



Certificate of Conformity

Certificate num.	Registration date	Version	Valid until	
afp - 3515	11-Nov-2020	Number 1	Issue date 11-Nov-2020	30-Apr-2022
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Product designation

Hochiki Europe (U.K.) Ltd, ESP Firebeam X, reflective optical beam smoke detector
(Refer to the Schedule/enclosures for further specified details)

Agent/distributor

Hochiki Australia Pty Ltd
391 Park Road, REGENTS PARK, NSW, AUSTRALIA, 2143

Registrant

Hochiki Australia Pty Ltd
391 Park Road, REGENTS PARK, NSW, AUSTRALIA, 2143

Producer

Hochiki Europe (U.K.) Ltd
Grosvenor Road, Gillingham Business Park, GILLINGHAM, KENT, UNITED KINGDOM, ME8 0SA

Conformance criteria and evaluation

The Hochiki Europe (U.K.) Ltd, ESP Firebeam X, reflective optical beam smoke detector has been evaluated and verified as conforming with the relevant requirements of the following criteria.

1. Australian Standard AS 7240.12-2007, 'Fire detection and alarm systems - Part 12: Line type smoke detectors using a transmitted optical beam'.

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. Compatibility of this equipment with new or existing Fire Detection Control and Indication Equipment (FDCIE) should be verified prior to installation.

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.

Issued by

David Whittaker
Executive Officer – ActivFire Scheme



Schedule to Certificate of Conformity

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Producer's description

The Hochiki Europe (U.K.) Ltd, ESP Firebeam X, reflective optical beam smoke detector uses a motorised sensor method which allows it to self-align to the centre of the reflector during commissioning. Once commissioned the detector monitors alignment and automatically realigns back to the centre of the reflector if any movement occurs. This equipment uses a separate controller unit for commissioning.

The range of the Hochiki Europe (U.K.) Ltd, ESP Firebeam X, reflective optical beam smoke detector is 70 m (mid-range) but may be increased to 160 m with the alternative (long-range) reflector kit.

This equipment interfaces through an integral Hochiki Fire Beam Control Module, for connection to a FDCIE addressable loop.

Technical specification

The following details are a representative extract of the technical specification for the Hochiki Europe (U.K.) Ltd, ESP Firebeam X, reflective optical beam smoke detector and may be subject to change. Complete and current details should be determined from the designated producer's technical manual/data sheets.

Schedule of properties/characteristics

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

Electrical specifications		
Supply voltage	17 to 41 Vdc	
Supply current	3.5 mA (constant current) in all operational states	
Constant current	17 mA (constant current) in fast commissioning	
Environmental specifications		
Temperature	-10°C to +55°C	
Humidity	10 to 95% RH Non-condensing	
Ingress protection index	IP65 when suitably mounted and terminated	
Mechanical specifications		
Beam head H x W x D, Weight	180 mm x 155 mm x 137 mm, 1.1 kg	
Controller H x W x D, Weight	185 mm x 120 mm x 62 mm, 0.55g	
70KIT40 mid-range reflector H x W x D, Weight	293 mm x 293 mm x 5 mm, 0.8 kg	
140KIT160 long-range reflector H x W x D, Weight	394 mm x 394 mm x 5 mm, 1.8 kg	
Adapter (mounts the beam head onto unistrut) H x W D, Weight	270 mm x 250 mm x 5 mm, 0.6 g	
Optical specifications		
Optical wavelength	870 nm	
Maximum angular alignment	±5°	
Maximum angular misalignment	Beam Head ±0.4°, Reflector ±2° (static not auto-aligning)	
Operational specifications		
Protection Range	70KIT40	Mid-Range Reflector Kit 7 to 70 metres
	140KIT160	Long-Range Reflector Kit 140 to 160 metres

Schedule of components and/or assemblies

Verified designation	Detector circuit type
Hochiki Europe (U.K.) Ltd, ESP Firebeam X, reflective optical beam smoke detector	Analogue Addressable

The following is a schedule of validated components and/or assemblies of the certified/listed equipment.

Description	Part num.
Beam head	-
Controller (with integral Hochiki Firebeam Control Module)	-
Mid-range reflector	70KIT40
Long-range reflector	140KIT160
Adapter (mounts the Beam Head onto unistrut)	-

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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.			
Report	XF3405/R1	Evaluation for Conformity of the Hochiki Europe (UK) Ltd., Model ESP Firebeam X, optical beam smoke detector to the requirements of AS 7240.12-2007	21-Jul-2020	CSIRO, Fire Systems Laboratory, AU
Issue	2-3-0-2700/ISS2	Hochiki USER GUIDE FIREbeam Xtra Reflective Optical Beam Smoke Detector	1-Oct-2019	Hochiki Europe (U.K.) Ltd.