

Halton GDD – Grille for circular duct installation



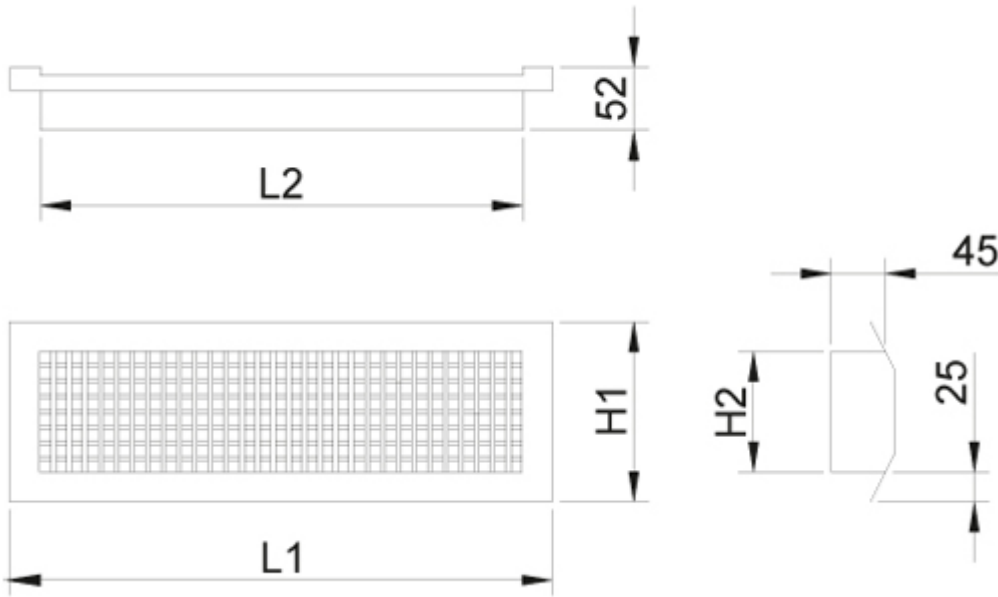
Overview

- Horizontal supply, for circular duct installations
- For cooling and heating applications; suitable also for exhaust
- Adjustable vertical front vanes, adjustable horizontal rear vanes
- Steel construction
- Visible screw fastening

Product models and accessories

- Model with wax-bulb actuator for directing the supply air jet in heating operation
- Opposite blade damper for airflow control

Dimensions



L x H	L1	L2	H1	H2	Duct size
415 x 72	450	400	107	57	160 to 400
495 x 72	530	480	107	57	160 to 400
575 x 72	610	560	107	57	160 to 400
415 x 115	450	400	150	100	315 to 630
495 x 115	530	480	150	100	315 to 630
575 x 115	610	560	150	100	315 to 630
495 x 155	530	480	190	140	630 to 1500
575 x 155	610	560	190	140	630 to 1500
495 x 195	530	480	230	180	800 to 1800
575 x 195	610	560	230	180	800 to 1800

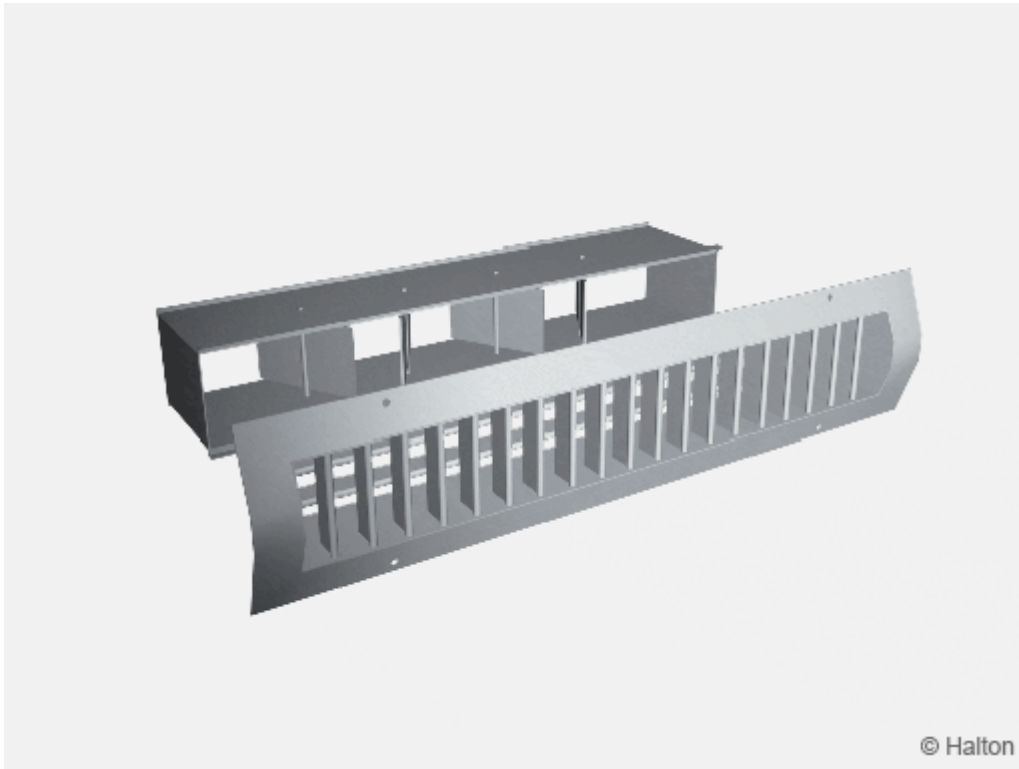
Total depth with OG/GDD (airflow adjustment damper) = 52 mm + 45 mm

The free area of the Halton GDD is 62 %.

Material

Part	Material	Finishing	Note
Frame	Steel	Polyester-painted Grey (RAL 7004/30% gloss)	Special colours and epoxy-painting (100%) available
Vanes	Steel	Polyester-painted Grey (RAL 7004/30% gloss)	Special colours and epoxy-painting (100%) available

Accessories



Accessory	Code	Description
Airflow adjustment damper	OG	Aluminium opposite blade damper for flow adjustment
Wax-bulb actuator	MT	The actuator controls the vane angle depending on the supply air temperature

Wax-bulb actuator

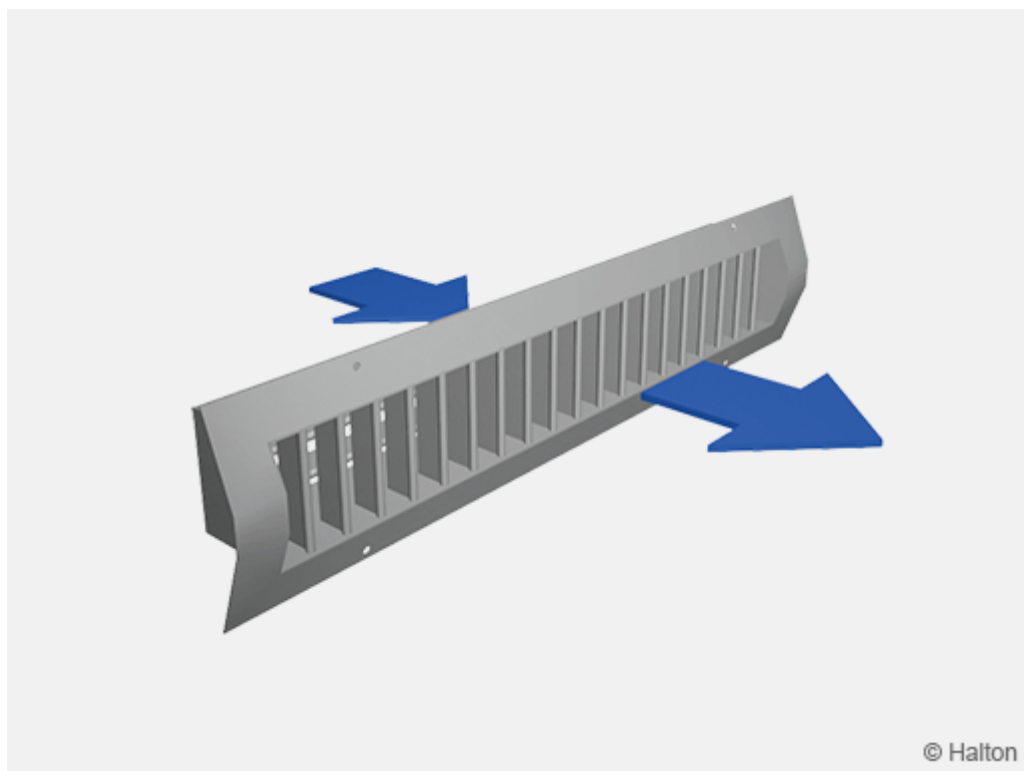
In applications where both heating and cooling are provided, the air pattern can be changed automatically via a wax-bulb actuator.

The wax-bulb actuator alters the angles of the horizontal rear vane depending on the supply air temperature. Neither auxiliary energy nor a dedicated control system are needed.

When cold air is supplied at a temperature up to 18°C the supply jet is horizontal. The vane angle is 0°. As the supply air temperature rises, the actuator piston progressively changes the angle of the rear vanes in order to direct the supply air jet downwards. The vane angle reaches 45° in 10 to 20 minutes.

No maintenance is required for the wax-bulb actuator.

Function



Supply air is supplied into the space with either horizontal and/or vertical deflection. The supply air mixes with room air in front of the grille.

The supply air is directed horizontally with the adjustable rear vanes.

The length and form of the flow pattern can be adjusted by turning the vertical vanes.

The rear vane angle can also be controlled by an optional wax-bulb actuator.

Installation

The grille is connected directly to the duct. For the size of the installation hole, see **Dimensions** page (LxH).

The grille is fastened to the duct with visible screws in pre-drilled holes in the frame.

Adjustment

The airflow rate can be adjusted when the grille is installed with the airflow adjustment damper OG/GDD.

The airflow is adjusted by turning the damper blades behind the grille with a screwdriver

Servicing

Remove the grille by unscrewing the visible fixing screws.

Clean the parts by wiping them with a damp cloth.

Push the grille back into place and screw in the fixing screws.

Specification

The grille is made of steel polyester-painted with grey (RAL 7004) standard colour.
The grille has adjustable horizontal rear and vertical front vanes.

The frame comprises a sealing gasket.

The grille is fastened directly to the circular duct with visible screws.

The grille can be installed with an airflow adjustment damper.

The grille has removable for cleaning purposes and to provide access to the circular duct.

Optionally

The supply air jet is controlled according to supply air temperature by a wax-bulb actuator.

Order code

GDD-L-H; CO-AC-ZT

L = Length (mm)

415, 495, 575

H = Height (mm)

72, 115, 155, 195

Other options and accessories

CO = Colour

G Grey (RAL 7004)

SW White (RAL 9003)

X Special colour (RAL xxxx)

AC = Accessories

MT Wax-bulb actuator

ZT = Tailored product

N No

Y Yes (ETO)

Sub products

OG Opposed blade damper (GDD)

Code example

GDD-415-72, CO=G, ZT=N