

invisible[®].ac[™]
air comfort

**SDHV
AIR CONDITIONING
SYSTEM**

Smart | Silent | Space-saving
COOLING SOLUTION

Capacity : 02 kW – 25 kW



www.savitruaircon.com

SAVITRU AIRCON PVT. LTD.

The Company

Savitru Aircon Pvt. Ltd.

Established in 2008, Savitru Aircon Pvt. Ltd., a proud member of the COSMOS Group of Companies, has nearly three decades of leadership in the Indian HVAC industry. As the official Indian partner of Invisible AC, Savitru has pioneered the transition from conventional systems to advanced SDHV solutions, delivering superior comfort, energy efficiency, and design flexibility. Alongside Invisible AC, Savitru also distributes world-class URSA pre-insulated ducting boards from Spain, ensuring complete and cutting-edge HVAC solutions for modern projects.

British Engineering Meets Indian Partnership

Building on this strong legacy of innovation, Invisible AC today is designed and manufactured in Cambridge, UK - a hub of advanced HVAC technology and engineering excellence. Every unit reflects years of research in energy efficiency, airflow optimization, and comfort technology, ensuring global performance standards.

To bring this innovation closer to customers, Savitru Aircon Pvt. Ltd., a proud member of the Group serves as the exclusive partner in India. With decades of HVAC expertise and deep understanding of the local market, Savitru ensures smooth project execution, installation, and after-sales support. Together, British engineering, Indian expertise, and the trusted legacy of the COSMOS Group provide a solution that is globally advanced yet locally reliable.



Mr. Norman Bale
Director, invisible AC





Air Conditioning - The Challenge

Air conditioning has become a part of everyday life - keeping our homes, offices, hotels, and hospitals comfortable. Traditionally, cooling has been provided through two main systems: ducted central air-conditioning and non-ducted units like wall-mounted or split ACs. While effective, these systems bring certain challenges. Large ducted systems take up valuable ceiling space, often disrupt interiors, and suffer from leakage at duct joints, leading to higher energy use and uneven comfort. Non-ducted units, on the other hand, remain visible in the room, affecting aesthetics while still struggling with airflow balance and humidity control.

SDHV Technology - The Next Generation Cooling System

Invisible AC is designed to overcome these limitations with a new-generation approach. Using advanced European Small Duct High Velocity (SDHV) technology, it works through slim, flexible ducts that fit easily above false ceilings and walls. With minimal joints, leakage and energy loss are reduced, while interiors remain clean and uncluttered. The result is a completely concealed system that delivers quiet, even airflow and superior humidity control — redefining comfort for modern residences, offices, hotels, and healthcare spaces.

Proven Lower Humidity

During high-velocity system evaluation, the space without walls averaged 42.99% RH, The RH is 10.8% less than that maintained using the conventional system. The air velocity is stratified as in the conventional system test, but the temperatures show less stratification than that of the conventional system.

Proven More Comfortable

The thermal comfort in an 1150 ft² (106.9 m²) house equipped with conventional and high-velocity distribution systems was evaluated. Several conclusions were drawn from the thermal comfort results obtained in this field test study.

Both systems maintained the majority of the house at comfortable conditions according to the PMV and PPD indices, but the high-velocity distribution system, on average, yielded higher comfort percentages for the whole house with and without walls

Where is it Used

- Offices
- Hospitals
- Restaurants
- Residences
- Retail outlets
- Auditoriums
- Studios
- Factories
- Heritage Buildings
- Education Centers
- Pharma Laboratories
- Commercial Centres

Air Conditioning

Conventional Air Conditioning vs SHDV Cooling

Invisible AC

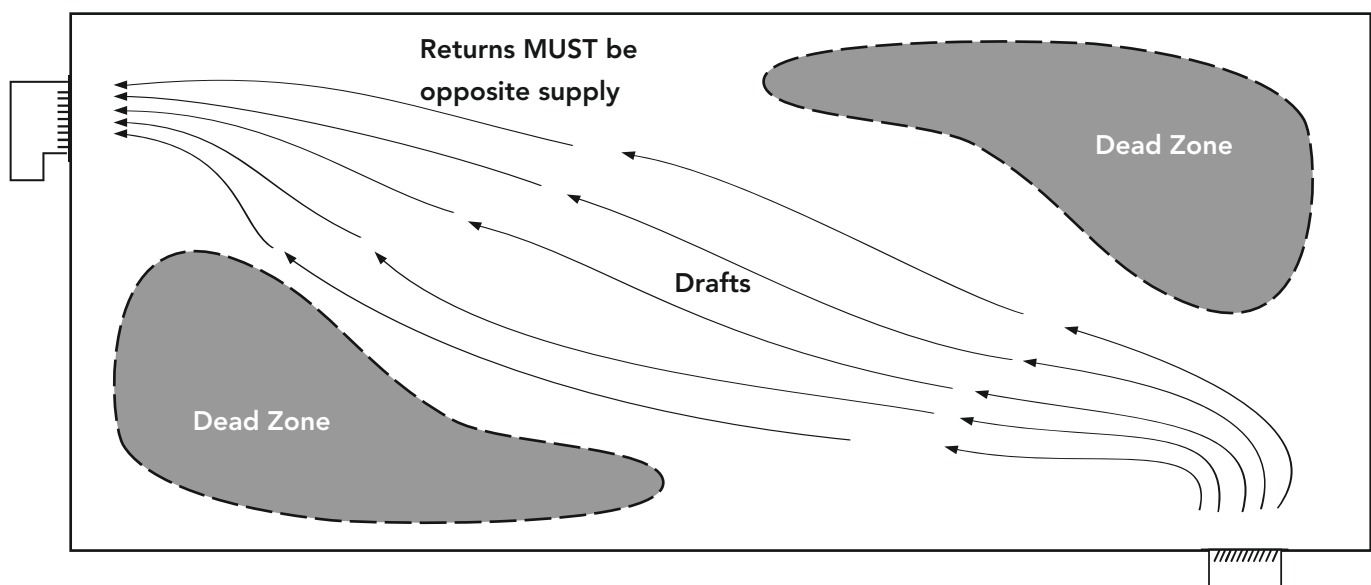
Where Jet Propulsion Meets Modern Air Conditioning

Invisible AC traces its roots to post-World War II innovations by engineer Calvin MacCracken, who applied jet propulsion principles to indoor comfort. By using high-velocity air jets, he created a system that circulated air swiftly and evenly, eliminating hot and cold spots and delivering seamless, draft-free comfort.

Today, Invisible AC builds on this legacy with modern engineering. Its high-speed air jets mix cooled or heated air efficiently, creating a gentle swirling effect that ensures uniform temperature distribution across every corner of a room. Using the same physics that powers aircraft, Invisible AC transforms any space into a perfectly controlled microclimate - blending advanced technology with practical luxury for homes, offices, hotels, and commercial environments.

Conventional Cooling System

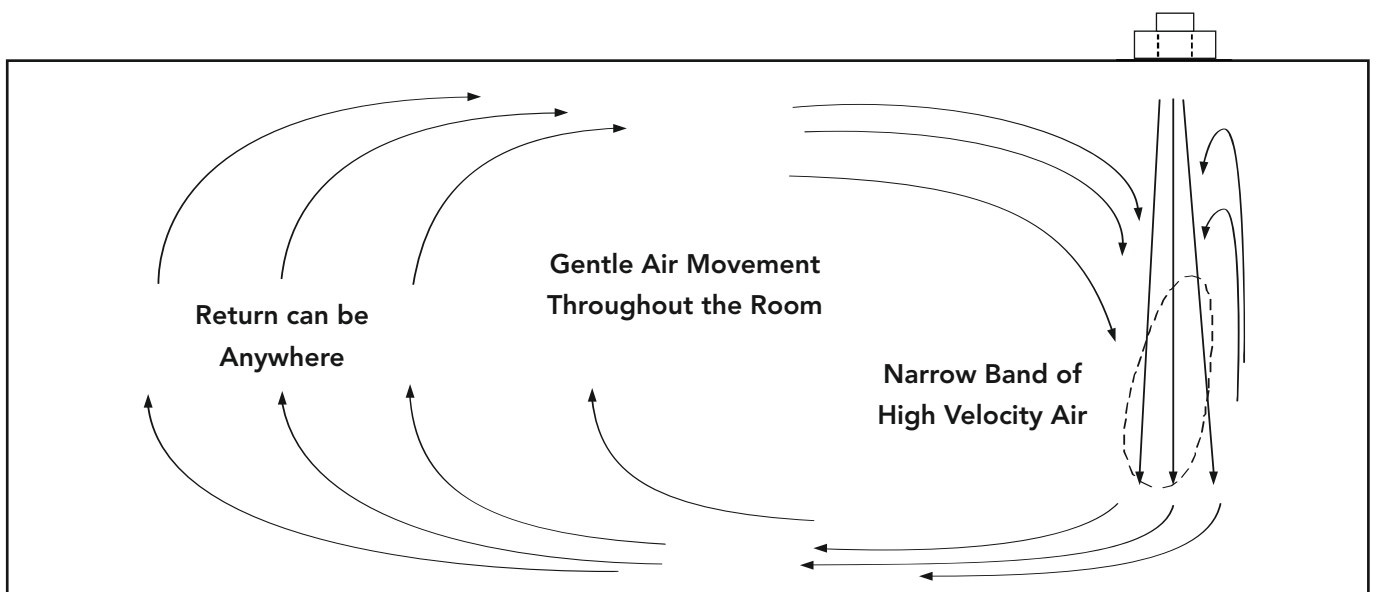
- Air Distribution** : Relies on larger ducts with slower airflow, leading to uneven mixing of air in the room.
- Comfort Issues** : Often creates drafts and leaves dead zones where air circulation is poor, resulting in temperature variations.
- Return Placement** : Requires return ducts to be positioned opposite the supply, which limits design flexibility.
- Efficiency** : Takes longer to achieve uniform room temperature due to uneven airflow and circulation patterns.
- Application** : Commonly used in standard residential and commercial buildings where cost efficiency is prioritized over advanced comfort.





SDHV (Small Duct High Velocity) Cooling System

- Air Distribution** : Uses a narrow band of high-velocity air that mixes thoroughly with room air, ensuring gentle and even air movement throughout the entire space.
- Comfort** : Eliminates drafts and prevents hot or cold spots, creating uniform comfort.
- Return Placement** : The return duct can be placed anywhere, making design and installation more flexible.
- Efficiency** : By quickly mixing conditioned air, SDHV systems achieve the desired temperature faster and maintain it more consistently.
- Application** : Ideal for spaces requiring consistent Comfort and Aesthetic Flexibility, such as Modern Homes, Heritage Buildings, Retrofit Projects and Commercial Projects.



SDHV - Air Conditioning, Redefined

An Advanced Alternative to Conventional Air Conditioning



Seamless Comfort, Perfectly Integrated

The perfect fit for Modern Living and Work Spaces

Unlike conventional split units or floor-standing systems that often intrude on design and limit comfort, Invisible AC redefines how cooling integrates into modern spaces. Its compact concealed design disappears within ceilings, walls, or false partitions, giving complete freedom to architects, designers, and homeowners to create interiors without compromise.

At the same time, European-engineered SDHV (Small Duct High Velocity) technology ensures even air distribution throughout the room. Instead of uneven comfort and hot or cold spots, occupants experience consistent cooling and improved air quality. Invisible AC is therefore not just an air conditioner - it is an alternative that adapts seamlessly to modern lifestyles and architectural needs.

Comfort with Minimal Hassle



With Invisible AC, you can enjoy central air cooling and heating without the disruption or cost of major remodeling. The system uses flexible, 2½-inch (63.5 mm) pre-insulated tubing to deliver high-velocity air, easily navigating walls and obstacles no tearing out walls or ceilings required.

Small, sleek 1-inch (25.4 mm) invisible slot or round air outlets, about the size of a CD, can be installed on ceilings, walls, or floors and painted or wallpapered to blend seamlessly with your décor. The quiet blower unit is compact enough to fit in an attic, small service areas, lofts, or concealed neatly above POP ceilings.

For winter comfort, Invisible AC can be configured with a hydronic (hot water) coil, an electric coil, or a heat pump, depending on your chosen model. This smart design brings modern comfort to your home with minimal disruption and maximum efficiency.

A Perfect Fit for Every Space



INVISIBLE AC is ideal for:

- Older homes, hospitals, hotels, historical landmarks.
- Newly Constructed Residential, Hospitality & Healthcare.
- Commercial Units with multiple zone requirements.

SDHV System

A Smarter Cooling Solution for Indian Spaces

Invisible AC pioneered small-duct, high-velocity central air systems decades ago and continues to refine and improve the technology. While other solutions may appear similar, none can match the quality, efficiency, and ease of installation that Invisible AC delivers. With compact ducting, flexible design, and advanced connectors, installations are faster, cleaner, and perfectly suited to Indian homes, offices, and commercial spaces.

Every Invisible AC unit is the result of cutting-edge engineering and the latest manufacturing practices from Cambridge, UK. Backed by Savitru and the COSMOS Group in India, the system combines global innovation with local expertise, ensuring superior performance, durability, and support. This makes Invisible AC not just another cooling system, but a trusted solution built to meet the diverse demands of Indian environments.

30% More Humidity Removal – Beyond Cooling



Cooling alone doesn't always guarantee comfort. High humidity can make a room feel sticky and unpleasant, even at lower temperatures. The Invisible AC is engineered with an exclusive deep coil design that removes up to 30% more moisture than conventional systems. With reduced humidity, you feel cool and comfortable, while uniform, airflow ensures consistent comfort throughout the room. This advanced dehumidification also saves energy, allowing you to stay comfortable at slightly higher temperatures without compromising freshness.

Silent Spaces, Superior Comfort



True comfort is experienced not only in temperature but also in silence. Invisible AC achieves whisper-quiet operation through a carefully designed mixing box, which balances airflow and minimizes turbulence at its source. In addition, sound-attenuator tubing carries cooled air from the ducts to the final diffusers, reducing noise along the air path. Specially designed high-efficiency fans, optimized duct layouts, and vibration control further ensure smooth, near-silent operation, often quieter than normal conversation. Complementing these features, URSA advanced insulation from Europe suppresses sound transmission while enhancing thermal efficiency. Together, these innovations create an indoor environment where cooling is felt rather than heard: bedrooms remain restful, offices stay focused, and luxury interiors preserve their serene atmosphere. Occupants enjoy consistent air movement, demonstrating that modern comfort can be both highly efficient and perfectly discreet.

Maximum Cooling, Maximum Power Efficiency



SDHV is designed for ultimate efficiency. Traditional duct systems can lose 20–30% of airflow due to leakage and short-cycling, wasting energy and reducing performance. With Invisible AC's smart duct design and precision-engineered components, every bit of cooled air reaches its destination. The result is consistent airflow, superior comfort, and significant energy savings keeping your home or office cool while lowering electricity bills.



Design Flexibility & Architectural Freedom

Every project is unique, and Invisible AC has been built to adapt. Its small-duct, high-velocity design allows the system to remain hidden, with conditioned air delivered gently through discreet grilles or slots that blend seamlessly with interiors. Whether in a luxury residence, hotel room, office, or retail outlet, Invisible AC ensures full climate control without disturbing aesthetics. From minimalist modern spaces to heritage buildings, it brings flexibility without compromise.



Flexible Air Distribution

Ceiling or Floor with Top & Bottom Discharge

Invisible AC delivers unmatched flexibility in air delivery, allowing outlets to be mounted in the ceiling or on the floor, depending on design requirements and comfort preferences. Floor-mounted installations offer two discharge options: top discharge, which directs conditioned air gently upward to promote natural convection and even distribution, and bottom discharge, which delivers air along the floor for a gentle, occupant-level cooling effect.

To ensure this airflow is delivered quietly and efficiently, sound-attenuator tubing carries air from the main ducts to the final diffusers, minimizing turbulence and noise along the path. Coupled with high-velocity airflow, this system guarantees that every corner of the room receives consistent, draft-free comfort without compromising interior aesthetics. This flexibility allows architects, designers, and homeowners to tailor airflow patterns to room geometry, furniture layout, or personal preference, delivering comfort that is both precise and unobtrusive.



Balanced Airflow for Natural Comfort

With conventional split or portable air-conditioners, cooling often feels uneven — some corners of the room stay warm while others get too cold. Invisible AC solves this problem through its advanced Small-Duct High-Velocity (SDHV) system, which circulates air evenly across the space.

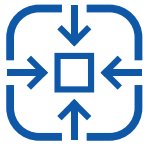
Instead of relying on large ducts or a single air outlet, Invisible AC delivers a gentle, high-velocity airflow that mixes smoothly with the room air. This ensures draft-free cooling and keeps every part of the room consistently comfortable, no matter where you sit, work, or relax.



Smart Modular Duct Design

Adopts layout revisions

The ducting in Invisible AC is designed using the static regain method, which ensures the entire duct remains a uniform size based on the unit's capacity. This provides a modular approach with flexibility in air distribution. Outlet positions can also be adjusted to suit site conditions, making installation simpler and perfectly adaptable to different layouts.



Fits Anywhere, Without the Mess

Invisible AC systems are installed by trained technicians who know exactly where to route tubing, eliminating the need for costly remodelling and minimizing disruption to your home or office. Installation is fast, clean, and efficient – your system can be up and running in just a few days.

For new homes or commercial projects, Invisible AC integrates effortlessly into the design with compact ducting and flexible routing, fitting seamlessly into ceilings and walls without major structural changes. For retrofits, it brings modern comfort quickly and with minimal hassle.

Featuring high efficiency, low maintenance, and an unobtrusive design, Invisible AC is the ideal choice for the 21st century – delivering superior performance without the mess and delays of conventional systems.

Draft-free Cooling

Insulated tubing dispersed cooled air from INVISIBLE AC to individual room

Small round outlets can be placed in ceilings, walls, or floors without standing out



Compact indoor unit fits in attic, small service areas

Flexible, pre-insulated tubing easily pass through closets, wall spaces or ceiling gaps

Outlets can be painted or wallpapered to match any décor

Flexible Coil Integration DX and Chilled Water

Flexibility in design is central to Invisible AC. The system is engineered to operate with both DX coils (ideal for compact, independent systems in homes and small offices) and Chilled Water Coils (perfect for large-scale commercial spaces such as hotels, offices, and institutional buildings).

Beyond this, Invisible AC offers enhanced adaptability:

- Compatible with VRF systems for seamless integration into modern building designs.
- Chilled Water systems available with thermostat control (optional) for precise temperature management.
- UV lamp option available for improved indoor air quality and hygiene.
- High-efficiency filtration with choices of MERV 8 and MERV 13 filters to meet varied project requirements.
- Dual system (CWC /DX) can be provided

This multi-level compatibility makes Invisible AC suitable for projects of every scale, providing consultants, architects, and developers the freedom to design without compromise on performance, comfort, or indoor air quality.

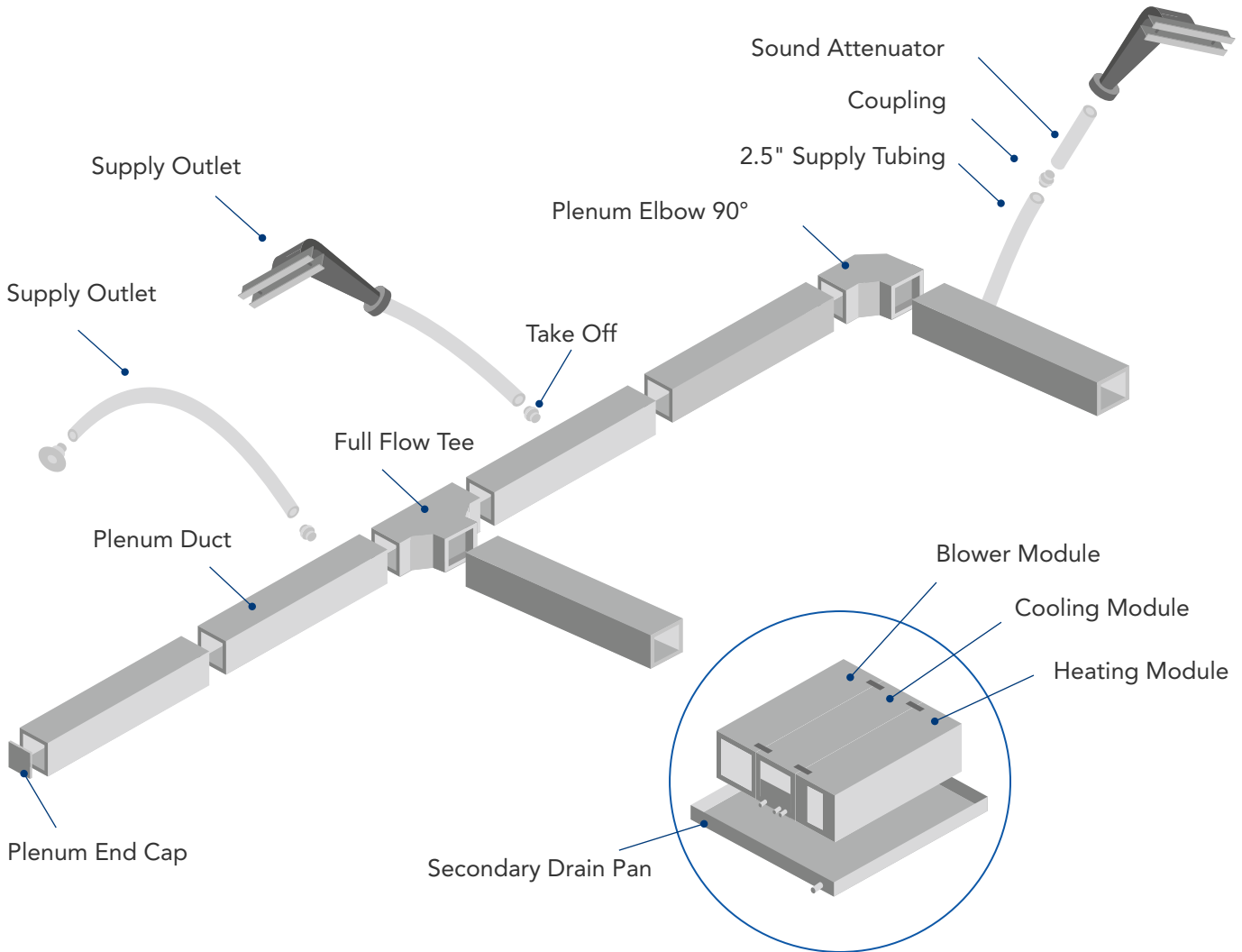
Intelligent Airflow Control

At the heart of Invisible AC is the EC (Electronically Commutated) blower, combining the best of AC and DC motor technology. Instead of fixed-speed operation, it adapts smoothly to room requirements, adjusting airflow as demand changes. With efficiencies of up to 87%, energy use is far lower than conventional systems. The built-in soft start/stop ensures smooth operation, eliminates power surges, and extends system life. Working quietly in the background, the EC blower ensures that Invisible AC delivers comfort effortlessly, reliably, and efficiently.



Invisible AC

The Complete SDHV Solution



Product List

Model No	Direct Expansion	Chilled Water Coils
207	✓ Available	✓ Available
812	✓ Available	✓ Available
1014	✓ Available	NA
1218	✓ Available	✓ Available
1520	✓ Available	NA
2025	✓ Available	✓ Available

Key Features & Benefits

- European-engineered Small Duct High Velocity, SDHV technology
- Compatible with most standard DX condensers and chilled water systems
- Compact 200 mm low-profile AHUs with capacities up to 25 kW
- Removes 30% more relative humidity (RH) compared to conventional AC.
- EC blowers with variable speed, up to 87% energy efficiency, soft start/stop
- Wide range: 2.0 kW – 25 kW units, delivering up to 3,400 m³/h air volume
- Low-noise operation with individual room temperature control
- Designed and manufactured in Cambridge, UK

Applications

- Luxury Homes & Apartments
- Hotels & Resorts
- Offices & Workspaces
- Retail Stores & Showrooms
- Hospitals & Clinics
- Conference Rooms & Auditoriums

Invisible AC - A Smarter Alternative to Mini-Splits and Room ACs

- Discreet outlets in ceilings, walls, or floors
- Complete comfort solution – cooling & heating
- No major re-modelling required
- Fast, clean installation – days, not weeks
- Even, draft-free cooling from floor to ceiling
- Removes up to 30% more humidity than conventional AC
- Greater comfort at efficient thermostat settings
- Zero to minimal leakage with close-proximity supply ducts → lower power consumption and higher efficiency
- Compatible with heaters, hot water & heat pumps



Invisible AC

Brought to India by COSMOS, your trusted HVAC partner

Technical Specification

Sr. No	System	Model No.	Cooling Capacity	Air Flow	Dimensions
			kW	CFM	(L) x (W) x (H)
1	DX	0207	02-07	600	600 x 900 x 200
2		0812	08-12	900	950 x 635 x 445
3		1014	10-14	1200	692 x 915 x 275
4		1218	12-18	1400	1000 x 940 x 445
5		1520	15-20	1800	920 x 930 x 380
6		2025	20-25	2000	1210 x 875 x 495
7	CWC	0207	02-07	600	660 x 945 x 200
8		0812	08-12	900	960 x 685 x 445
9		1014	10-14	1200	692 x 915 x 275
10		1218	12-18	1400	1008 x 965 x 445
11		1520	15-20	1800	920 x 930 x 380
12		2025	20-25	2000	1210 x 910 x 495

Refrigerent	Power Supply	Static Pressure	Height with Outside Drain Tray	Electric Load
		mm of H ₂ O	(H)	kW
R410 / R407	220-230V/1 Ph / 50 Hz	38	NA	0.30
			495	0.45
			325	0.60
			495	0.55
			430	0.90
			545	0.75
Water	220-230V/1 Ph / 50 Hz.	38	NA	0.30
			495	0.45
			325	0.60
			495	0.55
			430	0.90
			545	0.75

Invisible AC

The Complete Solution for Homes, Offices & Heritage Spaces

Every project has different needs — and Invisible AC is designed to meet them all. Available in capacities ranging from 0.6 TR to 7 TR (2.0 kW to 25 kW) and delivering up to 3,400 m³/h airflow, the system can scale effortlessly from a single bedroom to large auditoriums. Larger areas can also be divided into independent zones, ensuring greater energy efficiency and personalized comfort.

Originally developed as a complete comfort solution for residences, Invisible AC has grown to become equally popular in commercial, retail, and institutional projects. Its ease of installation makes it ideal for both new constructions and renovations. For businesses where downtime is critical — such as offices, restaurants, hospitals, and retail outlets — its speed and flexibility minimize disruption while ensuring superior comfort.

With advanced dehumidification and a concealed design, Invisible AC is also perfectly suited for heritage buildings, libraries, schools, hotels, and cultural spaces where preserving architectural integrity is essential. The discreet outlets blend seamlessly with interiors, delivering modern 21st-century comfort while maintaining the elegance of original décor.





Heritage Application



Residential Application

Invisible AC

The Complete Solution for Homes, Offices & Heritage Spaces

Corporate Office Application



Restaurant Application





Retail Application



Dual Height Application



invisible[®].ac[™]

air comfort

Indian Partners

SAVITRU AIRCON PVT. LTD.

A-9, Vimal Udyog Bhavan, 2nd Floor, 119, Taikalwadi,
Mahim West, Mumbai - 400 016. Maharashtra, India.

Tel : +9122 2421 6755, +9122 2432 8555

email : sales@savitruaircon.com

web : www.savitruaircon.com

Savitru Aircon Pvt. Ltd., is continually developing better designs and therefore reserves the right to change or amend Product or Technical Details without prior notice. Information and Photographs in this catalogue are property of **Savitru Aircon Pvt. Ltd.**, & must not be copied or lent to others without permissions in writing.

Products names, logos, brands and other trademarks featured or referred to within this document are the property of their respective trademark holders.