KIMMCO ISOVER
SAINT-GOBAIN

EPD VERIFIED · EUCEB · UL LISTED · SPM STRAIGHT DUCT METHOD CLIMAVER®

CLIMAVER®

DUCT SYSTEM

More than a duct.
Much more than insulation.

Thermal Insulation · Indoor Air Quality · Energy Savings · Moisture Control · Protected Planet · Minimal Waste · Recycled Glass UP TO 86% · Acoustic Insulation · Fire Protection

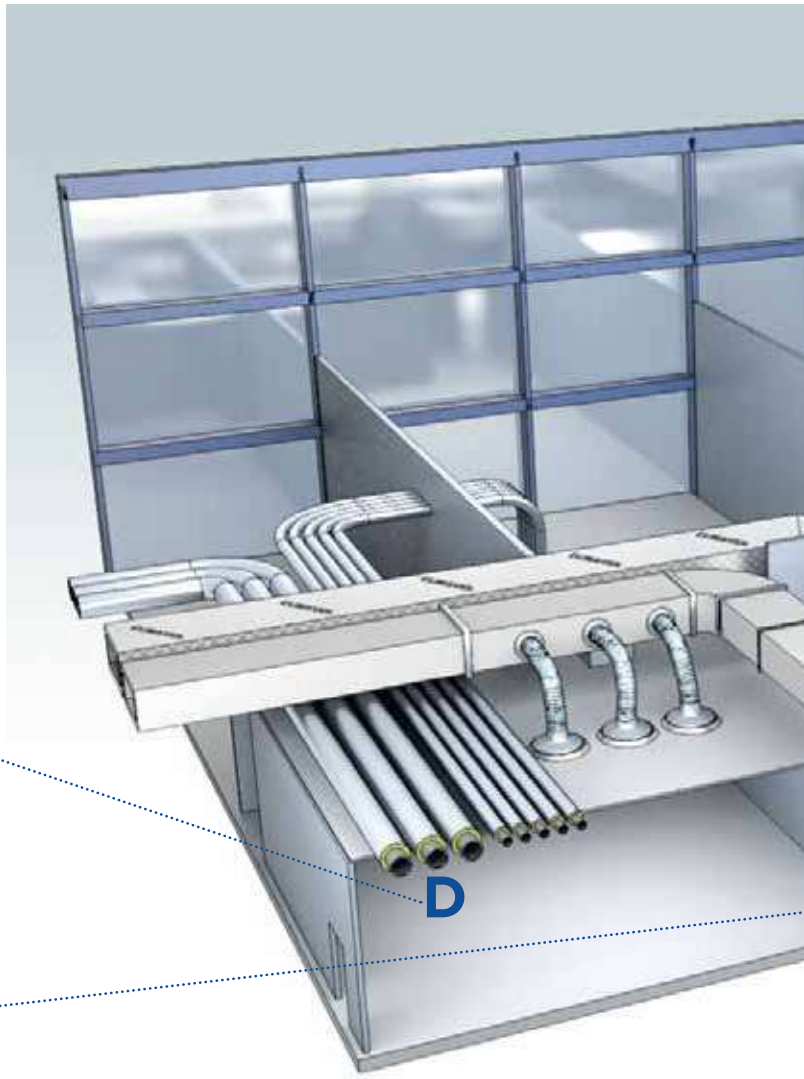
LEADER IN INNOVATIVE SUSTAINABLE SOLUTIONS

We offer a wide range of Glass wool and Stone wool insulation solutions for Thermal and Acoustic comfort, Fire safety and sustainability. The products are specifically designed and manufactured to address the needs of the market and the latest addition to our portfolio "**CLIMAVER**®".

CLIMAVER® is Glass wool based pre-insulation duct system that is efficient, safe and reliable thus making it as one of the best choice for energy saving & higher productivity for all projects and especially for Green building projects.

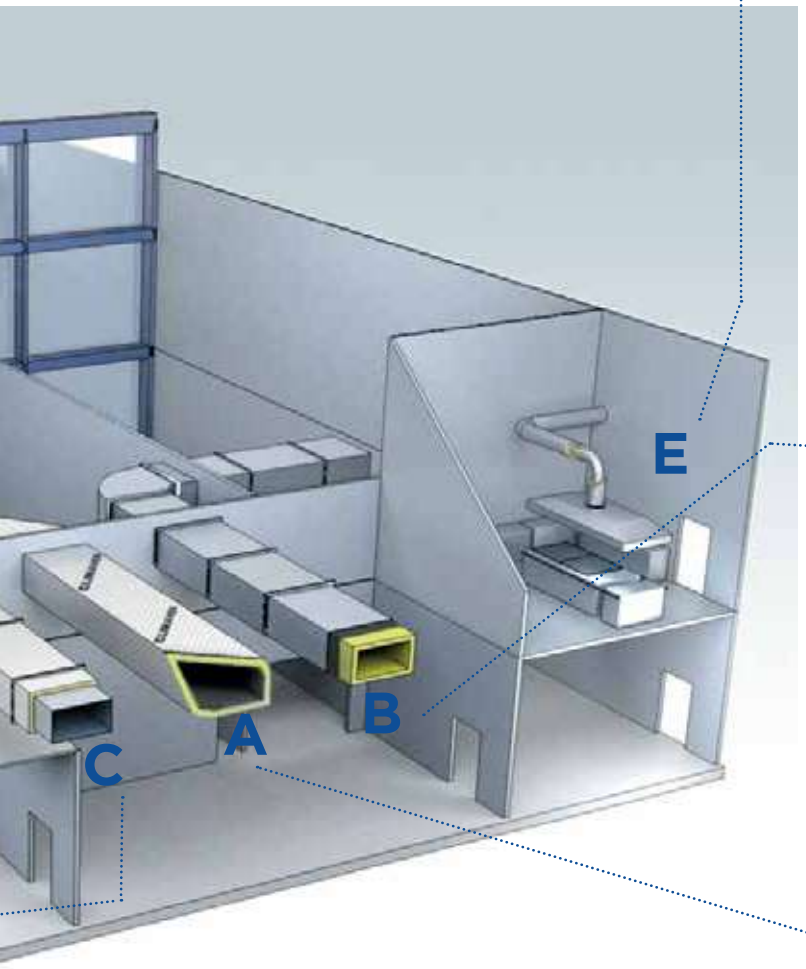
HVAC Pipe Insulation

KIMMCO-ISOVER pipe sections for insulation of HVAC water and other pipes. K450 and K450 Plus provide high efficient thermal insulation and prevention of condensation.



HVAC Duct Insulation

Solutions to provide thermal insulation and prevent condensation on the outside of the metal duct. Wide range of products are available with different facings - KDI, KDIP, EDI, EDIP and Self-seal.



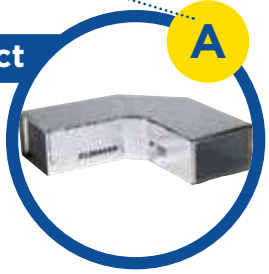
Exhaust duct Insulation

KIMMCO-ISOVER Stone wool solutions for providing fire resistance in kitchen exhaust and fire safety applications.

Inner Duct Liner

Solutions for superior sound absorption and better sound treatment of air duct. KIMMCO-ISOVER product, KCL with special acoustic facings is installed inside the metal or other PID duct for noise control.

Self- Supporting Duct



CLIMAVER®. solution is the easy-to install air duct alternative that provides high levels of noise control, thermal insulation, air tightness and UL fire rated

Optimizing
VENTILATION & AIR-CONDITIONING SYSTEMS

Do you want to optimise your projects by offering your customers the most efficient solutions for their ventilation and air conditioning systems?

- **Provide** the right amount of fresh air and ensure thermal and acoustic **comfort** for the occupants
- **Increase the energy efficiency** of buildings by offering best in class duct systems
- **Reduce** installation, operating and maintenance **costs**

CHOOSE CLIMAVER®, YOUR ALL-INCLUSIVE DUCT SYSTEM

Made from dense and rigid glass wool boards, CLIMAVER® self-supporting air ducts are a cost-effective, easy-to-install alternative to traditional insulated metal ducts:

An all-in-one metal-free system, delivered flat on a pallet, and assembled in a single operation.

Duct sections are assembled easily, without the need for expensive machinery usually used on-site.

A shiplap on the edges ensures tight closure of the duct.

A unique product to replace metal ducts, providing state-of-the-art insulation and comfort.

Read more to find out how CLIMAVER® ductwork can make your buildings more cost-efficient, greener and safer...

Add value at
EVERY STEP OF THE PROJECT

Invest in this exceptional ducting solution to add value across the entire life of the project.

AS A BUILDING OWNER

- Do your bit for the environment
- Improve the safety, comfort and wellbeing of the occupants of your property
- Earn points towards Green Building certifications (LEED, BREEAM...)
- Significantly reduce operational and maintenance costs

AS A SPECIFIER

- Design high-performance ventilation & air-conditioning systems for your customers
- Bring key benefits to your customers
- Demonstrate your capacity to innovate
- Address the most stringent building regulations (thermal, acoustic & fire performance)
- Work with Building Information Modelling (BIM)

AS A CONTRACTOR

- Install duct and insulation in a single operation
- Reduce installation time and labour costs
- Install more easily
- Optimise your logistics

8 GOOD REASONS TO CHOOSE *CLIMAVER®*

Reduce your energy bill

Get greener

Engage for safer and healthier materials

Keep the noise down

Ensure fire safety

Ensure reliable, long-term performance

Minimise maintenance

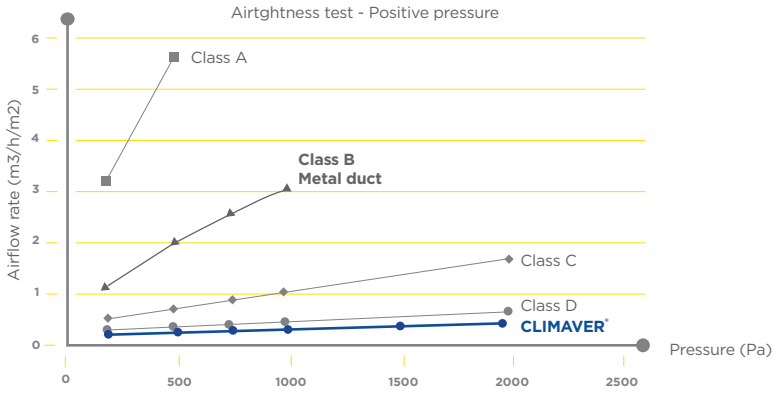
Increase your site productivity

Reduce your ENERGY BILL

To make your duct system as energy efficient as possible, you must take into consideration the thermal performance of your insulation material, potential thermal bridges and the airtightness of the duct system.

THE ALL-INCLUSIVE CLIMAVER® SOLUTION

Highest classification of airtightness (exceeding the most stringent airtightness classification)



Excellent thermal resistance

Thermal conductivity at 10°C (W/ m.K)	*Thermal Resistance (m².K/ W)*
λ = 0,032	R = 25mm = 0.78

Reduced thermal bridges

Reduced thickness of insulation at the edges

V

Thermal bridges
+ risk of condensation

Constant thickness of insulation all around the duct

V

No thermal bridges

Are you aware of the untapped potential of airtight ducts to improve energy efficiency?

Most people are unaware of this "out-of-sight" problem around the seams and joints of duct take-offs and fittings, often due to a poor workmanship. In fact, duct leakage is not only detrimental to indoor air quality and comfort, but also to the energy efficiency of the whole system.

Reducing leakage means:

- **Less heat loss**.
- **Less power for air handling unit (AHU) or ventilation machine needed** to compensate for the effect of the leaks.
- **Lower total airflow** rates to and from unconditioned spaces.
- **Optimised energy efficiency measures**, including demand-control and heat recovery.
- **The air** needed to maintain the indoor environment at the desired temperature **flows exactly where it is needed**.
- The whole system can be **precisely dimensioned**.

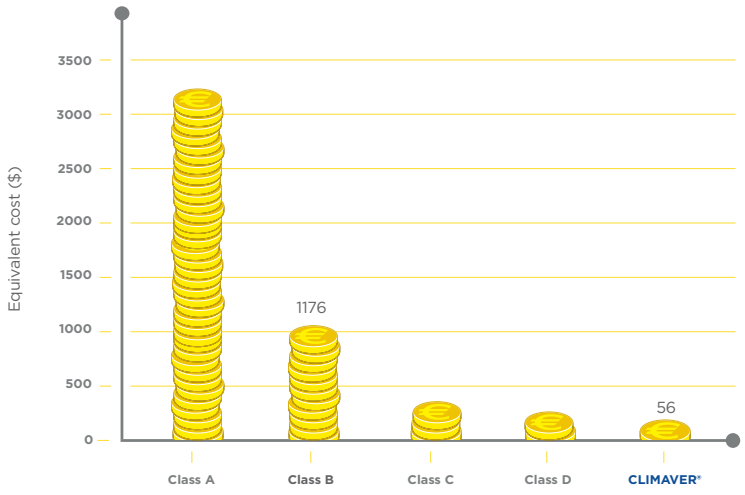
Energy used for heating & cooling is reduced by ~15%.

SCENARIO:

› A duct system of 200m², with a static pressure of 300 Pa, and a flow of 5400 m3/h.
› The airflow temperature is 16 ºC and the room temperature is 25ºC.
› Energy cost assumed is $ 0.17 per kWh in UAE.

Airtightness class EN 13403	*Leaks permitted (l/(sm²))*	*% Leaks/total flow*	*Energy loss / year (kWh)*	*Cost / year ($)*
A	1.1	14.8	21283	3559
B	**0.370**	**5.0**	**7030**	**1176**
C	0.120	1.6	2343	391
D	0.040	0.5	780	130
CLIMAVER®	**0.017**	**0.2**	**330**	**56**

Cost per year due to duct leakage



Class B system (metal duct + insulation)

› Up to 5% leaks / total flow
› Up to 7030 kWh lost per year
› **Cost of duct leakage = 1176 $**

VS.

CLIMAVER®

› Max 0.2% leaks / total flow
› Only 330 kWh lost per year
› **Cost of duct leakage = 50 $**

Get GREENER

Are you looking for more sustainable solutions?

CLIMAVER® provides various benefits to the environment across its entire lifecycle, lessening the impact from sourcing to manufacture, from distribution to end-of-life:

CLIMAVER® helps save materials & resources:

Manufactured from up to 80% recycled glass wool, it reduces the need for sand extracted from quarries and helps protect biodiversity. But that is not all! Compared to metal ducts requiring the use of screws and welding, CLIMAVER® also reduces the consumption of additional tools and equipment.

CLIMAVER® drives energy efficiency:

Very good thermal resistance, reduced thermal bridges and excellent airtightness help significantly reduce energy consumption and limit greenhouse gas emissions from your ventilation system. *Remember: The best energy is the energy we don't use.*

CLIMAVER® limits waste generation:

The exclusive Straight Duct Method (cf. page 20) and unique guiding lines ensure the optimal use of material, reducing building site waste.

CLIMAVER® reduces transport emissions:

The product is usually delivered flat on a pallet and assembled on-site. CLIMAVER®'s space-saving packaging reduces and optimises transport-related emissions.

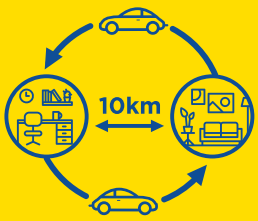
Multi Comfort

TRANSFORMING THE WAY WE BUILD

Buildings affect the way we live. We spend up to 90% of our time inside, so it's important that our homes, schools, hospitals, offices and other buildings are designed to not only keep us safe and comfortable, but to acknowledge and protect the fragile environment around us.

Multi Comfort is about building and renovating our buildings to provide improved comfort and wellbeing whilst protecting the environment. We start by incorporating the Passive House standard to ensure very low energy demand and enhanced Thermal Comfort – not too hot, not too cold. Then we add in high levels of Acoustic Comfort for sound control; enhanced Visual Comfort with just the right amount of natural light and then high levels of Indoor Air Comfort, bringing fresh air in and keeping pollution and odours out.

Feel	Hear	See	Breathe
THERMAL **COMFORT**	ACOUSTIC **COMFORT**	VISUAL **COMFORT**	INDOOR AIR **COMFORT**
Stays warm/cold without radiators and maintains ideal indoor temperature all year round.	*Protects from noise, outside and inside. Improves ambient noise and speech intelligibility for better working and learning*	*Ensures natural light without glare and even light distribution*	*Keeps outdoor pollution outside. Ensures constant supply of clean, fresh air. Actively breaks down impurities from indoor air.*



x 36 years

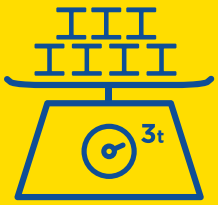
More than 36 years of driving 20km a day to work*

180,000 km travelled by car or 30 tons of CO2 emissions

4000x

The electricity usage of 4,000 inhabitants for 24h**

215,000 MJ of electricity consumed over 25 years



More than 3 tons of steel to install, insulate and dismantle

CLIMAVER® contributes significantly to many aspects of LEED and other sustainability labels.

Engage for safer
AND HEALTHIER MATERIALS

The health and safety of our customers is a top priority for us, not only for the building's occupants, but also during installation.

PROVIDING FRESH, CLEAN AIR

The indoor climate of the buildings is important for the wellbeing of its occupants. A constant supply of clean, fresh air helps people to be more productive, happier and to experience fewer health issues. The best way to improve indoor air quality is to reduce pollution at source while improving ventilation and purifying the air. With CLIMAVER®, you can effortlessly carry fresh air inside **without having to worry about mould or bacteria** (EN 13403 for non-metallic ducts). CLIMAVER® also fulfils low emission requirements for buildings (according to EN ISO 16000-10:2006). CLIMAVER® is odorless and it meets water vapor sorption according to ASTM C1104/C1104M

WORKING WITH A SAFE MATERIAL

CLIMAVER® ensures safe and comfortable installation

All ISOVER glass wool fibres are bio-soluble and exonerated from any classifications on carcinogenic, mutagenic, or toxic for reproduction criteria. CLIMAVER® is certified according to EUCEB and therefore complies with all EU regulatory requirements.

CLIMAVER® is easy to handle thanks to its ergonomic product dimensions and **weight 50% lower** than a metal duct + insulation solution.
In addition to this, the aluminium foil with its unique guiding lines improves installation productivity.


BCCA

BCCA

EUCEB CERTIFICATE

BCCA, independent Certification Body designated by the scheme owner EUCEB, declares that all requirements have been met to attest that the products to which the right to use the EUCEB Trademark is granted and that are manufactured by

Kuwait Insulating Material Manufacturing Co.
PO Box 10042, KW - 65451 Shuaiba,

in the plant situated at

Shuaiba

are made of fibres with a chemical composition that lies within the chemical range of the reference fibre

Mineral Wool AA 1

that has successfully been tested

in accordance with Note Q of the Regulation (EC) No 1272/2008 of the European Parliament and of the Council as currently in force

as given in report No 090205 of 19-02-2002.

This certificate is granted on the basis of the Implementation Rules TRA-EEUC-011 for EUCEB Certification of mineral wool products

N° certificate BEUC-011-23066-450-23066 | Valid from 01-01-2020 until 31-12-2023

Issued in Brussels, on 01 January 2020.

ir. B. De Blaere,
General Manager

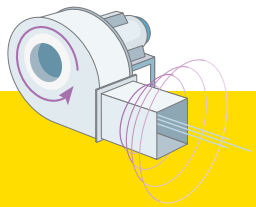
BELGIAN CONSTRUCTION CERTIFICATION ASSOCIATION NPO

More than 2500 scientific publications have demonstrated that mineral wool fibres are safe to manufacture, install and live with. This has been recognised by health authorities at an international level e.g. REACH regulation.

Keep the noise **DOWN**

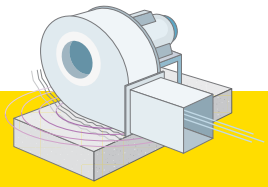
Noise is recognised as an environmental pollutant that has a significant impact on our health and wellbeing. Ventilation and air-conditioning systems can be a source of noise and vibrations, either from the equipment itself or from the air flow circulating through the system.

Main sources of noise in a ventilation and/or air-conditioning system:



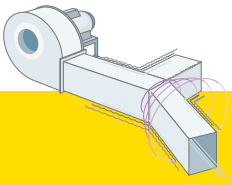
Ventilation/ air-conditioning system

Noise transmission due to the ventilation and/or air-conditioning system itself.



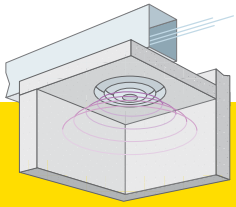
Machinery vibrations

Noise transmission due to the structure on account of vibration.



Air circulation

Generation of noise by the air speed effect.



Grilles and diffusers

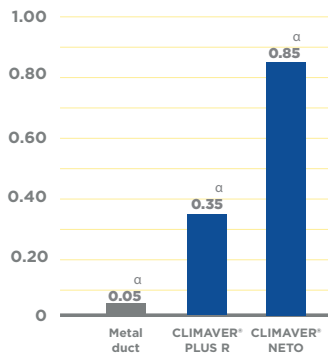
Noise transmission via grilles and diffusers.

This phenomenon is particularly noticeable if the internal surface of the ducts is made of a material that easily reflects sound, e.g. metal.

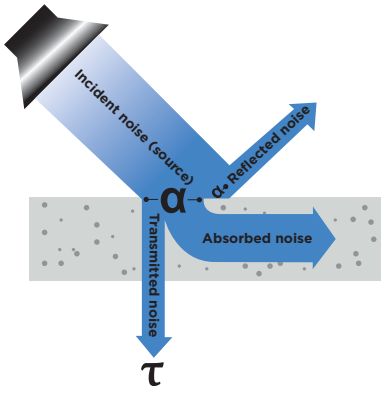
Create a well-balanced acoustic environment with CLIMAVER®

CLIMAVER® offers best-in-class sound absorption with weighted absorption coefficients of up to α_w **0.85 for *CLIMAVER neto®***

Acoustic absorption (α_w)



It acts as a sound insulator both towards its surroundings, and within the ductwork:



Acoustic attenuation in dB for 5m of 400x200mm duct

Product	*Frequency (Hz)*				
	125	*250*	*500*	*1000*	*2000*
Metal duct	2	2	7,5	7.5	3
CLIMAVER® Plus	8.5	8.5	8.5	38.5	30
CLIMAVER® Neto	18	43	52.5	62.54	68

CLIMAVER® is highy absorbent, including at low frequencies, where the problem of noise generated by the AHU or ventilation machine is greater.

- **Increases the level of acoustic comfort** of your buildings
- **No need for additional acoustic insulation** liners inside the ducts
- **No need for silencers or sound attenuators***

**depending on system design*

Ensure
FIRE SAFETY

The consequences of fire breaking out and spreading are of serious concern for property owners and occupants everywhere.

Today's buildings are full of highly inflammable materials which immediately catch fire. Within only a few minutes, a fire spreads, meaning the temperature goes up and the room begins to fill with toxic smoke. Smoke inhalation can cause serious respiratory complications, and is the primary cause of death for victims of fires, exceeding burns by a 3-to-1 ratio.

The choice of materials can significantly affect the spread of fire and its rate of travel, even though they are not likely to be the first things to ignite. They can be classified in terms of their reaction to fire, i.e. their potential contribution to flashover (the spontaneous ignition of hot smoke and gases which can lead to a fire spreading uncontrollably). To address other hazards found in real-life fires and for risk assessment, two additional classifications are also available: "s" and "d", providing information on smoke development. Class s1 to s3 refers to levels of smoke release, from insignificant (s1) to high (s3); and classes d0 to d2 refer to the emission of flaming droplets.

Product CLIMAVER®	*Class*	*Reaction to fire*	*Flashover*	*Smoke and droplets*
PLUS R, NETO,	*B, s1-d0*	No significant contribution to fire growth	No	Insignificant smoke release with no flaming droplets or particles expected
-	*C*	Limited contribution to flashover	Flashover >10 min	Production of smoke & flaming droplets & particles
-	*D*	Contribution to flashover	Flashover >2<10 min	Production of smoke & flaming droplets & particles
-	*E*	Significant contribution to flashover	Flashover <2 min	Production of smoke & flaming droplets & particles (smoke release is expected to be substantial)
-	*F*	Not tested or incapable of archieving Class E	NPD	NPD

CLIMAVER® is also classified O according BS 476 standard.

SAFETY FIRST:

CLIMAVER® is non-combustible. It does not contribute to the spread of fire. It will not emit smoke or help to propagate fire.

Ensure reliable,
LONG-TERM PERFORMANCE

As CLIMAVER® is made of glass wool, it could be perceived as fragile. However, CLIMAVER® is both robust and flexible, which means that it can withstand all kinds of mechanical stress.

WITHSTANDING HIGH PRESSURE

To make sure your CLIMAVER® duct is not affected by the working pressure of your air conditioning system, we tested the entire range in accordance with EN 13403.

The Resistance Against Pressure test determines the fitness for purpose of ductwork assembled without reinforcements. The air ducts and connector sections with joints should withstand the test pressure without rupturing.

This standard requires the duct to be tested at a pressure of 2.5 times the pressure declared by the manufacturer. The CLIMAVER® range has therefore been tested at a pressure of 2000 Pa without generating any cracks or swelling, despite the test being performed on a joint between two ducts.

Be assured that your CLIMAVER® duct can withstand constant static pressure of up to 800 Pa and air-circulation up to 18m/s.

A ROBUST SYSTEM

CLIMAVER® has been tested for the minimum required rigidity according to the EN 13403 method. It attains board stiffness Class R2 (Flexural rigidity Nmm2 ≥ 90,000).
Contrary to metal ducts, CLIMAVER® is not at risk of dents or damage on building sites.

Minimise MAINTENANCE

We know that it is important for your ventilation to work efficiently over time. Our design teams have therefore worked hard to ensure all CLIMAVER® products are easy to clean without compromising their original properties.

The internal coatings of the CLIMAVER® range offer the mechanical resistance required to clean the air conditioning systems, including with nylon brushes, without causing any deterioration or requiring post-cleaning treatments (encapsulation). For the same reason, the resistance of the internal coating reduces the frequency of access required for cleaning. This has been certified by AELSA (the Spanish association of duct cleaning companies).

CLIMAVER® ducts retain all their acoustic, thermal and fire protection properties over the whole lifetime of the system.

Increase your
SITE PRODUCTIVITY

Do you want to optimise your work, increase productivity and reduce installation times?

Choose CLIMAVER®, a single product that replaces the two traditional trades of metal ductwork and their insulation. Assembled in a single operation, it offers numerous installation benefits:

Improves site productivity:
CLIMAVER® is up to 5 times faster to install than metal ducts + insulation. A team of 4 appli - cators can fabricate and install more than 120 sqmts of ducts in a typical working day, which can help optimize the use of manpower.

Greater flexibility:
Installed on site, CLIMAVER® can easily be adapted to last-minute changes in ductwork or alternative routing.

Comfortable to install:
Up to 50% weight reduction compared to metal ducts + insulation, and its ergonomic pro- duct dimensions make it easy to carry and lift. Installation also requires fewer duct supports.

Optimises logistics:
Saves space during transport and storage, as CLIMAVER® is delivered flat on a pallet or box, and no special power tools or machines are needed for installation.

Limits waste generation

Reduces noise disturbance on building sites.

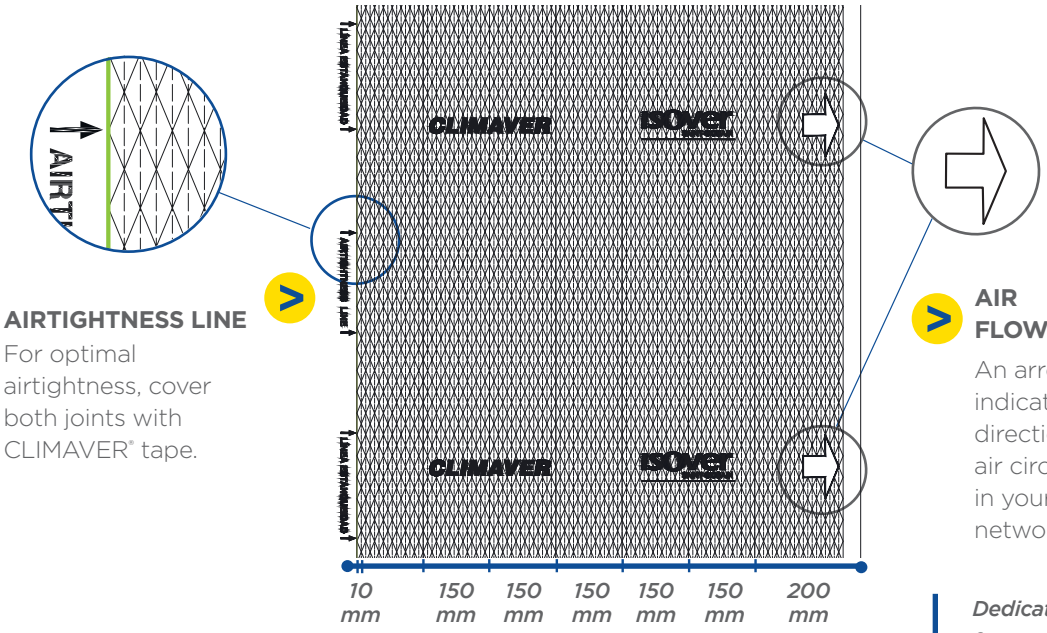
UNDERSTANDING THE SDM METHOD

As its name suggests, the Straight Duct Method (SDM) involves combining straight duct boards in different configurations and parts like elbows, branches and offsets etc.
By constructing self-supporting ducts in this way, greater precision, resistance and quality can be achieved, with less load loss and waste.

What's more, you'll save time and money, as the boards are faster to install.
5 times faster than cutting from pieces.

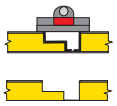
We've added guiding lines on all CLIMAVER® boards, so the installer does not have to draw lines himself. This limits the risk of mistakes, while improving performance and optimising the quantity of material used.

New design



RULE MTR 3
No need to measure by hand – we have marked every 10mm.

Dedicated tool: for example Red MM tool for straight cut



More information about the CLIMAVER® Straight Duct Method? Take a look at the **CLIMAVER® Installation Guide** or download our **CLIMAVER.app**.

CLIMAVER® AND BIM:

We provide BIM objects of different CLIMAVER® configurations, to facilitate the work of designers and specifiers on projects involving Building Information Modelling. The BIM objects are available for download in the “Documentation” section of our website.

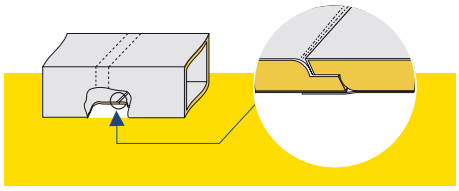
GET MORE FROM SDM

With our exclusive leaning shiplap, you can further optimise the performance of your ductwork:

- **Improve airtightness & reduce pressure loss**
- **Enhance aesthetics**
- Obtain **stronger**, **more precise jointing**
- **Choose your configuration**, including complex shapes
- **Connect to any HVAC** standard equipment

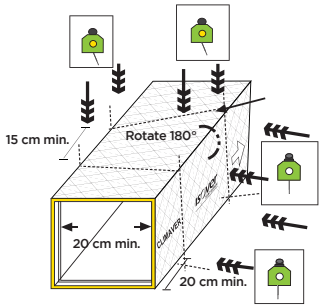
0% waste with SDM

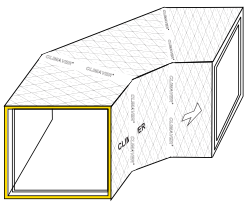
Example:
waste generated creating two 90’ elbows of 300x350mm

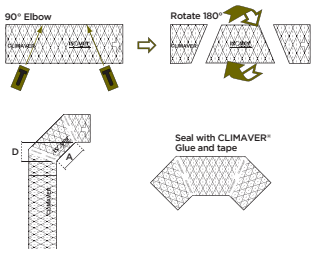


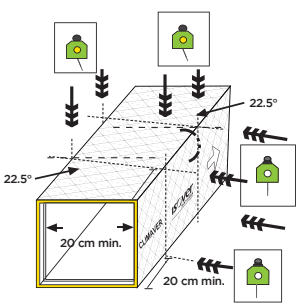
1.5 m²	Cut from 4 pieces
0 m²	Straight Duct Method

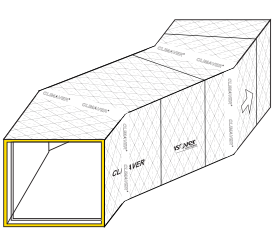
All complex shapes and connections needed with other HVAC equipment are easy to achieve with CLIMAVER®.

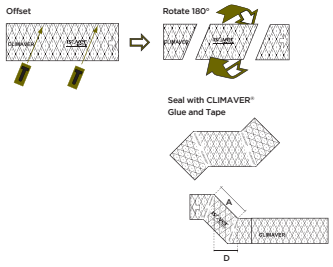












WHICH *CLIMAVER®* PRODUCT IS RIGHT FOR YOUR PROJECT?

Make your choice from a comprehensive range of solutions, trusted by customers around the world

A comprehensive range
TO MEET ALL YOUR NEEDS

Whether you are looking for maximum energy efficiency, enhanced noise reduction or extra fire protection, you'll find a pre-insulated duct solution tailored to your project.

CLIMAVER neto®

Characteristic	Symbol	Unit	Quantities and measured values						Standard
Application field	–	–	CLIMAVER® is a self-supporting duct for air-conditioning, ventilation and heating systems CLIMAVER® has been designed to offer excellent thermal performance, acoustics, fire safety and high level of air-tightness making the system energy efficient						EN 13403
Thermal conductivity	T	[°C]	10	20		40		60	EN 12667 EN 12939
	λ	[W/(m·K)]	0.032	0.033		0.036		0.038	
Fire behaviour	–	–	Non combustible, Euroclass B-s1, d0						EN 13501-1 EN 15715
Practical acoustic absorption coefficient, αP		Hz	125	250	500	1000	2000	4000	EN ISO 354 EN ISO 11654
	α		0.35	0.65	0.75	0.85	0.90	0.90	
	α_w		0.85						
Acoustic attenuation, in a straight duct, ΔL (DB/m)*	Section [mm]	200 x 200	4.83	11.49	14.04	16.73	18.12	18.12	
		300 x 400	2.82	6.70	8.19	9.76	10.57	10.57	
		400 x 700	1.90	4.51	5.51	6.57	7.12	7.12	
			$\Delta L = 1.05 \cdot \alpha_p^{1.4} \cdot P/S$ For the sound power of a ventilator with a 20,000 m³/h flow, load loss 15 mm.w.g.						
Water vapour resistance	–	m²·h·Pa/mg	140						EN 12086
Airtightness	–	–	Class D						EN 1507 EN 12237
Resistance to pressure	–	Pa	800						EN 13403
Pressure losses	–	Pa	For normal HVAC system air speeds pressure drops are similar to metal ducts						–
Dimensional stability	–	%	Quantities and measured values : < 1						EN 1604
Quality management	–	–	ISOVER is certified according to EN ISO 9001 and EN ISO 14001						EN ISO 9001 EN ISO 14001

BEST IN CLASS IN ACOUSTIC PERFORMANCE

CLIMAVER PLUS R®

BEST IN CLASS IN AIR TIGHTNESS PERFORMANCE

Characteristic	Symbol	Unit	Quantities and measured values						Standard
Application field	–	–	CLIMAVER® is a self-supporting duct for air-conditioning, ventilation and heating systems CLIMAVER® has been designed to offer excellent thermal performance, acoustics, fire safety and high level of air-tightness making the system energy efficient						EN 13403
Thermal conductivity	T	[°C]	10	20		40		60	EN 12667 EN 12939
	λ	[W/(m·K)]	0.032	0.033		0.036		0.038	
Fire behaviour	–	–	Non combustible, Euroclass B-s1, d0						EN 13501-1 EN 15715
Practical acoustic absorption coefficient, αP		Hz	125	250	500	1000	2000	4000	EN ISO 354 EN ISO 11654
	α		0.20	0.20	0.20	0.60	0.50	0.40	
	α_w		0.30						
Acoustic attenuation, in a straight duct, ΔL (DB/m)*	Section [mm]	200 x 200	2.21	2.21	2.21	10.27	7.96	5.82	
		300 x 400	1,29	1,29	1,29	5.99	4.64	3.40	
		400 x 700	0.87	0.87	0.87	4.04	3.13	2.29	
			$\Delta L = 1.05 \cdot \alpha_p^{1.4} \cdot P/S$ For the sound power of a ventilator with a 20,000 m³/h flow, load loss 15 mm.w.g.						
Water vapour resistance	–	m²·h·Pa/mg	140						EN 12086
Airtightness	–	–	Class D						EN 1507 EN 12237
Resistance to pressure	–	Pa	800						EN 13403
Pressure losses	–	Pa	For normal HVAC system air speeds pressure drops are similar to metal ducts						–
Dimensional stability	–	%	Quantities and measured values : < 1						EN 1604
Quality management	–	–	ISOVER is certified according to EN ISO 9001 and EN ISO 14001						EN ISO 9001 EN ISO 14001

ACCESSORIES

CLIMAVER® is UL181 certified system. It is mandatory to use UL approved accessories to have UL 181 certification valid. Contact us to know about UL certified accessories

CLIMAVER® tool Kit

Specifically developed and patented CLIMAVER® tools for the fabrication of CLIMAVER® ducts in all shapes that are accurate and easy to use to save time and money
CLIMAVER® Tools are used to make the CLIMAVER® ducts and it's used for all the required cuts for assembling the ducts. It is specially designed to be used together with the CLIMAVER® Alumium Angle Guide and the cutting guidelines with which are printed on their external face of CLIMAVER® board
Spare blades for CLIMAVER® Tool Kit

Spare blades CLIMAVER® Tool Kit

Set of 20 blades for the CLIMAVER® Tool Kit includes 2 sets of all the 5 different set of blades

UL listed Aluminium tape

- 63 mm wide,100-110 micron thick ,55 mt long
- To construct UL181 CLIMAVER® self-supporting ducts with exposed alumium exterior facing
- Ensures the water vapour barrier of the duct
- To be applied in temperatures above -40 to 149°C

CLIMAVER® Neto Tape

- Black roll
- 63 mm wide, 50 m long
- In boxes of 12 rolls

CLIMAVER® Profiles

The CLIMAVER® ducts are resistant to the most aggressive mechanical cleaning methods. For those cases where frequent cleaning and for extra rigidity of the ducts is required, KIMMCO-ISOVER have designed the CLIMAVER® metal profiles. H-profiles were designed in order to facilitate access and inspection, guaranteeing the airtightness and quality of the ducts

Alumium Angle Guide

CLIMAVER® Ruler simplifies the measurement and cutting of CLIMAVER® Board and the ducts

- Alumium Angle Guide are predefined with the most used angles (90 °, 22.5 ° and 45 °)
- Simplifies duct measuring and cutting operations
- Preparing CLIMAVER® ducts using CLIMAVER® MM tools, allows ducts to be prepared directly without the need to add or subtract for each measurement based on cutting tool

CLIMAVER® Staples

- 14 mm staples for use in the CLIMAVER® Stapler
- Stapling the overlaps and joints on CLIMAVER® ducts

Presentation
Cartridge of 5,000 14 mm staples

CLIMAVER® Stapler

- Staple gun for assembling CLIMAVER® ducts in accordance
- with the SDM. Used in Stapling CLIMAVER® ducts using CLIMAVER® Stapler

Presentation
Box containing CLIMAVER® stapler

CLIMAVER® Glue

- Used in the sealing of internal joints
- (glass wool to glass wool) in the fabrication of any type of CLIMAVER® ducts using Straight Duct Method (SDM)
- Odorless, non-toxic and non-flammable.

Presentation:
Bottle of 1 liter

CLIMAVER® Knife

CLIMAVER® Knife is double sided bladed cutting tool. The knife is used for two types of cutting, the blade is used for cutting duct boards into two parts and for the other operations such as cutting out edge flaps

CLIMAVER® Alumium tape regular (for non-UL rated system)

- 63 mm wide, 50 micron thick, 50 mt long
- To construct CLIMAVER® self-supporting ducts with exposed alumium exterior facing
- Ensures the water vapour barrier of the duct
- To be applied in temperatures above 0 °C

Unit Limitation
Static pressure up to 800 [Pa]
Air speed up to 18 [m/s]
Internal air temperature up to 90[ºC]
External air temperature up to 60[ºC]
Vertical height ≥ 3[m] needs reinforcements

Application area Limitation
CLIMAVER® is not suitable for the below applications
Smoke or gasses extraction
High humid area like Swimming pool, toilet & bathroom, Sauna area
Surgery room, clean room
External ducts (you can use CLIMAVER® Star) or buried without protection

Proven Across
CONTINENTS AND BUILDING SECTORS

CLIMAVER® solutions have been chosen by customers across the globe looking to combine high performance and significant cost savings in a variety of sectors:

- **Commercial buildings**
- **Residential buildings**
- **City complexes / malls**
- **Airports**
- **Hotels**
- **Hospitals**
- **High-rise buildings**
- **Schools and educational institutions**

BE CONFIDENT: A SYSTEM USED WIDELY FOR MORE THAN 50 YEARS

More than 180 million m^2 of CLIMAVER® duct have already been installed worldwide.

OFFICE

Beijing,
Chaoyang Distric
China

HOSPITAL

San Juan de Dios Hospital
Cordoba
Spain

- Alghanim Automotive Showroom – **Kuwait**
- Residential Building (100 Flats) Lusail – **Qatar**
- Jizan Government Hospital - **Saudi Arabia**
- Arada Villa project in Sharjah (100 Villa) – **UAE**
- X-cite showrooms – **Kuwait**
- Private Villa Al Khiran – **Kuwait**
- Residential Building (200 Flats) – **Kuwait**
- Jebel Ali Lake View Hotel Dubai (400 rooms) – **UAE**
- Others

The CLIMAVER® STORY

For 50 years, we have constantly updated and improved the CLIMAVER® range to meet our customers' evolving needs. Based on this deep sector experience, we have constantly improved our manufacturing techniques to build a product optimised for both installers and end users.

DID YOU KNOW...?

Many first-generation CLIMAVER® installations are still operational.

1969
A NEW IDEA IS BORN
CLIMAVER®

1985
TOWARDS MODERNITY
CLIMAVER® PLATA

1993
THE BIG REVOLUTION
CLIMAVER® PLUS R

2002
TECHNOLOGICAL INNOVATION
CLIMAVER® NETO

2009
CONTINUOUS EVOLUTION TOWARDS GREATER COMFORT

2019
50 YEARS OF CLIMAVER®

2020
PRODUCTION IN MIDDLE EAST, KUWAIT
CLIMAVER® UL LISTED

ABOUT US

Discover the Saint-Gobain
& Alghanim Industries
and read more about KIMMCO-ISOVER,
the middle east leading supplier
of sustainable insulation solutions

About US

SAINT-GOBAIN www.saint-gobain.com

Saint-Gobain designs, manufactures and distributes materials and solutions which are key ingredients in the wellbeing of each of us and the future of all. They can be found everywhere in our living places and our daily life: in buildings, transportation, and infrastructure and in many industrial applications. They provide comfort, performance and safety while addressing the challenges of sustainable construction, resource efficiency and climate change.

A market leader in all its businesses, Saint-Gobain is constantly innovating to make homes more comfortable, cost-efficient and sustainable worldwide. Since 1665, Saint-Gobain has demonstrated its ability to invent products that improve quality of life. As one of the top 100 industrial groups in the world, Saint-Gobain continues to deploy its technological know-how, often in partnership with the most prestigious universities and laboratories. More than 23% of Saint-Gobain sales are generated through products which were developed less than five years ago.

ALGHANIM INDUSTRIES www.alghanim.com

Al ghanim Industries is committed to becoming the most successful and admired company in the region. Alghanim Industries is one of the largest, privately-owned companies in the Gulf region. A multi-national company in outlook with operations in 40 countries, Alghanim Industries is a multi-billion dollar conglomerate with more than 30 businesses.

The company has been recognized as one of the best Employers in the Middle East and one of Asia's Best Employer Brands, as well as having the Best Corporate Governance in Kuwait.

KIMMCO-ISOVER www.kimmco-isover.com

KIMMCO-Isover® brand is the result of the joint venture between SAINT-GOBAIN® and Alghanim® Industries in Kuwait. We design, manufacture, and distribute Glass Wool and Stone Wool insulation materials for Airconditioning, building and industrial projects in GCC, Africa, Asia and Levant countries.
Our reputable high-quality products are offering solutions to enable the construction sector to meet the increasing demand for ecofriendly and energy efficient materials, in different density, thicknesses and shapes (slab, roll, pipes, Wired Mat & loose wool)
KIMMCO-Isover® owns 2 factories to cover all market requirements from mineral wool insulation, one in Kuwait for Glass Wool Insulation and another in Yanbu-KSA for Stone Wool insulation.

www.kimmco-isover.com

KIMMCO ISOVER
SAINT-GOBAIN

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