

Rain Harvesting Pty Ltd

PRODUCT APPRAISAL REPORT No 1213 Issue 4

Blue Mountain Co Plumbing - Detectable and Non-detectable Underground Marking Tape

AS/NZS 2648.1:1995 Underground marking tape - Non-detectable tape

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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

Rain Harvesting Ptv Ltd is an Australian owned business with the same ownership as RH Group Pty Ltd. The Group has adopted Blue Mountain Co as a parent brand for its product range with sub brands Blue Mountain Co Plumbing, Blue Mountain Co Gutter Mesh, Rain Harvesting by Blue Mountain Co. The marking tapes were previously marketed under the brand name of 421 and are now included within the Blue Mountain Co Plumbing range of products.

This appraisal is for a range of the Blue Mountain Co Plumbing detectable and nondetectable underground marking tapes The non-detectable tapes are manufactured to comply with AS/NZS 2648.1:2005 Underground marking tape - Non-detectable, as required by WSA PS 319 Marking Tape, Non-detectable. As AS/NZS 2648.1 does not include detectable marker tapes, WSAA Specification WSA PS 318 Marking Tape, Detectable is used to evaluate and appraise those products.

This Issue 4 is a revision of the original product appraisal that had reached its 5-year expiration period.

Blue Mountain Co Plumbing underground marking tapes, are manufactured from Linear Low-Density Polyethylene (LLDPE) with a thickness of 80-100µm. The detectable tape has an S shaped 0.7mm diameter Grade 316 stainless-steel tracer wire woven into the tape using a plastic laminate.

The detectable tapes are 100 mm wide and supplied in rolls of 250 metres. The nondetectable tapes may be 100 mm or 150 mm wide and supplied in rolls of 100 metres or 250 metres.

The black lettering is 40 mm high for 100 mm wide tapes and 65 mm high for 150 mm wide tapes. The lettering is set at intervals of not more than 1 metre with 85 mm spacing between repeats.

There is a range of warnings messages available on both detectable and non-detectable tapes. Examples are:

- (a) Blue background: DANGER: BURIED DRINKING WATER MAIN BELOW
- (b) Purple background: CAUTION: NON POTABLE LINE BURIED BELOW
- Cream background: BURIED SEWER MAIN BELOW

Rain Harvesting Pty Ltd holds an ISO 9001:2015 Quality Management System Licence.

This Appraisal has determined that Blue Mountain Co Plumbing marking tapes comply with the requirements of WSA PS 318 Marking Tape, Detectable and WSA PS 319 Marking Tape, Non-detectable and are considered as 'fit for purpose'.

1.2 Recommendation

It is recommended that WSAA members accept or authorise Blue Mountain Co Plumbing detectable and non-detectable underground marking tapes, as detailed in this report, for use in mains installation, provided installation is in accordance with relevant WSAA Codes and the manufacturer's requirements.

2 THE APPLICANT/SUPPLIER

Rain Harvesting Pty Ltd is an Australian owned business established in 2004 and has the same ownership as RH Group Pty Ltd.

In March 2010, Rain Harvesting Pty Ltd acquired 421. The '421' product range included:

- Standard and Custom Printed Pipemarkers.
- Detectable, Non-Detectable Underground and Barricade Tapes. (b)
- (c) Tube Sleeving.

- (d) Rain and Recycled Water Products & Associated Signage.
- (e) Full range of mandatory, warning, prohibition, safety, danger and customised signs designed and printed to customer requirements.

In 2018 the Group adopted Blue Mountain Co as a parent brand for its product range with sub brands Blue Mountain Co Plumbing, Blue Mountain Co Gutter Mesh and Rain Harvesting by Blue Mountain Co.

The range of products within Blue Mountain Co Plumbing includes underground tape, pipemarkers, signs, jumper valves and other plumbing accessories.

2.2 The Manufacturer

The marking tape products are manufactured in China. Rain Harvesting has requested that the manufacturer's identity remains as commercial in confidence.

The Supply Agent has a supply agreement with Rain Harvesting Pty Ltd for the supply of the Blue Mountain Co Plumbing range of underground warning tapes.

3 THE PRODUCT

This appraisal is for a range of the Blue Mountain Co Plumbing detectable and non-detectable underground marking tapes The non-detectable tapes are manufactured to comply with AS/NZS 2648.1:2005 *Underground marking tape - Non-detectable*, as required by WSA PS 319 *Marking Tape, Non-detectable*. As AS/NZS 2648.1 does not include detectable marker tapes, WSAA Specification WSA PS 318 *Marking Tape, Detectable* is used to evaluate and appraise those products.

The underground marking tapes are manufactured from Linear Low-Density Polyethylene (LLDPE) with a thickness of 80-100µm. The detectable tape has an S shaped 0.7mm diameter Grade 316 stainless-steel tracer wire woven into the tape using a plastic laminate.

The detectable tapes are 100 mm wide and supplied in rolls of 250 metres. The non-detectable tapes may be 100 mm or 150 mm wide and supplied in rolls of 100 metres or 250 metres.

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FIGURE 1 DETECTABLE TAPE

A detectable underground warning tape enables the route of a non-metallic pipeline to be established by means of detecting equipment, operated from the surface above the pipe, without excavation. When the tape is uncovered, identification of the type of pipeline is achieved by way of the tape colour and tape message.

Tracer wire adjacent lengths need a secure connection. This can be achieved through crimping or soldering together. If these methods are not available, an alternate method is to secure a knot between the adjacent lengths of wire.

The detectable tape can be accurately depth tested and traced using locating instruments.

The purpose of a non-detectable tape is to provide a visual warning to the excavator operators and/or their spotters of the presence of a service line buried further below in the ground.

4 SCOPE OF THE APPRAISAL

The scope of this appraisal applies to Blue Mountain Co Plumbing detectable and nondetectable underground marking tapes for buried mains.

5 APPRAISAL CRITERIA

5.1 Quality Assurance Requirements

The WSAA Product Appraisal Technical Advisory Group accepts detectable and non-detectable underground warning tapes manufactured in compliance with AS/NZS 2468.1:1995 and duly certified by means of an ISO Type 1 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 Product Certification Scheme shall meet the criteria described in WSA TN-08.

5.2 Performance Requirements

The detectable and non-detectable underground marking tapes have been appraised for compliance with AS/NZS 2648.1:1995 *Underground marking tape, Part 1: Non-detectable tape* and WSAA Product Specifications WSA PS-318 and WSA PS-319.

Australian Standard AS/NZS 2648.1 applies to non-detectable tape only. Requirements applicable to detectable tape are based on WSAA Product Specification WSA PS-318 and the WSA 02 Part 2: Construction.

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 Specifications are relevant to this application:

- WSA PS 318 Marking Tape, Detectable
- WSA PS 319 Marking Tape, Non-detectable

Copies of the Product Specifications are available at the following link:

https://www.wsaa.asn.au/shop/product/60961

6 COMPLIANCE WITH APPRAISAL CRITERIA

6.1 Compliance with Quality Assurance Requirements

Rain Harvesting Pty Ltd has submitted a copy of the following quality certificate:

 ISO 9001:2015 Certificate of Registration No. QEC30051 issued to Rain Harvesting Pty Ltd by Intertek SAI Global.

6.2 Compliance with Performance Requirements

The quality assurance requirements nominated in the WSAA Specifications relevant to marking tapes are for ISO Type 1 product certification to AS/NZS 2648:1995. Type 1 product certification is the simplest form of product certification intended for low risk products, where the manufacturer is only required to demonstrate compliance with the performance requirements of the Standard. The Blue Mountain Co Plumbing marking tapes considered in this Appraisal do not have product certification, however type test reports have been submitted to demonstrate compliance and the tapes are therefore deemed to be acceptable.

6.2.1 Type Tests

AS/NZS 2648.1 nominates performance requirements for non-detectable marking tape as follows:

- (a) elongation at break: min 300% in the longitudinal direction and minimum 350% in the transverse direction;
- (b) tear resistance: minimum 3.0 N in the longitudinal direction and minimum 3.5 N in the transverse direction:
- (c) impact resistance: to withstand the penetration of a 160 g dart;
- (d) chemical resistance to background discolouration, adhesion of print and deterioration of elongation properties.

In addition, WSA PS 318 specifies that the tracer wire shall allow at least 25% elongation of the plastic tape before breakage of the wire.

Type tests were conducted by Australian National Testing Laboratories Pty Ltd (NATA Accreditation No. 17149) in Rocklea Queensland to demonstrate compliance.

The tapes easily met the performance requirements of AS/NZS 2648.1, WSA PS 318 and WSA PS 319.

6.2.2 Tape Width

WSAA Product Specifications WSA PS-318 and WSA PS-319 specify the tape width shall be 100 mm minimum. Blue Mountain Co Plumbing tapes are 100 mm and 150 mm wide.

6.2.3 Tape Colour

WSAA guidelines recommend tape with a blue coloured background for identification of drinking water mains, purple coloured background for non-drinking water mains and cream coloured background for sewer mains.

Blue Mountain Co Plumbing tapes comply with this requirement.

6.2.4 Warning Message

AS/NZS 2648.1 specifies that the warning message shall be vertical block, full stroke, black lettering of minimum size 25mm and the message repeated at no greater than 1 m intervals. WSA PS-318 and WSA PS-319 specify that the height of the lettering shall be minimum 40 mm.

The warning messages on the Blue Mountain Co Plumbing tapes comply with these requirements. The lettering size is 40 mm and 50 mm high and the message is repeated at less than 1 m intervals, depending on the length of the message.

The messages on Blue Mountain Co Plumbing tapes do not align with WSAA Product Specification requirements however the meanings are clear and are considered acceptable. The messages for the range of Blue Mountain Co Plumbing tapes are given in Appendix A.

6.2.5 Tape and Tracer Wire Material

AS/NZS 2648.1, WSA PS-319, WSA PS-318 or the WSAA Codes do not specify tape material. The Blue Mountain Co Plumbing tape is Linear Low-Density Polyethylene (LLDPE) with a thickness of 80-100µm.

WSA PS-318 specifies that the tracer wire shall be Grade 316 Stainless Steel. Rain Harvesting has provided a test report to demonstrate compliance. The wire is 0.7 mm diameter.

6.2.6 Detectability

A test was conducted by ANTL to confirm adequate detection properties.

7 FITTING INSTRUCTIONS, TRAINING AND INSTALLATION

WSA 02 and WSA 03 provide guidelines for installation of detectable tape in sewer and water main installations respectively.

Rain Harvesting has provided installation instructions. A copy is attached in Appendix A.

8 PRODUCT MARKING

Other than the tape message there are no other markings on the tape.

9 PACKAGING AND TRANSPORTATION

The tape is wound around a cardboard reel (internal dimension 70 mm).

Rolls are packaged individually in a cardboard box.



FIGURE 2 PACKAGING FOR UNDERGROUND TAPE

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 Rain Harvesting's warranty is included in their terms and conditions of sale.

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

Rain Harvesting has been supplying underground marking tapes to the industry since 2010.

12 DISCUSSION

The principal means of identification for water supply and sewer mains includes one or more of the following:

(a) Pipes of specific colours.

- (b) Identification printed on pipes and/or sleeving.
- (c) Use of marking tapes
- (d) Marking of surface fittings
- (e) Identification markers and marker posts.

WSAA Codes require the designer to specify on the project drawings the type of marker tape to be installed for all new water mains and sewers including property services.

The design drawings and specifications shall include a typical section view of where it is to be laid and how it is to be fixed at chambers, pits, surface fittings and the like. The design drawings and specifications shall also detail how the marking tape is to be joined.

It should be recognised that detectable tapes may not be able to be detected due to one or more of the following conditions:

- (i) ground type
- (ii) lack of moisture in the ground/water table below the tape
- (iii) the depth the tape is laid
- (iv) the detection equipment used for detection
- (v) the method of detection intended to be used (induction, induction clamp or direct connection methods)
- (vi) the skill of the detection equipment operator

Whilst the requirements in AS/NZS 2648.1 were found to be equally applicable to the non-detectable component of detectable tape the AS/NZS 2648.1 specified tape elongation of 300% minimum is overridden by the requirement of the tracer wire elongation of 25% minimum specified in WSA PS 318.

Although greater than 25% elongation of the tracer wire is advantageous in avoiding breakage, it is not known whether this will be sufficient to prevent breakage of the tape in circumstances where an excavator bucket snags and pulls up the tape. It will obviously depend on how far the tape is pulled up, the length of tape the overlying soil is removed from and the ability of the tracer wire to stretch where soil still partially or fully covers the tape on either side of where it is pulled up. Given that AS/NZS 2648.1 requires 300% elongation capacity for non-detectable tapes, detectable tapes have a disadvantage over non-detectable tapes, due to the limitation of the tracer wire elongation capacity.

13 OUTCOMES OF EXPERT PANEL PRODUCT REVIEW

No issues were raised.

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, 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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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.

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APPENDIX A - PRODUCT LITERATURE

Blue Mountain Co

Tracer Wire Underground Tape



Installation and Specification Guide

PRODUCT DETAILS

Tracer Wire Underground Tape offers a high level of protection and detectability for underground services.

ROLL WIDTHS 100mm ROLL LENGTHS 250 metres

FEATURES AND BENEFITS

- Manufactured in accordance with AS/NZS 2648.1:1995 (Underground Marking Tape – Part 1: Non-detectable)
- Water Services Association of Australia
 Product Appraisal
- · 316 stainless steel tracer wire
- · High quality low density polyethelene

Installation

TRACER WIRE

- Underground warning tape is used to provide a visual warning that a buried pipe, cable or
 other service is below. It is recommended that the tape be buried halfway between the buried
 service and the surface of the earth.
- To install, unroll your tape onto the backfill in the trench.
- Backfill the trench further to the surface.

NOTE: Consult with your locator supplier for further details of the exact depth your equipment can locate to

PRODUCT RANGE

Description	Colour	Roll Size	Code
DANGER - BURIED FIRE MAIN BELOW	Red	100mm x 250m	UT9007
DANGER - BURIED GAS MAIN BELOW	Yellow	100mm x 250m	UT9000
DANGER - BURIED STORMWATER MAIN BELOW	Blue	100mm x 250m	UT9009
RECYCLED - RECLAIMED WATER DO NOT DRINK	Purple	100mm x 250m	UT9005
DANGER - BURIED SEWER MAIN BELOW	Beige	100mm x 250m	UT9004
DANGER - BURIED WATER MAIN BELOW	Green	100mm x 250m	UT9001
DANGER - BURIED ELECTRICITY CABLE BELOW	Orange	100mm x 250m	UT9006
DANGER - BURIED IRRIGATION MAIN BELOW	Blue	100mm x 250m	UT9010
DANGER - BURIED NON POTABLE WATER MAIN BELOW	Purple	100mm x 250m	UT9002
DANGER - BURIED COMMUNICATION CABLE BELOW	O White	100mm x 250m	UT9008
DANGER - BURIED POTABLE WATER MAIN BELOW	Green	100mm x 250m	UT9003
DANGER - BURIED DRINKING WATER MAIN BELOW	Blue	100mm x 250m	UT9011
DANGER - BURIED RAINWATER LINE BELOW	● Green	100mm x 250m	UT9024

PRODUCT SPECIFICATION

Material Type: Polyethylene

Stainless Steel Wire: 0.7mm diameter 316 stainless steel

Material Thickness: 100µm

Message Repeat: 600mm (depending on word length)

COMPLIANCE

- Manufactured to AS/NZS 2648.1:1995 Underground Marking Tape Part 1: Non-detectable tape
- Water Services Association of Australia Product Appraisal Report No 1213 Issue 2.

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For more information, please see our Services Purchase Terms at www.bluemountainco.com.au

Blue Mountain Co

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PLUMBING

bluemountainco.com.au/plumbing

Blue Mountain Co

Non Detectable Underground Tape



Installation and Specification Guide

PRODUCT DETAILS

Buried above underground services to provide visual warning during subsequent excavation.

ROLL WIDTHS 100mm & 150mm ROLL LENGTHS 100m & 250m

FEATURES AND BENEFITS

- Manufactured in accordance with Australian Standard AS/NZS 2648.1:1995 (Underground Marking Tape - Part 1: Non Detectable Tape)
- · High quality low density polyethelene
- Water Services Association of Australia - Product Appraisal

Installation

NON DETECTABLE

- Underground warning tape is used to provide a visual warning that a buried pipe, cable
 or other service is below. It is recommended that the tape be buried (halfway between the
 buried service and the surface of the earth.)
- 2. To install, unroll your tape onto the backfill in the trench.
- 3. Backfill the trench further to the surface.

NOTE: Consult with your locator supplier for further details of the exact depth your equipment can locate to.

PRODUCT DIMENSIONS

Description	Colour	Roll Size	Code
DANGER - BURIED COMMUNICATION CABLE BELOW	White	100mm x 250m	UT0193
		150mm x 100m	UT0196
DANGER - BURIED ELECTRICITY CABLE BELOW	Orange	100mm x 100m	UT0080
		100mm x 250m	UT0101
		150mm x 100m	UT0132
DANGER - BURIED FIRE MAIN BELOW	Red	100mm x 100m	UT0081
		100mm x 250m	UT0104
		150mm x 100m	UT0133
DANGER - BURIED GAS MAIN BELOW	Yellow	100mm x 100m	UT0082
		100mm x 250m	UT0107
		150mm x 100m	UT0134
		150mm x 250m	UT0153
		150mm x 500m	UT0195
DANGER - BURIED IRRIGATION MAIN BELOW	Blue	100mm x 100m	UT0083
		100mm x 250m	UT0181
		150mm x 100m	UT0180
CAUTION - NON POTABLE LINE BURIED BELOW	Purple	100mm x 100m	UT0084
		100mm x 250m	UT0111
		150mm x 100m	UT0183
DANGER - BURIED RAINWATER LINE BELOW	Green	100mm x 100m	UT0087
		100mm x 250m	UT0120
		150mm x 100m	UT0185

Description	Colour	Roll Size	Code
RECYCLED - RECLAIMED WATER DO NOT DRINK	Purple	100mm x 100m	UT0086
		100mm x 250m	UT0116
		150mm x 100m	UT0136
		150mm x 250m	UT0158
DANGER - BURIED SEWER MAIN BELOW	Beige	100mm x 100m	UT0088
		100mm x 250m	UT0123
		150mm x 100m	UT0137
		150mm x 250m	UT0161
DANGER - BURIED STORMWATER MAIN BELOW	Blue	100mm x 100m	UT0089
		100mm x 250m	UT0126
		150mm x 100m	UT0138
		150mm x 250m	UT0164
DANGER - BURIED WATER MAIN BELOW	Green	100mm x 100m	UT0090
		100mm x 250m	UT0129
		150mm x 100m	UT0139
		150mm x 250m	UT0167
DANGER - BURIED WATER MAIN BELOW	Blue	100mm x 100m	UT0198
		150mm x 100m	UT0199

PRODUCT SPECIFICATION

Material Type: Polyethylene Material Thickness: 80µm

Message Repeat: 600mm (depending on word length)

COMPLIANCE

- Manufactured to AS/NZS 2648.1:1995 Underground Marking Tape Part 1: Non-detectable tape
- Water Services Association of Australia Product Appraisal Report No 1213 Issue 2.

DISCLAIMER You acknowledge and agree that the information, data, advice, opinion, plan or other thing (Material) provided to you by Rain Harvesting Pty Ltd (ABN 11 113 300 093) (we, us, our) is provided "as is" without any representation, warranty, indemnity or guarantee as to the performance, accuracy, timeliness, completeness, merchantability or fitness of the Material for any particular purpose or application. The Material may contain errors, mistakes, inaccuracies and may not be complete. We expressly exclude any liability for such performance, accuracy, timeliness, completeness, merchantability or fitness of the Material for any particular purpose or application, to the maximum extent permissible by law.

Unless we expressly specify otherwise, we disclaim all responsibility and liability for any third party provided advice or provision of services, or failure to advise or provide services.

The disclaimers above are subject to the rights, warranties, guarantees and remedies relating to the provision of services that you have under, and that cannot be excluded, restricted or modified under, the Australian Consumer Law.

For more information, please see our Services Purchase Terms at www.bluemountainco.com.au

APPENDIX B - QUALITY CERTIFICATIONS

A copy of the following Quality Certificate is available from WSAA.

TABLE B1 RAIN HARVESTING PTY LTD - MANAGEMENT SYSTEM

28-34 Reginald Street, Rocklea, Brisbane QLD 4106, Australia		
Quality Systems Standard	ISO 9001:2015	
Certification licence no.	QEC30051	
Certifying agency	Intertek SAI-Global	
First date of certification	4 March 2013	
Current date of certification	23 January 2024	
Expiry date of certification	31 January 2027	



CERTIFICATE OF REGISTRATION

This is to certify that the management system of:

Rain Harvesting Pty Ltd

Trading as Blue Mountain Co

Incorporating
Blue Mountain Mesh
421

Every Little Drop Vincent Flow Products The RH Group Rain Harvesting

Main Site: 30 Finchley Street, Milton, Queensland, 4064, Australia

See appendix for additional sites and additional site scopes

has been registered by INTERTEK SAI Global as conforming to the requirements of:

ISO 9001:2015

The management system is applicable to:

The design, fabrication and wholesale of plastic accessories for rain water tanks and water systems, including, plumbing accessories, filters, valves, gauges and guttermesh.

Certificate Number:

QEC30051

Initial Certification Date:

04 March 2013

Date of Certification Decision:

23 January 2024

Issuing Date:

26 January 2024

Valid Until:

31 January 2027





Calin Moldovean

President, Business Assurance

SAI Global Certification Services Pty. Ltd.
Level 7 Suite 7.01
45 Clarence Street
Sydney NSW 2000
Australia



In the issuance of this certificate, INTERTEK SAI Global assumes no liability to any party other than to the Client, and then only in accordance with the agreed upon Certification Agreement. This certificate's validity is subject to the organization maintaining their system in accordance with INTERTEK SAI Global requirements for systems certification. Validity may be confirmed via email as certificate validation@intertek.com or by scanning the code to the right with a smartphone. The certificate remains the property of INTERTEK SAI Global, to whom it must be returned upon request. CT_ISO_9001_2015_SAIG_IAS-ANZ-EN-A4-08.may.23



APPENDIX C - SUPPLIER CONTACTS

Rain Harvesting Pty Ltd

Blue Mountain Co Plumbing

28-34 Reginald Street, Rocklea, Brisbane QLD 4106, Australia

Tel: +61 7 3248 9600 (Toll Free: 1800 06 77 44)

Email: info@bmco.com.au

Web: https://bluemountainco.com.au/plumbing/products/underground-tape/



Melbourne Office

Wurundjeri Country Level 8, Suite 8.02 401 Docklands Drive Docklands VIC 3008

Sydney Office

Gadigal Country Level 6 75 Elizabeth Street Sydney NSW 2000 GPO Box 915 Sydney NSW 2001

P +61 (0) 3 8605 7600 email: info@wsaa.asn.au

www.wsaa.asn.au