

# Drainage Pipe System

British Standard



**FITTINGS RANGE : Hunter, Ezyflo, Redi**  
**BS EN 1329 • BS EN 1401 • BS 5255 • BS 4514**  
**BS 4660 • BS 5481**

# UPVC Drainage Pipe System

**UPVC Drainage Pipe System**  
British Standard

## Drainage Pipe Systems

National Plastics produces a range of UPVC pipes for above and below ground use made from 100% virgin UPVC. It has full range of fittings in both solvent weld and rubber ring joint for all sizes.

The pipes are produced in all the major international standards ie: European Standards BS EN 1401, BS EN 1329, as well as the previous standards such as BS 5255, BS 4514, BS 4660, BS 5481. A range complying to ASTM D2655 Sch 40/80 is also available on request.

National Plastic also has Kitemark licences from BSI for the EN range from 1 1/4" to 16" and can supply Kitemark certified pipes where required.

National Plastic can provide a range of fittings from its own Ezyflo brand or from Redi and Hunter.

### General Properties of National Plastic Drain Pipes

- Fully compliant to the main International Standards
- Kitemark certified range
- Tough, impact resistant
- EPDM rubber rings following EW681 Standard
- Can be supplied in Solvent Weld or Rubber Ring Joint (from 3" and above)
- Different lengths available 3m, 2.9m, 6m, 5.8m. Other lengths on request.
- Distinctive colour coded system (ie Light Grey, Brown, White, etc.) with full printing at 1m intervals
- Superior chemical and acid resistance
- Outstanding mechanical properties of tensile strength and resistance to pressure.

## BS 5255, BS 4514, BS 4660, BS 5481

Code	Nominal OD mm(inch)	Minimum OD mm	Minimum Wall Thickness mm	Colour
<b>BS 5255 WASTE</b>				
DR-125	36(1 1/4")	36.15	1.8	WH/LG
DR-15	43(1 1/2")	42.75	1.9	"
DR-2(50)*	50(2")	50.00	2.0	"
DR-2(55)	55(2")	55.75	2.0	"
<b>BS 4514 SOIL</b>				
DR-3/LG	82(3")	82.40	3.0	LG
DR-4/LG	110(4")	110.00	3.2	"
DR-6/LG	160(6")	160.00	3.2	"
<b>BS 4660 UNDERGROUND</b>				
DR-4/BR	110(4")	110.00	3.2	BR
DR-6/BR	160(6")	160.00	4.1	"
<b>BS 5481 GRAVITY SEWER</b>				
DR-8/BR	200(8")	200.00	4.9	BR
DR-10/BR	250(10")	250.00	6.1	"
DR-12/BR	315(12")	315.00	7.7	"
DR-16/BR	400(16")	400.00	9.8	"

\* Not part of BS 5255. Metric only.

# UPVC Drainage Pipe System

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## The main features of Ezyflo drainage fittings are:

- Strong and resistant to impact
- Easy to install and compatible with National Plastic drainage pipe.
- Fully compliant to the BS standards.
- Resistant to a wide range of chemicals / fluids.
- Smooth bore to give excellent flow characteristics.



## Raw Material

The raw material is 100% virgin PVC-U

## Colour

BS EN 1329-1:2000 v Light Grey  
BS EN 1401-1:1998 v Orange Brown

## Chamfering

A 15° chamfer is applied to all spigot ends for rubber ring pipe.

## Length

Pipes are normally supplied in 6m overall length.

Pipes can also be supplied in 5.8m overall length to fit inside containers.

Sizes 36, 43 and 56mm are supplied in 4m overall length with plain ends.

## Specifications:

Standards	:	BS 5255 - Light Grey; BS 4514 - Light Grey; BS 4660 - Brown
Material	:	100% uPVC
Joints	:	Female solvent weld sockets
Temp Range	:	0°C - 80°C (for intermittent discharge)
Tensile Strength	:	Min. 45 N/mm <sup>2</sup>

## Characteristics of Pipes BS EN1329, BS EN1401

## Compound Characteristics

The compounds used in National Plastic pipes conforming to the standards have the following characteristics.

Modulus of Elasticity	=	E (1 min) ≥ 3000 mPa
Average Density	=	1.4 g/cm <sup>3</sup>
Average Coefficient of Linear Thermal Expansion	=	0.8mm/mK
Thermal Conductivity	=	0.16 WK <sup>-1</sup> m <sup>-1</sup>
Surface Resistance	=	> 10 <sup>12</sup> Ω



Dubai International Airport, Dubai

## Mechanical and Physical Characteristics

Characteristics	Requirement	Test Method
Impact Resistance	TIR ≤ 10%	EN 744
Vicat Softening	≥ 79°C	EN 727
Longitudinal Reversion	≤ 5%	EN 743
Dichloromethane Acid Resistance	No attack	EN 580
Water Tightness of Rubber Ring Joint	No leakage	EN 1277
Elevated Temp. Cycling	No leakage	EN 1055
Long Term Performance of TPE Seals	1. 90 days ≥ 1.3 bar 2. 100 years ≥ 0.6 bar	prEN 1989
Resistance to Internal Pressure	No failure during the test 10.0MPa for 1000 hours, at 60°C	EN 921

## BS EN 1329-1:2000

Dimensions in millimeters

Nominal Size DN/OD	Nominal OD	Mean Outside Diameter		Wall Thickness Application Area "B"	
		(dem, min)	(dem, max)	(e, min)	(e, max)
36 (1 1/4")	36	36.2	36.5	3.0	3.5
43 (1 1/2")	43	42.8	43.1	3.0	3.5
56 (2")	56	55.8	56.1	3.0	3.5
82 (3")	82	82.0	82.3	3.0	3.5
110 (4")	110	110.0	110.30	3.2	3.8
160 (6")	160	160.0	160.40	3.2	3.8
200 (8")	200	200.0	200.5	3.9	4.5
250 (10")	250	250.0	250.5	4.9	5.6
315 (12")	315	315.0	315.6	6.2	7.1

N.B. Application area "B" for components intended to be used above ground inside the building or outside building fixed to a wall.

## BS EN 1401-1:1998

Dimensions in millimeters

Nominal Size DN/OD	Nominal OD	Mean Outside Diameter		Wall Thickness SN2, SDR 51		Wall Thickness SN4, SDR 41		Wall Thickness SN8, SDR 34	
		(dem, min)	(dem, max)	(e, min)	(e, max)	(e, min)	(e, max)	(e, min)	(e, max)
110 (4")	110	110.0	110.3	-	-	3.2	3.8	3.2	3.8
160 (6")	160	160.0	160.4	3.2	3.8	4.0	4.6	4.7	5.4
200 (8")	200	200.0	200.5	3.9	4.5	4.9	5.6	5.9	6.7
250 (10")	250	250.0	250.5	4.9	5.6	6.2	7.1	7.3	8.3
315 (12")	315	315.0	315.6	6.2	7.1	7.7	8.7	9.2	10.4
400 (16")	400	400.0	400.7	7.9	8.9	9.8	11.0	11.7	13.1

N.B. For Outside the building structure application area "U" SN2 = Ring stiffness of 2 KN/m<sup>2</sup> SN4 = Ring stiffness of 4 KN/m<sup>2</sup>



# A Few Worldwide Projects

National Plastic products have been used in thousands of projects in four continents.

## AFGHANISTAN

- Water Distribution Network for relief project in Kabul
- uPVC well casing and screen for Aid Agency project
- Conduits for telecommunications

## ALGERIA

- Water well projects

## ANGOLA

- Rural water distribution

## AUSTRALIA

- Environmental Monitoring System

## AZERBAIJAN

- AGT Pipeline Facilities, Baku

## BAHRAIN

- Irrigation Network System
- Municipal Water Supply

## BANGLADESH

- Telecommunication Network Dhaka

## CAMBODIA

- Village Water Supply System in Phnom Penh

## CAPE VERDE

- Water Distribution Network

## CHAD

- Water well projects

## CHINA

- UN Funded Water well projects

## COMOROS

- Water Distribution System

## CONGO

- uPVC & CPVC Pipe System for 100 Villa Project, Kinshasa

## CYPRUS

- Water Supply Distribution Network

## DJIBOUTI

- Housing Drainage Network Djibouti

## EGYPT

- Water Supply Distribution System Cairo

## ERITREA

- Town Water Supply & Drainage Network, Asmara
- Drip Irrigation System Citrus Fruit Farm, Asmara
- UPVC Pipes & Fittings for Mealewya Water Development Project

## ETHIOPIA

- Town Water Distribution Network Addis Ababa
- Town Sewerage & Drainage Addis Ababa

## FRANCE

- Drip Irrigation System Paris

## GAMBIA

- Rural Water Distribution

## GEORGIA

- Water Supply Distribution Network

## GERMANY

- Environmental Monitoring System

## HONGKONG

- uPVC Pipe System for Government projects

## INDIA

- Pilot Drip Irrigation System for Horticultural Project in Central India
- UPVC Pipes for Champion Reef Golf Course Project
- Boulder Hills, India
- DLF Golf and Country Club, India

## IRAN

- Irrigation equipments for Tehran Municipality projects

## IRAQ

- uPVC Pipes and Fittings for UN funded water distribution projects

## ITALY

- Pipe & Irrigation System

## JAPAN

- Micro Irrigation System for Greenhouse Company

## JORDAN

- Casing & Screen for rural water well projects
- uPVC Pipe System for water supply network

## KENYA

- Water well projects
- Drip Irrigation System

## KUWAIT

- uPVC Pipes for Kuwait Oilfield installation
- LDPE pipes for Kuwait Oil Company

## KYRGHYZSTAN

- Housing complex Water Distribution Network, Bishkek

## LAOS

- Water Supply Distribution Network

## LEBANON

- Drainage Pipes for housing project in Beirut

## LIBYA

- Water well Projects
- Cathodic Protection System

## MAURITANIA

- Tasiast Gold Mine, Mauritania

## MAURITIUS

- uPVC Pipes for Water Supply & Irrigation, Port Louis

## MADAGASCAR

- Water well Projects

## MALAYSIA

- Water well Projects

## MALAWI

- UPVC Pipes Water Supply Projects in Mzuzu Phase 3 and Kasungu

## MOROCCO

- Water Distribution Network Rabat

## MYANMAR

- Community Water Supply System Yangon
- Royal Myanmar Golf Course

## NEPAL

- Water Distribution Networks Katmandu

## NEW ZEALAND

- Micro Irrigation equipment for irrigation company
- Irrigation PVC pipes, New Zealand

## NORTH KOREA

- Water Distribution Network

## OMAN

- uPVC Well Casing and Screens for various agriculture projects
- Waterproofing Roof coating Ministry of Agri., Inform & Health Muscat

## PAKISTAN

- Telecommunication Network Karachi
- uPVC Pipe / Well casing and screen for UN funded projects
- Bahria Golf City, Pakistan

## QATAR

- Central A/C Coating System, Sports Stadium, Doha
- uPVC Pipes for Ras Laffan Housing Project
- Casing and Screen project for Qatar International Airport

## RWANDA

- Village Water Supply Network Kigali

## SAUDI ARABIA

- Telephone duct for Saudi Arabia Telecom
- uPVC Pipes for various irrigation / landscape projects

## SENAGAL

- Water Supply Network

## SINGAPORE

- Water Supply System
- Laguna Golf Club, Singapore

## SOMALIA

- Rural Water Supply System

## SOUTH AFRICA

- uPVC Well Casing and Screens

## SPAIN

- Heavy duty casing & screen for Power Generating Authority in Northern Spain

## SRI LANKA

- Various Waterproofing Roof Coating projects

## SUDAN

- Waterproofing Roof Coating Rep Palace & Airprt, Khartoum
- Water well projects, Khartoum

## SYRIA

- Micro Irrigation System for various agricultural projects

## TANZANIA

- Village Water Supply System Dar Es Salaam

## THAILAND

- UPVC Well Casing & Screen Pipes
- Golf Course Irrigation Systems

## TURKMENISTAN

- Residential Water Supply System, Ashgabat

## UNITED ARAB EMIRATES

- International City, Dubai
- Festival City, Dubai
- International Airport Expansion, Dubai
- Burj Khalifa, Dubai
- Jumeirah Lake Towers, Dubai
- Madinat Jumeirah, Dubai
- Green Community, Dubai
- Palm Islands, Dubai
- Jumeirah Beach Residence, Dubai
- Arabian Ranches, Dubai
- Al Ruwaya Tiger Woods Golf Course, Dubai
- Conference Palace Hotel, Abu Dhabi
- Presidential Palace, Abu Dhabi
- Al Sowwah Island, Abu Dhabi
- City of Lights, Abu Dhabi
- Water Park Yas Island, Abu Dhabi
- Saadiyat Beach Apartment, Abu Dhabi
- Shams Al Reem Island, Abu Dhabi
- Khalifa Park, Abu Dhabi
- Rosewood Hotel, Abu Dhabi
- Mafraq Hospital, Abu Dhabi
- Al Raha Beach Resort
- Medical College, Al-Ain
- Marjan Island, Ras Al Khaimah

## UGANDA

- Water Supply Distribution Network Kampala

## UNITED KINGDOM

- uPVC & PE Casing/Screen pipes
- PVC pipes for water supply distribution

## UZBEKISTAN

- Golf Course Irrigation Network System, Tashkent

## VIETNAM

- uPVC Well Casing & Screen for Aid project
- uPVC pipes & fittings for town water supply
- uPVC Pipes for Long Bien Development
- Twin Doves Golf Course, Vietnam
- Ho Tram Golf Course, Vietnam

## YEMEN

- uPVC pipes & fittings & irrigation System for World Bank funded projects

## ZAMBIA

- Water well Projects

# INTERNATIONAL CERTIFICATIONS

Our Ref: HU/M110101  
Test Report: MAT/LAB 545C



11<sup>th</sup> April 2011

National Plastic & Building Material Industries LLC,  
PO Box 1943,  
Sharjah,  
UAE

**WATER REGULATIONS ADVISORY SCHEME (WRAS)  
MATERIAL APPROVAL**

The material referred to in this letter is suitable for contact with wholesome water for domestic purposes having met the requirements of BS 6920-1:2000 'Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water'.

The reference relates solely to its effect on the quality of the water with which it may come into contact and does not signify the approval of its mechanical or physical properties for any use.

**POLYVINYLCHLORIDE (PVC, PVC-U & CPVC) 5300**

National Plastic Sharjah blue coloured, extruded PVC-U pipe. For use with water up to 23°C.

**APPROVAL NUMBER: 1011525  
APPROVAL HOLDER: NATIONAL PLASTIC & BUILDING MATERIAL INDUSTRIES LLC.**

The Scheme reserves the right to review approval. This approval is valid between November 2010 and November 2015.

An entry, as above, will accordingly be included in the Water Fittings Directory on-line under the section headed, "Materials which have passed full tests of effect on water quality".

The Directory may be found at: [www.wras.co.uk/directory](http://www.wras.co.uk/directory)

Yours faithfully

Jason Furnival  
Approvals & Enquiries Manager  
Water Regulations Advisory Scheme

Water Regulations Advisory Scheme Ltd,  
20 West Close, River Vale Industrial Estate,  
Huddersfield, G13 7JG, UK.  
Tel: 01484 246114 Fax: 01484 213095  
E-mail: [info@wras.co.uk](mailto:info@wras.co.uk) Website: [www.wras.co.uk](http://www.wras.co.uk)

Our Ref: HU/M120421  
Test Report: M105169



18<sup>th</sup> January 2012

National Plastic &  
Building Materials Industries LLC,  
PO Box 1943,  
Sharjah,  
UAE

**WATER REGULATIONS ADVISORY SCHEME (WRAS)  
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The reference relates solely to its effect on the quality of the water with which it may come into contact and does not signify the approval of its mechanical or physical properties for any use.

**POLYVINYLCHLORIDE (PVC, PVC-U AND CPVC) - COMPONENTS 5300**

"NATIONAL PLASTIC SHARJAH-LF". Grey coloured, extruded PVC-U pipe. For use with water up to 60°C.

**APPROVAL NUMBER: 1201510  
APPROVAL HOLDER: NATIONAL PLASTIC & BUILDING MATERIALS INDUSTRIES LLC**

The Scheme reserves the right to review approval. This approval is valid between January 2012 and January 2017.

An entry, as above, will accordingly be included in the Water Fittings Directory on-line under the section headed, "Materials which have passed full tests of effect on water quality".

The Directory may be found at: [www.wras.co.uk/directory](http://www.wras.co.uk/directory)

Yours faithfully

Jason Furnival  
Approvals & Enquiries Manager  
Water Regulations Advisory Scheme

Water Regulations Advisory Scheme Ltd,  
20 West Close, River Vale Industrial Estate,  
Huddersfield, G13 7JG, UK.  
Tel: 01484 246114 Fax: 01484 213095  
E-mail: [info@wras.co.uk](mailto:info@wras.co.uk) Website: [www.wras.co.uk](http://www.wras.co.uk)

## CERTIFICATE OF COMPLIANCE

Certificate Number: 20120810-E354422  
Report Reference: E354422-20120802  
Issue Date: 2012-AUGUST-10

Issued to: NATIONAL PLASTIC & BUILDING MATERIAL  
INDUSTRIES LLC  
INDUSTRIAL AREA NO. 1  
STREET NO. 23  
P.O. BOX 1943  
SHARJAH, UNITED ARAB EMIRATES

This is to certify that representative samples of RIGID NONMETALLIC PVC CONDUIT  
Schedule 40 rigid nonmetallic PVC conduits in the 1-1/4, 1-1/2, 2, 2-1/2, 3, 4, 5 and 6 trade sizes with integral couplings.

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate

Standard(s) for Safety: Standard for Schedule 40 and 80 type EB and a Rigid PVC Conduit and fittings, UL661

Additional Information: See the UL Online Certifications Directory at [www.ul.com/database](http://www.ul.com/database) for additional information

Only those products bearing the UL Listing Mark should be considered as being covered by UL's Listing and Follow-Up Service.

The UL Listing Mark generally includes the following elements: the symbol UL in a circle with the word "LISTED"; a control number (may be alphanumeric) assigned by UL; and the product category name (product identifier) as indicated in the appropriate UL Directory.

Look for the UL Listing Mark on the product.

William R. King, Director, North American Technical Programs  
UL LLC



# Kitemark<sup>®</sup> Licence



No. KM 509597

BSI hereby grants to:

National Plastic & Building  
Material Industries LLC  
P O Box 1943  
Sharjah  
UAE

In respect of:  
**BS EN 1452-2**

Plastic Piping Systems for Water Supply -  
Unplasticized Poly (Vinyl Chloride) (PVC-U)  
Part 2: Pipes

The right and Licence to use the Kitemark in accordance with the Kitemark Licence Conditions of Contract governing the use of the Kitemark, as may be updated from time to time by BSI, and as approved by the Registrar under the Trade Marks Act 1994 (the "Conditions"). All defined terms in this Licence shall have the same meaning as in the Conditions.

The use of the Kitemark is authorized in respect of the Product(s) detailed on this Licence provided at or from the above address.

For and on behalf of BSI:

Alastair Trivett, Managing Director, BSI Product Services - Qatara

First granted: 13 Feb 2008

Date: 19 Feb 2008

Page: 1 of 2



The licence carries the property of BSI and shall be deemed null and void if not used in accordance with the terms of the licence. For more information, please contact the BSI Customer Services Department on 020 8996 9001 or visit [www.bsi.com](http://www.bsi.com).



BSI Product Services  
Maple Road Avenue, Hemel Hempstead, Hertfordshire HP2 4SD United Kingdom  
Tel: +44 (0)1462 20442 Website: [www.bsi-global.com](http://www.bsi-global.com)  
BSI Group Headquarters: 389 Chiswick High Road, London W4 4AL, UK Tel: +44 (0)20 8996 9001

Product Services

# KITEMARK LICENCE



No. KM 79152

BSI hereby grants to:

National Plastic & Building  
Material Industries L L C  
P O Box 1943  
Sharjah  
UAE

In respect of:

Plastic piping systems for soil and waste discharge (low and high temperature)  
within the building structure - unplasticized poly(vinyl chloride) (PVC-U)

The right and Licence to use the Kitemark in accordance with the Kitemark Licence Conditions of Contract governing the use of the Kitemark, as may be updated from time to time by BSI, and as approved by the Registrar under the Trade Marks Act 1994 (the "Conditions"). All defined terms in this Licence shall have the same meaning as in the Conditions.

The use of the Kitemark is authorized in respect of the Product(s), manufactured at, or provided from, the address above and in conformity with the standard(s) detailed on the following pages.

For and on behalf of BSI:

Anne Boyd, Divisional Director, Product Services Operations

First granted: 12 May 2004

Date: 12 May 2004

Page: 1 of 2



The licence carries the property of BSI and shall be deemed null and void if not used in accordance with the terms of the licence. For more information, please contact the BSI Customer Services Department on 020 8996 9001 or visit [www.bsi.com](http://www.bsi.com).



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Tel: +44 (0)1462 20442 Website: [www.bsi-global.com](http://www.bsi-global.com)  
BSI Group Headquarters: 389 Chiswick High Road, London W4 4AL, UK Tel: +44 (0)20 8996 9001

Product Services

# KITEMARK LICENCE



No. KM 79153

BSI hereby grants to:

National Plastic & Building  
Material Industries L L C  
P O Box 1943  
Sharjah  
UAE

In respect of:

Plastics piping systems for non-pressure underground drainage and sewerage  
- Unplasticized poly(vinyl chloride)(PVC-U)

The right and Licence to use the Kitemark in accordance with the Kitemark Licence Conditions of Contract governing the use of the Kitemark, as may be updated from time to time by BSI, and as approved by the Registrar under the Trade Marks Act 1994 (the "Conditions"). All defined terms in this Licence shall have the same meaning as in the Conditions.

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Anne Boyd, Divisional Director, Product Services Operations

First granted: 12 May 2004

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Page: 1 of 2



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Tel: +44 (0)1462 20442 Website: [www.bsi-global.com](http://www.bsi-global.com)  
BSI Group Headquarters: 389 Chiswick High Road, London W4 4AL, UK Tel: +44 (0)20 8996 9001

Product Services



# ezzyello

## Drainage Fittings



- BS 5255
- BS 4514
- BS 4660

*Produced from 100% virgin uPVC material*



ISO 9001



Ezyflo fittings are produced to the highest quality standards under an ISO 9001 Quality Assurance System and are supplied with female solvent weld sockets. They are fully compatible with the full range of National Plastic soil and underground pipe. They are also colour co-ordinated with the pipe to provide a uniform drainage network.

Bends and Branches are also available with screwed access caps to allow access to the system for cleaning and maintenance purposes.

### Soil (Solvent Cement) L Grey & 82mm and above (Underground Drainage) Brown



**Branch F/F**

36 mm x 88*	Y-JU-036-2F
43 mm x 88*	Y-JU-043-2F
55 mm x 88*	Y-JU-055-2F
82 mm x 88*	Y-JU-082-2F
110 mm x 88*	Y-JU-110-2F
160 mm x 88*	Y-JU-160-2F
200 mm x 88*	Y-JU-200-2F
200 mm x 110 x 88*	Y-JU-200/110-2F
200 mm x 160 x 88*	Y-JU-200/160-2F



**Bend F/F**

36 mm x 45*	Y-45BD-036-2F
43 mm x 45*	Y-45BD-043-2F
55 mm x 45*	Y-45BD-055-2F
82 mm x 45*	Y-45BD-082-2F
110 mm x 45*	Y-45BD-110-2F
160 mm x 45*	Y-45BD-160-2F
200 mm x 45*	Y-45BD-200-2F



**Bend F/F**

36 mm x 88*	Y-BD-036-2F
43 mm x 88*	Y-BD-043-2F
55 mm x 88*	Y-BD-055-2F
82 mm x 88*	Y-BD-082-2F
110 mm x 88*	Y-BD-110-2F
160 mm x 88*	Y-BD-160-2F
200 mm x 88*	Y-BD-200-2F



**Coupler F/F**

36 mm	DR-CU-036-2F
43 mm	Y-CU-043-2F
55 mm	Y-CU-055-2F
82 mm	Y-CU-082-2F
110 mm	Y-CU-110-2F
160 mm	Y-CU-160-2F
200 mm	Y-CU-200-2F



**Access Bend F/F**

43 mm x 88*	Y-BD-043-2FA
55 mm x 88*	Y-BD-055-2FA
82 mm x 88*	Y-BD-082-2FA
110 mm x 88*	Y-BD-110-2FA
160 mm x 88*	Y-BD-160-2FA



**Access Branch F/F**

43 mm x 88*	Y-JU-043-2FA
55 mm x 88*	Y-JU-055-2FA
82 mm x 88*	Y-JU-082-2FA
110 mm x 88*	Y-JU-110-2FA
160 mm x 88*	Y-JU-160-2FA



**Reducer Bush**

43 mm x 36 mm	Y-ERB-043/036F
55 mm x 43 mm	Y-ERB-055/043F
110 mm x 55 mm	Y-ERB-110/055F
110 mm x 82 mm	Y-ERB-110/082F
160 mm x 110 mm	Y-ERB-160/110F



**Y Branch F/F**

36 mm	Y-YJU-036-2F
55 mm	Y-YJU-055-2F
82 mm	Y-YJU-082-2F
110 mm	Y-YJU-110-2F
160 mm	Y-YJU-160-2F
160 x 110 mm	Y-YJU-160/110-2F



**Double Swept Branch**

110 mm x 88*	Y-DJU-110-2F
160 mm x 110 x 88*	Y-DJU-160/110-2F



**Floor Gully Body**

110 x 82 x 55 mm	Medium (60mm) Y-GU-082-2F
110 x 82 x 55 mm	Large (70mm) Y-GU-082-2F/L
110 x 82 x 43 mm	Large (70mm) Y-GU-082/043F



**Vent Cowl**

55 mm	Y-VC-055 F
82 mm	Y-VC-082 F
110 mm	Y-VC-110 F
160 mm	Y-BD-160 F



**Access Cap**

43 mm	Y-AC-043 A
55 mm	Y-AC-055 A
82 mm	Y-AC-082 A
110 mm	Y-AC-110 A
160 mm	Y-AC-160 A



**Access Pipe F/F**

110 mm	Y-AP-110-2F
160 mm	Y-AP-160-2F



**P Trap**

110 mm	Y-PT-110-F-8R
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**Invert Reducer**

110 x 82 mm	Y-IRB-110/82 F
160 x 110 mm	Y-IRB-160/110 F

### The main features :

- Strong and resistant to impact
- Easy to install and compatible with National Plastic drainage pipe
- Fully compliant to the BS standards
- Resistant to a wide range of chemicals / fluids
- Smooth bore to give excellent flow characteristics

### Specifications -

Standards :  
BS 4514 (Light Grey)  
BS 4660 (Brown)

Material :  
100% uPVC

Joints :  
Female solvent weld sockets

Temperature Range :  
0°C - 85°C  
(for intermittent discharge)

Tensile Strength :  
Min. 45 N/mm<sup>2</sup>