIGHT GRAY |

| SOIL COUPLER DS SOLVENT | |  |
|-------------------------|-----------|---|
| Code | Size (mm) | Colour |
| 6120082082 | 82 | OLIVE GRAY |
| 6120110110 | 110 | OLIVE GRAY |
| 6121110110 | 110 | BLACK |
| 6124110110 | 110 | LIGHT GRAY |

| SOIL SLIP COUPLER SOLVENT | | |
|---------------------------|-----------|------------|
| Code | Size (mm) | Colour |
| 612B 000 110 | 110 | OLIVE GRAY |
| 612B 100 110 | 110 | BLACK |
| 612B 400 110 | 110 | LIGHT GRAY |

| SOIL BEND 92° DS SOLVENT | | |
|--------------------------|-----------|------------|
| Code | Size (mm) | Colour |
| 6140082082 | 82 | OLIVE GRAY |
| 6140110110 | 110 | OLIVE GRAY |
| 6141110110 | 110 | BLACK |
| 6144110110 | 110 | LIGHT GRAY |

| SOIL ACCESS DOOR BEND 92° DS SOLVENT | | |
|--------------------------------------|-----------|------------|
| Code | Size (mm) | Colour |
| 614B 0000 82 | 82 | OLIVE GRAY |
| 614B 000 110 | 110 | OLIVE GRAY |
| 614B 100 110 | 110 | BLACK |
| 614B 400 110 | 110 | LIGHT GRAY |

| SOIL CONVERSION KNUCKLE BEND 90° SS SOLVENT | | |
|---|-----------|------------|
| Code | Size (mm) | Colour |
| 614L 000 110 | 110 | OLIVE GRAY |
| 614L 100 110 | 110 | BLACK |
| 614L 400 110 | 110 | LIGHT GRAY |

| SOIL KNUCKLE BEND 110° DS SOLVENT | | |
|-----------------------------------|-----------|------------|
| Code | Size (mm) | Colour |
| 6160110110 | 110 | OLIVE GRAY |
| 6161110110 | 110 | BLACK |
| 6164110110 | 110 | LIGHT GRAY |


| SOIL ACCESS CAP SOLVENT | | |
|-------------------------|-----------|------------|
| Code | Size (mm) | Colour |
| 6130000082 | 82 | OLIVE GRAY |
| 6130000110 | 110 | OLIVE GRAY |
| 6131000110 | 110 | BLACK |
| 6134000110 | 110 | LIGHT GRAY |


| SOIL BEND 92° SS SOLVENT | | |
|--------------------------|-----------|------------|
| Code | Size (mm) | Colour |
| 614A 000 110 | 110 | OLIVE GRAY |
| 614A 100 110 | 110 | BLACK |
| 614A 400 110 | 110 | LIGHT GRAY |


| SOIL ACCESS DOOR BEND 92° SS SOLVENT | | |
|--------------------------------------|-----------|------------|
| Code | Size (mm) | Colour |
| 614C 000 110 | 110 | OLIVE GRAY |
| 614C 100 110 | 110 | BLACK |
| 614C 400 110 | 110 | LIGHT GRAY |


| SOIL BEND 45° DS SOLVENT | | |
|--------------------------|-----------|------------|
| Code | Size (mm) | Colour |
| 6150082082 | 82 | OLIVE GRAY |
| 6150110110 | 110 | OLIVE GRAY |
| 6151110110 | 110 | BLACK |
| 6154110110 | 110 | LIGHT GRAY |


| SOIL KNUCKLE BEND 110° SS SOLVENT | | |
|-----------------------------------|-----------|------------|
| Code | Size (mm) | Colour |
| 616A 000 110 | 110 | OLIVE GRAY |
| 616A 100 110 | 110 | BLACK |
| 616A 400 110 | 110 | LIGHT GRAY |


| SOIL BRANCH 92° TS SOLVENT | |  |
|----------------------------|-----------|---|
| Code | Size (mm) | Colour |
| 6170082082 | 82 | OLIVE GRAY |
| 6170110110 | 110 | OLIVE GRAY |
| 6171110110 | 110 | BLACK |
| 6174110110 | 110 | LIGHT GRAY |


| SOIL BOSS PIPE CONNECTOR DS SOLVENT | |  |
|-------------------------------------|-----------|---|
| Code | Size (mm) | Colour |
| 6170110032 | 110X32 | OLIVE GRAY |
| 6171110032 | 110X32 | BLACK |
| 6174110032 | 110X32 | LIGHT GRAY |
| 6170110040 | 110X40 | OLIVE GRAY |
| 6171110040 | 110X40 | BLACK |
| 6174110040 | 110X40 | LIGHT GRAY |
| 6170110050 | 110X50 | OLIVE GRAY |
| 6171110050 | 110X50 | BLACK |
| 6174110050 | 110X50 | LIGHT GRAY |


| SOIL BRANCH 45° TS SOLVENT | |  |
|----------------------------|-----------|---|
| Code | Size (mm) | Colour |
| 6180082082 | 82 | OLIVE GRAY |
| 6180110110 | 110 | OLIVE GRAY |
| 6181110110 | 110 | BLACK |
| 6184110110 | 110 | LIGHT GRAY |

| SOIL BRANCH 45° DS SOLVENT | |  |
|----------------------------|-----------|---|
| Code | Size (mm) | Colour |
| 618A000 110 | 110 | OLIVE GRAY |
| 618A100 110 | 110 | BLACK |
| 618A400 110 | 110 | LIGHT GRAY |


| SOIL SHORT BOSS PIPE CONNECTOR DS SOLVENT (REQUIRES BOSS ADAPTOR) | |  |
|---|-----------|---|
| Code | Size (mm) | Colour |
| 6170110063 | 110X63 | OLIVE GRAY |
| 6171110063 | 110X63 | BLACK |
| 6174110063 | 110X63 | LIGHT GRAY |


| SOIL BRANCH 92° DS SOLVENT | |  |
|----------------------------|-----------|---|
| Code | Size (mm) | Colour |
| 617A000 110 | 110 | OLIVE GRAY |
| 617A100 110 | 110 | BLACK |
| 617A400 110 | 110 | LIGHT GRAY |


| SOIL ACCESS DOOR BRANCH 92° TS SOLVENT | |  |
|--|-----------|---|
| Code | Size (mm) | Colour |
| 617B000 110 | 110 | OLIVE GRAY |
| 617B100 110 | 110 | BLACK |
| 617B400 110 | 110 | LIGHT GRAY |


| SOIL ACCESS DOOR BRANCH 92° DS SOLVENT | |  |
|--|-----------|---|
| Code | Size (mm) | Colour |
| 617C000 110 | 110 | OLIVE GRAY |
| 617C100 110 | 110 | BLACK |
| 617C400 110 | 110 | LIGHT GRAY |


| TEE BOSS ADAPTOR SOLVENT | |  |
|--------------------------|-----------|---|
| Code | Size (mm) | Colour |
| 6190050032 | 51X32 | OLIVE GRAY |
| 6191050032 | 51X32 | BLACK |
| 6192050032 | 51X32 | WHITE |
| 6194050032 | 51X32 | LIGHT GRAY |
| 6190050040 | 51X40 | OLIVE GRAY |
| 6191050040 | 51X40 | BLACK |
| 6192050040 | 51X40 | WHITE |
| 6194050040 | 51X40 | LIGHT GRAY |
| 6190050050 | 51X50 | OLIVE GRAY |
| 6191050050 | 51X50 | BLACK |
| 6192050050 | 51X50 | WHITE |
| 6194050050 | 51X50 | LIGHT GRAY |


| SOIL BOSS CONNECTOR SOLVENT (2 PIECES) | |  |
|--|-----------|--|
| Code | Size (mm) | Colour |
| 6240110040 | 110X40 | OLIVE GRAY |
| 6240110050 | 110X50 | OLIVE GRAY |


| SOIL STRAP BOSS OPEN TYPE "A" (REQUIRES 63mm ADAPTOR) | |  |
|---|-----------|---|
| Code | Size (mm) | Colour |
| 624A0110 63 | 110X63 | OLIVE GRAY |
| 624A1110 63 | 110X63 | BLACK |
| 624A4110 63 | 110X63 | LIGHT GRAY |


| SOIL ACCESS DOOR PIPE DS SOLVENT | |  |
|----------------------------------|---------------|---|
| Code | Size(mm x mm) | Colour |
| 6250000110 | 110X63 | OLIVE GRAY |
| 6251000110 | 110X63 | BLACK |
| 6254000110 | 110X63 | LIGHT GRAY |


| SOIL VENT TERMINAL SOLVENT | |  |
|----------------------------|-----------|---|
| Code | Size (mm) | Colour |
| 6210050050 | 50 | OLIVE GRAY |
| 6211050050 | 50 | BLACK |
| 6214050050 | 50 | LIGHT GRAY |
| 6210082082 | 82 | OLIVE GRAY |
| 6210110110 | 110 | OLIVE GRAY |
| 6211110110 | 110 | BLACK |
| 6214110110 | 110 | LIGHT GRAY |


| SOIL VENT COWL SOLVENT | |  |
|------------------------|-----------|---|
| Code | Size (mm) | Colour |
| 621A 000 110 | 110 | OLIVE GRAY |
| 621A 100 110 | 110 | BLACK |
| 621A 200 110 | 110 | LIGHT GRAY |
| 621A 400 110 | 110 | WHITE |


| SOIL STRAP BOSS OPEN TYPE "A" SOLVENT | |  |
|---------------------------------------|-----------|---|
| Code | Size (mm) | Colour |
| 624A0110 50 | 110X50 | OLIVE GRAY |
| 624A1110 50 | 110X50 | BLACK |
| 624A4110 50 | 110X50 | LIGHT GRAY |

| SOIL STRAP BOSS TYPE "B" SOLVENT | |  |
|----------------------------------|-----------|---|
| Code | Size (mm) | Colour |
| 624B 0110 50 | 110X50 | OLIVE GRAY |
| 624B 2110 50 | 110X50 | BLACK |


| SOIL ACCESS DOOR PIPE SS SOLVENT (REQUIRES 63mm ADAPTOR) | | |  |
|---|-----------|------------|---|
| Code | Size (mm) | Colour | |
| 625A 000 110 | 110X63 | OLIVE GRAY | |
| 625A 100 110 | 110X63 | BLACK | |
| 625A 400 110 | 110X63 | LIGHT GRAY | |


| SOIL GULLY TRAP TYPE "B" SOLVENT | | |  |
|----------------------------------|-----------|------------|---|
| Code | Size (mm) | Colour | |
| 6320110082 | 110X82X50 | OLIVE GRAY | |


| SOIL COUPLER DS PUSH FIT | | |  |
|--------------------------|-----------|------------|---|
| Code | Size (mm) | Colour | |
| 6620110110 | 110 | OLIVE GRAY | |
| 6621110110 | 110 | BLACK | |
| 6624110110 | 110 | LIGHT GRAY | |


| SOIL COUPLER SOLVENT / PUSH FIT | | |  |
|---------------------------------|-----------|------------|---|
| Code | Size (mm) | Colour | |
| 662C 000 110 | 110 | OLIVE GRAY | |
| 662C 100 110 | 110 | BLACK | |
| 662C 200 110 | 110 | WHITE | |
| 662C 400 110 | 110 | LIGHT GRAY | |


| SOIL BEND 92° SS PUSH FIT | | |  |
|---------------------------|-----------|------------|---|
| Code | Size (mm) | Colour | |
| 664A 000 110 | 110 | OLIVE GRAY | |
| 664A 100 110 | 110 | BLACK | |
| 664A 400 110 | 110 | LIGHT GRAY | |

| SOIL FLOOR GULLY INTEL (PP: POLYPROPYLENE) | | |  |
|--|-----------|--------|---|
| Code | Size (mm) | Colour | |
| 6262145145 | 145X145 | WHITE | |

| SOIL GULLY TRAP TYPE "A" SOLVENT | | |  |
|----------------------------------|-----------|------------|---|
| Code | Size (mm) | Colour | |
| 6310110082 | 82X50 | OLIVE GRAY | |


| SOIL SLIP COUPLER PUSH FIT (WITHOUT STOP) | | |  |
|---|-----------|------------|---|
| Code | Size (mm) | Colour | |
| 662B 000 110 | 110 | OLIVE GRAY | |
| 662B 100 110 | 110 | BLACK | |
| 662B 200 110 | 110 | WHITE | |
| 662B 400 110 | 110 | LIGHT GRAY | |

| SOIL BEND 92° DS PUSH FIT | | |  |
|---------------------------|-----------|------------|---|
| Code | Size (mm) | Colour | |
| 6640110110 | 110 | OLIVE GRAY | |
| 6641110110 | 110 | BLACK | |
| 6644110110 | 110 | LIGHT GRAY | |


| SOIL ACCESS DOOR BEND 92° DS PUSH FIT | | |  |
|---------------------------------------|-----------|------------|---|
| Code | Size (mm) | Colour | |
| 664B 000 110 | 110 | OLIVE GRAY | |
| 664B 100 110 | 110 | BLACK | |
| 664B 400 110 | 110 | LIGHT GRAY | |


| SOIL ACCESS DOOR BEND 92° SS PUSH FIT | | |  |
|---------------------------------------|-----------|------------|---|
| Code | Size (mm) | Colour | |
| 664C000 110 | 110 | OLIVE GRAY | |
| 664C100 110 | 110 | BLACK | |
| 664C400 110 | 110 | LIGHT GRAY | |


| SOIL BEND 30° DS PUSH FIT | | |  |
|---------------------------|-----------|------------|---|
| Code | Size (mm) | Colour | |
| 6650030110 | 110 | OLIVE GRAY | |
| 6651030110 | 110 | BLACK | |
| 6654030110 | 110 | LIGHT GRAY | |


| SOIL BEND 45° SS PUSH FIT | | |  |
|---------------------------|-----------|------------|---|
| Code | Size (mm) | Colour | |
| 665A000 110 | 110 | OLIVE GRAY | |
| 665A100 110 | 110 | BLACK | |
| 665A400 110 | 110 | LIGHT GRAY | |

| SOIL BEND 15° SS PUSH FIT | | |  |
|---------------------------|-----------|------------|---|
| Code | Size (mm) | Colour | |
| 665A015 110 | 110 | OLIVE GRAY | |
| 665A115 110 | 110 | BLACK | |
| 665A415 110 | 110 | LIGHT GRAY | |


| SOIL BRANCH 92° TS PUSH FIT | | |  |
|-----------------------------|-----------|------------|---|
| Code | Size (mm) | Colour | |
| 6670110110 | 110 | OLIVE GRAY | |
| 6671110110 | 110 | BLACK | |
| 6674110110 | 110 | LIGHT GRAY | |

| SOIL BEND 45° DS PUSH FIT | | |  |
|---------------------------|-----------|------------|---|
| Code | Size (mm) | Colour | |
| 6651110110 | 110 | BLACK | |
| 6654110110 | 110 | LIGHT GRAY | |


| SOIL BEND 15° DS PUSH FIT | | |  |
|---------------------------|-----------|------------|---|
| Code | Size (mm) | Colour | |
| 6650015110 | 110 | OLIVE GRAY | |
| 6651015110 | 110 | BLACK | |
| 6654015110 | 110 | LIGHT GRAY | |


| SOIL BEND 30° SS PUSH FIT | | |  |
|---------------------------|-----------|------------|---|
| Code | Size (mm) | Colour | |
| 665A030 110 | 110 | OLIVE GRAY | |
| 665A130 110 | 110 | BLACK | |
| 665A430 110 | 110 | LIGHT GRAY | |


| OFFSET BEND 45° DS SOLVENT / PUSH FIT | | |  |
|---------------------------------------|-----------|------------|---|
| Code | Size (mm) | Colour | |
| 665C000 110 | 110 | OLIVE GRAY | |
| 665C100 110 | 110 | BLACK | |
| 665C400 110 | 110 | LIGHT GRAY | |


| SOIL BRANCH 92° DS PUSH FIT | | |  |
|-----------------------------|-----------|------------|---|
| Code | Size (mm) | Colour | |
| 667A000 110 | 110 | OLIVE GRAY | |
| 667A100 110 | 110 | BLACK | |
| 667A400 110 | 110 | LIGHT GRAY | |


| SOIL ACCESS DOOR BRANCH 92° TS PUSH FIT | |  |
|---|-----------|---|
| Code | Size (mm) | Colour |
| 667B 000 110 | 110 | OLIVE GRAY |
| 667B 100 110 | 110 | BLACK |
| 667B 400 110 | 110 | LIGHT GRAY |


| SOIL ACCESS DOOR BRANCH 92° DS PUSH FIT | |  |
|---|-----------|---|
| Code | Size (mm) | Colour |
| 667C 000 110 | 110 | OLIVE GRAY |
| 667C 100 110 | 110 | BLACK |
| 667C 400 110 | 110 | LIGHT GRAY |

| SOIL BRANCH 45° TS PUSH FIT | |  |
|-----------------------------|-----------|---|
| Code | Size (mm) | Colour |
| 6680110110 | 110 | OLIVE GRAY |
| 6681110110 | 110 | BLACK |
| 6684110110 | 110 | LIGHT GRAY |

| SOIL BRANCH 45° DS PUSH FIT | |  |
|-----------------------------|-----------|---|
| Code | Size (mm) | Colour |
| 668A 000 110 | 110 | OLIVE GRAY |
| 668A 100 110 | 110 | BLACK |
| 668A 400 110 | 110 | LIGHT GRAY |

| SOIL ACCESS DOOR PIPE DS PUSH FIT (REQUIRES 63mm ADAPTOR) | |  |
|--|-----------|---|
| Code | Size (mm) | Colour |
| 675000110 | 110X63 | OLIVE GRAY |
| 675000111 | 110X63 | BLACK |
| 675000114 | 110X63 | LIGHT GRAY |

| SOIL ACCESS DOOR PIPE SS PUSH FIT (REQUIRES 63mm ADAPTOR) | |  |
|--|-----------|---|
| Code | Size (mm) | Colour |
| 675A 000 110 | 110X63 | OLIVE GRAY |
| 675A 100 110 | 110X63 | BLACK |
| 675A 400 110 | 110X63 | LIGHT GRAY |

| SOIL PIPE CLIPS (PP:POLYPROPYLENE) | |  |
|------------------------------------|-----------|---|
| Code | Size (mm) | Colour |
| 817C 000 110 | 110 | OLIVE GRAY |
| 817C 100 110 | 110 | BLACK |
| 817C 200 110 | 110 | WHITE |
| 817C 400 110 | 110 | LIGHT GRAY |

Testing of U-PVC Piping systems for Drainage and Sewerage

Several tests are carried out to verify the compliance of our U-PVC pressure pipes with the relevant standards through in-house testing as well as tests in external accredited laboratories. Furthermore, all quality procedures and practices are checked from the entry of raw material, until the delivery of the pipes to the customers. Out of the regular inspections of appearance, color, marking and geometric characteristics, several mechanical and material tests are carried out as mentioned below:

Resistance to Internal Pressure Test

This test determines the resistance of pipes to internal pressure in accordance with the EN ISO 1167-1 International Standard as follows:

- (i) All pipes are tested under long term hydrostatic pressure at 60°C, for 1000 hours at Circumferential Stress of 10 MPa, without any failure.
- (ii) All fittings are also tested under long term hydrostatic pressure at 60°C, for 1000 hours at Circumferential Stress of 6.3MPa without any failure.

Water-tightness Test

In accordance with ISO 13254 Standard, this test checks the water-tightness of U-PVC samples when are subjected to internal pressure of 0.5 bar pressure for 1 minute without any failure.

Vicat Softening Temperature (VST) Test

The aim of this test is to determine the softening point of the U-PVC material under a load of 50N and a heating rate of 50 °C/h according to the guidelines of EN 727 Standard.

Impact Resistance Test

The scope of this test is to verify the resistance of pipes to external blows at 0°C, where the pipes shall have a true impact rate (TIR) of not more than 10% in accordance with EN744 Standard.

Resistance to Dichloromethane Test

This test aims to investigate the effect of dichloromethane at any part of the surface of the test piece according to the instructions of EN580.

Longitudinal Reversion Test

This test is conducted in order to check the amount of reversion under 150°C of heat exposure within a hot air oven. The maximum acceptable reversion is 5% as specified in the ISO 2505 International Standard.

Effects of Heating Test

This test determines the resistance of the U-PVC products to heating using an air oven. The relevant test method is specified in EN 763 European Standard.

Elevated Temperature Cycling for Application Area BD Test


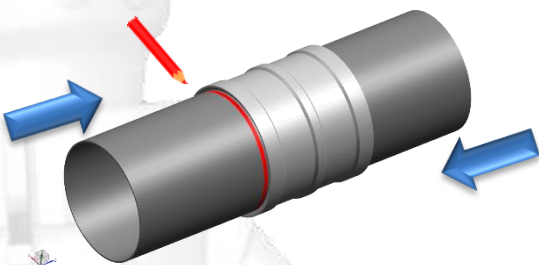
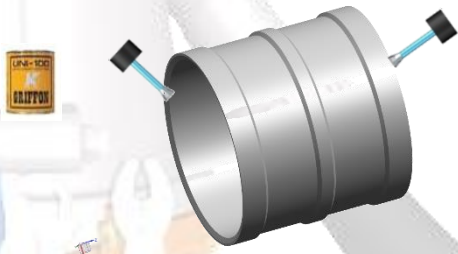
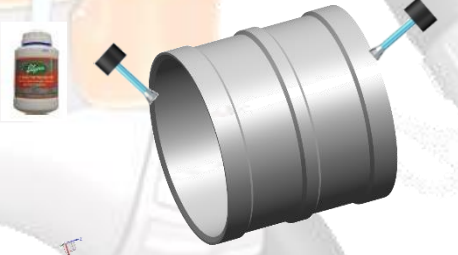
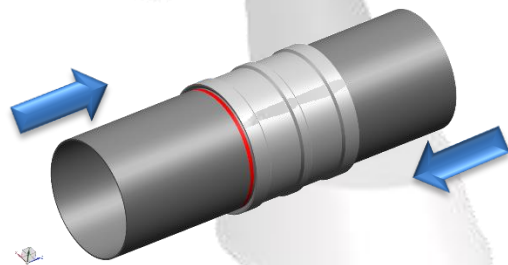
The scope of this tests is to assess the leak-tightness and the resistance to sagging of our U-PVC piping systems for non-pressure applications under 1500 cycles of elevated temperature cycling in accordance with EN 1055 Standard.

Uniaxial Tensile Test

The scope of this test is to investigate the failure point of the U-PVC sample when it's subjected to a controlled tension. The sample shall meets the requirements of EN ISO 6259 Standard.



Assembly Procedure

| | INSTRUCTIONS | PROCEDURES |
|--------|---|--|
| STEP 1 | 1. Pipe shall be cut straight and square to the axis and its end should be chamfered at an angle of about 15° to approximately 1/3 of pipe's wall thickness by using a chamfering tool. |  |
| STEP 2 | 2. After ensuring that the spigot and socket are free from dust and as dry as possible, the pipe should be inserted into the socket and mark the pipe when it is fully inserted. |  |
| STEP 3 | 3. Clean thoroughly the abraded surfaces of pipe and fittings using a clean paper towel with a U-PVC cleaner. |  |
| | 4. Use a suitable brush and apply the adhesive on the sockets' internal surface and pipes' external surface up to the mark previously made, working with respect to the central axis. |  |
| STEP 4 | 5. Push the pipe or fitting firmly into the socket up to the mark previously made. |  |

Notes:



FOR CONDUCT:

HEAD OFFICE & FACTORY: 5 PENTADAKTYLOU STREET, 2643 ERGATES INDUSTRIAL ZONE, NICOSIA

T. +357 22455000, **F.** +357 22455055

MAIL ADDRESS: P.O. Box 27014, 1641 NICOSIA, CYPRUS

WEBPAGE: WWW.ELYSÉE.COM.CY

E-MAIL: ELYSÉE@ELYSÉE.COM.CY

ELYSÉE WISE: GHERFINE – MAIN ROAD BYBLOS, LEBANON

T. +961 9 624551, **F.** +961 9 624552,

MAIL ADDRESS: E-MAIL: INFO@ELYSÉEWISE.COM

P.O.Box 48 BYBLOS, LEBANON



Elysee Irrigation



Elyseeey



[elyseeexportcoordinator](https://www.skype.com/en/contacts/009619624551)



Elysee Irrigation