



# Certificate of Conformity

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## Product designation

**aquatherm firestop, SDR 7.4 Series, PP-R FS (Polypropylene) pipe and fittings**  
(Refer to the Schedule/enclosures for further specified details)

## Agent/distributor

Aquatherm Australia Pty Limited  
6F Kirby Industrial Park, 443 West Botany Street, ROCKDALE, NSW, AUSTRALIA, 2216

## Registrant

Aquatherm GmbH  
Biggen 5, ATTENDORN, GERMANY, D-57439

### Producer

Aquatherm GmbH  
Biggen 5, ATTENDORN, GERMANY, D-57439

## Conformance criteria and evaluation

The aquatherm firestop, SDR 7.4 Series, PP-R FS (Polypropylene) pipe and fittings has been evaluated and verified as conforming with the relevant requirements of the following criteria.

1. Australian Standard AS 4118.2.1-1995, 'Fire sprinkler systems - Piping - General' incl. Amdt 1 (22 June 2005).
2. Loss Prevention Council - Evaluation, surveillance and approval, 'LPC approval'.
3. Factory Mutual - Evaluation, surveillance and approval, 'FM approval'.
4. Verband der Schadenverhütung - Evaluation and approval, 'Vds approval'.

## 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. Specific or special requirements in relation to this product must be considered and included in the system design and installation. This includes application of the requirements or requirements equivalent to those specified by Aquatherm "Technical instruction firestop", Issue 1 23-Oct-2006.
- ii. Quick response sprinklers shall be used where pipe and fittings are exposed (i.e. fire exposure).

(Limitations/conditions of conformance continue)

Issued by

David Whittaker  
Executive Officer – ActivFire Scheme



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.

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- iii. The pipe and fittings of this product are suitable for use only with wet pipe systems.
- iv. Where pipe and fittings are exposed (i.e. fire exposure), the system shall be installed close to a flat ceiling construction.
- v. Fire sprinkler equipment, system design and installation should 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. Due considerations include the occupancy fire loading, sprinkler location, coverage, response, hydraulic characteristics and other specified requirements relevant to the conformance and effectiveness of the equipment and installed system.
- vi. Use of additives is only permitted in accordance with the producer/manufacturer installation instructions.
- vii. Care should be exercised to ensure that joints are adequately cured, in accordance with the producer/manufacturer's installation instructions, prior to pressurisation.
- viii. Pipe and fittings shall not be installed outdoors.
- ix. Sprinkler systems using this product shall be designed where possible to ensure there are no 'no flow' sections of pipework in the event of sprinkler operation.
- x. The system of pipes must be installed in accordance with the producer/manufacturer installation instructions, which include the conformity assessment body conditions of use.
- xi. This product shall only be installed,
  - using the required tools and methods as specified by the producer/manufacturer and
  - by companies (business entities) who can provide evidence of personnel training in the installation of the product. It is recommended that business entities engaged in the installation of this product are also be certificated to ISO 9000.
- xii. The maximum normal ambient temperature of use shall not exceed 70° C.
- xiii. The maximum working pressure is 1200 kPa (12 bar).

## Producer's description

The basic elements of the aquatherm firestop, SDR 7.4 Series, PP-R FS (Polypropylene) pipe and fittings are available in various forms and dimensions for the installation of pipelines and reticulation by using specially designed fittings and straight pipes.

The system is based on a fibre reinforced polypropylene pipe (faser composite pipe) produced in a multi-layer extrusion process.

Connection is by fusion welding. No sealants or adhesives are required for this permanent connection.

It is corrosion-proof and resistant to the clogging of the sprinkler with corrosive products. This ensures a long, low-maintenance service life as well as trouble-free functioning of the system.

The production of pipes and fittings is controlled according to the highest quality standards on latest injection moulding machines and extrusion lines. The high quality of our products is also ensured by extensive controls of incoming goods and the production process.

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## Technical specification

The following details are a representative extract of the technical specification for the aquatherm firestop, SDR 7.4 Series, PP-R FS (Polypropylene) pipe and fittings and may be subject to change. Complete and current details should be determined from the designated producer's technical manual/data sheets.

Pipe material: fusiolen® PP-R (80) FS

Working pressure: 1200 kPa (12 Bar)

Max. working temperature: 70 °C.

Recognised body references:	LPCB Certificate Num:	684a
	FM Approval:	Aquatherm GmbH, Redpipe / Firestop
	VdS-approval num.:	G4050042
Reference technical data sheet	aquatherm, UK 40000: Edition: 11/06 aquatherm "Technical instruction firestop", Issue 1 23-Oct-2006 aquatherm, E 40000: Edition: 01/2011	

## Designation details - Pipe

Type description	Article num.	Nominal pipe size	(Dimension) Outside diameter	Wall thickness	Internal diameter
Faser composite pipe SDR 7.4	4170708	15 mm	20 mm	2.8 mm	14.4 mm
	4170710	20 mm	25 mm	3.5 mm	18.0 mm
	4170712	25 mm	32 mm	4.4 mm	23.2 mm
	4170714	32 mm	40 mm	5.5 mm	29.0 mm
	4170716	40 mm	50 mm	6.9 mm	36.2 mm
	4170718	50 mm	63 mm	8.6 mm	45.8 mm
	4170720	55 mm	75 mm	10.3 mm	54.4 mm
	4170722	65 mm	90 mm	12.3 mm	65.4 mm
	4170724	80 mm	110 mm	15.1 mm	79.8 mm
	4170726	90 mm	125 mm	17.1 mm	90.8 mm

## Designation details - Fittings

Type description	Article num.	Dimension (O.D of connected pipe)
Socket	4111008	20 mm
	4111010	25 mm
	4110012	32 mm
	4111014	40 mm
	4111016	50 mm
	4111018	63 mm
	4111020	75 mm
	4111022	90 mm
	4111024	110 mm
	4111026	125 mm
Reducer	4111112	25mm x 20mm
	4111116	32 mm x 25 mm
	4111122	40 mm x 32 mm
	4111124	50 mm x 20 mm
	4111130	50 mm x 32 mm
	4111131	50 mm x 40 mm
	4111138	63 mm x 20 mm
	4111142	63 mm x 50 mm
	4111152	75 mm x 63 mm
	4111153	90 mm x 75 mm
	4111155	110 mm x 63 mm
	4111159	110 mm x 90 mm
	4111163	125 mm x 90 mm
	4111165	125 mm x 110 mm
Reducing socket	4111238	65 mm x 50 mm
	4111242	73 mm x 63 mm
	4111253	90 mm x 75 mm

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Type description	Article num.	Dimension (O.D of connected pipe)
Elbow 90°	4112108	20 mm
	4112110	25 mm
	4112112	32 mm
	4112114	40 mm
	4112116	50 mm
	4112118	63 mm
	4112120	75 mm
	4112122	90 mm
	4112124	110 mm
Elbow 90° (female x male)	4112126	125 mm
	4112308	20 mm
	4112310	25 mm
	4112312	32 mm
	4112314	40 mm
Elbow 45°	4112508	20 mm
	4112510	25 mm
	4112512	32 mm
	4112514	40 mm
	4112516	50 mm
	4112518	63 mm
	4112520	75 mm
	4112522	90 mm
	4112524	110 mm
Elbow 45° (female x male)	4112526	125 mm
	4112708	20 mm
	4112710	25 mm
	4112712	32 mm
	4112714	40 mm
Tee	4113108	20 mm
	4113110	25 mm
	4113112	32 mm
	4113114	40 mm
	4113116	50 mm
	4113118	63 mm
	4113120	75 mm
	4113122	90 mm
	4113124	110 mm
Reducing tee	4113126	125 mm
	4113511	20 mm x 25 mm x 20 mm
	4113520	25 mm x 20 mm x 20 mm
	4113522	25 mm x 20 mm x 25 mm
	4113532	32 mm x 20 mm x 20 mm
	4113534	32 mm x 20 mm x 32 mm
	4113540	32 mm x 25 mm x 32 mm
	4113546	40 mm x 32 mm x 40 mm
	4113550	50 mm x 32 mm x 50 mm
	4113551	50 mm x 40 mm x 50 mm
	4113558	63 mm x 40 mm x 63 mm
	4113560	63 mm x 50 mm x 63 mm
	4113568	75 mm x 50 mm x 75 mm
	4113570	75 mm x 63 mm x 75 mm
	4113580	90 mm x 50 mm x 90 mm
	4113582	90 mm x 63 mm x 90 mm
	4113584	90 mm x 75 mm x 90 mm
	4113586	110 mm x 63 mm x 110 mm
	4113588	110 mm x 75 mm x 110 mm
	4113590	110 mm x 90 mm x 110 mm
	4113592	125 mm x 75 mm x 125 mm
	4113594	125 mm x 90 mm x 125 mm
	4113596	125 mm x 110 mm x 125 mm

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Type description	Article num.	Dimension (O.D of connected pipe)
Cross	4113712	32 mm
	4113714	40 mm
Reducing cross	4113750	50 mm x 32 mm
	4113756	63 mm x 32 mm
	4113764	75 mm x 32 mm
End cap	4114108	20 mm
	4114110	25 mm
	4114112	32 mm
	4114114	40 mm
	4114116	50 mm
	4114118	63 mm
	4114120	75 mm
	4114122	90 mm
	4114124	110 mm
Weld-in saddle	4114126	125 mm
	4115156	40 mm / 20 mm
	4115158	40 mm / 25 mm
	4115160	50 mm / 20 mm
	4115162	50 mm / 25 mm
	4115164	63 mm / 20 mm
	4115166	63 mm / 25 mm
	4115168	63 mm / 32 mm
	4115170	75 mm / 20 mm
	4115172	75 mm / 25 mm
	4115174	75 mm / 32 mm
	4115175	75 mm / 40 mm
	4115176	90 mm / 20 mm
	4115178	90 mm / 25 mm
	4115180	90 mm / 32 mm
	4115181	90 mm / 40 mm
	4115182	110 mm / 20 mm
	4115184	110 mm / 25 mm
	4115186	110 mm / 32 mm
	4115188	110 mm / 40 mm
	4115189	110 mm / 50 mm
	4115190	125 mm / 20 mm
	4115192	125 mm / 25 mm
	4115194	125 mm / 32 mm
	4115196	125 mm / 40 mm
	4115197	125 mm / 50 mm
	4115198	125 mm / 63 mm
	4115198	100 mm / 50 mm
Flange adapter	4115512	32 mm
	4115514	40 mm
	4115516	50 mm
	4115518	63 mm
	4115520	75 mm
	4115522	90 mm
	4115524	110 mm
	4115527	125 mm
Steel flange	4115512	32 mm
	4115714	40 mm
	4115716	50 mm
	4115718	63 mm
	4115720	75 mm
	4115722	90 mm
	4115724	110 mm
Coupling screw	4115726	125 mm
	4115812	32 mm
	4115814	40 mm

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Type description	Article num.	Dimension (O.D of connected pipe)
	4115816	50 mm
	4115818	63 mm
	4115820	75 mm
Connecting back plate elbow	4120108	20 mm x ½" mm female
	4120112	25 mm x ¾" female
Transition piece	4121008	20 mm x ½" female
	4121011	25 mm x ½" female
	4121013	32 mm x ¾" female
Transition piece, female	4121108	20 mm x ½" female
	4121110	20 mm x ¾" female
	4121111	25 mm x ½" female
	4121112	25 mm x ¾" female
	4121113	32 mm x ¾" female
	4121114	32 mm x 1" female
	4121115	40 mm x 1" female
	4121116	40 mm x 1 ¼" female
	4121117	50 mm x 1 ¼" female
	4121118	50 mm x 1 ½" female
	4121119	63 mm x 1 ½" female
	4121120	63 mm x 2" female
	4121122	75 mm x 2" female
	4121153	32 mm x ½" female
	4121154	40 mm x ½" female
Transition piece	4121308	20 mm x ½" male
	4121310	20 mm x ¾" male
	4121311	25 mm x ½" male
	4121312	25 mm x ¾" male
	4121313	32 mm x ¾" male
	4121314	32 mm x 1" male
	4121316	32 mm x 1 ¼" male
	4121317	40 mm x 1" male
	4121318	40 mm x 1 ¼" male
	4121319	50 mm x 1 ¼" male
	4121320	50 mm x 1 ½" male
	4121321	63 mm x 1 ½" male
	4121322	63 mm x 2" male
	4121323	75 mm x 2" male
	4121324	75 mm x 2 ½" male
	4121325	90 mm x 3" male
	4121327	110 mm x 4" male
Transition elbow	4123008	20 mm x ¾" female
	4123010	20 mm x ½" female
	4123012	25 mm x ¾" female
	4123014	25 mm x ½" female
	4123015	32 mm x ½" female
	4123016	32 mm x ¾" female
	4123018	32 mm x 1" female
	4123020	40 mm x ½" female
Threaded branch tee	4125006	20 mm x ½" female x 20 mm
	4125008	20 mm x ¾" female x 20 mm
	4125010	25 mm x ½" female x 25 mm
	4125012	25 mm x ¾" female x 25 mm
	4125013	32 mm x ½" female x 32 mm
	4125014	32 mm x ¾" female x 32 mm
	4125016	32 mm x 1" female x 32 mm
	4125018	40 mm x ½" female x 40 mm
	4125022	50 mm x 1" female x 50 mm
	4125024	50 mm x 1 ¼" female x 50 mm
Counterpart	4123010	20 mm x 1" male
	4123012	25 mm x 1 ¼" male

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Type description	Article num.	Dimension (O.D of connected pipe)
	4123014	32 mm x 1 ½ " male
	4123016	40 mm x 2" male
	4123018	50 mm x 2 ¼" male
	4123020	63 mm x 2 ¾" male
	4123022	75 mm x 3 ½" male
Transition piece for groove connection	4127054	40 mm / 1"
	4127056	50 mm / 1 ¼ "
	4127058	63 mm / 1 ½ "
	4127060	75 mm / 2"
Weld-in saddle	4128214	40 mm / 25 mm x ½ " female