



# Pipemakers Australia Pty Ltd

## PRODUCT APPRAISAL REPORT PA 2020 ISSUE 2

PVC-M Pressure Pipes

**AS/NZS 4765:2017 Modified PVC (PVC-M) pipes for pressure applications**

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## Peer Reviewers

Name/Title	Organisation	Date
Peter Pittard, WSAA Consultant	WSAA	16 February 2020
Carl Radford, Product Appraisal Manager	WSAA	20 March 2020
Peter Pittard, WSAA Consultant	WSAA	4 November 2020
Carl Radford, Product Appraisal Manager	WSAA	4 November 2020

## Overview of WSAA

The Water Services Association of Australia (WSAA) is the peak industry body representing the urban water industry. Our members provide water and sewerage services to over 20 million customers in Australia and New Zealand and many of Australia's largest industrial and commercial enterprises.

Based around our vision of 'customer driven, enriching life', WSAA facilitates collaboration, knowledge sharing, networking and cooperation within the urban water industry. We are proud of the collegiate attitude of our members which has led to industry-wide approaches to national water issues.

WSAA can demonstrate success in the standardisation of industry performance monitoring and benchmarking, as well as many research outcomes of national significance. The WSAA Executive retains strong links with policy makers and legislative bodies and their influencers, to monitor emerging issues of importance to the urban water industry.

WSAA was formed in 1995 as a non-profit organisation to foster the exchange of information between industry, government and the community, and to promote sustainable water resource management.

The urban water industry is committed to anchoring its services to customers' values, and to enrich communities where water services have broad economic, environmental and social values. In line with this our main activities focus on four areas:

1. influencing national and state policies on the provision of urban water services and sustainable water resource management
2. promoting debate on environmentally sustainable development and management of water resources and the community health requirements of public water supplies
3. improving industry performance and establishing benchmarks and industry leading practices for water service processes; and
4. fostering the exchange of information on education, training, research, water and wastewater management and treatment and other matters of common interest.

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## 1 EXECUTIVE SUMMARY

Pipemakers Australia Pty Ltd is an Australian company established in Queensland in 1990 to manufacture PVC piping. The company maintains PVC manufacturing facilities in Acacia Ridge in Queensland and Deer Park in Victoria and operates a national distribution network within Australia.

This Appraisal is for a range of Enviromain plain wall PVC-M Series 1 and Series 2 (Cast Iron Compatible) pipes suitable for water supply and pressure sewer applications manufactured to AS/NZS 4765:2017 *Modified PVC (PVC-M) pipes for pressure applications*.

The report is a replacement for PA 1401 which had reached its 5-year expiry date.

This issue 2 is to include Series 1 PVC-M pipes.

Series 1 PVC-M pipes are available with either solvent cement joints or rubber ring joints in sizes DN 100, DN 125, DN 150, DN 175, DN 200, DN 225, DN 250 and DN 300 with pressure classifications of PN6, PN9 and PN12.

The Series 2 PVC-M pipes have rubber ring joints and are available in sizes DN 100, DN 150, DN 200, DN 225, DN 250, DN 300, DN375 and DN 450 with pressure classifications of PN12, PN16, PN18 and PN20.

Pipes are generally supplied in 6m lengths although other lengths are available for some sizes and pressure classifications.

Colours for Series 2 pipe are blue for drinking water, lilac for non-drinking water and cream for pressure sewer applications. Colours for Series 1 pipe are white for drinking water, lilac for non-drinking water and cream for pressure sewer applications.

Pipemakers holds an ISO 9001:2015 Quality Management System licence that covers both the Deer Park and Acacia Ridge manufacturing sites.

The Pipemakers Enviromain PVC-M Series 1 and 2 pipes have ISO Type 5 ApprovalMark product certification to AS/NZS 4765:2017 *Modified PVC (PVC-M) pipes for pressure applications* for both manufacturing sites.

This Appraisal has determined that Pipemakers Enviromain Series 1 and 2 PVC-M pipes, as detailed in this report, meet the requirements of WSA PS-209 *Polyvinylchloride Modified (PVC-M) Pressure Pipes for Pressure Applications – Water Supply and Sewerage* and are considered as 'fit-for-purpose'.

### 1.1 Recommendations

It is recommended that WSAA members, subject to any specific requirements of the member, accept or authorise Enviromain Series 1 or 2 PVC-M pressure pipes, as detailed in this report, for use in water supply and pressure sewer networks provided pipeline design, installation, acceptance testing and commissioning are in accordance with relevant WSAA Codes and the manufacturer's requirements.

## 2 THE APPLICANT

The Applicant is Pipemakers Australia Pty Ltd.

### 2.1 The Manufacturer/Supplier

Pipemakers Australia Pty Ltd is an Australian company established in Queensland in 1990 to manufacture PVC piping. PVC pipes are manufactured at Acacia Ridge Queensland and Deer Park in Victoria. Pipemakers operates a national distribution network within Australia.

Pipemakers manufactures its range of thermoplastic pipes using the latest European PVC pipe manufacturing technology and equipment and has further capacity to grow and expand its product range.

Pipemakers Australia became a Pty Ltd company in January 2008 but is still managed by the Kanji group, which has extensive operations across many industries throughout Australia and Asia.

### 3 THE PRODUCT

This Appraisal is for a range of Enviromain plain wall PVC-M Series 1 and Series 2 (Cast Iron Compatible) pipes suitable for water supply and pressure sewer applications manufactured to AS/NZS 4765:2017 *Modified PVC (PVC-M) pipes for pressure applications*.

The Series 1 PVC-M pipes are available with either solvent cement joints or rubber ring joints in sizes DN 100, DN 125, DN 150, DN 175, DN 200, DN 225, DN 250 and DN 300 with pressure classifications of PN6, PN9 and PN12.

The Series 2 PVC-M pipes have rubber ring joints and are available in sizes DN 100, DN 150, DN 200, DN 225, DN 250, DN 300, DN375 and DN 450 with pressure classifications of PN12, PN16, PN18 and PN20.

Pipes are generally supplied in 6m lengths although other lengths are available for some sizes.

Colours for Series 2 pipe are blue for drinking water, lilac for non-drinking water and cream for pressure sewer applications. Colours for Series 1 pipe are white for drinking water, lilac for non-drinking water and cream for pressure sewer applications.

The outside diameter of the Series 2 Enviromain pipes align with AS/NZS 2280 ductile iron pipe outside diameters and are suitable for use with standard ductile iron fittings.

PVC-M provides enhanced mechanical properties when compared to PVC-U, especially for its toughness. The use of a material with enhanced mechanical properties legitimately allows a design factor of 1.4 to be adopted, as opposed to a design factor of 2.1 for PVC-U pipes. This allows more efficient use of the material with reduced wall thicknesses for PVC-M pipes compared to PVC-U pipes for equivalent pressure ratings.

Pipemakers utilises SBR or EPDM elastomeric seals for their Enviromain PVC-M pipes that are pre-installed in the pipe sockets. The joint allows pipe deflections up to 1.5 degrees.

### 4 SCOPE OF THE APPRAISAL

The scope of this appraisal includes PVC-M Series 1 with solvent weld joint (SWJ) or rubber ring joint (RRJ) and Series 2 pipes with rubber ring joints (RRJ) as detailed in Tables 1 and 2 and also included in the ISO Type 5 ApprovalMark product certification product schedules included in Appendix B. All Series 1 pipe sizes are manufactured at Deer Park and Acacia Ridge except DN 125 and DN 175 that are manufactured at Acacia Ridge only.

**TABLE 1 ENVIROMAIN PVC-M SERIES 1 SCJ AND RRJ PIPE RANGE**

DN	OD mm	6	9	12
100	114	SWJ, RRJ	SWJ, RRJ	SWJ, RRJ
125	140	SWJ, RRJ	SWJ	SWJ
150	160	SWJ, RRJ	SWJ, RRJ	SWJ, RRJ
175	200	SWJ	SWJ	SWJ
200	225	SWJ, RRJ	SWJ, RRJ	SWJ, RRJ
225	250	SWJ, RRJ	SWJ, RRJ	SWJ, RRJ
250	280	SWJ, RRJ	SWJ, RRJ	SWJ, RRJ
300	315	SWJ, RRJ	SWJ, RRJ	SWJ, RRJ

All pipe sizes are manufactured at Deer Park and Acacia Ridge except that DN 125 and DN 175 are manufactured at Acacia Ridge only.

**TABLE 2 ENVIROMAIN PVC-M SERIES 2 RRJ PIPE RANGE**

DN	OD mm	Pressure Class PN			
		12	16	18	20
100	122	✓	✓	✓	✓
150	177	✓	✓	✓	✓
200	232	✓	✓	✓	✓
225	259	✓	✓	✓	✓
250	286	✓	✓	✓	✓
300	345	✓	✓	✓	✓
375	426	✓	✓	✓	✓
450	507	✓	✓	✓	✓

All Series 2 pipes are manufactured at Deer Park. Those shaded in blue are also manufactured at Acacia Ridge.

## 5 APPRAISAL CRITERIA

### 5.1 Quality Assurance Requirements

Product Appraisal Technical Advisory Group accepts PVC-M pipes manufactured in compliance with AS/NZS 4765:2017 *Modified PVC (PVC-M) pipes for pressure applications* and duly certified by means of an ISO Type 5 product certification scheme undertaken by a JAS-ANZ accredited Conformity Assessment Body (CAB) or by an international accreditation system recognised by JAS-ANZ.

The manufacturer is generally expected to have a production management and control system that has been duly accredited in accordance with AS/NZS ISO 9001 as a prerequisite to undergoing a product certification audit.

The ISO Type 5 Product Certification Scheme shall meet the criteria described in WSA TN-08.

### 5.2 Performance Requirements

Enviromain PVC-M pressure pipes have been appraised for compliance with AS/NZS 4765:2017 *Modified PVC (PVC-M) pipes for pressure applications*.

Appraisal criteria are also determined by the WSAA Product Appraisal Technical Advisory Group and regularly reviewed to ensure that the criteria reflect the requirements of WSAA members.

The following Product Specification is also relevant to this application:

WSA PS-209 *Polyvinylchloride Modified (PVC-M) Pressure Pipes for Pressure Applications – Water Supply and Sewerage*.

A copy of the Product Specification is available at the following link:

<https://www.wsaa.asn.au/shop/product/35716>

Readers are also referred to the following WSAA “Information and Guidance Notes”:

- a) TN 2 Issue 2 - *Guidelines for the use of ductile iron elastomeric joint fittings with plastic pipes*.
- b) TN 4 – *Guidelines for design of pressure pipeline systems for water supply using PVC-M and PVC-O pipes*.

- c) TN 5 - *Guidelines for installation of pressure pipeline systems for water supply using PCV-M and PVC-O pipes.*

The above documents are available on the WSAA web site at the following link:

<https://www.wsaa.asn.au/shop/category/5>

### **5.3 COMPLIANCE WITH APPRAISAL CRITERIA**

#### **5.3.1 Compliance with Quality Assurance Requirements**

Pipemakers has submitted the following quality certificates:

- ISO 9001:2015 Certificate of Registration No. QEC22888 issued to Pipemakers Australia Pty Ltd by SAI-Global
- AS/NZS 4765:2017 ApprovalMark ISO Type 5 product certification Licence No. AMI 74555 issued to Pipemakers Australia Pty Ltd (Deer Park) by ApprovalMark International.
- AS/NZS 4765:2017 ApprovalMark ISO Type 5 product certification Licence No. AMI 21378 issued to Pipemakers Australia Pty Ltd (Acacia Ridge) by ApprovalMark International.
- AS/NZS 4765:2017 ApprovalMark Best Environmental Practice Certificate No. BEP-PVC 542 issued to Pipemakers Pty Ltd (Deer Park) by ApprovalMark International.
- AS/NZS 4765:2017 ApprovalMark Best Environmental Practice Certificate No. BEP-PVC 4110 issued to Pipemakers Pty Ltd (Acacia Ridge) by ApprovalMark International.

Copies of the Quality Assurance and Product Certification licences have been included in Appendix B and are also available for downloading from the WSAA Members Website.

#### **5.3.2 Compliance with Performance Requirements**

##### **5.3.3 Type tests for pipes**

Type tests have been completed in accordance with AS/NZS 4765 requirements by Sharp & Howells, Victoria, for the composition test and Queensland Testing Laboratory for the other nominated type tests.

The tests include material composition, vinyl chloride monomer test, softening temperature, long term hydrostatic strength, long term toughness and resistance of notched pipe to internal pressure.

The tests were reviewed and accepted in the previous appraisal report (PA 1401) and are not required to be retested unless there is a change in material formulation.

Process Verification and Batch Release Tests are carried out in house by Pipemakers.

##### **5.3.4 Type tests for elastomeric seal joints**

Type tests have been completed in accordance with AS/NZS 4765 requirements by Queensland Testing Laboratory on the elastomeric seal joints.

The tests conducted were leak tightness – positive pressure short term, leak tightness – negative pressure short term, leak tightness – long term pressure and end-load bearing joints – pressure and bending.

The tests were reviewed and accepted in the previous appraisal report (PA 1401) and are not required to be retested unless there is a change in material formulation or design.

##### **5.3.5 Seals**

Enviromain PVC-M pipes utilise SBR seals sourced from Gulf Rubber or EPDM Turner Series sourced from Hultec/Terramix.



The seals are factory fitted into the socket however Pipemakers recommend that the seal be removed for cleaning prior to joint assembly.

Gulf Rubber and Thong Nhat Rubber Company have been issued with ISO Type 5 StandardsMark Licence No. SMKP20133 for AS 1646:2007 and Terramix SA has been issued with ISO Type 5 ApprovalMark Licence No. AMI 74509 to AS 1646:2007.

Copies of the product certification licences are held on file by WSAA.

The product certifications are deemed as acceptable to demonstrate compliance to AS 1646 and AS 681-1.

### **5.3.6 Pipe joint deflection**

Pipemakers recommends a maximum pipe deflection of 1.5 degrees for Series 2 rubber ring joints. Maximum deflection is not nominated for Series 1 rubber ring joints.

### **5.3.7 Contact with drinking water**

Pipemakers has submitted a copy of a report from StandardMark Laboratory Sdn Bhd, based in Malaysia, dated 2 April 2019 to demonstrate compliance with AS/NZS 4020:2018 for DN 100 PVC-M Series 2 pressure pipe manufactured at Deer Park and Acacia Ridge. StandardMark is accredited by Standards Malaysia (No 786) which is a member of ILAC-MRA.

AS/NZS 4020 certification for the SBR seals is covered by the Gulf Rubber and Terramix ISO Type 5 product certifications.

The lubricant supplied by Pipemakers is manufactured by Thomas Grozier & Sons. The product has WaterMark Certification to WMTS 014:2016 *Jointing materials* which mandatorily requires compliance with AS/NZS 4020.

## **6 FITTING INSTRUCTIONS, TRAINING AND INSTALLATION**

PVC-M pressure pipe has been a commonly used product in the urban water industry for many years and most experienced pipe layers have a good understanding of the installation requirements. Pipemakers do not provide any specific training for pipe layers.

- a) Drilling and tapping: Field research has shown conventional drilling and tapping equipment used for PVC-U can also be used on PVC-M.
- b) Allowable damage: The depth of external damage should be limited to 10% of the wall thickness up to a maximum of 0.5mm. This advice is consistent with WSA 03 *Water Supply Code for PVC* where it states that pipes scored deeper than 0.5mm are not to be used.
- c) External storage: Storage requirements for PVC-M are identical to PVC-U. If the total period of exposed storage outdoors is likely to exceed 12 months, pipes should be covered and stored in a manner that allows ventilation and prevents heat entrapment. Pipes may be stored in this manner indefinitely.

The installation, repair and maintenance procedures for PVC pipes are well documented in AS/NZS 2032 - *Installation of PVC pipe systems* and the WSAA Sewerage and Water Supply Codes of Australia (WSA 02 and WSA 03 respectively).

There are also a number of Registered Training Organisations (RTOs) who conduct suitable training courses based on AS/NZS 2032 and AS/NZS 2566.2. The Plastics Industry Pipe Association of Australia Limited (PIPA) have nominated the Flexitec course, which covers PVC pipe handling and installation, and is delivered nationally either directly by LeHunt and Associates or in conjunction with PARTEC (Qld, NT, NSW), Holmesglen TAFE (Vic), Chisholm TAFE (Vic) and Regency TAFE (SA). The Civil Contractors Federation have their own state-based RTOs and some of them conduct suitable PVC pipe training courses as well.

Installation, repair and maintenance procedures for PVC pipes are also specified in WSA 03 *Water Supply Code of Australia* and WSA 02 *Sewerage Code of Australia*.

## **7 PRODUCT MARKING**

Enviromain PVC-M pipes are marked in accordance with requirements of AS/NZS 4795:2017 as follows:

- Manufacturers Name: Pipemakers
- Best Environmental Practice: BEP
- Product Name: Enviromain
- Nominal Size: e.g. 100
- Pressure Classification: e.g. PN16
- Pipe Series Number: S2
- Pipe Material: PVC-M
- Maximum allowable angle of joint deflection: MAX DEFL 1.5 Degs
- The date of manufacture: e.g. 090120 (20<sup>th</sup> Jan 2009)
- The time of manufacture:
- Identification of the place of manufacture & machine number: e.g. Product Line L-5
- The standard number: AS/NZS 4765
- Licence Number: e.g. AMI 21378 or AMI 74555
- Certification: e.g. ISO TYPE 5
- Special Application information – e.g. RECYCLED WATER - DO NOT DRINK

Example: PIPEMAKERS BEP ENVIROMAIN S2 PVC-M 150MM PN 16 MAX DEFL 1.5 DEGS DATE L5 Q (ISO TYPE 5) AS/NZS 4765 L N-AMI 21378 TIME

## **8 PACKAGING AND TRANSPORTATION**

Pipemakers packages the Enviromain product in accordance with AS/NZS 2032 guidelines. The method of packaging and transporting of these pipes is identical to the practices adopted for PVC-U.

The PVC-M Series 2 pipe is crated in scalloped timbers and has extra nylon gut strapping for safety. The customer should inspect the pipe when it is delivered on site to check for any movement or abrasion damage.

Full packs of pipe use scallop timber which is held in place with plastic straps. Additionally, all RRJ pipes have timber slats placed between each row to prevent squashing of sockets and the slats are nailed in place to prevent movement.

Larger bore pipes are also belly strapped using foam isolating strip (to prevent the strapping from damaging the pipe) and plastic strapping. This gives further stabilisation to the pipe packs.

To prevent damage to sockets during transport socketed pipes are stacked in layers with sockets placed at alternate ends of the stack and protruding so that the sockets do not carry any load.



**FIGURE 1 EXAMPLES OF PIPE PACKAGING**

When quantities of less than a full pack are required, smaller timber packing is used or pipes are strapped to minimise damage.

Pipemakers take special care in the packaging and transportation of pipes to ensure they arrive at their destination in the same condition they left the factory. Most pipes are transported by road transport unless required otherwise by the purchaser and delivery is generally directly to site.

## **9 PRODUCT WARRANTY**

The products are covered by the normal commercial and legal requirements of the *Competition and Consumer Act 2010 (Cth)*, which covers manufacture to the relevant standard, and details of Pipemakers's warranty is included in their terms and conditions of sale.

## **10 WATER AGENCY EXPERIENCE WITH THE PRODUCT OR FIELD-TESTING REPORT**

Pipemakers has been manufacturing PVC-M pipe for many years and have been successfully installed in many projects nationally.

Pipemakers range of pipe has been approved by many Australian water agencies including SA Water, Sydney Water, City West Water, South East Water, Yarra Valley Water, Barwon Water, Water Corp WA and various other regional water agencies.

## **11 FUTURE WORKS**

No future works have been identified.

## **12 DISCLAIMER**

This Product Appraisal Report (Report) is issued by the Water Services Association of Australia Limited on the understanding that:

This Report applies to the product(s) as submitted. Any changes to the product(s) either minor or major shall void this Report.

To maintain the recommendations of this Report any such changes shall be detailed and notified to the Product Appraisal Manager for consideration and review of the Report and

appropriate action. Appraisals and their recommendations will be the subject of continuous review dependent upon the satisfactory performance of products.

WSAA reserves the right to undertake random audits of product manufacture and installation. Where products fail to maintain appraised performance requirements the appraisal and its recommendations may be modified and reissued. Appraisal reports will be reviewed and reissued at regular intervals not exceeding five (5) years.

The following information explains a number of very important limits on your ability to rely on the information in this Report. Please read it carefully and take it into account when considering the contents of this Report.

Any enquiries regarding this report should be directed to the Program Manager, Carl Radford, Phone: 03 9606 0713 email [carl.radford@wsaa.asn.au](mailto:carl.radford@wsaa.asn.au).

## **12.1 Issue of Report**

This Report has been published and/or prepared by the Water Services Association of Australia Limited and nominated Project Manager and peer group of technical specialists (the Publishers).

The Report has been prepared for use within Australia only by technical specialists that have expertise in the function of products such as those appraised in the Report (the Recipients).

By accepting this Report, the Recipient acknowledges and represents to the Publisher(s) and each person involved in the preparation of the Report that the Recipient has understood and accepted the terms of this Disclaimer.

## **12.2 Limits on Reliance on Information and Recommendations**

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This Report does not contain all information that a person might require for the purposes of assessing any product discussed or appraised within it (Product). The product appraisal criteria used in preparing this Report may not address all relevant aspects of the Product.

Recipients should seek independent evidence of any matter which is material to their decisions in connection with an assessment of the Product and consult their own advisers for any technical information required. Any decision to use the Product should take into account the reliability of that independent evidence obtained by the Recipient regarding the Product.

Recipients should also independently verify and assess the appropriateness of any recommendation in the Report, especially given that any recommendation will not take into account a Recipient's particular needs or circumstances.

WSAA has not evaluated the extent of the product liability and professional indemnity insurance that the provider of the product maintains. Recipients should ensure that they evaluate the allocation of liability for product defects and any professional advice obtained in relation to the product or its specification including the requirements for product liability and professional indemnity insurance.

### **12.3 No Updating**

Neither the Publisher(s) nor any person involved in the preparation of this Report [has] [have] any obligation to notify you of any change in the information contained in this Report or of any new information concerning the Publisher(s) or the Product or any other matter.

### **12.4 No Warranty**

The Publisher(s) do[es] not, in any way, warrant that steps have been taken to verify or audit the accuracy or completeness of the information in this Report, or the accuracy, completeness or reasonableness of any recommendation in this Report.

**APPENDIX A – PRODUCT LITERATURE**

 <p><b>GULF RUBBER</b> PIPE SEAL DIVISION</p>	<p><b>DUAL HARDNESS</b> <b>AS 1477 / 4765 / 4441 S2</b> <b>Pressure Pipe Gasket</b></p>
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**INTRODUCTION**

The Dual Hardness Series 2 gasket is a one piece dual durometer design for AS1477 / 4765 / 4441 S2 mandrel produced socketed pressure pipes.

The hard rubber retaining section holds the seal in place, but the seal can be removed for cleaning if necessary prior to field installation.

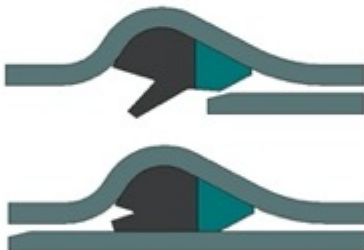
The gasket is an integral part of the pipe, initially fitted into the socket by the pipe manufacturer.

The Dual Hardness Series 2 is Standardsmarked and Watermarked to AS1646 by SAI Global.

**APPLICATION**

In ground Pressure UPVC, MPVC & OPVC pipe.

A cross-section view of the joint before and after assembly is shown below:



The Dual Hardness Series 2 gasket meets the functional requirements of AS 1477 / 4765 / 4441

**MATERIAL SPECIFICATIONS**

- \* Conforms to AS1646, EN681-1, ASTM F-477 and other International specifications.
- \* Standard material SBR
  - Sealing portion Shore A 53 +/- 3.
  - Retaining portion Shore A 83 +/- 3.
- \* Potable Water Approved Material:
  - SBR to NSF-61, AS4020
  - EPDM to WRAS-UK, KTW, ACS, AS4020 and other International Standards.
- \* Detailed Test Reports for all materials are available on request.

**MARKINGS**

Each Dual Lock Series 2 gasket is embossed on the non-sealing surface ;

Example :  
 DN100 .....Nominal Pipe Size  
 AS 1477/4765/4441 .....Pipe Specification  
 125776 .....Aust. Reg.Design  
 1-1 .....Mould & Cavity Number



.....Manufacturing Mark

10:: .....Year and 1/4 of Manufacture

Additional markings in line with other statutory or International regulations may also be embossed.



.....Standardsmark Licence 20133



.....Watermark Licence 20133

**SIZE AND DIMENSIONS**

Nominal Size	Pipe O.D.	Part Number
DN100	121.7	8130.8
DN150	177.1	8132.7
DN200	231.9	8134.7
DN225	258.9	8136.7
DN250	285.8	8138.7
DN300	344.9	8140.7
DN375	425.7	8142.7
DN450	506.5	8144.7
DN500	559.8	8146.7
DN600	666.5	8148.7

	<p><b>GULF RUBBER</b> PIPE SEAL DIVISION</p>
<p>Gulf Rubber Australia Pty Limited                  12-13 Green Street, Revesby                  Sydney Australia 2212                  Tel : (61) (2) 9772 4877                  Fax: (61) (2) 9771 2060                  Email: sales@gulf.com.au                  Web Site: www.gulf.com.au</p>	
<p>Australia / New Zealand / Italy</p>	

**APPENDIX B - QUALITY CERTIFICATIONS****TABLE B1 PIPEMAKERS AUSTRALIA PTY LTD – MANAGEMENT SYSTEMS**

186 Ingram Road, Acacia Ridge QLD 4110 and 501 Foley Road, Deer Park VIC 3023	
Quality Systems Standard	AS/NZS ISO 9001:2008
Certification No.	QEC22888
Certifying agency	SAI Global
First date of certification	27 March 2006
Current date of certification	15 March 2018
Expiry date of certification	26 March 2021

**TABLE B2 PIPEMAKERS AUSTRALIA PTY LTD – PRODUCT CERTIFICATION**

186 Ingram Road, Acacia Ridge QLD 4110	
Product Standard	AS/NZS 4765:2017
Certificate No.	AMI 21378
Certifying agency	ApprovalMark International
First date of certification	16 December 2011
Current date of certification	16 March 2020
Expiry date of certification	16 December 2021

**TABLE B3 PIPEMAKERS AUSTRALIA PTY LTD – PRODUCT CERTIFICATION**

501 Foley Road, Deer Park VIC 3023	
Product Standard	AS/NZS 4765:2017
Certificate No.	AMI 74555
Certifying agency	ApprovalMark International
First date of certification	10 February 2020
Current date of certification	10 February 2020
Expiry date of certification	10 February 2023

**TABLE B5 PIPEMAKERS AUSTRALIA PTY LTD – BEST ENVIRONMENTAL PRACTICE**

186 Ingram Road, Acacia Ridge QLD 4110	
Product Standard	AS/NZS 4765: 2017
Certificate No.	BEP-PVC 4110
Certifying agency	ApprovalMark International
First date of certification	20 February 2012
Current date of certification	20 February 2020
Expiry date of certification	21 February 2022

**TABLE B6 PIPEMAKERS AUSTRALIA PTY LTD – BEST ENVIRONMENTAL PRACTICE**

501 Foley Road, Deer Park VIC 3023	
Product Standard	AS/NZS 4765: 2017
Certificate No.	BEP-PVC 542
Certifying agency	ApprovalMark International
First date of certification	29 February 2012
Current date of certification	28 February 2020
Expiry date of certification	28 February 2022





# CERTIFICATE OF REGISTRATION

This is to certify that:

## Pipemakers Australia Pty Ltd

ABN 17 010 035 266

112 Landseer Street Acacia Ridge QLD 4110 AUSTRALIA

501 Foley Road Deer Park VIC 3023 AUSTRALIA

operates a

### QUALITY MANAGEMENT SYSTEM

which complies with the requirements of

### ISO 9001:2015

for the following scope

The manufacture and distribution of PE, UPVC, MPVC and PVC-O pipes and the purchase and distribution of complementary PVC & PE pipe fittings.

### Certificate No: QEC22888

Issued: 20 March 2018

Originally Certified: 27 March 2006

Expires: 26 March 2021

Current Certification: 15 March 2018

Nicole Grantham  
General Manager SAI Global Certification Services



**Registered by:**

SAI Global Certification Services Pty Ltd (ACN 108 716 669) 680 George Street Sydney NSW 2000 Australia with SAI Global Pty Limited 680 George Street Sydney NSW 2000 Australia ("SAI Global") and subject to the SAI Global Terms and Conditions for Certification. While all due care and skill was exercised in carrying out this assessment, SAI Global accepts responsibility only for proven negligence. This certificate remains the property of SAI Global and must be returned to SAI Global upon its request. To verify that this certificate is current please refer to SAI Global On-Line Certification register at <http://www.saiglobal.com>





## ATTACHMENT TO CERTIFICATE OF REGISTRATION

These sites are registered under certificate No: QEC22888 issued on 20 March 2018.

### Pipemakers Australia Pty Ltd

SAI Site Cert no.	Certified Site Details	Effective Date
C-402260	112 Landseer Street Acacia Ridge QLD 4110 AUSTRALIA  Site Scope: The manufacture and distribution of UPVC, MPVC and PVC-O pipes and the purchase and distribution of complementary PVC pipe fittings.	15 March 2018
C-141387	501 Foley Road Deer Park VIC 3023 AUSTRALIA  Site Scope: The manufacture and distribution of PE, UPVC, MPVC and PVC-O pipes and the purchase and distribution of complementary PVC & PE pipe fittings.	15 March 2018

These registrations are dependent on Pipemakers Australia Pty Ltd maintaining their scope of registration to ISO 9001:2015.

**Registered by:**

SAI Global Certification Services Pty Ltd (ACN 108 716 669) 680 George Street Sydney NSW 2000 Australia with SAI Global Pty Limited 680 George Street Sydney NSW 2000 Australia ("SAI Global") and subject to the SAI Global Terms and Conditions for Certification. While all due care and skill was exercised in carrying out this assessment, SAI Global accepts responsibility only for proven negligence. This certificate remains the property of SAI Global and must be returned to SAI Global upon its request. To verify that this certificate is current please refer to SAI Global On-Line Certification register at <http://www.saiglobal.com>



**ISO TYPE 5**

# CERTIFICATE OF CONFORMITY



*ApprovalMark International* hereby grants:

## PIPEMAKERS PTY LTD

186 Ingram Road,  
Acacia Ridge 4110,  
QLD, AUSTRALIA

Evaluated to:

**AS/NZS 4765 : 2017 Modified PVC (PVC-M) pipes for pressure application**

The ISO Type 5 License shall comply with all the terms and conditions As stipulated by the governance of the operating rules of the ISO Type 5 Scheme, and shall comply with the standard requirements at all times including when the standard is amended. The ISO Type 5 License only covers the product which is identified in the attached product schedule.

Certificate No. **AMI 21378**

**Issued:** 16<sup>th</sup> March 2020

**Original Certification:** 16<sup>th</sup> December 2011

**Expires:** 16<sup>th</sup> December 2021

**John PRASAD**  
Director



**Registered by:** ApprovalMark International Pty Ltd (ABN 69 143 259 974) Unit 20, 33 Holbeche Road, Arndell Park NSW 2148 Australia. The assessment was carried with appropriate skill and assessment by ApprovalMark International Pty Ltd; however it will only accept its responsibility for proven negligence. The certificate remains the property of ApprovalMark International Pty Ltd.

ApprovalMark™





# Product Schedule

**PipeMakers Australia Pty Ltd**  
186 Ingram Road,  
Acacia Ridge, 4110  
QLD, Australia

## ISO Type 5 Certificate of Conformity

Evaluated to:

**AS/NZS 4765: 2017 - Modified PVC (PVC-M) pipes for pressure applications**

Model Id	Model Name	Brand Name	Product Description	Endorsement Date
100PRESSPN6MPVC	100PRESSPN6MPVC	PIPEMAKERS	MPVC Pressure Pipe, DN 100, PN6	28 <sup>th</sup> April 2012
100PRESSPN9MPVC	100PRESSPN9MPVC	PIPEMAKERS	MPVC Pressure Pipe, DN 100, PN9	28 <sup>th</sup> April 2012
100PRESSPN12MPVC	100PRESSPN12MPVC	PIPEMAKERS	MPVC Pressure Pipe, DN 100, PN12	28 <sup>th</sup> April 2012
100PRESSPN6MRRJ	100PRESSPN6MRRJ	PIPEMAKERS	MPVC Pressure Pipe, DN 100, PN6, RRJ	28 <sup>th</sup> April 2012
100PRESSPN9MRRJ	100PRESSPN9MRRJ	PIPEMAKERS	MPVC Pressure Pipe, DN 100, PN9, RRJ	28 <sup>th</sup> April 2012
100PRESSPN12MRRJ	100PRESSPN12MRRJ	PIPEMAKERS	MPVC Pressure Pipe, DN 100, PN12, RRJ	28 <sup>th</sup> April 2012
100PN12S2MPVCRRJ	100PN12S2MPVCRRJ	PIPEMAKERS	MPVC Pressure Pipe, S2, DN 100, PN12, RRJ	28 <sup>th</sup> April 2012
100PN16S2MPVCRRJ	100PN16S2MPVCRRJ	PIPEMAKERS	MPVC Pressure Pipe, S2, DN 100, PN16, RRJ	28 <sup>th</sup> April 2012
125PRESSPN6MPVC	125PRESSPN6MPVC	PIPEMAKERS	MPVC Pressure Pipe, DN 125, PN6	28 <sup>th</sup> April 2012
125PRESSPN9MPVC	125PRESSPN9MPVC	PIPEMAKERS	MPVC Pressure Pipe, DN 125, PN9	28 <sup>th</sup> April 2012
125PRESSPN12MPVC	125PRESSPN12MPVC	PIPEMAKERS	MPVC Pressure Pipe, DN 125, PN12	28 <sup>th</sup> April 2012
125PRESSPN6MRRJ	125PRESSPN6MRRJ	PIPEMAKERS	MPVC Pressure Pipe, DN 125, PN6, RRJ	28 <sup>th</sup> April 2012
150PRESSPN6MPVC	150PRESSPN6MPVC	PIPEMAKERS	MPVC Pressure Pipe, DN 150, PN6	28 <sup>th</sup> April 2012
150PRESSPN9MPVC	150PRESSPN9MPVC	PIPEMAKERS	MPVC Pressure Pipe, DN 150, PN9	28 <sup>th</sup> April 2012
150PRESSPN12MPVC	150PRESSPN12MPVC	PIPEMAKERS	MPVC Pressure Pipe, DN 150, PN12	28 <sup>th</sup> April 2012
150PRESSPN6MRRJ	150PRESSPN6MRRJ	PIPEMAKERS	MPVC Pressure Pipe, DN 150, PN6, RRJ	28 <sup>th</sup> April 2012
150PRESSPN9MRRJ	150PRESSPN9MRRJ	PIPEMAKERS	MPVC Pressure Pipe, DN 150, PN9, RRJ	28 <sup>th</sup> April 2012
150PRESSPN12MRRJ	150PRESSPN12MRRJ	PIPEMAKERS	MPVC Pressure Pipe, DN 150, PN12, RRJ	28 <sup>th</sup> April 2012
150PN12S2MPVCRRJ	150PN12S2MPVCRRJ	PIPEMAKERS	MPVC Pressure Pipe, S2, DN 150, PN12, RRJ	28 <sup>th</sup> April 2012
150PN16S2MPVCRRJ	150PN16S2MPVCRRJ	PIPEMAKERS	MPVC Pressure Pipe, S2, DN 150, PN16, RRJ	28 <sup>th</sup> April 2012
175PRESSPN6MPVC	175PRESSPN6MPVC	PIPEMAKERS	MPVC Pressure Pipe, DN 175, PN6	28 <sup>th</sup> April 2012
175PRESSPN9MPVC	175PRESSPN9MPVC	PIPEMAKERS	MPVC Pressure Pipe, DN 175, PN9	28 <sup>th</sup> April 2012
175PRESSPN12MPVC	175PRESSPN12MPVC	PIPEMAKERS	MPVC Pressure Pipe, DN 175, PN12	28 <sup>th</sup> April 2012
200PRESSPN6MPVC	200PRESSPN6MPVC	PIPEMAKERS	MPVC Pressure Pipe, DN 200, PN6	28 <sup>th</sup> April 2012
200PRESSPN9MPVC	200PRESSPN9MPVC	PIPEMAKERS	MPVC Pressure Pipe, DN 200, PN9	28 <sup>th</sup> April 2012



# Product Schedule

Model Id	Model Name	Brand Name	Product Description	Endorsement Date
200PRESSPN12MPVC	200PRESSPN12MPVC	PIPEMAKERS	MPVC Pressure Pipe, DN 200, PN12	28 <sup>th</sup> April 2012
200PRESSPN6MRRJ	200PRESSPN6MRRJ	PIPEMAKERS	MPVC Pressure Pipe, DN 200, PN6, RRJ	28 <sup>th</sup> April 2012
200PRESSPN9MRRJ	200PRESSPN9MRRJ	PIPEMAKERS	MPVC Pressure Pipe, DN 200, PN9, RRJ	28 <sup>th</sup> April 2012
200PRESSPN12MRRJ	200PRESSPN12MRRJ	PIPEMAKERS	MPVC Pressure Pipe, DN 200, PN12, RRJ	28 <sup>th</sup> April 2012
200PN1252MPVCRRJ	200PN1252MPVCRRJ	PIPEMAKERS	MPVC Pressure Pipe, S2, DN 200, PN12, RRJ	28 <sup>th</sup> April 2012
200PN1652MPVCRRJ	200PN1652MPVCRRJ	PIPEMAKERS	MPVC Pressure Pipe, S2, DN 200, PN16, RRJ	28 <sup>th</sup> April 2012
225PRESSPN6MPVC	225PRESSPN6MPVC	PIPEMAKERS	MPVC Pressure Pipe, DN 225, PN6	28 <sup>th</sup> April 2012
225PRESSPN9MPVC	225PRESSPN9MPVC	PIPEMAKERS	MPVC Pressure Pipe, DN 225, PN9	28 <sup>th</sup> April 2012
225PRESSPN12MPVC	225PRESSPN12MPVC	PIPEMAKERS	MPVC Pressure Pipe, DN 225, PN12	28 <sup>th</sup> April 2012
225PRESSPN6MRRJ	225PRESSPN6MRRJ	PIPEMAKERS	MPVC Pressure Pipe, DN 225, PN6, RRJ	28 <sup>th</sup> April 2012
225PRESSPN9MRRJ	225PRESSPN9MRRJ	PIPEMAKERS	MPVC Pressure Pipe, DN 225, PN9, RRJ	28 <sup>th</sup> April 2012
225PRESSPN12MRRJ	225PRESSPN12MRRJ	PIPEMAKERS	MPVC Pressure Pipe, DN 225, PN12, RRJ	28 <sup>th</sup> April 2012
225PN1252MPVCRRJ	225PN1252MPVCRRJ	PIPEMAKERS	MPVC Pressure Pipe, S2, DN 225, PN12, RRJ	28 <sup>th</sup> April 2012
225PN1652MPVCRRJ	225PN1652MPVCRRJ	PIPEMAKERS	MPVC Pressure Pipe, S2, DN 225, PN16, RRJ	28 <sup>th</sup> April 2012
250PRESSPN6MPVC	250PRESSPN6MPVC	PIPEMAKERS	MPVC Pressure Pipe, DN 250, PN6	28 <sup>th</sup> April 2012
250PRESSPN9MPVC	250PRESSPN9MPVC	PIPEMAKERS	MPVC Pressure Pipe, DN 250, PN9	28 <sup>th</sup> April 2012
250PRESSPN12MPVC	250PRESSPN12MPVC	PIPEMAKERS	MPVC Pressure Pipe, DN 250, PN12	28 <sup>th</sup> April 2012
250PRESSPN6MRRJ	250PRESSPN6MRRJ	PIPEMAKERS	MPVC Pressure Pipe, DN 250, PN6, RRJ	28 <sup>th</sup> April 2012
250PRESSPN9MRRJ	250PRESSPN9MRRJ	PIPEMAKERS	MPVC Pressure Pipe, DN 250, PN9, RRJ	28 <sup>th</sup> April 2012
250PRESSPN12MRRJ	250PRESSPN12MRRJ	PIPEMAKERS	MPVC Pressure Pipe, DN 250, PN12, RRJ	28 <sup>th</sup> April 2012
250PN1252MPVCRRJ	250PN1252MPVCRRJ	PIPEMAKERS	MPVC Pressure Pipe, S2, DN 250, PN12, RRJ	28 <sup>th</sup> April 2012
250PN1652MPVCRRJ	250PN1652MPVCRRJ	PIPEMAKERS	MPVC Pressure Pipe, S2, DN 250, PN16, RRJ	28 <sup>th</sup> April 2012
300PRESSPN6MPVC	300PRESSPN6MPVC	PIPEMAKERS	MPVC Pressure Pipe, DN 300, PN6	28 <sup>th</sup> April 2012
300PRESSPN9MPVC	300PRESSPN9MPVC	PIPEMAKERS	MPVC Pressure Pipe, DN 300, PN9	28 <sup>th</sup> April 2012
300PRESSPN12MPVC	300PRESSPN12MPVC	PIPEMAKERS	MPVC Pressure Pipe, DN 300, PN12	28 <sup>th</sup> April 2012
300PRESSPN6MRRJ	300PRESSPN6MRRJ	PIPEMAKERS	MPVC Pressure Pipe, DN 300, PN6, RRJ	28 <sup>th</sup> April 2012
300PRESSPN9MRRJ	300PRESSPN9MRRJ	PIPEMAKERS	MPVC Pressure Pipe, DN 300, PN9, RRJ	28 <sup>th</sup> April 2012
300PRESSPN12MRRJ	300PRESSPN12MRRJ	PIPEMAKERS	MPVC Pressure Pipe, DN 300, PN12, RRJ	28 <sup>th</sup> April 2012
300PN1252MPVCRRJ	300PN1252MPVCRRJ	PIPEMAKERS	MPVC Pressure Pipe, S2, DN 300, PN12, RRJ	28 <sup>th</sup> April 2012
300PN1652MPVCRRJ	300PN1652MPVCRRJ	PIPEMAKERS	MPVC Pressure Pipe, S2, DN 300, PN16, RRJ	28 <sup>th</sup> April 2012

*End of record*

**Certificate No: AMI 21378**

*The models identified above in the schedule are endorsed for ISO Type 5 application only.*



**ISO TYPE 5**

# CERTIFICATE OF CONFORMITY



*ApprovalMark International* hereby grants:

**PIPEMAKERS AUSTRALIA PTY LTD**  
501 Foleys Road  
Deer Park, 3023  
AUSTRALIA

Evaluated to:

**AS/NZS 4765:2017 - Modified PVC (PVC-M) pipes for pressure applications**

The ISO Type 5 licensee shall comply with all the terms and conditions as stipulated by the governance of the operating rules of the ISO Type 5 scheme, and shall comply with the standard requirements at all times including when the standard is amended. The ISO Type 5 license only covers the product which is identified in the attached product schedule.

**Certificate No.** AMI 74555

**Issued:** 10th February 2020  
**Expires:** 10th February 2023

**Original Issue:** 10th February 2020

**John PRASAD**  
Director



**Registered by:** ApprovalMark International Pty Ltd (ABN 69 143 259 974) Unit 20, 33 Holbeche Road, Arndell Park NSW 2148 Australia. The assessment was carried with appropriate skill and assessment by ApprovalMark International Pty Ltd; however it will only accept its responsibility for proven negligence. The certificate remains the property of ApprovalMark International Pty Ltd.

ApprovalMark



# Product Schedule

## PIPEMAKERS AUSTRALIA PTY LTD

501 Foleys Road  
Deer Park, 3032  
AUSTRALIA

### ISO Type 5 Certificate of Conformity

Evaluated to:

**AS/NZS 4765:2017 – Modified PVC (PVC-M) pipes for pressure applications**

Model Id	Model Name	Brand Name	Product Description	Endorsement Date
100 S2 PVC-M	100 PVC-M	ENVIRONMAIN	100MM PN-12 TO PN20 S2 PVC-M PRESSURE PIPE. AVAILABLE IN BLUE, LILAC, CREAM, GREY & WHITE. LENGTHS FROM 3M TO 6 M RRJ	10th February 2020
150 S2 PVC-M	150 PVC-M	ENVIRONMAIN	150MM PN-12 TO PN20 S2 PVC-M PRESSURE PIPE. AVAILABLE IN BLUE, LILAC, CREAM, GREY & WHITE. LENGTHS FROM 3M TO 6 M RRJ	10th February 2020
200 S2 PVC-M	200 PVC-M	ENVIRONMAIN	200MM PN-12 TO PN20 S2 PVC-M PRESSURE PIPE. AVAILABLE IN BLUE, LILAC, CREAM, GREY & WHITE. LENGTHS FROM 3M TO 6 M RRJ	10th February 2020
225 S2 PVC-M	225 PVC-M	ENVIRONMAIN	225MM PN-12 TO PN20 S2 PVC-M PRESSURE PIPE. AVAILABLE IN BLUE, LILAC, CREAM, GREY & WHITE. LENGTHS FROM 3M TO 6 M RRJ	10th February 2020
250 S2 PVC-M	250 PVC-M	ENVIRONMAIN	250MM PN-12 TO PN20 S2 PVC-M PRESSURE PIPE. AVAILABLE IN BLUE, LILAC, CREAM, GREY & WHITE. LENGTHS FROM 3M TO 6 M RRJ	10th February 2020
300 S2 PVC-M	300 PVC-M	ENVIRONMAIN	300MM PN-12 TO PN20 S2 PVC-M PRESSURE PIPE. AVAILABLE IN BLUE, LILAC, CREAM, GREY & WHITE. LENGTHS FROM 3M TO 6 M RRJ	10th February 2020
375 S2 PVC-M	375 PVC-M	ENVIRONMAIN	375MM PN-12 TO PN20 S2 PVC-M PRESSURE PIPE. AVAILABLE IN BLUE, LILAC, CREAM, GREY & WHITE. LENGTHS FROM 3M TO 6 M RRJ	10th February 2020
450 S2 PVC-M	450 PVC-M	ENVIRONMAIN	450MM PN-12 TO PN20 S2 PVC-M PRESSURE PIPE. AVAILABLE IN BLUE, LILAC, CREAM, GREY & WHITE. LENGTHS FROM 3M TO 6 M RRJ	10th February 2020
100 S1 PVC-M	100 PVC-M	ENVIRONMAIN	100MM PN-6 TO PN18 S1 PVC-M PRESSURE PIPE. AVAILABLE IN BLUE, LILAC, CREAM, GREY & WHITE. LENGTHS FROM 3M TO 6 M RRJ & SWJ	10th February 2020
150 S1 PVC-M	150 PVC-M	ENVIRONMAIN	150MM PN-6 TO PN18 S1 PVC-M PRESSURE PIPE. AVAILABLE IN BLUE, LILAC, CREAM, GREY & WHITE. LENGTHS FROM 3M TO 6 M RRJ & SWJ	10th February 2020
200 S1 PVC-M	200 PVC-M	ENVIRONMAIN	200MM PN-6 TO PN18 S1 PVC-M PRESSURE PIPE. AVAILABLE IN BLUE, LILAC, CREAM, GREY & WHITE. LENGTHS FROM 3M TO 6 M RRJ & SWJ	10th February 2020
225 S1 PVC-M	225 PVC-M	ENVIRONMAIN	225MM PN-6 TO PN18 S1 PVC-M PRESSURE PIPE. AVAILABLE IN BLUE, LILAC, CREAM, GREY & WHITE. LENGTHS FROM 3M TO 6 M RRJ & SWJ	10th February 2020
250 S1 PVC-M	250 PVC-M	ENVIRONMAIN	250MM PN-6 TO PN18 S1 PVC-M PRESSURE PIPE. AVAILABLE IN BLUE, LILAC, CREAM, GREY & WHITE. LENGTHS FROM 3M TO 6 M RRJ & SWJ	10th February 2020
300 S1 PVC-M	300 PVC-M	ENVIRONMAIN	300MM PN-6 TO PN18 S1 PVC-M PRESSURE PIPE. AVAILABLE IN BLUE, LILAC, CREAM, GREY & WHITE. LENGTHS FROM 3M TO 6 M RRJ & SWJ	10th February 2020
375 S1 PVC-M	375 PVC-M	ENVIRONMAIN	375MM PN-6 TO PN18 S1 PVC-M PRESSURE PIPE.	10th February 2020



# Product Schedule

Model Id	Model Name	Brand Name	Product Description	Endorsement Date
			AVAILABLE IN BLUE, LILAC, CREAM, GREY & WHITE. LENGTHS FROM 3M TO 6 M RRJ & SWJ	
450 S1 PVC-M	450 PVC-M	ENVIRONMAIN	450MM PN-6 TO PN18 S1 PVC-M PRESSURE PIPE. AVAILABLE IN BLUE, LILAC, CREAM, GREY & WHITE. LENGTHS FROM 3M TO 6 M RRJ & SWJ	10th February 2020
575 S1 PVC-M	575 PVC-M	ENVIRONMAIN	575MM PN-6 TO PN18 S1 PVC-M PRESSURE PIPE. AVAILABLE IN BLUE, LILAC, CREAM, GREY & WHITE. LENGTHS FROM 3M TO 6 M RRJ & SWJ	10th February 2020

*End of record*

**Certificate No: AMI 74555**

*The models identified above in the schedule are endorsed for ISO Type 5 application only.*

ApprovalMark





# BEST ENVIRONMENTAL PRACTICE



*ApprovalMark International* hereby grants:

## PIPEMAKERS AUSTRALIA PTY LTD

186 Ingram Road,  
Acacia Ridge 4110  
AUSTRALIA

### Best Environmental Practice - PVC

Evaluated to

AS/NZS 1254:2010 - PVC-U - Pipes and fittings for stormwater and surface water applications  
AS/NZS 1260:2017 - PVC - U - Pipes and fittings for drain, waste and vent applications  
AS/NZS 1477:2017 - PVC- U - Pipes and fittings for pressure applications  
AS/NZS 4441:2017 - Orientated PVC (PVC-O) pipes for pressure applications  
AS/NZS 4765:2017 - Modified PVC (PVC-M) pipes for pressure applications  
AS/NZS 2053.2:2001 - Conduits and fittings for electrical installations - Part 2: Rigid plain conduits and fittings of insulating material

The licensee complies with the requirements of Best Environmental Practice – PVC as per Section 7 as specified in the Green Building Council of Australia ("the Requirements") Literature Review and Best Practice Guidelines for the Life Cycle of PVC Building Product's using the compliance pathway Number 2 - Manufacturer's Declaration as measured by the Green Star PVC Credit Auditor Verification Guidance - November 2013 ("the Criteria").

The documentation was reviewed by ApprovalMark International on 20th February 2020 and found to comply with the following requirements:

- **Manufacture of PVC Resin**
- **Manufacture and end of life management of PVC products**
- **Use of PVC Recyclate in PVC products**

*Note - Any changes introduced to above requirements shall immediately be reported to ApprovalMark International in order to examine the validity of the certificate.*

**Certificate No. BEP-PVC 4110**

**Issued:** 20th February 2020  
**Expires:** 21st February 2022

**Originally Certified:** 20th February 2012  
**Current Certification:** 20th February 2020

**John PRASAD**  
Director

BEP  
CERTIFIED

ApprovalMark



# BEST ENVIRONMENTAL PRACTICE



*ApprovalMark International* hereby grants:

## PIPEMAKERS AUSTRALIA PTY LTD

501 Foleys Road  
Deer Park 3023  
AUSTRALIA

### Best Environmental Practice - PVC

Evaluated to

AS/NZS 1254:2010 - PVC-U Pipes and fittings for stormwater and surface water applications  
AS/NZS 1260:2017 - PVC-U - Pipes and fittings for drain, waste and vent applications  
AS/NZS 1477:2017 - PVC-U - Pipes and fittings for pressure applications  
AS/NZS 4441:2017 - Orientated PVC (PVC-O) pipes for pressure applications  
AS/NZS 4765:2017 - Modified PVC (PVC-M) pipes for pressure applications  
AS/NZS 2053.2:2001 - Conduits and fittings for electrical installations - Part 2: Rigid plain conduits and fittings of insulating material

The licensee complies with the requirements of Best Environmental Practice – PVC as per Section 7 as specified in the Green Building Council of Australia ("the Requirements") Literature Review and Best Practice Guidelines for the Life Cycle of PVC Building Product's using the compliance pathway Number 2 - Manufacturer's Declaration as measured by the Green Star PVC Credit Auditor Verification Guidance - November 2013 ("the Criteria").

The documentation was reviewed by ApprovalMark International on 28th February 2020 and found to comply with the following requirements:

- **Manufacture of PVC Resin**
- **Manufacture and end of life management of PVC products**
- **Use of PVC Recyclate in PVC products**

*Note - Any changes introduced to above requirements shall immediately be reported to ApprovalMark International in order to examine the validity of the certificate.*

**Certificate No. BEP-PVC 542**

**Issued:** 28th February 2020  
**Expires:** 28th February 2022

**Originally Certified:** 29th February 2012  
**Current Certification:** 28th February 2020

**John PRASAD**  
Director

BEP  
CERTIFIED

ApprovalMark

## APPENDIX C - SUPPLIER CONTACTS

### PIPEMAKERS AUSTRALIA PTY LTD

#### PVC Manufacturing Facilities

186 Ingram Road Acacia Ridge QLD 4110. Tel. 07 3344 3377 Email. <a href="mailto:vs@pipemakers.com.au">vs@pipemakers.com.au</a>	501 Foley Road Deer Park VIC 3023 Tel. 03 8361 7115 Email. <a href="mailto:vs@pipemakers.com.au">vs@pipemakers.com.au</a>
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#### Sales and Distribution

<p><b>Pipemakers Northern Region</b>          Areas Serviced</p> <ul style="list-style-type: none"> <li>• Northern Territory</li> <li>• Queensland</li> <li>• Northern New South Wales</li> <li>• Metropolitan Sydney</li> <li>• ACT</li> </ul> <p><b>Queensland:</b>          Phone: (07) 3344 3377          Address: 186 Ingram Rd          Acacia Ridge QLD 4110</p> <p><b>New South Wales:</b>          Phone: (02) 9604 3044          Address: 16-24 Lugard Street,          Penrith N.S.W.</p>	<p><b>Pipemakers Southern Region</b>          Areas Serviced</p> <ul style="list-style-type: none"> <li>• Southern New South Wales</li> <li>• Victoria</li> <li>• Tasmania</li> <li>• South Australia</li> </ul> <p><b>Victoria</b>          Phone: (03) 8361 7115          Address: 501 Foleys Road          Deer Park VIC 3023</p> <p><b>New South Wales</b>          Phone: (02) 9604 3044          Address: 16-24 Lugard Street,          Penrith N.S.W.</p>
<p><b>Pipemakers Western Region</b>          Areas Serviced</p> <ul style="list-style-type: none"> <li>• Western Australia</li> </ul> <p>Phone: (08) 6250 3100          Address: 17 Gauge Circuit          Canningvale WA 6155</p>	



**Melbourne Office**

Level 8, Suite 8.02  
401 Docklands Drive  
Docklands VIC 3008

**Sydney Office**

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Sydney NSW 2000  
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