



# High Performance Modular Air Curtains







With over 50 years experience in manufacturing, Shearflow have a tradition of quality, reliability and innovative design. Numerous buildings of all types have benefited from Shearflow's unique product range and long experience in air curtain technology.

At the heart of the Shearflow range is the modular concept – individual units that are designed to fit seamlessly together, allowing any width of doorway to be protected by a continuous air curtain barrier. Interlocking end panels allow 1 metre or 1.5 metre units to be combined easily for rapid installation. The modular concept means that even the largest units are easy to handle, transport and stock.

The slim profile, with streamlined inlet and moulded

end caps, answers the need for air curtains that blend into their surroundings, making these units ideal in areas such as shops, receptions, hotels and offices.

Shearflow air curtains not only look good, they combine high performance with low noise, generating a high velocity air barrier to protect any size of doorway. In fact anywhere there is a need to open a door, Shearflow can offer an air curtain solution.

Page	Model Range	Recommended maximum mounting height*
2	S6 - Compact Range	Small openings
3	S10 - Commercial Range	2.5 m
4	S15 - Commercial Range	3,5 m
5	S10/15 - Recessed Range	2.5/3.5 m
6	Dimensional Information & Control Systems	
7	Technical & Dimensional Information	
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**SELECTING THE CORRECT UNIT:**

Shearflow modular air curtains can be supplied electrically heated (E), water heated (W), or as ambient unheated versions (A). Selecting the correct unit is easy. Choose the most suitable range /output for the door height and the required number of modules to fully cover the width of the door. NB A linking kit is required between each module connected – see p 7.

\* Recommended mounting heights are for guidance only. Actual performance of air curtains will depend on external factors such as environmental conditions and building design. You are invited to contact us for a detailed assessment of your air curtain requirements.

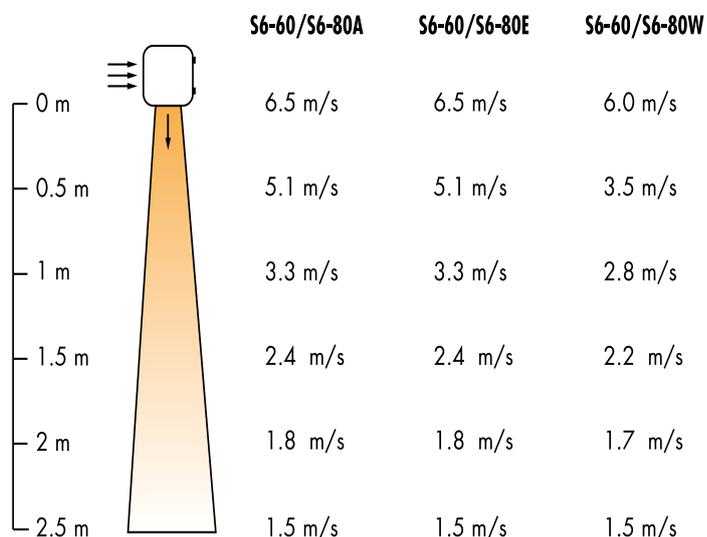


## S6 SERIES

The S6 series of over-door heating modules has been designed to offer the most effective solution to the problem of cold draughts entering through smaller doorways. Despite their compact dimensions the S6 range offers exceptional performance, combining high airflow with low noise and reliable proven technology.

The S6 range incorporate controls built into the fascia. These units are easy and quick to install. Optional adjustable brackets are available for ceiling or angled mounting.

Finish is white powder coated steel with white moulded end caps and brushed aluminium inlet grille.



MODEL	HEAT OUTPUT kW	DIMENSIONS LxHxW mm	INPUT Amps	VOLTAGE	MAX AIR VOLUME m <sup>3</sup> /h	NOISE LEVEL dB(A) (high/low)*	WEIGHT kg
S6-80A	0	840x160x256	0.6	230V/1ph	430	50	8
S6-80E	0/2.25/4.5	840x160x256	20	230V/1ph	430	50	9

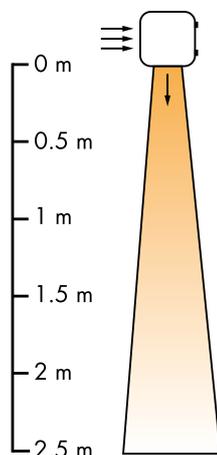
\*Conditions: Distance to unit 5m, directional factor 2, equivalent absorption area 200m<sup>2</sup>. All S6 models have built in controls. For overall and fixing dimensions see page 5.



**S10 SERIES**

The S10 range is Shearflow's most popular modular air curtain system. Suitable for offices, shops, reception areas and other commercial premises, the S10 series combines streamlined good looks with high performance and low noise. Modules can be mounted singularly to cover doorways up to 1.5m, or combined to provide a continuous barrier over any width of opening and are suitable for doorways up to 2.7m high. The S10 series is supplied without controls. Remote switching and a control link allow any number of modules to be centrally controlled.

High performance is provided by low noise tangential fans connected to powerful twin shaft motors for long service life. Construction is durable white powder coated steel galvanised steel chassis, moulded end caps and brushed aluminium inlet grille.



	S10-100/S10-150A	S10-100/S10-150E	S10-100/S10-150W
0 m	9.0 m/s	9.0 m/s	8.0 m/s
0.5 m	6.5 m/s	6.5 m/s	5.0 m/s
1 m	4.6 m/s	4.6 m/s	3.1 m/s
1.5 m	3.0 m/s	3.0 m/s	2.4 m/s
2 m	2.4 m/s	2.4 m/s	2.1 m/s
2.5 m	2.0 m/s	2.0 m/s	1.7 m/s

MODEL	HEAT OUTPUT kW	DIMENSIONS LxHxW mm	INPUT Amps	VOLTAGE	MAX AIR VOLUME m <sup>3</sup> /h	NOISE LEVEL dB(A) (high/low)**	WEIGHT kg
S10-100A	0	1064x200x300	0.4	230V/1ph	1250	53/45	15
S10-100E	0/4.5/9	1064x200x300	13.5+	400V/3ph	1250	53/45	19
S10-100W	0/8.4*	1064x200x300	0.4	230V/1ph	1150	52/47	18
S10-150A	0	1564x200x300	0.6	230V/1ph	1900	53/40	22
S10-150E	0/6.75/13.5	1564x200x300	20+	400V/3ph	1900	53/40	24
S10-150W	0/13.2*	1564x200x300	0.6	230V/1ph	1700	48/40	24

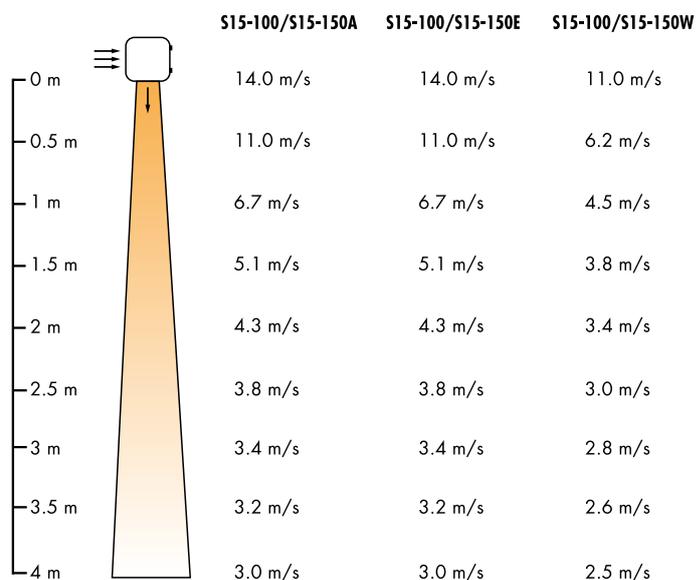
\*LP HW at 82/71°C (Other outputs/coil specifications on request). \*\*Conditions: Distance to unit 5m, directional factor 2, equivalent absorption area 200m<sup>2</sup>. + Per phase. All S10 models supplied without controls. For control options, overall and fixing dimensions see Page 5.



## S15 SERIES

S15 modular air curtains combine the same design characteristics as the S6 and S10 range, with higher output for larger commercial applications. Typically S15 units can be mounted up to 4.0m high, but still provide high performance and relatively low noise. S15 units are available in 1.0m and 1.5m modules and like all Shearflow modular units can be linked together to form a continuous barrier. Remote switching and a control link allow any number of modules to be centrally controlled.

S15 units also use tangential fans coupled to twin-shaft motors for reliability and long service even in the most demanding environments. Construction is durable white powder coated steel galvanised steel chassis, moulded end caps and brushed aluminium inlet grille.



MODEL	HEAT OUTPUT kW	DIMENSIONS LxHxW mm	INPUT Amps	VOLTAGE	MAX AIR VOLUME m <sup>3</sup> /h	NOISE LEVEL dB(A) (high/low)**	WEIGHT kg
S15-100A	0	1070x280x417	1.6	230V/1ph	2400	64/54	25
S15-100E	0/6/12	1070x280x417	19+	400V/3ph	2400	64/54	30
S15-100W	0/18.6*	1070x208x417	1.4	230V/1ph	2200	62/54	30
S15-150A	0	1570x280x417	2.8	230V/1ph	3600	64/55	35
S15-150E	0/9/18	1570x280x417	29+	400V/3ph	3600	64/55	40
S15-150W	0/27.8*	1570x280x417	2.6	230V/1ph	3300	64/58	40

\*LP HW at 82/71°C (Other outputs/coil specifications on request). \*\*Conditions: Distance to unit 5m, directional factor 2, equivalent absorption area 200m<sup>2</sup>. + Per phase. All S15 models supplied without controls. For control options, overall and fixing dimensions see Page 6.



### S10/S15 RECESSED SERIES

Both S10 and S15 ranges are available as recessed units allowing safe and simple installation in false ceiling voids.

In their recessed form S - range air curtains can cover openings up to 2.5m high (S10/R) or 3.7m high (S15/R), and 2m wide. Internally the air curtain components are identical to the standard surface mounted models and are supplied ready fitted in a robust steel mounting frame.

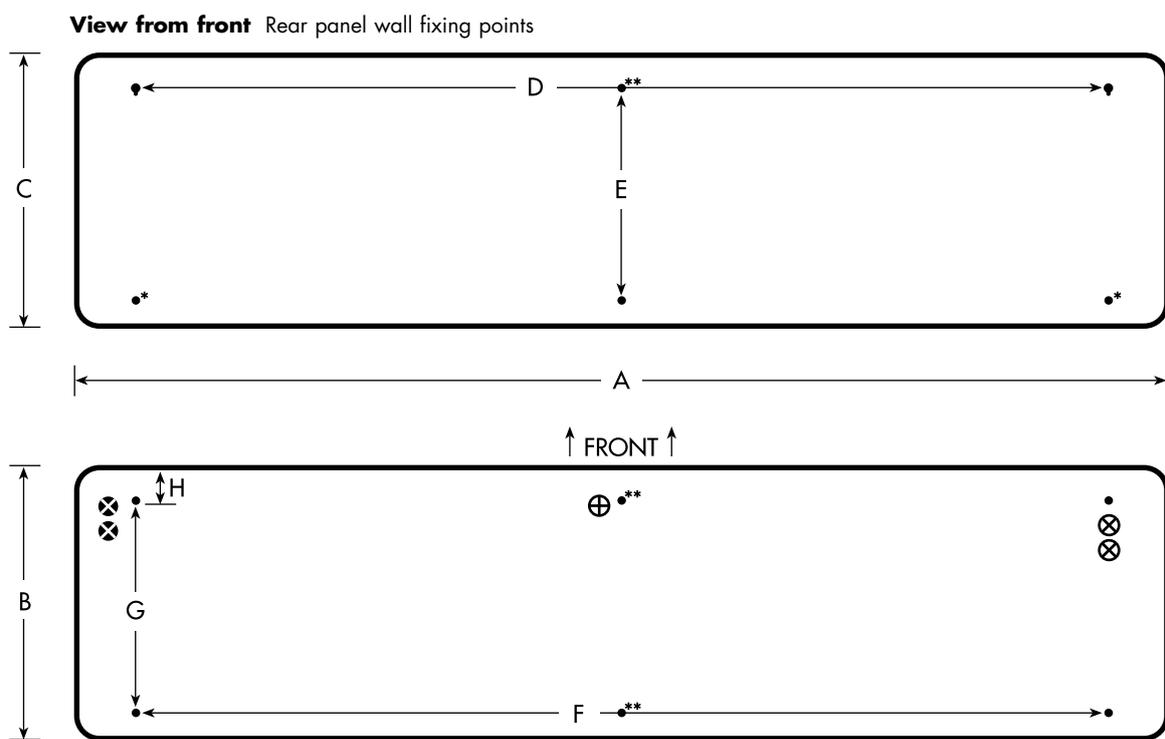
The frame can be suspended from a load bearing structure using drop rods or other suitable fixings. The Shearflow recessed system is quick and convenient to install as well as being very versatile. The supplied mounting frame ensures that the air curtain components are mounted securely and that safe clearances are maintained around the unit.

Each recessed unit comes complete with a flush fitting ceiling grille. No controls are supplied but any of Shearflow's remote control options may be used.

MODEL	HEAT OUTPUT kW	INPUT Amps	VOLTAGE	WEIGHT kg
S10-100AR	0	0.4	230V/1ph	21.3
S10-100ER	0/4.5/9	13.5+	400V/3ph	28.3
S10-100WR	0/8.4*	0.4	230V/1ph	27.3
S10-150AR	0	0.6	230V/1ph	29.6
S10-150ER	0/6.75/13.5	20+	400V/3ph	39.6
S10-150WR	0/13.2*	0.6	230V/1ph	37.1
S10-200AR	0	0.8	230V/1ph	39.1
S10-200ER	0/9/18	27+	400V/3ph	53.1
S10-200WR	0/16.8*	0.8	230V/1ph	51.1
S15-100AR	0	1.9	230V/1ph	40.8
S15-100ER	0/6/12	19+	400V/3ph	44.8
S15-100WR	0/18.6*	1.7	230V/1ph	43.8
S15-150AR	0	2.8	230V/1ph	53.2
S15-150ER	0/9/18	27+	400V/3ph	58.2
S15-150WR	0/27.8*	2.8	230V/1ph	57.2
S15-200AR	0	3.8	230V/1ph	78.9
S15-200ER	0/12/24	38+	400V/3ph	86.9
S15-200WR	0/37.2*	3.4	230V/1ph	84.9

\*LP HWV at 82/71°C (Other outputs/coil specifications on request). For airflow, volume and noise data, please refer to S10/S15 specification charts. (INB Actual noise levels will be influenced by the ceiling void and mounting method).

**Unit Dimensions**



**Plan view** Ceiling/drop rod mounts (S10 - 4x M6 Threaded / S15 - 4x M8 Threaded / S20 - 4x M10 Threaded).

	A	B	C	D	E	F	G	H
	Length	Depth	Height	Wall fix ctrs	Wall fix ctrs	Roof fix ctrs	Roof fix ctrs	Roof fix ctrs
S6-60 A/E/W	640	256	160	550	103	N/A - Use bracket set MB6		
S6-80 A/E/W	840	256	160	750	103	"		
S10-100 A/E/W	1064	300	200	823	135	823	125	140
S10-150 A/E/W	1564	300	200	1333	135	1333	125	140
S15-100 A/E/W	1070	417	280	880	218	776	290	87
S15-150 A/E/W	1570	417	280	1380	218	1276	290	87

All measurements in mm

- Key hole slots
- ⊕ Cable entry
- ⊗ Water connection (All W models)
- ⊗ S20 Alternative water connection

**For full installation dimensions please refer to Shearflow installation & operating manuals – available on request!**

**CONTROLS**



**SB**



**SBO**

Shearflow modular air curtains (except S6 series) are supplied without controls, allowing a wide variety of remote switching options and convenient location of the user controls. Typically air curtains are controlled manually using on/off and output switching. This method is suitable where the doorway is continually open or in frequent use. Shearflow provide a number of control options:

**Standard switch boxes**

Each SBO (water/ambient unit) or SB (electric unit) can be used to control single or multiple units and may be mounted up to 20m from the air curtains. These robust controls allow on/off, high/low fan speed and high/low output (electric versions only).

**Thermostatic control (RTE/TS2)**

Air curtains may be controlled thermostatically either to switch the unit or the heating elements. Thermostatic control is most suitable where the air curtain is also

being used to provide a heating service.

**Valve controls (VR20/25)**

A range of valve actuation devices is available. Supply to water units should always be isolated locally (isolator valves not supplied with units).

**Door activation (MDCT3)**

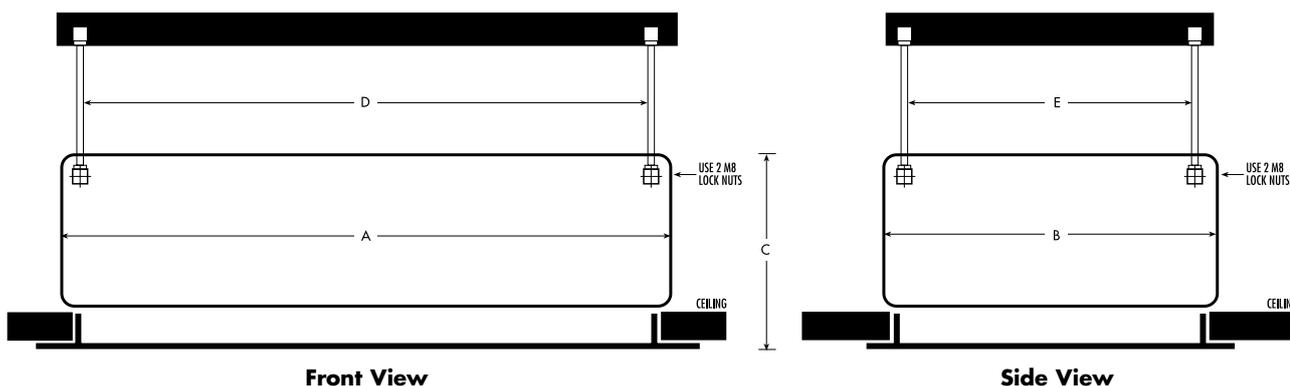
Air curtain activates when door is opened, using magnetic contacts. Adjustable fan overrun time.

**BMS activation (SBMS)**

Standard configuration allows 24v signal for on/off and fault signal, Summer/Winter running switch.

*Please contact Shearflow for further advice and full details of these control options.*

**Recessed Units**



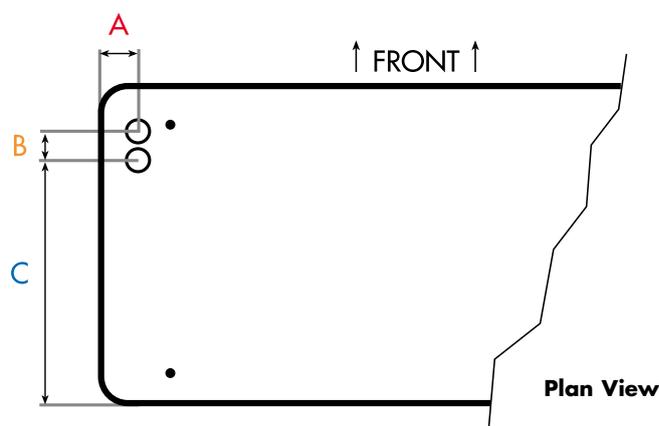
	A Length	B Depth	C Height	D Fixing centres	E Fixing centres
S10-100 A/E/W R	1174	410	310	1125	300
S10-150 A/E/W R	1674	410	310	1620	300
S10-200 A/E/W R	2238	410	310	2189	300
S15-100 A/E/W R	1186	580	390	1125	450
S15-150 A/E/W R	1686	580	390	1622	450
S15-200 A/E/W R	2258	580	390	2197	450

All measurements in mm

**Water Inlet Pipes**

	A	B	C
S6-60	32	33	143
S6-80	32	33	143
S10-100	36	30	205
S10-150	36	30	205
S15-100	50	45	262
S15-150	50	45	262

All measurements in mm



**TECHNICAL INFORMATION**

**Linking kit (JK)**

A standard wiring loom to connect modules (one kit per connection required).

**Ceiling mounting accessories**

- Ceiling brackets (ADPF1) for use with drop rods
- Full suspension set (ADPK) includes ceiling brackets and suspension arms

**Vertical mounting**

S10/S15 models may be vertically mounted using special mounting brackets (ambient/water units only).

**Special finishes**

Powder coating service in RAL colours, quotation available on request.

**Installation**

Full installation and wiring details available on request from our technical department.

**Safety**

Please refer to full installation and operating instructions before installing/using heaters. Shearflow products should only be installed by competent persons in accordance with local regulations and our installation instructions.

**Warranty**

All Shearflow products carry a 1 year warranty against manufacturing defects.

Our policy is one of continuous improvement the company therefore reserves the right to change specifications without notice.

All Shearflow products are CE marked and comply with European standards for safety and electro-magnetic compatibility.

Shearflow manufacturing facilities are ISO 14001 and ISO 9001 registered.

**IP rating**

S10 A/W (IP24)  
S10 E and S15 A/E/W (IP21)

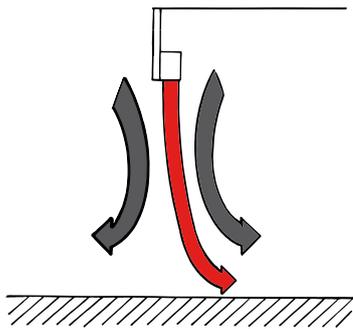
For further details, technical information after sales support, please contact our customer service department.



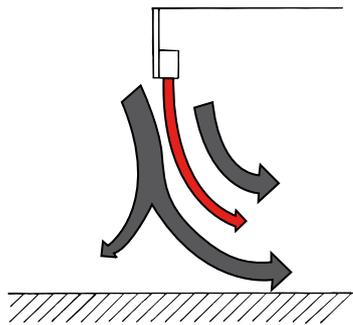
**Installation**

The air curtain should be directed so that a small part of the air stream goes out while the main part comes back into the room. Then the cold outdoor air follows the air curtain out again and the warm indoor air is retained in the building.

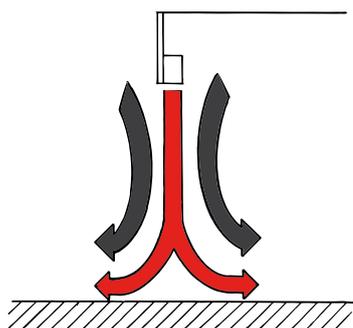
When installing recessed units it is important to allow sufficient supply airflow and an unobstructed outlet. Maintenance access should also be carefully considered.



**Correct air curtain**



**Weak air curtain which cannot cover the door height**



**Excessively strong air curtain gives energy loss**





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