



For Immediate Release

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CIAT Epure Dynamics Automated Air Purification System Enhances Air Quality in Hotels and Hospitality Venues

LEATHERHEAD, England, 12 Jan. 2022 – CIAT UK is rolling out its automated indoor air quality (IAQ) system Epure® Dynamics for use in hospitality venues, offering hotels, restaurants and pubs enhanced levels of protection as they welcome back customers. The Epure Dynamic IAQ control system is available on CIAT fan coil units and ducted units, and is part of [#CIAT4life](#), a campaign to increase awareness of CIAT’s range of advanced IAQ solutions and services. CIAT is part of [Carrier Global Corporation](#) (NYSE: CARR), the leading global provider of healthy, safe, sustainable and intelligent building and cold chain solutions.

Epure Dynamics uses a network of calibrated air quality sensors located around a building to continuously measure the concentration of airborne particulates. If the concentration exceeds a pre-set level, the system activates purification mode, switching on a high-efficiency filtration system.

In purification mode, the system continuously recycles and filters the air until air quality achieves the desired level. The cleaning process uses a filter with 11 times the surface area of conventional filter media and normally takes from a few minutes to half-an-hour, depending on the volume of the space treated and level of contaminants.

Matt Maleki, Carrier and CIAT UK’s IAQ specialist, said, “Following the reduction of restrictions, the focus on improving IAQ and supporting healthy buildings is more important than ever. It is a particular issue in hotels and the hospitality industry due to the density and numbers of people involved. Epure Dynamics addresses this and offers a solution that delivers a higher-quality indoor environment and helps support healthy buildings.”

Epure Dynamics is a major advance on conventional air conditioning that does not always address the problem of particulates, particularly below the size range $<2.5\mu\text{m}$, which are considered to be most harmful to human health. Once activated, Epure Dynamics rapidly reduces the concentration of airborne particles, achieving the World Health Organisation (WHO) recommendation for annual load of $10\mu\text{m}/\text{cu m}$ within 20 minutes, and a 90% reduction in PM_{2.5} particles within 60 minutes [see graph].

Some air handling systems draw particulates into a building from outside, which can be a problem in urban areas with emissions from traffic, and areas with airborne industrial pollutants. While closed-circuit air conditioning systems do not suffer from this problem, they continually recirculate airborne particulates already within a building, and repeatedly expose occupants to new particulates that are constantly being created.

Use of a fine F7 filter on a building's main fresh air intake will stop around 70% of particulates with a diameter $< 2.5 \mu\text{m}$. However, airborne particles generated inside a building cannot be processed by the air handling unit in this way, and therefore build up within it, posing a potential health risk for occupants.

Epure Dynamics overcomes these issues with a highly-effective and dedicated purification unit equipped with advanced high-efficiency filters. When triggered by its network of sensors, these quickly remove particles from contaminated air throughout the building. The unit tackles particles drawn in from outside as well as those created within the building.

Maleki added: "Importantly, because purification mode is only activated when required, energy consumption by the cleaning system is minimised, ensuring both high-quality indoor air and low energy consumption, with reduced running costs for end users."

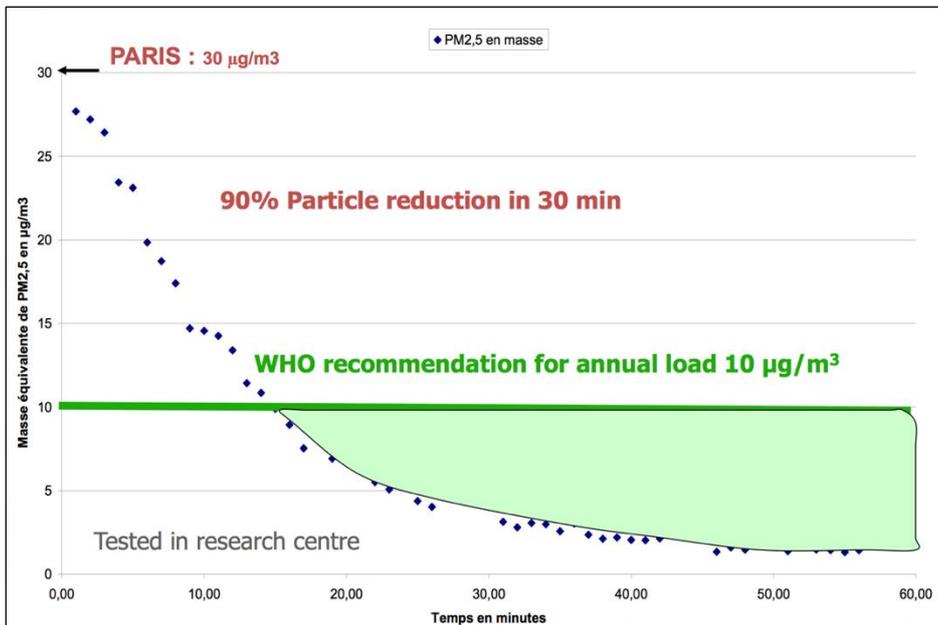
About CIAT

CIAT is one of Europe's leading names in cooling, heating, and indoor air quality. Renowned for its capacity to create innovative, durable and high-performing products, CIAT offers a complete range of equipment that is designed to work together. CIAT's latest innovations have been specially designed to meet the most demanding requirements. CIAT is part of Carrier Global Corporation, the leading global provider of healthy, safe, sustainable and intelligent building and cold chain solutions. For more information, visit www.ciat.com/en/eu/.

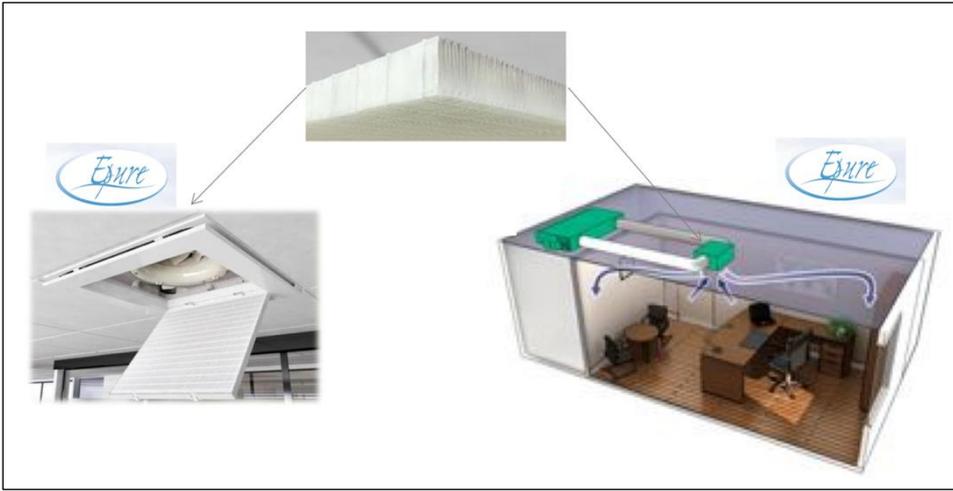
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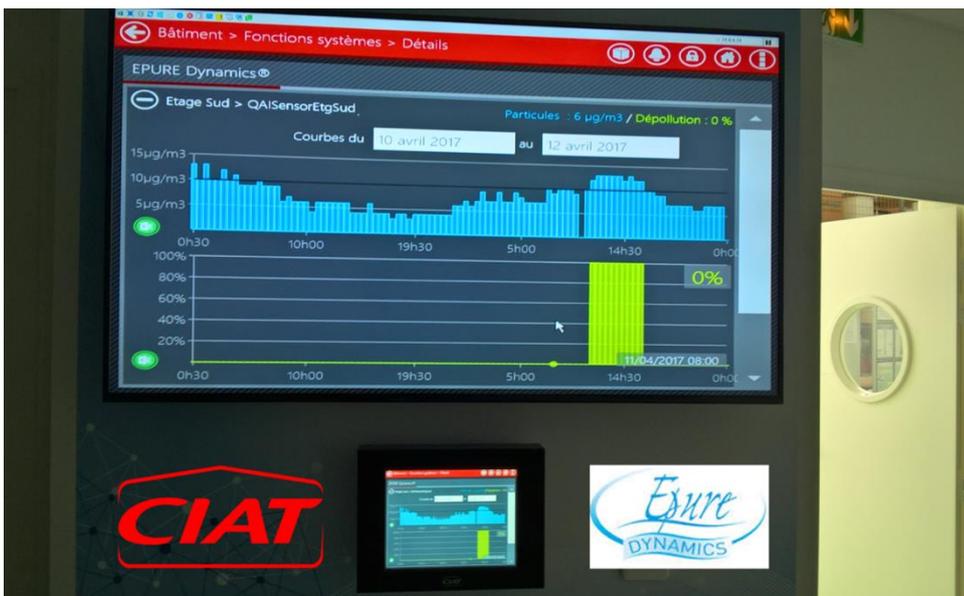
Hotel lobbies and other high traffic area lend themselves to CIAT's Epure Dynamics automated air purification system



Graph shows how CIAT's Epure Dynamics reduces the concentration of particles with a diameter $< 2.5 \mu\text{m}$ in indoor air over a 60 minute period.



The high-purity filters used in Epure Dynamics have a surface area 11 times that of conventional filter systems.



The graphical display on the Smart CIATControl system constantly shows contaminant levels in indoor air and how the Epure Dynamics system is activated to restore air quality.