

THE BENEFITS OF COMPLEX HEAT RECOVERY SYSTEM Zehnder

Piping distribution ComfoSystem + Air Handling Units (AHU) from Zehnder/PAUL

AHU is certificated by PASSIVHAUS INSTITUT Darmstadt

Why is it an advantage? Independent – global renowned institute confirmed top parameters of this AHU by it's unaffected measurements and tests.

AHU: Function of constant flow: Constantly insured constant amount of supplying and exhausting air without influencing from changes in pressure ratios (gust of wind, condensation, filter clogging...).

Why is it an advantage? By constant airflow is insured permanently maximum efficiency of heat recovery. Always the same amount of supplying air is heated always by equivalent amount of exhausting air – always with maximum effect.

Perfect tightness of AHU: the body of AHU is made by compact pressing from EPP

Why is it an advantage? Higher heat recovery without thermal bridges (without risk of surface condensation from interior humidity on AHU), lower consumption of electricity, excellent acoustic properties.

Controlling of AHU: intuitive control, possibility to control AHU according to the humidity, CO2 sensors, possibility to control AHU 0-10V.

AHU – Compact dimensions: (HEIGHT 25CM)

Why is it an advantage? We can install AHU at least drop ceiling.

Filters: More than 1/3 bigger filtration surface compared to common units on the market

Why is it an advantage? Filters have a lower pressure loss (lower consumption of electricity, lower acoustic load) and longer life of filters => lower costs.

AHU – Preheater of exterior air: in basic equipment of unit in basic price.

Why is it an advantage? AHU will work fully in the biggest frost. In the biggest frost the temperature of supplying air will be comfortable.

AHU – Enthalpy exchanger in base equipment: comfortable solution of interior climate. – this is the solution of lower humidity in winter months.

Why is it an advantage? In the biggest frost is optimally managed with humidity of the air and that is the reason why we haven't unpleasant feeling of dry air. (low relative humidity).

AHU – does not need the condensation drain (thanks to enthalpy exchanger)

Why is it an advantage? AHU we can install for example in the hall – without needing special sewer pipes. (reducing the cost) and without waste trap without risk of pollution and necessary controls and cleaning – there is no danger of condensate leak => there is no danger of building damage

AHU – We can control independently overpressure or vacuum

Why is it an advantage? Except the heating period we can ventilate in overpressure or vacuum mode with half-open windows. In hot summer we can cool interior thanks to overpressure mode – with colder night air.

Systemic acoustic silencers ComfoWell (DISTRIBUTORS COMBINED WITH SILENCERS):

Why is it an advantage? Excellent acoustic parameters (for example in bedroom the air handling heat recovery system is not getting any sound). Three functions in one element with one size and one price. (acoustic silencer, service entry to each place of distribution for necessary periodical cleaning, function of distributor with possibility to perfectly adjust the airflow in each pipe of distribution system). Thanks to ComfoWell are removed crosstalks between rooms in the building/flat. Distributors/acoustic silencers ComfoWell have minimal pressure loss.

Piping distribution: surface treatment CleanInside, internal maximally smooth side of pipe

Why is it an advantage? The air we breathe is distributed in pipes which are made from high quality hygienic material (without risk of odor, with antibacterial function, antistatic).

Air handling heat recovery system is cleanable in any place: All the time that we are using this system, we can periodically clean pipes and tubes with certified Zehnder service.

Why is it an advantage? Always hygienic use, Always controllable and clean, professionally cleanable in each place of distribution with systemic Zehnder's cleaner.

Small coordinating claims on the other professions – maximum flexibility

Easy installation of whole system, a small number of perfectly matched components.

Why is it an advantage? Simple design of the system, easy delivery of components and their clear and system-based installation according to clear instructions. Properly designed system will be properly installed and will work properly. The system installation can be clearly calculated (price assurance).