# **Canal Plus Polyester**

Made of 4 mm thick fibreglass-reinforced polyester, provided with topcoat. Waterproof, single-piece. Provided on the top side with a integrated black/natural coloured anodized aluminium profile, height 31.5 mm, that serves as a frame for the grille and for the anchoring of the duct in the subfloor.

- Insulated R 2.5 / K 0.4 w/(m².K): inside coating of 40 mm polyurethane foam.
- Insulated R 3.0 / K 0.33 w/(m<sup>2</sup>.K): inside coating of 50 mm polyurethane foam.
- Insulated R 4.0 / K 0.25 w/(m<sup>2</sup>.K): inside coating of 80 mm polyurethane foam.

Polyurethane foam: (32 kg/m³); in accordance to ASTM 1692. Finish: dark grey polyethylene foam of 5 mm thick, in accordance to DIN 4102-1. class B2.

Canal Plus is provided as standard with a chipboard cover, thickness 1.5 cm, with pre-assembled spacer sleeves (meter load max. 90 kg).

#### Feet

Feet of electrolytic galvanized and dark grey coated (RAL 7024) 1.5 mm steel plate, provided with upright lips for fixing the separation wall and heat exchanger.

#### **Brackets**

Brackets of electrolytic galvanized and dark grey coated (RAL 7024) 1 mm steel plate included. These are clicked on the heat exchanger and give extra support for the separation wall. On both ends they function as a seal between the duct and separation wall.

### Separation wall

Black finished polyurethane wall in one piece, thickness 25 mm, slid in between the vertical upright lips of the feet.

## **Canal Plus Metal**

Grey lacquered sendzimir galvanized steel plate of 0.75 mm thick. Easy to assemble and fit into the floor. Supplied with holes for easy pipe connection.

- Not insulated K-value = 8 w/(m².K)
- R-value = 0.12 m<sup>2</sup>K/w Insulated K-value = 1.73w/(m<sup>2</sup>.K) R-value = 0.58 m<sup>2</sup>K/w

Inside coating of 10 mm antracite coloured polyurethane foam. Auto-extinctive in accordance to DIN 4102-1, class B2

#### Aluminium frames for metal ducts

Reinforced L-profile. Heigth: 31.5 mm x width: 24 mm. Versions: anodized aluminium in natural colour / dark brown / black / brass colour / lacquered in a scratch resistant epoxy-polyester powder, sprayed electrostatically and baked at a temperature of 200°C. UV resistant due to ASTM G53.

With attaching pieces and removable distant pieces. Separate frames are delivered with removable pieces to avoid deformation of the frame during installation or floor construction.

#### **Brackets**

Brackets are included and made of sendzimir galvanized steel plate of 1 mm; supplied to be installed with a maximum intermediate distance of 1.05 m.

## Seperation walls

Double profiled, electrolytic galvanized steel plate of 0.7 mm thick; lacquered grey (RAL 7011). To be attached to the lips of the brackets; if wall mounted at one side. If freestanding at both sides. The separating wall has to be fitted as close as possible to the grille.

## **Grilles**

#### Roll-up wooden grilles

Crossways positioned wooden slats (12 x 24.5 mm up to grille width with 40.8 cm; 12 x 32 mm from grille width 44.8 cm) with 20 mm space between. The wood slats are interconnected by a galvanized steel spring and fixed in the correct distance by dark brow synthetic pieces.

Free air flow 63%.

Versions: oak / beech / merbau / oak varnished / beech varnished / merbau varnished.

### Roll-up Designo wooden grilles

Crossways positioned wooden slats (12 x 24.5 mm up to grille width with 40.8 cm; 12 x 32 mm from grille width 44.8 cm) with 13 mm space between. The wood slats are interconnected by a galvanized steel spring and fixed in the correct distance by natural coloured aluminium pieces. Free air flow 52%.

Versions: oak / beech / merbau /oak varnished / beech varnished / merbau varnished.

#### Roll-up aluminium grilles

Crossways positioned aluminium slats (5x 23 mm) with 11 mm space between.

The slats are interconnected by a galvanized steel spring and fixed in the correct distance by aluminium pieces in the same colour.

Free air flow 70%.

Versions: anodized aluminium natural colour / dark brown / black / brass colour.

### Rigid aluminium grilles

Profiled slats placed lengthways (5 x 16 mm) with 15 mm space between, mechanically connected with two crossways supporting slats (5 x 27 mm) with maximum 30.5 cm space between. Free air flow 75%.

Versions: anodized aluminium natural colour / dark brown / black / brass colour / lacquered in a scratch resistant epoxy-polyester powder, sprayed electrostatically and baked at a temperature of 200°C. UV resistant due to ASTM G53.

### Designo rigid aluminium grilles

Profiled slats placed lengthways (5 x 16 mm) with 8 mm space between, mechanically connected with two crossways supporting slats (5 x 27 mm) with maximum 30.5 cm space between. Free air flow 62.5%.

Versions: anodized aluminium natural coloured / dark brown / black / brass coloured / lacquered in a scratch resistant epoxy-polyester powder, sprayed electrostatically and baked at a temperature of 200°C. UV resistant due to ASTM G53.

#### Roll-up stainless steel grilles

Roll-up grille in rust proof high-grade steel V2A 1.4301. Crossways positioned stainless steel slats (8 x 18 mm) with 12 mm space between. The slats are interconnected by a metal spring, with a light grey synthetic cover.

Free air flow 60%

With matching insert frame in anodized aluminium with a natural colour, including black rubber strip to hide the bottom side of the frame, and to avoid contact noises.

## Heat exchanger

The heat exchanger is manufactured from round, seamless circulation tubes of pure red copper, with pure aluminium fins and two brass collectors for left or right 1/2" same end connection. Straight air vent 1/8" and drain cock 1/2" are included. Pressure test: 20 bar. Working pressure: 10 bar. Mounting with Canal Compact and

Working pressure: 10 bar.
Mounting with Canal Compact and
Canal Plus: on feet on the bottom end
of the polyester duct.
Wall mounting for Canal Plus metal
ducts.

Mounting in a pre-formed duct: wall mounting / central mounting on feet. Heat exchanger electrostaticaly lacquered with anthracite grey epoxy-polyester RAL 7024, gloss degree 70%.

Manufacturer: Jaga Type: Canal Compact Canal Plus polyester duct Canal Plus metal duct

Outputs meet standard EN442.

## **Options**

- Complete connection sets with flexible connection or with extended connection for remote control in the duct or at distance.
- Flexible connections from stainless steel
- Cover strip: to hide the bottom side of the frame and to avoid contact noises
- Extended air vent for heat exchanger type 10 / 15 / 20.

### How to install

The building services engineer chooses the heating elements considering the following conditions:

- a heat output calculation according to the standard.
- The required heat outputs will be determined by the tables and the fitting instruction of the building services engineer of Canal Compact / Canal Plus.
- The heat exchangers will be connected to a two pipe system, with a same end connection. The flow valve always has to be fitted to the top connection of the heat exchanger.
- The supply pipe is brought in on the side or end of the duct: the specially designed connection set with flexible stainless steel connections with white Jaga thermostatic head with remote control / chrome-white Jaga thermostatic head in the duct and sensor at distance / white Jaga thermostatic head /white Jaga manual head / chrome-white Jaga thermostatic head can be connected to plastic central heating service pipes/ RPE-ALU tube / copper tube / steel pipe. (Flexible connection from highest quality stainless steel, with welded connections and 100% diffusionproofed. Length 60 cm, stretches to ± 1 meter. Don't squeeze in small bends.)
- The supply pipe is brought in on the side of the duct: the specially designed connection set with extended connection from RPE/ALU tube ø16/2 with white Jaga thermostatic head with remote control / with white Jaga thermostatic head above in the duct / with white manual head above the duct can be connected to plastic central heating service pipes / RPE-ALU tube / copper tube / steel pipe.
- The supply pipe is brought in on the side of the duct: the specially designed connection set with white Jaga thermostatic head with remote control / with chrome-white Jaga thermostatic head in the duct and sensor at distance / with white Jaga thermostatic head / with white Jaga manual head / with chrome-white Jaga thermostatic head can be connected to plastic central heating service pipes / RPE-ALU tube / copper tube / steel pipe.
- In order to totally block off the cold draughts from the window it is preferable that the heat exchanger covers the full length of the window. Concerning the distance in between the window and the Canal Plus allow extra space for curtains, which under no circumstances should hang over the Canal Plus. The heat exchanger must always be kept accessible for maintenance purposes.