# **KVD**

# Hood for dishwashing areas with supply air

• For dishwashers • Integrated low velocity makeup air



Declaration(s) and certification(s)



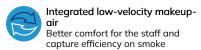
**EPD** declarations





# Main technologies and options







## Recommended combinations







#### **Applications**

Halton steam hoods are suitable for dishwashing areas and, in general, all applications where grease filtration is not the primary requirement.

Fully compatible with *M.A.R.V.E.L.* airflow and energy optimization technology, the steam hoods perfectly complement Halton's Capture<sup>™</sup> Jet hoods and ventilated ceilings in cooking areas, especially for projects that are subject to LEED (1), BREEAM (2), DGNB (3), RE2020 (4), or other similar programs or certifications.

#### About dishwashing areas

The dishwashing areas are often considered as secondary. And yet, if some provisions are not taken, the working conditions inside can easily become a nightmare and hygiene of the kitchenware after cleaning can also be compromised.

Dishwashing areas are indeed characterised by important heat and humidity loads, not only coming from the washing equipment but also from the clean kitchenware that generally continue to cool down and dry in the space. Germs and bacteria coming from guests' plates and trays as well as detergent constitutes additional pollutlants. Noise of the equipment should also be taken into account.

#### Description

KVD hoods are designed to remove the steam released by dishwashing equipment. They are equipped with specially configured deflectors to separate the moisture from the extracted air.

KVD hoods are also equipped with a low-velocity makeup air built into the front face.

#### Main features and benefits

• Construction compliant with NF EN 16282-2 (5).

- To ensure full compatibility with a M.A.R.V.E.L. airflow and energy optimization system that may be used in the cooking areas, the hood can be equipped with a ABD damper.
- This configuration ensures a constant exhaust airflow, regardless of the kitchen's overall exhaust demands. It also supports operation at two airflow levels based on the usage of the dishwashing equipment.
- Front Capture Jet™ on KVD as an option for a better steam capture.
- Better hygiene thanks to less condensation in the extract ducts
- Deflectors removable without tool, of max 500 mm width to be easy to clean in a dishwasher.
- Surface LED light fitting (IP54, IK10). DALI compatible power supply as an option.
- Better capture efficiency and comfort for the staff thanks to a low-velocity diffuser built into the front.
- Quick and easy commissioning. Hoods delivered "ready to install", with all accessories included, such as light fitting, T.A.B.<sup>TM</sup> airflow measurement taps, and dampers for quick balancing on-site.
- Sturdier and easier to clean (less parts and fewer joints).
   Stainless steel construction.

# A perfect match with Halton HSC hygienic suspended ceiling



Halton's hygienic and rigid suspended ceiling (HSC) is designed to provide high cleanability and long-term stability to the entire kitchen, diswashing area and surrounding spaces. It stands out for its materials and design features that significantly limit the build-up of potential contaminants on its surface, thereby meeting the highest hygiene requirements while offering unique architectural qualities.

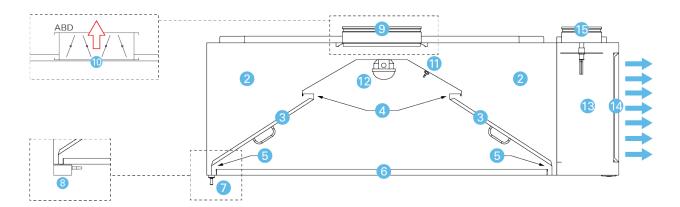
Its acoustic version is particularly suitable for dishwashing areas that face real challenges in terms of acoustic comfort.

HSC ceilings perfectly integrates flush Halton's low velocity makeup air diffusers (LFUs) or isolated extraction boxes (KBOs), as well as Halton Skyline light fittings.

HSC ceilings also allow for the integration of third parties services such as emergency signs, smoke detectors, speakers, and more - either directly from the factory or on-site thanks to pre cut outs.



## Construction

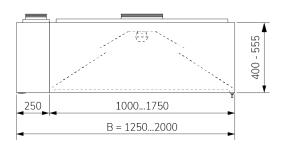


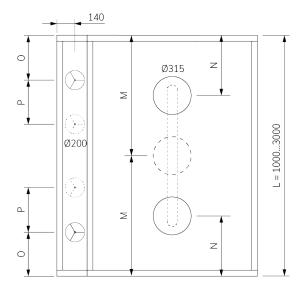
- Exhaust plenum construted from stainless steel AISI 304 (1 mm thick) and galvanized steel (top).
- 2. Removable deflectors (one being equipped with handles).
- 3. Upper baffle chicane.
- 4. Bottom baffle chicane.
- 5. Condense channel.
- 6. Condensates drain.
- 7. Collection tray as an option.
- 8. Exhaust connection(s) and sliding damper(s).

- When the hood is connected to a ductwork serving other hoods equipped with M.A.R.V.E.L. energy optimization technology (MRV), the sliding damper is replaced by ABD automated slim balancing damper or alternatively with a Constant Air Volume damper.
- 10. T.A.B.™ (Testing And Balancing) pressure port(s) for quick airflow calculation during ductwork balancing operations.
- 11. LED light fitting 20 or 36W, IP54, IK10.
- 12. Makeup air plenum.
- Perforated front face with honeycomb structure for a low velocity makeup air.
- 14. Supply air connection and adjustment damper (type MSM).



# **Dimensions**





[mm]	1x 1	2x 🛨	3x <b>1</b>	2x 🛨	4× <u>▼</u>
L	М	N	M, N	0	O, P
1000	L/2	-	-		
1500	L/2	375	-	450	-
2000	L/2	500	-	450	450, 500
2500	-	500	L/2, 500	450	450, 500
3000	-	500	L/2, 500	-	450, 500

- Above 3100 mm, hoods are an assembly of separate sections to make transportation and site handling easier.
   Number of connections to be determined based on the sections length and on the calculation of the airflow rates.
- Rectangular connections on request.



# **Product Environmental Impact**

#### Green Steel Label



#### Manufactured with decarbonized stainless steel (option)

Halton's innovations are recognized for significantly reducing its clients' carbon footprint from the very first day of operation and throughout the product's lifecycle. Our efforts to reduce the environmental impact of our products start from the moment they are manufactured. Solar energy, geothermal energy, optimization of raw material usage, and waste recovery are just some of the measures Halton implements at its production sites.

Halton is taking things even further! Gradually, and in Europe first, Halton is offering the option to manufacture Capture Jet™ hoods using decarbonized stainless steel.

A further 60% reduction in  $CO_2$  emissions! This is the average reduction, with equal mechanical properties, in the environmental impact of manufacturing this green steel. This represents 850 kg less  $CO_2$ , or the equivalent of driving 4,595 km in a conventional car, flying 5,600 km on a medium-haul flight, or traveling 423,636 km by the french high-speed train (TGV) (1).

(1) According to the ADEME (The French Agency for Ecological Transition) resource site which popularizes and promotes environmental data.

## **Environmental Product Declaration (EPD)**



An Environmental Product Declaration (EPD) is an evaluation of the **environmental impact** of a product or system throughout its entire life cycle, from the raw materials extraction, through to its production, transport and the 'use phase' to its end of life. It includes the recycling or final disposal of the materials composing it. EPDs are based on scientific grounds and standardized methods, in order to provide **unbiased**, **reliable**, **and comparable assessments**.

Halton's EPDs comply with several standards:

- ISO EN 14025, which defines the principles and procedures for Type III declarations, i.e. declarations that are **checked by independent third parties** to guarantee the completeness and conformance to standards. It also establishes the use of the ISO 14040 series in the development of the declarations.
- ISO EN 14040, which defines the principles and framework for Life Cycle Assessment (LCA) that enable assessing the environmental impact of a
  product, process, or service.
- EN 15804, which defines the Product Category Rules (PCR part A) applicable to construction products as part of type III declarations.

Complementary Product Category Rules (PCR part B) also apply to the **sub-category of ventilation systems for commercial kitchens**. PCR part B are defined by the European verification organizations, with agreements for mutual recognition.

An EPD consists of two key documents:

- The underlying LCA report, a systematic and comprehensive summary of the LCA project to support the third-party verifier when verifying the EPD. This report is not part of the public communication.
- A Public EPD document that provides the LCA results.

Halton's EPDs are verified and registered by and on the <u>IBU</u> (Institut Bauen und Umwelt) platform or <u>EPD Hub</u>. They are also available on the <u>ECO Platform</u>.

EPDs are available for the Capture Jet™ hoods KVF, KVI, UVF, UVI, CMW-FMOD and CMW-IMOD, as well as for the steam hoods KVV and KVD.

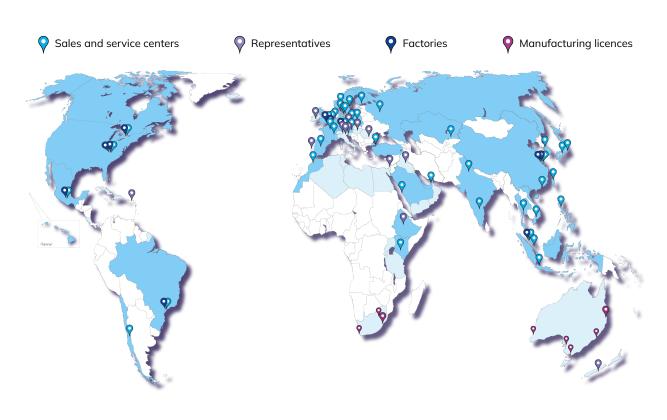
An additional EPD is also available for the UVF or UVI hood equipped with the M.A.R.V.E.L. Demand-Controlled Ventilation (DCV) system. It allows for the assessment of M.A.R.V.E.L.'s additional environmental impact on the KVF, KVI, CMW-FMOD, and CMW-IMOD models.







### Halton Manufacturing and Sales Facilities in the world



### Halton Foodservice partnerships







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