

# AEU – Aerolys supply Air Handling Unit (CE)



## Overview

Halton's range of **Aerolys** AEU supply air handling units is designed as an integrated solution and complement **PolluStop** exhaust air handling units to comply with the highest hygiene and efficiency requirements inside professional kitchens.

**Aerolys** units are equipped with the “Urban Pack” and including high efficiency carbon impregnated bag filters and **Halton SafeGuard Risk** UVGI (Ultraviolet Germicidal Irradiation) treatment. The bag filters virtually eliminate the gaseous and particulate pollutants. The UVGI lamps neutralize the incoming viruses and bacteria and also mitigates the known risk of them growing on the coils of the unit as well as mould.

Replacing the exhaust air is not merely a question of blowing in fresh and healthy air. Hygiene can rapidly become compromised if the correct balance between supply and exhaust is NOT kept at all times and in each area of the kitchen. When energy-saving technology such as **M.A.R.V.E.L.** is used, this risk is even greater. When demand ventilation is used, the exhaust airflow rates are adjusted continuously depending on the cooking activity. **Aerolys** is fully compatible with **M.A.R.V.E.L.** and automatically tracks airflow ensuring the space balance is maintained.

**Aerolys** units meet the most stringent hygiene requirements enabling chefs, and their team to benefit from the healthiest fresh air and contributes directly to the highest operational safety. When combined with **PolluStop** air handling units and **M.A.R.V.E.L.**, restaurants can then be located wherever you choose i.e. where they are of most value while benefiting from unmatched energy savings, and without risk of neighbourhood complaint.

- **Eurovent** accredited
- Specially developed to establish restaurants in dense urban areas or when the quality of the incoming air is required to meet high standards (hospitals, care homes, public buildings etc).

- Wide range of units, from 3,240 to 38,880 m<sup>3</sup>/h (0.9 to 10.8 m<sup>3</sup>/s)
- Can work in conjunction with the energy recovery coil incorporated in a **PolluStop** unit, offering air-to-air heat transfer.
- Options for low temperature hot water, indirect gas or electric heating facilities.
- Options for chilled water or direct expansion (dx) cooling facilities.
- Attenuators for reducing in-duct noise levels can be provided.
- Features the “Urban Pack” which is a combination of ultra high-efficiency Panel filters, impregnated long-pocket Bag filters and **Halton SafeGuard Risk** UVGI treatment.
- **Halton SafeGuard Risk** UVGI neutralizes the outside viruses and bacteria .
- The combination works to ensure the cleanest and safest makeup air for the kitchen’s processes and the staff.
- Compatible with **M.A.R.V.E.L.** energy saving technology.
- Equipped with **Halton Connect** IoT (Internet of Things platform) platform with advanced 24/7 distant monitoring capabilities.
- Highest value of ownership thanks to **Halton Connect & Care** smart services offering.
- External insulated panelling available in 4 colour options (dark blue, light grey, dark grey or white).
- Acoustic and thermal insulation built into the unit’s double-skin panels.
- External installation possible. There are a number of additional service possibilities, such as variable frequency drive and other monitoring systems.
- Good thermal comfort guaranteed by complete and fully compatible packages: supply temperature controls, airflow management dampers and kitchen specific air diffusers.

## More about the main embedded technologies



Halton Connect

Halton SafeGuard  
Risk UVGI

## Recommended combinations with other products or technologies

To further enhance the performance of your kitchen, whether talking about the energy savings, safety, Indoor Environment Quality (IEQ) or the kitchen’s impact on the environment, here are couple of combinations with other Halton products or technologies we recommend you.



### Further increase the energy savings and improve the working conditions of the staff

Go for [M.A.R.V.E.L.](#) energy saving technology for kitchens ventilation



### Establish your kitchen wherever you chose and increase once more the energy savings

Go for [PolluStop PEU](#) exhaust Air Handling Units with pollution control and heat recovery



### Optimize the ductwork cleaning costs and further improve your safety

Go for KGS [grease deposition level monitoring system](#) for ductwork

## About Halton Connect & Care



[Halton Connect](#) is a state-of-the-art IoT (Internet of Things) platform whose core is an advanced cloud-based portal. It enables 24/7 remote monitoring of the solutions designed by Halton. It allows access to important and useful information along with powerful data analytics to the end users. It also provides crucial information to our engineers. In return, they can remotely and safely control all systems and their settings when required.

This digital “two directions” technology opens the way to Premium Services that are vital to keep the performance of the systems and technologies at the initial design level and during the entire lifecycle. Even better! They enable continuous optimisation of your systems, resulting in even lower operating costs.

[Halton Connect for commercial kitchen ventilation](#)

## Videos

Halton range of exhaust and supply Air Handling Units for commercial kitchens

Discover the key points and main benefits of Halton's AHUs for an efficient and safe ventilation of commercial kitchens:

- PolluStop exhaust units with advanced pollution control;
- Aerolys supply units with air quality control;
- Extenso exhaust and supply units that combine the benefits of both PolluStop and Aerolys.

## About Eurovent certificate



[www.eurovent-certification.com](http://www.eurovent-certification.com)

Halton Foodservice participates in the Eurovent Certified Programme for Halton AHU range of exhaust and supply units (PolluStop PEU, Aerolys AEU and Extenso XEU). Diploma: 17.02.277.

Check on-going validity of certificate: [www.eurovent-certification.com](http://www.eurovent-certification.com)

## Ranking of Halton Aerolys (AEU), PolluStop (PEU) and Extenso (XEU) units

As part of this programme, the model box of Halton Air Handling Units has been tested according to 6 targets. The scores Halton AHUs reached on each target are detailed below.



Casing strength (CS) – **Class D1(R\*)**  
Max Deflection CS  $\leq 4$  mm



Thermal Transmittance (TT) – **Class T4**  
Max transmittance  $1,4 < TT \leq 2,0$  W/m<sup>2</sup> K



Thermal Bridging Factor (TBF) – **Class TB4**  
Max Bridging  $0,30 < TBF \leq 0,45$



Casing Air Leakage (CAL400) – **Class L3(R\*)**  
Max leakage  $0,44 < CAL400 \leq 1,32$  l/s m<sup>2</sup>



Casing Air Leakage (CAL700) – **Class L3(R\*)**

Max leakage  $0,63 < \text{CAL700} \leq 1,9 \text{ l/s m}^2$

G1-F5 F6 F7 F8 **F9**

Filter Bypass Leakage (FBL) – **Class F9(R\*)**

Max bypass FBL  $\leq 0,5\%$

More about the [targets and what they mean](#).

\* R stands for Real Unit (M stands for Model Box).

## Acoustical insulation [dB]

Frequency [Hz]	125	250	500	1000	2000	4000	8000
Insulation [dB]	13	17	31	32	33	36	42