

# Certificate of Conformity

Certificate num.	Registration date	Version	Valid until	
<b>afp - 1698</b>	22-Sep-2004	Number 7	Issue date 1-May-2013	30-Apr-2014

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## Product designation

**Dixon, hot-dip galvanised, medium wall, fire sprinkler and hydrant pipe**  
(Refer to the Schedule/enclosures for further specified details)

## Agent/distributor

Dixon (Asia Pacific) Pty Ltd  
170 Francis Road, WINGFIELD, SA, AUSTRALIA, 5013

## Registrant

Dixon (Asia Pacific) Pty Ltd  
170 Francis Road, WINGFIELD, SA, AUSTRALIA, 5013

## Producer

Weifang East Steel Pipe Co., Ltd  
28 Chunyuan Road, Weicheng District, WEIFANG, SHANDONG, CHINA

## Conformance criteria and evaluation

The Dixon, hot-dip galvanised, medium wall, fire sprinkler and hydrant 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'.
2. Australian Standard AS 4118.2.1-1995, 'Fire sprinkler systems - Piping - General' incl. Amdt 1 (22 June 2005).
3. Australian Standard AS 2419.1-2005, 'Fire hydrant installations - System design, installation and commissioning'.
4. Australian/New Zealand Standard AS/NZS 4792:2006, 'Hot-dip galvanized (zinc) coatings on ferrous hollow sections, applied by a continuous or a specialized process'.

## 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. Fire system designers, and authorities having jurisdiction, must confirm that the codes or standards used for the systems design adequately address the hydraulic characteristics of this product. Full hydraulic analysis is an approved and recommended method of determining that system performance will meet design requirements.

Issued by



David Whittaker  
Executive Officer – ActivFire Scheme



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The validity and authenticity of this certificate can be verified by the certification register located at <http://www.activfire.gov.au>

# Schedule to Certificate of Conformity

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## Producer's description

The Dixon, hot-dip galvanised, medium wall, fire sprinkler and hydrant pipe is cold formed and electric resistance welded mild steel pipe made from hot-rolled steel strip. Hot-dip galvanizing after forming, welding and cutting to length protects the pipe internally and externally. The wall thickness of these pipes exceeds those specified in Table 2.2 of AS 1074 - 1989. The steel used to manufacture these pipes conforms to the relevant requirements of ASTM A 135 - 01, providing improved resistance to impact at 0°C. The hot-dip galvanized coating of these pipes conforms to the requirements of AS/NZS 4792, Coating Class HDG300, the minimum coating mass being 300 grams/m<sup>2</sup>. The pressure rating is suitable for use in sprinkler systems in accordance with AS 2118.1 and fire hydrant installations in accordance with AS 2419.1.

Sizes are suitable for use with rolled-groove type couplings and fittings of suitable diameter and groove profile, and are also suitable for joining by shouldered-end couplings, or by butt-welding.

Details of the range of sizes covering by this listing, and corresponding dimensional data, are included in the Technical Specifications portion of this document.

## Technical specification

The following details are a representative extract of the technical specification for the Dixon, hot-dip galvanised, medium wall, fire sprinkler and hydrant pipe and may be subject to change. Complete and current details should be determined from the designated producer's technical manual/data sheets.

### General

Dixon, hot-dip galvanised, medium wall, fire sprinkler and hydrant pipe is manufactured by using an electric resistance welding method in accordance with the requirements of ASTM Standard A135-01.

### Leak-Tightness

The leak-tightness and integrity of the weld is ensured by 100% testing with eddy-current type in-line automatic flaw-detection equipment which automatically controls automatic flawed-pipe ejection machinery located at the outlet end of the pipe mill.

### Galvanising

Hot-dip galvanized coating is applied in accordance with AS/NZS 4792, Coating class HDG300, and has a minimum average mass of 300 grams/m<sup>2</sup> of pipe surface.

### Pipe dimensions

Nominal size	Outside diameter (mm)	Inside diameter (mm)	Wall thickness (mm)	Mass kg/m
DN50	60.3	53.1	3.6	5.03
DN65	76.1	68.9	3.6	6.43
DN80	88.9	80.9	4.0	8.37
DN100	114.3	105.3	4.5	13.14
DN150	165.1	155.1	5.0	19.74

### Steel chemical properties

Element	Composition, max, %	
	Steel grade A	Steel grade B
Carbon	0.25	0.30
Manganese	0.95	1.20
Phosphorus	0.035	0.035
Sulphur	0.035	0.035

### Note:

The above mass values have been derived by calculation assuming that the pipe dimensions are exactly as above.