

Invisible. AC by Quantum Group

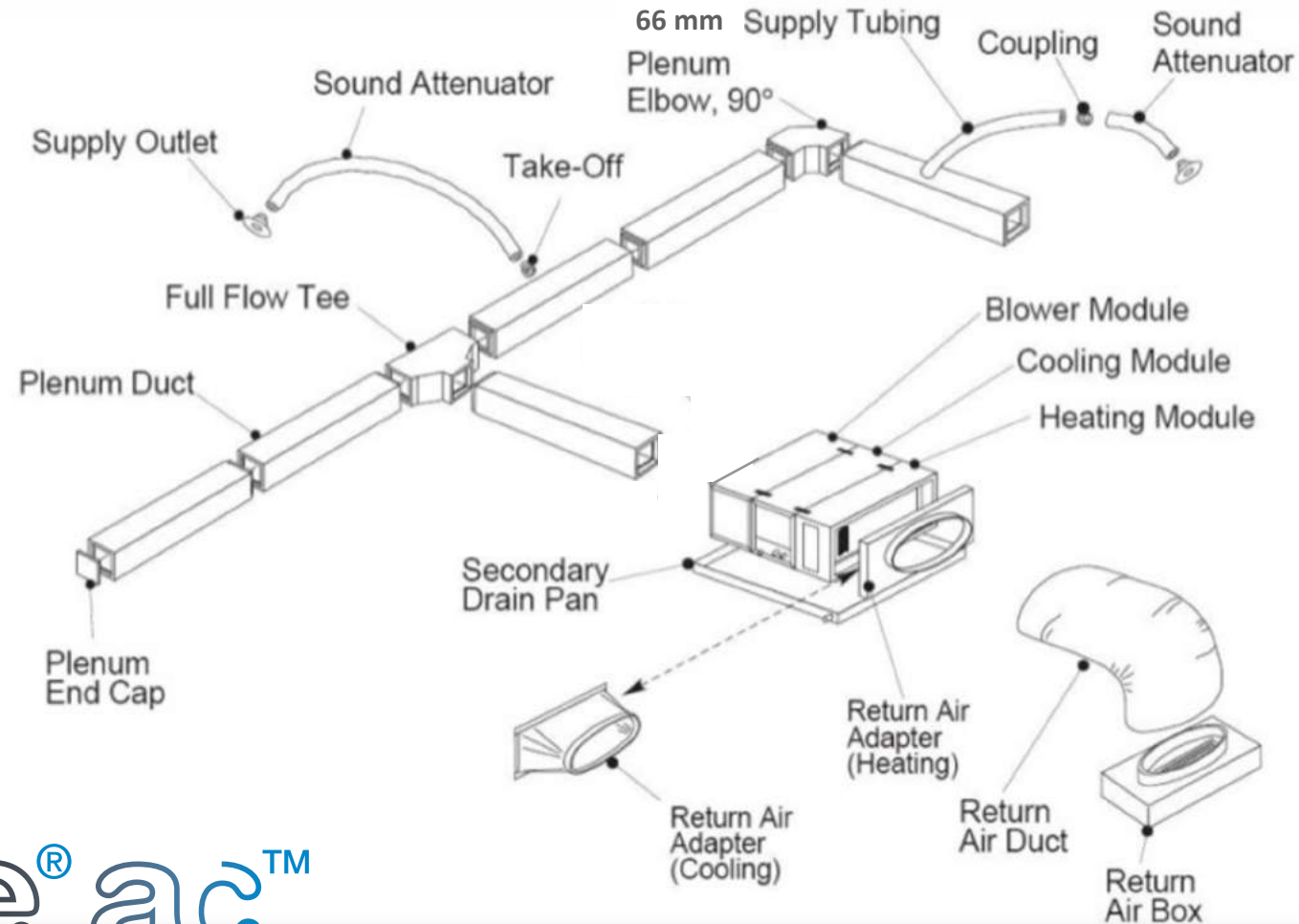
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air jet comfort



Invisible.AC offers versatile and efficient air conditioning, heating, ventilation and UV air purification solution for residential, commercial, new build and heritage buildings. The highly efficient air-handling units distribute cooled or warmed air through flexible space-saving mini-ducts, injecting the air at high velocity through discreet linear slots or round outlets.

- Outlets – round & slots
- Mini ducts
- Main plenum
- Air handlers - 4 to 25kW
- Return air grilles
- Controls
- Energy sources - *Air to water, air to air, ground source heat pumps and conventional boilers.*

System Components



Product features

- An Invisible.AC solution combines air conditioning, heating, ventilation and UV air purification in a single system for year-round comfort. Skillfully sited high-velocity 'Aspiration' air-jets eliminate drafts and ensure a temperature differential no greater than 1°C throughout a room, compared to the variation of up to 6°C with conventional systems. The system also removes 30% more relative humidity. The reduced humidity means you can set the temperature higher, saving energy and running costs when cooling. System zoning gives users the flexibility and control to set precise temperatures for different conditions in different areas. The basic Invisible. AC Twin zone product allows up to full cooling duty in either zone!

- With an Invisible.AC there is no need to compromise on appearance. Discreet outlets for cool or warm air eliminate the need for less aesthetic grills, wall-units, radiators and pipe runs. The single 25-mm wide linear slot ceiling, wall or floor outlets blend with any traditional or contemporary décor. Inconspicuous round outlets are also available.

Quiet

- The Invisible.AC system is one of the most quiet around. The use of acoustic technology throughout ensures that the system operates at low noise levels with minimum vibration. Sound-attenuating ducts, smooth running equipment, extensive insulation and low-turbulence outlets enable noise levels as low as NR20 for quiet areas in homes, hotels, restaurants and working areas in offices.

- Invisible.AC systems are compatible with reversible heat exchanger units to provide air conditioning and heating from a single source. As well as eliminating the additional capital costs of installing two separate systems, the combination of a modern heat-pump and an Invisible.AC system can increase energy efficiency and energy savings by 300% over conventional fossil fuel installations. The ability to deliver constant, even temperatures and the potential savings from system zoning can increase energy efficiency even further.

Invisible AC links up with the following partner brands



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Compact

- The compact Invisible.AC air-handling equipment fits easily in a roof or cupboard space with small, flexible mini-ducts running in ceiling voids or partition walls. The system is quick and easy to install in new or existing buildings and is suitable for traditionally challenging properties such as historical buildings.

Meeting your requirements

Why **architects** select it:

- Discreet appearance with linear slot ceiling or floor outlets to enhance any décor
- Most quiet system on the market
- Even temperatures and low humidity throughout a building
- Improves air quality by reducing unpleasant and harmful odours, by neutralising undesirable and dangerous pathogens and by converting pollutants such as VOCs and hydrocarbon exhaust fumes into harmless gases.

Why **developers** prefer it:

- One system to install, reducing capital costs
- Offers owners comfort, quality and efficiency
- Compact system frees more space for living
- Enhances interior design with no pipes, radiators or ugly grilles

Why **specifiers** recommend it:

- Simple installation of space-saving mini ducts in ceilings, walls or floors
- Compact equipment fits in tight spaces, roof voids, etc.
- Layout is flexible and easy to design
- Up to 100% fresh-air, links to heat- recovery systems
- Suitable for new builds, refurbishments and historic buildings

Why **consumers** use it:

- Comfortable living and working conditions all year round
- Even temperatures and no drafts
- Controlled temperatures for different rooms
- Lower energy bills – heat-pump compatible
- Quiet, pleasant environment

Perfect for every environment

New Build

- Invisible.AC products are more compact than existing technology systems, providing great performance whilst 'invisible'. They fit into the smallest ceiling void in new construction (<150mm). They can be easily integrated with fresh-air energy recovery ventilation systems.

Heritage

- Invisible.AC – the revolution possible with mini-duct air distribution. Historic buildings were never originally intended to have ducted systems installed. Authorities, owners can now install a system that provides heating, cooling, fresh-air and dehumidification with out impacting on the visual appearance or the fabric of the building.

Residential

- Invisible.AC offers residential customers the convenience of a cooling and heating system that reduces energy costs. With zonal control, they can choose comfortable temperatures for different rooms like the bedrooms or living areas. Plus, with the Invisible.AC Twin zone product – the full duty can used in either area!
- Zonal control is one of the most important requirements in commercial properties like restaurants and retail outlets. Invisible.AC systems provide comfortable temperatures for customers, while maintaining appropriate temperatures in working areas and protecting products in storage or on display.

Commercial

- Invisible.AC systems maintain comfortable, even temperatures in the office, helping to improve working conditions and increase productivity. They ensure quiet operation in the office environment and maintain temperatures at a level that meets legislation. Individual outlets can simply be moved if office partition layouts change.

Supply air mini Ducts



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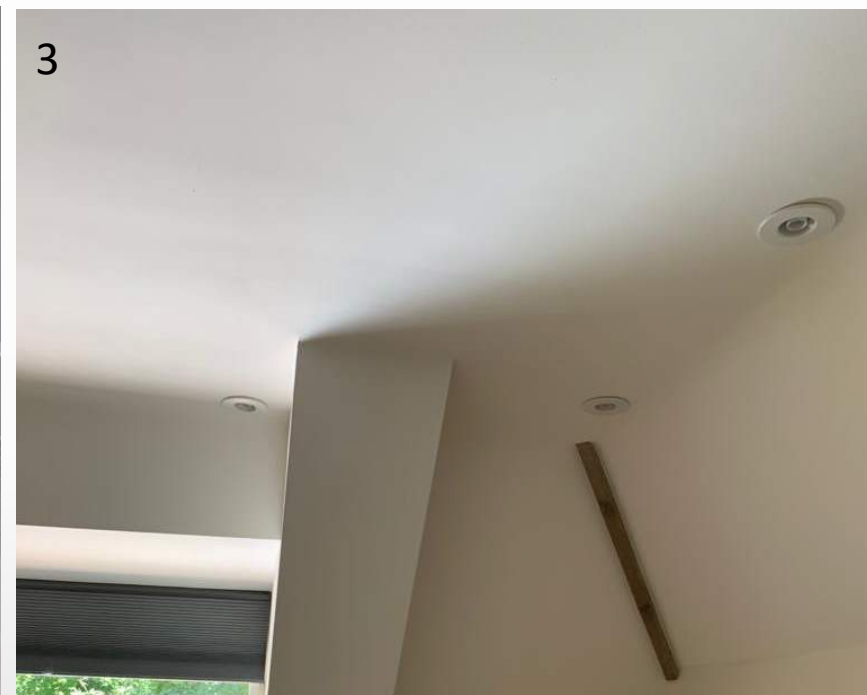
1. Invisible.AC mini ducts running in 100mm stud wall.
2. Invisible.AC mini ducts running in 100mm ceiling void.
3. Invisible.AC mini ducts running in a floor.

Supply air slotted outlets



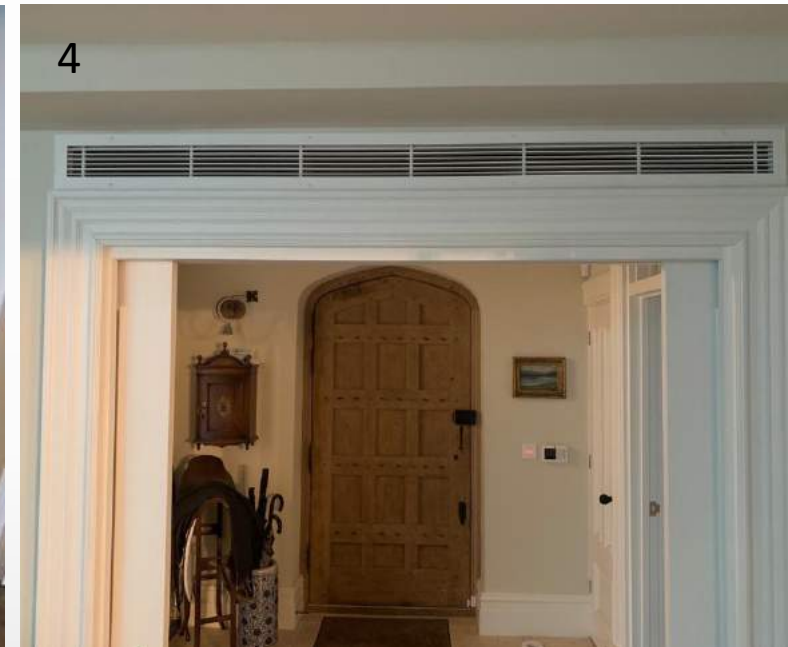
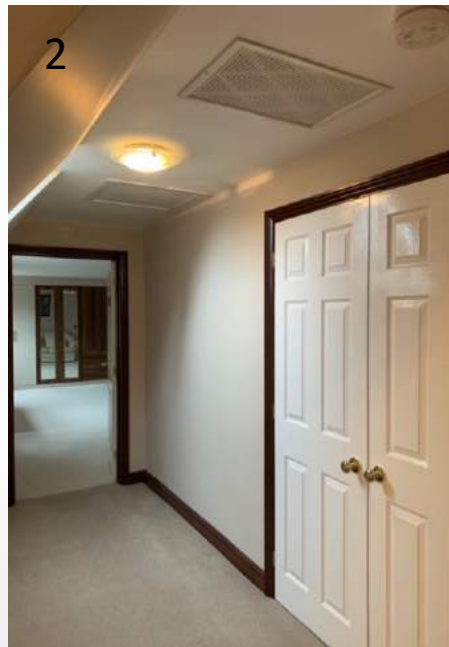
1. Slotted outlet cut into plaster boarded ceiling.
2. Slotted outlet plastered.
3. Slotted outlet decorated.
4. Slotted outlet decorated
5. Slotted outlet cut into wooden floor.

Supply Air Round Outlets



1. Round outlets with directional nozzle in sloped ceiling.
2. Round outlets with directional nozzle in floor.
3. Round outlets in ceiling

Return Air Grilles



1. Return air from each zone back to the communal air path can be done through transfer grilles, under doors or through the ceiling void.
2. A standard return air grille.
3. Bespoke slots for return air.
4. Bespoke return air grille

Air Handler and Main Supply Duct



1. Main supply duct with zone damper and motor.
2. Main supply duct branch with zone damper motor and mini ducts.
3. 14kW horizontal modular air handler with return air duct and supply plenum.

Fiberboard Flat Duct



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- 450mm by 150mm acoustically lined fiberboard which fits in a 150mm ceiling void.
- The 102mm mini ducts fit into a standard studwork wall.

Energy Sources



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1. Air to water heat pump
2. Air to air DX heat pump
3. Air to air DX heat pump

Controls



The invisible control system can be connected to AV system interfaces such as Control 4, Crestron and KNX.

1. Invisible control box for thermostats, dampers and energy source connections.
2. Standard zone thermostat for heating and cooling.
3. Heatmiser hub for WIFI connectivity.

Chorley Wood Project



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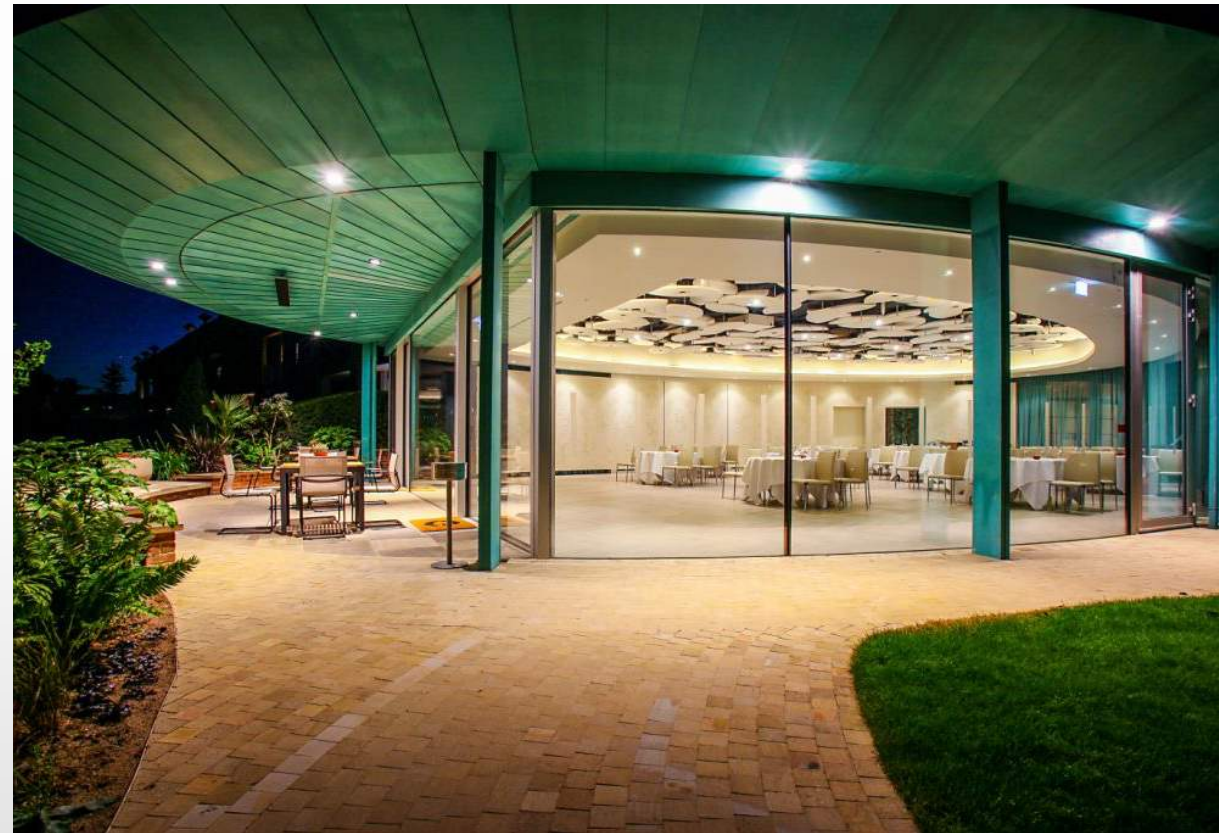
- Recently completed London residence with 250mm main plenum ductwork and slotted outlets.

Chorley Wood Project



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The Grove Hotel, Watford



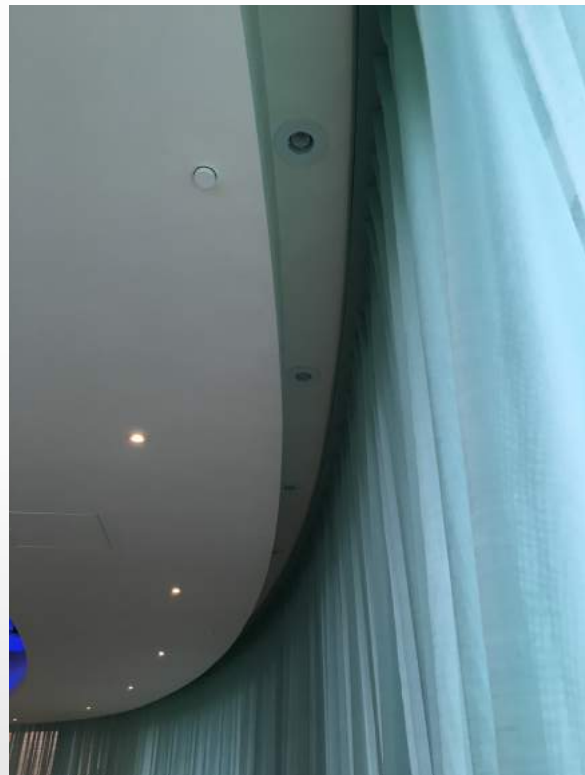
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Warren Drive Project



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- 1100m² four story house in Surrey with five Invisible.AC small duct cooling systems supplying cool air to all areas.

Warren Drive Project



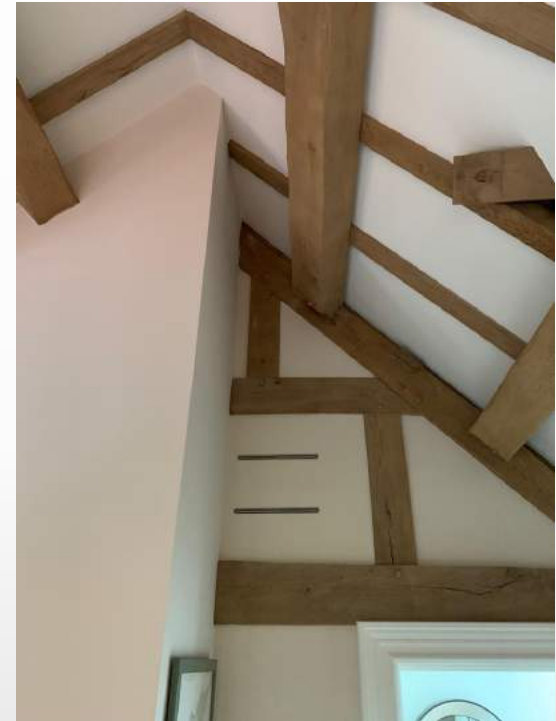
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Gym Extension, Surrey



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Listed Property, Maidenhead



Listed Property, Maidenhead



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