



# PD-Ai

## Air Shower Integrated AHU

**PBSC** provide installation, servicing, technical advice, product selection and demonstrations for clean controlled environments with **Innovation, Design** and **Quality** at the heart.

**PBSC** manufacture high quality clean room, high containment and material decontamination products. When you need areas and staff to be contamination free and protected from pathogens, you need dependable equipment which will maintain critical biosafety levels, achieve sterility and protect data reliability.

Complying with local and global regulations **PBSC's** products can be designed to meet your specific requirements. Over 30 years knowledge and competence within the specialist sectors, always going through extensive research and development and offering accurate assistance during project planning to consultants, architects and end users to deliver successful projects.



### Innovation

Incorporating your requirements to create product ranges to exceed expectations



### Design

Leading the way with pioneering design, ensuring customer requirements are achieved



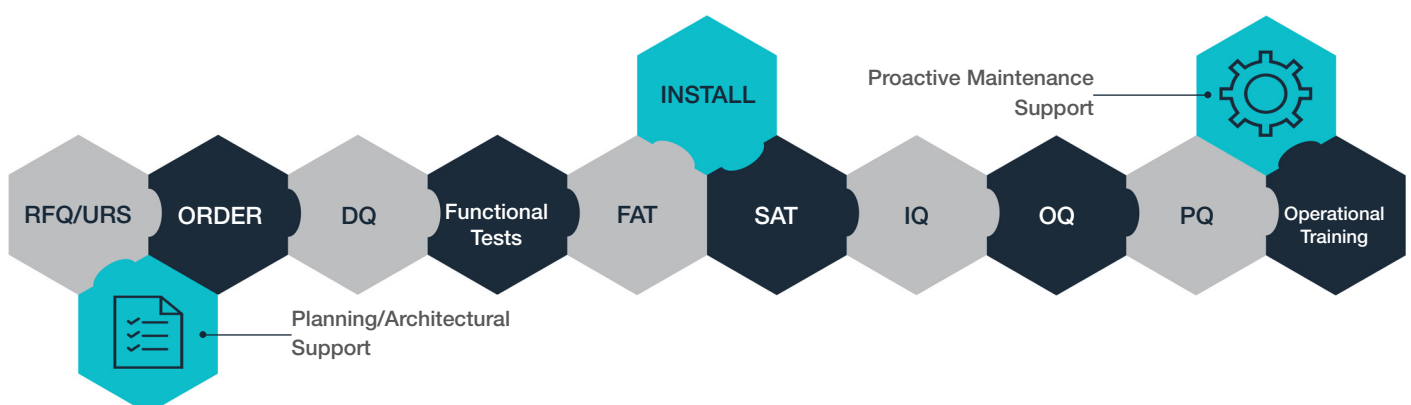
### Quality

Delivering high quality products for over 30 years, with rigorous testing and inspection

### PBSC is the accepted benchmark by which others are measured...

The search for innovative design, an eye for detail and advanced manufacturing techniques has seen **PBSC** gain a deserved reputation as the premier supplier within cleanroom environments.

Supporting the customer throughout the process continuing to meet the growing challenges and striving for continual improvement with our ISO 9001 QA processes independently audited and updated on a regular basis.





## Description



PBSC's personnel air shower comes in two designs, one with the integrated Air Handling Unit (AHU) on the top of the shower and with a separate AHU which has "Safe Change" filters. Both are designed to remove particles from the operative with high velocity jets of air. The integrated design is designed to remove non-hazardous particles on the entry to a controlled area. Please see PBSC's other air shower information if the particles are hazardous and a safe change on the filter housing is required.

The air shower is the latest design which has been continually improved over the years and features either a stainless steel or powder coated steel construction with interlocked float/toughened glass personnel doors. The shower has final assembly in place and requires no cranes or special access on site as the largest piece will fit through a single door way.

Maximum clear opening, the door design has been refined to provide a maximum clear entry width with the frame -finishing flush to the internal panels. (straight through design only).

There are 9 x adjustable stainless-steel nozzles on each of the two side walls in the shower, total of 18 nozzles in the shower.

As the operative enters the shower the PLC automatically turns on the high performance 24VDC LED light which is powered from the PLC (no mains power in the shower cubicle).

PBSC's design of the shower has the lowest nozzle only 21.5cm from the finish floor level and a low-level return on each wall panel to the AHU built into the top of the shower cubicle.

When the shower cycle is started by the operative, the shower controls lock the doors and run the fans to provide the air flow below. Note the shower has a low power usage with highly efficient fan, the total power requirement is only 10Amps @ 110 – 230V, 50 to 60HZ, 1 Ph.

Clean Filter – 150 Pa

32m/s at 5cm from the nozzles

Dirty Filter – 300 Pa

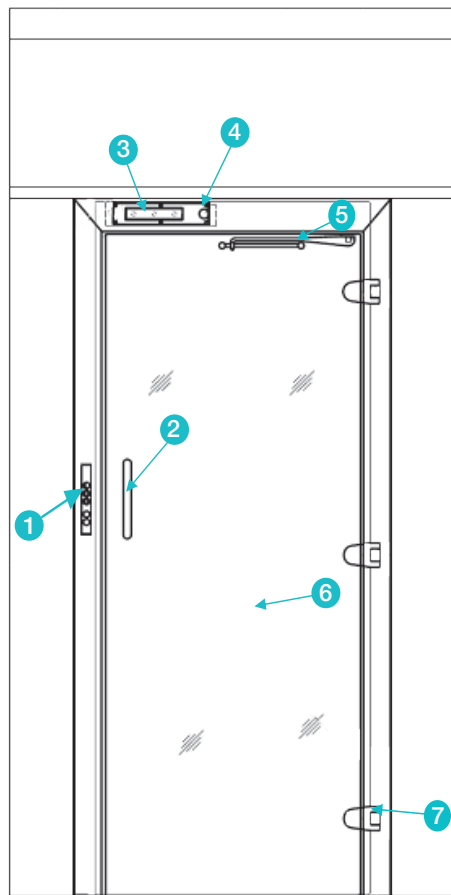
28 m/s at 5cm from the nozzles

The system is available with a range of control panel options, the standard is a Siemens Logo, but it can be provided with an Allen Bradley PLC or a Siemens S1200 PLC.

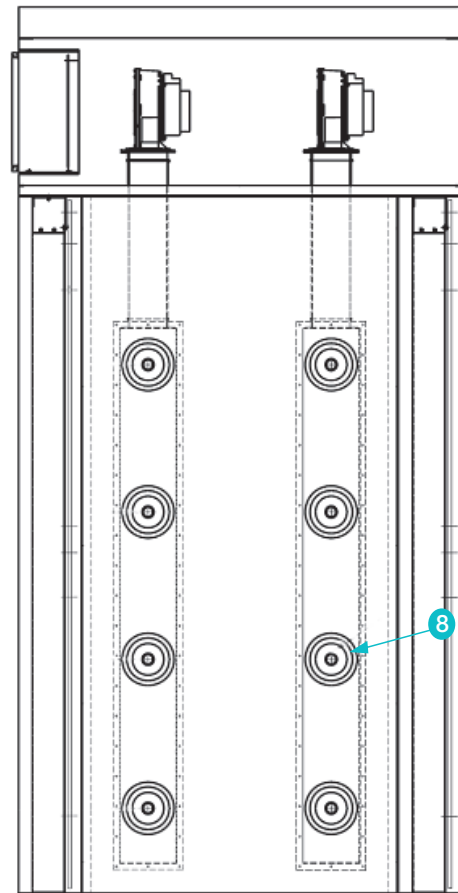
The S1200 PLC comes with a touch screen in the shower (or on the PLC cabinet) to show the shower status, alarms can be seen and cleared from the screen.



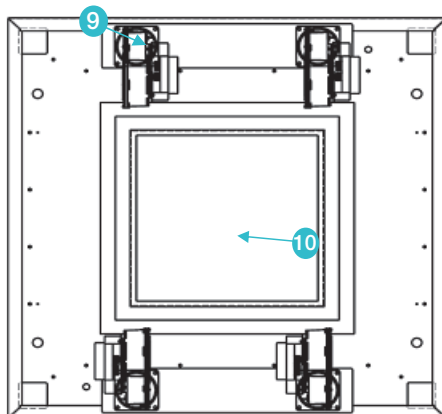
Front Elevation



Side View



Plan View



1. Door lock indicator light and emergency override push buttons
2. Stainless steel "D" handles
3. Maglock
4. Proximity Switch
5. Door closure mechanism
6. Thick clear toughened glass
7. Stainless steel hinges without visible fixings
8. Air nozzle Jets
9. Ceiling mounted return air hepa filter
10. Supply and return air spigots

## Options



- Right Angles Design
- Air knife (requires S1200 PLC upgrade)
- Automated Doors
- S1200 PLC upgrade
- 304 or 316 stainless steel construction





## Key Features



- PLC controlled internal 24VDC LED light
- High velocity from nozzles
- Adjustable stainless-steel nozzle, no performance loss with different positions
- Efficient power use, only 10A, 1Ph required (110 or 230V)
- Frameless glass door sets – maximum clear opening

- ① Flush Maglock
- ② Shower Controls
- ③ Adjustable air supply nozzle
- ④ PBSC concealed closer system
- ⑤ PBSC solid stainless-steel hinge
- ⑥ Tinted toughened frameless glass
- ⑦ Stainless-steel pull handles



## PBSC Staying in Control of Controlled Environments

Established in 1987 PBSC has become one of the leading manufacturers of clean room, high containment and material decontamination products throughout the world and having the extensive product range and bespoke designs and assembly capabilities can meet customers needs.

Providing high quality products and services to the pharmaceutical, medical research, high containment and hospital sectors, offering quick and accurate assistance during project planning to consultants, architects and end users.

PBSC have agents and representatives in most countries to provide excellent local support and logistical services to make sure your products arrive on time.

Products include;

- Clean Room Doors
- Pneumatic Inflatable Seal /Airtight Door Sets
- Mechanical Seal / Airtight Doors
- Material Decontamination Chambers
- Transfer Hatches / Cleanroom Pass Through
- Fogging Showers / Mist Showers
- Air Showers

[www.pbsc.co.uk](http://www.pbsc.co.uk)  
[www.pbsc-inc.com](http://www.pbsc-inc.com)

PD-Ai0920

PBSC reserve the right to introduce changes in performance, configuration and technology, dimension, weights and materials in the course of technical progress. Images may not be accurate