

MALAYSIA INDUSTRY STANDARD

PVC-U PIPES

Our **Soil, Waste and Vent (S.W.V) PVC pipes** comply with **MS 1063:2002, BS 4514, MS 5481**, and **BS 5255**, and are designed for soil and waste discharge as well as ventilation pipework within building structures.

These pipes are suitable for sanitary stacks, wastewater conveyance, and associated ventilation systems in residential and commercial buildings. Sizes are available from 36mm to 315mm.

The outside diameter is manufactured with reference to **JIS K6741**, with pipe wall thickness produced to meet applicable local requirements and usage conditions.

Scope of applications:

- Soil, waste discharge, and ventilation systems
- Sanitary stacks and wastewater conveyance
- New construction, renovations, and replacement of metal pipe systems

JOINTING METHODS

RAIN WATER DOWN PIPE (RWDP)

Suitable joining methods include solvent cement.

SEWERAGE PIPE (S.W.V)

Suitable joining methods include with socket or solvent cement.

Pipe selection shall be determined based on application type, installation method, and applicable standards.

■ Pipe Features

- No deposits and smooth surface (better flow rate)
- S.W.V. Pipes are non-corrosive (lower maintenance)
- S.W.V. Pipes have a longer life cycle than others
- S.W.V. Pipes are suitable for residential, commercial and industrial sectors.

PVC-U | RAIN WATER DOWN PIPE (RWDP)

- Color: White
- Standard: BS EN 12200, & BS 4576
- Conformance Standard BS EN 12200-1

Size		Class	OD		Thickness
ft	mm		MIN(mm)	MAX(mm)	MIN(mm)
4	110	UPVC (R)	110	110.4	2.5

- Standard Length 5.8m ± 5mm

Light Duty				
Size	OD		Thickness	
	MIN(mm)	MAX(mm)	MIN(mm)	MAX(mm)
3	82.4	82.8	1.8	-
4	110	110.4	2.5	-
6	160	160.6	2.5	-

- Standard Length 5.8m ± 5mm

PVC-U | UNDERGROUND SEWERAGE PIPE

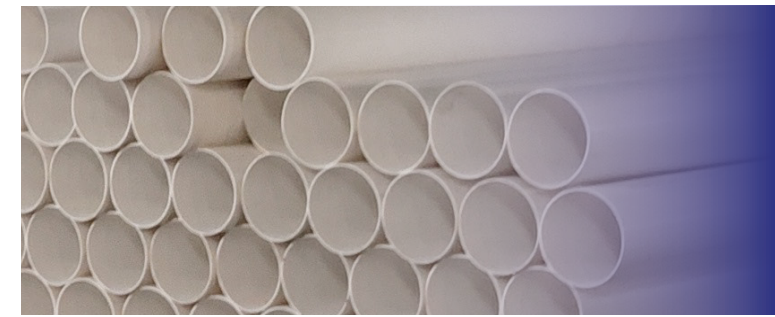
- Color: Standard Grey
- Standard: MS 979: Part 1: 1985

Size		Class	OD		Thickness
Inch	mm		MIN(mm)	MAX(mm)	MIN(mm)
4	100	UNDERGROUND	110	110.4	3.2
6	155	UNDERGROUND	160	160.6	4.1

- Standard: MS 979: Part 2: 1985

Size		Class	OD		Thickness
Inch	mm		MIN(mm)	MAX(mm)	MIN(mm)
8	200	UNDERGROUND	200	200.6	4.9
10	250	UNDERGROUND	250	250.7	6.1
12	315	UNDERGROUND	315	315.9	7.7

- Standard Length 5.8m ± 5mm



PVC-U | SOIL, WASTE & VENT (S.W.V) PIPE

- Color: White
- Standard: MS 1063: 2002, BS 4514, BS 5481 & BS 5255

CODE B Application for Components, intended use above ground inside or outside buildings or fixed onto walls

Size	OD		Thickness	
	MIN(mm)	MAX(mm)	MIN(mm)	MAX(mm)
1 1/4	32.0	32.2	3.0	3.5
1 1/2	40.0	40.2	3.0	3.5
2	50.0	50.2	3.0	3.5
2 1/2	63.0	63.2	3.0	3.5
3	82.4	82.8	3.0	3.5
4	110.0	110.3	3.2	3.8
6	160.0	160.4	3.2	3.8
8	200.0	200.4	3.9	4.5
10	250.0	250.5	4.9	5.6
12	315.0	315.6	6.2	7.1

- Standard Length 5.8m ± 5mm

CODE BD Application for Components intended use above ground for both inside or outside buildings, fixed onto walls and rapid construction

Size	OD		Thickness	
	MIN(mm)	MAX(mm)	MIN(mm)	MAX(mm)
3	82.4	82.8	3	3.5
4	110	110.3	3.2	3.8
6	160	160.4	4	4.6
8	200	200.5	3.9	4.5
10	250	250.5	4.9	5.6
12	315	315.6	6.2	7.1

- Standard Length 5.8m ± 5mm

SINGAPORE INDUSTRY STANDARD

PVC-U PIPES

Our range of **PVC-U Pipes**: for **Soil, Waste and Vent (S.W.V)** are manufactured in accordance with **Singaporean Industry Standards (SS)**.

These pipes are manufactured to meet the performance, safety, and durability requirements and are intended for use in residential, commercial, and industrial developments, including HDB projects and private sector works, where compliance with approved standards and consistent performance are required.

They are suitable for both above-ground and below-ground installations, subject to correct pipe class selection based on working pressure and intended use.

Scope of applications:

- Soil, waste discharge, and ventilation systems
- Sanitary stacks and wastewater conveyance
- New construction, renovations, and replacement of metal pipe systems

JOINTING METHODS

RAIN WATER DOWN PIPE (RWDP)

Suitable joining methods include solvent cement.

SEWERAGE PIPE (S.W.V.)

Suitable joining methods include with socket or solvent cement.

Project owners, engineers and contractors must determine the appropriate pipe class based on the working pressure and intended applications.

■ Pipe Features

- Corrosion & Chemical Resistant
- Smooth Surface for Efficient Flow
- Lightweight & Easy Installation

PVC-U | SOIL, WASTE & VENT PIPE (S.W.V)

- Color: White
- Standard: SS213:1998
- Corresponding to BS 4514, AS 1415, BS 5255

Size		OD (MM)		Thickness		20ft Cont. Load (Approx.Qty.)
INCH	MM	Min	Max	Min	Max	
1 1/4	32	36.2	36.5	2.1	2.4	4100
1 1/2	40	42.8	43.1	2.3	2.6	2950
2	50	55.7	56	2.4	2.7	1750
3	80	82.3	82.7	3	3.5	800
4	110	110.0	110.4	3.2	3.6	451
6	160	160.0	160.5	4	4.5	210

- Standard Length 5.8m ± 5mm

PVC-U | COLD WATER SERVICES, ELECTRICAL DUCTING & INDUSTRIAL PIPE

- Color: White
- Standard: SS141:1976
- Corresponding to BS 3505, BS 3506, AS 1477

Class D

Size		OD (MM)		Thickness		20ft Cont. Load (Approx.Qty.)
INCH	MM	Min	Max	Min	Max	
1 1/4	32	42.1	42.4	2.2	2.7	2,995
1 1/2	40	48.1	48.4	2.5	3.0	2,300
2	50	60.2	60.5	3.1	3.7	1,467
3	80	88.7	89.1	4.6	5.3	670
4	100	114.1	114.5	6.0	6.9	440
6	155	168.0	168.5	8.8	10.2	196
8	200	218.8	219.4	10.3	11.9	110
10	250	272.6	273.4	12.8	14.8	70

- Standard length 5.8m ± 5mm

*1 MPA =10 bar	Class	Working Pressure		Color
1 bar = 14.2 PSI (Pound per sq inch)	B	0.6 Mpa*	60m head of water	Grey
	C	0.9 Mpa*	90m head of water	Grey
	D	1.2 Mpa*	120m head of water	White
	E	1.5 Mpa*	150m head of water	White

Other colours and socket-end configurations are available for selected sizes upon request, subject to minimum order quantities.

PVC-U | UNDERGROUND DRAINAGE PIPE

- Color: Brown
- Standard: SS272:1983
- Corresponding to BS 4660, BS 5481, AS 1260

Size		OD (MM)		Thickness		20ft Cont. Load (Approx.Qty.)
INCH	MM	Min	Max	Min	Max	
4	110	110	110.4	3.2	3.2	451
6	160	160	160.6	4.0	4.5	210
8	200	200.0	200.6	4.9	6.0	132
10	250	250.0	250.7	6.1	7.5	72
12	315	315.0	315.9	7.7	9.4	49

- Standard Length 5.8m ± 5mm

Class E

Size		OD (MM)		Thickness		20ft Cont. Load (Approx.Qty.)
INCH	MM	Min	Max	Min	Max	
1/2	15	21.2	21.5	1.7	2.1	12,000
3/4	20	26.6	26.9	1.9	2.5	7,470
1	25	33.4	33.7	2.2	2.7	4,700

- Standard length 5.8m ± 5mm



JAPAN INDUSTRY STANDARD

PVC-U PIPES

Our range of **PVC-U Pipes: Class AW, AE, AEO AND AO** are manufactured in accordance with **Japanese Industrial Standards (JIS)**.

Scope of applications:

- Soil, waste discharge, and ventilation systems
- Sanitary stacks and wastewater conveyance
- New construction, renovations, and replacement of metal pipe systems

Class VP (AW) PVC-U

Used for high pressure applications such as pumps, mechanical plant systems and pressurised fluid conveyance.

Class VU (AE) PVC-U

Used for non-pressurised and low-pressure applications such as drainage, ventilation, and discharge systems in industrial and building services installations.

AEO PVC-U Pipes

Used for non-pressurised drainage applications including fume exhaust systems and air-conditioning discharge lines.

AO PVC-U Pipes

Used for non-pressurised sanitary, rainwater, and sewage systems, commonly specified in regional building standards

Pipe class selection shall be based on working pressure, installation environment, and regulatory requirements.

■ Pipe Features

- Durable & Corrosion-Resistant
- Lightweight & Easy Installation
- Pressure-Rated Options Available
- Standards-Compliant Manufacturing

Pipe Standard	Working Pressure
Class VP (AW)	0.98Mpa(10kgfcm ²)
Class VU (AE)	0.59Mpa(6kgfcm ²)
*1 kgfcm ² = 1 bar	
Pipes are manufactured in grey as standard, with custom colours available for certain sizes upon request.	

PVC-U | AW&AE PIPE

- Color: Standard Grey
- Standard: JIS K6741: 1999

Size		OD (MM)		AW Thickness		AE Thickness		20ft Cont. Load (Approx.Qty.)
INCH	MM	Min	Max	Min	Max	Min	Max	
1/4	10	15.0	17.2	2.2	2.8	–	–	–
3/8	13	17.0	17.8	2.2	2.8	–	–	16,500
1/2	16	21.1	22.2	2.7	3.3	–	–	11,000
3/4	20	25.8	26.2	2.7	3.3	–	–	7,900
1	25	31.8	32.2	3.1	3.9	–	–	5,200
1-1/4	30	37.8	38.2	3.1	3.9	–	–	3,500
1-1/2	40	47.8	48.2	3.6	4.4	1.8	2.2	2,200
2	50	59.8	60.2	4.1	4.9	1.8	2.2	1,480
2-1/2	65	75.7	76.3	4.1	4.9	2.2	2.8	900
3	75	88.7	89.3	5.5	6.3	2.7	3.3	650
4	100	113.6	114.4	6.6	7.6	3.1	3.9	440
5	125	139.2	140.8	–	–	4.1	4.7	–
6	150	164.5	165.5	8.9	10.3	5.1	5.9	196
8	200	215.3	216.7	10.3	11.7	6.5	7.5	110
10	250	266.1	267.9	12.7	14.5	7.8	9.0	72
12	300	317.0	319.0	15.1	17.3	9.2	10.6	49

- Standard Length 5.8m ± 5mm

PVC-U | AEO/AO PIPE

- Color: Standard Grey
- Standard: JIS K6741: 1999

Size		OD (MM)		Thickness		20ft Cont. Load (Approx.Qty.)
INCH	MM	Min	Max	Min	Max	
3/8	13	17.8	18.2	1.8	2.2	16,500
1/2	16	21.8	22.2	1.8	2.2	11,000
3/4	20	25.8	26.2	1.8	2.2	7,900
1	25	31.8	32.2	1.8	2.2	5,200
1 1/4	38	37.8	38.2	1.8	2.2	3,500
1 1/2	42	41.8	42.2	1.8	2.2	2,860
3 (AO Only)	75	88.7	89.3	1.9		–
4	100	113.6	114.4	2.2	2.4	440
6	150	164.5	165.5	2.5	2.8	196
8	200	215.3	216.7	4.0	4.5	110
10	250	266.1	267.9	4.0	4.5	72
12	300	317.0	319.0	5.5	6.0	49

- Standard Length 5.8m ± 5mm

