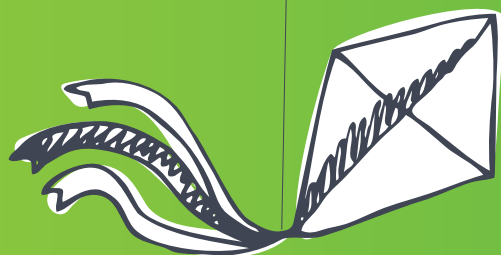




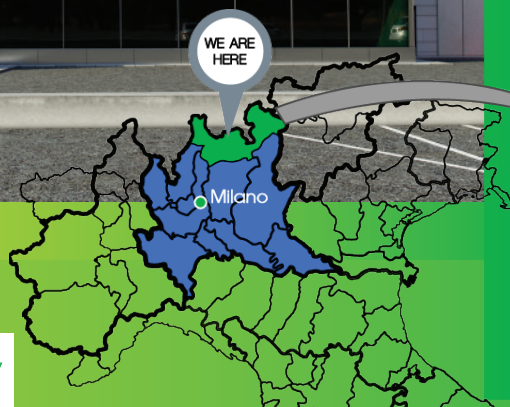
indoor air quality and energy saving

Brochure UTEK



Utek

indoor air quality and energy saving



The Company

For about 20 years we have been designing and producing ventilation, air conditioning and heat recovery units for the residential and tertiary sector. **Over 150 employees**, divided into three factories covering over **15,000 square meters**, using technologically advanced operating machines. The quality of the production process (ISO 9001 from 2006). The sales network – the Dealer – It will support you with competence and professionalism: from design and supply of

CMV: What it is and how it works



The Controlled Mechanical Ventilation (CMV) technology aims at giving a response to the growing demand for low-energy buildings. If, on one hand, airtight casing, high quality thermal insulation, airtight casing, airtight doors and windows and minimum thermal bridges help you to significantly cut your energy bill, on the other hand, these measures can worsen the salubrity of indoor air (invisible air pollution) because the building "does not breathe". The periodic change of air and evacuation of pollutants are extremely important to avoid condensate, molds on walls, stagnation of gases and bad smells...

Most of our time is spent in closed environments (almost 90%) and the air we breathe contains, in suspension, internal pollutants (materials used in construction) and outside, especially in cities and close to industries (smoke, smog, CO₂). Opening the windows in air-conditioned environments is a waste of energy and allows noises and pollution to enter

A "Forced" air exchange system, in operation 24 hours a day throughout the year, replaces the manual opening of windows with considerable advantages: the ventilation control, energy wastage avoided and better air quality, thanks to the filtration... in other words, high level of comfort with low energy requirements!

In a traditional residential system, air is sucked up from service rooms (kitchen, bathrooms or laundry) along with its humidity load, noxious substances and bad smells, then it is filtered, pushed through the heat recovery unit and finally expelled outside. Conversely, in a high efficiency heat exchanger, almost all heat is released to the external fresh air which is sucked up, filtered, treated (heated, cooled or dehumidified depending on the season) and finally introduced into the living room and bedrooms.

UTEK residential units are included in the list of the ClimateHouse / KlimaHaus Agency have high energy class and best meet the certification requirements for buildings in high energy class.



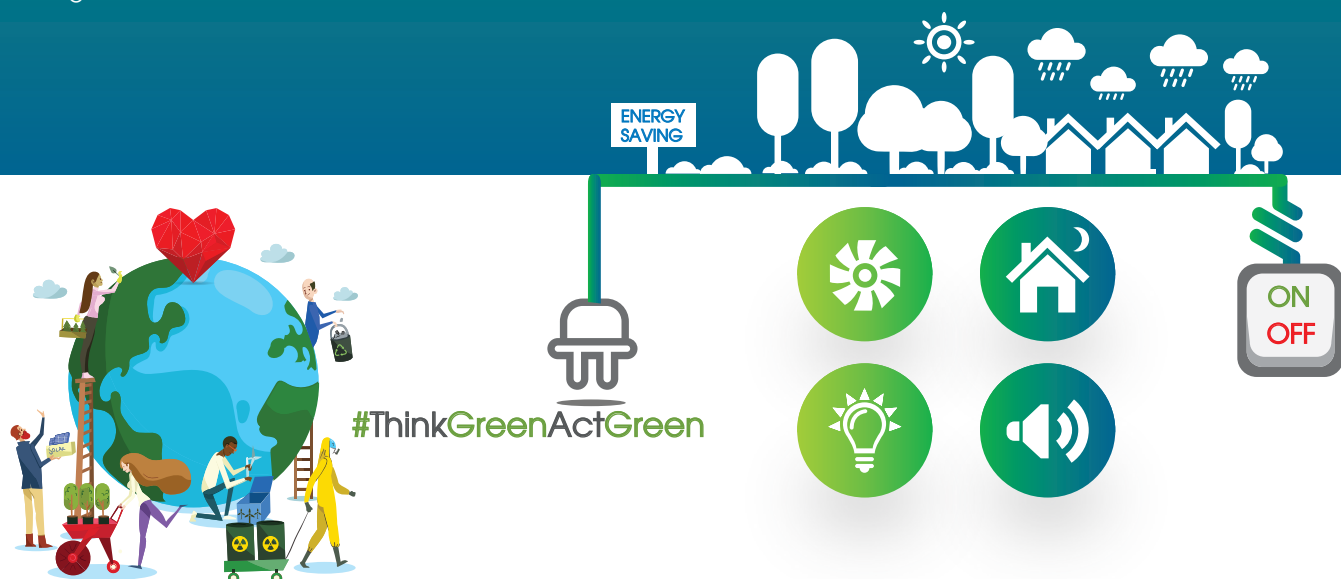
Objective: energy saving

The construction industry accounts for about 40% of total energy consumption; therefore, it represents a priority within the 20-20-20 targets: Directive 2002/91/EC (EPDB Energy Performance of Buildings Directive), replaced by Directive 2010/31/EU (EPDB2) sets the minimum standards for the construction of new buildings and the renovation of existing buildings.

Nearly zero-energy buildings it is already a widespread design standard (private buildings from 01-01- 2021, public buildings from 01 - 01 - 2018) for high energy buildings and passive buildings. Passive buildings cover most of their energy needs (heating, cooling, sanitary hot water, ventilation and lighting) with a minimum of energy requirements, without any "conventional" system, but using alternative sources. Double Flow Controlled Mechanical Ventilation with Heat Recovery is indispensable!

More and more demanding regulations require more and more efficient appliances (Regulations UE nr. 1253/2014 or EcoDesign) and an energy classification of residential ventilation units (Regulations UE nr. 1254/2014). Uniquely declared performance allows Consumers a conscious choice.

An advanced management of heat recovery (air quality probes or time bands) improves air quality and reduces operating costs.



HEAT RECOVERY VENTILATION UNITS for RESIDENTIAL BUILDINGS



Unit	Air flow	High eff.	Medium eff.	Configuration	Enthalpic	Pag
FLAT	from 130 to 580 m³/h	Yes		Horizzontal/Vertical	Yes	5
FLAT V	150 and 250 m³/h	Yes		Vertical	Yes	5
MICRO-FLAT	60 and 110 m³/h	Yes		Horizzontal	Yes	5
RC-TOP	150 and 250 m³/h	Yes		Vertical	Yes	6
HRE-RES	330 and 460 m³/h	Yes		Horizzontal	Yes	5
MICRO-REV	230 m³/h	Yes		Vertical	Yes	6
REVERSUS	330, 460 and 600 m³/h	Yes		Vertical	Yes	6
UVD	690 m³/h	Yes		Vertical	Yes	7
JD	from 100 to 800 m³/h	Yes		Horizzontal	Yes	7
AURA	24 and 50 m³/h	Yes				8

HEAT RECOVERY VENTILATION UNITS for COMMERCIAL and INDUSTRIAL BUILDINGS



Unit	Air flow	High eff.	Medium eff.	Configuration	Enthalpic	Pag
UTA	8.000 and 24.000 m³/h	Yes		Horizzontal		8
CRHE-H	from 700 to 3.400 m³/h	Yes		Horizzontal	Yes	8
CRHE-V	from 700 to 5.600 m³/h	Yes		Vertical	Yes	8
UVR & UVR-TOP	from 900 to 6.200 m³/h	Yes		Horizzontal/Vertical	Yes	9
FAI-ED & FAI-EC	from 300 to 3.500 m³/h		Yes	Horizzontal/Vertical		9
DUE-ED	from 300 to 4.000 m³/h		Yes	Horizzontal/Vertical		10
DUO-EC	from 300 to 9.000 m³/h		Yes	Horizzontal		10

AIR CONDITIONING & DEHUMIDIFICATION UNIT with HEAT RECOVERY (refrigeration unit or hydronic version)



Unit	Air flow	High eff.	Medium eff.	Configuration	Enthalpic	Pag
HRU tutti	from 500 to 5.000 m³/h		Yes	Horizzontal		10
DEH & DEH IDRONICO	150-300 and 250-500 m³/h	Yes		Horizzontal/Vertical	Yes	10

AIR VENTILATION UNITS



Unit	Air flow	High eff.	Medium eff.	Configuration	Enthalpic	Pag
BOX	from 500 to 6.000 m³/h					11
FAR-EC	from 400 to 16.000 m³/h					11
FAN-T	from 800 to 40.000 m³/h					11

FILTRATION UNITS



Unit	Air flow	High eff.	Medium eff.	Configuration	Enthalpic	Pag
CAFIL	from 200 to 12.000 m³/h					11

Note – for the exact characteristics of each unit, see the TECHNICAL SHEETS www.utek-air.it

Our units



HEAT RECOVERY VENTILATION UNITS for RESIDENTIAL BUILDINGS

Comply with EU Regulations 1253/2014 (ecodesign) and 1254/2014 (energy labeling)



FLAT, FLAT Enthalpic & FLAT vertical

High efficiency HRVU with **high-efficiency heat recovery**
- Plug n' play version (switchboard and prewired control on the unit)

CASING

- Self-supporting structure with polyurethane panels; exterior and interior of the unit in Aluzinc®

CONFIGURATION AND INSTALLATION

- Horizontal: suspended ceiling or floor installation
- Vertical: wall installation (vertical ducts)

HEAT EXCHANGER

- Counterflow aluminium height efficiency
- Automatic 100% bypass

RANGE

- FLAT: 4 models with airflow from 130 to 600 m³/h
- FLAT VERTICAL: 2 models with airflow 130 and 300 m³/h

ENERGY CLASS (with control EVO-PH): **A**



Counterflow heat exchanger made of aluminum manufactured by RECUTECH



HRE-RES & HRE-RES Enthalpic

High efficiency HRVU with **high-efficiency heat recovery**
- Plug n' play version (switchboard and prewired control on the machine)

CASING

- Self-supporting structure with polyurethane panels; exterior and interior of the unit in Aluzinc®

CONFIGURATION AND INSTALLATION

- Horizontal: suspended ceiling or floor

HEAT EXCHANGER

- Counterflow aluminium height efficiency
- Automatic 100% bypass

RANGE

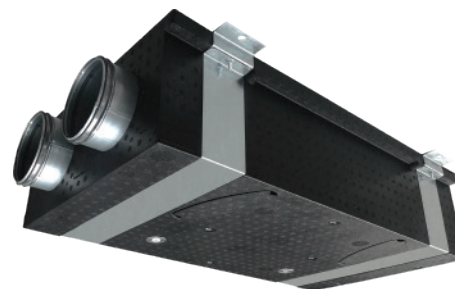
- Nr. 2 models; airflow: 330 and 460 m³/h

ENERGY CLASS (with control EVO-PH)

- HRE-RES 1: class **A** ; HRE-RES 2: class **B**



Counterflow heat exchanger made of aluminum manufactured by RECUTECH



MICRO-FLAT

High efficiency HRVU with **high-efficiency heat recovery**

CASING

- PPE case, weight 9 kg

CONFIGURATION AND INSTALLATION

- Horizontal: in false ceiling or floor

HEAT EXCHANGER

- Counter current, high efficiency, in PP

RANGE and FANS

2 models:

- AC, with airflow 60 m³/h
- EC, with airflow 110 m³/h

ENERGY CLASS

- MICRO-FALT EC: class **A**
- MICRO-FALT AC: class **B**

RC-TOP

High efficiency HRVU with **high-efficiency heat recovery**
- Plug n' play version (electrical panel and control pre-wired on the unit)

CASING

- Self-supporting structure with polyurethane panels; gray plastic coated exterior, Aluzinc® interior

CONFIGURATION AND INSTALLATION

- Vertical: floor or on the wall

HEAT EXCHANGER

- Counterflow height efficiency
- Automatic 100% bypass

RANGE

- Nr. 2 models; airflow: 150 and 250 m³/h

ENERGY CLASS

(with control EVO-PH) **A**



Counterflow heat exchanger made of aluminum manufactured by RECUTECH



MICRO-REV & MICRO-REV Enthalpic

High efficiency HRVU with **high-efficiency heat recovery**
- Plug n' play version (switchboard and prewired control on the unit)

CASING

- Self-supporting structure with polyurethane panels; gray plastic coated exterior, Aluzinc® interior

CONFIGURATION AND INSTALLATION

- Vertical: wall installation

HEAT EXCHANGER

- Counterflow, high efficiency, aluminium
- Automatic 100% bypass

RANGE

- Nr. 1 model, airflow: 230 m³/h

ENERGY CLASS

MICRO-REV (with EVO-PH control): **A**



Counterflow heat exchanger made of aluminum manufactured by RECUTECH



REVERSUS & REVERSUS Enthalpic

High efficiency HRVU

- Plug n' play version (switchboard and prewired control on the machine)

CASING

- Self-supporting structure with polyurethane panels; gray plasticized exterior
- Inside 100% recyclable PPE for sizes 1 and 2
- Inside Aluzinc® for size 3

CONFIGURATION AND INSTALLATION

- Vertical: wall installation
- Can be configured on site: quick change of air ducts (intake and / or recovery) only sizes 1 and 2



Counterflow heat exchanger made of aluminum manufactured by RECUTECH

HEAT EXCHANGER

- Counterflow PP height efficiency for size 1 and 2
- Counterflow aluminium height efficiency for size 3
- Automatic 100% bypass

RANGE

- Nr. 3 models, airflow: 330, 460 and 600 m³/h

ENERGY CLASS

REVERSUS (with control EVO-PH): **A**

REVERSUS ENT. (with control EVO-PH): **B**



UVD & UVD Enthalpic

High efficiency HRVU with **high-efficiency heat recovery**

- Plug n 'play version (electrical panel and control pre-wired on the unit)

CASING

- Self-supporting structure with polyurethane panels; exterior and interior in Aluzinc®

CONFIGURATION AND INSTALLATION

- Vertical: wall
- attacks in the upper part

HEAT EXCHANGER

- Counterflow height efficiency, alluminium
- Automatic 100% bypass

RANGE

- 1 model airflow 690 m³/h

UVD (residential classification)

ENERGY CLASS: **A**



Counterflow heat exchanger made of aluminum manufactured by RECUTECH



JD & JD Enthalpic (size 1 and 2)

High efficiency heat recovery module, for collective systems

- Passive recuperator (exchanger and filters, without fans)

CASING

- Self-supporting structure insulated internally; exterior and interior in Aluzinc®
- Double condensate drain

CONFIGURATION AND INSTALLATION

- Horizontal: counter-ceiling

2 centralized ventilation units serving the building (condominium or multi-family houses) or the column, combined with passive JD recuperators (exchanger and filters), one for each apartment.

HEAT EXCHANGER

- JD 1 and 2: in counter current, high efficiency, in PP
- JD 3 and 4: countercurrent, high efficiency, in Al

RANGE

- 4 models airflow from 100 to 800 m³/h



AURA/AURA evo

Decentralized high efficiency heat recovery unit for VMC (for single room)

STRUCTURE (high strength, anti-static, anti UV)

- Telescopic tube in PVC or insulated
- High efficiency regenerative recovery unit
- Brushless DC fan, low consumption
- Internal grill design, with filter
- Folding or aesthetic external grill

ELECTRONIC VERSION

- Electronic board on the machine 230V
- Master unit (remote control), up to 12 slaves
- 3 speeds + AUTO (T, U.R. and light sensors)

NOTE: CasaClima only size 2

analogico



elettronico



ANALOGIC VERSION

- Automatic operation (input / extraction air adjustable 35 ÷ 200 sec.) or manual (IN or OUT)
- Up to 4 units with 1 control / power supply

AVAILABLE OPTIONS

- Predisposition for large construction sites
- Kit for corner installation

RANGE

- 2 models airflow MAX 24 and 50 m³/h

ENERGY CLASS: **A**



HEAT RECOVERY VENTILATION UNITS for COMMERCIAL and INDUSTRIAL BUILDINGS

Compliant with EU Regulation no. 1253/2014 (EcoDesign)



UTA

High efficiency heat recovery ventilation unit
- Plug n 'play version (electrical panel and control pre-wired on the unit)

CASING

- Double paneled case internal and external in Aluzinc®
- Frame in extruded aluminum profiles

CONFIGURATION AND INSTALLATION

- Horizontal: floor

HEAT EXCHANGER

- High efficiency counter current, in aluminum
- Rotary exchanger available, also enthalpic
- automatic TOTAL by-pass

RANGE

- 5 models airflow from 8.000 to 24.000 m³/h



Counterflow heat exchanger made of aluminum manufactured by RECUTECH



CRHE & CRHE Enthalpic

High efficiency heat recovery ventilation unit
- Plug n 'play version (electrical panel and control pre-wired on the unit)

CASING

- Double paneled case internal and external in Aluzinc®
- Frame in extruded aluminum profiles

CONFIGURATION AND INSTALLATION

- CRHE-H horizontal, inside or outside
- CRHE-V vertical, outside

H = horizontal arrangement; V = vertical arrangement

HEAT EXCHANGER

- High efficiency counter current, in aluminum
- automatic TOTAL by-pass

RANGE

- CRHE-H: 5 models, airflow from 700 to 3.000 m³/h
- CRHE-V: 7 models, airflow from 700 to 5.300 m³/h



Counterflow heat exchanger made of aluminum manufactured by RECUTECH



UVR Enthalpic & UVR-TOP Enthalpic

High efficiency heat recovery ventilation unit
- Plug n 'play version (electrical panel and control pre-wired on the unit)

CASING

- Double paneled case internal and external in Aluzinc®
- Frame in extruded aluminum profiles
- Without thermal break (T3-TB3) or with (T2-TB2)
- In 1 pc. or (optional) supplied 3 parts (size 3)

CONFIGURATION AND INSTALLATION

Horizontal UVR or vertical UVR-TOP, on the floor

HEAT EXCHANGER

- Rotary, Enthalpic high efficiency aluminum
- ABSORPTION enthalpy exchanger available

RANGE

- 6 models airflow from 600 to 7.000 m³/h



Aluminum rotary / enthalpy heat exchanger produced by KLINGERBURG

FAI-ED & FAI-EC

Medium efficiency heat recovery ventilation unit

- Plug n 'play version (electrical panel and control pre-wired on the unit)



CASING

- Double paneled case internal and external in Aluzinc®
- Frame in extruded aluminum profiles

CONFIGURATION AND INSTALLATION

- Horizontal false ceiling or vertical floor

HEAT EXCHANGER

- High efficiency counter current, in aluminum
- automatic TOTAL by-pass

RANGE

- FAI-ED: 5 models airflow from 300 to 3.000 m³/h
- FAI-EC: 4 models airflow from 300 to 2.500 m³/h

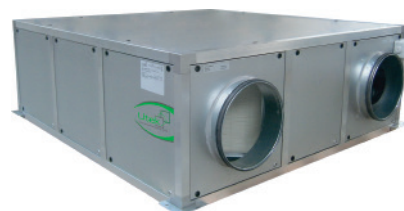


Counterflow heat exchanger made of aluminum manufactured by RECUTECH

DUO-ED & DUO-EC

Medium efficiency heat recovery ventilation unit

- Plug n 'play version (electrical panel and control pre-wired on the unit)



CASING

- Double paneled case internal and external in Aluzinc®
- Frame in extruded aluminum profiles

CONFIGURATION AND INSTALLATION

- Horizontal false ceiling or vertical floor

HEAT EXCHANGER

- High efficiency counter current, in aluminum
- By-pass for automatic or manual freecooling

FANS

- DUO-ED: 3 or 4 speed AC centrifugal fans
- DUO-EC: high efficiency EC electronic

RANGE

- DUO-ED: 6 models, airflow from 300 to 4.000 m³/h
- DUO-EC: 7 models, airflow from 300 to 9.000 m³/h



Counterflow heat exchanger made of aluminum manufactured by RECUTECH



AIR CONDITIONING AND DEHUMIDIFICATION UNIT



HRU-ED, HRU-EX e HRU-EC

Air / air conditioning unit with heat recovery

- Plug n 'play version (electrical panel and control pre-wired on the unit)

CASING

- Double paneled case internal and external in Aluzinc®
- Frame in extruded aluminum profiles

CONFIGURATION AND INSTALLATION

- Horizontal: ceiling or floor

HEAT EXCHANGER

- Cross-flow aluminum, passive recovery

HRU-ED VERSION

- ON-OFF compressor, AC fans

HRU-EX VERSION

- ON-OFF compressor, EC fans

HRU-EC VERSION

- INVERTER compressor, EC fans

RANGE

- 5 models airflow from 500 to 5.000 m³/h
- Powers (active + passive recovery) from 5 to 50 kW
- Rotary or scroll compressor, R410A gas



Counterflow heat exchanger made of aluminum manufactured by RECUPERATOR

Compliant with EU Regulations nr. 1253/2014 (EcoDesign) and 1254/2014 (energy labeling). Heat recovery units included in the list of ClimateHouse Agency of ventilation appliances



DEH & DEH Enthalpic

Air dehumidification and renewal unit with **high efficiency** heat recovery

- Plug n 'play version (electrical panel and control pre-wired on the unit)

CASING

- Self-supporting structure; external and internal Aluzinc®

CONFIGURATION AND INSTALLATION

- Horizontal: counter-ceiling
- Vertical wall

HEAT EXCHANGER

- counter-current with high efficiency, in PP

DEHUMIDIFY & VERSIONS

- With refrigeration unit, gas R134a
- With hydronic coil

RANGE

- DEH 1 airflow 150 (VMC) - 300 dehumidify m³/h
- DEH 2 airflow 250 (VMC) - 500 dehumidify m³/h

ENERGY CLASS: **B**



VENTILATION UNITS

BOX

High prevalence Box ventilation unit

CASING

- Self-supporting Aluzinc® structure with internal insulation
- Anti-vibrating joint on fan delivery
- Motors mounted on anti-vibrating supports

FANS

- Centrifugal forward blades, double suction coupled to the impeller, (ErP-2015)

RANGE

- Different models, air flow up to 6,000 m³ / h



FAR-EC

Box ventilation unit, EC motors electronically controlled, high prevalence

CASING

- Double sandwich paneling case (internal and external parts) in Aluzinc®
- Frame in extruded aluminum profiles

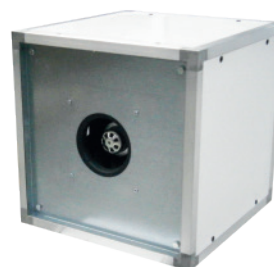
For combination with different housing units:
- collective VMC, with JD recuperators
- industrial processes

FANS

- High efficiency EC electronics (ErP-2015)

RANGE

- 10 models airflow from 400 a 16.000 m³/h



FAN-T

Ventilation unit with transmission fan (belt and pulleys)

CASING

- Available with simple polyethylene insulation or double sandwich panel on polyurethane foam insulation
- (internal and external parts) in Aluzinc®
- Frame in extruded aluminum profiles

FANS

- Centrifugal fans forward blades (ErP-2015)

RANGE

- Different models air flow up to 35,000 m³/h



FILTRATION PLENUM

CAFIL

Filter holder plenum to be installed in a channel (pre-filter or better filtration)

CONSTRUCTION

- Aluzinc® sheet case
- Circular sleeves with seal

FILTERS – classification according to ISO 16890

- coarse 65 % (ex G4) pleated synthetic fiber
- ePM1 70% (ex F7) low pressure drop
- ePM1 85% (ex F9) low pressure drop

RANGE

- 10 models with diam. from 200 to 710 mm



Controls: air quality and savings

The units are supplied complete with control system and connection to the power supply network; multiple versions of controls are available. For more information see the controls manual

CTRS



CTR-08



EVO-PH

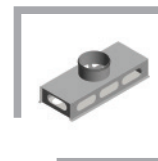
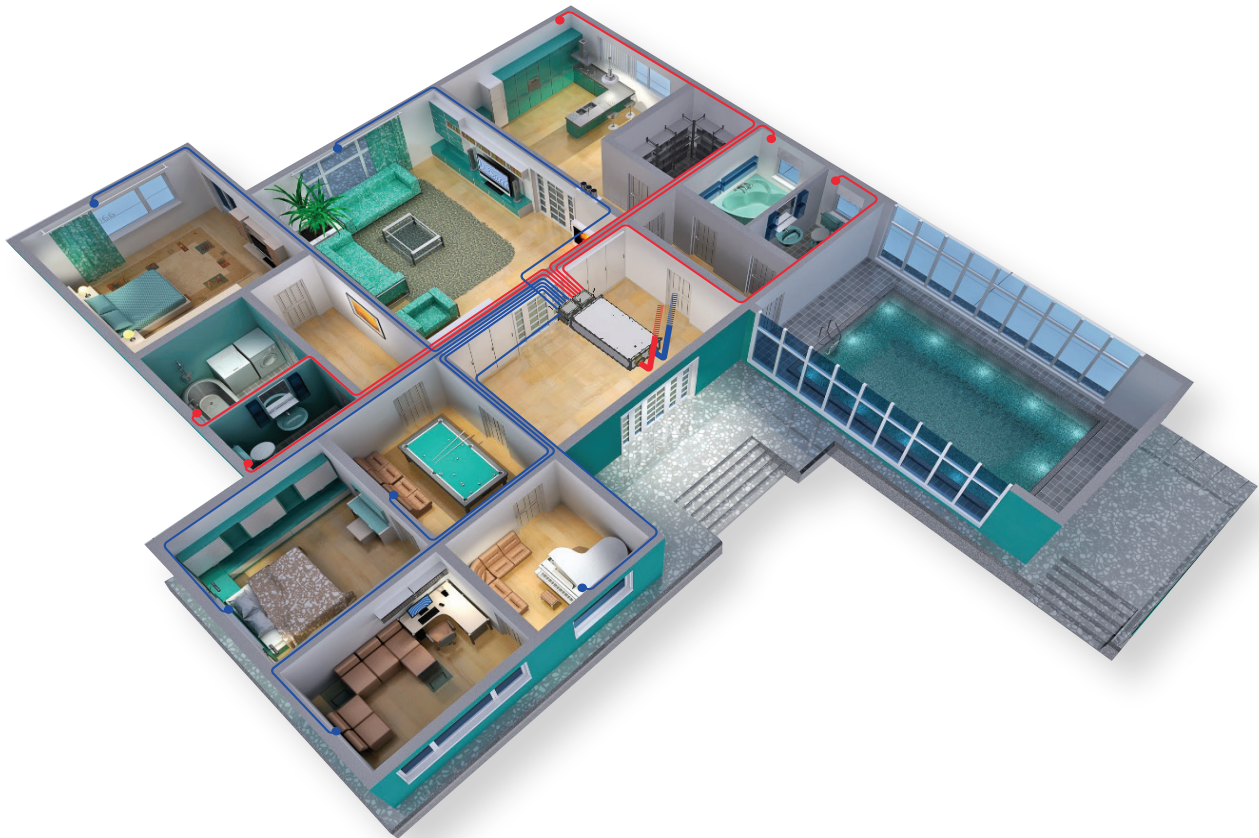


SMART CONTROL



The AIR + air distribution system is a complete range of accessories – **positioning on site simple and quick, in suspended ceiling or under-lay** – for air distribution to individual local (new buildings or to renovate).

Circular and oval sections are available, plenum distribution and air recovery, silencers, various fittings, diaphragms, valve terminals, plenum environment for grilles and valves ventilation, ecc. The product is made of **antibacterial and antimycotic material**.



Completion of the proposal – for the tertiary sector – **a wide range of dampers** (calibration, sealing, overpressure), **silencers, grilles, filter boxes, flow regulators...and special performances.**



New filtration concept



CLEAN AIR CUBE best represents what is now needed: filtered, healthy and clean air

CLEAN AIR CUBE has been designed to increase the filtration capacity in the environments: It can be installed in 2 ways:

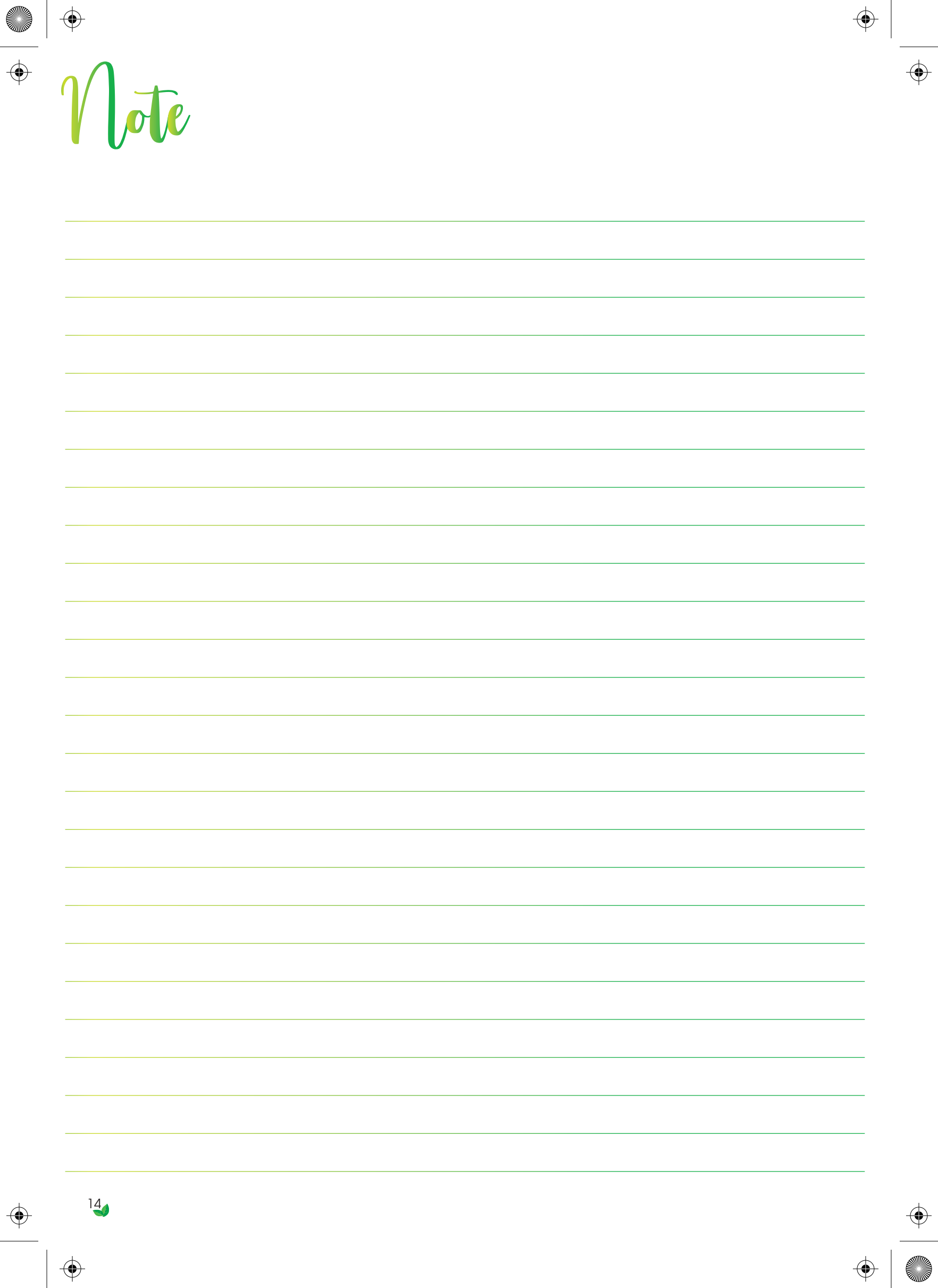
- Independent unit: can be equipped with different controls; from a simple potentiometer, to manually adjust the fan speed, up to different types of controls to adjust the air flow rate or pressure.
- By integrating an existing VMC system.

CLEAN AIR CUBE is equipped with several levels of filtration:

- **Prefiltration:** the units can house 2 pre-filters used both as prefiltration for a possible final absolute filter or be all existing filtration
- **Additional filter:** after the prefilter section it is possible to install an additional filter; for example a flat activated carbon filter, if you need to eliminate odors or VOC.
- **Final filtration:** after the additional filter, a HEPA or Electrostatic filter can be inserted

CLEAN AIR CUBE can also be equipped with a germicidal UV lamp

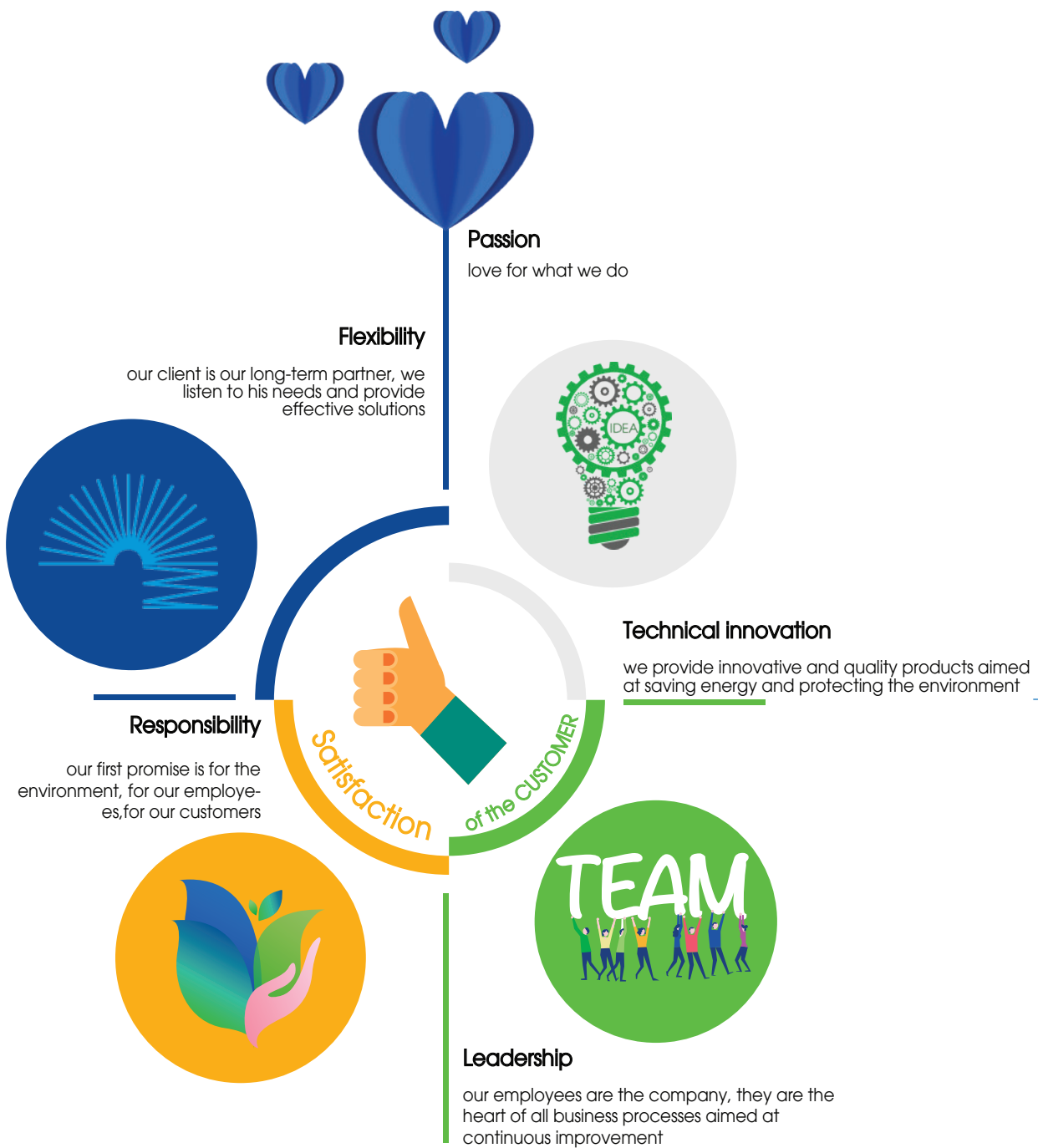
For more information contact the sales representative



Note

Handwriting practice lines consisting of alternating light green and yellow horizontal bands.

Our business philosophy





BROCHURE_EN

