

David Moss Group Pty Ltd

PRODUCT APPRAISAL REPORT PA 2027

Damos PVC-M Pressure Pipes

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

Published: 5 June 2020

Document History

The following information indicates the changes made to this document.

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Peer Reviewers

Name/Title	Organisation	Date
Product Appraisal Technical Advisory Group	WSAA	3 June 2020
WSAA Expert Panel	WSAA	3 June 2020
Peter Pittard, WSAA Consultant	WSAA	15 May 2020
Carl Radford, Product Appraisal Manager	WSAA	5 June 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:

- 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

David Moss Group Pty Ltd is a privately-owned group of companies that can trace its heritage back to 1936. The Group is predominantly focussed on the manufacture and supply of PE and PVC pipe and fittings and underground ventilation. Other companies within the Group provide specialised piping solutions, crushing and screening products and other specialist products and services.

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

The pipes are available in sizes DN 100 to DN 250 with PN12, PN16, PN18 and PN20 pressure classifications. See Section 4 for specific details of the range.

Pipes are supplied in 6m lengths coloured blue for drinking water, lilac for non-drinking water and cream for pressure sewer applications.

David Moss Group Pty Ltd holds an ISO 9001:2015 Quality Management System licence.

The Damos PVC-M Series 2 pipes have ISO Type 5 StandardsMark product certification to AS/NZS 4765:2017 *Modified PVC (PVC-M) pipes for pressure applications.*

This Appraisal has determined that Damos Series 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 Damos Series 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 David Moss Group Pty Ltd.

2.1 The Manufacturer/Supplier

The David Moss Group Pty Ltd is a privately-owned group of companies that can trace its heritage back to 1936. The Group is predominantly focussed on the manufacture and supply of PE and PVC pipe and fittings and underground ventilation products. Other Group companies provide specialised piping solutions, crushing and screening products and other specialist products and services.

David Moss Corporation Pty Ltd was incorporated in Perth in 1960 and its operations at Neerabup WA manufactures PE and PVC pipes and fittings for the water, gas, industrial, mining and agricultural segments.

In 2013 David Moss Group acquired the Mining, Industrial and Civil Division of Australian PE pipe manufacturer PPI Corporation and incorporated those operations into David Moss Queensland Pty Ltd, with its manufacturing operations located at Geebung, Queensland.

3 THE PRODUCT

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

Damos also manufactures a range of Series 1 PVC-M pipes that are not included in the scope of this appraisal.

The rubber ring joint Series 2 pipes are available in sizes DN 100, DN 150, DN 200, DN 225 and DN 250 with pressure classes of PN12, PN16, PN18 and PN20.

Pipes are supplied in 6m lengths coloured blue for drinking water, lilac for non-drinking water and cream for pressure sewer applications.

The outside diameter of the Series 2 pipe aligns 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.

David Moss utilises dual hardness SBR elastomeric seals for their PVC-M Series 2 pipes that are pre-installed in the pipe sockets. The joint allows pipe deflection up to 1 degree.

4 SCOPE OF THE APPRAISAL

The scope of this appraisal includes PVC-M Series 2 RRJ pipes in sizes DN 100, 150, 200, 225 and 250 as included in the ISO Type 5 StandardsMark product certification product schedule included in Appendix B.

The range of Damos PVC-M Series 2 RRJ pipes is detailed in Table 1.

	Mean OD	Pressure Class PN						
DN	mm	12	16	18	20			
100	121.7	✓	✓	✓	✓			
150	177.1	✓	✓	✓	✓			
200	231.9	✓	✓		✓			
225	258.9	✓	✓					
250	285.8	✓	√					

TABLE 1 DAMOS PVC-M RRJ PIPE RANGE

5 APPRAISAL CRITERIA

5.1 Quality Assurance Requirements

The WSAA 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

Damos 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

6 COMPLIANCE WITH APPRAISAL CRITERIA

6.1 Compliance with Quality Assurance Requirements

David Moss has submitted the following quality certificates:

- ISO 9001:2015 Certificate of Registration No. QEC3125 issued to David Moss Group Pty Ltd by SAI-Global.
- AS/NZS 4765:2017 StandardsMark ISO Type 5 product certification Licence No. SMK 20018 issued to David Moss Corporation Pty Ltd by SAI-Global.
- AS/NZS 4765:2017 Best Environmental Practice Certificate issued to David Moss Corporation Pty Ltd) by SAI-Global.

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.

6.2 Compliance with Performance Requirements

6.2.1 Type tests for pipes

Performance type tests were completed in 2003 by Plumbing Testing Laboratory (NATA Accreditation No 14285) in Perth in accordance with AS/NZS 4765:2000 requirements. The Standard does not require additional type tests to be completed unless there is a change in material or design. David Moss has confirmed that there has been no change since that time.

The performance tests include softening temperature, resistance to internal pressure at elevated temperatures, long term hydrostatic strength, long term toughness and resistance of notched pipe to internal pressure.

A certificate of analysis from Australian Vinyls Corporation Limited dated 13th December 2018 has been submitted to demonstrate compliance with the vinyl chloride monomer test that is required to be completed each 5 years.

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

6.2.2 Type tests for elastomeric seal joints

Type tests have been completed for the elastomeric seal joints in accordance with AS/NZS 4765:2000 by Plumbing Testing Laboratory in 2003. The Standard does not require additional type tests to be completed unless there is a change in material or design. David Moss has confirmed that there has been no change since that time.

The tests conducted were short term pressure test for leak-tightness and short-term negative pressure test for leak-tightness.

6.2.3 Seals

Damos Series 2 PVC-M pipes utilise SBR compound 2512S for their dual hardness S2 seals sourced from Gulf Rubber.

Gulf Rubber has been issued with ISO Type 5 StandardsMark Licence No. SMKP20133 for AS 1646:2007. Copies of the product certification licences are held on file by WSAA.

Product certification is deemed as acceptable to demonstrate compliance to AS 1646 and AS 681-1.

6.2.4 Pipe joint deflection

David Moss recommends a maximum pipe deflection of 1 degree for all sizes.

6.2.5 Contact with drinking water

David Moss has submitted a copy of a report from Australian Water Quality Centre dated 2nd March 2016 to demonstrate compliance with AS/NZS 4020:2005 for DN 100 PVC-M Series 2 pressure pipe manufactured at Neerabup WA.

Test reports completed by AWQC, dated 6 December 2019, for Gulf Rubber SBR compound 2512S are retained on file by WSAA to verify compliance of the SBR material to AS/NZS 4020:2018.

The lubricant supplied by David Moss 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.

7 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. David Moss 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.

8 PRODUCT MARKING

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

Manufacturers Name: David Moss

Pipe Series Number: S2Pipe Material: PVC-M

Nominal Size: e.g. 100

Pressure Classification: e.g. PN12

Maximum allowable angle of joint deflection: DEFL 1°

• The date of manufacture: e.g. 200229

Identification of the place of manufacture & machine number: e.g. EX7

The standard number: AS/NZS 4765

Best Environmental Practice: BEP

Licence Number: e.g. LIC#25601

Special Application information – e.g. RECYCLED WATER - DO NOT DRINK

Example:

DAVID MOSS S2 PVC-M 100 PN 12 DEFL 1° LIC #25601 YYMMDD TIME. EX7 AS/NZS4765 MIXCODE L6M

9 PACKAGING AND TRANSPORTATION

David Moss packages the PVC-M pipe in accordance AS/NZS 2032:2006. To prevent unnecessary damage David Moss advises that pipes and fittings should not be dropped or thrown onto hard surfaces or allowed to come into contact with sharp objects or sharp edges. The storage area should be free from surface irregularities such as sharp stones or any other sharp projection.

The pipes are positioned in scalloped gluts and strapped in packs to suit job requirements.

10 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 David Moss's warranty is included in their terms and conditions of sale.

11 WATER AGENCY EXPERIENCE WITH THE PRODUCT OR FIELD-TESTING REPORT

David Moss has submitted a copy of Water Corporation WA Authorisation No. 19-63-WA/WWA dated 9 September 2019 for their range of PVC-M pipes.

12 OUTCOMES OF EXPERT PANEL PRODUCT REVIEW

No issues were raised.

13 FUTURE WORKS

No future works have been identified.

14 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.

14.1 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.

14.2 Limits on Reliance on Information and Recommendations

14.2.1 Disclaimer of liability

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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 indemnify 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.

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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.

14.4 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

PVC PRESSURE SYSTEMS



MPVC - SERIES 2 PRESSURE PIPES AS/NZ4765 SERIES 2 COMPLETE WITH RUBBER RING

PIPE OUTSIDE DIAMETER			PN6			PN9		PN12				PN18		
NOM OF SIZE		BORE	Wille	VGH VGA	SORE	VALL	Kan.	MI AN BORE	Will	KGM	MLAN		WOR	
100	121,9	113,1	4.4	2.4	110.3	5,7	3.1	109.1	6.4	3,4	107.8	7.1	3.7	
150	177.4	164.8	6.3	5	160.8	8.3	6.5	158.9	9.3	7.1	157	10.2	7.8	
200	232.3	215.9	8.2	8,4	210.7	10.8	11	208.1	12.1	12.1	205.8	13.3	13.3	
225	259.3	241	9.2	10.5	235.1	12	13.7	232.4	13.5	15.2	229.7	14.8	16.7	
250	286.2	266	10.1	12.8	259.7	13.3	16.6	256.6	14.8	18.5	253.4	6.4	20.2	
300	345.4	321	12.2	18.8	313.5	16	24.4	309.7	17.9	27,1	306,1	19,7	29,6	
375	426.2	28.3	386.9	19.7	37			-	£3.	-3	-	~	1	



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APPENDIX B - QUALITY CERTIFICATIONS

Copies of the following Quality Certification Certificates are available for downloading from the WSAA member only website.

TABLE B1

DAVID MOSS GROUP PTY LTD - MANAGEMENT SYSTEM

26 Turnbull Road Neerabup WA					
Quality Systems Standard	ISO 9001:2015				
Certification Licence No.	QEC3125				
Certifying agency	SAI-Global				
First date of certification	11 February 2002				
Current date of certification	27 April 2018				
Expiry date of certification	26 April 2021				

TABLE B2

DAVID MOSS CORPORATION PTY LTD – PRODUCT CERTIFICATION

26 Turnbull	Road Neerabup WA
Product Standard	AS/NZS 4765:2017
Certificate No.	SMK20018
Certifying Agency	SAI-Global
First Date of Certification	9 March 2020
Current Date of Certification	9 March 2020
Expiry Date of Certification	8 March 2025

TABLE B3

DAVID MOSS CORPORATION PTY LTD – BEST ENVIRONMENTAL PRACTICE

26 Turnbull Road Neerabup WA					
Product Standard	AS/NZS 4765: 2017				
Certifying agency	SAI-Global				
Current date of certification	6 November 2018				
Expiry date of certification	5 November 2020				



This is to certify that:

David Moss Group Pty Ltd

ABN 23 156 543 725

Trading as David Moss Corporation Pty Ltd ABN 64 009 124 681

In association with David Moss Queensland Pty Ltd

ABN 69 159 866 627

26 Turnbull Road Neerabup WA 6031 AUSTRALIA 60 Prosperity Place Geebung QLD 4034 AUSTRALIA

operates a

QUALITY MANAGEMENT SYSTEM

which complies with the requirements of

ISO 9001:2015

for the following scope

The registration covers the Quality Management System for the manufacturing and marketing of Polythene and PVC pipes and conduits rubber products for the water supply sewage, drainage electrical mining gas rural and telecommunication industries. The registration also covers the fabrication of Polyethylene pipe fittings and the hire of poly welding equipment.

Certificate No: QEC3125

Issued: 4 May 2018

Expires: 26 April 2021

Originally Certified: 11 February 2002

Current Certification: 27 April 2018

Nicole Grantham

General Manager SAI Global Certification Services





Registered by:

SAI Global Certification Services Pty Ltd (ACN 198 716 669) 880 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 grown 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





SAI Global hereby grants:

David Moss Corporation Pty Ltd

ABN 64 009 124 681

26 Turnbull Road, Neerabup, WA 6031, Australia

StandardsMark Licence

Manufactured to:

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

"the StandardsMark Licensee" the right to use the STANDARDSMARK as shown below only in respect of the goods described and detailed in the Schedule which are produced by the Licensee or on behalf of the Licensee" and which comply with the appropriate Standard referred to above as from time to time amended. The Licence is granted subject to the rules governing the use of the STANDARDSMARK and the Terms and Conditions for certification and licence. The Licensee covenants to comply with all the Rules and Terms and Conditions.

Licence No: SMK20018

Issued: 18 March 2020 Expires: 8 March 2025

deatheadlas

Originally Certified: 9 March 2020 Current Certification: 9 March 2020

Heather Mahon General Manager Technical Services SAI Global Assurance



*For details of manufacture, refer to the licensee

The STANDARDSMARK is a registered certification trademark of SAI Global Pty Limited
(A.C.N. 050 644 642) and is issued under licence by SAI Global Certification Services Pty Limited
(A.C.N. 108 716 669) ("SAI Global") 680 George Street, Sydney NSW 2000, GPO Box 5420 Sydney
NSW 2001. This certificate remains the property of SAI Global and must be returned to SAI Global upon its request. Refer to
www.saiglobal.com, for the list of product models.

SCHEDULE TO STANDARDSMARK LICENCE

SAI Global hereby grants:

David Moss Corporation Pty Ltd 26 Turnbull Road, Neerabup, WA 6031, Australia

StandardsMark Licence

Manufactured to:

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

Model identification of the goods on which the STANDARDSMARK may be used:

Model Identification	Marrie	Product. Description	Product Type	Nominal Size	Pipe	Classification	Jules Type	Colour	Date Enderse
Q-RS1M-100126	David Nosa	PVC-M Pressure Pipe	PVC-M pipe	100	4	12	Rubber Ring Joint	White or Light Green, Blue	9 Mar 2020
Q-RS1M-100156	David Mose	PVC-M Pressure Pipe	PVC-M pipe	100	-1	35	Rubber Ring Joint	White or Light Green, Stor	9 Mar 2020
Q-R51M-125126	David Moss	PVC-M Pressure Pipe	PVC-M pipe	125	1	12	Rubber Ring June	White or Light. Green, Blue	9 Mar 2020
D-RS1M-125156	David Moss	PVC-M Pressure Pipe	PVC-M pipe	125	1	15	Rubber Ring Joint	White or Light Green, Blue	9 Mar 2020
Q-RS1M-150126	David Moss	PVC-M Pressure Pipe	PVC-M pipe	150	-1	12	Rubber Ring Joint	White or Light Green, Stus	9 Mar 2020
Q-RS1M-150156	David .	PVC-M Pressure	PVCM pipe	150	1	16	Rubber Ring	White or Light	9 Mar 2020
Q-RS1M-175128	Moss. David	PVC-M Pressure	PVC-M pape	175	1	12	Rubber Ring	Oreen, Blue Whole or Light	9 Mer 2020
Q-RS1M-175196	Moss David Moss	PVC-M Pressure	PVC-M pipe	195	1	15	Rubber Ring	White or Light	9 Mar 2020
Q-R51M-200126	David Moss	Pipe PVC-M Pressure	PVC-M pipe	200	2	12	Rubber Ring Joint	Green, Stue White or Light	9 Mar 2020
G-R51M-200156	David	PVC-M Pressure	PVC-M pipe	200	2	15	Rubber Ring	Green, Blue White or Light	9 Mar 2020
Q-R52M-100126	Moss David Moss	Pipe PVC-M Pressure Pipe	PVC-M pipe	100	1	12	Rubber Ring Joint	Green, Blue White or Light Green, Rus Crean	9 Mar 2020
G-R52M-100166	David Moss	PVC-M Pressure	PVC-M pape	100	2	16.	Rubber Ring	White or Light Green, Blue Cream	9 Mar 2020
Q-RS2M-1001M	David Moss	Pipe PVC-M Pressure Pos	PVC-M pipe	100	2	18	Rubber Ring Joint	White or Light Green, Stus Cream	9 Mar 2020
Q-RS2M-100206	David	PVC-M Pressure	PVC-M pipe	100	2	20	Rubber Ring	White or Light	9 Mar 2020
Q-R52M-150126	Moss David	PVC-M Pressure	PVC-M pape	150	1	12	Rubber Ring	White or Light	9 Mar 2020
Q-R52M-150166	David Mine	Pro-M Pressure Pos	PVC-M pipe	150	2	16	Rubber Hung Joint	Green, Blue, Cream White or Light Green, Blue, Cream	9 Mar 2020
Q-R52M-150186	Devid Moss	PVC-M Presents	PVC-M pipe	150	2	18	Rubber Ring	White of Light	8 Mar 2020
Q-R52M-190206	David Moss	PVC-M Pressure	PVC-M pape	150	2	20	Rubber Ring	Green, Blue Creen White or Light	9 Mar 2000
Q-R52M-200126	David Moss	PVC-M Preseurs	PVC-M pipe	200	2	12	Rubber Hing Joint	Green, Sive Cream White or Light Green, Sive Cream	9 Mar 2020
Q-R52M-200166	David Moss	Pipe PVC-M Pressurs Pipe	PVC-M pipe	200	2	16.	Rubber Ring	White or Light Green, Stue Cream	9 Mar 2020
Q-RSUM-200200	David Moss	PVC-M Pressure	PVC-M pipe	200	3	20	Rubber Ring	White, Cream or Light Green, Stup	9 Mar 2020
Q-R52M-225126	David Moss	Pipe PVC-M Pressure Pipe	PVC-M pipe	225	2	12	Rubber Ring	White or Light Green, Stue	9 Mar 2020
Q-R52M-225166	David Moss	PVC-M Pressure Pipe	PVC-M pipe	225	2	14	Rubber Ring Joint	White or Light Green, Blue	9 Mar 2020
Q-R52M-250126	David Moss	PVC-M Pressure Pipe	FVC-M pipe	250	2	12	Rubber Ring	White or Light Green, Blue, Cream	9 Mar 2025
Q-R52M-250166	David Moss	PVC-M Pressure Pipe	PVC-M pape	250	2	16	Rubber Ring	White or Light Green, Stue Cream	9 Mar 2020
Q-S1M-100126	David Moss	PVC-M Pressure Pipe	PVC-M pape	100	1	12	Solvent	White or Light Green	9 Mar 2020
Q-S1M-100196	David Moss	PVCM Pressure Pos	PVC-M pipe	100	4	16	Solvent	White or Light Orean	9 Mar 2020
Q-51M-125126	David Moss	PVC-M Pressure Pipe	PVC-M pipe	125	-1	12	Solvent cernent	White of Light Grean	9 Mar 2020

Licence No: SMK20018 Issued Date: 18 March 2020

This schedule supersedes all previously issued schedules



The STANDARDSMARK is a registered certification trademark of SAI Global Pty Limited (A.C.N. 050 644 642) and is issued under licence by SAI Global Certification Services Pty Limited (A.C.N. 108 716 669) ("SAI Global") 680 George Street, Sydney NSW 2000, GPO Box 5420 Sydney NSW 2001. This certificate remains the property of SAI Global and must be returned to SAI Global upon its request. Refer to the Schedule for the list of product models.

^{*} For details of manufacture, refer to the licensee



SAI Global hereby grants:

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ABN 67 050 611 642

BEST ENVIRONMETAL PRACTICE FOR PVC VERIFICATION CERTIFICATE

The product types listed below have been assessed and comply with the requirements of Best Practice Guidelines for PVC in the Built Environment, as published by the Green Building Council of Australia.

- PVC pipes and fittings for pressure applications to AS/NZS 1477:2006 as listed in WaterMark certificate WMKA25601.
- Modified PVC (PVC-M) pipes for pressure applications to AS/NZS 4765:2007 as listed in the WaterMark certificate WMKA20018.

This certificate is issued based on verification of compliance based manufacturers declaration for pipes and fittings manufactured by **David Moss Corporation Pty Ltd, Australia**.

This certificate is subject to bi-annual review.

This certificate does not constitute product certification and does not imply the product is certified unless stated. For details of product certification please refer to http://register.saiglobal.com

Issued: 06/11/2018 Expires: 05/11/2020

This certificate remains valid until the expiry date above or until material change occurs to the materials and / or process which requires re-validation under the guidelines.

SAI Global is a certification body accredited by JAS-ANZ. For more information on SAI Global's accreditation please refer to www.saiglobal.com.

SFinn

Simon Fraser Service Delivery Leader – Product Certification

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APPENDIX C - SUPPLIER CONTACTS

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