Date : 29 June 2018

CERTIFICATE OF COMPLIANCE

This certificate of compliance validates the following			
TEST REPORT NUMBER 'Assessment Reports' are not acceptable	TE215840 TE280668	**CERTIFICATE NUMBER**	117g-(cl-2)
DATE OF ISSUE	22 June 2005 13 March 2013	**DATE OF ISSUE**	10 April 2018
DATE OF EXPIRY	N/A	**DATE OF EXPIRY**	N/A
Manufacturer details			
NAME OF FACTORY/ MANUFACTURER	Hochiki Corporation	**NAME OF THE BRAND**	Silver-Tec Ltd
FACTORY ADDRESS / REGION (STREET / TOWN / CITY / COUNTRY)	141-1 Maebara Ejiri Kakuda City Miyagi, 981-1521 Japan	**MODEL / NO**	Heat Detectors ST-AHDW-W ST-AHD-W
WEBSITE	www.hochikieurope.com	**LOGO ON THE PRODUCT**	Silver-Tec Instrumentation for your safety ...
TEL	+44 (0)1634 260131	**EMAIL**	info@silver-tec.co.uk

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Product Details From Test Report		Reference Test Report page NO
DESCRIPTION OF THE PRODUCT (TECHNICAL DETAILS FROM TEST REPORT, SUCH AS ACTUAL FIRE RATINGS/DIMENSIONS/THICKNESS/ SENSITIVITY ETC)	Hochiki Brand 117g/10 ACB-EW 117g/14 ATJ-EN(WHT) ST-AHDW-W — Weather Proof Intelligent Analogue Addressable Class P Heat Detector (ST-ABI-I base) Note: Classes A1R, A1S, BR, BS, CR and CS when used with ACB-E protocol and classes A1S, BS and CS when used with ATG-E protocol. — 117g/10 ST-AHD-W — Intelligent Analogue Addressable Class P Heat Detector (ST-ABI-I, ST-ABI-SC, ST-ABS and ST-ABSF-WWL bases) Note: Classes A1R, BR, CR, A1S, BS and CS. — 117g/14 Bases ST-ABI-I — Mounting base ST-ABI-SC — Short circuit isolator base ST-ABS-I — Base sounder ST-ABSF-WWL — Base sounder beacon (White LED)	
TEST STANDARD (SUCH AS ASTM/BS EN/ DN ETC)	EN 54-5:2000 + A1:2002	
TEST DESCRIPTION	**117g/10 TE215840 Page 6** The object of this evaluation was to examine the construction and assess the performance of the Hochiki ACB-E analogue addressable heat detectors fitted with 1) ACB-E Protocol and 2) ATG-E Protocol against the requirements of EN54-5: 20001. **117g/14 TE280668 Page 4** The object of this evaluation was to assess the performance of the Hochiki Corporation, ACC-EN, ALN-EN and ATJ-EN range of detectors for compliance with the requirements of EN 54-7:2000 and EN 54-5:2000 when used in conjunction with the YBN-R/3 and YBO-BSB mounting bases. Testing on the ACC-EN multi-criteria detector has been reduced based on the approved ACC-E detector (TE270507). The ALN-EN smoke detector is based on the ALN-E (TE277796) which has previously undergone full testing. The ATJ-EN heat detector is	

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based on the ATJ-E (TE270508/ TE280860) which has previously undergone full testing.

Testing has been omitted on the ALN-EN and ATJ-EN variants due to the detectors using the same outer cover as the ACC-EN, as they all have the same physical dimensions.

SPECIFICATION OF TEST SPECIMEN

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Equipment		
No.	**Description**	**Receipt date**
15	ACB-E analogue addressable heat detectors	24/12/2004
15	ACB-EW weatherproof analogue addressable heat detector	24/12/2004
5	YBN-R/3 mounting bases	14/09/2004
10	YBO-R/SCI mounting bases	20/09/2004

Second Submission

Equipment		
No.	**Description**	**Receipt date**
1	ACB-E analogue addressable heat detector. Modified sample to meet the requirements of the non compliance - Clause 5.18(c). (Referred to as sample 16 in report)	18/04/2005

Third Submission

Equipment		
No.	**Description**	**Receipt date**
1	ACB-E analogue addressable heat detector. Modified sample to be used for EMC testing Clause 5.18(c) in conjunction with the YBO-R/SCI mounting base	26/05/2005

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	(Referred to as sample 17 in report)	

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Equipment

No.	Description	Receipt
20	YBN-R/3 mounting bases.	21/12/2012
20	ACC-EN analogue addressable multi-criteria detectors.	21/12/2012
20	ALN-EN analogue addressable optical scatter smoke detectors with heat enhancement.	21/12/2012
4	YBN-BSB beacon sounder bases.	21/12/2012

TEST RESULT
(SUCH AS PASSED CRITERIA___/ COMPLIED TO___/ DURATION___/OBSERVATION___/ETC)

PASS
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The Hochiki ACB-E Protocol, Class A1R analogue addressable heat detector in conjunction with the YBN-R/3 and YBO-R/SCI mounting bases met the requirements of a series of tests taken from EN 54-5: 20001 and LPCB/VdS Agreement Document AD3.12 as specified in LPCB test schedule E120218/1.3 on the first submission except for Clause 5.18(c) Conducted disturbances.
During the Conducted Disturbances test the panel lost communication with the EUT heat detector when using either the YBN-R/3 or YBO-R/SCI mounting bases. The panel produced an error message reading, "device report internal fault".
Modifications to Sample Number 1 were made by the manufacturer. An additional Capacitor (C21) was placed in parallel with Component Z2 resulting in a value of 100nF at 50V. Sample number 1 was then resubmitted as Sample Number 16. The ACB-E Protocol, Class A1R heat detector subsequently met the requirements of Clause 5.18(c) on the second submission using the YBN-R/3 mounting base only. Clauses 5.18(d) and 5.18(e) were repeated using the modified unit. The requirements of these Clauses were met for the second time using the modified unit.
The manufacturer submitted a final modified sample (Sample No. 17) for the third submission to be tested to Clause 5.18(c) Conducted Disturbances using the YBO-R/SCI mounting base. The detector was submitted with the following modifications made to the Remote Indicator and Transmit circuit:
Capacitor C21 1nF 50V between the RIL (Remote) and Loop.
Capacitor C22 22nF 50V across R32 (TR15 base and Vcc 3V).
Capacitor C23 1nF 50V across R36 (TR16 base and Vcc 3V).

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	The Hochiki ACB-E Protocol, Class A1R heat detector subsequently met the requirements of Clause 5.18(c) on the third submission using the YBO-R/SCI mounting base. **TE280668** **117g/14** The Hochiki Corporation, ACC-EN, ALN-EN and ATJ-EN range of detectors met the requirements of a series of tests specified in LPCB Test Schedule E122642-1.2 taken from EN 54-7:2000 and EN 54-5:2000 on the first submission.	
PRODUCT APPLICATION GUIDELINE (END USE) **(CLEARLY STATE THE END USE WITH SPECIFIC APPLICATION, SUCH AS EXACT FIRE RATING/TO BE INSTALLED IN___/TO BE INSTALLED AT____/TO BE CONNECTED WITH____/TO BE INSTALLED WITH___ ETC ALONG WITH ANY WARNINGS SUCH AS NOT TO BE USED IN___/NOT TO BE INSTALLED AT___/ NOT TO BE INSTALLED WITH___ETC.**	**Installation Instructions 2-3-0-2462**	

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Laboratory and Certification body details			
NAME OF CERTIFICATION BODY	BRE Global Ltd.	**NAME OF TEST FACILITY**	BRE Global Ltd.
CERTIFICATION BODY ADDRESS / REGION (STREET / TOWN / CITY / COUNTRY)	Bucknalls Lane Garston Watford WD25 9XX United Kingdom	**TEST FACILITY ADDRESS / REGION** (STREET / TOWN / CITY / COUNTRY)	Bucknalls Lane Garston Watford WD25 9XX United Kingdom
WEBSITE	www.breglobal.com	**WEBSITE**	www.breglobal.com
TEL	+44 (0)333 321 88 11	**TEL**	+44 (0)333 321 88 11
EMAIL	BREGlobalEnquiries@bre.co.uk	**EMAIL**	BREGlobalEnquiries@bre.co.uk
ACCREDITED BY (NAME OF ACCREDITATION BODY WHICH ISSUED ACCREDITATION TO THE CERTIFICATION BODY, ALONG WITH WEBSITE)	UKAS www.ukas.com	**ACCREDITED BY** (NAME OF ACCREDITATION BODY WHICH ISSUED ACCREDITATION TO THE LABORATORY, ALONG WITH WEBSITE)	UKAS www.ukas.com
AS PER (STANDARD TO WHICH THE CERTIFICATION BODY IS ACCREDITED TO)	EN45011: 1998 / ISO 17065: 2012	**AS PER** (STANDARD TO WHICH YOUR ORGANIZATION IS ACCREDITED TO)	ISO 17025: 2005
VALIDITY (EXPIRY DATE OF CERTIFICATION BODY ACCREDITATION)	N/A	**VALIDITY** (EXPIRY DATE OF LABORATORY ACCREDITATION)	N/A
REFERENCE NUMBER: (CERTIFICATION BODY ACCREDITATION REFERENCE NUMBER TO VERIFY ON THE ACCREDITOR'S WEBSITE)	0007	**REFERENCE NUMBER:** (THE LABORATORY ACCREDITATION REFERENCE NUMBER TO VERIFY ON THE ACCREDITOR'S WEBSITE)	0578
CERTIFICATION MARK	LOSS PREVENTION CERTIFICATION BOARD LPCB 117g/10 117g/14	BRE GLOBAL LTD BUCKNALLS LANE WATFORD WD25 9XX U.K.	117g-(cl-2)

(ENDORSEMENT) TO BE SIGNED BY MANUFACTURER			
NAME OF MANUFACTURER'S SIGNATORY	Richard Anderson	**SIGNATURE**	
EMAIL / TEL	randerson@hochikieurope.com 01634 266544	**FACTORY OFFICIAL SEAL**	HOCHIKI EUROPE (UK) LIMITED Grosvenor Road, Gillingham Business Park Gillingham, Kent ME8 0SA England
NOTES: I Undertake that all data and information provided are genuine and accurate			

(ENDORSEMENT) TO BE SIGNED BY CERTIFICATION BODY			
NAME OF CERTIFICATION BODY SIGNATORY	BRE Global Ltd. E. MATTIE-SULEIMAN	**SIGNATURE**	
EMAIL / TEL	BREGlobalEnquiries@bre.co.uk +44 (0)333 321 88 11	**CERTIFICATION BODY OFFICIAL SEAL**	BRE GLOBAL LTD BUCKNALLS LANE. WATFORD WD25 9XX U.K.
NOTES: I Undertake that all data and information provided are genuine and accurate 117g/10 117g/14 117g-(cl-2)			

ATTACHMENTS:

- **COPY OF 'CERTIFICATE OF COMPLIANCE' ISSUED BY CERTIFICATION BODY (OLD OR NEW)**