

## A121 Humidity Controlled Extract Grille specification document

The A121 Humidity Controlled Extract Grille is designed for 'wet rooms' and responds automatically to changes in relative humidity, opening and closing to meet demand, working in harmony with a central mechanical extract fan to boost individual room extraction.

### **OPERATION**

The A121 Extract Grille incorporates a number of nylon strands which expand and contract in line with relative humidity, releasing tension within a set of springs inside the extract, varying the size of the opening of the extract.



When relative humidity is below 30%, the extract allows a low level of ventilation (15m<sup>3</sup>/hr). When relative humidity increases, the A121 opens gradually to increase ventilation in line with relative humidity. When relative humidity is above 60%, the extract is fully open and allows a ventilation rate of 75m<sup>3</sup>/hr.

The extract forms part of a whole house mechanical ventilation solution, and are located in 'wet rooms' such as kitchens, utility rooms, bathrooms, en-suites etc.

Extracts are ducted to a centrally located, continuously running extract fan which drives the ventilation system.

The A121 is particularly suited to applications in which occupant control is not desired e.g. special needs, care homes, student accommodation etc.

### **FEATURES**

#### **Energy Efficiency**

Being non-electrical, the A121 Extract Grille is ideal as part of an energy efficient ventilation system.

#### **Ease of Installation**

As there are no electrical connections to be made, installation is made as simple as possible, just connect the extract to the ducting.

#### **Flexibility**

The A121 Extract Grille can be either wall or ceiling mounted.

#### **Simple Maintenance**

With no electrical parts to malfunction, the A121 requires minimal maintenance. The extract should be cleaned periodically.

#### **Visually Unobtrusive**

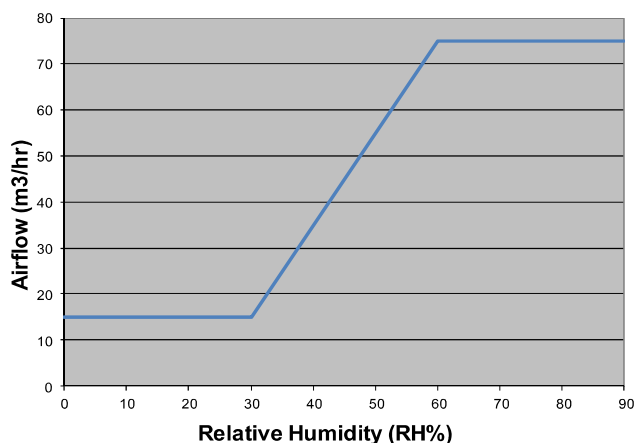
The attractive design ensures that the extract is aesthetically pleasing to the occupant.

#### **Fully Automatic**

Being controlled by the relative humidity of the room, the occupant does not need to worry about the level of ventilation.

## A121 Humidity Controlled Extract Grille specification document

Humidity controlled extract 15/75 m<sup>3</sup>/hr

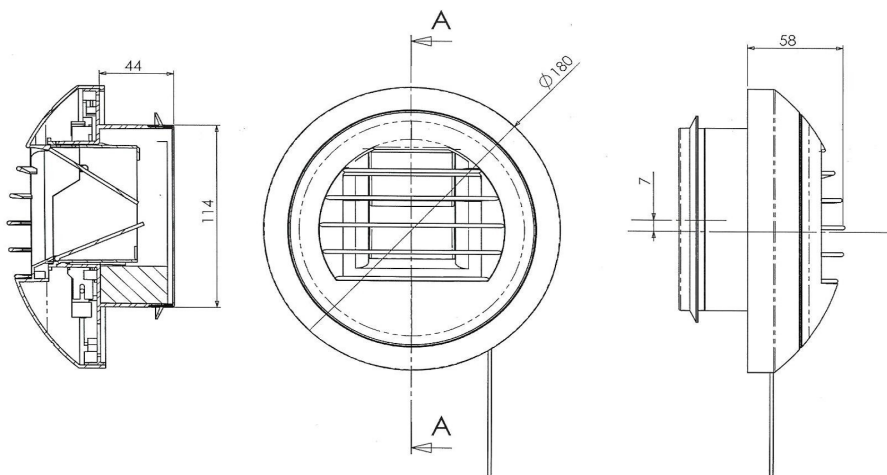


Relationship between relative humidity and ventilation rate	
RH (%)	Airflow (m <sup>3</sup> /hr)
0	15
30	15
60	75
90	75

Results shown @80Pa

<b>Airflow @80Pa:</b>	Minimum:	15m <sup>3</sup> /hr (4l/s)
	Maximum:	75m <sup>3</sup> /hr (21l/s)
<b>Opening Area:</b>	Minimum:	170mm <sup>2</sup>
	Maximum:	840mm <sup>2</sup>
<b>Control Method:</b>	Humidity Controlled	

Dimensions	
External Diameter:	180mm
Thickness:	58mm
Spigot Diameter:	125mm



Extract Grille	Standard Operation Range	Additional Boost	Use with Boost Switch	Power Supply	
				Mains	Battery
A121	Humidity controlled 15m <sup>3</sup> /hr-75m <sup>3</sup> /hr (4l/s-21l/s)	None	None	No power required	