Double flow mechanical ventilation with a heat recovery system

In its Basic Interior Air Quality Health Document, **the Spanish Technical Building Code (CTE)** demands that properties have means to guarantee suitable ventilation, providing an exterior air flow and guaranteeing the extraction of contaminated air.

With this code it aims to **guarantee the health, comfort and hygiene** of the people living in the property, as well as preventing the accumulation of humidity, thus **preventing deterioration of the buildings.**

Double flow ventilation is a system that ensures air quality through the extraction of stale air in humid rooms (kitchen, bathrooms, toilets, utility rooms, etc.) and simultaneously ensures the flow of new filtered air into dry rooms (sitting room, dining room, bedrooms, etc.).

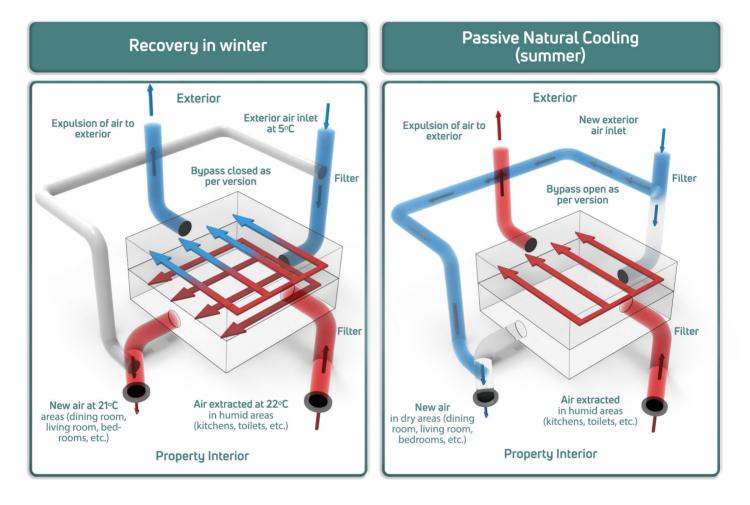
Functioning The fundamental aspect of double flow is in the **exchange** of temperatures of the expelled air with the exterior air, in this way achieving significant energy savings by obtaining high performance.

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• In WINTER, the new air recovers the calories of the stale air we extract from the property thanks to the presence of a heat exchanger (92% recovery), helping maintain the temperature inside the property.

When it is 5^{∞} C outside and 20^{∞} C inside, the new air enters at 19^{∞} C.



•In SUMMER, the new air that enters the property is cooled thanks to the stale air we extract from the property through a heat exchanger (92% recovery), preventing the property from reheating.

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When it is 30°C outside and 21°C inside, the new air enters at only 22°C; refreshing in summer.