



Aymroo Pty Ltd

PRODUCT APPRAISAL REPORT 1608 Issue 2

PVC-U Maintenance Shafts for Sewerage

**WSA 137:2019 - INDUSTRY STANDARD FOR MAINTENANCE SHAFTS,
MAINTENANCE CHAMBERS AND MAINTENANCE HOLES FOR SEWERAGE**

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Peer Reviewers

Name/Title	Organisation	Date
Product Appraisal Technical Advisory Group	WSAA	10 October 2016
WSAA Expert Panel	WSAA	10 October 2016
Carl Radford, Product Appraisal Manager	WSAA	23 September 2016
Peter Pittard, WSAA Consultant	WSAA	1 September 2021
Carl Radford, Product Appraisal Manager	WSAA	1 September 2021

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

Aymroo Pty Ltd has been manufacturing PVC plumbing fittings for the commercial and domestic markets in Australia since 1988. The company was acquired by Reln Pty Ltd in 2011.

The injection moulded components for the PVC-U maintenance shafts are manufactured by Reln and assembled by Aymroo, both located in Ingleburn NSW.

This Appraisal is for a range of PVC-U sewer maintenance shafts, including associated fittings, manufactured in conformance with WSA 137:2019 *Industry standard for PVC-U, PP and PE maintenance shafts, maintenance chambers and maintenance holes for sewerage*.

The sewer maintenance shafts provide a safe alternative to traditional access chambers to enable access for maintenance and CCTV cameras.

This Issue 2 is a replacement for the previous appraisal which had reached its 5-year expiry date.

The basic types of Aymroo PVC-U sewer maintenance shafts are summarised below:

- DN 300 “T” section body with inline, junction or bend configurations.

Junctions may be at 45° or 90°. Bends may be specified from 5° to 90°.

- DN 300 terminal maintenance shaft.

This maintenance shaft utilises a DN 300 bend.

- Central Axis Maintenance Shaft (CAMS)

This maintenance shaft is specifically designed for improved hydraulic performance and camera access and is manufactured by welding a moulded base and top together. The maintenance shaft can be supplied with inlet angles from 80° to 280° from the outlet, an inlet grade from 0° to 15° and an inlet invert level height from 0mm up to 650mm.

Solvent cement joint level invert tapers may be utilised to provide inlet and outlet sizes of DN 100, DN 150, DN 225 or DN 300 and riser sizes of DN 225 or DN 300 for all MS types. The CAMS facilitates connection to DN 150 and DN 225 inlet and outlet sizes.

Connection to the sewer network utilises Solvent Cement Joints (SCJ) as standard with Rubber Ring Joints (RRJ) as an option.

Further details are provided in Section 3.

The Aymroo maintenance shafts are suitable for installation depths up to 4.7 metres.

A PVC-U quick release bayonet locking access cap is available to cap the DN 300 or DN 225 risers. Aymroo also offers a surcharge relief bung that can be installed into the access cap on site, after testing. Alternatively, a SWJ cap without solvent cement or a RRJ cap can be utilised to cater for surcharge.

Associated pipes and fittings including shroud pipes, adapters and surface access covers are also available.

Both Aymroo Pty Ltd and Reln Pty Ltd hold an ISO 9001:2015 Quality Management System Licence.

The sewer maintenance shafts have ISO Type 5 ApprovalMark Product Certification to WSA 137:2019 and associated pipes and fittings have product certification to the relevant standard.

This Appraisal has determined that Aymroo sewer maintenance shafts, as detailed in this report, meet the requirements of WSA PS 341:2019 *Maintenance Shafts (MS)* -

Polypropylene (PP) for Non-Pressure Applications – Sewerage and are considered as 'fit-for-purpose'.

1.1 Recommendation

It is recommended that WSAA members, subject to any specific requirements of the member, accept or authorise the Aymroo PVC-U sewer maintenance shaft assemblies, as detailed in this report, for use in sewer pipelines provided any relevant conditions relating to the design, installation, acceptance testing and commissioning are in accordance with WSAA Codes and manufacturer's requirements.

2 THE APPLICANT

The Applicant is Aymroo Pty Ltd.

2.1 The Supplier

Aymroo Pty Ltd was founded in 1988. Aymroo specialises in the manufacture of PVC plumbing fittings for sewerage and other applications at its Ingleburn NSW factory. Aymroo has been supplying sewer maintenance shafts to the Australian water industry since 1999. In 2011 Aymroo was acquired by Reln Pty Ltd, a major supplier to the plumbing industry.

More information about Aymroo can be found on their website at the following link: www.aymroo.com.au

2.2 The Manufacturer

The injection moulded components of the sewer maintenance shafts are manufactured by Reln Pty Ltd at its Ingleburn moulding facility. Reln manufactures its own lines of domestic and industrial products with applications as diverse as surface water drainage, plumbing, agriculture, aquaculture and gardening. Reln also provides design and product management for leading manufacturers in the packaging, automotive, medical, electronic goods and consumer industries.

More information about Reln can be found on their website at the following link: www.reln.com.au

3 THE PRODUCT

This Appraisal is for a range of PVC-U sewer maintenance shafts, including associated fittings, manufactured in conformance with WSA 137:2019 *Industry standard for PVC-U, PP and PE maintenance shafts, maintenance chambers and maintenance holes for sewerage*.

The sewer maintenance shafts provide a safe alternative to traditional access chambers to enable access for maintenance and CCTV cameras.

The basic types of Aymroo PVC-U sewer maintenance shafts are summarised below:

- DN 300 "T" section body with inline, junction or bend configurations.

Junctions may be at 45° or 90°. Bends may be specified from 5° to 90°.

- DN 300 terminal maintenance shaft.

This maintenance shaft utilises a DN 300 bend.

- Central Axis Maintenance Shaft (CAMS)

The CAMS body is manufactured by welding a moulded base and top together. This maintenance shaft is specifically designed to provide large access for cameras, jetting and maintenance equipment. The maintenance shaft can be supplied with inlet angles from 80° to 280° from the outlet, an inlet grade from 0° to 15° and an inlet invert level height from 0mm up to 650mm.

The CAMS are well suited for manual installation (each base unit weighs approximately 15kg) and are easily handled by one person.

Solvent cement joint level invert tapers may be utilised to provide inlet and outlet sizes of DN 100, DN 150, DN 225 or DN 300 and riser sizes of DN 225 or DN 300 for all MS types. The CAMS facilitates connection to DN 150 and DN 225 inlet and outlet sizes.

Connection to the sewer network utilises Solvent Cement Joints (SCJ) as standard with Rubber Ring Joints (RRJ) as an option.

The Aymroo maintenance shafts are suitable for installation depths up to 4.7 metres.



Inline



Junction

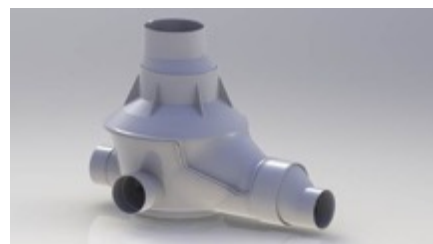
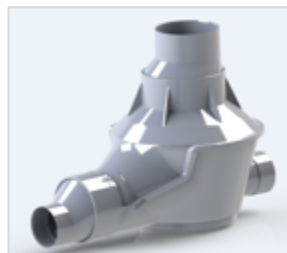


Bend

**FIGURE 1
EXAMPLES OF SEWER MAINTENANCE SHAFT ASSEMBLIES**



**FIGURE 2
EXAMPLE OF TERMINAL MAINTENANCE SHAFT**



**FIGURE 3
EXAMPLES OF CENTRAL AXIS MAINTENANCE SHAFTS**

A PVC-U quick release bayonet locking access cap is available to cap the DN 300 or DN 225 risers. The access cap housing is solvent welded to the riser and incorporates a bayonet operated lid that seals with a rubber ring. The lid can be removed using an Aymroo cap spanner or 30 x 30 RHS.

Aymroo also offer a surcharge relief bung that can be installed into the access cap on site after testing.

Alternatively, a SWJ cap without solvent cement or a RRJ cap can be utilised to cater for surcharge. See Figure 4 for examples of caps.



FIGURE 4
BAYONET LOCKING ACCESS CAP

Level invert tapers utilised in the assembly of the maintenance shafts are manufactured by Aymroo in conformance with AS/NZS 1260. Other PVC-U pipes and fittings including drop junctions, couplings, adapters, long radius bends, extension pipes or shroud pipes are manufactured in conformance with AS/NZS 1260 and are either manufactured by Aymroo under their product certification licence or sourced from other product certified manufacturers.

Sockets and elastomeric seals for all fittings are dimensionally and performance compliant with AS/NZS 1260. The elastomeric seal material complies with EN 681.1.

Ductile iron access covers manufactured in conformance with AS 3996 are also available from Aymroo. The water and gas tight access covers are available for Class B or Class D applications. A top hat cover that incorporates the riser shroud into the design is also available with either Class B or Class D lids.

Additional product information is available in Appendix A or at www.aymroo.com.au

4 SCOPE OF THE APPRAISAL

The scope of this appraisal includes a range of PVC-U sewer maintenance shafts as described in Section 3 and included in the ISO Type 5 ApprovalMark Product Schedule included in Appendix B. Associated PVC-U pipe and fittings are also included in the Scope.

5 APPRAISAL CRITERIA

5.1 Quality Assurance Requirements

The WSAA Product Appraisal Technical Advisory Group accepts PVC-U sewer maintenance shafts manufactured in compliance with WSA 137:2019 *Industry standard for PVC-U, PP and PE maintenance shafts, maintenance chambers and maintenance holes for sewerage* 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

The Aymroo PVC-U sewer maintenance shafts have been appraised for compliance with WSA 137:2019 *Industry standard for PVC-U, PP and PE maintenance shafts, maintenance chambers and maintenance holes for sewerage*.

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 341 *Maintenance Shafts (MS) - Polypropylene (PP) for Non-Pressure Applications – Sewerage*.

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

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

6 COMPLIANCE WITH APPRAISAL CRITERIA

6.1 Compliance with Quality Assurance Requirements

- ISO 9001:2015 Certificate of Registration No.AMI-QM-78017 issued to Reln Pty Ltd (for both Reln and Aymroo sites) by ApprovalMark Pty Ltd.
- WSA 137:2019 ISO Type 5 ApprovalMark Product Certification Licence No. SMK 40084 issued to Aymroo Pty Ltd by ApprovalMark Pty Ltd.
- AS/NZS 1260:2017 ISO Type 5 ApprovalMark Product Certification Licence No. AMI 74924 issued to Aymroo Pty Ltd by ApprovalMark Pty Ltd.

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

Copies of Quality Assurance certificates have also been supplied for the major component suppliers and are held on file by WSAA.

A Verification Certificate issued by SAI-Global has been submitted to verify that the PVC resin supplied by APN Compounding Pty Ltd for the manufacture of the PVC components complies with the requirements of Best Practice Guidelines for PVC in the Built Environment. (BEP)

6.2 Compliance with Performance Requirements

6.2.1 PVC-U Material

The PVC-U material used for the injection moulded components and associated fittings comply with AS/NZS 1260:2017 *PVC-U pipes and fittings for drain, waste and vent applications* in accordance with the requirements of WSA 137:2019 and confirmed by the ISO Type 5 ApprovalMark product certification.

Where PVC-U fittings are not manufactured by Reln, Aymroo sources fittings with ISO Type 5 product certification to AS/NZS 1260 from other Australian manufacturers.

6.2.2 Solvent cement joints

SCJ sockets and spigots comply with the dimensional requirements of AS/NZS 1260.

Aymroo sources Plummas brand solvent cement and priming fluid from RLA Polymers Pty Ltd. These products are covered by AS/NZS 3879:2011 WaterMark Certification No 025224 issued by Australian Certification Services. A copy of the certificate is held on file by WSAA.

6.2.3 Elastomeric joints

Aymroo RRJ seals are manufactured by Thong Nat Rubber Company Ruthimex and supplied by Gulf Rubber Australia. The material is SBR 2410S and is covered by ISO Type

5 StandardsMark product certification to AS 1646:2007. A copy of the product certification licence is held on file by WSAA.

Copies of type test reports were submitted for the previous issue of this Appraisal to demonstrate compliance of the elastomeric joints to the performance requirements specified in AS/NZS 1260. These tests include hydrostatic test, joint infiltration and contact width and pressure for root intrusion resistance.

6.2.4 Type tests

Type test requirements specified in WSA 137:2019 were completed for the previous version of this Appraisal and are not required to be repeated. The tests successfully undertaken were:

- Structural integrity of base
- Impact resistance of base
- Ring stiffness of riser
- High temperature stress relief
- Accessibility test
- Elastomeric seal joints between pipe and base
- Elastomeric seal joints between the riser and base
- Effective seal
- Integrity of lid and seal – liquid infiltration test
- Riser & joint load resistance
- 1000 hr durability test
- Verification of allowable depth

7 MANUFACTURE

7.1 Welding

The Welding methods currently in use for the fabrication of MSs are PVC hot air rod weld and extrusion welding. All welded joins and surfaces are chamfered to 75% wall thickness and filled with three beads of welding rod or appropriate extruded material. The welding process is conducted by trained and competent workers. Welding certificates were submitted as part of the Appraisal process.

8 FITTING INSTRUCTIONS, TRAINING AND INSTALLATION

Aymroo Installation Instructions are included in Appendix A.

There are no specific training requirements nominated as it is anticipated that experienced PVC pipe layers would have no difficulties installing Aymroo maintenance shafts.

Typical installation arrangements are included in Appendix A.

Since PVC sewer maintenance shafts are a light weight and water tight underground fitting, potential flotation may be an issue in certain soil conditions, flood prone or low-lying areas. For these applications, consideration should be given in to the specification of anti-flotation solutions. Commonly these would include concrete encasement or concrete footings fitted with steel bars or bands used as anchors around the MS. Other solutions may be available and should be considered based on past experience and performance.

9 PRODUCT MARKING

Aymroo maintenance shafts are marked in accordance with WSA 137 using a sticker attached to the assembly.

- Manufacturer's name: Aymroo
- Date of manufacture: e.g., 24/5/21
- Material identification: PVC-U
- Nominal size: e.g., 225 x 225
- Configuration: e.g., Central Maintenance Shaft
- Maximum depth: 4.7m
- Number of the standard: WSA 137
- Product certification mark: ApprovalMark SMK40084

10 PACKAGING AND TRANSPORTATION

MS's are packed onto pallets or in pallet boxes, as appropriate, depending on order size, delivery method and location. Foam protection caps are utilised to protect ends from damage and warping.

PVC material used in the construction of Aymroo maintenance shafts contains TiO₂ in accordance with AS/NZS 1260, which allows for storage uncovered in direct sunlight.

11 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 Aymroo's warranty is included in their terms and conditions of sale.

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

Aymroo PVC-U maintenance shafts have been available in Australia since 1999 without reported failures. A successful field installation of a DN 150 x DN 225 inline CAMS was undertaken on 21st November 2018 in Box Hill NSW. CJ Doyle installed the MS and Jerry Suharto witnessed the installation. A copy of the field trial report is available from Aymroo or WSAA.

13 OUTCOMES OF EXPERT PANEL PRODUCT REVIEW

There are no outstanding issues.

14 FUTURE WORKS

No future works have been identified.

15 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 8605 7601 email carl.radford@wsaa.asn.au.

15.1 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.

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Need for independent assessment

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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.

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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.

15.4 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

A comprehensive range of literature is available at: www.aymroo.com.au

MAINTENANCE SHAFTS




Aymroo PVC Maintenance Shafts can replace traditional manholes, where approved, for cheaper and easier sewer system installs. Aymroo has supplied over 50,000 to date, saving thousands of hours for installers and thousands of dollars for project managers.

- Extensive range of configurations.
- Internal labeling provides vital information and traceability of maintenance shafts for years after installation.
- Designed for easy passage of cameras and cleaning equipment.
- PVC construction compatible with 90% of all sewer installations across Australia and New Zealand - no need for adaptors to other materials.
- Superior hydraulic performance.
- Strong, durable and lightweight for easier handling and shipping.
- Choice of standard 225 or 300mm riser for extra clearance.
- Small footprint reduces required excavation.
- Available with standard Solvent Cement Joint (SCJ) or optional Rubber Ring Joint (RRJ) types (adaptors for other pipe types available on request).

Quality Assurance

The Maintenance Shaft System is manufactured to the requirements of WS4137, plus it has been appraised by the Water Services Association of Australia and is recommended as an alternative to manholes by its members and associates. All major water boards have also approved the system.

Quality is guaranteed with SAI Global Standards mark #40086. Our system is suitable and recommended for installations across Australia.









maintenancesHAFTS

p. 1300-057 586 | f. 1300-052 807 | www.aymroo.com.au
PVC Plumbing Fittings | Maintenance Shafts | Fabrications | Civil Products

PRODUCT CATALOGUE

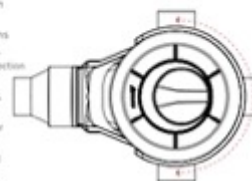
MAINTENANCE SHAFTS

PVC Central Axis Maintenance Shaft



Maintenance Shaft

- Centrally terminating configuration for more flexibility.
- 225mm or 300mm riser connections for flexibility in various authorities.
- CNC machine cut for accurate deflection and grade fabricated inlets.
- PVC material directly suited to 90S of Australia's sewer pipe systems.
- Ability to adapt to RRJ PVC or other pipe systems.
- Entirely Australian made, moulded to fabrication.
- Tested & analysed to requirements of WSA137.



Inline

- Straight through MS.
- Fully moulded.
- Available with 225mm or 300mm Riser & Locking Cap.
- Available in 150/225/300mm.



Terminal Elbow

- End of line/Termination Elbow MS.
- Fully moulded.
- Available with 225mm or 300mm Riser & Locking Cap.
- Available in 150/225/300mm.



Elbow

- Change of direction MS.
- Moulded and fabricated.
- Available in 15°, 22°, 30°, 45°, 60°, 90°.
- Available with 225mm or 300mm Riser & Locking Cap.
- Available in 150/225/300mm.



45° Junction

- 45° branch line junction MS.
- Moulded and fabricated.
- Must be specified left or right (L or R).
- Available with 225mm or 300mm Riser & Locking Cap.
- Available in 150/225/300mm.



90° Junction

- 90° branch line junction MS.
- Moulded and fabricated.
- Can be supplied in opposed configuration.
- Available with 225mm or 300mm Riser & Locking Cap.
- Available in 150/225/300mm.



Riser Junction

- Inlet for house connection to MS.
- Fabricated fitting.
- MSF or F&F available.
- Made to suit maintenance equipment.



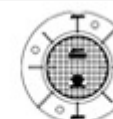
MS Covers – Class B and D

- Complies with AS3996.
- Gas and Water Tight.
- Compatible with all MS Risers.



MS Covers – Top Hat

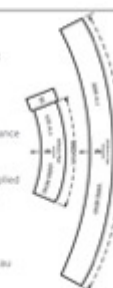
- Complies with AS3996.
- Gas and Water Tight.
- Compatible with all MS Risers.

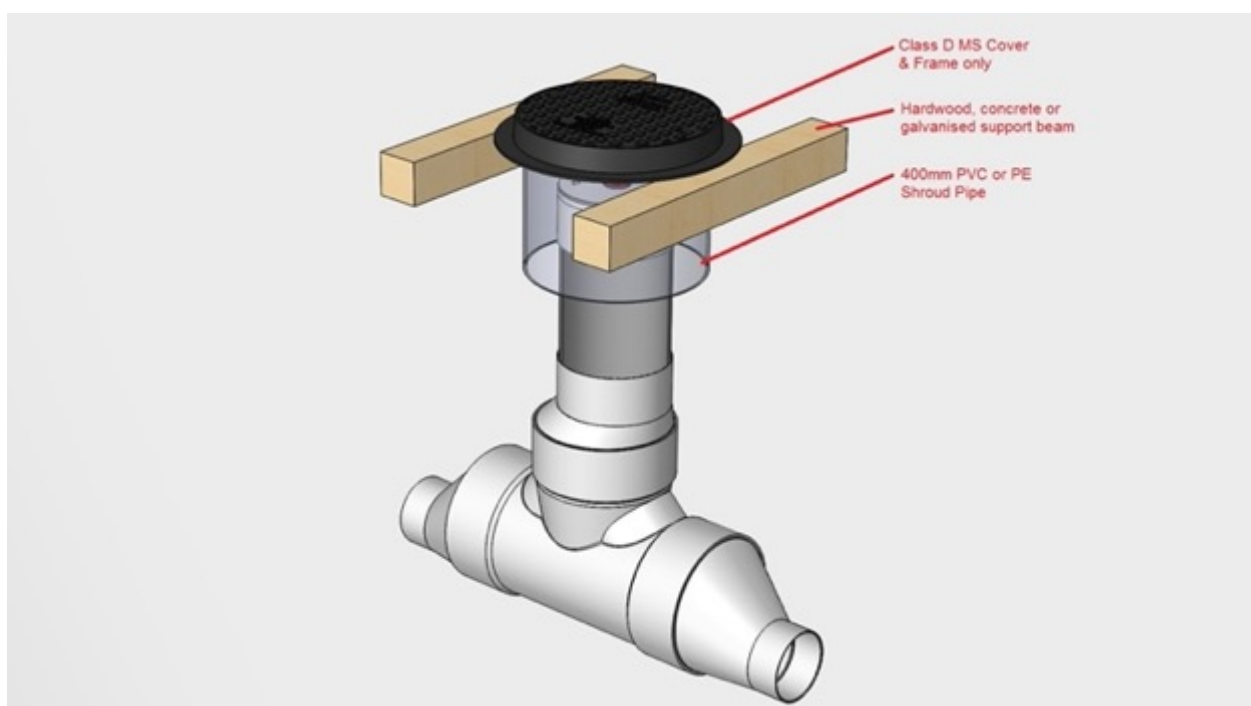
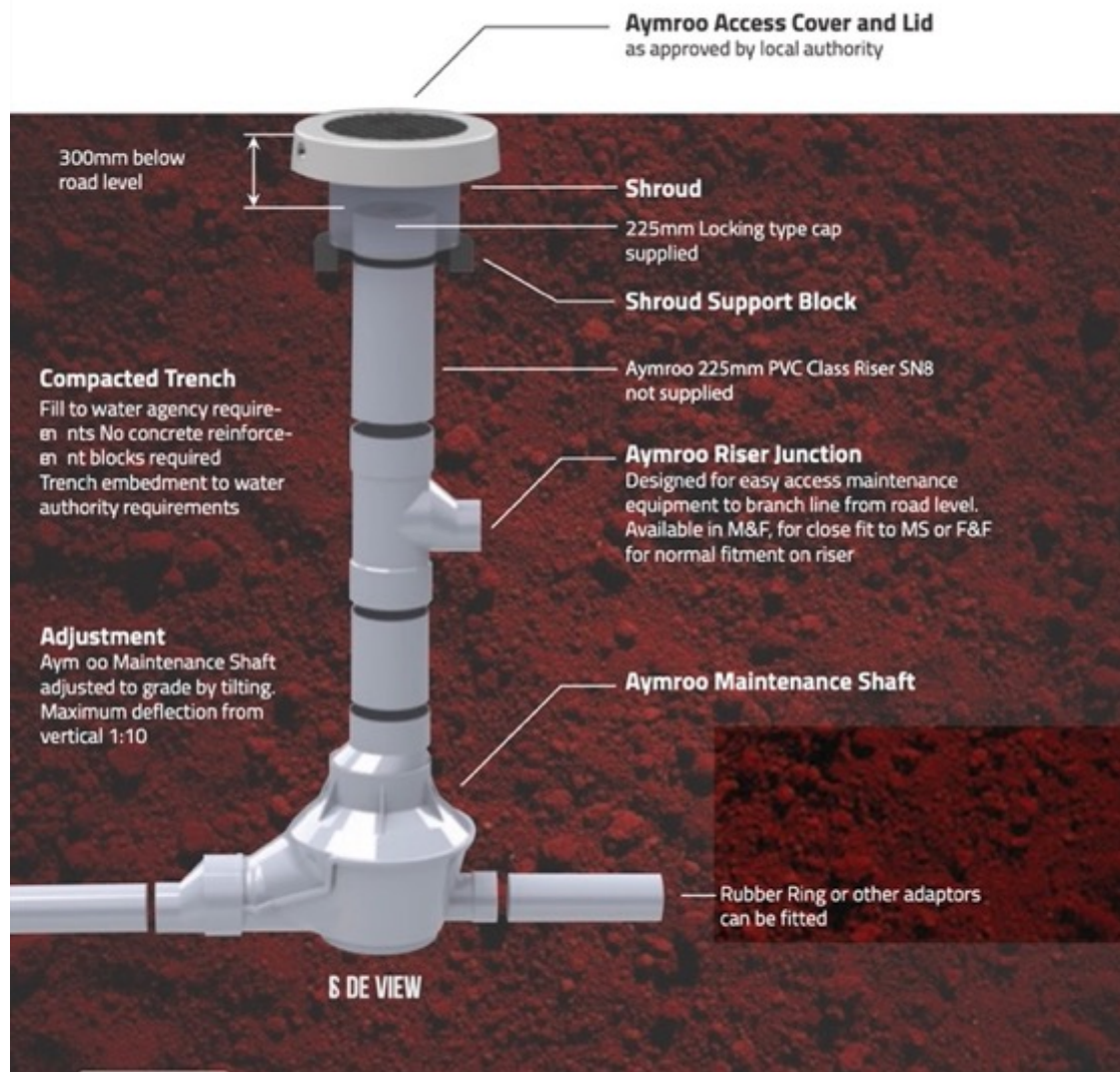


Vario Bends

- DN150 + 635mm RADIUS MSF incl. curved socket adaptor.
- DN150 + 3000mm RADIUS M&M.

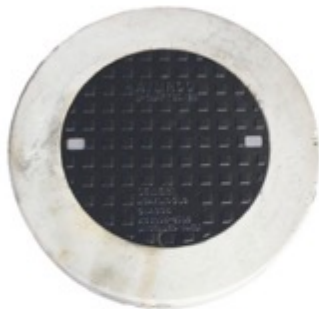
1. Look up degree or 's required.
2. Obtain length required from chart, measure distance on centre line on heel of bend.
3. Cut through pipe at 90° and remove swarf.
4. For 635mm vario, solvent cement bend into supplied curved socket adaptor and then solvent cement into MS socket.
5. For 3000mm vario, solvent cement end into MS socket.

For more detailed information visit www.aymroa.com.au





Maintenance Shaft Covers



Class B



Top Hat



Class D

Aymroo Maintenance Shaft Covers are used in conjunction with Aymroo Sewer Maintenance Shaft systems and are designed to allow sewer inspection equipment.

The ductile covers are available in 3 configurations, Class B which is used in pedestrian traffic areas only, Class D which is suitable for trafficable areas and is rated to 140kN and the Top Hat cover which is compatible with both Class B & Class D lids & incorporates the riser shroud into the design.

All Covers have a clear opening of 360mm to allow access to the MS riser and are water and gas tight to stop water ingress, they also conform to the specific requirements of AS3996-2006.



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Aymroo Maintenance Shafts

General Installation Instructions (Local requirements to be adhered to)

Step 1 – Initial inspection

Installer must visually inspect the Maintenance Shaft (MS) to ensure it is free from defects/damage caused during transportation/handling.

Step 2- Prepare location

Prepare trenching and embedment material in accordance to local regulatory authority.

Step 3 – Prepare MS

Lower MS into trench, following safe handling guidelines. Prepare sockets to be joined;

- SWJ – Clean debris in sockets and apply red primer
- RRJ – Ensure ring properly seated and apply jointing lubricant

Step 4 – Connections to MS

Connect downstream and upstream pipes using the required joining method, ensuring the MS is installed at required grade. Install Riser Kicker Bend to bring riser vertical if required.

Step 5 – MS Support material

Pack/compact supporting material around the MS unit with a minimum coverage of 100mm, or as specified by local authority.

Step 6 – Riser installation

Cut the vertical riser pipe to required length and connect to MS via appropriate method (for SWJ or RRJ riser sockets). Connect locking cap to riser using solvent cement.

Step 7 - Backfilling

Backfill and compact in accordance to local regulatory authority.

Step 8 – Access Covers

Approved Access Cover to be installed in line with local regulatory authority;

- Class B cover with concrete surround – to be used in light vehicular areas. Shroud and/or support beams to be used to support cover and prevent backfill from covering MS riser
- Class D cover and frame only – to be used in heavy vehicular areas. Shroud and/or support beams to be used to support cover and prevent backfill from covering MS riser. Cover to be cast into concrete/bitumen to suit local requirements.
- Top Hat Cover – to be used in either light or heavy vehicular areas. Install over MS riser and backfill as required.

Note – Jointing to MS should be done following guidelines contained in AS/NZS 2032:2006 and also in PIPA document POP102 – “Solvent Cement Jointing of PVC Pipe”

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APPENDIX B - QUALITY CERTIFICATIONS

Copies of the following Quality Certification Certificates are available from WSAA

TABLE A1
RELN PTY LTD & AYMROO PTY LTD – MANAGEMENT SYSTEMS

14 B Williamson Road Ingleburn NSW and 30 York Road Ingleburn NSW	
Quality Systems Standard	ISO 9001:2015
Certification Licence No.	AMI-QM-78017
Certifying Agency	ApprovalMark International
Current Date of Certification	8 April 2021
Expiry Date of Certification	8 April 2023

TABLE A2
AYMROO PTY LTD – PRODUCT CERTIFICATION

30 York Road Ingleburn NSW	
Product Standard/Spec.	WSA 137:2019
Certificate No.	SMK 40084
Issuing Certification Body	ApprovalMark International
First Date of Certification	10 July 2019
Current Date of Certification	10 July 2019
Expiry Date of Certification	10 July 2022

TABLE A2
AYMROO PTY LTD – PRODUCT CERTIFICATION

30 York Road Ingleburn NSW	
Product Standard/Spec.	AS/NZS 1260:2017
Certificate No.	AMI 74924
Issuing Certification Body	ApprovalMark International
First Date of Certification	24 August 2021
Current Date of Certification	24 August 2021
Expiry Date of Certification	24 August 2024

ISO 9001

CERTIFICATE OF REGISTRATION



ApprovalMark International hereby grants:

RELN PTY LTD

Note: This is a multisite licence

Site 1 - Sydney - Reln Pty Ltd, 14(B) Williamson Road, Ingleburn 2565, Australia
 Site 2 - Sydney - Aymroo Pty Ltd, 30 York Road, Ingleburn 2565, Australia
 Site 3 - Brisbane - Alphatreat Pty Ltd, 9 Mackie Way, Brendale 4500, Australia

Evaluated to:

ISO 9001: 2015 - QUALITY MANAGEMENT SYSTEMS

THIS COVERS THE FOLLOWING SCOPE:

The design, manufacture, sales and distribution of moulded, fabricated and assembled products for industrial, plumbing, construction, agricultural, environmental and waste management markets.

Certificate No. AMI-QM-78017

Issued: 8th April 2021

Expires: 8th July 2023

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. This certificate remains the property of ApprovalMark International Pty Ltd.

Screenshot

ISO TYPE 5

CERTIFICATE OF CONFORMITY



ApprovalMark International hereby grants:

AYMROO PTY LTD

30 York Road
Ingleburn 2565
AUSTRALIA

Evaluated to:

WSA 137:2019 - Industry standard for Uplasticized poly(vinyl chloride) (PVC-U), polypropylene (PP) and Polyethylene (PE) maintenance shafts, maintenance chambers and maintenance holes for sewerage

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 on the attached product schedule.

Certificate No. SMK 40084

Issued: 10th July 2019
Expires: 10th July 2022

Original Issue: 10th July 2019

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.



Product Schedule

AYMROO PTY LTD

30 York Road
Ingleburn 2565
AUSTRALIA

ISO Type 5 Certificate of Conformity

Evaluated to:

WSA 137:2019 – Industry Standard for Uplasticized poly (vinyl chloride) (PVC-U), polypropylene (PP) and Polyethylene (PE) maintenance shafts, maintenance chambers and maintenance holes for sewerage

Model Id	Model Name	Brand Name	Product Description	Endorsement Date
MSIL151500	Maintenance Shaft	Aymroo	150*150 Inline MS SWJ	10 th July 2019
MSIL151500R	Maintenance Shaft	Aymroo	150 *150 Inline MS RRJ	10 th July 2019
MSIL252500	Maintenance Shaft	Aymroo	225*225 Inline MS SWJ	10 th July 2019
MSCA1515	Maintenance Shaft	Aymroo	150*150 Central MS - 2 Way SWJ	10 th July 2019
MSCA151515	Maintenance Shaft	Aymroo	150-150-150 Central MS - 3 Way SWJ	10 th July 2019
MSCA2525	Maintenance Shaft	Aymroo	225*225 Central MS - 2 Way SWJ	10 th July 2019
MSBD1515	Maintenance Shaft	Aymroo	150*150 MS Bend SWJ	10 th July 2019
MSTE159000	Maintenance Shaft	Aymroo	225*150*90 MS Terminal Elbow SWJ	10 th July 2019
MSJ?11145	Maintenance Shaft	Aymroo	150*150*150 45D LH/RH MS Junction	10 th July 2019
MSJ?11190	Maintenance Shaft	Aymroo	150*150*150 90D LH/RH MS Junction	10 th July 2019
MSACL25000	Access Cap	Aymroo	225mm ACCESS CAP (Locking Trap Screw) (Moulded)	10 th July 2019
MSBD151515	MS Bend	Aymroo	150 x 150 15D Elb W/Cap SWJ	10 th July 2019
MSBD151515R	MS Bend	Aymroo	150 x 150 15D Elb W/Cap RRJ	10 th July 2019
MSBD151522	MS Bend	Aymroo	150 x 150 22D Elb W/Cap SWJ	10 th July 2019
MSBD151522R	MS Bend	Aymroo	150 x 150 22D Elb W/Cap RRJ	10 th July 2019
MSBD151530	MS Bend	Aymroo	150 x 150 30D Elb W/Cap SWJ	10 th July 2019
MSBD151530R	MS Bend	Aymroo	150 x 150 30D Elb W/Cap RRJ	10 th July 2019
MSBD151545	MS Bend	Aymroo	150 x 150 45D Elb W/Cap SWJ	10 th July 2019



Product Schedule

Model Id	Model Name	Brand Name	Product Description	Endorsement Date
MSBD151545R	MS Bend	Aymroo	150 x 150 45D Elb W/Cap RRJ	10 th July 2019
MSBD151560	MS Bend	Aymroo	150 x 150 60D Elb W/Cap SWJ	10 th July 2019
MSBD151560R	MS Bend	Aymroo	150 x 150 60D Elb W/Cap RRJ	10 th July 2019
MSBD151590	MS Bend	Aymroo	150 x 150 90D Elb W/Cap SWJ	10 th July 2019
MSBD151590R	MS Bend	Aymroo	150 x 150 90D Elb W/Cap RRJ	10 th July 2019
MSBD252515	MS Bend	Aymroo	225 x 225 15D Elb W/Cap SWJ	10 th July 2019
MSBD252515R	MS Bend	Aymroo	225 x 225 15D Elb W/Cap RRJ	10 th July 2019
MSBD252522	MS Bend	Aymroo	225 x 225 22D Elb W/Cap SWJ	10 th July 2019
MSBD252522R	MS Bend	Aymroo	225 x 225 22D Elb W/Cap RRJ	10 th July 2019
MSBD252530	MS Bend	Aymroo	225 x 225 30D Elb W/Cap SWJ	10 th July 2019
MSBD252530R	MS Bend	Aymroo	225 x 225 30D Elb W/Cap RRJ	10 th July 2019
MSBD252545	MS Bend	Aymroo	225 x 225 45D Elb W/Cap SWJ	10 th July 2019
MSBD252545R	MS Bend	Aymroo	225 x 225 45D Elb W/Cap RRJ	10 th July 2019
MSBD252560	MS Bend	Aymroo	225 x 225 60D Elb W/Cap SWJ	10 th July 2019
MSBD252560R	MS Bend	Aymroo	225 x 225 60D Elb W/Cap RRJ	10 th July 2019
MSBD252590	MS Bend	Aymroo	225 x 225 90D Elb W/Cap SWJ	10 th July 2019
MSBD252590R	MS Bend	Aymroo	225 x 225 90D Elb W/Cap RRJ	10 th July 2019
MSBD303015	MS Bend	Aymroo	300 x 300 15D Elb W/Cap SWJ	10 th July 2019
MSBD303015R	MS Bend	Aymroo	300 x 300 15D Elb W/Cap RRJ	10 th July 2019
MSBD303022	MS Bend	Aymroo	300 x 300 22D Elb W/Cap SWJ	10 th July 2019
MSBD303022R	MS Bend	Aymroo	300 x 300 22D Elb W/Cap RRJ	10 th July 2019
MSBD303030	MS Bend	Aymroo	300 x 300 30D Elb W/Cap SWJ	10 th July 2019
MSBD303030R	MS Bend	Aymroo	300 x 300 30D Elb W/Cap RRJ	10 th July 2019
MSBD303045	MS Bend	Aymroo	300 x 300 45D Elb W/Cap SWJ	10 th July 2019
MSBD303045R	MS Bend	Aymroo	300 x 300 45D Elb W/Cap RRJ	10 th July 2019
MSBD303060	MS Bend	Aymroo	300 x 300 60D Elb W/Cap SWJ	10 th July 2019
MSBD303060R	MS Bend	Aymroo	300 x 300 60D Elb W/Cap RRJ	10 th July 2019
MSBD303090	MS Bend	Aymroo	300 x 300 90D Elb W/Cap SWJ	10 th July 2019
MSBD303090R	MS Bend	Aymroo	300 x 300 90D Elb W/Cap RRJ	10 th July 2019
MSBL303045	MS Bend	Aymroo	300 x 300 45D L/H Elb W/Cap SWJ	10 th July 2019
MSBL303060	MS Bend	Aymroo	300 x 300 60D L/H Elb W/Cap SWJ	10 th July 2019
MSBL303090	MS Bend	Aymroo	300 x 300 90D L/H Elb W/Cap SWJ	10 th July 2019
MSBR303045	MS Bend	Aymroo	300 x 300 45D R/H Elb W/Cap SWJ	10 th July 2019
MSBR303060	MS Bend	Aymroo	300 x 300 60D R/H Elb W/Cap SWJ	10 th July 2019
MSBR303090	MS Bend	Aymroo	300 x 300 90D R/H Elb W/Cap SWJ	10 th July 2019
MSCS15000	Vario Adaptor	Aymroo	150mm Curved Socket SWJ	10 th July 2019
MSIL151500	Inline	Aymroo	150 x 150 IL Maint/Shaft W /Cap SWJ	10 th July 2019
MSIL151500R	Inline	Aymroo	150 x 150 IL Maint/Shaft W /Cap RRJ	10 th July 2019
MSIL152500	Inline	Aymroo	150 x 225 IL Maint/Shaft W /Cap SWJ	10 th July 2019



Product Schedule

Model Id	Model Name	Brand Name	Product Description	Endorsement Date
MSIL252500	Inline	Aymroo	225 x 225 IL Maint/Shaft W /Cap SWJ	10 th July 2019
MSIL252500R	Inline	Aymroo	225 x 225 IL Maint/Shaft W /Cap RRJ	10 th July 2019
MSIL303000	Inline	Aymroo	300 x 300 IL Maint/Shaft W /Cap SWJ	10 th July 2019
MSIL303000R	Inline	Aymroo	300 x 300 IL Maint/Shaft W /Cap RRJ	10 th July 2019
MSJL11145	MS Junction	Aymroo	150 x 150 x 150 45D L/H Jun W /Cap SW J	10 th July 2019
MSJL11145R	MS Junction	Aymroo	150 x 150 x 150 45D L/H Jun W /Cap RRJ	10 th July 2019
MSJL12145	MS Junction	Aymroo	225 x 150 x 150 45D L/H Jun W /Cap SW J	10 th July 2019
MSJL12145R	MS Junction	Aymroo	225 x 150 x 150 45D L/H Jun W /Cap RRJ	10 th July 2019
MSJL12245	MS Junction	Aymroo	150 x 225 x 225 45D L/H Jun W /Cap SW J	10 th July 2019
MSJL12245R	MS Junction	Aymroo	150 x 225 x 225 45D L/H Jun W /Cap RRJ	10 th July 2019
MSJL13145	MS Junction	Aymroo	150 x 150 x 300 45D L/H Jun W /Cap SW J	10 th July 2019
MSJL13145R	MS Junction	Aymroo	150 x 150 x 300 45D L/H Jun W /Cap RRJ	10 th July 2019
MSJL13245	MS Junction	Aymroo	150 x 225 x 300 45D L/H Jun W /Cap SW J	10 th July 2019
MSJL13245R	MS Junction	Aymroo	150 x 225 x 300 45D L/H Jun W /Cap RRJ	10 th July 2019
MSJL13345	MS Junction	Aymroo	150 x 300 x 300 45D L/H Jun W /Cap SW J	10 th July 2019
MSJL13345R	MS Junction	Aymroo	150 x 300 x 300 45D L/H Jun W /Cap RRJ	10 th July 2019
MSJL22145	MS Junction	Aymroo	225 x 150 x 225 45D L/H Jun W /Cap SW J	10 th July 2019
MSJL22145R	MS Junction	Aymroo	225 x 150 x 225 45D L/H Jun W /Cap RRJ	10 th July 2019
MSJL22245	MS Junction	Aymroo	225 x 225 x 225 45D L/H Jun W /Cap SW J	10 th July 2019
MSJL22245R	MS Junction	Aymroo	225 x 225 x 225 45D L/H Jun W /Cap RRJ	10 th July 2019
MSJL23145	MS Junction	Aymroo	225 x 150 x 300 45D L/H Jun W /Cap SW J	10 th July 2019
MSJL23145R	MS Junction	Aymroo	225 x 150 x 300 45D L/H Jun W /Cap RRJ	10 th July 2019
MSJL23245	MS Junction	Aymroo	225 x 225 x 300 45D L/H Jun W /Cap SW J	10 th July 2019
MSJL23245R	MS Junction	Aymroo	225 x 225 x 300 45D L/H Jun W /Cap RRJ	10 th July 2019
MSJL23345	MS Junction	Aymroo	225 x 300 x 300 45D L/H Jun W /Cap SW J	10 th July 2019



Product Schedule

Model Id	Model Name	Brand Name	Product Description	Endorsement Date
MSJL23345R	MS Junction	Aymroo	225 x 300 x 300 45D L/H Jun W /Cap RRJ	10 th July 2019
MSJL33145	MS Junction	Aymroo	300 x 150 x 300 45D L/H Jun W /Cap SW J	10 th July 2019
MSJL33145R	MS Junction	Aymroo	300 x 150 x 300 45D L/H Jun W /Cap RRJ	10 th July 2019
MSJL33245	MS Junction	Aymroo	300 x 225 x 300 45D L/H Jun W /Cap SW J	10 th July 2019
MSJL33245R	MS Junction	Aymroo	300 x 225 x 300 45D L/H Jun W /Cap RRJ	10 th July 2019
MSJL33345	MS Junction	Aymroo	300 x 300 x 300 45D L/H Jun W /Cap SW J	10 th July 2019
MSJL33345R	MS Junction	Aymroo	300 x 300 x 300 45D L/H Jun W /Cap RRJ	10 th July 2019
MSJN11190	MS Junction	Aymroo	150 x 150 x 150 90D Jun W /Cap SWJ	10 th July 2019
MSJN11190R	MS Junction	Aymroo	150 x 150 x 150 90D Jun W /Cap RRJ	10 th July 2019
MSJN12190	MS Junction	Aymroo	150 x 150 x 225 90D Jun W /Cap SWJ	10 th July 2019
MSJN12190R	MS Junction	Aymroo	150 x 150 x 225 90D Jun W /Cap RRJ	10 th July 2019
MSJN12290	MS Junction	Aymroo	150 x 225 x 225 90D Jun W /Cap SWJ	10 th July 2019
MSJN12290R	MS Junction	Aymroo	150 x 225 x 225 90D Jun W /Cap RRJ	10 th July 2019
MSJN13190	MS Junction	Aymroo	150 x 150 x 300 90D Jun W /Cap SWJ	10 th July 2019
MSJN13190R	MS Junction	Aymroo	150 x 150 x 300 90D Jun W /Cap RRJ	10 th July 2019
MSJN13290	MS Junction	Aymroo	150 x 225 x 300 90D Jun W /Cap SWJ	10 th July 2019
MSJN13290R	MS Junction	Aymroo	150 x 225 x 300 90D Jun W /Cap RRJ	10 th July 2019
MSJN13390	MS Junction	Aymroo	150 x 300 x 300 90D Jun W /Cap SWJ	10 th July 2019
MSJN13390R	MS Junction	Aymroo	150 x 300 x 300 90D Jun W /Cap RRJ	10 th July 2019
MSJN22190	MS Junction	Aymroo	225 x 150 x 225 90D Jun W /Cap SWJ	10 th July 2019
MSJN22190R	MS Junction	Aymroo	225 x 150 x 225 90D Jun W /Cap RRJ	10 th July 2019
MSJN22290	MS Junction	Aymroo	225 x 225 x 225 90D Jun W /Cap SWJ	10 th July 2019
MSJN22290R	MS Junction	Aymroo	225 x 225 x 225 90D Jun W /Cap RRJ	10 th July 2019
MSJN23190	MS Junction	Aymroo	225 x 150 x 300 90D Jun W /Cap SWJ	10 th July 2019
MSJN23190R	MS Junction	Aymroo	225 x 150 x 300 90D Jun W /Cap RRJ	10 th July 2019
MSJN23290	MS Junction	Aymroo	225 x 225 x 300 90D Jun W /Cap SWJ	10 th July 2019
MSJN23290R	MS Junction	Aymroo	225 x 225 x 300 90D Jun W /Cap RRJ	10 th July 2019
MSJN23390	MS Junction	Aymroo	225 x 300 x 300 90D Jun W /Cap SWJ	10 th July 2019
MSJN23390R	MS Junction	Aymroo	225 x 300 x 300 90D Jun W /Cap RRJ	10 th July 2019
MSJN33190	MS Junction	Aymroo	300 x 150 x 300 90D Jun W /Cap SWJ	10 th July 2019
MSJN33190R	MS Junction	Aymroo	300 x 150 x 300 90D Jun W /Cap RRJ	10 th July 2019
MSJN33290	MS Junction	Aymroo	300 x 225 x 300 90D Jun W /Cap SWJ	10 th July 2019
MSJN33290R	MS Junction	Aymroo	300 x 225 x 300 90D Jun W /Cap RRJ	10 th July 2019
MSJN33390	MS Junction	Aymroo	300 x 300 x 300 90D Jun W /Cap SWJ	10 th July 2019



Product Schedule

Model Id	Model Name	Brand Name	Product Description	Endorsement Date
MSJN33390R	MS Junction	Aymroo	300 x 300 x 300 90D Jun W /Cap RRJ	10 th July 2019
MSJO11190	MS Junction	Aymroo	150 x 150 x 150 90D OP/JUN W /Cap SW J	10 th July 2019
MSJO11190R	MS Junction	Aymroo	150 x 150 x 150 90D OP/JUN W /Cap RRJ	10 th July 2019
MSJO11290	MS Junction	Aymroo	150 x 225 x 150 90D OP/JUN W /Cap SW J	10 th July 2019
MSJO11290R	MS Junction	Aymroo	150 x 225 x 150 90D OP/JUN W /Cap RRJ	10 th July 2019
MSJO11390	MS Junction	Aymroo	150 x 300 x 150 90D OP/JUN W /Cap SW J	10 th July 2019
MSJO11390R	MS Junction	Aymroo	150 x 300 x 150 90D OP/JUN W /Cap RRJ	10 th July 2019
MSJO12290	MS Junction	Aymroo	150 x 225 x 225 90D OP/JUN W /Cap SW J	10 th July 2019
MSJO12290R	MS Junction	Aymroo	150 x 225 x 225 90D OP/JUN W /Cap RRJ	10 th July 2019
MSJO12390	MS Junction	Aymroo	150 x 300 x 225 90D OP/JUN W /Cap SW J	10 th July 2019
MSJO12390R	MS Junction	Aymroo	150 x 300 x 225 90D OP/JUN W /Cap RRJ	10 th July 2019
MSJO22290	MS Junction	Aymroo	225 x 225 x 225 90D OP/JUN W /Cap SW J	10 th July 2019
MSJO22290R	MS Junction	Aymroo	225 x 225 x 225 90D OP/JUN W /Cap RRJ	10 th July 2019
MSJO22390	MS Junction	Aymroo	225 x 300 x 225 90D OP/JUN W /Cap SW J	10 th July 2019
MSJO22390R	MS Junction	Aymroo	225 x 300 x 225 90D OP/JUN W /Cap RRJ	10 th July 2019
MSJR11145	MS Junction	Aymroo	150 x 150 x 150 45D R/H Jun W /Cap SW J	10 th July 2019
MSJR11145R	MS Junction	Aymroo	150 x 150 x 150 45D R/H Jun W /Cap RRJ	10 th July 2019
MSJR12145	MS Junction	Aymroo	225 x 150 x 150 45D R/H Jun W /Cap SW J	10 th July 2019
MSJR12145R	MS Junction	Aymroo	225 x 150 x 150 45D R/H Jun W /Cap RRJ	10 th July 2019
MSJR12245	MS Junction	Aymroo	150 x 225 x 225 45D R/H Jun W /Cap SW J	10 th July 2019
MSJR12245R	MS Junction	Aymroo	150 x 225 x 225 45D R/H Jun W /Cap RRJ	10 th July 2019
MSJR13145	MS Junction	Aymroo	150 x 150 x 300 45D R/H Jun W /Cap SW J	10 th July 2019
MSJR13145R	MS Junction	Aymroo	150 x 150 x 300 45D R/H Jun W /Cap RRJ	10 th July 2019



Product Schedule

Model Id	Model Name	Brand Name	Product Description	Endorsement Date
MSJR13245	MS Junction	Aymroo	150 x 225 x 300 45D R/H Jun W /Cap SW J	10 th July 2019
MSJR13245R	MS Junction	Aymroo	150 x 225 x 300 45D R/H Jun W /Cap RRJ	10 th July 2019
MSJR13345	MS Junction	Aymroo	150 x 300 x 300 45D R/H Jun W /Cap SW J	10 th July 2019
MSJR13345R	MS Junction	Aymroo	150 x 300 x 300 45D R/H Jun W /Cap RRJ	10 th July 2019
MSJR22145	MS Junction	Aymroo	225 x 150 x 225 45D R/H Jun W /Cap SW J	10 th July 2019
MSJR22145R	MS Junction	Aymroo	225 x 150 x 225 45D R/H Jun W /Cap RRJ	10 th July 2019
MSJR22245	MS Junction	Aymroo	225 x 225 x 225 45D R/H Jun W /Cap SW J	10 th July 2019
MSJR22245R	MS Junction	Aymroo	225 x 225 x 225 45D R/H Jun W /Cap RRJ	10 th July 2019
MSJR23145	MS Junction	Aymroo	225 x 150 x 300 45D R/H Jun W /Cap SW J	10 th July 2019
MSJR23145R	MS Junction	Aymroo	225 x 150 x 300 45D R/H Jun W /Cap RRJ	10 th July 2019
MSJR23245	MS Junction	Aymroo	225 x 225 x 300 45D R/H Jun W /Cap SW J	10 th July 2019
MSJR23245R	MS Junction	Aymroo	225 x 225 x 300 45D R/H Jun W /Cap RRJ	10 th July 2019
MSJR23345	MS Junction	Aymroo	225 x 300 x 300 45D R/H Jun W /Cap SW J	10 th July 2019
MSJR23345R	MS Junction	Aymroo	225 x 300 x 300 45D R/H Jun W /Cap RRJ	10 th July 2019
MSJR33145	MS Junction	Aymroo	300 x 150 x 300 45D R/H Jun W /Cap SW J	10 th July 2019
MSJR33145R	MS Junction	Aymroo	300 x 150 x 300 45D R/H Jun W /Cap RRJ	10 th July 2019
MSJR33245	MS Junction	Aymroo	300 x 225 x 300 45D R/H Jun W /Cap SW J	10 th July 2019
MSJR33245R	MS Junction	Aymroo	300 x 225 x 300 45D R/H Jun W /Cap RRJ	10 th July 2019
MSJR33345	MS Junction	Aymroo	300 x 300 x 300 45D R/H Jun W /Cap SW J	10 th July 2019
MSJR33345R	MS Junction	Aymroo	300 x 300 x 300 45D R/H Jun W /Cap RRJ	10 th July 2019
MSKB250100	Kicker Bend	Aymroo	225 M-F Kicker Bend 1 DEG SW J	10 th July 2019
MSKB250200	Kicker Bend	Aymroo	225 M-F Kicker Bend 2 DEG SW J	10 th July 2019
MSKB250300	Kicker Bend	Aymroo	225 M-F Kicker Bend 3 DEG SW J	10 th July 2019
MSKB250400	Kicker Bend	Aymroo	225 M-F Kicker Bend 4 DEG SW J	10 th July 2019
MSKB250500	Kicker Bend	Aymroo	225 M-F Kicker Bend 5 DEG SW J	10 th July 2019



Product Schedule

Model Id	Model Name	Brand Name	Product Description	Endorsement Date
MSRJF25159	Riser Junction	Aymroo	225 x 150 x 88° FF Riser Junction	10 th July 2019
MSRJF25259	Riser Junction	Aymroo	225 x 225 x 88° Riser FF Jun SWJ	10 th July 2019
MSRJM25159	Riser Junction	Aymroo	225 x 150 x 88° MF Riser Junction	10 th July 2019
MSRJM25259	Riser Junction	Aymroo	225 x 225 x 88° Riser MF Jun SW J	10 th July 2019
MSTE159000	Terminal	Aymroo	225 x 150 90D Term Elb W /Cap SW J	10 th July 2019
MSTE159000R	Terminal	Aymroo	225 x 150 90D Term Elb W /Cap RRJ	10 th July 2019
MSTE259000	Terminal	Aymroo	225 x 225 90D Term Elb W /Cap SW J	10 th July 2019
MSTE259000R	Terminal	Aymroo	225 x 225 90D Term Elb W /Cap RRJ	10 th July 2019
MSTE309000	Terminal	Aymroo	225 x 300 90D Term Elb W /Cap SW J	10 th July 2019
MSTE309000R	Terminal	Aymroo	225 x 300 90D Term Elb W /Cap RRJ	10 th July 2019
MSVB30020	Vario Bend	Aymroo	150 x 3000 x 20D V/Bend W /SPI Both Ends	10 th July 2019
MSVB30020MFR	Vario Bend	Aymroo	150 x 3000 x 20D Vario Bend M&F RRJ	10 th July 2019
MSVB63545	Vario Bend	Aymroo	150 x 635 x 45 D V/Bend W /Socket SW J	10 th July 2019

End of record

Certificate No: SMK 40084

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

The product schedule contains 20 pages of products and have not included herein. A copy of the schedule may be obtained directly from Aymroo or WSAA .

ISO
TYPE
5

CERTIFICATE OF CONFORMITY



ApprovalMark International hereby grants:

Aymroo Pty Ltd

30 York Road
Ingleburn, NSW 2565
AUSTRALIA

ISO Type 5 Certificate of Conformity

Evaluated to:

**AS/NZS 1260:2017 – PVC-U pipes and fittings for drain,
waste and vent applications.**

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 74924

Issued: 24th August 2021
Expires: 24th August 2024

Original Issue: 24th August 2021

A handwritten signature in black ink, appearing to read "John Prasad".

John PRASAD

Director

ApprovalMark International Pty Ltd
20/33 Holbeche Road, Amdell Park 2148, Australia
www.approvalmark.com



Registered by: ApprovalMark International Pty Ltd (ABN 69 143 259 974) Unit 20, 33 Holbeche Road, Amdell 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.

APPENDIX C - SUPPLIER CONTACTS

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