

**Designed specifically for Operating Theatre & Clean Room environments**

#### Client Benefits:

- Removable blades for improved maintenance
- SteriTouch® antimicrobial protection as standard
- Quiet day-to-day operation
- Incorporating a 60 minute fire and hot smoke resistance intumescent screen
- Low maintenance
- Unique, patented balancing system

The patented VARI-centric® range of Air Pressure Stabilisers is purpose-designed for clean environments, such as Operating Theatres, Isolation Rooms, Pharmacies and Cleanrooms, to control airborne contamination by controlling pressure differentials between rooms.

The VARI-centric® balancing system accurately controls the differential air pressure between adjacent rooms, with the blades closing fully as soon as the pressure differential drops below the required level. This diverts the airflow to pass through an open door forcing back airborne contamination without the need to alter the air extract and supply.

Positive pressurisation of Operating Theatres to protect them from the ingress of infectious agents passing through the open doors, by providing high air volume rates, is a well established principle of hygiene and infection control, forming the fundamental principles on which Health Technical Memoranda HTM 03-01 & HTM 2025 are based.

In following the philosophy of HBN 4 Supplement 1: *Isolation facilities in acute settings*, Air Pressure Stabilisers are utilised to control the pressure differential between the Lobby and Isolation Room.

Within Cleanrooms they are used to facilitate the cascade of air pressures to maintain a sterile environment where facilities are conforming to ISO 14664-1 and BS 5295.

Apreco VARI-centric® Air Pressure Stabilisers and associated products are supplied as standard with SteriTouch®, utilising Silver technology – which is already used extensively within the healthcare sector as an excellent antimicrobial protection in conjunction with good hygiene practices. SteriTouch® is extremely effective in helping to protect against harmful bacteria including MRSA, E-coli, Salmonella and C-diff.



#### Product Data

##### Items:

*Air Pressure Stabiliser and Intumescent Screen (60 minute fire and hot smoke resistance to BS 1364-1:2000) to fit wall depths 120mm upwards.*

##### Materials:

*Aluminium frame with Carbon / Stainless Steel blades to suit application.*

##### Standard Finish:

*RAL9010 powder coated white SteriTouch®, antimicrobial protection as standard.*

##### Bearings:

*Stainless Steel ball roller type 'sealed for life' ball bearings.*

##### Pressure Control Range:

*3 - 35 Pa with a setting accuracy of +/- 1 Pa over the operating range.*

### Unit Selection

To obtain an indicative size of a APSX-FI unit use Table A below to calculate the total length of blade required, and divide it into sections of equal length using values from Table B.

*Example:*

Selecting a stabiliser capable of transferring 220 l/s (0.22m<sup>3</sup>/s) @ 14Pa.

Therefore 220 x 4.39 = 966 mm of total blade length.

Where: 220 (Volume of l/s)  
4.39 (Factor from Table A relating to 14Pa)

Table A (Factors)

Pa	Factor	Pa	Factor	Pa	Factor
3	9.49	15	4.25	35	2.78
5	7.35	20	3.68		
8	5.81	22	3.51		
10	5.20	25	3.29		
11	4.96	30	3.00		
14	4.39	32	2.91		

Table B (Blade Lengths in mm)

200	350	500
250	400	575
300	450	

Divide this total into equal lengths using one of the standard blade lengths from Table B. It is suggested that consideration should be made regarding any physical restrictions the building may impose before calculating the blade lengths of units.

Therefore 966 divided by 2 (blades) = 483mm.  
Round up to the nearest increment gives you 2 x 500 mm blades.

Where: 966 (Total blade length)  
500 (Standard blade length from Table B)

### Dimensions

No of Rows	Dim 'A'
1	210
2	275
3	425
4	550

