



SOLUTIONS FOR THE GROWING WORLD

COMPANY PROFILE



The company was founded by several experts from different industries, cross paths during plantation projects. By having the same passion towards farming, the young & motivated team came together & decided to form KDG Plantation.

CORE BUSINESS

01 TRAINING **"Education"**

Provide paid training courses regarding agricultural knowledge & feasible farming skills.

02 CONSULTATION **"Agro Specialist"**

Strategic - Knowledge, technique, guidance & training module.

Practical - Planning, leading, on ground set up, monitoring, sales strategy, growth planning.

03 MORTGAGE & FINANCE **"Everyone Can Farm"**

Provide potential opportunity to people who would like to start involving in any agriculture related economic activity.

04 DESIGN & BUILD **"System & Structures"**

For example: Handling "GreenHouse" projects from scratch. Designing systems, providing materials & executing the entire build up.

05 JOINT VENTURE **"Win-Win-Win"**

We come in as partners of the project & provide solutions. Then market it to public & welcome other investors to join on board.

COMPANY PROFILE

**WHAT
KDG
TRULY
STANDS
FOR ?**



The ultimate goal of farming is not the growing of crops, but the cultivation and perfection of human beings. When possessed with the power of agricultural "Knowledge", we provide our services with "Diligence", & ensure sustainable "Growth" for the Plantation World.



"Solutions for The
***Growing
World***"

COMPANY PROFILE



TEC Borneo Hardware Sdn Bhd. was incorporated in 2013 as HDPE (High-Density Poly Ethylene) Products Manufacturer & Metal Steel Products Supplier. Since its inception, we have worked assiduously to meet the need of our clients in both public & private sectors across different industries & countries. Within 7 short years, the quest to supporting our client's mission has enabled us to developed enviable expertise in manufacturing, engineering & trading.

TEC Borneo have then took on multiple partnership projects with industry leaders to enhance our capacity, to deliver world-class quality products. Our core competence is that our factory is now equipped with cutting-edge machinery & operated by professionals with all relevant & necessary industry certifications.

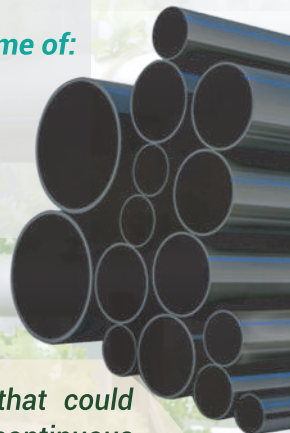
In result of having diversified product range:

- ◆ **High Density Polyethylene (HDPE) & UPVC Products**
- ◆ **Construction & Hardware Materials**
- ◆ **Agriculture & Irrigation Systems**

We proclaim our success over the years are the outcome of:

- ◆ **Precise Technical Expertise**
- ◆ **Reliability in Quality Products**
- ◆ **Customer-Oriented Services**
- ◆ **Efficient Supply Chain**

“**TEC Borneo** will be constantly pursuing to reinvest towards technologies that could innovate products, systems, procedures to achieve continuous increment in quality, durability, & strength of our entire organization.”





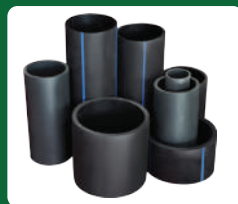
PIPE PRODUCTS

TEC HIGH DENSITY POLYETHYLENE (HDPE) PIPE

As one of the major manufacturer of HDPE pipe in Malaysia, **TEC** HDPE pipes are demanded strict conformity to **MS 1058** standard specifications. Our products are licensed by **SIRIM** and approved by the local water authorities to be the used as the top mark for quality. The granting of the top mark confirms that the company's manufacturing, testing and quality control systems complies with the stringent licensing requirements and thus ensures that the products quality is consistently maintained.

Principal Advantages for using TEC HDPE Pipe

- Light-weight for ease of installation and handling
- Immunity to corrosion, chemical and micro-biological resistance
- Flexible
- High impact strength and toughness
- Alternative installation techniques possible



Our products are examined and tested to ensure to compliance with all the relevant standard specifications. The specified tests are all carried out in our laboratory. They are as follow:

- Appearance, dimension and ovality
- Hydrostatic strength at 80°C for 165 hours
- Hydrostatic strength at 80°C for 1000 hours
- Oxidation Induction Time (OIT)
- Melt Flow Rate (MFR)



Melt Flow



Oxidation Induction Time



Hydrostatics Pressure Tester

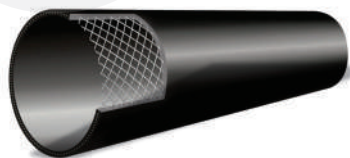
SPECIFICATION
MS 1058 : PART 2 : 2005
FOR POTABLE WATER



SIRIM

The management system governing the manufacture of this product is ISO 9001:2008 certified.

CERTIFICATION
SIRIM QAS International,
Approved by JKR and SPAN



FEATURES AND ADVANTAGES

- **Superior Elasticity** - Highly flexible to conform with different terrain contours, hence requiring fewer fittings and lesser joints; resulting in cost saving.
- **Light Weight** - Easy handling and fast installation; resulting in lower transportation and installation costs.
- **Non Toxic** - Food grade compliant.
- **High Impact Strength** - Strong, durable and resilient.
- **UV Resistant** - Ideal for outdoor installation and exposed application.
- **Corrosion Proof & Chemical Resistant** - Ideal for aggressive soil and peat swamp with low pH and high salinity.
- **Superior Flowability**

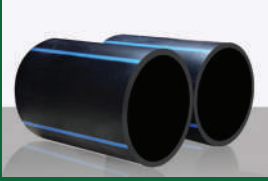
TYPICAL PROPERTIES OF HDPE

Properties	Unit	Value
Density	kg/m ³	954
Melt Index, Condition 190° C/5kg	g/10min	0.2 - 0.6
Thermal Stability	min	>20
ESCR, Condition A & B, F50	h	>1000
Tensile Stress at Yield	MPa	22
Tensile Stress at Break	MPa	32
Elongation at Break	%	>350%
Flexural Modulus	MPa	800

The following Quality Assurance Tests are conducted on **TEC** Pipes at the manufacturing facility:

- A) Dimensional : Outside Diameter, Wall Thickness, Length, Ovality
- B) Visual : Surface Finish, Colour Distribution, Marking
- C) Weight : According to Standards
- D) Performance : Internal Pressure Test
- E) Elongation : Elongation Test
- F) Thermal Stability : Oxidation Induction Time

PIPE PRODUCTS



HIGH DENSITY POLYETHYLENE (HDPE)

Pipe PE 100

PIPE OD MM	PN10			PN12.5			PN16		
	e min mm	e max mm	Wt kg/m	e min mm	e max mm	Wt kg/m	e min mm	e max mm	Wt kg/m
20							2.0	2.3	0.117
25				2.0	2.3	0.149	2.3	2.7	0.171
32	2.0	2.3	0.194	2.4	2.8	0.231	3.0	3.4	0.279
40	2.4	2.8	0.295	3.0	3.5	0.362	3.7	4.2	0.431
50	3.0	3.4	0.453	3.7	4.2	0.550	4.6	5.2	0.669
63	3.8	4.3	0.722	4.7	5.3	0.877	5.8	6.5	1.057
75	4.5	5.1	1.02	5.6	6.3	1.24	6.8	7.6	1.48
90	5.4	6.1	1.47	6.7	7.5	1.78	8.2	9.2	2.14
110	6.6	7.4	2.18	8.1	9.1	2.64	10.0	11.1	3.17
125	7.2	8.3	2.78	9.2	10.3	3.39	11.4	12.7	4.12
160	9.5	10.6	4.56	11.8	13.1	5.55	14.6	16.2	6.73
180	10.7	11.9	5.76	13.3	14.8	7.05	16.4	18.2	8.51
200	11.9	13.2	7.11	14.7	16.3	8.65	18.2	20.2	10.50
225	13.4	14.9	9.02	16.6	18.4	10.98	20.5	22.7	13.28
250	14.8	16.4	11.05	18.4	20.4	13.52	22.7	25.1	16.33
280	16.6	18.4	13.89	20.6	22.8	16.94	25.4	28.1	20.48
315	18.7	20.7	17.58	23.2	25.7	21.47	28.6	31.6	25.92
355	21.1	23.4	22.38	26.1	28.9	27.23	32.2	35.6	32.91
400	23.7	26.2	28.28	29.4	32.5	34.52	36.3	40.1	41.78
450	26.7	29.5	35.83	33.1	36.6	43.73	40.9	45.1	52.90
500	27.7	32.8	44.28	36.8	40.6	53.97	45.4	50.1	65.29
560	33.2	36.7	55.47	41.2	45.5	67.71	50.8	56.0	81.79
630	37.4	41.3	70.26	46.3	51.1	85.58	57.2	63.1	103.63

Color : Black with 4 blue stripes

Standard : MS 1058 equivalent to ISO 4427

PIPE PRODUCTS



HIGH DENSITY POLYETHYLENE (HDPE)

HDPE Corrugated Cable Pipes

HDPE Cable Pipe	Nominal Diameter	Standard length
Corrugated Outside	100mm	6m / 50m
Smooth Inside	150mm	6m / 30m
	200mm	6m / 30m



HIGH DENSITY POLYETHYLENE (HDPE)

HDPE Solid Wall Cable Pipes- PN10

Outside Diameter	Wall Thickness	Standard length
110 mm	8.1 mm - 9.1 mm	6 m / 12 m / 100 m
160 mm	11.8 mm - 13.1 mm	6 m / 12 m
200 mm	14.7 mm - 16.3 mm	6 m / 12 m
250 mm	18.4 mm - 20.4 mm	6 m / 12 m
280 mm	20.6 mm - 22.8 mm	6 m / 12 m
315 mm	23.2 mm - 25.7 mm	6 m / 12 m



UPVC PRESSURE PIPES WITH RUBBER

Ring Joint

Standard					Wall Thickness (mm)			
Nominal Size		Outside Diameter (mm)		Insertion Length (A)	MS 628 : Part 2 : Section 2.1			
					Class D (PN12)		Class E (PN15)	
in	mm	Min	Max	(mm)	Min	Max	Min	Max
4	100	114.1	114.5	86.20	6.9	6.9	7.3	8.4
6	155	168.0	168.5	91.90	8.8	10.2	10.8	12.5
8	200	218.8	219.4	115.10	10.3	11.9	12.6	14.5
10	250	272.6	273.4	128.60	12.8	14.8	15.7	18.1
12	300	323.4	324.3	136.00	15.3	17.7	18.7	21.6

PIPE PRODUCTS



UPVC PIPE

UPVC Soil, Waste and Ventilating (S.W.V) Pipes

Nominal Size		Mean Outside Diameter (mm)		Wall Thickness (mm) Application Area			
				B		BD	
Min	Max	Min	Max	Min	Max	Min	Max
1 1/4"	36	36.2	36.5	3.0	3.5	-	-
1 1/2"	43	42.8	43.1	3.0	3.5	-	-
2"	56	55.8	56.1	3.0	3.5	-	-
3"	82	82.4	82.8	3.0	3.5	3.0	3.5
4"	110	110.0	110.3	3.2	3.8	3.2	3.8
6"	160	160.0	160.4	3.2	3.8	4.0	4.6
8"	200	200.0	200.5	3.9	4.5	4.9	5.6
10"	250	250.0	250.5	4.9	5.6	6.2	7.1
12"	315	315.0	315.6	6.2	7.1	7.7	8.7

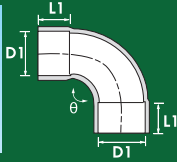
Color : White color

Length: 4m, or 5.8m

Standard : MS 1063 (BS 5255) , (BS 4514) , (BS EN 1401) , (BS EN 1329)



PIPE PRODUCTS



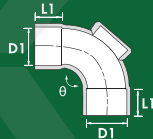
UPVC S.W.V SYSTEM



Sweep Bend

Size Dimension mm	Angle θ	D1	L1
36	91.25	36.6	20
43	91.25	42.9	25
56	91.25	55.9	28
82	92.5	82.6	45
110	92.5	110.2	50
160	92.5	160.4	78
200	92.5	200.5	80

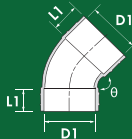
* To solvent weld to pipe of fitting.



Sweep Bend With I/O

Size Dimension mm	Angle θ	D1	L1
43	91.25	42.9	21.5
56	91.25	55.9	28
82	92.5	82.6	45
110	92.5	110.2	50
160	92.5	160.4	78

* To solvent weld to soil pipe or fitting fitted with inspection opening.

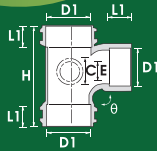


45° Bend Plain

Size Dimension mm	Angle θ	D1	L1
36	45	36.3	24
43	45	42.9	25
56	45	55.9	28
82	45	82.6	45
110	45	110.2	50
160	45	160.4	78
200	45	200.5	80

* To solvent weld to soil pipe.

PIPE PRODUCTS

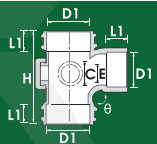


Equal Single Branch

Size Dimension mm	Angle θ	D1	L1	H	C	E
36	91.25	36.3	24	89	-	-
43	91.25	42.9	25	109	-	-
56	91.25	55.9	28	135	-	-
82	92.5	82.6	45	205	-	42.9
110	92.5	110.2	50	250	-	55.9
160	92.5	160.4	75	350.5	82.6	55.9
200	90	200.5	80	404	82.6	55.9

* To solvent weld to soil pipe.

* 92° branches have integrally moulded boss adaptor socket to accept waste pipe.

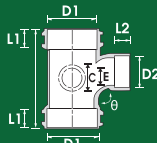


Equal Single Branch With I/O

Size Dimension mm	Angle θ	D1	L1	H	C	E
43	91.25	42.9	25	110	-	-
56	91.25	55.9	28	135	-	-
82	92.5	82.6	45	205	-	42.9
110	92.5	110.2	50	250	-	55.9
160	92.25	160.4	75	350.5	82.6	55.9

* To solvent weld to soil pipe.

* 92° branches have integrally moulded boss adaptor socket to accept waste pipe or fitting with inspection opening.

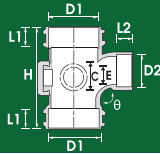


Reducing Branch

Size Dimension mm	Angle θ	D1	D2	L1	L2	H	C	E
110 X 56	91.25	110.2	55.9	50	30	230	-	55.9
110 X 82	92.5	110.2	82.6	50	45	230	-	55.9
160 X 110	92.25	160.4	110.2	75	50	310	-	55.9

* 92° branches have integrally moulded boss adaptor socket to accept waste pipe or fitting with inspection opening.

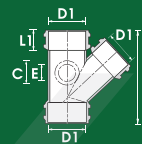
PIPE PRODUCTS



Reducing Branch With I/O

Size Dimension mm	Angle θ	D1	D2	L1	L2	H	C	E
160 X 110	92.5	160.4	110.2	75	50	310	-	55.9

* 92° branches have integrally moulded boss adaptor socket to accept waste pipe or fitting with inspection opening.

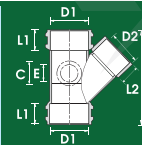


45° Y-Branch

Size Dimension mm	D1	L1	H	C	E
110	110.2	50	265	-	55.9

* To solvent weld to soil pipe.

* 45° branches have integrally moulded boss adaptor socket to accept waste pipe or fitting with inspection opening.

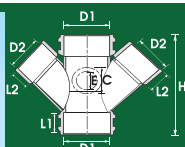


45° Y-Branch (Reducing Y-Tee)

Size Dimension mm	Angle θ	D1	D2	L1	L2	H	C	E
160 X 110	45	160.4	110.2	75	50	310	82.6	55.9

* To solvent weld to soil pipe.

* 45° branches have integrally moulded boss adaptor socket to accept waste pipe fitting.



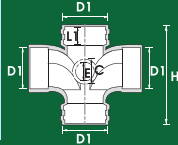
45° Reducing Double Y-Branch (Reducing Cross Y-Tee)

Size Dimension mm	Angle θ	D1	D2	L1	L2	H	C	E
160 X 110	45	160.4	110.2	75	50	310	82.6	55.9

* To solvent weld to soil pipe.

* 45° branches have integrally moulded boss adaptor socket to accept waste pipe fitting.

PIPE PRODUCTS

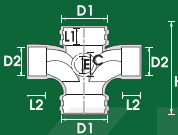


Equal Double Branch (Cross Tee)

Size Dimension mm	D1	L1	H	C	E
110	110.2	50	250	-	55.9

* To solvent weld to soil pipe.

* 92° branches have integrally moulded boss adaptor socket to accept waste pipe or fitting.

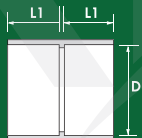


Reducing Double Branch (Reducing Cross Tee)

Size Dimension mm	Angle θ	D1	D2	L1	L2	H	C	E
160 X 110	92.5	160.4	110.2	75	50	310	-	55.9

* To solvent weld to soil pipe.

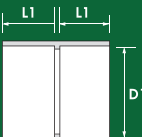
* 92° branches have integrally moulded boss adaptor socket to accept waste pipe or fitting.



Straight Coupler

Size Dimension mm	D1	L1
36	36.3	24
43	42.9	25
56	55.9	28
82	82.6	45
110	110.2	50
160	160.4	78
200	200.5	80

* To solvent weld together two length of uPVC soil or waste pipes.

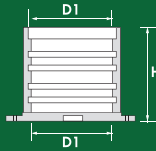


Straight Coupler (Plain)

Size Dimension mm	D1	L1
110	110.2	50

* To solvent weld together two length of uPVC soil or waste pipes.

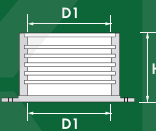
PIPE PRODUCTS



 **Pipe Sleeve**

Size Dimension mm	D1	H
56	55.9	110
82	82.6	110
110	110.2	110
160	160.4	161
200	200.5	175

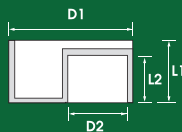
* For cast into RC floor slab /concrete wall to provide a through socket for pipes.



 **Pipe Sleeve (Short)**

Size Dimension mm	D1	H
160	160.4	110.1

* For cast into RC floor slab /concrete wall to provide a through socket for pipes.



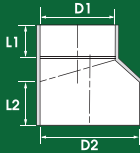
 **Bush / Socket Reducer**

Size Dimension mm	D1	D2	L1	L2
43x36	42.9	36.3	22	19
56x36	55.9	36.3	28	19
56x43	55.9	42.9	28	22
82x56	82.6	55.9	45	28
110x56	110.2	55.9	50	28
110x82	110.2	82.6	50	45
160x82	160.4	82.6	78	43
160x110	160.4	110.2	78	50
200x110	200.5	110.2	82	50
200x160	200.5	160.4	82	78

* Coming Soon.

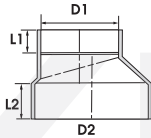
* To allow change in fitting socket diameter.

PIPE PRODUCTS



Level Invert Reducer

Size Dimension mm	D1	D2	L1	L2
82x56	55.9	82.6	31	46
110x56	55.9	110.2	31	53
110x82	82.6	110.2	46.5	53
200x110	110.2	200.4	60	50
200x160	160.4	200.5	60	60



Size Dimension mm	D1	D2	L1	L2
160x110	110.2	160.4	48	51.5

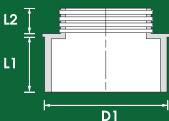
* To allow for change in pipe diameter with large end spigot to fitting and other end socket to pipe.



End Cap

Size Dimension mm	D1	L1
56	55.9	31
82	82.6	31
110	110.2	25
160	160.4	75

* To cover up the open-end of a pipe line for later accessibility.

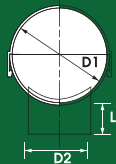


Access Plug (M)

Size Dimension mm	D1	L1
82	82.6	45
110	110.2	50

* To plug up the socket to allow for later accessibility.

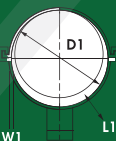
PIPE PRODUCTS



Boss Connector

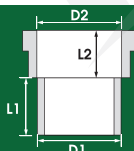
Size Dimension mm	D1	D2	L
82x56	82.6	55.9	28
160x82	160.4	82.6	45
160x110	160.4	110.2	50
110x56	110.2	55.9	28
110x82	110.2	82.6	45

* To connect waste pipe to soil pipe and for venting by solvent cement. Incorporates a bracket specially designed to hold boss connector firmly in place during installation.



Pipe Holder

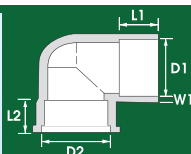
Size Dimension mm	D1	D2	W1
110	110.4	28.7	3.0



Pt Socket

Size Dimension mm	D1	D2	L1	L2
36	36	42	33.5	24
43	43	82	39	28.5

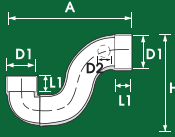
* To connect basin joint directly to PVC pipe.



Pt Elbow

Size Dimension mm	Angle θ	D1	D2	L1	L2	W
36	92.5	34	40	33.5	24	2.2
43	92.5	42	47	39	28.5	2.6

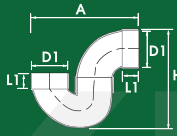
PIPE PRODUCTS



“P” Trap Plain

Size Dimension mm	D1	D2	L1	A	H
110	110.2	55.9	50	380	270

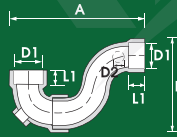
*"P" Trap with water seal for gas-tight connection to SWV system.



“P” Trap Plain (U Body)

Size Dimension mm	D1	L1	A	H
110	110.2	50	380	280

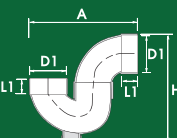
*"P" Trap with water seal for gas-tight connection to SWV system.



“P” Trap With I/O

Size Dimension mm	D1	D2	L1	A	H
56	55.9	55.9	28	240	180
110	110.2	55.9	50	380	270

*"P" Trap with water seal for gas-tight connection to SWV system with inspection opening.

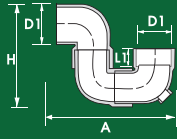


“P” Trap With I/O (U Body)

Size Dimension mm	D1	D2	L1	A	H
110	110.2	55.9	50	300	270

*"P" Trap with water seal for gas-tight connection to SWV system with inspection opening.

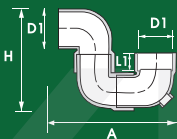
PIPE PRODUCTS



"P" Trap With I/O (Offset)

Size Dimension mm	D1	D2	L1	A	H
110	110.2	110.2	50	320	280

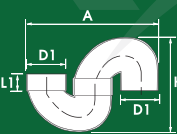
*"P" Trap with water seal for gas-tight connection to SWV system with inspection opening.



"S" Trap Plain

Size Dimension mm	D1	L1	A	H
110	110.2	50	470	280

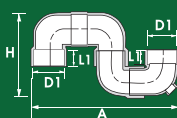
*"S" Trap with water seal for gas-tight connection to SWV system.



"S" Trap Plain (U Body)

Size Dimension mm	D1	L1	A	H
110	110.2	50	300	260

*"S" Trap with water seal for gas-tight connection to SWV system.

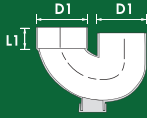


"S" Trap I/O

Size Dimension mm	D1	L1	A	H
110	110.2	50	470	280

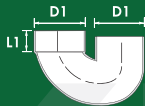
*"S" Trap with water seal for gas-tight connection to SWV system with inspection opening.

PIPE PRODUCTS



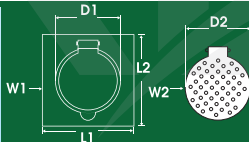
 **U Body With (M/F)**

Size Dimension mm	D1	D2
110	110.2	50



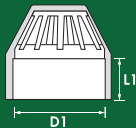
 **U Body (M/F)**

Size Dimension mm	D1	D2
110	110.2	50



 **Floor Grating**

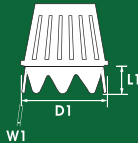
L1	L2	D1	D2	W1	W2
144	144	100.5	100	2.5	4.0



 **Vent Cowl**

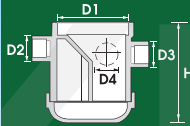
Size Dimension mm	D1	D2
56	55.9	30
82	82.6	25
110	110.2	25.4
160	160.4	38

PIPE PRODUCTS



 **Dome Filter**

Size Dimension mm	D1	L1	W1
110	110.2	28.5	4
160	155	50	5
200	192	62	5



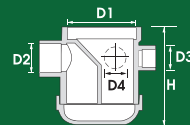
 **Floor Gully With Trap I/O (i)**

Floor Gully with Trap & I/O (56mm) X 3

Size Dimension mm	D1	D2	D3	D4	H
110x56	110.2	55.9	55.9	55.9	194.2

Floor Gully with Trap & I/O (82mm) X 56mm

Size Dimension mm	D1	D2	D3	D4	H
110x82	110.2	82.6	55.9	55.9	194.2



 **Floor Gully With Trap & I/O (ii)**

Size Dimension mm	D1	D2	D3	D4	H
110x56	110.2	55.9	55.9	42.9	212
110x82	110.2	82.6	55.9	42.9	212

PIPE PRODUCTS



UPVC UNDERGROUND DRAINAGE AND SEWERAGE FITTINGS

Underground Drainage and Sewerage Pipes

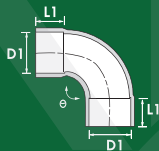
Nominal Size in	mm	Outside Diameter		Wall Thickness (mm)	
		Min	Max	Min	Max
4	100	110.0	110.4	3.2	-
6	155	160.0	160.6	4.1	-
8	200	200.0	200.5	4.9	5.6
10	250	250.0	250.5	6.2	7.1
12	315	315.0	315.6	7.7	8.7

Color : Golden Brown

Length: 5.8m

Type of Joint: Solvent Cement Weld Joint

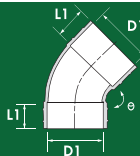
Standard : MS 979, MS1063 (BS 4660, BS 5481, BS EN 1329)



Underground Sweep Bend

Size Dimension mm	Angle θ	D1	L1
110	92.5	110.2	50
160	92.5	160.4	78
200	92.5	200.5	80

* To solvent weld to soil pipe.

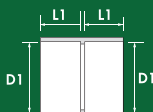


45° Underground Sweep Plain

Size Dimension mm	Angle θ	D1	L1
110	45	110.2	50
160	45	160.4	78
200	45	200.5	80

* To solvent weld to soil pipe.

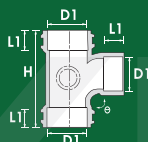
PIPE PRODUCTS



Underground Straight Coupling

Size Dimension mm	D1	L1
110	110.2	50
160	160.4	78
200	200.5	80

* To solvent weld together two length of uPVC soil or waste pipe.

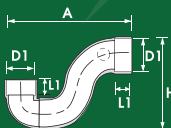


Underground Equal Single Branch

Size Dimension mm	Angle θ	D1	L1	H
110	92.5	110.2	50	250
160	92.5	160.4	78	350.5
200	92.5	200.5	80	404

* To solvent weld to soil pipe.

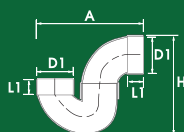
* 92° branches have integrally moulded boss adaptor socket to accept waste pipes or fitting.



Underground "P" Trap Plain

Size Dimension mm	D1	L1	A	H
110	110.2	50	380	270

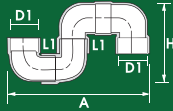
* Underground "P" Trap with water seal for gas-tight connection to SWV system.



Underground "P" Trap Plain (U Body)

Size Dimension mm	D1	L1	A	H
110	110.2	50	300	280

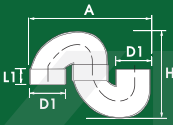
* Underground "P" Trap with water seal for gas-tight connection to SWV system.



Underground "S" Trap Plain

Size Dimension mm	D1	L1	A	H
110	110.2	50	380	270

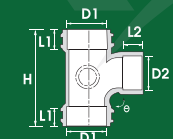
* Underground "P" Trap with water seal for gas-tight connection to SWV system.



Underground "S" Trap Plain (U Body)

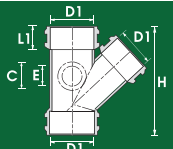
Size Dimension mm	D1	L1	A	H
110	110.2	50	390	250

* Underground "P" Trap with water seal for gas-tight connection to SWV system.



Underground Reducing Branch

Size Dimension mm	Angle θ	D1	L1	H	C	E
160x110	92.5	160.4	75	110.2	50	350

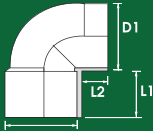


Underground Y-Branch

Size Dimension mm	D1	L1	A	H
110	110.2	50	265	55.9

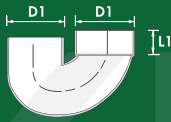


PIPE PRODUCTS



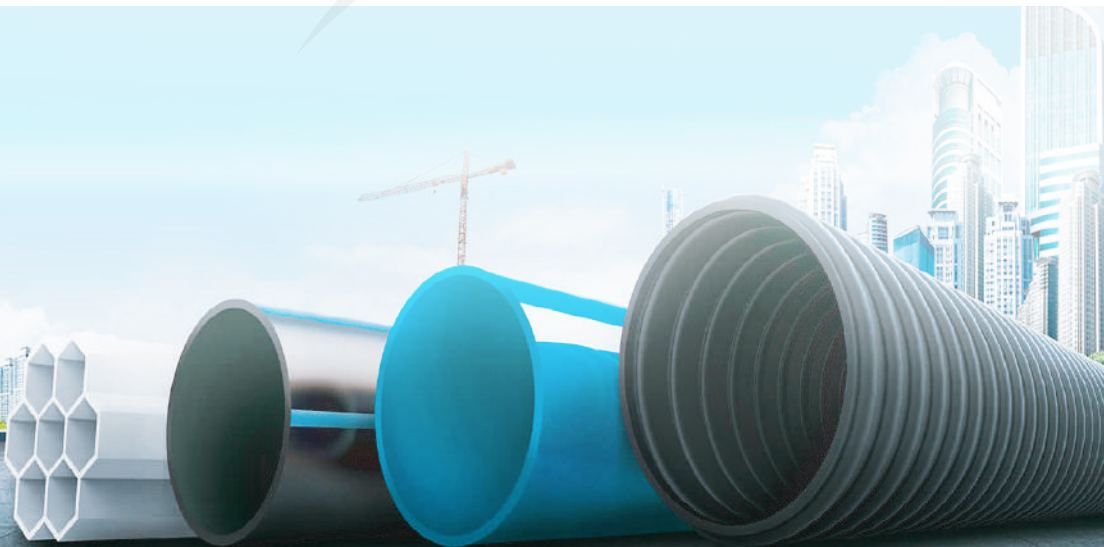
Underground Bossed Bend (M/F)

Size Dimension mm	Angle θ	D1	L1	L2
110	90	110.2	50	25



Underground U Body (M/F)

Size Dimension mm	D1	L1
110	110.2	50



PIPE PRODUCTS



UPVC PRESSURE PIPES WITH SOLVENT CEMENT JOINT

○ Specification of Pressure Pipes

STANDARD		Wall Thickness (mm)													
		MS762 (BS 3506)				MS628 (BS 3505)				MS762 (BS 3506)					
Normal Size	Outside Diameter mm	Class O		Class B PN6		Class C PN9		Class D PN12		Class E PN15		Class 7			
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max		
1/2	15	21.2	21.5									1.7	2.1	3.7	4.3
3/4	20	26.6	26.9									1.9	2.5	3.9	4.5
1	25	33.4	33.7									2.2	2.7	4.5	5.2
1 1/4	32	42.1	42.4							2.2	2.7	2.7	3.2	4.8	5.5
1 1/2	40	48.1	48.4	1.8	2.2					2.5	3.0	3.1	3.7	5.1	5.9
2	50	60.2	60.5	1.8	2.2			2.5	3.0	3.1	3.7	3.9	4.5	5.5	6.3
2 1/2	65	75.0	75.3	1.8	2.2			3.0	3.5	3.9	4.5	4.8	5.5		
3	80	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	100	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	125	140.0	140.4	2.6	3.1	3.8	4.4	5.5	6.4	7.3	8.4	9.0	10.4		
6	155	168.0	168.5	3.1	3.7	4.5	5.2	6.6	7.6	8.8	10.2	10.8	12.5		
8	200	218.8	219.4	3.1	3.7	5.3	6.1	7.8	9.0	10.3	11.9	12.6	14.5		
10	250	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	300	323.4	324.3	3.1	3.7	7.8	9.0	11.5	13.3	15.2	17.7	18.7	21.6		

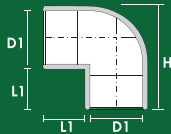
Color : Grey

Length: 5.8m

Type of Joint: Solvent Cement Weld Joint

STANDARD		Wall Thickness (mm)				
		JIS K 6741				
Nominal Size	Outside Diameter (mm)		Type VU (AE) 6.0 BAR		Type VU (AW) 10.0 BAR	
	Min	Max	Min	Max	Min	Max
200	215.3	216.7	6.5	7.5	10.3	11.7
250	266.1	267.9	7.8	9.0	12.7	14.5
300	317.0	319.0	9.2	10.6	15.1	17.3

PIPE PRODUCTS

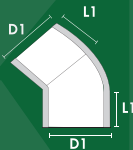


UPVC PRESSURE PIPES WITH SOLVENT CEMENT JOINT



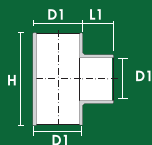
Equal Elbow

Size Dimension mm	D1	L1	H
15	21.3	25	51
20	26.7	26.5	57
25	33.5	28	67
32	42.2	32.1	81.5
40	48.2	34	91.5
50	60.3	40	110.5



45° Elbow

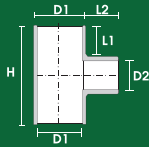
Size Dimension mm	D1	L1
15	21.3	21
20	26.7	26.5
25	33.5	28



Equal Tee

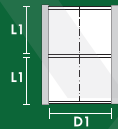
Size Dimension mm	D1	L1	H
15	21.3	25	73.5
20	26.7	26.5	84.5
25	33.5	28	102
32	42.2	37.1	114.6
40	48.2	34	117
50	60.3	40	141

PIPE PRODUCTS



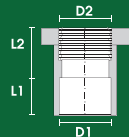
Reducing Tee

Size Dimension mm	D1	D2	H	L1	D2
20x15	26.7	21.3	84.8	26.5	25.5
25x20	33.5	21.3	102.5	29.5	30
25x25	33.5	26.7	102.5	29.5	30
32x25	42.2	26.7	114.4	50.2	28.1 *
32x25	42.2	33.5	114.4	50.2	28.1 *
40x15	48.2	21.3	121.5	56.5	34.1 *
40x20	48.2	26.7	121.5	56.5	34.1 *
40x25	48.2	33.5	121.5	56.5	34.1
40x32	48.2	42.2	121.5	56.5	34.1 *
50x15	60.3	21.3	145.4	69.4	42.3 *
50x20	60.3	26.7	145.4	69.4	42.3 *
50x25	60.3	33.5	145.4	69.4	42.3 *
50x32	60.3	42.2	145.4	69.4	42.3 *
50x40	60.3	48.2	145.4	69.4	42.3



Double End (DE) Socket

Size Dimension mm	D1	L1
15	21.3	21.1
20	26.7	22.3
25	33.5	22.7
32	42.2	42.5
40	48.2	42.5
50	60.3	51

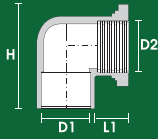


Faucet (P/T) Socket

Size Dimension mm	D1	D2	L1	L2
15	21.3	21.1	25	19
20	26.7	26.8	25.5	25.5
25	33.5	33.5	30	29.5
32	42.2	42.8	41.9	26.5
40	48.2	48.4	45.1	33.8
50	60.3	60.2	60.0	37.7

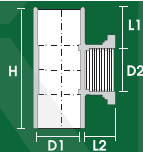
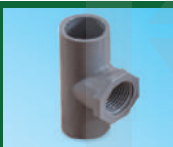


PIPE PRODUCTS



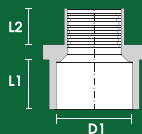
 Faucet (P/T) Elbow

Size Dimension mm	D1	D2	L1	L2	H
15	21.3	21.2	25	16.5	59.5
20	26.7	26.8	26.5	25.5	66
25	33.5	33.5	30	29.5	71
32	42.2	42.8	41.9	24.3	75 *
40	48.2	48.8	45.1	27.2	95.1 *
50	60.3	60.2	60.0	33	106.4 *



 Faucet (P/T) Tee

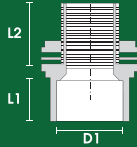
Size Dimension mm	D1	D2	H	L1	L2
15	21.3	21.2	25	22	16



 Valve Socket

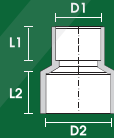
Size Dimension mm	D1	L1	L2
15	21.3	21.5	17.3
20	26.7	26.7	20
25	33.5	33.5	23.8
32	42.2	42.2	24.3
40	48.2	48.2	26.3
50	60.3	60.3	30.6

PIPE PRODUCTS



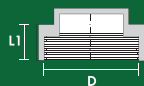
 V-Tank Connector

Size Dimension mm	D1	L1	L2
15	21.3	32.8	32.8
20	26.7	33.2	33.2
25	33.5	42.2	40
32	42.2	51.5	57.9
40	48.2	62.8	56.9
50	60.3	64.5	34.6



 Reducing Socket

Size Dimension mm	D1	L2	L1	L2
20x15	21.3	26.7	17.3	20.9
25x15	21.3	33.5	28	25
25x20	26.7	33.5	22	25
32x15	21.3	42.2	25.7	27.2 *
32x20	26.7	42.2	25.9	27.2 *
32x25	33.5	42.2	25.9	28.0
40x15	21.3	48.2	28.0	28.7 *
40x20	26.7	48.2	28.0	28.7 *
40x25	33.5	48.2	28.0	28.6
40x32	42.2	48.2	28.1	28.6
50x15	21.3	60.3	33.4	35.5 *
50x20	26.7	60.3	33.3	35.6 *
50x25	33.5	60.3	36.1	34.4 *
50x32	42.2	60.3	33.3	28.1
50x40	48.2	60.3	33.1	35.5

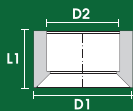
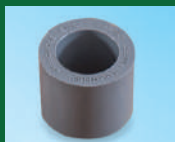


 Plug

Size Dimension mm	D1
15	12.5

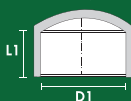


PIPE PRODUCTS



Reducing Bush

Size Dimension mm	D1	D2	L1
20x15	26.7	21.3	21.2
25x15	33.5	21.3	26.8
25x20	33.5	26.7	26.8
32x15	42.2	21.3	31.7 *
32x20	42.2	26.7	31.7 *
32x25	42.2	33.5	31.7
40x15	48.2	21.3	34 *
40x20	48.2	26.7	34 *
40x25	48.2	33.5	34
40x32	48.2	42.2	34
50x15	60.3	21.3	39 *
50x20	60.3	26.7	39 *
50x25	60.3	33.5	39 *
50x32	60.3	42.2	39
50x40	60.3	48.2	39



End Cap

Size Dimension mm	D1	L1
15	21.3	18
20	26.7	21.1
25	33.5	25
32	42.2	31.6
40	48.2	31.7
50	60.3	32

PIPE PRODUCTS

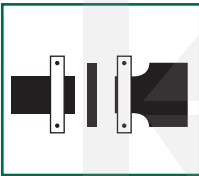


Butt Fusion Welding Machine

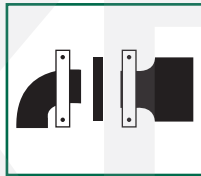
Welding Range

- 50 - 160mm (Manual)
- 63 - 160mm (Semi-Auto)
- 63 - 200mm (Manual)
- 110 - 250mm (Semi-Auto)
- 160 - 315mm (Semi-Auto)
- 280 - 450mm (Semi-Auto)

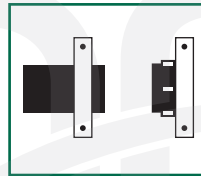
FITTINGS POSITIONING INTO THE BUTT FUSION WELDING MACHINE



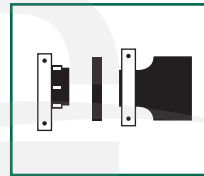
A) Welding pipe with fittings



B) Welding fitting with fitting



C) Welding pipe with stub end



D) Welding fitting with stub end

OPTICAL CHECKING OF BUTT WELDING RESULT



Correct Welding



The Material Have Difference Heating Time And/Or Heating Temperature



Welding Bead Narrow And Tall, Too Pressure



Small Welding Bead, Not Enough Pressure



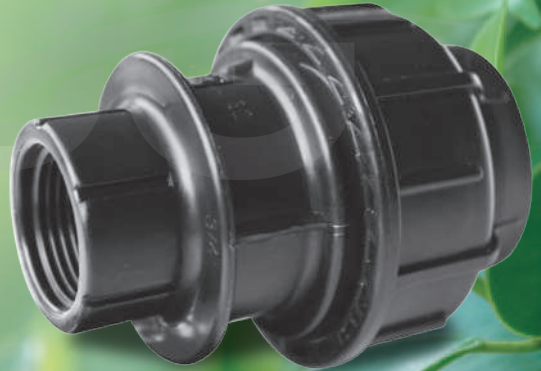
Crack On The Center Of Welding Bead, Not Enough Temperature or Long Change Over Time



Disalignment, Tolerance Accepted 10% Of Pipe Wall Thickness



FITTING PRODUCTS




FITTING PRODUCTS




HDPE & UPVC PRODUCTS

► COMPRESSION POLY FITTINGS


☐☐ Male Threaded Adaptor (M.T.A)

	Size (mm x inch)		
	20 x 1/2"	32 x 1"	63 x 1 1/2"
	20 x 3/4"	40 x 1"	63 x 2"
	25 x 1/2"	40 x 1 1/4"	75 x 2"
	25 x 3/4"	40 x 1 1/2"	75 x 2, 2 1/2"
	25 x 1"	50 x 1 1/4"	90 x 3"
	32 x 1/2"	50 x 1 1/2"	110 x 4"
	32 x 3/4"		


☐☐ Female Threaded Adaptor (F.T.A)

	Size (mm x inch)		
	20 x 1/2"	32 x 1"	63 x 2"
	20 x 3/4"	40 x 1"	75 x 2"
	25 x 1/2"	40 x 1 1/4"	75 x 2, 2 1/2"
	25 x 3/4"	40 x 1 1/2"	90 x 3"
	25 x 1"	50 x 1 1/4"	110 x 4"
	32 x 3/4"	50 x 1 1/2"	

☐☐ Flange Adaptor

	Size (mm x inch)		
	50 x 1 1/2"		
	63 x 2"		
	75 x 2, 2 1/2"		
	90 x 3"		
	110 x 4"		

☐☐ Male Elbow 90

	Size (mm x inch)		
	20 x 1/2"	32 x 1"	63 x 2"
	20 x 3/4"	40 x 1"	75 x 2"
	25 x 1/2"	40 x 1 1/4"	75 x 2, 2 1/2"
	25 x 3/4"	50 x 1 1/4"	90 x 3"
	25 x 1"	50 x 1 1/2"	110 x 3"
	32 x 3/4"		110 x 4"



FITTING PRODUCTS

HDPE & UPVC PRODUCTS

► COMPRESSION POLY FITTINGS

Female Elbow 90



Size (mm x inch)

20 x 1/2"	32 x 1"	63 x 2"
20 x 3/4"	40 x 1"	75 x 2"
25 x 1/2"	40 x 1 1/4"	75 x 2, 2 1/2"
25 x 3/4"	50 x 1 1/4"	90 x 3"
25 x 1"	50 x 1 1/2"	110 x 3"
32 x 3/4"		110 x 4"

Male Tee



Size (mm x inch)

20 x 1/2"	32 x 1"	63 x 2"
20 x 3/4"	40 x 1"	75 x 2"
25 x 1/2"	40 x 1 1/4"	75 x 2, 2 1/2"
25 x 3/4"	50 x 1 1/4"	90 x 3"
25 x 1"	50 x 1 1/2"	110 x 3"
32 x 3/4"	63 x 1"	110 x 4"

Female Tee



Size (mm x inch)

20 x 1/2"	32 x 1"	63 x 2"
20 x 3/4"	40 x 1"	75 x 2"
25 x 1/2"	40 x 1 1/4"	75 x 2, 2 1/2"
25 x 3/4"	50 x 1 1/4"	90 x 3"
25 x 1"	50 x 1 1/2"	110 x 3"
32 x 3/4"		110 x 4"

Wall Plate



Size (mm x inch)


20 x 1/2"
25 x 1/2"
25 x 3/4"
32 x 3/4"
32 x 1"




HDPE & UPVC PRODUCTS

► COMPRESSION POLY FITTINGS


☐☐ Reducing Coupler

	Size (mm x mm)		
	25 x 20	50 x 25	75 x 50
32 x 20	50 x 30	75 x 63	
32 x 25	50 x 40	90 x 63	
40 x 20	63 x 25	90 x 75	
40 x 25	63 x 32	110 x 63	
40 x 32	63 x 40	110 x 90	
50 x 20	63 x 50		


☐☐ Reducing Tee

	Size (mm x mm)		
	25 x 20	50 x 25	75 x 50
32 x 20	50 x 30	75 x 63	
32 x 25	50 x 40	90 x 63	
40 x 25	63 x 25	90 x 75	
40 x 32	63 x 32	110 x 63	
50 x 20	63 x 40	110 x 75	
	63 x 50	110 x 90	

☐☐ End Cap

	Size (mm x mm)	
	20 x 20	50 x 50
25 x 25	63 x 63	
32 x 32	75 x 75	
40 x 40	90 x 90	
	110 x 110	

☐☐ Straight Coupler

	Size (mm x mm)	
	20 x 20	50 x 50
25 x 25	63 x 63	
32 x 32	75 x 75	
40 x 40	90 x 90	
	110 x 110	




FITTING PRODUCTS


HDPE & UPVC PRODUCTS

► COMPRESSION POLY FITTINGS


Equal Elbow 90

	Size (mm x mm)	
	20 x 20	50 x 50
25 x 25	63 x 63	
32 x 32	75 x 75	
40 x 40	90 x 90	
	110 x 110	

Equal Tee

	Size (mm x mm)	
	20 x 20	50 x 50
25 x 25	63 x 63	
32 x 32	75 x 75	
40 x 40	90 x 90	
	110 x 110	

Clamp Saddle

	Size (mm x inch)	
	32 x 1/2", 3/4", 1"	160 x 3/4", 1", 1 1/2", 2"
50 x 1/2", 3/4", 1"	180 x 3/4", 1", 1 1/2", 2"	
63 x 1/2", 3/4", 1"	200 x 3/4", 1", 1 1/2", 2", 3"	
75 x 1/2", 3/4", 1"	225 x 3/4", 1", 2", 3"	
90 x 1/2", 3/4", 1", 1 1/2", 2"	250 x 3/4", 1", 1 1/2"	
110 x 3/4", 1", 1 1/2", 2"	250 x 2", 3", 4"	
125 x 3/4", 1", 2"		

FITTING PRODUCTS



HDPE & UPVC PRODUCTS

► COMPRESSION POLY FITTINGS

	Female Threaded Equal Elbow
	Size (inch x inch)
	1/2" x 1/2"
	3/4" x 3/4"
	1" x 1"
	Female Threaded Equal Tee
	Size (inch x inch)
	1/2" x 1/2"
	3/4" x 3/4"
	1" x 1"
	Female Threaded Socket
	Size (inch x inch)
	1/2" x 1/2"
	3/4" x 3/4"
	1" x 1"
	Female Threaded Red Elbow
	Size (inch x inch)
	3/4" x 1/2"
	1" x 3/4"
	Female Threaded Red Coupler
	Size (inch x inch)
	3/4" x 1/2"
	1" x 3/4"
	Female Threaded Reducing Tee
	Size (inch x inch)
	3/4" x 3/4" x 1/2"
	1" x 1" x 3/4"
	1" x 1" x 1/2"




FITTING PRODUCTS


HDPE & UPVC PRODUCTS

► COMPRESSION POLY FITTINGS

☐☐ Ball Valve (Compact)

	Size (inch)	Pcs / Carton
	1/2"	240
3/4"	180	
1"	120	
1 1/4"	80	
1 1/2"	48	
2"	36	
3"	8	
4"	6	


☐☐ Ball Valve (Threaded)

	Size (inch)	Pcs / Carton
	1/2"	240
3/4"	180	
1"	120	
1 1/4"	80	
1 1/2"	48	
2"	36	
3"	8	
4"	6	

☐☐ PE Compact Ball Valve

	Size (inch)	Pcs / Bag	Pcs / Carton
	1/2"	6	120
3/4"	2	70	
1"	2	46	
1 1/2"	1	14	
2"	1	11	
3"	1	6	
4"	1	6	

☐☐ Air Release Valve

	Size (inch)
	1/2"
1"	
2"	


FITTING PRODUCTS




HDPE & UPVC PRODUCTS

► COMPRESSION POLY FITTINGS


☐ PE Stud End

	Size (mm)		
	32	160	315
50	180	345	
63	200	355	
90	225	400	
110	250	450	
125	280	500	


☐ PE Tank Connector

	Size (inch)	
	1/2"	1 1/2"
3/4"	2"	
1"	3"	
1 1/4"	4"	

☐ PE Nipple

	Size (inch)
	1/2" x 1/2"
3/4" x 3/4"	
1" x 1"	
1 1/2" x 1 1/2"	
2" x 2"	
3" x 3"	
4" x 4"	

☐ PE Bush

	Size (inch)
	3/4" x 1/2"
1" x 3/4"	
1" x 1/2"	
1 1/2" x 1"	
2" x 1"	
2" x 1 1/2"	



FITTING PRODUCTS

HDPE & UPVC PRODUCTS

► PUSHON FITTINGS

Pushon Male Tee



Size (mm x inch)

20 x 1/2"

25 x 3/4"

Pushon Female Tee



Size (mm x inch)

20 x 1/2"

25 x 3/4"

32 x 1"

50 x 1 1/2"

63 x 2"

Pushon Male Threaded Adaptor



20 x 1/2"

25 x 3/4"

32 x 1"

50 x 1 1/2"

63 x 2"

Pushon Female Threaded Adaptor



Size (mm x inch)

20 x 1/2"

25 x 3/4"

32 x 1"

50 x 1 1/2"

63 x 2"



HDPE & UPVC PRODUCTS

► PUSHON FITTINGS

Pushon Male Elbow



Size (mm x inch)

20 x 1/2"
25 x 1/2"
25 x 3/4"
32 x 1"
50 x 1 1/2"
63 x 2"

Pushon Female Elbow



Size (mm x inch)

20 x 1/2"
25 x 1/2"
25 x 3/4"
32 x 1"
50 x 1 1/2"
63 x 2"

Pushon End Cap



Size (mm x mm)

20 x 20
25 x 25
32 x 32
50 x 50
63 x 63

Pushon Straight Coupler



Size (mm x mm)

20 x 20
25 x 25
32 x 32
40 x 40
50 x 50
63 x 63




FITTING PRODUCTS


HDPE & UPVC PRODUCTS

► PUSHON FITTINGS


Pushon Equal Elbow

	Size (mm x mm)
	20 x 20
	25 x 25
	32 x 32
	40 x 40
	50 x 50
63 x 63	


Pushon Equal Tee

	Size (mm x mm)
	20 x 20
	25 x 25
	32 x 32
	40 x 40
	50 x 50
63 x 63	

Pushon Reducing Tee

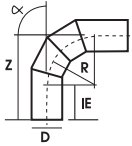
	Size (mm x mm)
	25 x 20
	32 x 20
	32 x 25
	50 x 32
	63 x 50

Pushon Reducing Coupler

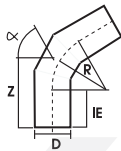
	Size (mm x mm)
	25 x 20
	32 x 20
	32 x 25
	50 x 32
	63 x 50



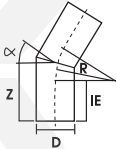
► FABRICATED FITTINGS (PE80 & PE100)



 90° Bend



 60° & 45° Bend



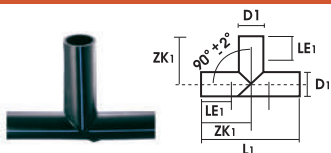
 30° , 22.5° & 11.25° Bend

D	IE	R ¹⁾	$\alpha \pm 2^\circ$				
			90°	60°	45°	30°	22.5°
			Z mm	Z mm	Z mm	Z mm	Z mm
50		-	-	-	-	-	-
63		-	-	-	-	-	-
75		-	-	-	-	-	-
90		-	-	-	-	-	-
110	150	165	315	245	218	194	194
125		188	338	258	228	200	200
160		240	390	288	249	214	214
180		270	420	305	262	222	222
200		300	450	323	274	230	230
225		338	488	345	290	241	241
250		375	625	466	412	350	350
280		420	670	492	424	362	362
315	300	473	773	576	498	428	428
355		533	833	608	520	443	443
400		600	900	646	548	461	461
450		675	975	689	580	481	481
500		350	750	1100	783	665	551

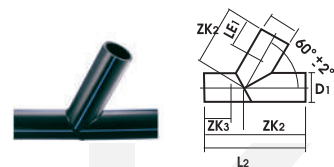


FITTING PRODUCTS

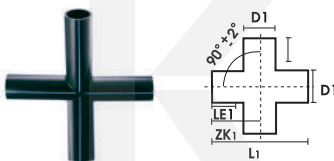
FABRICATED FITTINGS (PE80 & PE100)



 90° Tee



 60° Branch Tee



 Cross Tee Bend

D	LE	R	90° Tee & Cross Tee		90° Branch Tee		
			L ₁ mm	ZK ₁ mm	L ₂ mm	ZK ₂ mm	ZK ₂ mm
90		-	-	-	-	-	-
110	150	165	410	205	500	325	175
125		188	430	215	545	355	190
160		240	460	230	642	412	230
180		270	480	240	700	450	250
200		300	500	250	759	487	272
225		338	530	265	830	530	300
250	250	375	750	375	905	580	325
280		420	780	390	995	630	365
315		473	920	460	1090	690	400
355	300	533	860	480	1155	730	425
400		600	1000	500	1250	800	450
450		675	1050	525	1325	850	475
500	350	750	1200	600	1400	900	500

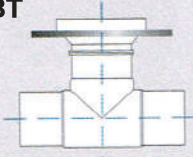
FITTING PRODUCTS



▶ PRODUCT RANGE ON REQUEST

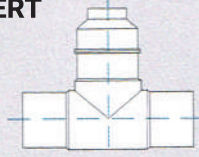
▶ Flanged Branch Tee

FBT



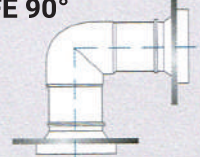
▶ Reducing Tee

PERT



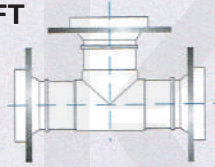
▶ All Flanged Elbow (90°)

AFE 90°



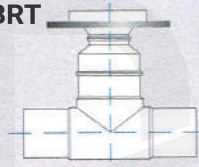
▶ All Flanged Tee

AFT



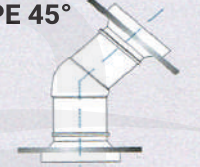
▶ Flange Branch Reducing Tee

FBRT



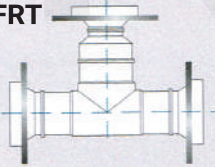
▶ All Flanged Elbow (45°)

APE 45°



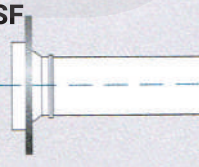
▶ All Flanged Reducing Tee

AFRT



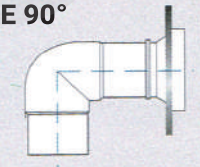
▶ Pipped Stub Flange Assembly with Backing Ring

PSF



▶ Single Flanged Elbow (90°)

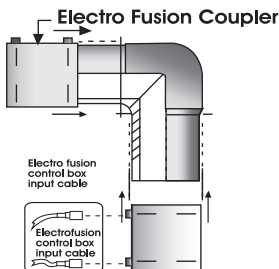
SFE 90°



Electro Fusion System

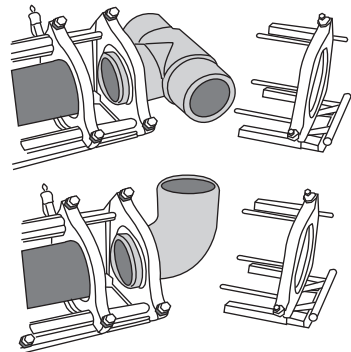
电焊套热熔接法

- * Reliable quality comply with DIN 16963 (SIRIM product certification license approval by PBA & LAP)
- * Compatible with all kinds of JKR, PBA and LAP approval CNC automatic Butt Fusion Machine



Butt Fusion System

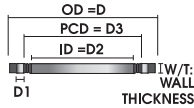
热熔对接法





FITTING PRODUCTS

▶ PE INJECTION MOULDED & M/STEEL FLANGE & RUBBER GASKET



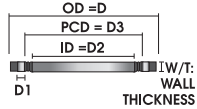
 Mild Steel (PN10)

DN mm	Loose Backing Flanges						
	Nominal Outside Dia. Of Pipe	Outside Dia.	Inside Dia.	Pitch Circle Dia.	Bolts		
					Bolt Hole Dia.	Number n	Screw Thread
DN (mm)	D (mm)	D2 (mm)	D3 (mm)	D1 (mm)			
15	20	95	28	65	14	4	M 12
20	25	105	34	75	14	4	M 12
25	32	115	42	85	14	4	M 12
32	40	140	51	100	18	4	M 16
40	50	150	62	110	18	4	M 16
50	63	165	78	125	18	4	M 16
65	75	185	92	145	18	4	M 16
80	90	200	108	160	18	8	M 16
100	110	220	128	180	18	8	M 16
100	125	220	135	180	18	8	M 16
125	140	250	158	210	18	8	M 16
150	160	285	178	240	22	8	M 20
150	180	285	188	240	22	8	M 20
200	200	340	235	295	22	8	M 20
200	225	340	238	295	22	8	M 20
250	250	395	288	350	22	12	M 20
250	280	395	294	350	22	12	M 20
300	315	445	338	400	22	12	M 20
350	355	505	376	460	22	16	M 20
400	400	565	430	515	26	16	M 24
450	450	615	488	565	26	20	M 24
500	450	670	517	620	26	20	M 24
500	500	670	533	620	26	20	M 24
600	560	780	618	725	30	20	M 27
600	630	780	645	725	30	24	M 27
700	710	895	740	840	30	24	M 27
800	800	1015	843	950	33	24	M 30
900	900	1115	947	1050	33	28	M 30
1000	1000	1230	1050	1160	36	28	M 33
1200	1200	1455	1260	1380	39	32	M 36

FITTING PRODUCTS



▶ PE INJECTION MOULDED & M/STEEL FLANGE & RUBBER GASKET



 Mild Steel (PN16)

DN mm	Loose Backing Flanges						
	Nominal Outside Dia. Of Pipe DN (mm)	Outside Dia. D (mm)	Inside Dia. D2 (mm)	Pitch Circle Dia. D3 (mm)	Bolts		
					Bolt Hole Dia. D1 (mm)	Number n	Screw Thread
250	250	405	288	355	26	12	M 24
250	280	405	294	355	26	12	M 24
300	315	460	338	410	26	12	M 24
350	355	520	376	470	26	16	M 24
400	400	580	430	525	30	16	M 27
450	450	670	517	585	30	20	M 27
500	500	715	533	650	33	20	M 30
600	560	840	618	770	36	20	M 33
600	630	840	645	770	36	20	M 33
700	710	910	740	840	36	24	M 33
800	800	1025	843	950	39	24	M 36
900	900	1125	947	1050	39	28	M 36
1000	1000	1230	1050	1170	42	28	M 39
1200	1200	1455	1260	1390	48	32	M 45



FITTING PRODUCTS

▶ PE INJECTION MOULDED & M/STEEL FLANGE & RUBBER GASKET



 (Ductile Iron) DI Flanged (PN16)

DN mm	Loose Backing Flanges						
	Nominal Outside Dia. Of Pipe	Outside Dia.	Inside Dia.	Pitch Circle Dia.	Bolts		Approx. Wall Thickness W/T
					Bolt Hole Dia.	Screw Thread	
DN (mm)	D (mm)	D2 (mm)	D3 (mm)	D1 (mm)			
50	63	165	78	125	18	4	19
80	90	200	108	160	18	8	19
100	110	220	128	180	18	8	19
100	125	220	135	180	18	8	19
150	160	285	178	240	22	8	19
150	180	285	188	240	22	8	19
200	225	340	238	295	22	12	20
250	250	395	288	350	22	12	22
250	280	395	294	350	22	12	22
300	315	445	338	400	22	12	24.5
350	355	505	376	460	22	16	26.5
400	400	565	430	515	22	16	28
450	450	615	470	565	26	20	30



 Rubber Gasket (NR)

DN (Outside Dia. Of Pipe)	PCD (mm)	No. Of Holes	Packing
2'	125	4	200
2 1/2"	145	4	200
3" T/E	146	4	200
3"	160	8	200
4" T/E	178	8	200
6" T/E	235	8	160
8" T/E	292	8	100
8"	295	12	100
10" T/E	356	12	60
12" T/E	406	12	60





CONSTRUCTION PRODUCTS



STEEL BAR

- British Standard **BS**
- Commercial Quality **CQ**

High Tensile Deformed Bar

BS

Size mm	Bar Length Meter	Standard Pack (Pcs/Bundle)	Weight (Bundle)
Y10mm	12	138	1.022
Y12mm	12	96	1.023
Y16mm	12	54	1.024
Y20mm	12	34	1.008
Y25mm	12	22	1.016
Y32mm	12	14	1.060
Y40mm	12	9	1.065

Mild Steel Round Bar

BS

Size mm	Bar Length Meter	Standard Pack (Pcs/Bundle)	Weight (Bundle)
R10mm	12	138	1.022
R12mm	12	96	1.023
R16mm	12	54	1.024
R20mm	12	34	1.008
R25mm	12	22	1.016
R32mm	12	14	1.060

Commercial Quality

CQ

Size mm	Bar Length Meter		Standard Pack (Pcs/Bundle)
CQ Y10mm	12	10	138
CQ Y12mm	12	10	96
CQ Y16mm	12	10	54
CQ Y20mm	12	10	34
CQ Y25mm	12	10	22
CQ R4.0mm	12	10	320
	12	10	300
CQ R4.8mm	12	10	200
CQ R5.0mm	12	10	320
	12	10	300
CQ R5.2mm	12	10	400
	12	10	320
	12	10	300



CQ R5.5mm	12	10	400
	12	10	320
	12	10	300
CQ R5.8mm	12	10	400
	12	10	320
	12	10	300
CQ R7.5mm	12	10	200
	12	10	168
CQ R7.0mm	12	10	168
CQ R8.0mm	12	10	200
	12	10	168



Steel Wire Grill For Concrete Reinforcement (BRC)


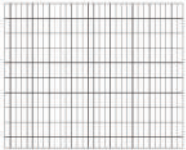
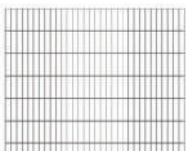
Reference No.	MS 145 : 2001	Standard Sheet Size
	BS 4483 : 1998	
A12	A556	2.2 m X 6m
A10	A393	
A9	A318	
A8	A252	
A7	A193	
A6	A142	
A5	A98	
A4	A63	
B12	B1131	
B10	B785	
B9	B636	
B8	B503	
B7	B385	
B6	B283	
B5	B196	
C10	C785	
C9	C636	
C8	C503	
C7	C385	
C6	C283	
C5	C196	
DA10	DA785	
DA9	DA636	
DA8	DA503	
DA7	DA385	
DA6	DA283	
DA5	DA196	
DA4	DA126	

*Standard : BRITISH STANDARD BS 4483 : 1998
SIRIM MS 145 : 2001s


 Galvanized Wire (Gi Wire)

Nominal Size mm	Minimum Mass of Coating (g/m ²)	
	Standard	Heavy
1.40 - 1.64	30	195
1.65 - 1.84	30	205
1.85 - 2.14	40	215
2.15 - 2.49	45	230
2.50 - 2.79	45	245
2.80 - 3.19	50	255
3.20 - 3.79	60	265
3.80 - 4.39	60	275
4.40 - 5.19	70	280
5.20 - 8.19	80	290


 Roll Top Profile Security Fence

Model	Height mm	Length mm	Wire Diameter mm	Spacing mm
	900	2400	5	Vertical 50
	1200			
	1500			
	1800			
	2100			
	900	2400	5	Vertical 75
	1200			
	1500			
	1800			
	2100			
	900	2400	5	Vertical 75
	1200			
	1500			
	1800			
	2100			
	2400			Horizontal 300

Diameter : 4.00 mm x 8.00mm

Pitch : 50mm x 150mm, 50mm x 200mm, 75mm x 200mm, 75mm x 300mm, 75mm x 450mm

Material : Mild Steel Bright Hard Drawn Wire, Heavy Galvanized Wire, Galfan Wire.

Tensile Strength 550 - 770 N/mm²

Height : 900mm - 3000mm

Width : 2200mm - 3000mm


 Chain Link Fence

Model	Wire Gauge	Standard Height Ft	Standard Width Ft
PVC Coated Chain Link Fencing	PVC Wire 8# (4.06mm)	3ft - 12ft	50
	PVC Wire 9# (3.66mm)	3ft - 12ft	50
	PVC Wire 10# (3.25mm)	3ft - 12ft	50
	PVC Wire 12# (2.64mm)	3ft - 12ft	50
Galvanized Chain Link Fencing	GI Wire 8# (4.06mm)	3ft - 12ft	50
	GI Wire 9# (4.66mm)	3ft - 12ft	50
	GI Wire 10# (3.25mm)	3ft - 12ft	50
	GI Wire 12# (2.64mm)	3ft - 12ft	50
	GI Wire 13# (2.34mm)	3ft - 12ft	50
	GI Wire 14# (2.00mm)	3ft - 12ft	50

Available Pitches Of Chain Link Rence

Standard pitch (mm)	73mm	67mm	50mm	40mm
Standard pitch (in)	2 7/8"	2 5/8"	2"	2 1/2"


 Barbed Wire

Model	Outside Diameter (OD) mm	Estimated Length Meter	Estimated Length Ft	Packing Kg
PVC Coated Wire 12#	+/- 2.6	~ 54 - 109	+/- 178 - 357	5-10kg
Galvanized Wire 13#	+/- 2.3	~ 40 - 80	+/- 131 - 263	5-10kg
Galvanized Wire 14#	+/- 2.0	~ 53 - 107	+/- 175 - 350	5-10kg


 Concertina Barbed Tape

Concertina Barbed Tape (OD)	Meter Run/Coil (m)	Feet Run/Coil (ft)
450mm	8 - 10	26 - 33
700mm	9 - 10	26 - 33
980mm	10 - 12	33 - 39
Straighten	+/-100	+/-328



Welded Mesh In Roll Form

Diameter : 1.60 mm x 12.00mm
 Mesh Aperture : 50mm x 50mm, 75mm x 75mm, 100mm x 100mm,
 50mm x 150mm, 100mm x 200mm, 200mm x 200mm..etc
 Material : Mild Steel Bright Hard Drawn Wire, Ribbed Wire, Galvanized Wire,
 Heavy Galvanized Wire, Galfan Wire.
 Tensile Strength: 600 - 700 N/mm²
 Fabrics Size : 1000mm - 3000mm Width
 : 10m - 100m Length
 Form : Roll Form



Size
L x W x H

Pitch
mm

1m x 1m x 1m
 2m x 1m x 1m
 3m x 1m x 1m
 1m x 1m x 1m
 2m x 1m x 1m
 3m x 1m x 1m

80 x 100
 80 x 100
 80 x 100
 80 x 100
 80 x 100
 80 x 100



Channel & Batten

Standard
Size

C.Channel 1 1/4" x 3" x 6 Meter
 Roof Batten 40mm x 6 Meter



Steel Nails

Standard
Size

1"
 1 1/2"
 2"
 2 1/2"
 3"
 3 1/2"
 4



HARDWARE ITEMS

	 Galvanized Wire	
	Description & Size	Packing
	#20 (2Kg) #20 (12Kg)	10 Rolls / Bundle 10 Rolls / Bundle
	 Glass Block	
	Description & Size	Packing
	Ocean White Diamond	6 Pcs / Box 6 Pcs / Box
	 Orange Garden Water Hose Pipe	
	Description & Size	Packing
	10 Meter 30 Meter	10 Rolls / Bag 10 Rolls / Bag
	 White Tape	
	Description & Size	Packing
	12mm x 0.075mm	10 Pcs / Bundle 100 Pcs / Box
	 Paku Kayu	
	Description & Size	Packing
	1" - 2.5" 3" - 4.5" 5"	12 Kg / Box



HARDWARE ITEMS

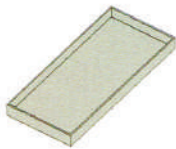
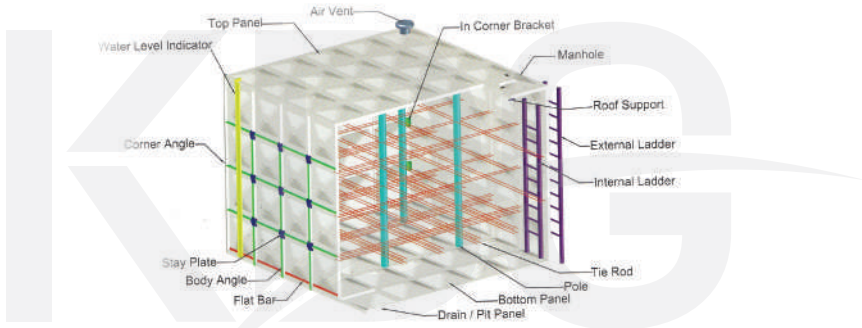
	 Pressure Gauge	
	Description & Size	Packing
	Light Duty Heavy Duty	
	 C Channel & Battern	
	Description & Size	Packing
	C Channel (Blue) Battern (Blue)	100 Lgt / Bundle 200 Lgt / Bundle
	 Plywood	
	Description & Size	Packing
	12mm x 4' x 8'	150 Pcs / Bundle
	 Corrugated Zinc Sheet	
	Description & Size	Packing
	6' - 12'	
	 Wheel Barrow	
	Description & Size	Packing
	Light Duty Heavy Duty	12 Pcs / Box 12 Pcs / Box



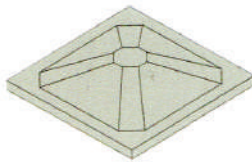
Water Tanks

FRP Sectional Water Tanks

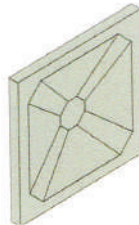
Malaysia Standard : MS 1390 : 2010
 Singapore Standard : SS 245 : 2014
 British Standard : EN 13280 : 2001



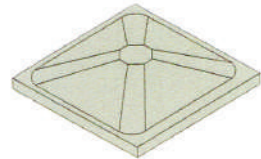
Flat Panel



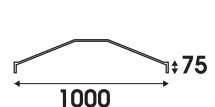
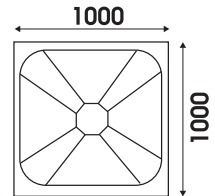
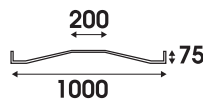
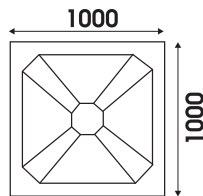
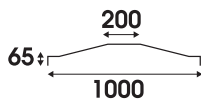
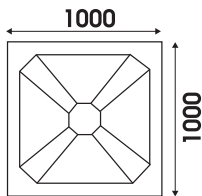
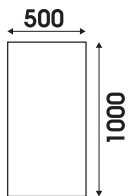
Top Panel



Side Panel



Bottom Panel





AGRICULTURAL PRODUCTS






GENERAL PRODUCTS


	 Outdoor Solar Lamp	
	Description & Size	Packing
100 Watt 200 Watt		
	 Plastic Nylon String	
	Description & Size	Packing
400 Grams 1.4 Kg	50 Pcs / Bdl 10 Rolls / Bag	
	 Silver Shine	
	Description & Size	Packing
1.2 M x 250 M	100 Rolls / Pld	
	 Weed Mat	
	Description & Size	Packing
2 M x 200 M 1.2 M x 400 M	1 Roll 1 Roll	
	 Paku Weed Mat	
	Description & Size	Packing
5"	1000 Pcs / Bag	





GENERAL PRODUCTS

	 Azud Disc Filter	
	Description & Size	Packing
	1" 2"	60 Pcs / Carton 13 Pcs / Carton

	 Helix Disc Filter	
	Description & Size	Packing
	2" 3" 4"	1 Nos / Carton 1 Nos / Carton 1 Nos / Carton

	 PE Sheet	
	Description & Size	Packing
	Black - 12' x 80' x 240 MIC White UV - 8' x 150"	1 Roll 1 Roll

	 Flower Pot	
	Description & Size	Packing
	Round Base - 6" 10"	200 Pcs / Carton 200 Pcs / Carton

	 Flower Pot Hanger	
	Description & Size	Packing
		100 Pcs / Carton



GENERAL PRODUCTS



Industrial Container W or W/O Handle

Description & Size

With Handle

Packing

27" x 19" x 16"

27" x 19" x 16"

LDPE PRODUCTS



LDPE Tubing

Description & Size

16mm x 300 M
20mm x 200 M

Packing

1 Roll
1 Roll

Micro Tubing

Description & Size

5/3mm x 80 M
1mm x 200 M

Packing

35 Rolls / Bdl
40 Rolls / Bdl

LDPE Straight Coupler

Description & Size

16mm
20mm

Packing

100 Pcs / Bag
100 Pcs / Bag



LDPE PRODUCTS

	 LDPE End Cap	
	Description & Size	Packing
	16mm 20mm	100 Pcs / Bag 100 Pcs / Bag
	 LDPE Equal Tee	
	Description & Size	Packing
	16mm 20mm	100 Pcs / Bag 100 Pcs / Bag
	 LDPE Equal Elbow	
	Description & Size	Packing
	16mm 20mm	100 Pcs / Bag 100 Pcs / Bag
	 LDPE Male Threaded Adaptor	
	Description & Size	Packing
	16mm x 3/4" 16mm x 1/2"	100 Pcs / Bag 100 Pcs / Bag
	 LDPE Male Threaded Tee	
	Description & Size	Packing
	16mm x 3/4"	100 Pcs / Bag



LDPE PRODUCTS

	 LDPE Reducing Tee	
	Description & Size	Packing
	16mm	100 Pcs / Bag
	 LDPE Reducing Coupler	
	Description & Size	Packing
	16mm x 13mm 20mm x 16mm	100 Pcs / Bag 100 Pcs / Bag
	 QAV	
	Description & Size	Packing
	16mm x 20mm	100 Pcs / Bag
	 QAV Threaded	
	Description & Size	Packing
	1/2" x 16mm 3/4" x 16mm	100 Pcs / Bag 100 Pcs / Bag
	 Repair Plug	
	Description & Size	Packing
	4mm / 5mm	1000 Pcs / Bag





AGRICULTURAL PRODUCTS

LDPE PRODUCTS

	 Rubber Gourmet (Flange)	
	Description & Size	Packing
	16mm x 20mm	100 Pcs / Bag
	 Rubber Gourmet (Straight)	
	Description & Size	Packing
	16mm 20mm	100 Pcs / Bag 100 Pcs / Bag
	 LDPE End Line	
	Description & Size	Packing
	16mm	100 Pcs / Bag

NURSERY PRODUCTS

	 Poly Bag	
	Description & Size	Packing
	Black 16" x 16" White 16" x 16"	25 Kg 25 Kg





NURSERY PRODUCTS



	 Cocopeat	
	Description & Size	Packing
5 Kg+-		
	 HortiCube	
	Description & Size	Packing
5,520 Cubes	1 Box	
	 Orchid Sunshade Netting	
	Description & Size	Packing
2 M x 30 M 2 M X 50 M	1 Roll 1 Roll	
	 Seed Tray 104	
	Description & Size	Packing
104 Holes	100 Pcs / Box	
	 Seed Tray 40	
	Description & Size	Packing
40 Holes	1 Box	





AGRICULTURAL PRODUCTS



NURSERY PRODUCTS

	 T Labeling Plant Tag	
	Description & Size	Packing
	16mm x 20mm	1000 Pcs / Bag

	 Tomato Clip	
	Description & Size	Packing


SPRINKLER & DRIP IRRIGATION PRODUCTS

	 Butterfly Sprinkler Square 818	
	Description & Size	Packing
	3/4", 45 L/H, Max 8 M (Radius) Pressure 1 (Bar)	200 Pcs / Bag

	 Butterfly Sprinkler 825	
	Description & Size	Packing
	3/4", 45 L/H, Max 8 M (Radius) Pressure 1 (Bar)	200 Pcs / Bag



SPRINKLER & DRIP IRRIGATION PRODUCTS

	 Single Arm Sprinkler 328	
	Description & Size	Packing
	3/4", 42.5~50 L/H, Max 9 M (Radius) Pressure 1~2 (Bar)	200 Pcs / Bag
	 Double Arm Sprinkler 388	
	Description & Size	Packing
	3/4", 42.5~50 L/H, Max 9 M (Radius) Pressure 1~2 (Bar)	200 Pcs / Bag
	 G Sprinkler Black	
	Description & Size	Packing
	Max 1~2 M (Radius)	1000 Pcs / Bag
	 G Sprinkler Thailand	
	Description & Size	Packing
	Max 1~2 M (Radius)	100 Pcs / Bag
	 G Sprinkler Stake	
	Description & Size	Packing
		200 Pcs / Bag



AGRICULTURAL PRODUCTS

SPRINKLER & DRIP IRRIGATION PRODUCTS

	 Holland Sprinkler 360	
	Description & Size	Packing 100 Pcs / Bag
	 Finland Sprinkler 16mm	
	Description & Size	Packing 500 Pcs / Bag
	 Long Arm Sprinkler 323	
	Description & Size	Packing 200 Pcs / Bag
	 Micro Sprinkler 1/2"	
	Description & Size	Packing 100 Pcs / Bag
	 Spray Jet 360 v2	
	Description & Size 90 L/H, Max 2 M (Radius), Pressure 1~2 (Bar)	Packing 1000 Pcs / Bag



SPRINKLER & DRIP IRRIGATION PRODUCTS

	 Adjustable Dripper 360	
	Description & Size	Packing
		500 Pcs / Bag
	 Rain Gun	
	Description & Size	Packing
	1.5" 2"	
	 Black Two Way Puncher	
	Description & Size	Packing
	3 mm Hole	
	 Blue Hole Puncher	
	Description & Size	Packing
	3 mm Hole	
	 Drip Pen 100mm	
	Description & Size	Packing
	100 mm	500 Pcs / Pack



AGRICULTURAL PRODUCTS

SPRINKLER & DRIP IRRIGATION PRODUCTS

	 Drip Pen 150mm	
	Description & Size	Packing
	150mm	500 Pcs / Pack
	 Drip Pen 1mm	
	Description & Size	Packing
	1mm	500 Pcs / Bag
	 Netafirm Dripper	
	Description & Size	Packing
	2.0 L/H for Red & Pink	



GREENHOUSE





AGRICULTURAL PRODUCTS

GREEN HOUSE PRODUCTS

	 UV Long Spring	
	Description & Size	Packing
	2 M	100 Pcs / Carton
	 Long Henger Clip	
	Description & Size	Packing
	20 mm	100 Pcs / Pack
	 Short Henger Clip / Roofing Hook	
	Description & Size	Packing
	20 mm	100 Pcs / Pack
	 Clip Holder	
	Description & Size	Packing
	20 mm	250 Pcs / Carton
	 GI Round Pipe	
	Description & Size	Packing
	1/2" x 24'	123 Pcs / Carton



GREEN HOUSE PRODUCTS

	 GI Square Pipe	
	Description & Size 2" x 2" x 6M	Packing 50 Pcs / Carton
	 GI Rain Gutter	
	Description & Size 24' 20'	Packing 40 Pcs / Carton 40 Pcs / Carton
	 GI Gutter Head	
	Description & Size 9" (W) x 9" (D) x 4" (O)	Packing
	 PVC Rain Gutter	
	Description & Size 4" x 5.8 M	Packing 6 Lgt / Pack
	 PVC Spot Head	
	Description & Size 4" x 4" Outlet	Packing 25 Pcs / Box








GREEN HOUSE PRODUCTS

	 MEIRYO UV Netting	
	Description & Size	Packing
	2.1 M x 100 M	1 Roll
	 Insect Netting	
	Description & Size	Packing
	32 Mesh x 3.7M x 60M	1 Roll
	 Plastic Clear Film	
	Description & Size	Packing
	7.32mm x 0.1V5mm x 48 M x 150 MIC	1 Roll
	 Metal Hub	
	Description & Size	Packing
	(L) 16.7cm x (W) 5.5cm x (H) 4.5cm	
	 Greenhouse Metal Support	
	Description & Size	Packing
	AA Metal AB Metal	



GREEN HOUSE PRODUCTS

	 Exhaust Fan	
	Description & Size	Packing
	3 Phase, 1380 x1380 x 350 cm	
	 Zinc Bar	
	Description & Size	Packing
	9" (W) x 9" (D) x 4" (O)	
	 GI Door Clip	
	Description & Size	Packing
	1/2" inch	
	 Zinc Bar Hook	
	Description & Size	Packing
	1/2" inch	
	 Round Pipe Joint	
	Description & Size	Packing
	1/2" inch	

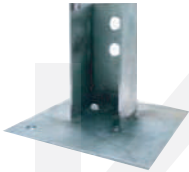



GREEN HOUSE PRODUCTS

	 GI U-Bolts & Nuts	
	Description & Size	Packing
	 Ear Clip	
	Description & Size	Packing
	 21mm Steel Clip	
	Description & Size	Packing
	 Greenhouse Screws	
	Description & Size	Packing
	DS 725 HO DS 725 HW DS 520 HO	
	 Inner U Joint	
	Description & Size	Packing



GREEN HOUSE PRODUCTS

	 Gutter Bracket	
	Description & Size	Packing
	 Base Bracket	
	Description & Size	Packing
	 Y Bracket	
	Description & Size	Packing
	 Air Flow Drum	
	Description & Size	Packing
	570mm, 6300 cbm/h, 120w	



NFT PRODUCTS


 NFT Hydroponic Systems

Description & Size

3 Layer - 18 Holes

Packing


 Cup of Plant / Net Pot

Description & Size

47mm x 35mm
50mm x 35mm

Packing

1000 Pcs / Bag
1000 Pcs / Bag
 PVC Hydroponic Trunking 2" x 4"

Description & Size

Packing

6 Lgt / Bundle


 PVC Hydroponic Trunking 2" x 4" CV

Description & Size

Packing

6 Lgt / Bundle


 1 FT (12") End Cap Trunking

Description & Size



280mm(D) x 220mm(H)
x 200mm(B)

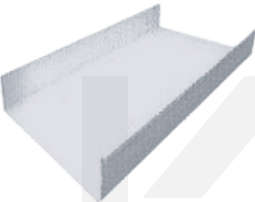

Packing



50 Pcs / Box





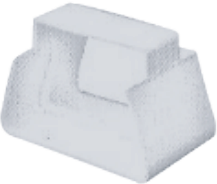

NFT PRODUCTS

	 1 FT (12") Joint Trunking	
	Description & Size	Packing
	JT300 x 659	50 Pcs / Box

	 1 FT (12") Trunking Pipe	
	Description & Size	Packing
	2 1/2" x 12F	4 Lgt / Bundle

	 Elbow 2" x 4"	
	Description & Size	Packing
		100 Pcs / Bag

	 Joint 2" x 4"	
	Description & Size	Packing
		100 Pcs / Bag

	 Joint 2" x 4" CV	
	Description & Size	Packing
		100 Pcs / Bag



AGRICULTURAL PRODUCTS

NFT PRODUCTS

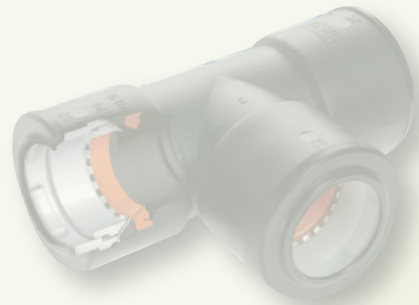
	 End Cap 2" x 4"	
	Description & Size	Packing
		100 Pcs / Bag
	 End Cap with Hole 2" x 4"	
	Description & Size	Packing
		100 Pcs / Bag
	 End Cap 2" x 4" CV	
	Description & Size	Packing
		100 Pcs / Bag
	 End Cap with Hole 2" x 4" CV	
	Description & Size	Packing
		100 Pcs / Bag





KDG GROUP OF COMPANIES (Co. No. 1045386-T)

Lot 5413-Unit 9, Batu 23,
 Jalan Rawang Kudang Sungai Bakau,
 48000 Rawang Selangor West, Malaysia.
 Tel : + 6012 611 3420
 : + 6016 335 6940 RON
 Fax : + 603 6242 9301
 E-mail : sales@tecborneo.com.my



- TEC BORNEO HARDWARE SDN BHD
- KDG VENTURE SDN BHD
- TSB LOGISTICS & TRANSPORT SDN BHD
- KDG HEALTHCARE SDN BHD
- MPPI INDUSTRIES SDN BHD
- KDG ENGINEERING SDN BHD
- TEC BORNEO HARDWARE (SABAH) SDN BHD
- KDG FARMER (RAWANG) SDN BHD
- HS PRODUCT MARKETING SDN BHD
- TAT SERI BETA GROUP SDN BHD
- KDG WORLD SDN BHD

