



Certificate of Conformity

Certificate num.	Registration date	Version	Valid until	
afp - 3322	20-Feb-2019	Number 4	Issue date 29-Apr-2021	30-Apr-2022

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Product designation

Shield, AS 1074 Series, steel fire protection pipe

(Refer to the Schedule/enclosures for further specified details)

Agent/distributor

Shield Engineering Group Pty Ltd
322 Brenan Street, SMITHFIELD, NSW, AUSTRALIA, 2164

Registrant

Surya Roshni Limited
Prakesh Nagar, Sankhol, BAHADURGARH, HARYANA, INDIA, 124507

Producer

Surya Roshni Limited
Prakesh Nagar, Sankhol, BAHADURGARH, HARYANA, INDIA, 124507

Manufacturing unit (Primary)

Surya Roshni Limited
Survey No. 188, Anjar Mundra Highway, Bhuvad, Anjar, KUTCH, GUJARAT, INDIA, 370130

Conformance criteria and evaluation

The Shield, AS 1074 Series, steel fire protection pipe has been evaluated and verified as conforming with the relevant requirements of the following criteria.

1. Australian Standard AS 1074-1989, 'Steel tubes and tubulars for ordinary service'.

Limitations/conditions of conformance

Limitations/conditions of conformance, where identified on this certificate, are derived from qualifications from evaluation(s) for conformity and/or other related technical documentation. All details with respect to design, assembly and installation instructions and restrictions should be checked against the producer's current technical manual/data sheets and the requirements of the Authority having Jurisdiction.

Specified limitations/conditions, determined from the evaluation for conformity, include the following.

- i. System design and installation shall be determined and verified in accordance with the performance and prescribed requirements of the regulations, standards and criteria as specified by the building code and authorities having jurisdiction.
- ii. System design and installation requirements may specify a minimum wall thickness that precludes the use of some of the scheduled pipe sizes for certain applications and locations.
- iii. The dimensional and mechanical compatibility of pipes must be verified with the sizes of components by which they are connected or to which they connect.

Issued by

David Whittaker
Executive Officer – ActivFire Scheme



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This certificate remains the property of CSIRO and may be subject to amendment, suspension or withdrawal at any time.
The validity and authenticity of this certificate can be verified by the certification register located at <https://www.activfire.gov.au>

This certification is issued within the scope of CSIRO Verification Services – Rules governing ActivFire Scheme and is valid only for the product(s) as submitted for evaluation and verification of conformity, subject to the following conditions.

- Reference to details, limitations and requirements, where documented as a schedule/enclosure with this certificate.
- The Registrant is responsible for their attestation of conformity and ensuring that on-going production complies with the conformance criteria defined in this certificate.
- This certificate will not be valid if any changes or modifications are made to the product which have not been notified and validated by CSIRO Verification Services.
- This certificate is subject to periodical re-validation upon verification that all requirements, as determined by the conformity assessment body, continue to be satisfactorily met by the Registrant.
- This certificate may only be reproduced in its published form, without modification and inclusive of all schedules/enclosures.
- Any changes, errors or omissions, must be submitted in writing and if necessary or requested, substantiated with relevant evidence.
- Any representations, such as advertising or other marketing related activities or articles shall reflect the correct contents of this certificate and conform with all relevant trade practices and consumer protection legislation and regulations.
- Any terms or conditions of use as applicable to content and documentation as published or accessed through web sites administered by the CSIRO Verification Services.

Schedule to Certificate of Conformity

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Producer's description

The production and physical characteristics of Shield, AS 1074 Series, steel fire protection pipe are summarised as follows:

- The pipe is produced as ERW tube from Hot Rolled steel strip.
- The individual lengths of pipe are HDG (Inner surface as well as outer surface).
- Steel is processed in accordance with AS1074.
- The HDG coating conforms to AS/NZS 4792 – coating class HDG300 (300 g/m² min coating mass).

Technical specification

The following details are a representative extract of the technical specification for the Shield, AS 1074 Series, steel fire protection pipe and may be subject to change. Complete and current details should be determined from the designated producer's technical manual/data sheets.

Schedule of variant designations

The following is a schedule of validated variant designations of the certified/listed equipment.

DN	Inch	Class	OD min	OD max	Thickness	Surface finish options	End finish options
15	½"	Light	21.0 mm	21.4 mm	2.00 mm	Black/painted/HDG	PE/RG/Threaded
20	¾"	Light	26.4 mm	26.9 mm	2.30 mm	Black/painted/HDG	PE/RG/Threaded
25	1"	Light	33.2 mm	33.8 mm	2.60 mm	Black/painted/HDG	PE/RG/Threaded
32	1¼"	Light	41.9 mm	42.5 mm	2.60 mm	Black/painted/HDG	PE/RG/Threaded
40	1½"	Light	47.8 mm	48.4 mm	2.90 mm	Black/painted/HDG	PE/RG/Threaded
50	2"	Light	59.6 mm	60.2 mm	2.90 mm	Black/painted/HDG	PE/RG/Threaded
65	2½"	Light	75.2 mm	76.0 mm	3.20 mm	Black/painted/HDG	PE/RG/Threaded
80	3"	Light	87.9 mm	88.7 mm	3.20 mm	Black/painted/HDG	PE/RG/Threaded
100	4"	Light	113.0 mm	113.9 mm	3.60 mm	Black/painted/HDG	PE/RG/Threaded
150	6"	Light	165.1 mm	165.1 mm	3.50 mm	Black/painted/HDG	PE/RG/Threaded
200*	8"	Light	219.1 mm	219.1 mm	4.80 mm	Black/painted/HDG	PE/RG/Threaded
15	½"	Medium	21.1 mm	21.7 mm	2.60 mm	Black/painted/HDG	PE/RG/Threaded
20	¾"	Medium	26.6 mm	27.2 mm	2.60 mm	Black/painted/HDG	PE/RG/Threaded
25	1"	Medium	33.4 mm	34.2 mm	3.20 mm	Black/painted/HDG	PE/RG/Threaded
32	1¼"	Medium	42.1 mm	42.9 mm	3.20 mm	Black/painted/HDG	PE/RG/Threaded
40	1½"	Medium	48.0 mm	48.8 mm	3.20 mm	Black/painted/HDG	PE/RG/Threaded
50	2"	Medium	59.8 mm	60.8 mm	3.60 mm	Black/painted/HDG	PE/RG/Threaded
65	2½"	Medium	75.4 mm	76.6 mm	3.60 mm	Black/painted/HDG	PE/RG/Threaded
80	3"	Medium	88.1 mm	89.5 mm	4.00 mm	Black/painted/HDG	PE/RG/Threaded
100	4"	Medium	113.3 mm	114.9 mm	4.50 mm	Black/painted/HDG	PE/RG/Threaded
125	5"	Medium	138.7 mm	140.6 mm	5.00 mm	Black/painted/HDG	PE/RG/Threaded
150	6"	Medium	164.1 mm	166.1 mm	5.00 mm	Black/painted/HDG	PE/RG/Threaded
15	½"	Heavy	21.1 mm	21.7 mm	3.20 mm	Black/painted/HDG	PE/RG/Threaded
20	¾"	Heavy	26.6 mm	27.2 mm	3.20 mm	Black/painted/HDG	PE/RG/Threaded
25	1"	Heavy	33.4 mm	34.2 mm	4.00 mm	Black/painted/HDG	PE/RG/Threaded
32	1¼"	Heavy	42.1 mm	42.9 mm	4.00 mm	Black/painted/HDG	PE/RG/Threaded
40	1½"	Heavy	48.0 mm	48.8 mm	4.00 mm	Black/painted/HDG	PE/RG/Threaded
50	2"	Heavy	59.8 mm	60.8 mm	4.50 mm	Black/painted/HDG	PE/RG/Threaded
65	2½"	Heavy	75.4 mm	76.6 mm	4.50 mm	Black/painted/HDG	PE/RG/Threaded
80	3"	Heavy	88.1 mm	89.5 mm	5.00 mm	Black/painted/HDG	PE/RG/Threaded
100	4"	Heavy	113.3 mm	114.9 mm	5.40 mm	Black/painted/HDG	PE/RG/Threaded
125	5"	Heavy	138.7 mm	140.6 mm	5.40 mm	Black/painted/HDG	PE/RG/Threaded
150	6"	Heavy	164.1 mm	166.1 mm	5.40 mm	Black/painted/HDG	PE/RG/Threaded

* 200 DN materials and manufacturing process conform to AS 1074 but 200 mm exceeds the range of diameters prescribed by this product standard.

PE: Plain End
 RG: Rolled Groove
 HDG: Hot-dipped Galvanising

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Schedule of properties/characteristics

The following schedule is an extract of physical and operational properties/characteristics of the certified/listed equipment.

Yield strength (min)	195 MPa
Ultimate Tensile Strength	320 to 460 MPa
Minimum elongation	20%
Galvanising, if specified	Hot-dip galvanized coating conforms with AS/NZS 4792, coating class HDG300. Minimum average coating mass of 300 g/m ² of pipe surface.
Threading	AS 1722.1

Supplementary information

Schedule of relevant articles

The following schedule is an extract of articles significant and/or related as evidence of conformity.

Reference		Title / description	Date issued (or date validated)	Source
Ident. type	Ident.			
Extract	Section 01	AS 1074-1989 Steel tubes and tubulars for ordinary service (surya_SpecExtract_Section01_1-Jun-2015.pdf)	1-Jun-2015	Surya Global Steel Tubes Ltd
Test certificate	2015/E/53	Mill/material/manufacture's test certificate (surya_certOfTest_14-May-2015.pdf)	20-May-2015	
	2015/E/3	Mill/material/manufacture's test certificate (surya_certOfTest_20-May-2015.pdf)	14-May-2015	