0122-V1

Tested AOV Solutions
for Smoke Ventilation

Tested Solutions and Standard Details

SE CONTROLS

RUSSELL Timber Technology
Engineered to excel

Tested AOV Solutions

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Smoke Ventilation

SE CONTROLS

Russell Timber Technology and SE Controls have collaborated together to provide the Construction market with a compliant NSHEV AOV to meet the requirements of EN12101-2:2003.

The Construction market cannot accept the use of a standard window and 'off the shelf' actuator as an AOV as both must be tested together and manufactured under a System 1 Factory Production Control process to comply. Utilising this tested solution and process detailed below will remove risk of non-compliance in life safety systems.

Compliance to EN12101-2:2003 for smoke vents is mandated by law in the Construction Products Regulation which has been in force since 2013.

The following process has been put in place to support you in placing that product onto the market compliantly.

SE Controls Certification Process

STAGE 1 Consult

Consult SE Controls:

- Ensure the profile that has been selected is within scope of the tested solution,

-free area performance calculations and to

-select the appropriate tested actuator.

STAGE 2 Purchase

Purchase your EN12101-2:2003 compliant AOV from Russell Timber Technology.

STAGE 3 Installation of Actuators

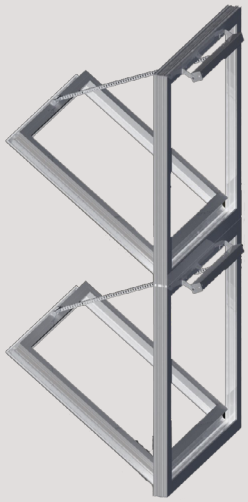
Installation of actuators (during fabrication or on site) must be carried out under a System 1 FPC process as per the prescriptive detail. Apply certification mark.

STAGE 4 Certify

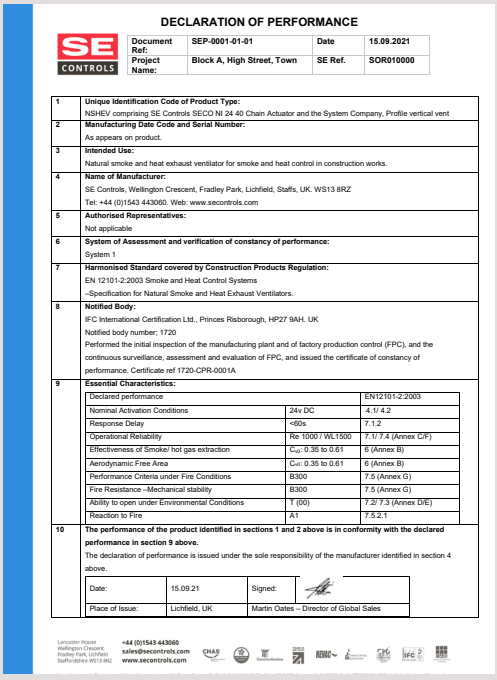
SE Controls produce a Declaration of Performance (DoP) to EN12101-2:2003 in accordance with BS 7346-8 and the CPR.

Russell Timber Technology can provide the AOV with the actuator pre-fitted in the factory. Alternatively if there is a preference for the actuator to be installed on site please click here for a list of all SE Controls approved actuator installers.

Typical AOV Applications



Proof of Compliance



DECLARATION OF PERFORMANCE

Document Ref:	SEP-0001-01-01	Date	15.09.2021
Project Name:	Block A, High Street, Town	SE Ref.	SOR010000

1	**Unique Identification Code of Product Type:** NSHEV comprising SE Controls SECO NI 24 40 Chain Actuator and the System Company, Profile vertical vent
2	**Manufacturing Date Code and Serial Number:** As appears on product.
3	**Intended Use:** Natural smoke and heat exhaust ventilator for smoke and heat control in construction works.
4	**Name of Manufacturer:** SE Controls, Wellington Crescent, Fradley Park, Lichfield, Staffs, UK. WS13 8RZ Tel: +44 (0)1543 443060. Web: www.secontrols.com
5	**Authorised Representatives:** Not applicable
6	**System of Assessment and verification of constancy of performance:** System 1
7	**Harmonised Standard covered by Construction Products Regulation:** EN 12101-2:2003 Smoke and Heat Control Systems –Specification for Natural Smoke and Heat Exhaust Ventilators.
8	**Notified Body:** IFC International Certification Ltd., Princes Risborough, HP27 9AH. UK Notified body number; 1720 Performed the initial inspection of the manufacturing plant and of factory production control (FPC), and the continuous surveillance, assessment and evaluation of FPC, and issued the certificate of constancy of performance. Certificate ref 1720-CPR-0001A
9	**Essential Characteristics:**

Declared performance		EN12101-2:2003
Nominal Activation Conditions	24v DC	4.1/ 4.2
Response Delay	<60s	7.1.2
Operational Reliability	Re 1000 / WL1500	7.1/ 7.4 (Annex C/F)
Effectiveness of Smoke/ hot gas extraction	C_{vo}: 0.35 to 0.61	8 (Annex B)
Aerodynamic Free Area	C_{vo}: 0.35 to 0.61	8 (Annex B)
Performance Criteria under Fire Conditions	B300	7.5 (Annex G)
Fire Resistance –Mechanical stability	B300	7.5 (Annex G)
Ability to open under Environmental Conditions	T (00)	7.2/ 7.3 (Annex D/E)
Reaction to Fire	A1	7.5.2.1

10	**The performance of the product identified in sections 1 and 2 above is in conformity with the declared performance in section 9 above.** The declaration of performance is issued under the sole responsibility of the manufacturer identified in section 4 above.

Date:	15.09.21	Signed:	
Place of Issue:	Lichfield, UK	Martin Oates – Director of Global Sales	

Lancaster House, Wellington Crescent, Fradley Park, Lichfield, Staffordshire WS13 8RZ
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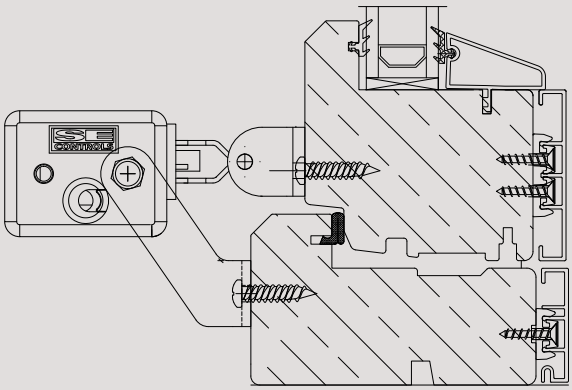
sales@secontrols.com
www.secontrols.com

The Declaration of Performance (DoP) and the product certification mark are the ultimate proof of compliance which illustrates the vent profile and actuator have been tested together as a single solution to all declarable essential characteristics of EN12101-2:2003.

The NSHEV is part of a life safety system and the DoP is required at project handover stage in accordance with the CPR and BS7346-8 code of practice.

Ensure that you have this document as it will delay handover if not provided when requested.

Russell Timber Balcony Door
EN12101-2 Tested Profiles and Parameters



SYSTEM NAME	SERIES 40 BRACKET KIT NO.
BALCONY DOOR OPENING OUTWARD	AKS16150002

System Parameters

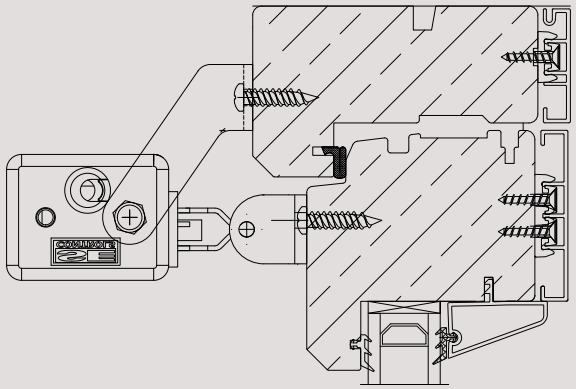
SYSTEM NAME	MAX OUTER FRAME WIDTH	MAX OUTER FRAME HEIGHT
SIDE HUNG OPEN OUT ON BUTT HINGE	1090MM	2488MM

Please contact Russell Timber for advice on maximum weight parameters.

Max Certifiable Weight = 120KG, Max Certifiable Permiter = 7.1 Metres

Please note this profile is available both with and without aluminium cladding. Please contact Russell Timber to discuss your project requirements.

Russell Timber Bottom Hinge Open Out EN12101-2 Tested Profiles and Parameters



SYSTEM NAME	SERIES 40 BRACKET KIT NO.
BOTTOM HINGE OPEN OUT	AKS16150002

System Parameters

SYSTEM NAME	MAX OUTER FRAME WIDTH	MAX OUTER FRAME HEIGHT
BOTTOM HUNG OPEN OUT ON BUTT HINGE	2488MM	2488MM

Please contact Russell Timber for advice on maximum weight parameters.

Max Certifiable Weight = 120KG, Max Certifiable Permiter = 7.1 Metres

Please note this profile is available both with and without aluminium cladding. Please contact Russell Timber to discuss your project requirements.

Notes

The profile parameters outlined within this document are aligned to Russell Timber Technology tested performance parameters. If your vents are outside of these sizes please ensure you obtain written acceptance from Russell Timber Technology for the oversized vents. Without this we cannot produce a Declaration of Performance.

The actuators alone will not act as 'window restrictors'. SE Controls recommend the installation of suitable restrictors relative to the orientation of the vent, so that stability is provided should the actuator be removed, or the vent is subjected to high external forces whilst in the open position. Contact our team for further advice.

Façade Engineering Services

- CAD DETAILS
- PROJECT DESIGN
- CERTIFICATION
- QUOTATIONS
- FREE AREA CALCULATIONS
- REGULATIONS ADVICE
- PRODUCT SELECTION
- SPECIFICATION

To contact a member of the Facade support team click here.

For further information click here for the Smoke Control Association's guidance document for EN12101-2:2003 Automatic Opening Smoke Vents.