Neolia® Ventilation Grid

Designer solution fully compliant with gas regulations





BUILDING SANITARY ENVIRONMENT



BUILDING SOLUTIONS

Specialising in plastics solutions for building and public works, Nicoll offers the most comprehensive range of PVC products for rainwater drainage, roofline cladding and ventilation on the market. Nicoll's solutions are fully suited to all types of architecture: individual and multi-unit buildings, whether newly-built or undergoing renovation. The solutions available cover the full needs of installers, specifiers and distributors. In a market where compliance with standards is a must for all professionals, the solutions combine ease of installation, aesthetics and reliability. With innovation after innovation, Nicoll is gaining a reputation as the partner for successful projects in both France and overseas.

- Waste water drainage
- Rainwater drainage
- Roofing accessories
- Roof spilling out cladding
- Ventilation
- · Access flap doors
- Surface drainage products
- Accessories





| NEOLIA®, VENTILATION GRID | 4 |
|---|----|
| AESTHETIC AND TECHNICAL SOLUTION | 5 |
| STATUTORY SOLUTION FOR GAS APPLIANCES | 6 |
| TECHNICAL SOLUTION FOR FIREPLACES AND WOOD-BURNING STOVES | 7 |
| INTERIOR DESIGNER SOLUTION | 8 |
| DECORATIVE SOLUTION FOR FAÇADES | 9 |
| INSTALLATION | 10 |
| THE NEOLIA® RANGE | 11 |





Neolia® Ventilation Grid

A combination of regulatory compliance and design.

Air vents are required for protection and structural soundness as well as being an important part of detail and design. However, installing them in a dwelling is not an easy task. Thanks to its technical expertise and experience, Nicoll can now offer you a range of grids to suit all your needs.

Advantages:

- Grids can be adapted to pipes of 100 mm and 125 mm diameter
- Elegant, discreet design for interiors
- Shock and UV resistant for exteriors
- Cross-sectional flow area compliant with gas regulations
- Developed in collaboration with "Qualigaz" (french company specialised in gas installation control)
- Adjustable version available*
- Colours: white, sand, anthracite, stainless steel and wood
- 100% recyclable



* According to the gas regulations, the adjustable version cannot be used for ventilation in a room containing a gas appliance.

** La référence gaz = The leading gas solution

Aesthetic and technical solution



DESIGNER VENTILATION GRID (REF. GDT100B AND GDT125B)

Its design and range of colours add style to interiors and exteriors. It has been designed to maximise the cross-sectional flow area. Its baffled design cuts off external draughts and enables air to be diffused internally. The grid fits onto a pipe and can be removed for easy cleaning.

| Reference | Diameter of pipe | Cross-sectional area | |
|-----------|------------------|----------------------|--|
| GDT100B | Ø100 | 50 cm ² | |
| GDT125B | Ø125 | 100 cm ² | |



INSECT SCREEN (REF. MOS100 AND MOS125)

Prevents entry of insects without reducing the cross-sectional flow area of the ventilation grid. The flexible screen is easy to fit inside a pipe. It can also be easily removed for cleaning.

| Reference | Diameter of pipe | Cross-sectional area | | |
|-----------|------------------|----------------------|--|--|
| MOS100 | Ø100 | 50 cm ² | | |
| MOS125 | Ø125 | 100 cm ² | | |



ADJUSTABLE GRID

(REF. FDT100B AND FDT125B)

It has all the features of a ventilation grid, with the additional option of closing the air vent.

It can be easily opened and closed by pulling or pushing the central part of the grid.

| Reference | Diameter of pipe | Cross-sectional area | | |
|-----------|------------------|----------------------|--|--|
| FDT100B | Ø100 | 50 cm ² | | |
| FDT125B | Ø125 | 70 cm ² | | |

PRODUCT GUIDE

| Neolia [®] Designer ventilation grid | | | | | | | | Ŭ. | |
|--|--|-----|-------------------|--|---|-------------------------------|-------------|---|----------------------------------|
| Product reference | Idiameter toring Installation I insect | | insect | Natural ventilation of a room containing a gas appliance | Ventilation of a room containing a solid fuel appliance | Wall-mounted ventilation grid | | ion grid | |
| | | | | | (Boiler…) | (Wood-burning stove…) | Crawl space | Natural ventilation of a room containing a gas appliance | Air supply for future fireplaces |
| GDT100B | Ø100 | 50 | Clicks into place | MOS100 | | | | | |
| GDT125B | Ø125 | 100 | Clicks into place | MOS125 | | | | | |

NB: products shown in white. For other colours, please consult the table of products (p.11).



Statutory solution for gas appliances

Combine style with regulatory compliance.

French standards NF DTU 61.1 and NF P45-500 relating to gas safety require an air vent to be installed in any room that contains a gas appliance and set out the minimum cross-sectional flow area required for ventilation grids.

| Type of outlet | Type of air vent | Air vent cross-sectional area | Reference |
|---|--------------------|--|-----------|
| Air vented via vertical pipe | Direct or indirect | 50 cm ² (if PO \leq 25 kW) | GDT100B |
| All vented via ventical pipe | Direct of indirect | 100 cm ² (if PO \leq 50 kW) GDT125E | GDT125B |
| Air vented directly via wall vent (horizontal) | Direct only | 100 cm ² (if PO \leq 35 kW) | GDT125B |

In most cases, the cross-sectional flow area must be 100 cm².

GRID

→ A cross-sectional area of 100 cm² can only be obtained with existing products by using 160 mm diameter grids. However, this diameter grid is cumbersome and not very aesthetic.

Nicoll's new GDT grid was designed in collaboration with Qualigaz so a statutory cross-sectional area of 100 cm² could be achieved in a 125 mm diameter pipe.

INSECT SCREEN

→ The insect screen fitted to standard ventilation grids reduces the cross-sectional flow area by an average of 50%.

The **Neolia®** insect screen has been designed so as to ensure the same cross-sectional flow area as the grid.

| Grid | Grid Insect screen Diameter of pipe | | Cross-sectional area | |
|---------|-------------------------------------|------|----------------------|--|
| GDT100B | MOS100 | Ø100 | 50 cm ² | |
| GDT125B | MOS125 | Ø125 | 100 cm ² | |

NICOLL ADVANTAGES

The cross-sectional flow areas of Nicoll's Neolia[®] grids have been validated by an independent body called CETIM (Technical Centre for Mechanical Engineering). Report no. CET0084783/6G1/a.







Technical solution for fireplaces and wood-burning stoves

100% air flow guaranteed.

The decree of 23 February 2009 sets out the minimum cross-sectional flow area required for ventilation grids according to the power output of the appliance (insert, wood-burning stove, etc.).

| TOTAL POWER OUTPUT OF APPLIANCES (PO) | MINIMUM FREE CROSS-SECTIONAL AREA OF DIRECT AIR VENT | Reference |
|--|---|-----------|
| lf PO ≤ 8 kW | 50 cm ² | GDT100B |
| If 8 kW \leq PO \leq 16 kW | 70 cm ² | GDT125B |
| If 16 kW \leq PO \leq 70 kW | 100 cm ² | GDT125B |

The **Neolia**[®] designer grid for 125 mm diameter pipes allows for a permanent supply of air and guarantees a cross-sectional area of 100 cm². It thus ensures compliance with regulations and caters for all fireplace or wood-burning stove types of solid fuel appliances. This grid is also recommended for new-build projects to create the air vent for the future fireplace.



INSTALLATION OF A WOOD-BURNING STOVE

When installing a wood-burning stove, certain installers recommend an internal adjustable grid to prevent draughts when the stove is not being used. The vast majority of wood-burning stoves have a power output of less than 16 kW and therefore require a 70 cm² air vent.

For specific cases like these, the **Neolia®** range also includes an adjustable grid for 125 mm diameter pipes. This grid allows for the creation of a cross-sectional flow area of 70 cm² in the open position and enables the flow of air to be stopped in the closed position. A 100 mm diameter version is also available. It allows for a cross-sectional flow area of 50 cm² in the open position.



NICOLL ADVANTAGES

Adjustable grid for 125 mm diameter pipes

- Contemporary design
- Cross-sectional area of 70 cm² (wood-burning stoves: power output < 16 kW)
- Closure system to stop the flow of air
- Available in anthracite grey (ref. FDT125A)



NB: products shown in white.

For other colours, please consult the table of products (p.11).



Interior designer solution

A perfect match for all interiors.

DESIGN

Nicoll's **Neolia®** range takes the humble ventilation grid to a whole new level. The design of a traditional, natural ventilation grid is determined by its function.

Neolia® is a product based on aesthetically pure lines. Thanks to its stylish appearance and the variety of colours and finishes available, fitting an air vent becomes a real opportunity to express the property owner's taste.

The colour of the grid can thus be matched with the door frames, whether they are made from white PVC, anthracite aluminium or wood. There is also the option of fitting an anthracite grey-coloured grid beside a wood-burning stove or a brushed stainless steel grid in a contemporary interior.





COMFORT

The **Neolia**[®] range of grids has been specifically designed to facilitate the diffusion of air. This eliminates the sensation of cold draughts associated with traditional grids.







Decorative solution for façades

Discretion assured.

VENTILATION OF CRAWL SPACE

Nicoll's **Neolia®** ventilation grids also offer a solution to the issue of crawl space ventilation. Crawl space solutions are often considered ugly due to their wall-mounted ventilation grids.

The design of the **Neolia®** range blends in with the building to make the crawl space solution as discreet as possible.





FRESH AIR VENT FOR FUTURE FIREPLACE

The cross-sectional area of an air vent for a future fireplace must be 100 cm². It is therefore necessary that the pipe, ventilation grid and insect screen have a minimum cross-sectional area of 100 cm².

In the past, these advance air vents were created using one 160 mm diameter pipe or two 125 mm pipes as the cross-sectional area of the ventilation grid was limited. Nicoll's **Neolia®** range of ventilation grids now enables this air vent to be created using a single 125 mm diameter pipe.

NICOLL ADVANTAGES

Advantages compared to a single 160 mm diameter air vent or two 125 mm diameter air vents:

- Discreetly mounted on the wall
- Quick to install
- Economical solution
- Cross-sectional area of 100 cm² guaranteed







Installation

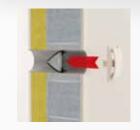


Create an opening through the wall with a sealed PVC pipe (use a non pre-sleeved pipe).

Tip: select the pipe diameter according to the intended application and required cross-sectional flow area (see product guide on page 5).

Bend and insert the insect screen into the pipe (select correct insect screen for pipe diameter).

| DIAMETER OF PIPE | INSECT SCREEN (NICOLL REF) |
|------------------|-------------------------------|
| 100 | MOS100 |
| 125 | MOS125 |



Position the grid by clipping it into the pipe (select correct grid for pipe diameter).

| DIAMETER OF PIPE | DESIGNER GRID (NICOLL REF) | ADJUSTABLE GRID (NICOLL REF) |
|------------------|-------------------------------|---------------------------------|
| 100 | GDT100B | FDT100B |
| 125 | GDT125B | FDT125B |

NB: products shown in white.

For other colours, please consult the table of products (p.11).





How to open and close the adjustable grid:

- \rightarrow Pull the central part of the grid to open it
- → Push the central part to close it again



NEOLIA® Range





| DESCRIPTION | WHITE | SAND | ANTHRACITE GREY | BRUSHED STAINLESS STEEL | CORK-OAK | | |
|--|---------|------------------------------|--------------------|-------------------------------|----------|--|--|
| 50 CM ² VENTILATION | | | | | | | |
| 100 MM DIAMETER DESIGNER VENTILATION GRID (50 cm² of air flow) | GDT100B | GDT100S | GDT100A | GDT100X | GDT100CL | | |
| 100 MM DIAMETER INSECT SCREEN WHICH CAN BE ADAPTED TO THE DESIGNER GRID (50 cm ² of air flow) | | | MOS100 | | | | |
| | 100 |) CM ² VENTILATIC | ON | | | | |
| 125 MM DIAMETER DESIGNER VENTILATION GRID (100 cm² of air flow) | GDT125B | GDT125S | GDT125A | GDT125X | GDT125CL | | |
| 125 MM DIAMETER INSECT SCREEN WHICH CAN BE ADAPTED TO THE DESIGNER GRID (100 cm ² of air flow) | | | MOS125 | | | | |
| | A | DJUSTABLE GRIE |) | | | | |
| 100 MM DIAMETER ADJUSTABLE DESIGNER GRID (50 cm² of air flow) | FDT100B | FDT100S | FDT100A | FDT100X | FDT100CL | | |
| 125 MM DIAMETER ADJUSTABLE DESIGNER GRID (70 cm ² of air flow) | FDT125B | FDT125S | FDT125A | FDT125X | FDT125CL | | |

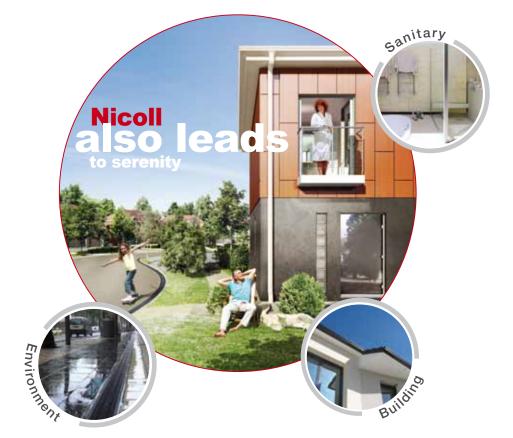
NICOLL ADVANTAGES

- The Neolia[®] range of grids has been designed and tested to prevent penetration of rainwater, even in high winds.
- The flange and its "water drop" profile also protect the wall from staining caused by stagnation of droplets on the exterior or the flow of air in the interior.



(11

www.nicoll.fr





NICOLL is ISO 9001v2008 and ISO 14001v2004 certified

Head office and industries: 37, rue Pierre & Marie Curie - BP 10966 - 49309 CHOLET Cedex // Tel: +33 (0)2 41 63 73 83 - Fax: +33 (0)2 41 63 73 57 Documentation request: info@nicoll.fr // Technical information: tech-com.nicoll@aliaxis.com SAS (SPL) with capital of €7,683,431 - 060 200 128 RCS Angers

an **OAliaxis** company