



Your Complete Piping Solutions

PVC-U

Underground Sewerage System



MS 1001:2007 2015 CERT NO. 1004-10001



COMPANY BACKGROUND

Cew Sin Plastic Pipe (243310-M) was founded in 1992 and is a renowned plastic pipe manufacturer in Malaysia that specializes in Unplasticized Polyvinyl Chloride (PVC-U) Pipes and Fittings, Polypropylene Random (PP-R) Pipes and Fittings and High-Density Polyethylene (HDPE) Pipes. Cew Sin (CS) uses primarily PVC-U, PP-R and HDPE raw materials to manufacture high-quality, safe and reliable plastic pipes and fittings for a wide range of applications, including water supply, drainage, sewage, cable and wire conduits for a wide spectrum of industries such as construction, infrastructure, utility, agriculture and many more. It is our cutting-edge technology and proven track record of quality excellence that has made us a respected leader in the market.

CS is also committed to providing green solutions for our customers. We offer environmentally friendly, lead-free options for our pipes and fittings. Our products also comply with various national and international professional certifications as part of our pursuit of quality excellence. At the same time, we invest heavily in Research and Development because we believe in continuously upgrading the quality of our products, as befitting our status as a market leader in Malaysia.

We owe our achievements in the plastic pipe manufacturing industry to sound management, professional production, continuous upgrades and efficient services. Our endeavours over the years have made us a well-trusted brand in both the domestic and international market.

We are ISO 9001:2015 Quality Management System certified, while stringent measures are adopted to ensure a high product quality that meets our local and export customers' needs. Our products are also endorsed by SIRIM QAS (Standard of Industrial and Research Institute in Malaysia) and TÜV SÜD certified according to local and international standards.

Apart from international certification, our pipes and fittings meet the requirements of the Malaysian National Water Authority (Suruhanjaya Perkhidmatan Air Negara or SPAN), Jabatan Air Negeri Sabah, and the State Water Authority of Sarawak.

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**THE
NEW
TITAN
CON**



OUR COMMITMENTS AND SERVICES

VISION

To become the leading manufacturer and distributor of complete PVC-U, PP-R and HDPE pipping systems in the region.

MISSION

To ensure total customer satisfaction through continuously improving our products, resources, facilities and services.

QUALITY POLICIES

- ◆ Customer satisfaction is our top priority
- ◆ Strive to be the best in the industry
- ◆ People competency is the key driver
- ◆ Plan for and commit to continuous improvement



STATE-OF-THE-ART LABORATORY

CS strongly believes in the importance of high-quality, durable, safe and reliable products. We have a comprehensive range of equipment in our laboratory where all products are rigorously tested in compliance with local and international standards. Fine raw materials and compounds are assessed in terms of temperature, pressure and energy input, while pipe samples are put under stringent impact and tensile strength inspections. Our dedicated Research and Development team is also always working on developing new ways to upgrade the quality of our pipes and fittings as according to industry standards.

OFFICIAL CERTIFICATIONS

CS's wide range of products adheres to ISO 9001 certification, as well as both local and international standards, including but not limited to:

- ◆ SIRIM (Standard and Industrial Research Institute of Malaysia)
- ◆ TÜV SÜD Malaysia



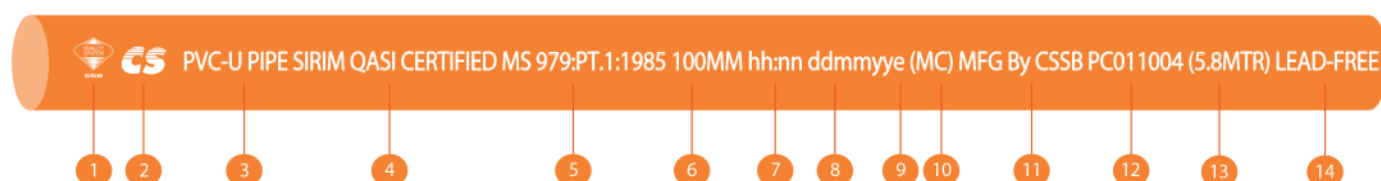
PVC-U UNDERGROUND SEWERAGE PIPES

This range of PVC-U pipes are suitable for the conveyance of normal domestic effluents and surface water. It adheres to the MS 979 standard and is recommended for underground applications including under gardens, fields, driveways, yards and roads other than main roads. These pipes are highly resistant to corrosion, have excellent chemical resistance and are exceedingly durable. CS offers a comprehensive sewerage solution with pipes of sizes between 100mm to 315mm.

Features:

- ♦ Designed for use underground
- ♦ Comprehensive range of size options available
- ♦ Suitable for installation under gardens, fields, driveways and roads
- ♦ Low maintenance due to durable nature
- ♦ Superior resistance to abrasion
- ♦ Impervious to chemicals found in domestic effluent
- ♦ Lightweight and easy to handle, transport and install
- ♦ Available in a golden-brown colour
- ♦ Fuss-free assembly with solvent cement and rubbering joint

CS Pipe Marking



- | | |
|--|--|
| ① SIRIM Logo  | ⑧ Reference code year/weeks/day of weeks |
| ② CEW SIN Logo  | ⑨ Shift code |
| ③ Material | ⑩ Machine no. |
| ④ Certification Body | ⑪ Manufacture code |
| ⑤ Standard References and conformance | ⑫ SIRIM Licenses no. |
| ⑥ Nominal Size | ⑬ Length for 5.8M |
| ⑦ Time and Minutes | ⑭ LEAD-FREE Formulation |

PRODUCT CODE

PVC-U PIPE NEW CODE

PS-UG-200-5.8-BR

GROUP+
SERIES

PRODUCT &
CLASS

DIAMETER
SIZES

LENGTH

COLOUR

PVC-U FITTINGS NEW CODE

F-USB-200-BR

GROUP+
SERIES

PRODUCT

DIAMETER
SIZES

COLOUR

GROUP

P	PIPE
F	FITTINGS
O	OTHERS

SERIES

S	SIRIM
C	CUSTOM MADE

CLASS

UG	UNDERGROUND SEWERAGE
D	CODE : D (MS 1063)

FITTINGS

USB	UNDERGROUND SWEPT BEND
USB135	UNDERGROUND 135° BEND PLAIN
UBB	UNDERGROUND BOSSED BEND (M/F)
UESB	UNDERGROUND EQUAL SINGLE BRANCH
URSB	UNDERGROUND REDUCING SINGLE BRANCH
UYB	UNDERGROUND Y-BRANCH
URYB	UNDERGROUND REDUCING Y-BRANCH
UBC	UNDERGROUND BOSS CONNECTOR
USC	UNDERGROUND STRAIGHT COUPLING
ULIRS	UNDERGROUND LEVEL INVERT REDUCING SOCKET
UEC	UNDERGROUND END CAP
UPTR	UNDERGROUND P-TRAP
UPTR-UB	UNDERGROUND P-TRAP (U-BODY)
USTR	UNDERGROUND S-TRAP
USTR-UB	UNDERGROUND S-TRAP (U-BODY)
UUB	UNDERGROUND U-BODY
USWN	UNDERGROUND SWAN NECK

DIAMETER / SIZES

100MM	4" (MS 979)
110MM	4" (MS 1063)
155MM	6" (MS 979)
160MM	6" (MS 1063)
200MM	8"
250MM	10"
315MM	12"

LENGTH

5.8	5.8 MTR
6.0	6.0 MTR

COLOR

BR	GOLDEN BROWN
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PVC-U UNDERGROUND SEWERAGE PIPES

MS 979: PART1: 1985 & MS 979: PART 2:1985

(BS 4660, BSEN 1401 & ISO 4435)



The Underground Sewerage Pipes commonly known as the “Sewer & Storm Pipes” which are suitable for all underground usage.

Available from 100mm to 315mm diameter, these pipes are laid in the ground as scupper drain, sewer or drainage connections.

They are produce in golden brown colour.

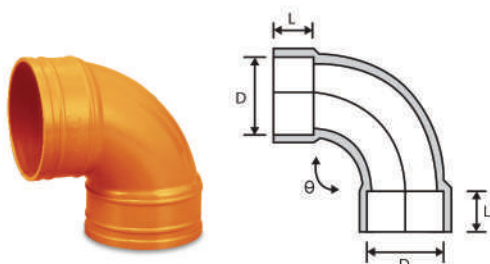
The pipes are joined by solvent cement joint and rubbering joint.

PRODUCT CODE	NOMINAL/SIZES		OUTSIDE DIAMETER (MM)		MIN WALL THICKNESS (MM)	LENGTH (METER)
	(IN.)	(MM)	MIN	MAX		
PS-UG-100-5.8-BR	4	100	110.00	110.40	3.2	5.8
PS-UG-155-5.8-BR	6	155	160.00	160.60	4.1	5.8
PS-UG-200-5.8-BR	8	200	200.00	200.60	* 4.9	5.8
PS-UG-250-5.8-BR	10	250	250.00	250.70	* 6.1	5.8
PS-UG-315-5.8-BR	12	315	315.00	315.90	* 7.7	5.8

* These values of wall thickness are for a standard dimension ration (SDR) of 41.

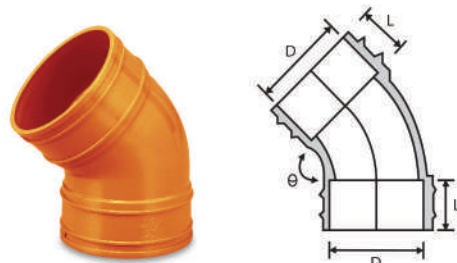
PVC-U UNDERGROUND SEWERAGE FITTINGS

UNDERGROUND SWEPT BEND

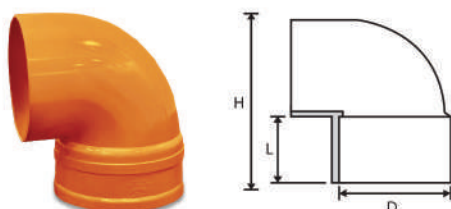


PRODUCT CODE	NOMINAL SIZE (mm)	DIMENSIONS (mm)	
		D	L
F-USB-110-BR	110	110.50	52.30
F-USB-160-BR	160	160.60	78.50
F-USB-200-BR	200	200.70	81.60
F-USB-250-BR	250	250.50	82.10
F-USB-315-BR	315	315.50	103.10

UNDERGROUND 135° BEND PLAIN



PRODUCT CODE	NOMINAL SIZE (mm)	DIMENSIONS (mm)		
		Angle (θ)	D	L
F-USB135-110-BR	110	135.00	110.40	48.00
F-USB135-160-BR	160	135.00	160.80	77.40
F-USB135-200-BR	200	135.00	200.40	81.10
F-USB135-250-BR	250	45.00	250.60	85.60
F-USB135-315-BR	315	135.00	315.50	100.20

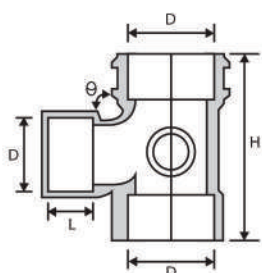


UNDERGROUND BOSSSED BEND (M/F)

PRODUCT CODE	NOMINAL SIZE (MM)	DIMENSIONS (MM)			
		Angle (θ)	D	L	H
F-UBB-110-WT	110	90.00	110.40	49.50	162.00

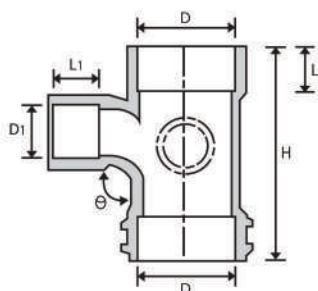
PVC-U UNDERGROUND SEWERAGE FITTINGS

UNDERGROUND EQUAL SINGLE BRANCH



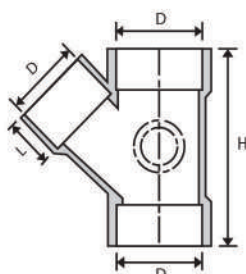
PRODUCT CODE	NOMINAL SIZE (mm)	DIMENSIONS (mm)			
		Angle (θ)	D	L	H
F-UESB-110-BR	110	92.50	110.60	52.50	249.00
F-UESB-160-BR	160	92.50	160.50	74.00	350.00
F-UESB-200-BR	200	90.00	200.40	81.50	403.00
F-UESB-250-BR	250	87.50	250.80	82.10	443.00

UNDERGROUND REDUCING SINGLE BRANCH



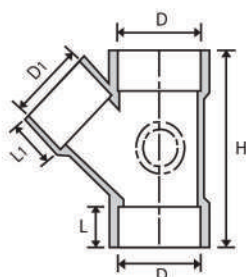
PRODUCT CODE	NOMINAL SIZE (MM)	DIMENSIONS (MM)				
		D	D1	H	L	L1
F-URSB-160X110-BR	160X110	160.50	110.40	315.00	74.00	50.00
F-URSB-200X110-BR	200X110	200.70	110.40	410.00	82.00	50.00
F-URSB-200X160-BR	200X160	200.70	160.50	410.00	82.00	50.00
F-URSB-250X160-BR	250X160	250.80	160.70	443.00	82.10	74.00
F-URSB-250X200-BR	250X200	250.80	200.80	443.00	82.10	81.50

UNDERGROUND Y-BRANCH



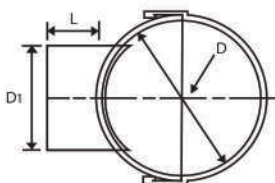
PRODUCT CODE	NOMINAL SIZE (MM)	DIMENSIONS (MM)			
		Angle (θ)	D	H	L
F-UYB-110-BR	110	135.00	110.40	260.60	51.20
F-UYB-160-BR	160	135.00	160.50	350.00	74.00
F-UYB-200-BR	200	135.00	200.00	430.00	82.00

PVC-U UNDERGROUND SEWERAGE FITTINGS



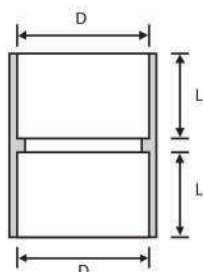
UNDERGROUND REDUCING Y-BRANCH

PRODUCT CODE	NOMINAL SIZE (MM)	DIMENSIONS (MM)				
		D	D1	H	L	L1
F-URYB-160X110-BR	160X110	160.50	110.40	350.00	74.00	52.00



UNDERGROUND BOSS CONNECTOR

PRODUCT CODE	NOMINAL SIZE (MM)	DIMENSIONS (MM)		
		D	D1	L
F-UBC-160X110-BR	160X110	160.50	110.40	50.50
F-UBC-200X110-BR	200X110	200.70	110.40	47.90
F-UBC-200X160-BR	200X160	200.70	110.40	58.20

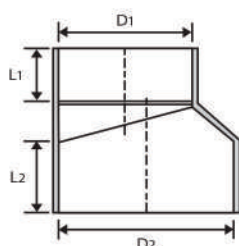


UNDERGROUND STRAIGHT COUPLING

PRODUCT CODE	NOMINAL SIZE (mm)	DIMENSIONS (MM)	
		D	L
F-USC-110-BR	110	110.50	53.20
F-USC-160-BR	160	160.50	78.20
F-USC-200-BR	200	200.70	81.00
F-USC-250-BR	250	250.70	83.40
F-USC-315-BR	315	315.90	101.20

PVC-U UNDERGROUND SEWERAGE FITTINGS

UNDERGROUND LEVEL INVERT REDUCING SOCKET



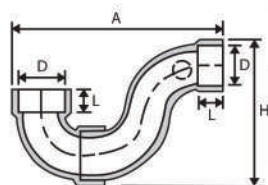
PRODUCT CODE	NOMINAL SIZE (MM)	DIMENSIONS (MM)			
		D1	D2	L1	L2
F-ULIRS-160X110-BR	160X110	110.30	160.50	47.80	52.20
F-ULIRS-200X110-BR	200X110	110.50	200.90	62.80	68.80
F-ULIRS-200X160-BR	200X160	160.30	200.60	63.60	68.60
F-ULIRS-250X110-BR	250X110	110.60	250.70	52.00	84.00
F-ULIRS-250X160-BR	250X160	160.60	250.70	61.40	84.00
F-ULIRS-250X200-BR	250X200	200.45	250.70	72.00	84.00

UNDERGROUND END CAP



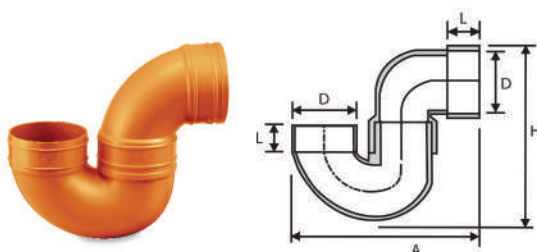
PRODUCT CODE	NOMINAL SIZE (MM)	DIMENSIONS (MM)	
		D1	L1
F-UEC-110-BR	110	110.40	23.50
F-UEC-160-BR	160	160.50	78.00

UNDERGROUND P-TRAP



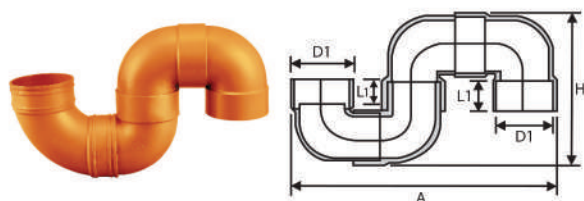
PRODUCT CODE	NOMINAL SIZE (mm)	DIMENSIONS (MM)			
		D	L	A	H
F-UPTR-110-BR	110	110.40	49.50	375.00	270.00

PVC-U UNDERGROUND SEWERAGE FITTINGS



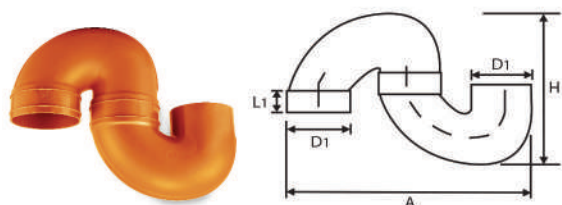
UNDERGROUND P-TRAP (U-BODY)

PRODUCT CODE	NOMINAL SIZE (mm)	DIMENSIONS (mm)			
		D	L	A	H
F-UPTR-UB-110-BR	110	110.40	46.50	310.00	295.00



UNDERGROUND S-TRAP

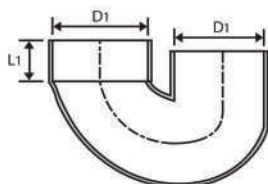
PRODUCT CODE	NOMINAL SIZE (mm)	DIMENSIONS (mm)			
		D1	L1	A	H
F-USTR-110-BR	110	110.40	49.50	460.00	295.00



UNDERGROUND S-TRAP (U-BODY)

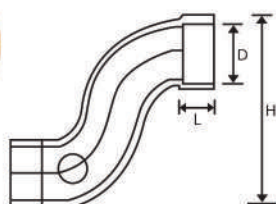
PRODUCT CODE	NOMINAL SIZE (mm)	DIMENSIONS (mm)			
		D1	L1	A	H
F-USTR-UB-110-BR	110	110.40	46.50	380.00	280.00

PVC-U UNDERGROUND SEWERAGE FITTINGS



UNDERGROUND U-BODY

PRODUCT CODE	NOMINAL SIZE (mm)	DIMENSIONS (mm)	
		D1	L1
F-UUB-110-BR	110	110.40	46.50



UNDERGROUND SWAN NECK

PRODUCT CODE	NOMINAL SIZE (mm)	DIMENSIONS (mm)		
		D	L	H
F-USWN-110-BR	110	110.50	50.00	280.00

PVC-U UNDERGROUND SEWERAGE ASSEMBLY SYSTEM



Solvent Cement is a cost effective and highly secure method for pipe assembly. It can be used on PVC-U pipes and socket end pipes. CS's Solvent Cement is recommended for use on PVC and PVC-U pipes. It features superior adhesion, fast setting, and waterproof bonding. Upon full cure, it is safe for drinking water, irrigation, waste water, sanitary pipes, conduits and more.

Features

- ◆ Reliable and highly secure bonding
- ◆ Cost effective as small amount is needed for each application
- ◆ Strong resistance to vibration and pulsation leaks
- ◆ Watertight adhesion
- ◆ Fast setting and easy installation

POLYVINYL CHLORIDE (PVC) SOLVENT CEMENT

CS solvent cement is a formulated premium quality liquid adhesive which is used to create an airtight seal that holds PVC-U pipe and fittings together. Our solvent cement features strong bonding strength, fast-dry, slow-dry and waterproof seal. It is safe for drinking-water supply piping, sanitary pipes, water irrigation and etc. All of our solvent cement has been certified by Sirim QAS International in compliance with MS 628-4:2015. (equivalent to British Standard BS 4346 Part 3)



Product Code: SSCPVC500-T

Colour : Transparent (Fast Dry)
Solid consists of : MEK & CYC



Product Code: SSCPVC500-G

Colour : Green (Fast Dry)
Solid consists of : MEK & CYC



Product Code: SSCPVC500-B

Colour : Blue (Slow Dry)
Solid consists of : MEK, CYC & THF

Solid content : 24%

Consistency property : 1,000pcs

Quality : Tough & Resistance

Comply to Standard : MS 628-4: 2015

- ♦ A highly soluble **FAST DRY** and **SLOW DRY** PVC-U Solvent cement is available.
- ♦ When applied, it will instantly dissolve and blend with the pipe to produce a film (wall) of 0.4mm thick, so that the fitting gap will be strong and stable.

RECOMMENDATIONS ON BRUSH :-

A : Pipes with diameter 25mm (1") and below - recommended brush are provided with the can.

B : Pipes with diameter 32mm to 50mm (1 1/4" to 2") - use 1" brush

C : Pipes with diameter 75mm to 200mm (3" to 8" and above) - use 2" brush

PRESSURE TEST

Cold Water (20°C)

Hot Water (60°C)

TEST PRESSURE

Below 12kg/cm²(171psi)

Below 12kg/cm²(171psi)

DRYING TIME

After 1 hour

After 2 hour

MATERIAL SAFETY DATA SHEET

COMPOSITION/INFORMATION ON INGREDIENT:

Ingredient	PVC Resin	Cyclohexanone	Methyl Isobuty Ketone (MIBK)	T.H.F.	Methyl Ethynyl Keltone (MEK)
CAS No.	9003-22-9	108-94-1	141-79-7	109-99-9	78-93-3
% - volume	24%	30%	11%	4%	55%

ESTIMATED SOLVENT CEMENT REQUIREMENT:-

NORMINAL/SIZES		Number of Possible Joints 500g
(IN.)	(MM)	
1/2	32	383
3/4	40	250
1	50	200
1 1/4	80	156

NORMINAL/SIZES		Number of Possible Joints 500g
(IN.)	(MM)	
1 1/2	40	100
2	50	69
3	80	41
4	100	32

NORMINAL/SIZES		Number of Possible Joints 500g
(IN.)	(MM)	
6	155	19
8	200	10
10	250	6
12	300	4

PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Clear Flash Point : 15°C DG Class : 3.2

Flammable Mixture (UN No. 1133)

This solvent cement material will ignite at ambient temperatures. Colourless vapors may travel considerable distance to ignition sources and cause flash fires or explosions.

HAZARD IDENTIFICATION

May cause eyes and skin irritation, burns or dermatitis.

STORAGE

Store in well-ventilated area. Keep away from heat, sparks and flame.

SAFETY PHASE

- Keep away from sources of ignition - No-Smoking.
- Avoid contact with eyes.
- In case of fire, use chemical powder, foam or carbon dioxide.

INSTALLATION GUIDE



Preparation

Prepare all the needed tools and equipment for the pipe installation.



Marking

Mark the socket depth on the pipe end.



Cutting the Pipe

Cut the pipe with the proper tool, using a fine-toothed saw.



Joint Preparation

Slightly deburr the external pipe edge and break off any sharp edges.



Cleaning

Thoroughly clean all surfaces to be joined. Any dirt, moisture, oil and other foreign material will affect the joining's integrity.



Test Dry Fit of the joint

Insert the spigot into the socket without the solvent cement to check the fit. An interference fit should occur between 1/3 and 2/3 of full entry.



Witness Mark the pipe

Draw a line on the spigot to show the depth of the socket.



Apply Solvent Cement on Pipe

Apply an even coat of solvent to the pipe marked for joining.



Apply Solvent Cement on Fitting

Apply an even coat of solvent to the inside of the spigot or socket.



Assembly of joint

While both parts to be joined are still wet, put the spigot into the socket in a slightly twisting motion. Hold the cemented joint idle for a minimum of 30 seconds for secure adhesion.



Clean off

Wipe off excess cement from the pipe at the end of the socket. Any gaps in the cement ring around the pipe perimeter may indicate a defective assembly.

