

Automatic Opening Smoke Vents

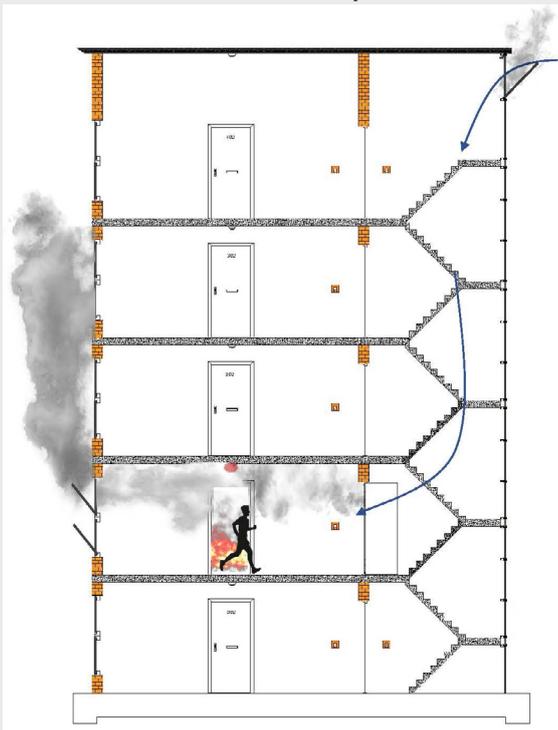
Seamless integration with your façade system



AOVs (NSHEV's) utilised for life safety means of escape smoke exhaust ventilation must comply to EN12101-2:2003 mandated by law via the Construction Products Regulation. They must also be controlled by a compatible EN12101-10 compliant smoke ventilation control system.

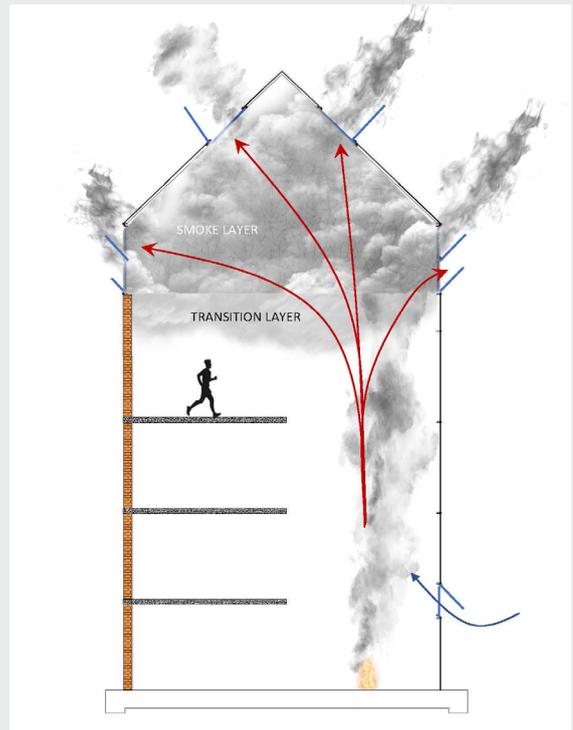
Typical Applications

End of Corridor & Top of Stair



High Rise Residential - [Click for info](#)

Atria Smoke Ventilation



Non Residential - [Click for info](#)

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 S8000 M 2x40 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 443000. 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	4.3/ 4.2
	Response Delay	<60s	7.1.2
	Operational Reliability	Re 1000 / Wl 1500	7.1/ 7.4 (Annex G/F)
	Effectiveness of Smoke/ hot gas extraction	C _{ex} : 0.35 to 0.61	6 (Annex B)
	Aerodynamic Free Area	C _{ex} : 0.35 to 0.61	6 (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 Gates - Director of Global Sales	

Lichfield Office
+44 (0)1543 443000
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.

No DoP No Compliance.

UK UK CA NI CE

Typical AOV Applications

Natural Smoke Ventilation

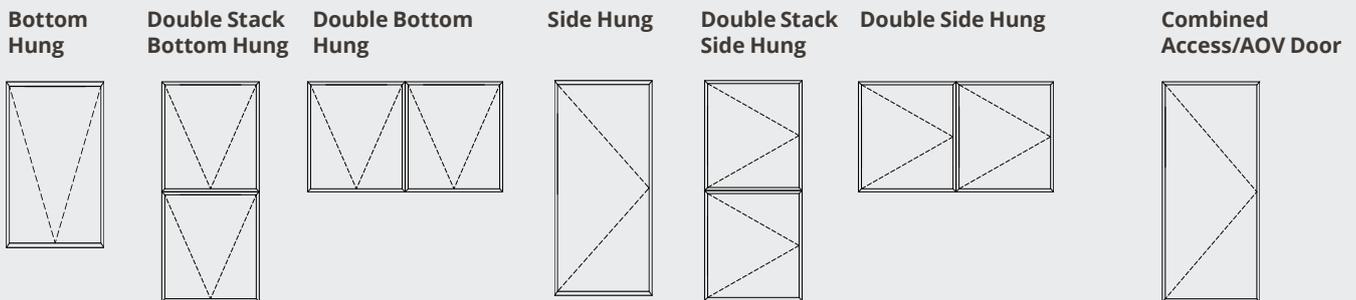
Prescriptive Free Area Requirements

Application	Aerodynamic (Aa) Free Area Requirement	Geometric (Diagram D7 ADB) Free Area Requirement
High Rise Residential End of Corridor	0.9sq/m Aa (option a. ADB)	1.5sq/m (option b. ADB)
High Rise Residential Top of Stair	0.7sq/m Aa (option a. ADB)	1.0sq/m (option b. ADB)
Fire Fighting Lobby	1.0sq/m Aa (BS9999)	1.5sq/m (BS9999)
Fire Fighting Stair	0.7sq/m Aa (BS9999)	1.0sq/m (BS9999)
Non-residential Atria intake/extract	BS9999 or Fire Engineered Design	

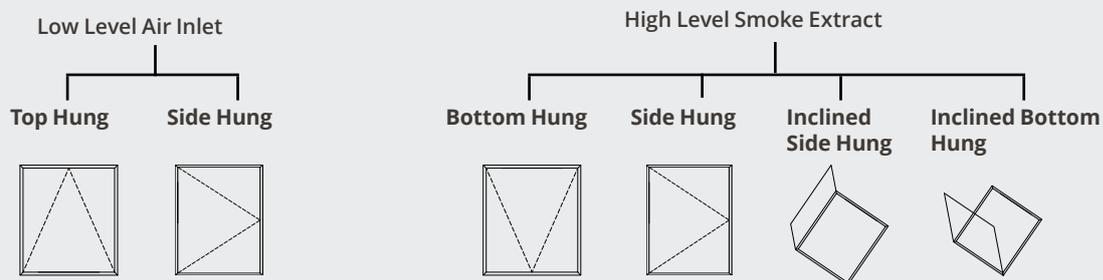
* Aerodynamic free area is the recommended calculation as it aligns to the EN12101-2 product standard and is prescriptive via the test data. Diagram D7 of Approved Document B (ADB) is ambiguous, leading to inconsistent declarations of area and no stated area for the Approved Inspector to sanction.

High Rise Residential [click for info](#)

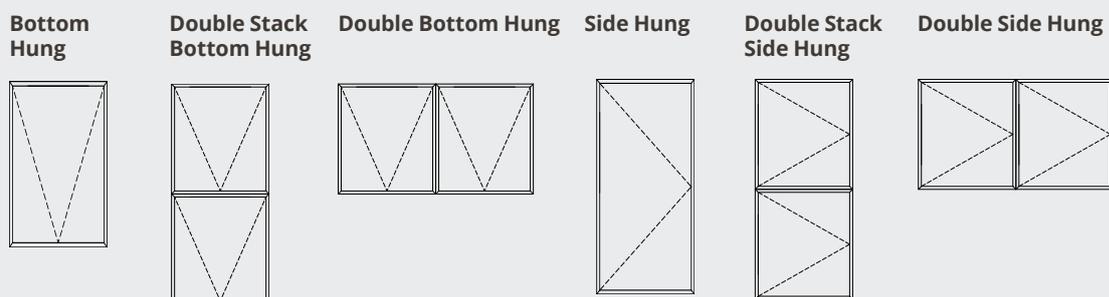
AOVs must open outwards in the direction of smoke flow for smoke extract to aid means of escape.



Non Residential [click for info](#)



Fire Fighting Lobbies [click for info](#)



SE Controls have collaborated with the leading façade systems within the industry to provide a seamless solution without the need to glaze in a third party smoke vent. This ensures the overall performance and compliance of the façade remains within the façade package.

To view the range of Tested Solutions each System Company has available [click here](#).

Façade Engineering Services

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

To contact a member of the Façade 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.

