

AUTHORISED ITEMS for SEWER SYSTEM

MAINTENANCE

***ALL MINOR ITEMS NOT COVERED IN DETAIL IN THIS CATALOGUE TO BE
IN ACCORDANCE TO APPROPRIATE AUSTRALIAN STANDARD.***

**Further information on products and materials is available on the WSAA web site
www.wsaa.asn.au**



NETWORK INFRASTRUCTURE STANDARDS

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Amdt
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AUTHORISED ITEMS for SEWER SYSTEM

Document Update Information

Date	Change Type	Page Number(s)	Details
1 Dec 2009	Revision 1	All	Standards Unit details changed
1 Jan 2011	Revision 2	8, 9, 15, 16	Fittings Added
April 2014	Revision 3	13	Manufacturer and fittings added

AUTHORISED ITEMS for SEWER SYSTEM

PVC Adaptors (Plain Wall) Information

The use of adaptors in the Waste Water System is permitted for repairs to existing pipes, however conditions do apply to their installation.

- Where an adaptor incorporating a Rubber Ring is used the joint shall be wrapped in Petrolatum tape ensuring there are no voids
- The ends of the pipes shall be located as close together as the fitting allows
- Compaction shall be as shown in the Sewer Construction Manual with particular attention taken to ensuring the joint does not move and that the Petrolatum wrap is not damaged.

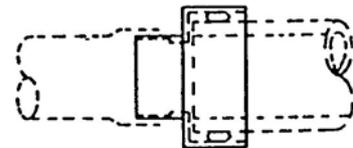
Applicable Australian Standards

- AS1260:1996 PVC pipes and fittings for drain, waste and vent applications

AUTHORISED ITEMS for SEWER SYSTEM

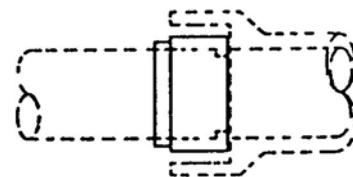
PVC Adaptors (Plain Wall)

PVC to Vitrified Clay (suit PVC socket and VC spigot)



SIZE (DN)	Vinidex
100mm	★
150mm	★
225mm	★
300mm	★

PVC to Vitrified Clay (suit PVC spigot and VC socket)



SIZE (DN)	Iplex Pipelines	Key Plastics	Vinidex
100mm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
150mm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
225mm			<input type="checkbox"/>
300mm			<input type="checkbox"/>

AUTHORISED ITEMS for SEWER SYSTEM

PVC to Vitrified Clay (suit Spigot ends)

SIZE (DN)	Iplex Pipelines	Key Plastics	Vinidex
100mm	★	★	★
150mm	★	★	★
225mm			★
300mm			★

AUTHORISED ITEMS for SEWER SYSTEM

PVC Adaptors (Structured Wall) Information

For many years the only Authorised Structured Wall Pipe was Ultra Rib (PVC pipe) produced by Vinidex which has additional maintenance requirements to Solid Wall PVC Pipe. This pipe was only used in limited applications, but there is still be maintenance requirements for this type of pipe and the following requirements apply.

- Two Rubber Rings shall be used on the Ultra Rib
- Where an adaptor incorporating a Rubber Ring is used the joint shall be wrapped in Petrolatum tape ensuring there are no voids
- The ends of the pipes shall be located as close together as the fitting allows
- Compaction shall be as shown in the Sewer Construction Manual with particular attention taken to ensuring the joint does not move and that the Petrolatum wrap is not damaged.

More recently a range of Polypropylene (PP) Pipe has been authorised:

- Iplex (Trade name – SewerMax)
- Vinidex (Trade name – SewerPRO)

These pipes are available in sizes up to DN900 and it is expected that they will be used predominantly in sizes above DN300. The following conditions apply to the use of PP structured wall pipe.

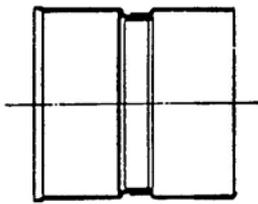
- One (1) rubber sealing ring per joint is required - placed in the 1st or 2nd trough nearest the leading edge of the pipe spigot (to manufacturer's requirements).
- Where two or more consecutive ribs are broken, the section of damaged pipe is to be replaced.
- All cuts in PP structured wall pipe are to be made in the centre of two consecutive ribs.

Applicable Australian Standards

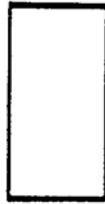
- AS1260:1996 PVC pipes and fittings for drain, waste and vent applications
- AS/NZS 5065 Polyethylene and polypropylene pipes and fittings for drainage and sewerage applications.

AUTHORISED ITEMS for SEWER SYSTEM

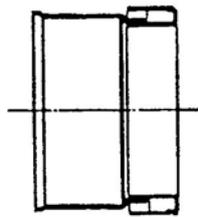
Adaptors (Structured Wall) – PVC



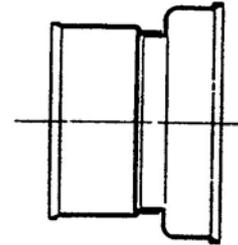
Type A



Type B



Type C

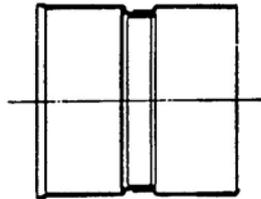


Type D

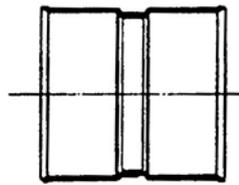
Size	End Types	Sketch Type	Vinidex Ultra Rib
ALL SIZES AVAILABLE	Soc (Ultra Rib) – Soc (Plain PVC SWJ)	A	★
	Spigot (Ultra Rib) – Soc (PVC)	B	★
	Soc (Ultra Rib) – Spigot (VC)	C	★
	Soc (Ultra Rib) – Soc (VC)	D	★

AUTHORISED ITEMS for SEWER SYSTEM

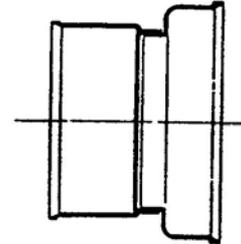
Adaptors (Structured Wall) – PP



Type A



Type B



Type C

Size	End Types	Sketch Type	IPLEX SewerMAX	Vinidex SewerPRO
ALL SIZES AVAILABLE	Soc (PP) – Soc (Plain PVC SWJ)	A	★	★
	Soc (PP) – Soc (Ultra rib)	B	★	
	Soc (PP) – Soc (VC)	C	★	

AUTHORISED ITEMS for SEWER SYSTEM

Couplings and Slip Couplings

Couplings are Authorised for use both in the repair and construction of PVC Pipe systems. Authorised couplings are designed to be solvent cement jointed and have a depth stop. For correct installation the pipes shall be inserted to butt against the depth stop.

The use of Slip Couplings in the Waste Water System is permitted for repairs to existing pipes, however conditions do apply to their installation.

- Where a Slip Coupling incorporating a Rubber Ring is used the joint shall be wrapped in Petrolatum tape ensuring there are no voids.
- The ends of the pipes shall be located as close together as the fitting allows.
- Compaction shall be as shown in the Sewer Construction Manual with particular attention taken to ensuring the joint does not move and that the Petrolatum wrap is not damaged.

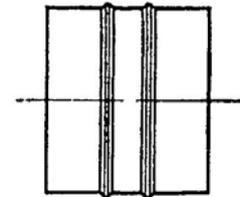
Applicable Australian Standards

- AS1260:1996 PVC pipes and fittings for drain, waste and vent applications
- AS/NZS 5065 Polyethylene and polypropylene pipes and fittings for drainage and sewerage applications.

AUTHORISED ITEMS for SEWER SYSTEM

Couplings- Plain Wall PVC Pipe

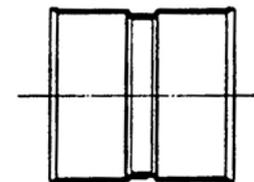
*PVC Pipe (Plain Wall)
 Straight Coupling PVC SWJ to PVC SWJ*



SIZE (DN)	Iplex Pipelines	Key Plastics	Crevet Pipelines	Vinidex
100mm	★	★	★	★
150mm	★	★		★
225mm	★			★
300mm	★			★

Couplings- Structured Wall Pipe

*PVC Pipe (Ultra rib) Coupling
 PP Straight Coupling*

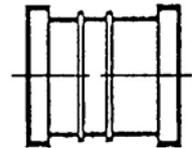


Size	End Types	Vinidex Ultra rib	IPLEX SewerMAX	Vinidex SewerPRO
ALL SIZES AVAILABLE	Soc (Ultra rib) - Soc (Ultra rib)	★		
	Soc (PP) – Soc (PP)		★	★

AUTHORISED ITEMS for SEWER SYSTEM

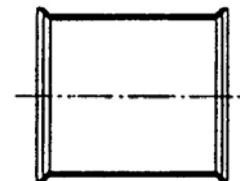
Slip Couplings

PVC Pipe (Plain Wall)



SIZE (DN)	Iplex Pipelines	Vinidex
100mm	★	★
150mm	★	
225mm	★	
300mm	★	

PVC Pipe (Structured Wall)



SIZE (DN)	Vinidex Ultra Rib
150mm	★
225mm	★
300mm	★
375mm	★

AUTHORISED ITEMS for SEWER SYSTEM

PVC Saddle Information

The use of PVC saddles in the Waste Water System is permitted for connection into existing pipes. The PVC saddles come in two configurations:

- Solvent Welded for use on existing PVC sewer pipe
- Gasket seals for use on existing VC and Structured wall pipes

As the saddles contact less than half of the host pipe's circumference they must be fixed to the host pipe. This can be accomplished by the use of large diameter 316 stainless steel adjustable hose clamps or 316 stainless steel screws (structured wall pipe only).

Some specific conditions do apply to their installation:

- The saddles are to be installed in accordance with the manufacturer's installation recommendations.
- The exterior surface of the host pipe shall be cleaned and checked for structural damage before the installation of the saddle.
- The entry hole into the main is to be cut prior to the installation of the saddle
- The ends of the pipes shall be located as close together as the fitting allows
- Compaction shall be as shown in the Sewer Construction Manual with particular attention taken to ensuring the saddle does not move and that the branch pipe is fully supported by the embedment material.

Applicable Australian Standards

- AS1260:1996 PVC pipes and fittings for drain, waste and vent applications

AUTHORISED ITEMS for SEWER SYSTEM

PVC Saddles



Type A (Plain Wall shown)



Type B (Structured Wall shown)

Alternate Description

Junction Saddle

Branch Saddle

Size	End Types	Sketch Type	Iplex	Vinidex
ALL SIZES AVAILABLE	<u>Plain Wall</u>			
	Slope Saddle (Junction)	A	★	★
	Square Saddle (Branch)	B	★	★
	<u>Structured Wall</u>			
	Slope Saddle (Junction)	A	★	★
	Square Saddle (Branch)	B	★	★

AUTHORISED ITEMS for SEWER SYSTEM

Metal Banded Flexible Couplings Information

Metal Banded Flexible Coupling are Authorised for use for **REPAIR** purposes **ONLY**.
All Authorised Metal Banded Flexible Coupling are in accordance with Corporation Standard Specification SAW 9000.

Metal Banded Flexible Couplings are also available with a wide centrally placed SS shear band in-lieu of the two internal SS clamps. These are the preferred option and should be used if available.

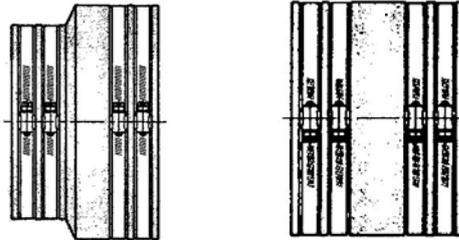
Applicable Corporation Standard Specification

- SAW 9000 Metal Banded Flexible Coupling.

AUTHORISED ITEMS for SEWER SYSTEM

Metal Banded Flexible Couplings

*PVC to Vitrified Clay
 (suit PVC spigot to VC spigot)*



SIZE (DN)	Jenco	(Leap) Flex Seal with shear band + bush
100mm	★	SC 150 + BC15/115
150mm	★	SC 200 + BC 16/164
225mm	★	SC 290 + BC 16/250
300mm	★	SC 385 + BC 24/315

PVC to PVC (suit PVC spigot to PVC spigot)



SIZE (DN)	Jenco	(Leap) Flex Seal with shear band
100mm - 100mm		SC 115
150mm - 150mm	★	SC 165
225mm - 225mm	★	SC 250
300mm - 300mm	★	SC 320

Note :

Metal Banded Flexible Couplings with a wide centrally placed SS shear band in-lieu of the two SS clamps, are the preferred option and should be used if available.

AUTHORISED ITEMS for SEWER SYSTEM

Stainless Steel Clamps Information

Stainless Steel clamps (couplings and branches) are Authorised for **REPAIR PURPOSES ONLY**.

Clamps are available for both Plain wall and Structured wall pipe.

Stainless Steel clamps are to be in accordance with AS 4181.

Clamps are to be manufactured from Grade 316 Stainless Steel

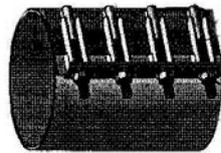
Stainless Steel clamps used on structured wall pipe are to have a sealing rubber with a profile which matches the external surface of the pipe.

Applicable Standards

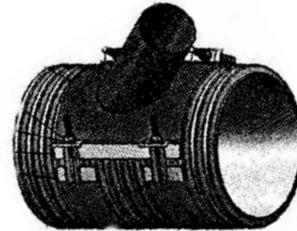
- AS 4181 Stainless steel clamps for waterworks purposes

AUTHORISED ITEMS for SEWER SYSTEM

Stainless Steel Clamps-Couplings and Branches



Type A



Type B

Alternate Description
Joiners and off-takes

Size	End Types	Sketch Type	Iplex	Tyco Wang	
ALL SIZES AVAILABLE	<u>Plain Wall</u>				
	Repair Coupling (Joiner)	A	★	★	
	Branch (Off-take)	B		★	
	<u>Structured Wall</u>				
	Repair Coupling (Joiner)	A	★		
	Branch (Off-take)	B	★		

AUTHORISED ITEMS for SEWER SYSTEM

PVC Expansion Fittings Information

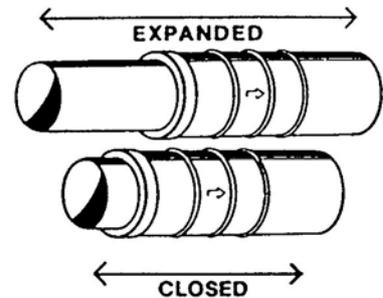
The use of Expansion Fittings in the Waste Water System is permitted for repairs to existing pipes, however conditions do apply to their installation.

- Where an Expansion Fitting is used the Rubber Ring Joint shall be wrapped in Petroleum tape ensuring there are no voids
- Both end connections shall be a Solvent Cement Joint
- Compaction shall be as shown in the Sewer Construction Manual with particular attention taken to ensuring the joint does not move and that the Petroleum wrap is not damaged.

Applicable Australian Standards

- AS1260 Unplasticized PVC pipes and fittings for sewerage applications

PVC Expansion Fittings



PVC Expansion Joint

Size (DN)	Storm Plastics	Iplex
100mm	★	★
150mm	TBA	★
225mm	TBA	
300mm	TBA	

AUTHORISED ITEMS for SEWER SYSTEM

***Sewer Access Frame and Cover
 (Cast Iron - Bellmouth Style)***

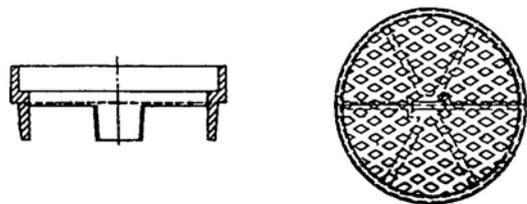


*Note : To be used for maintenance purposes only.
 Clear opening of 550 mm.*

Item	SA Water Stock No.	Bianco-PCP (BIA)
Frame	5680-0085	★
Cover	5680-0078	★

Note: Matching concrete support ring available from supplier

***Sewer Access Frame and Cover
 (Cast Iron - Lohmeyer Style)***



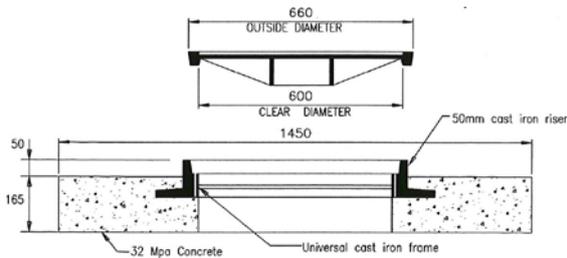
*Note : To be used for maintenance purposes only.
 Specify Lohmeyer style. Clear opening of 550 mm.*

Item	SA Water Stock No.	Bianco-PCP (BIA)
Frame	5680-0063	★
Cover	5680-0062	★

Note: Matching concrete support ring available from supplier

AUTHORISED ITEMS for SEWER SYSTEM

No. 5 Replacement Cover

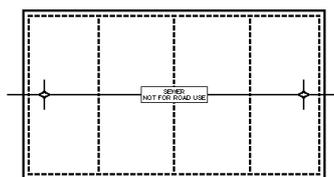


Note: This is designed to replace damaged or noisy No. 5 Covers located in Trafficable areas.

Item	SA Water Stock No.	Cooke Pre Cast	Bianco PCP
Concrete Support Slab		★	★
Cover and Frame		★	★

Aluminium Easement Cover

(used in lieu of No 5 Cast Iron Meter Box Cover)



Note: This cover is only for use in easements.

Item	SA Water Stock No.	Cooke Pre Cast	Beverly Industries
Cover		★	
Frame			★

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