## Case Study



Housebuilder Castle Green Homes has selected Vent-Axia's decentralised mechanical extract ventilation (dMEV) units to be installed in its homes as its chosen solution to meet the amended Part F (Means of Ventilation) and Part L (Conservation of Fuel & Power) of the Building Regulations.

Vent-Axia is supplying its highly efficient Lo-Carbon NBR dMEV C units to be installed in 500 homes a year, across North Wales and the North West of England. The aim is to ensure homes have good indoor air quality to help protect homeowners' health and meet the new airflow rates set out in Part F.

The new Part F mandates increased ventilation rates for New Build residential homes, favouring advanced solutions like Mechanical Ventilation with Heat Recovery (MVHR) and Continuous Mechanical Extract Ventilation, such as dMEV, over traditional Intermittent Extract Ventilation (now called Natural Ventilation). Due to higher airtightness in buildings, Vent-Axia's Lo-Carbon NBR dMEV C is the optimal choice. It meets Building Regulations with its highly efficient, quiet, and low-energy design. Tested to SAP 10 standards, its Specific Fan Power (SFP) values are as low as 0.08 w/l/s, providing near-silent operation as low as 7.4 dB(A).

The Lo-Carbon NBR dMEV C's patent-pending air pathway design ensures predictable performance, meeting domestic installation requirements without a traditional centrifugal fan. Its high-efficiency EC/DC motor drastically reduces Dwelling Emission Rates (DER). The fan's sleek, circular design, multi-orientation grille, and IPX5 rating make it suitable for various zones. With 100mm and 125mm models, variable speed settings, and fully adjustable airflow controls, it achieves wholehouse ventilation rates efficiently with fewer fans.

Designed for a peaceful environment, the fan includes an optional delayed start for quiet operation and won't activate the boost if the light is switched on and off within three minutes. The user-friendly speed adjustment dial ensures compliance with Building Regulation Approved Document F. The NBR dMEV C's IPX5 rating allows flexible installation without SELV, making it ideal for wet rooms in Zone 1. The continuous running H model features an ambient response humidistat, adjusting extract rates based on humidity levels. The 100mm fan achieves a minimum noise level of 7.4 dB(A), and the 125mm model achieves 8.5 dB(A) at 3 meters.

"At Castle Green Homes we're committed to successfully combining the most technologically advanced housebuilding approaches with traditional build methods. We therefore chose to specify Vent-Axia's market-leading dMEV for our homes to meet the amendments to Part F of the Building Regulations while providing good indoor air quality for homeowners. Vent-Axia's Lo-Carbon NBR dMEV C unit ticked all the right boxes because of its attractive round aesthetics, low noise and outstanding SAP performance"

Rhys Jones, Commercial Director at Castle Green Homes



