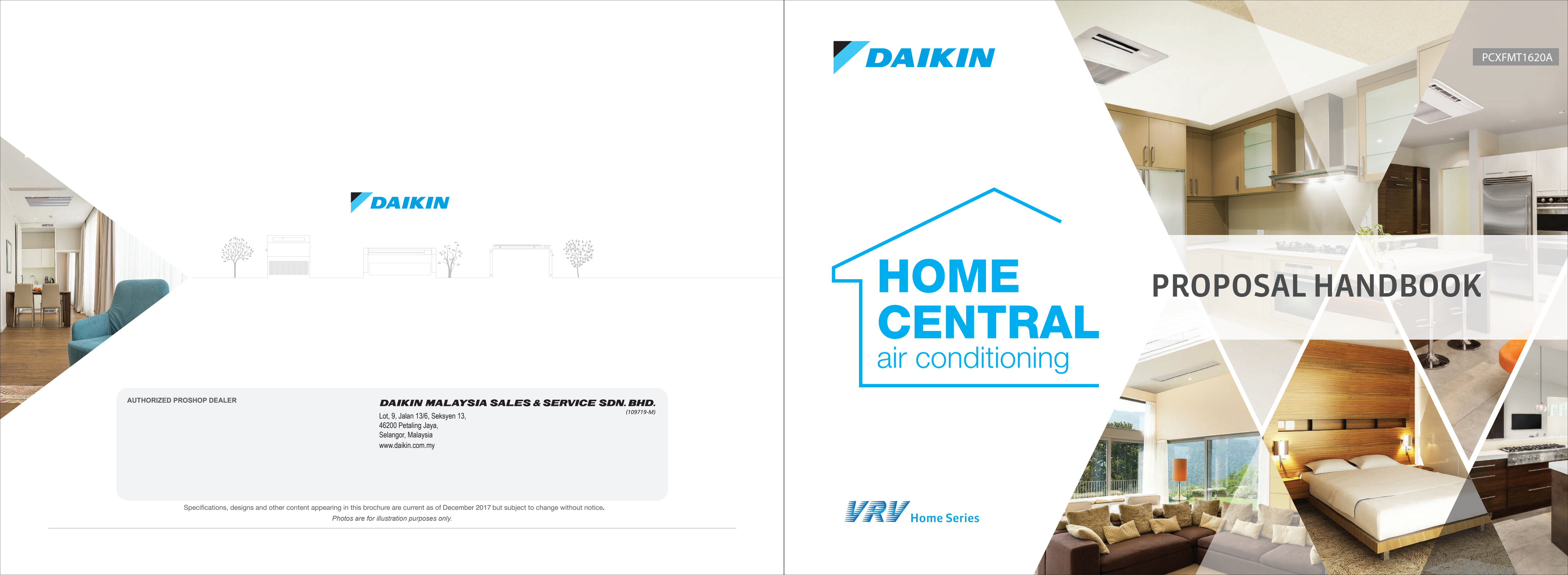
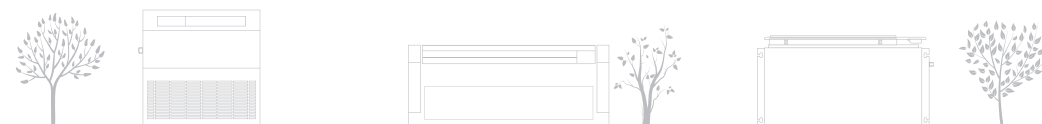




PCXFMT1620A



HOME CENTRAL

air conditioning

PROPOSAL HANDBOOK

AUTHORIZED PROSHOP DEALER

DAIKIN MALAYSIA SALES & SERVICE SDN. BHD.

Lot, 9, Jalan 13/6, Seksyen 13,
46200 Petaling Jaya,
Selangor, Malaysia
www.daikin.com.my

(109719-M)

Specifications, designs and other content appearing in this brochure are current as of December 2017 but subject to change without notice.

Photos are for illustration purposes only.

VRV Home Series

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FOREWORD

Home and interior design is an art. It involves extensive know-how of space and layout design, material selection, furnishing, colours and lighting that maximizes the space. All these elements are essential to portray and elevate your standard of living.

Interior design is not only about aesthetics, but also the comfort level given to the occupants. As a specialist in air conditioning systems, Daikin cares about your lifestyle needs and the well being of you and your family.

EVOLUTION OF HOME AIR CONDITIONING

CONVENTIONAL SPLIT TYPE AIR CONDITIONING



- Challenging to fit an interior design.
- Visible conduits and refrigerant piping of air conditioners affecting aesthetics of the interior design.
- Uneven air flow distribution.
- Multiple outdoor units affecting the exterior facade.

HIDDEN COMFORT SOLUTION

HOME CENTRAL AIR CONDITIONING



- Hidden air conditioner giving more space for design flexibility.
- Various selection of indoor unit models to match the interior design.
- Even air flow distribution.
- Hidden conduits and refrigerant piping of air conditioners without interfering with a room's aesthetics.
- Only one outdoor unit is required, allowing more space to be utilized for designs.
- Prevention of cold draft.

HOME CENTRAL AIR CONDITIONING

REDEFINING COMFORT

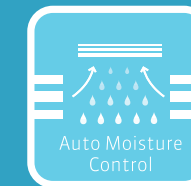
New Life Style



Comfort Cooling



Excellent Air Distribution



Auto Moisture Control



Sweet Dream



Bathroom Comfort



Kitchen Comfort



Q 1 I want a circular-shaped plaster ceiling to hang my chandelier.

Q 2 My living room has a cross-beam in the middle which makes the ceiling look much lower if an air conditioner is installed in the ceiling.

Q 3 I do not like cold draft blown towards me.

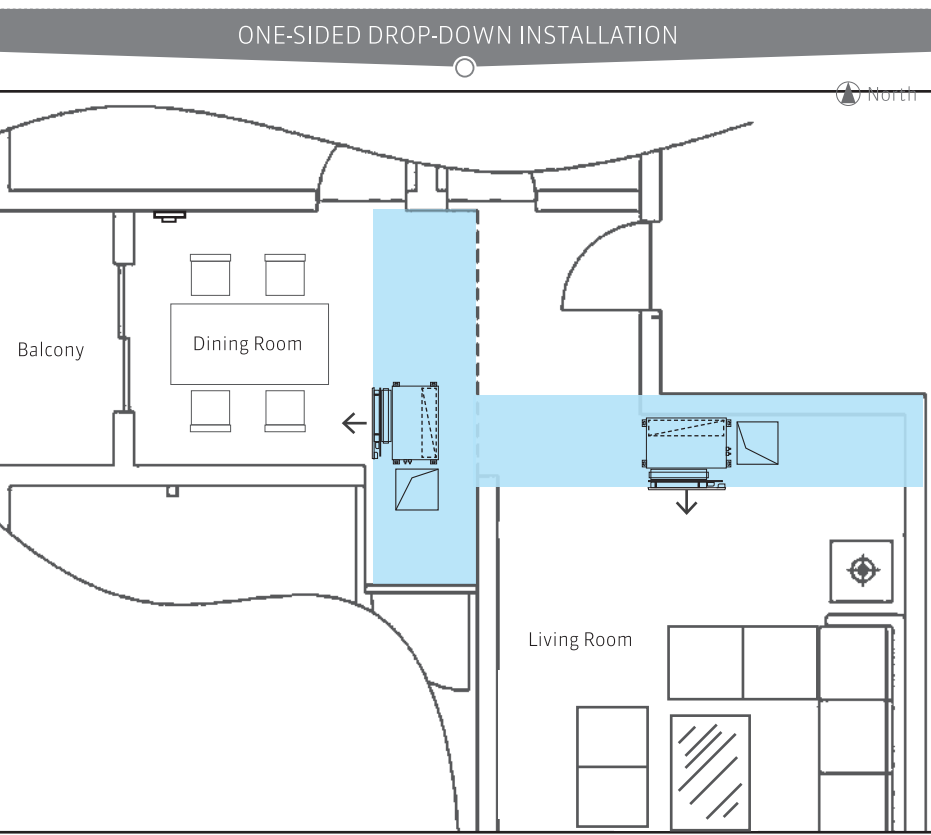
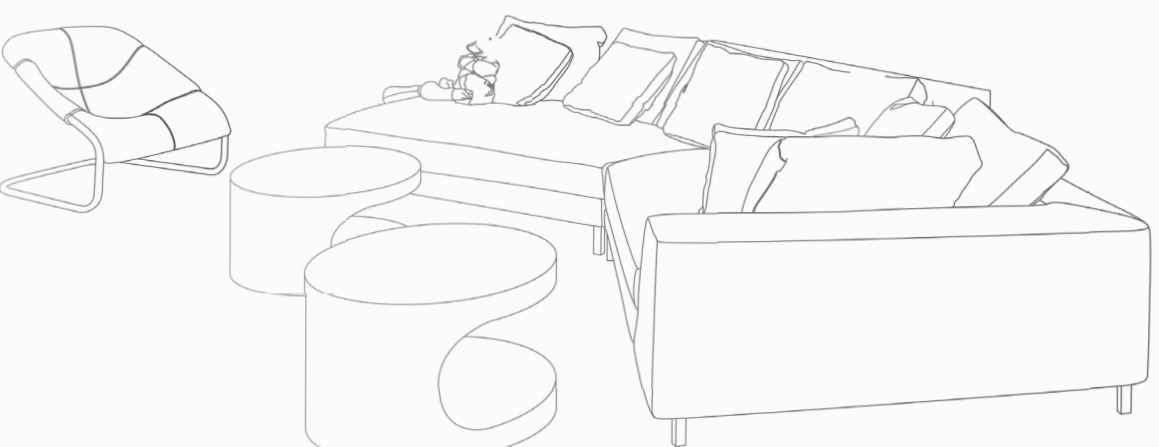
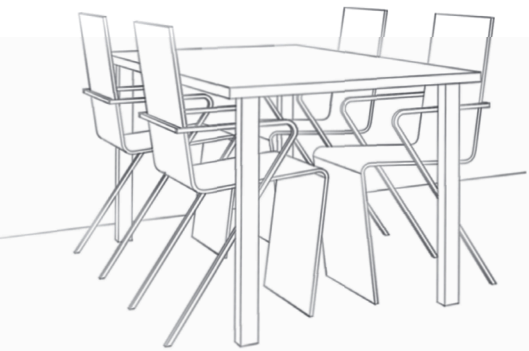
A 1 We provide solutions for hidden air conditioning systems with different types of air discharge diffusers to choose from that do not affect the design of circular-shaped plaster ceilings.

A 2 You do not have to worry about the structure of your living room as there are various types of compact units that can suit your application.

A 3 The 'Intelligent Eye' feature senses human activity which will direct the cold draft away from the human and control the humidity at the same time.

LIVING ROOM

Living space where families spend precious time together



LEGEND

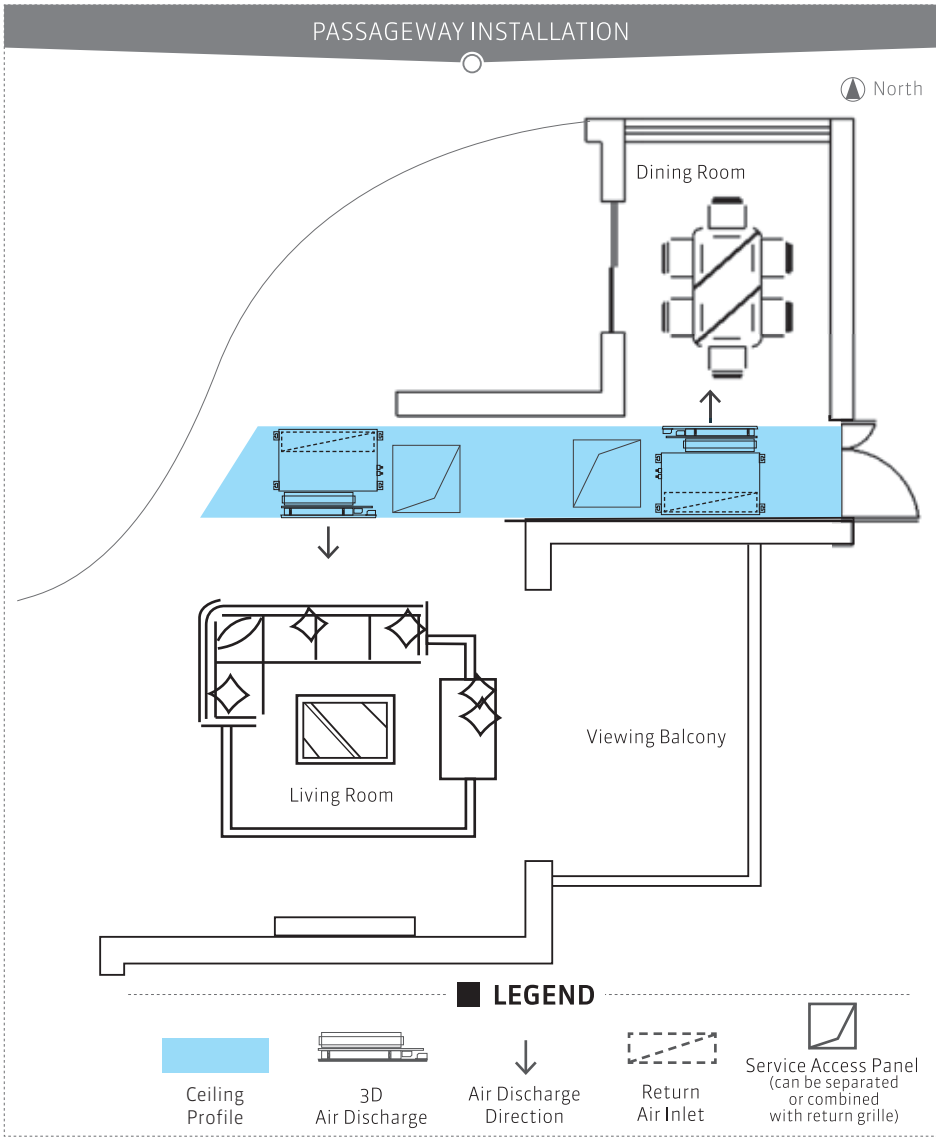
- Ceiling Profile
- Intelligent 3D Air Discharge
- Air Discharge Direction
- Return Air Inlet
- Service Access Panel (can be separated or combined with return grille)



Space between living room and dining room normally has an L-shaped partial ceiling which can be utilized to install the air conditioner indoor units.

Recommended Indoor Unit

3Di+
Moisture Control Intelligent
3D Air Flow Ceiling Mounted
Duct



For separated living room and dining room layout, the passageway ceiling space can be utilized to install the air conditioner indoor units.

Recommended Indoor Unit



3Di
Intelligent 3D Air Flow Ceiling Mounted Duct

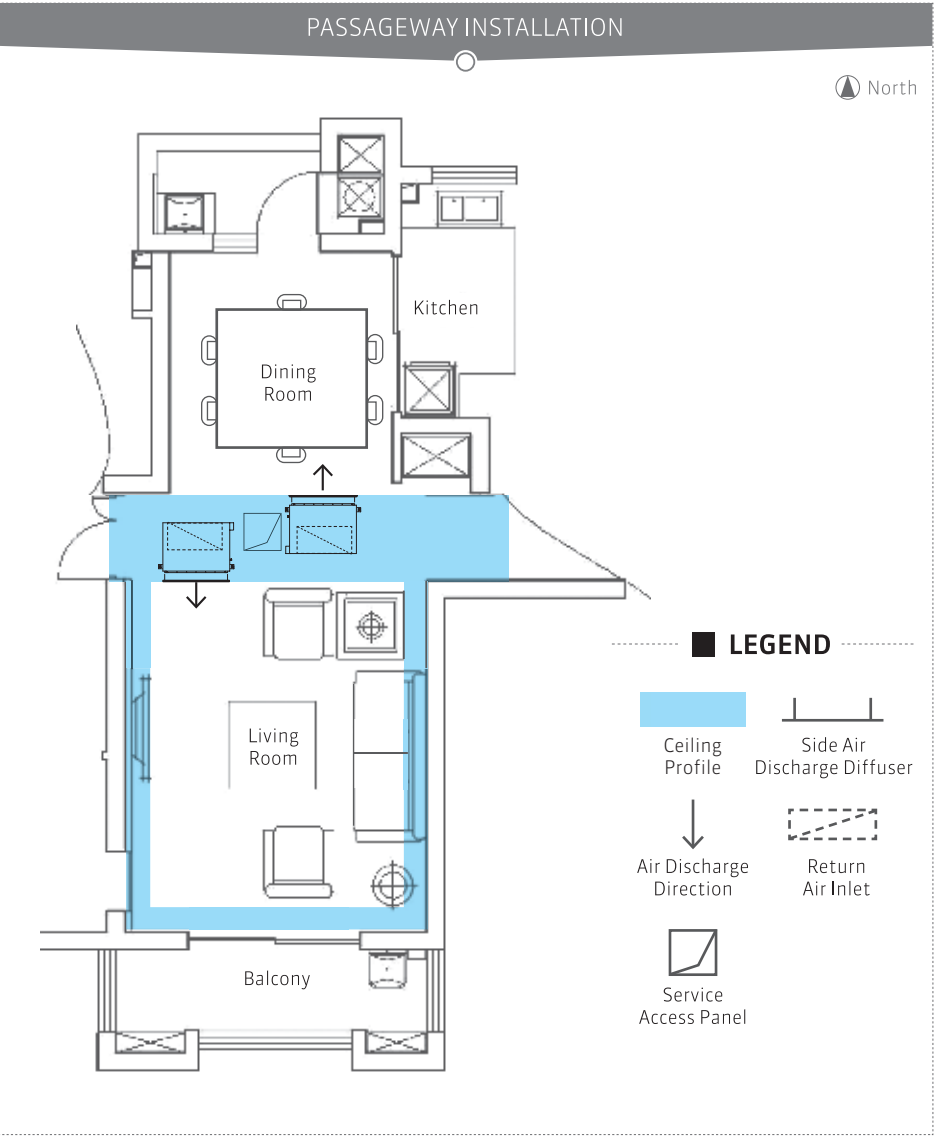


For connected layout, there is flexibility to suit the plaster ceiling design with the choices of sideways air outlet and inlet or downwards air outlet and inlet.

Recommended Indoor Unit



COMPACT
Compact Ceiling Mounted Duct



PART 1

Bedroom 2 - Passageway At The Entrance | Hidden Comfort Solution



Indoor unit can be installed along the passageway of the bedroom, hidden above the plaster ceiling.

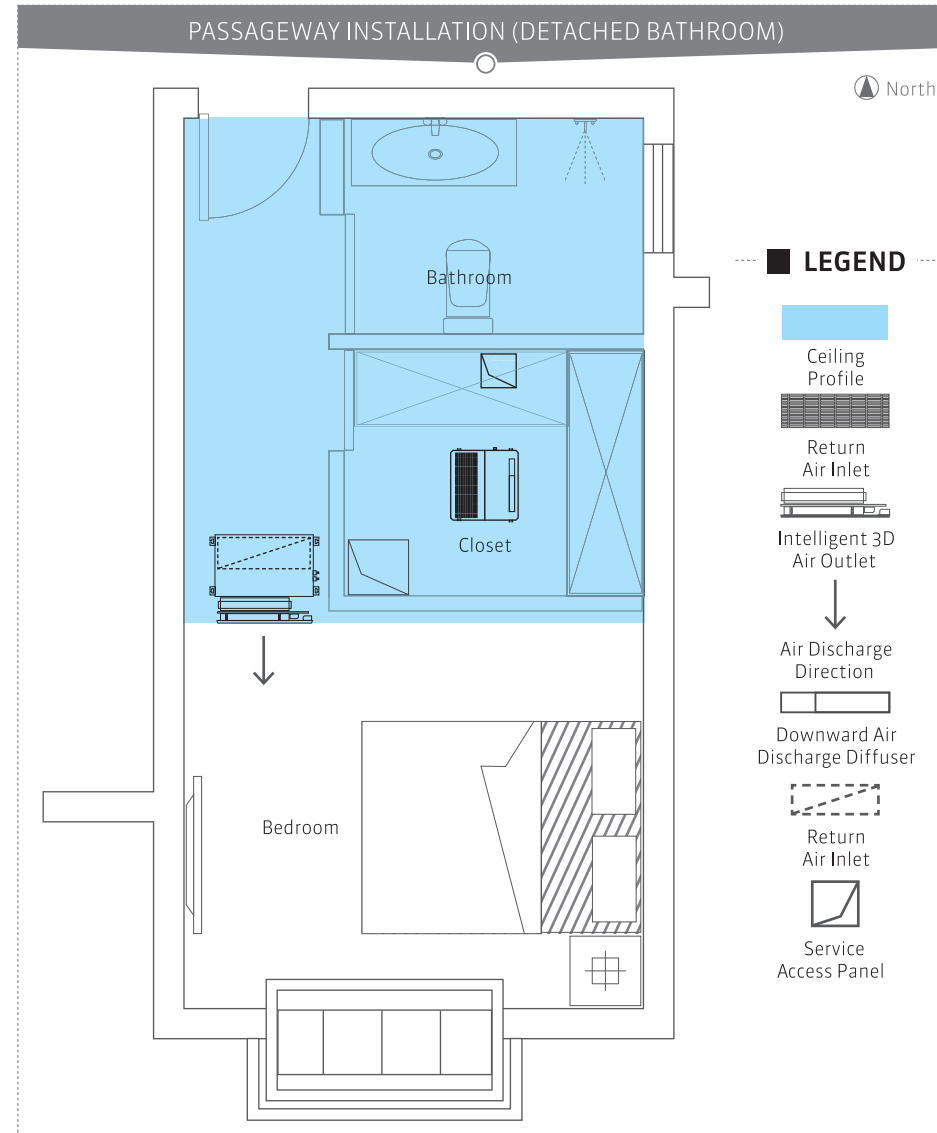
Recommended Indoor Unit



3Di+
Moisture Control Intelligent 3D Air Flow Ceiling Mounted Duct



CLOSET
Moisture Control Closet Ceiling Mounted Cassette



PART 1

Hidden Comfort Solution | Bedroom 3 - Passageway At The Entrance

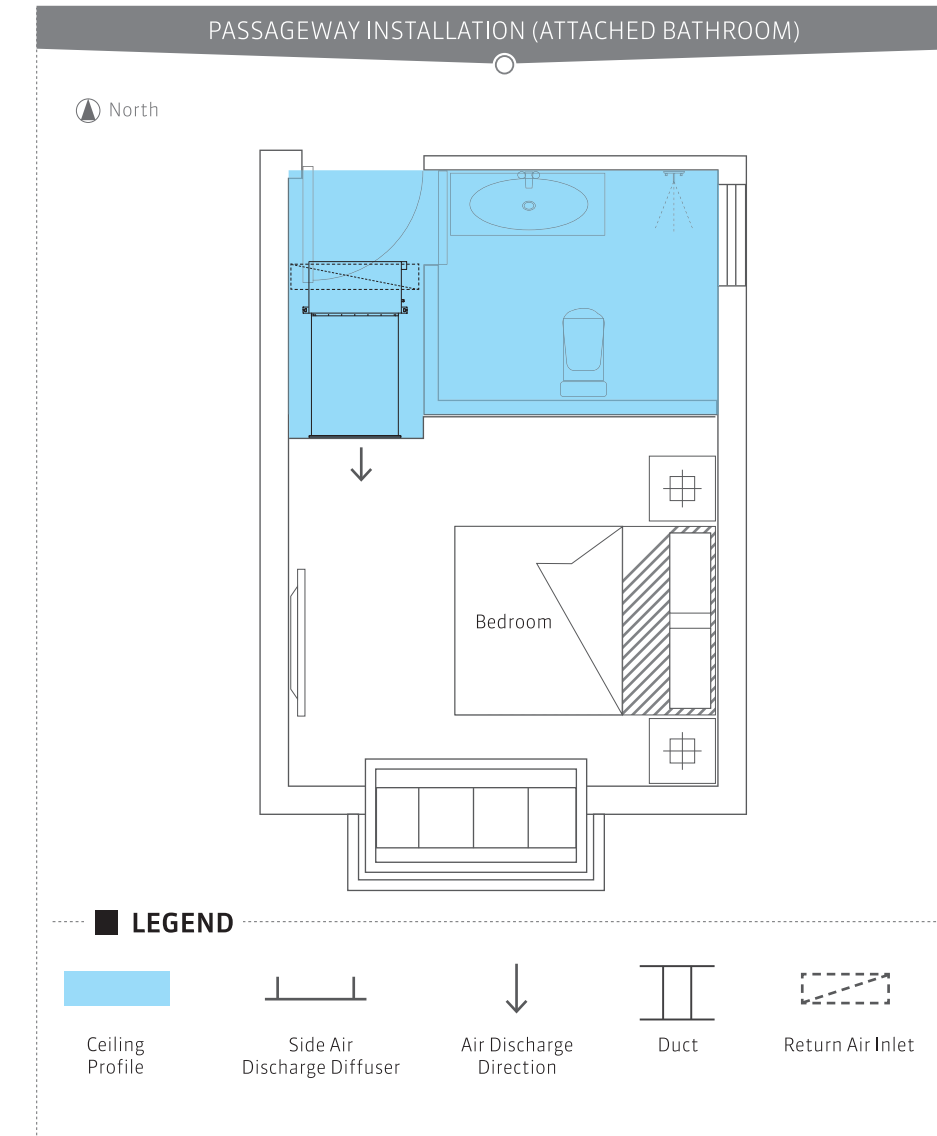


Indoor unit will be installed along the walkway of the bedroom, hidden above the plaster ceiling by utilizing slim and compact ducted unit.

Recommended Indoor Unit

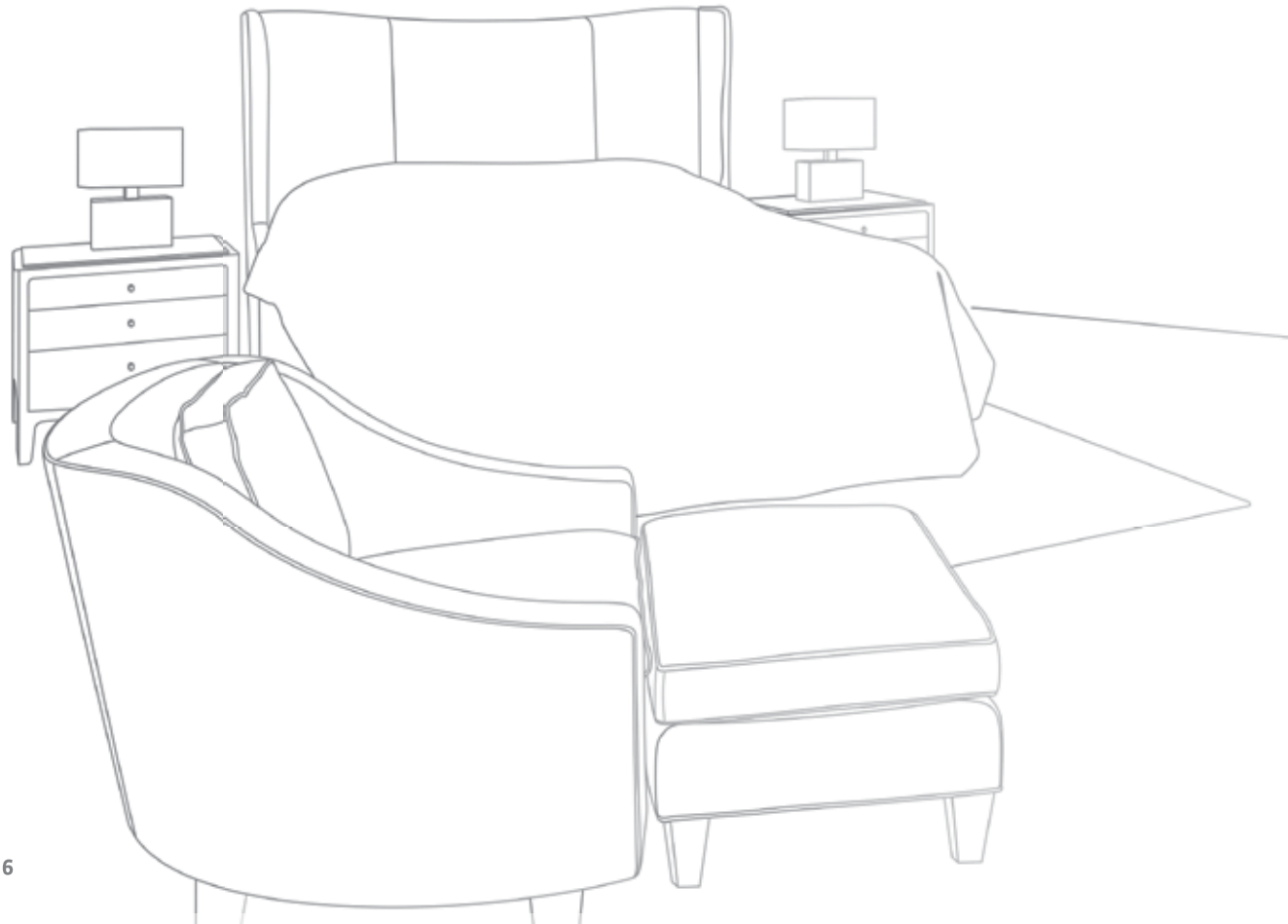


COMPACT
Compact Ceiling Mounted Duct



BEDROOM

Good sleep quality is the root to health and happiness



Q 1

It is difficult to select the right setting to achieve a comfortable environment if the controls are confusing.

Q 2

The air conditioning system is too cold and causes my baby to wake up in the middle of the night.

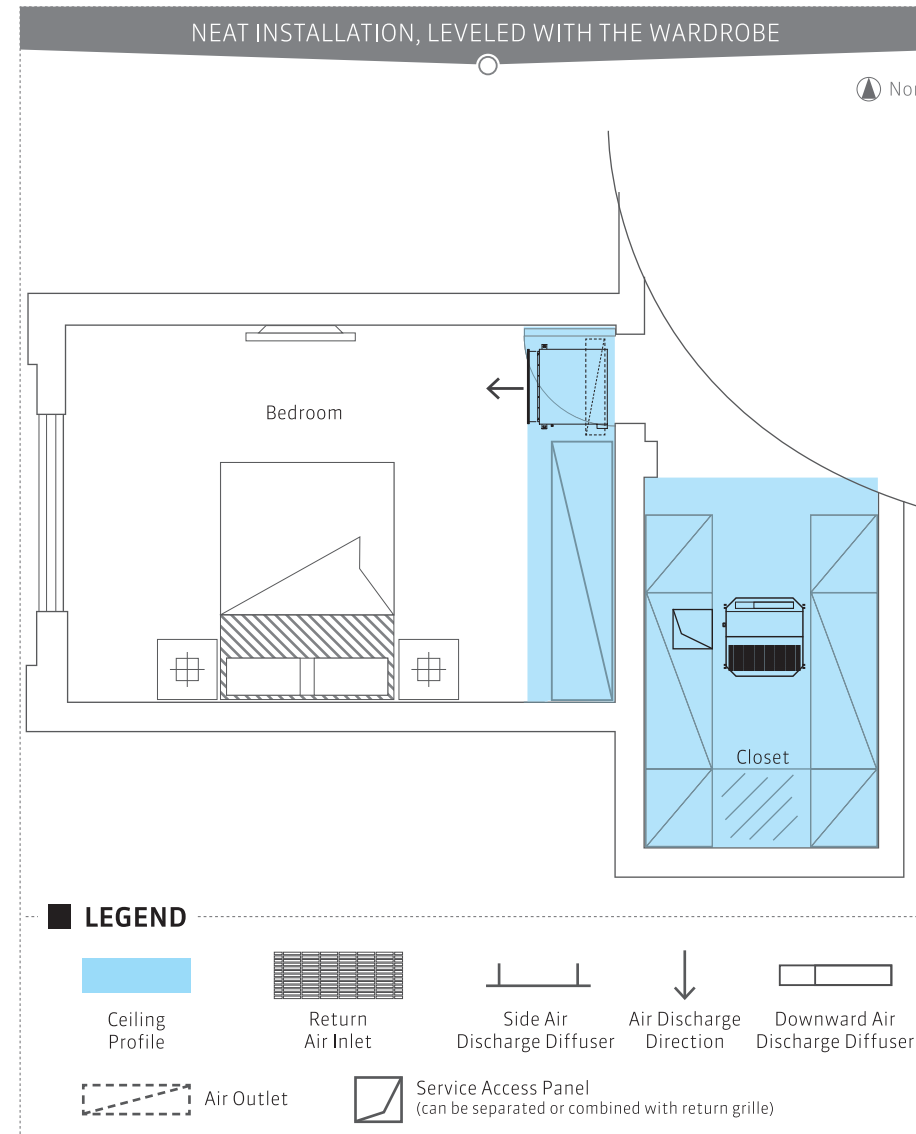
A 1

The 'Intelligent Eye' feature controls the air conditioning system for you by reacting according to your needs, giving you a peace of mind without having to change the settings manually.

A 2

The 'Sweet Dream' feature provides an optimum temperature and humidity level to create a perfectly suitable sleeping environment for babies. The unit operates quietly at only 20dB(A)* noise level and gentle airflow of 0.3m/s*.

*Daikin internal testing values.



Ceiling spaces at the entrance can be used to install the air conditioner indoor unit. To beautify the spaces, the stretch of plaster ceiling accommodating the indoor unit can be used for additional downlights, creating a warm environment to the bedroom.

Recommended Indoor Unit



3Di+
Moisture Control Intelligent 3D Air Flow Ceiling Mounted Duct



CLOSET
Moisture Control Closet Ceiling Mounted Cassette

PART 1

Study Room | Hidden Comfort Solution

STUDY ROOM

The study room does not only serve as a home-office, but also a place to unwind after a long, tiring day.

Q 1

I would like my study room to be the most comfortable room for my relaxation and pastime such as reading books and watching movies.

A 1

A study room normally keeps many books and electronic items that require a certain level of dryness to keep it in good working condition. The home central air conditioning system is able to provide the required level of dryness while delivering superior comfort to users.



PART 1

Hidden Comfort Solution | Study Room 1 - Typical Layout



The air conditioner unit is suitable for installation above the window with bottom air return for long narrow spaces.

Recommended Indoor Unit

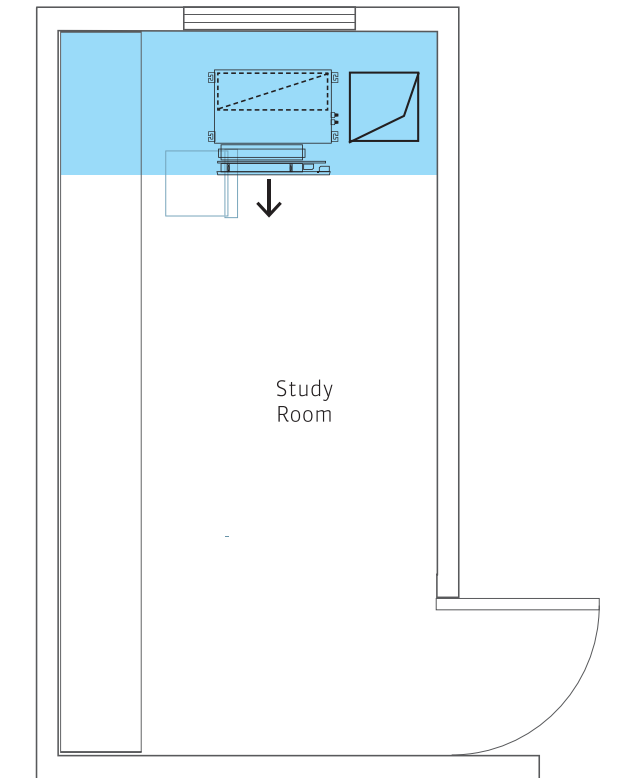


3Di+

Moisture Control Intelligent
3D Air Flow Ceiling Mounted
Duct

INSTALLATION BY THE SIDE OF THE WINDOW

North



LEGEND

Ceiling
Profile

Intelligent 3D
Air Discharge

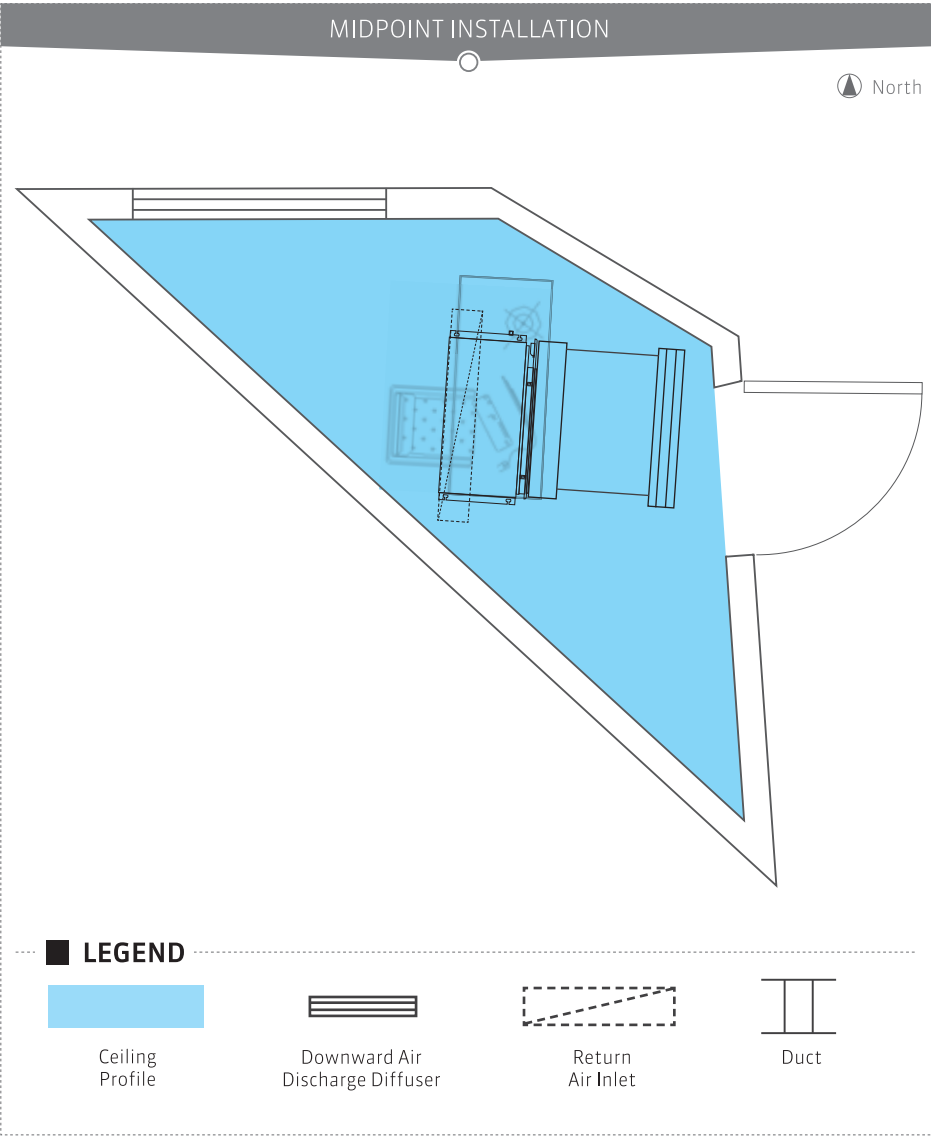
Air Discharge
Direction

Return
Air Inlet

Service Access Panel
(can be separated
or combined
with return grille)

PART 1

Study Room 2 - Typical Layout | Hidden Comfort Solution



For squarish room designs, air conditioning indoor units can be installed in the centre, hidden above the plaster ceiling. Hence the entire ceiling can be fully utilized for other ornaments such as lights and chandeliers.

Recommended Indoor Unit



COMPACT
Compact Ceiling Mounted Duct

PART 1

Hidden Comfort Solution | Bathroom

BATHROOM

Providing a comfortable environment for a relaxing bath



Q₁ I sweat easily even right after my bath which makes me feel uncomfortable.

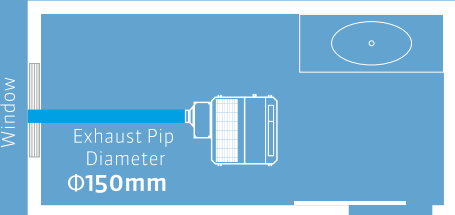
Q₂ Since the bathroom is so damp and humid, would the air conditioner be spoilt easily in such a condition?

A₁ With the moisture control and exhaust functions, your bathroom will be kept dry at a comfortable temperature for an enjoyable time in the bathroom.

A₂ The home central air conditioner has gone through stringent testing including moisture protection up to an international level of IPX4. Even the wired remote control unit has passed this test.

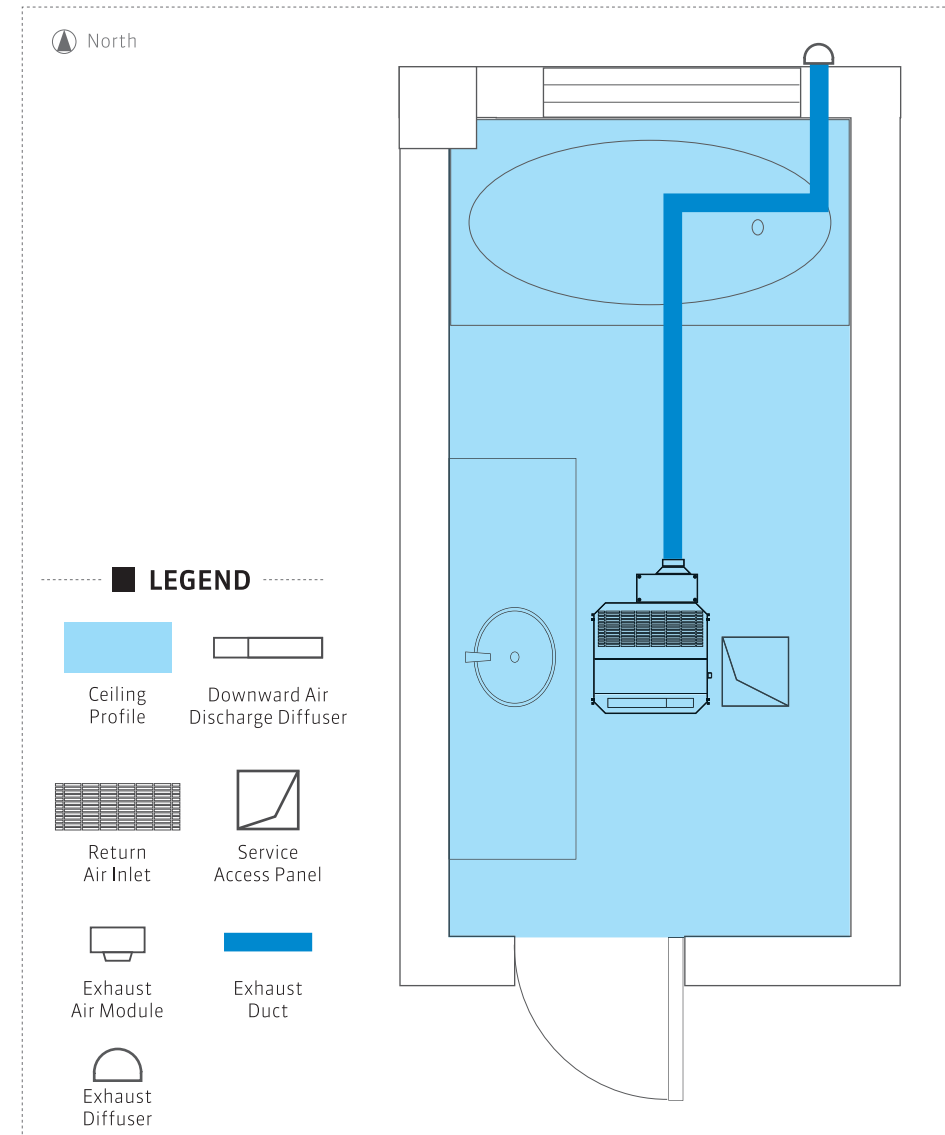
Installation Tips:

The indoor unit comes with a ventilation feature that is able to exhaust the air out from the bathroom, keeping the air fresh. The duct connection is able to connect directly to an exhaust pipe with diameter of 150mm.



PART 1

Bathroom 1 - Typical Layout | Hidden Comfort Solution



Recommended Indoor Unit



BATHROOM

Ventilating Moisture Control Bathroom Ceiling Mounted Cassette

PART 1

Hidden Comfort Solution | Bathroom 2 - Typical Layout

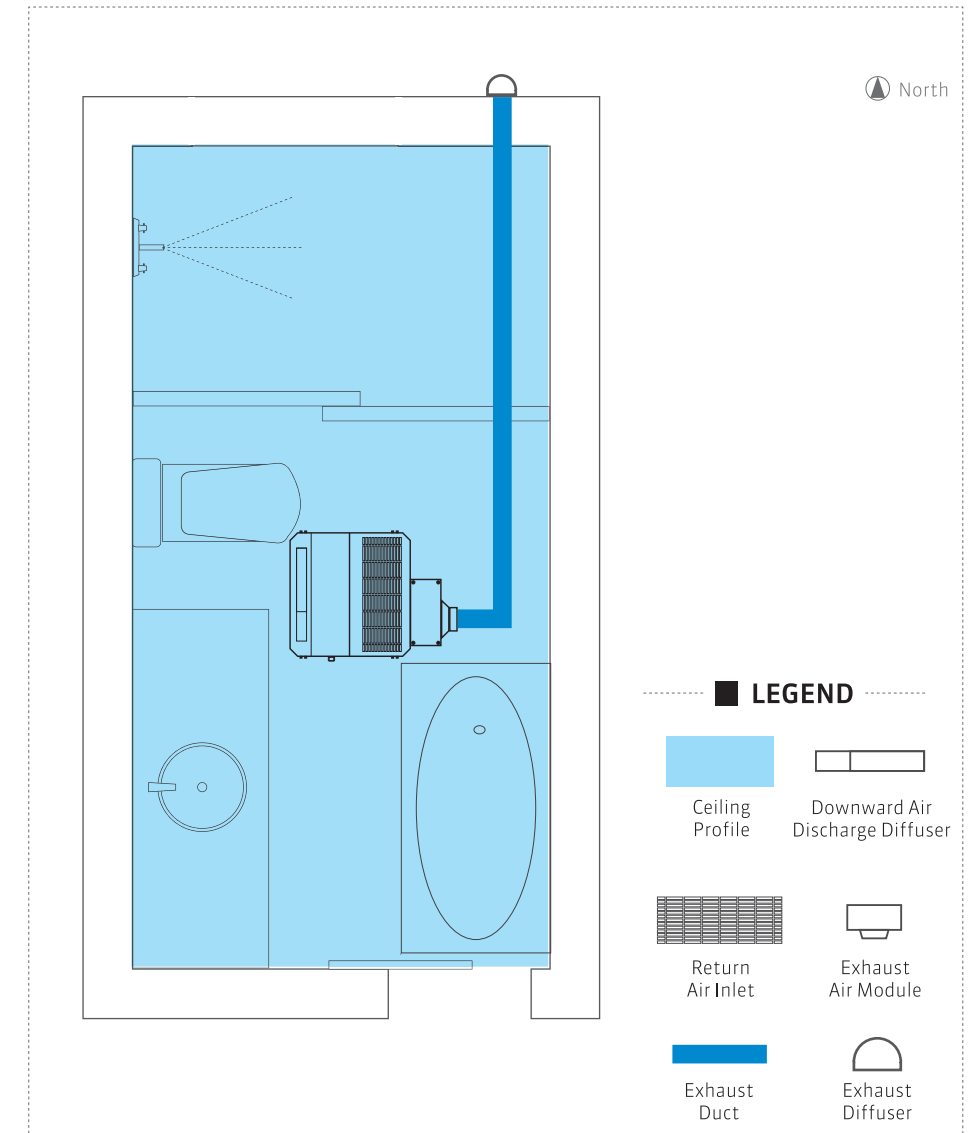


Recommended Indoor Unit



BATHROOM

Ventilating Moisture Control Bathroom Ceiling Mounted Cassette



Q 1 Normally air conditioners are installed in dry kitchens. Installing a unit in the wet kitchen is a revolutionary idea but can the indoor unit match my wet kitchen's interior design?

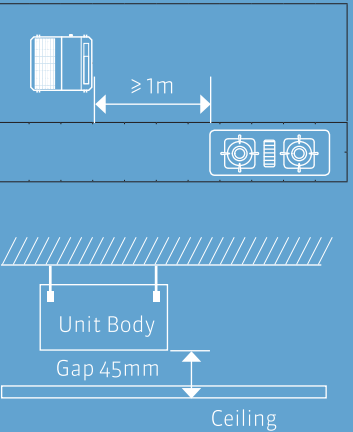
Q 2 Are there any special requirements for the installation of the indoor unit for kitchen?

A 1 Yes, the indoor unit can match any types of kitchen design. The full height kitchen cabinet can be maintained as the indoor unit can be mounted on the ceiling and its design can easily blend in with the kitchen interior.

A 2 There shall be a minimum distance of 1m from the stove so that the air flow will not interrupt the flames.

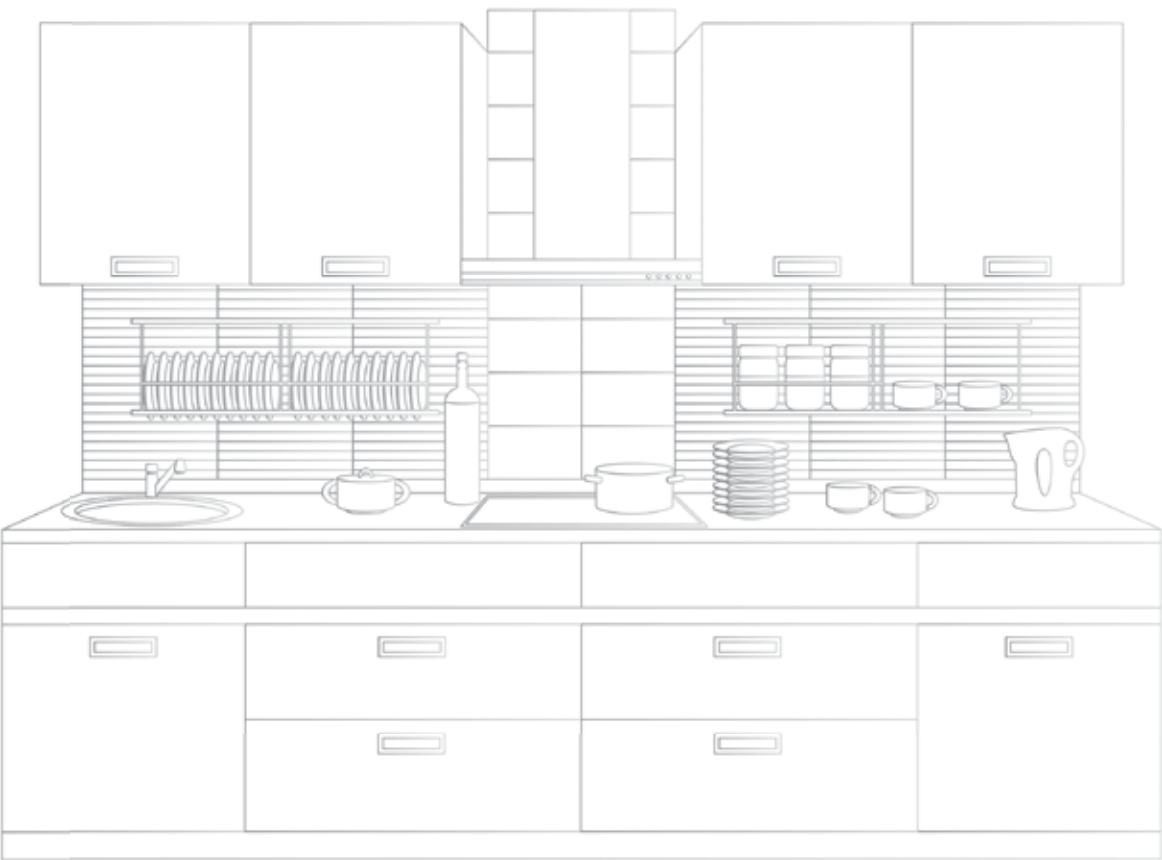
Installation Tips:

1. The indoor unit shall be at least 1m away from the stove.
2. Main body of indoor units for kitchen, bathroom and closet shall have a clearance of 45mm from the plaster ceiling for gap-less installation of decoration panel.



KITCHEN

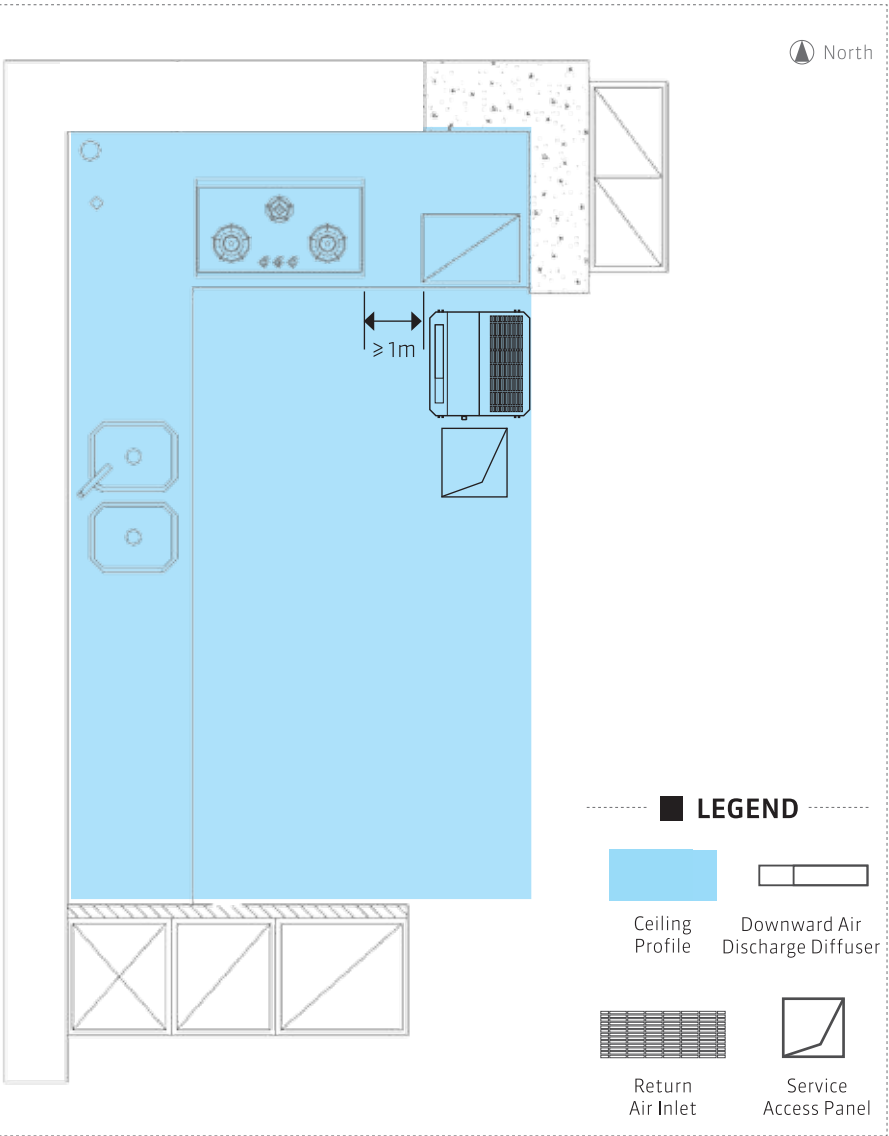
Cooking can be enjoyable. The kitchen is the place to present your love



Recommended Indoor Unit

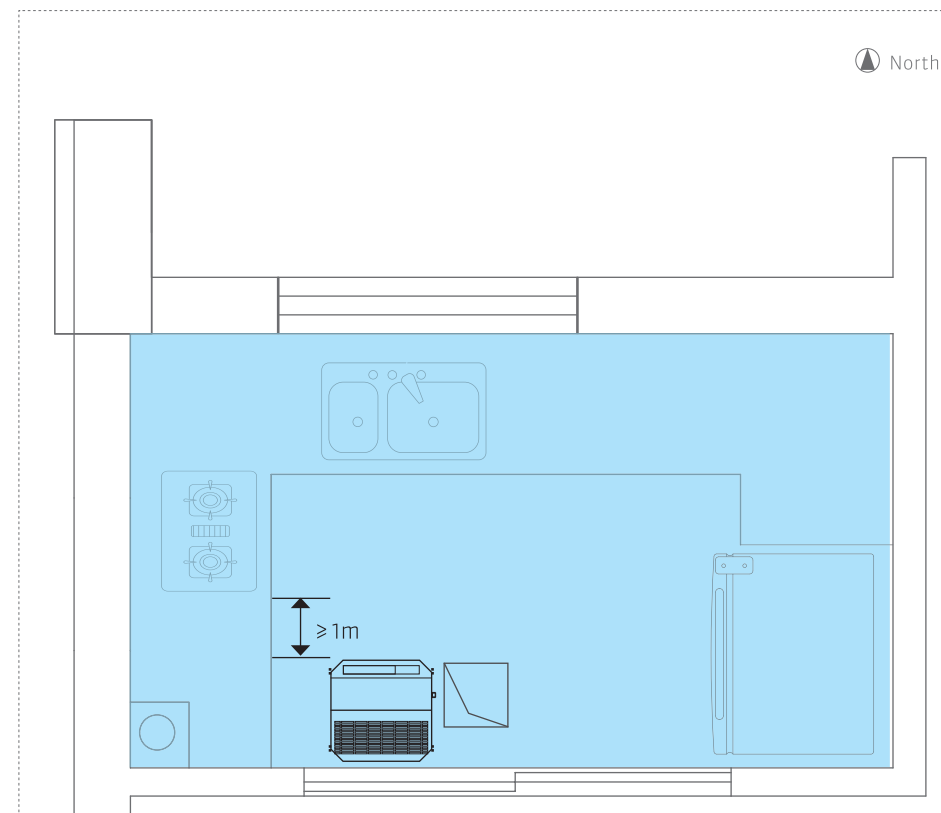


KITCHEN
High Durability Moisture Control
Kitchen Ceiling Mounted Cassette



PART 1

Hidden Comfort Solution | Kitchen - L-Shaped Layout



LEGEND



Recommended Indoor Unit



KITCHEN

High Durability Moisture Control Kitchen Ceiling Mounted Cassette

PART 1

Hidden Air Conditioner Solution | Kitchen - Kitchen Island Layout

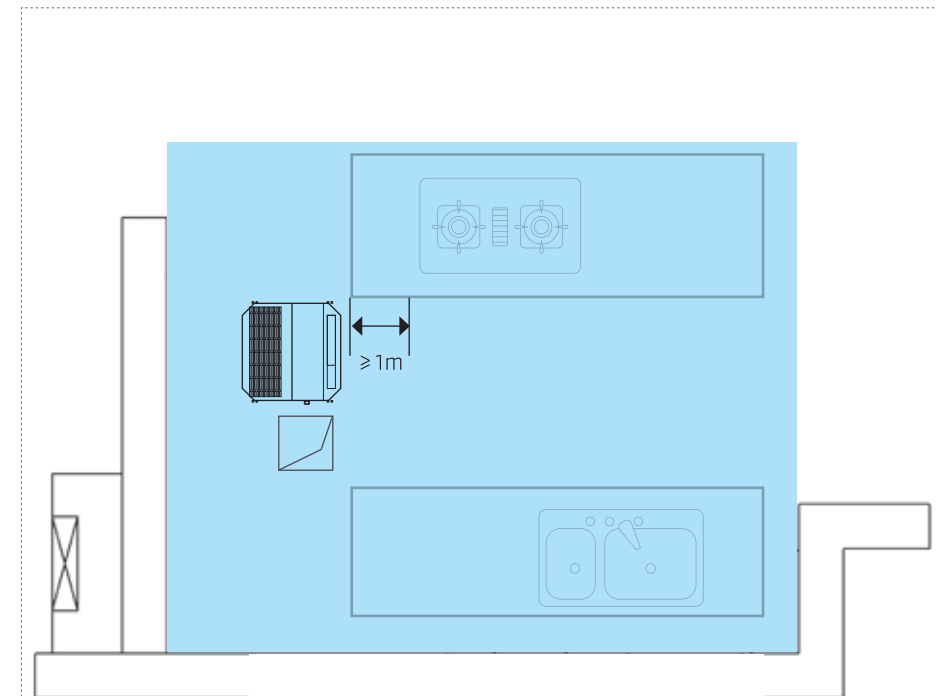


Recommended Indoor Unit



KITCHEN

High Durability Moisture Control Kitchen Ceiling Mounted Cassette



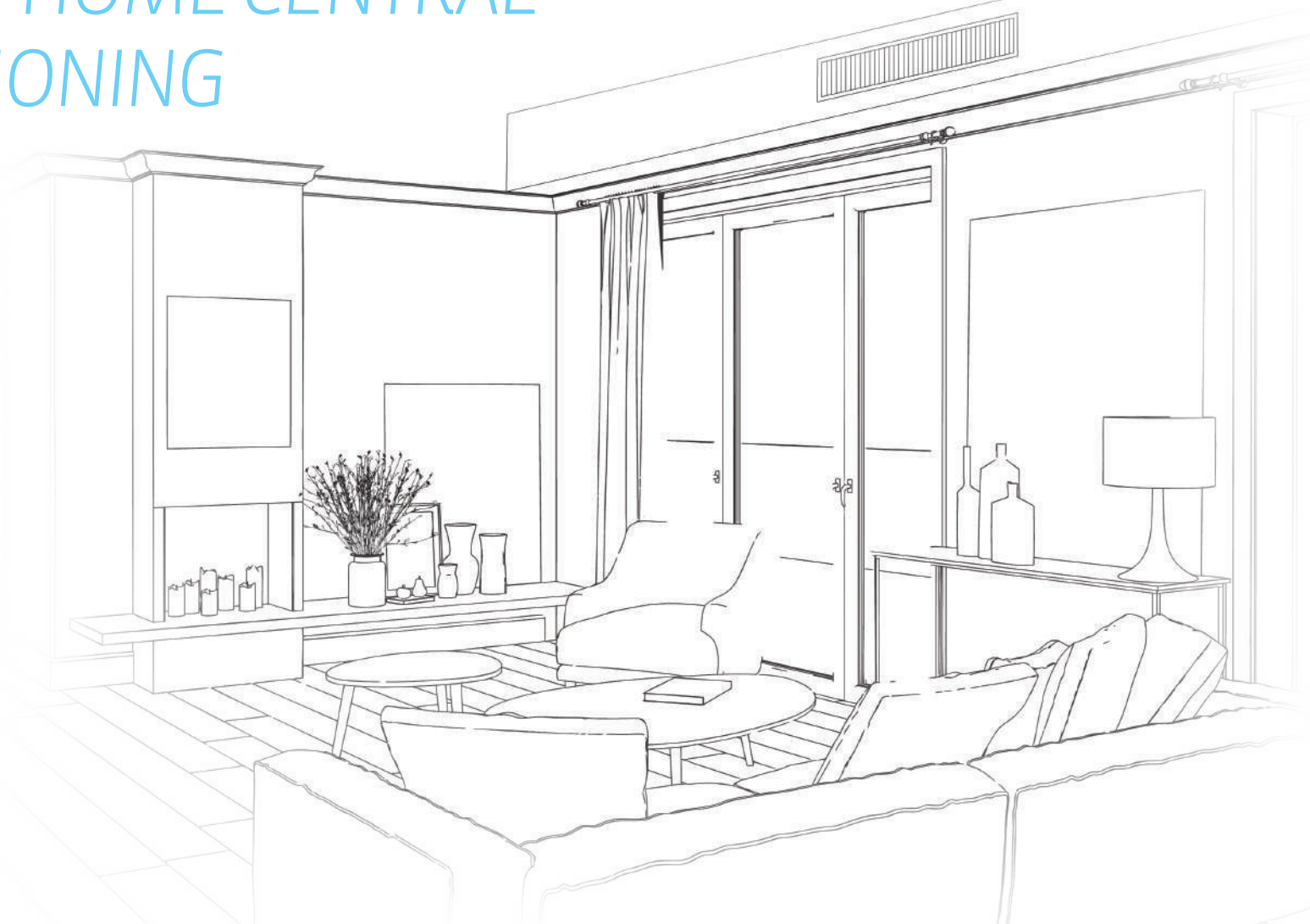
LEGEND



PART 2

Home Central Air Conditioning Product Line Up | Outline Of Home Central Air Conditioning

OUTLINE OF HOME CENTRAL AIR CONDITIONING



Comfort Cooling



Excellent Air Distribution



Auto Moisture Control



Sweet Dream

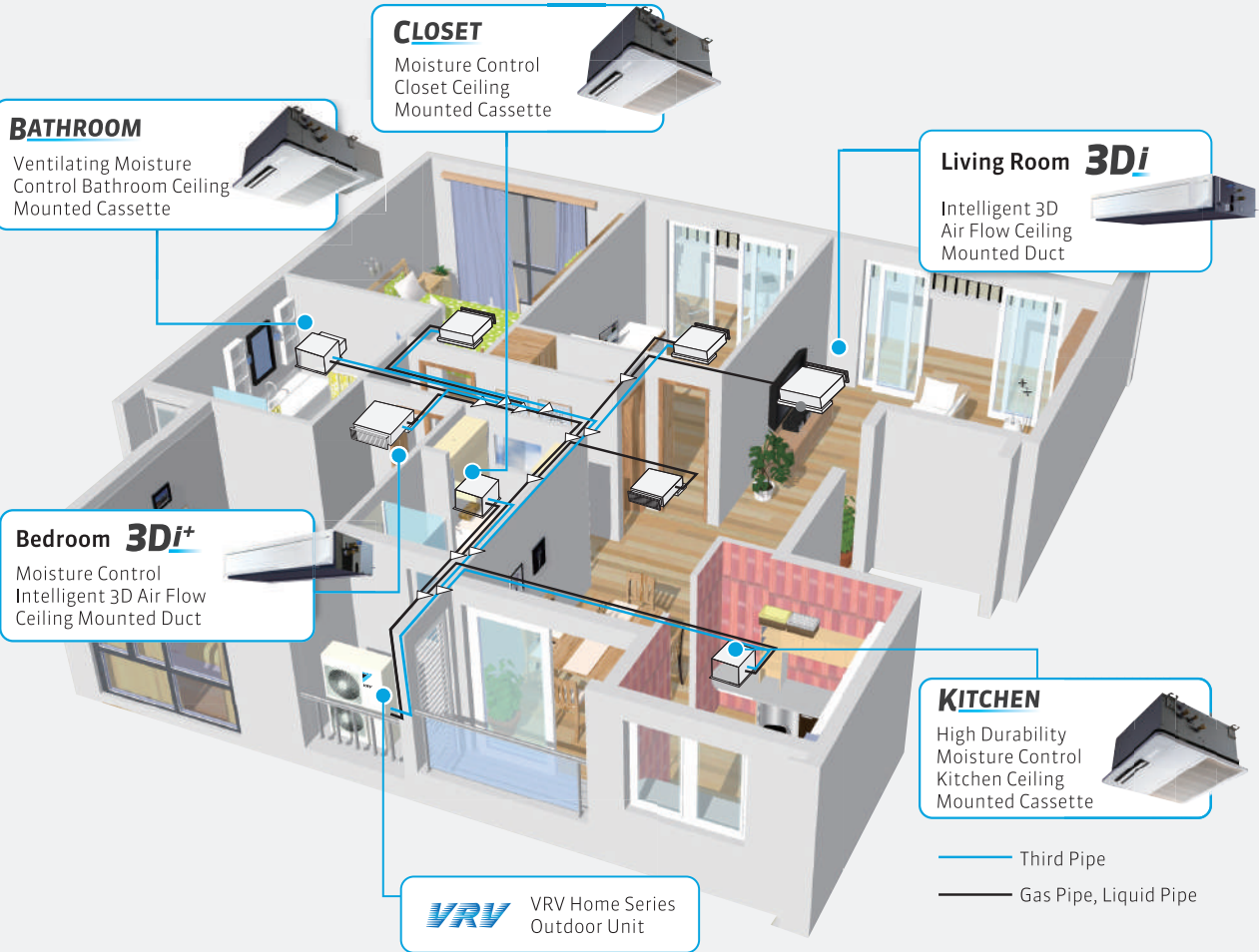


Bathroom Comfort



Kitchen Comfort

The Daikin home central air conditioning redefines comfort with its new, revolutionary breakthrough in air conditioning norms. It is a unified system which incorporates temperature control, humidity control and airflow control.



1

3Di+

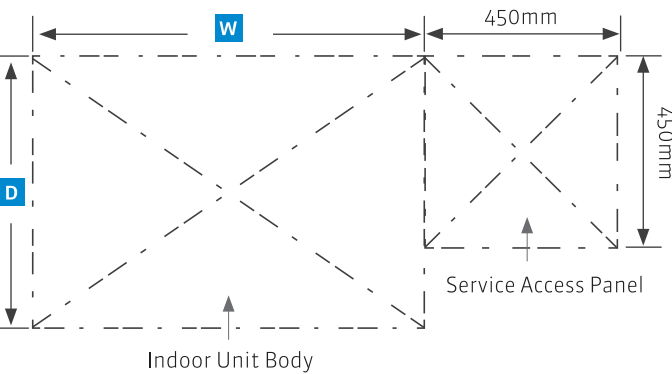
3D+

FPRSQAPVM
FPRAQAPVM

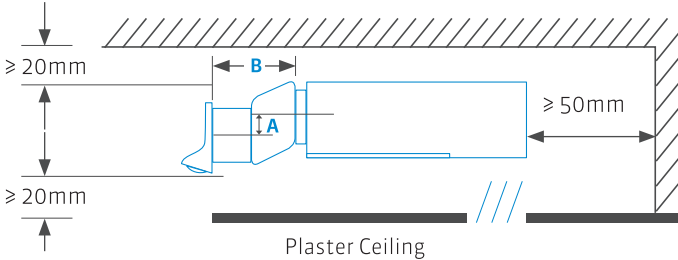
Moisture Control Intelligent 3D Air Flow Ceiling Mounted Duct
(recommended to use bottom air return)
Moisture Control 3D Air Flow Ceiling Mounted Duct
(recommended to use bottom air return)

Diagram	Reference Area (m²)	Capacity (Btu/h)	Outline Dimension (HxWxD) (mm)	Installation Dimension (HxWxD) (mm)	Air Discharge Dimension (HxW) (mm)
	8-22	7506 - 15354	200x700x620	250x1150x(805~930)	131x525
	23-26	19107	200x900x620	250x1350x(805~930)	131x725
	27-35	24225	200x1100x620	250x1550x(805~930)	131x925

Installation Guideline



A	B
50	135 ~ 150
40	135 ~ 170
30	135 ~ 200
20	135 ~ 220
10	135 ~ 240
0	135 ~ 260



W = Width
D = Depth
A = Vertical Gap of Flexible Duct
B = Flexible Duct Length

2

3Di

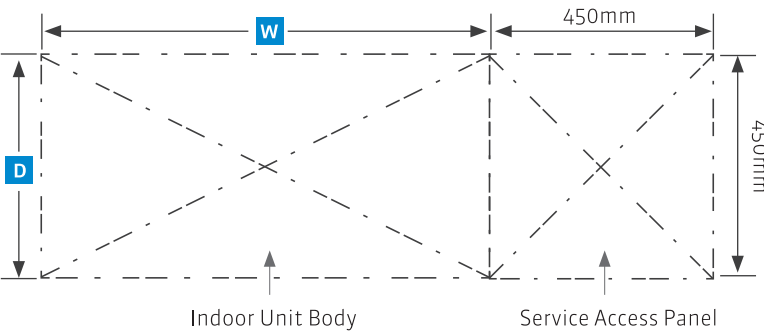
3D

FPDSQAPVM
FPDAQAPVM

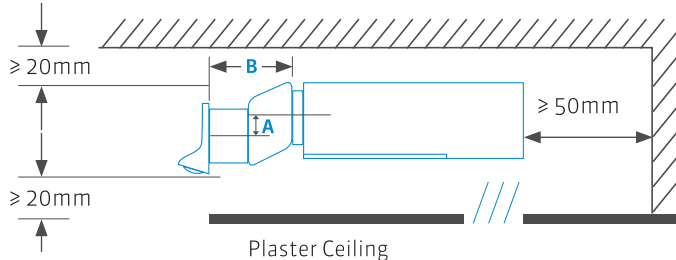
Intelligent 3D Air Flow Ceiling Mounted Duct
(recommended to use bottom air return)
3D Air Flow Ceiling Mounted Duct
(recommended to use bottom air return)

Diagram	Reference Area (m²)	Capacity (Btu/h)	Outline Dimension (HxWxD) (mm)	Installation Dimension (HxWxD) (mm)	Air Discharge Dimension (HxW) (mm)
	10-17	7506 - 15354	200x700x450	250x1150x(635~760)	131x525
	18-24	19107	200x900x450	250x1350x(635~760)	131x725
	25-30	24225	200x1100x450	250x1550x(635~760)	131x925

Installation Guideline



A	B
50	135 ~ 150
40	135 ~ 170
30	135 ~ 200
20	135 ~ 220
10	135 ~ 240
0	135 ~ 260



W = Width
D = Depth
A = Vertical Gap of Flexible Duct
B = Flexible Duct Length

A. Interior with Light Box Concept Design

When designing the interior, both air conditioning and light trough positioning shall be taken into consideration.

PARTIAL LIGHT TROUGH

When both parallel sides of the plaster ceiling is used for light trough, the ceiling mounted unit can be installed on the other two sides.



SURROUND LIGHT TROUGH

When the plaster ceiling is designed with surround light troughs, the ceiling mounted unit can be installed above the doorway, beneath the light trough.



POOR DESIGN

Light trough blocking the air discharge.



B. Interior With Air Discharge Diffuser Design

When designing the interior, both air conditioning and light trough positioning shall be taken into consideration.



Linear Diffuser

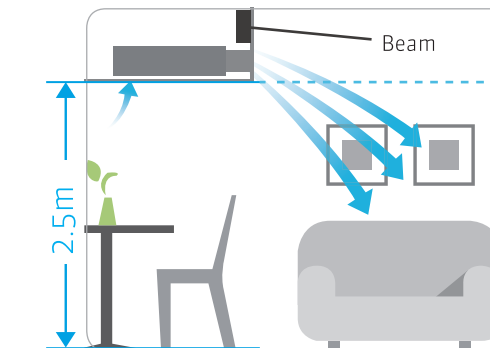
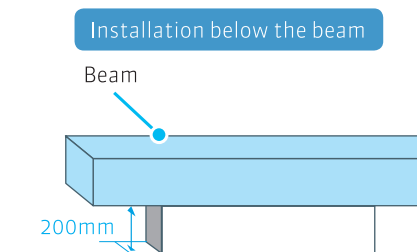


Curved Diffuser



Bar Grille Diffuser

C. Installation For Spaces With Beam





Linear Diffuser

Enhanced Varieties Of Indoor Units To Suit Different Interior Requirements

Ceiling Mounted Duct Type

3Di⁺



**Moisture Control Intelligent
3D Air Flow Ceiling Mounted Duct**

- Achieving balanced temperature and humidity control by utilizing dual heat exchanger structure.
- Exceptional comfort can be achieved thanks to the co-function of dual intelligent eye and 3D discharge louver .

3Di



Intelligent 3D Air Flow Ceiling Mounted Duct

- The innovative dual intelligent eye is able to make auto adjustment on the airflow direction and temperature by detecting the presence location of people as well as floor temperature.
- Three directional air flow improves temperature distribution and offers a comfortable living environment.

3D⁺



**Moisture Control Intelligent
3D Air Flow Ceiling Mounted Duct**

- Dual control of temperature and humidity with advanced heat exchanger design.
- Excellent choice for comfort cooling.

3D



3D Air Flow Ceiling Mounted Duct

- Optimum cooling distribution with 3D panel.
- Simple and classy panel design to match with house interior.

COMPACT



Compact Ceiling Mounted Duct

- At only 200mm in height, this slim body duct is suitable for low ceilings.
- Flexible for short duct connections and discharge grille.

COMPACT⁺



**Compact Moisture Control
Ceiling Mounted Cassette**

- Capability of individual control temperature and humidity.
- Duct height is as low as 200mm for low ceilings.

Enhanced Varieties Of Indoor Units To Suit Different Interior Requirements

Ceiling Mounted Duct Type

COMPACT^B



Compact Big Volume Ceiling Mounted Duct

- Compact body size for even larger area requirement.
- Variety of installation methods to support different house interior.

LONG DUCT



Medium Static Ceiling Mounted Duct

- High versatility for uncommon room structure.
- Suitable for high ceiling and large areas application.
- Flexible installation for long duct connections.



Ceiling Mounted Cassette Type

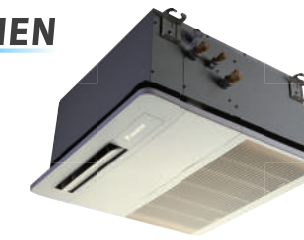
BATHROOM



**Ventilating Moisture Control Bathroom
Ceiling Mounted Cassette**

- Multi-purpose and designed for user comfort by
 - comfort cooling.
 - all day ventilation to remove moisture and odours quickly.
 - laundry drying during humid and rainy days.
 - all season drying, effectively suppress the growth of molds.
- Smart drying, mildew proof.

KITCHEN



**High Durability Moisture Control Kitchen
Ceiling Mounted Cassette**

- Create a comfortable and cool environment for cooking by delivering gentle air flow and rapid removal of heat.
- Easy installation.
- Resistance to oil ensuring long life span.
- Mold proof function.

CLOSET



**Moisture Control Closet
Ceiling Mounted Cassette**

- Utilizing dual heat exchange structure for keeping the clothes dry and fresh.
- Compact cassette design"suitable to install" for small spaces of closet.

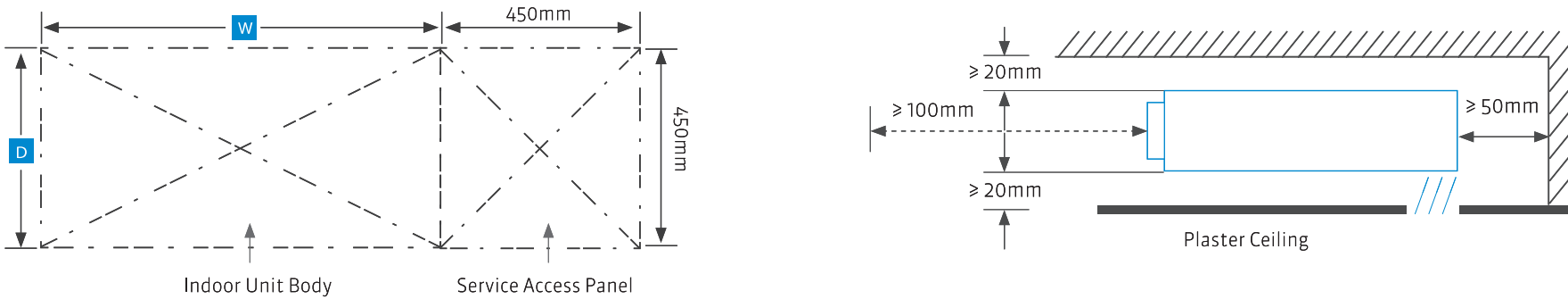
Ceiling Mounted Cassette Type

3

COMPACT FPDQAPV1 Compact Ceiling Mounted Duct

Diagram	Reference Area (m²)	Capacity (Btu/h)	Outline Dimension (HxWxD) (mm)	Installation Dimension (HxWxD) (mm)	Air Discharge Dimension (HxW) (mm)
	8-22	7506 - 15354	200x700x450	250x1150x600	153x660
	23-26	19107	200x900x450	250x1350x600	153x860
	27-35	24225	200x1100x450	250x1550x600	153x1060

Installation Guideline



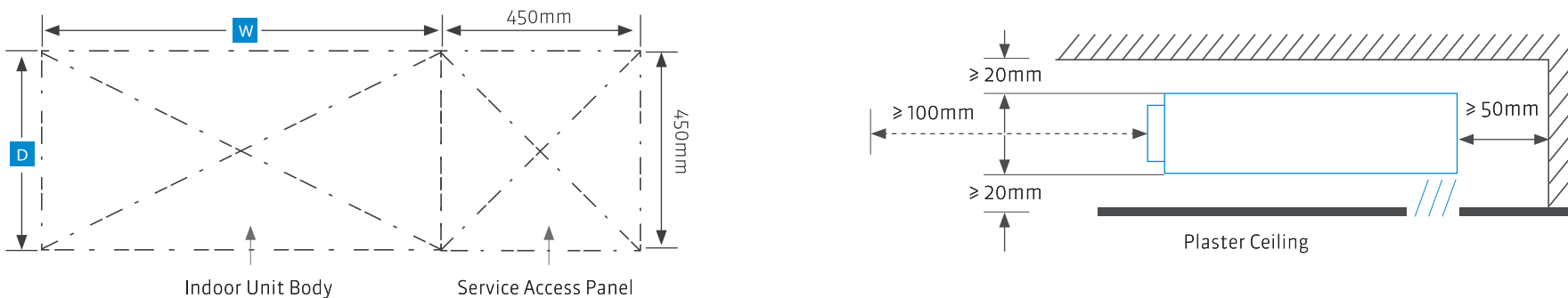
W = Width
D = Depth

4

COMPACT+ FPRQAPVM Compact Moisture Control Ceiling Mounted Duct
(recommended to use bottom air return)

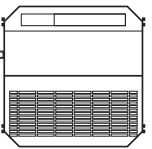
Diagram	Reference Area (m²)	Capacity (Btu/h)	Outline Dimension (HxWxD) (mm)	Installation Dimension (HxWxD) (mm)	Air Discharge Dimension (HxW) (mm)
	8-22	7506 - 15354	200x700x620	250x1150x(805 - 930)	153x660
	23-26	19107	200x900x620	250x1350x(805 - 930)	153x860
	27-35	24225	200x1100x620	250x1550x(805 - 930)	153x1060

Installation Guideline



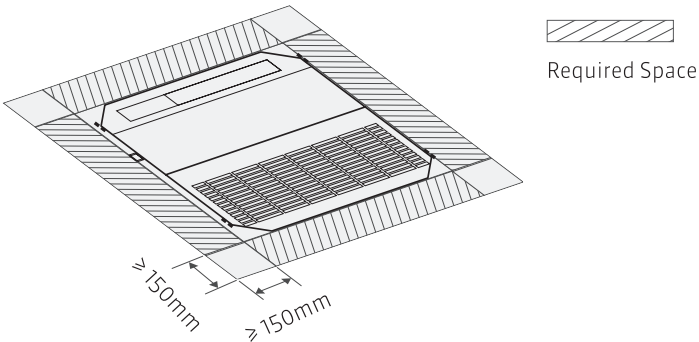
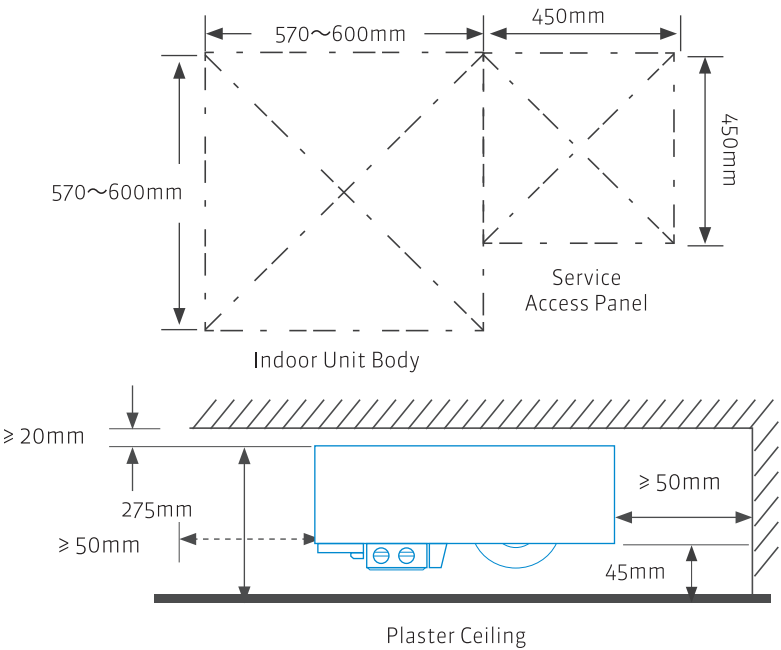
W = Width
D = Depth

3 CLOSET FPECQAPVM Moisture Control Closet Ceiling Mounted Cassette

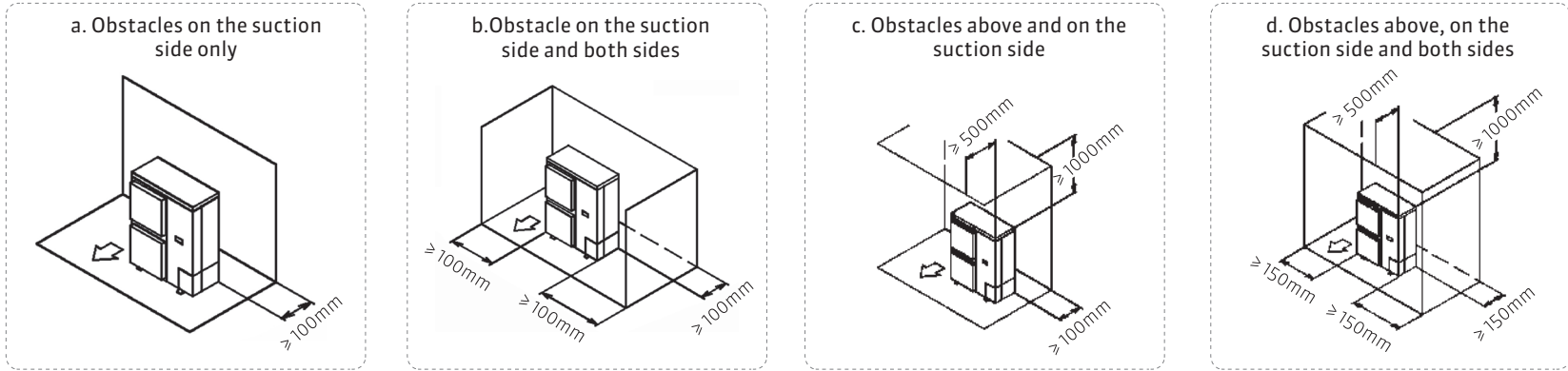
Diagram	Reference Area (m²)	Capacity (Btu/h)	Outline Dimension (HxWxD) (mm)	Decorative Panel Dimension (HxWxD) (mm)	Installation Dimension (HxWxD) (mm)
	6-10	6824	230x555x540	60x625x640	295x1050x700

Installation Guideline

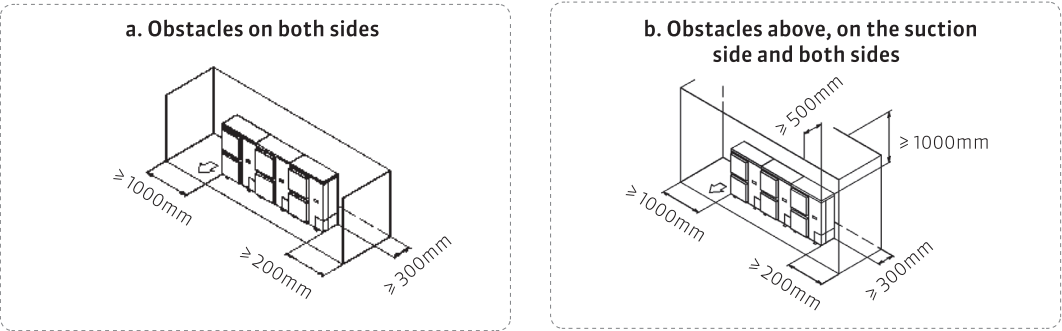
Installation Clearance



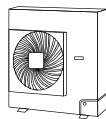
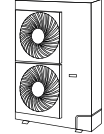
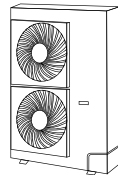
A. Stand-Alone Installation



B. Series Installation



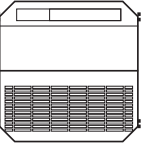
Outdoor Unit Dimension

Diagram	Unit Size (HP)	Outline Dimension (HxWxD) (mm)	Diagram	Unit Size (HP)	Outline Dimension (HxWxD) (mm)	Diagram	Unit Size (HP)	Outline Dimension (HxWxD) (mm)
	4	990x940x320		6	1345x900x320		10	1615x940x460
	5			8	1430X940X320		12	
					9			

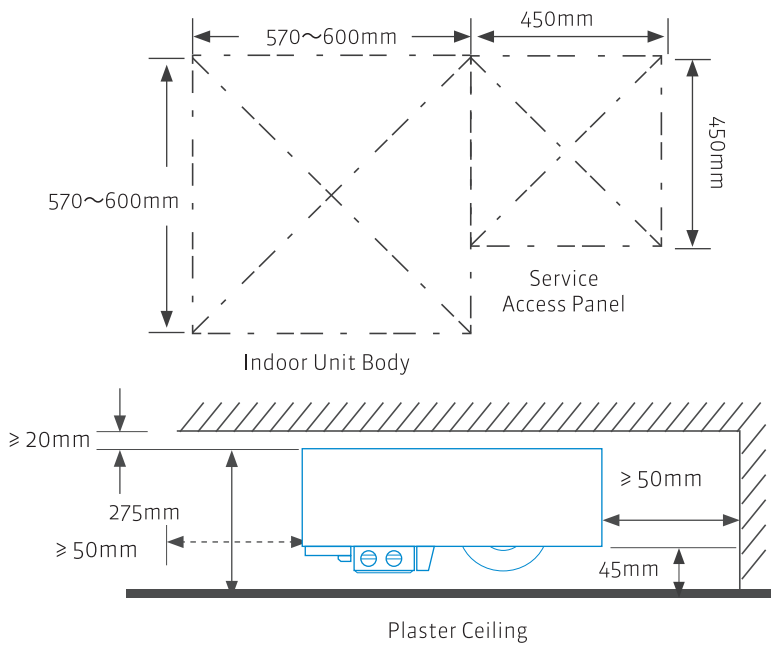
PART 2

Outline Of Home Central Air Conditioning | Indoor Unit Dimension - Ceiling Mounted Cassette Type

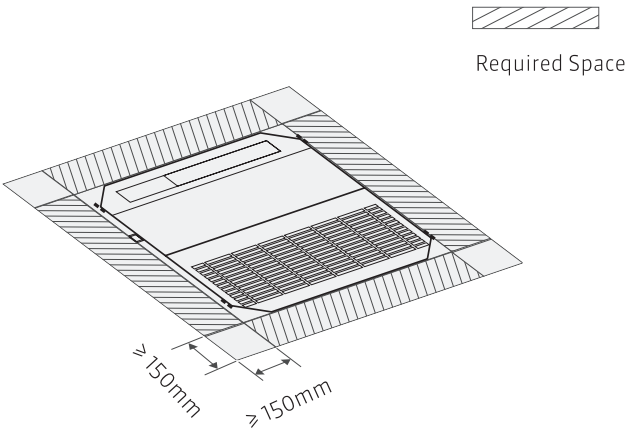
1 **KITCHEN** **FPEKQAVM** High Durability Moisture Control Kitchen Ceiling Mounted Cassette

Diagram	Reference Area (m²)	Capacity (Btu/h)	Outline Dimension (HxWxD) (mm)	Decorative Panel Dimension (HxWxD) (mm)	Installation Dimension (HxWxD) (mm)
	6-10	7506 - 10918	230x555x540	60x625x640	295x1050x700

Installation Guideline



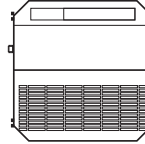
Installation Clearance



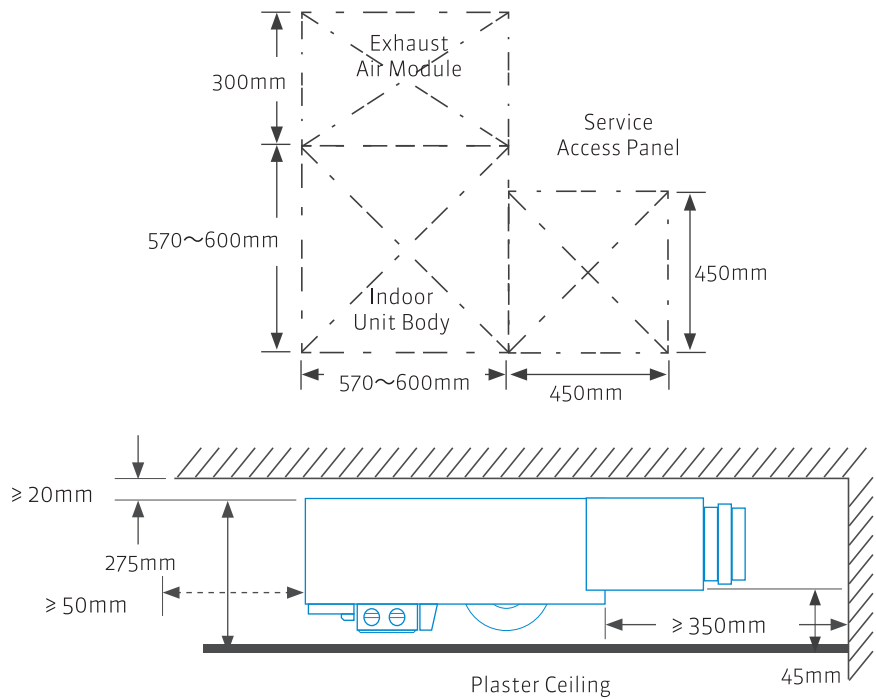
PART 2

Indoor Unit Dimension - Ceiling Mounted Cassette Type | Outline Of Home Central Air Conditioning

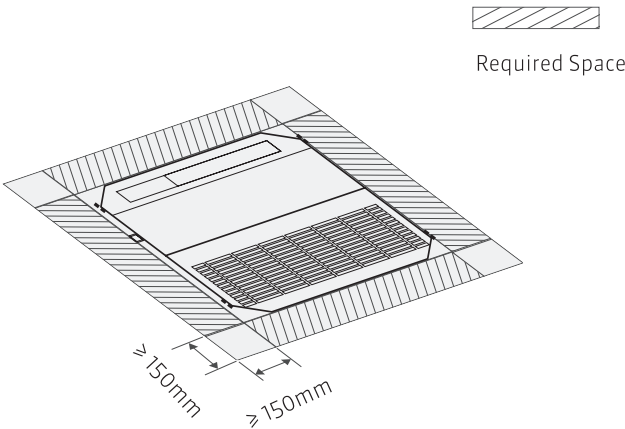
2 **BATHROOM** **FPEBQAV1** Ventilating Moisture Control Bathroom Ceiling Mounted Cassette

Diagram	Reference Area (m²)	Capacity (Btu/h)	Outline Dimension (HxWxD) (mm)	Decorative Panel Dimension (HxWxD) (mm)	Installation Dimension (HxWxD) (mm)	Exhaust Air Module Dimension (HxWxD) (mm)
	6-10	6653	230x555x540	60x625x640	295x1050x1000	215X245X370

Installation Guideline



Installation Clearance



START ▶

1

INSTALLATION PREPARATION

Determine a suitable installation location for the indoor unit and refrigerant pipings.

Avoid drilling through beams to minimize the risk of structure weakening. Ensure the drilling hole angle is downwardly towards external to avoid rainwater flow back.

2

INDOOR UNIT INSTALLATION

The indoor unit must be mounted horizontally to ensure smooth drainage.

After the installation, the indoor unit must be wrapped and protected with plastic to avoid dust from accumulating inside the unit.

3

PIPING WORKS

Nitrogen gas is to be used by flowing through refrigerant pipings continuously at low pressure during the brazing process of copper pipes. This is to prevent formation of oxidation bubbles inside the copper pipe during brazing and allows the piping to cool down naturally.

Brazing work should be carried out in a downward or sideways direction but not upwards.

4

REFRIGERANT PIPE AND DRAIN PIPE LAYOUT PLANNING

It is important to cover the refrigerant pipe as it will prevent water, dirt and dust from getting inside the pipes. The end of each pipe must be covered using a 'pinching' or 'taping' method. The drain pipe must be fitted at a gradient of at least 1/100 and should be as short as possible and free from air block. Suspension bolts should be used to support long stretches of drain pipes to ensure that the 1/100 gradient is maintained.

5

OUTDOOR UNIT INSTALLATION

Select a location for installation that meets the following conditions and get customer's approval.

- Good ventilation
- Does not disturb neighbours
- Does not shelter small animals
- Solid enough to support the weight and vibration of the unit which can be placed horizontally
- Avoid the rain as much as possible
- Adequate space around the unit for installation
- Outdoor piping and wiring within an allowable length range
- No risk of flammable gas leaks

6

LEAK TEST AND VACCUM DRYING

Carry out a leak test to ensure there is no leakage of refrigerants in the system. Leakage can be detected using soap solution, electric detector or spray method of detection. It is not advisable to use the halide-torch detector to test nitrogen gas leakage.

Using a vacuum pump, remove the air and moisture inside the pipe and leave the pipes completely dry inside to ensure the system runs smoothly.

7

ADDITIONAL REFRIGERANT CHARGE

Calculate the correct amount of refrigerant to be added according to actual piping length. Charge in the required amount using weighing scale. Refrigerant charging shall be done in liquid state to liquid service port only.

8

TESTING AND COMMISSIONING

The purpose of these tests is to ensure that all components and systems perform in a satisfactory and safe condition, and to verify that the system is running properly and efficiently.

A complete user guideline manual must be provided to the end user.

9

OPERATING GUIDELINE

All inspections, tests and commissioning shall be recorded and reported accordingly. The report must then be submitted and notified to the end user or authorized service contractor for future reference.



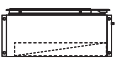
* The installation procedure above serves as a rough guideline. The steps may differ depending on the site condition.

END ▶

PART 2

Outline Of Home Central Air Conditioning | Indoor Unit Dimension

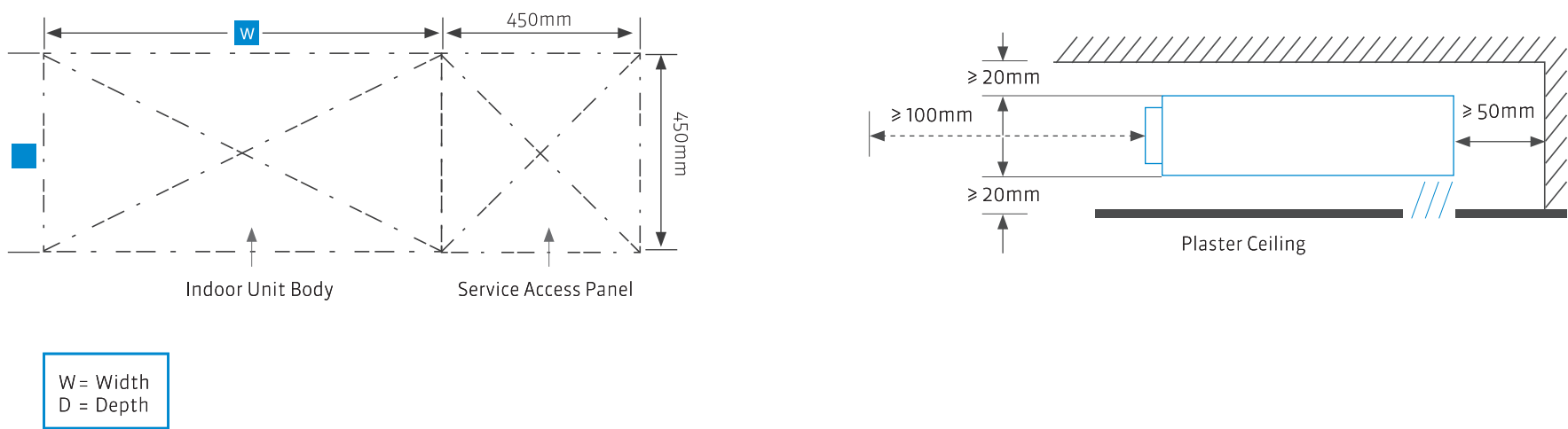
5 COMPACT^B FPDQAPV1 Compact Big Volume Ceiling Mounted Duct

Diagram	Reference Area (m²)	Capacity (Btu/h)	Outline Dimension (HxWxD) (mm)	Installation Dimension (HxWxD) (mm)	Air Discharge Dimension (HxW) (mm)
	36-50	30708 - 38214	200x1610x560	250x2060x710	153x1570

6 LONG DUCT FPSQAPCV1 Medium Static Ceiling Mounted Duct

Diagram	Reference Area (m²)	Capacity (Btu/h)	Outline Dimension (HxWxD) (mm)	Installation Dimension (HxWxD) (mm)	Air Discharge Dimension (HxW) (mm)
	23-35	19107-24225	250x1000x700	250x1450x(885-1010)	200x962
	36-70	30708-54592	250x1400x700	250x1850x(885-1010)	200x1362

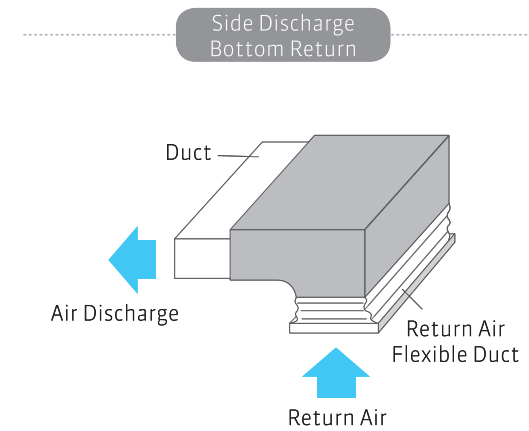
Installation Guideline



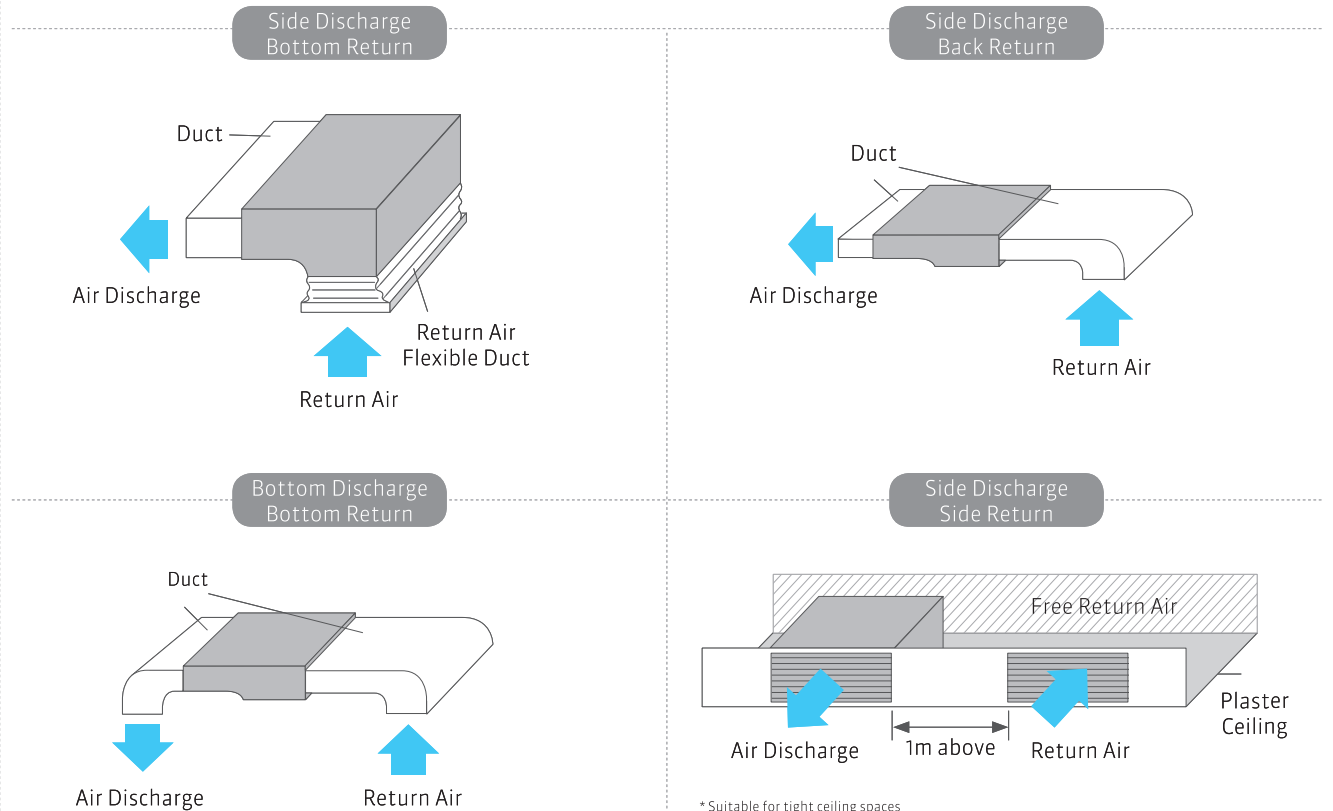
PART 2

Ceiling Mounted Typical Air Discharge and Suction Method | Outline Of Home Central Air Conditioning

Types of Models	
3Di⁺	Moisture Control Intelligent 3D Air Flow Ceiling Mounted Duct
3Di	Intelligent 3D Air Flow Ceiling Mounted Duct
3D⁺	Moisture Control 3D Air Flow Ceiling Mounted Duct
3D	3D Air Flow Ceiling Mounted Duct
COMPACT⁺	Compact Moisture Control Ceiling Mounted Duct



Types of Models	
COMPACT	Compact Ceiling Mounted Duct
COMPACT^B	Compact Big Volume Ceiling Mounted Duct
LONG DUCT	Medium Static Ceiling Mounted Duct



* Suitable for tight ceiling spaces
* Spaces shall be sufficient for free return air path