

# Engineering Data

## Ceiling Mounted Cassette (Round Flow with Sensing) Type FXFQ-TVJU

60 Hz

**R-410A**





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# 1. Features and Benefits

## FEATURES

- True 360° airflow distribution and three room sensors enables optimized occupant comfort and efficiency
- Optional self-cleaning filter panel to further increase efficiency and reduce maintenance costs
- Individually controlled supply air louvers for comfortable air supply
- Improved efficiency with new DC fan motor and auto logic that adjusts fan speed based on space load
- Industry leading flexibility with 23 possible airflow patterns
- Integral condensate pump with up to 26-1/2" lift
- Standard Limited Warranty: 10-year warranty on compressor and all parts

## BENEFITS

- Compact design to allow for installation in small ceiling voids
- Very low sound levels increases flexibility regarding location of the unit
- Increased indoor air quality with high efficiency filter options & ventilation connection kit
- Automatic occupancy dependant Set back function to save energy



## 2. Specifications

### Ceiling mounted cassette (round flow with sensing) type

Model		FXFQ07TVJU		FXFQ09TVJU	
Power supply		1 phase, 60 Hz, 208/230 V		1 phase, 60 Hz, 208/230 V	
★1, ★3 Cooling capacity	Btu/h (kW)	7,200 (2.1)		9,500 (2.8)	
★2, ★3 Heating capacity	Btu/h (kW)	8,500 (2.5)		10,500 (3.1)	
Casing/Color		Galvanized steel plate		Galvanized steel plate	
Dimensions: (H × W × D)		in. (mm)	9-11/16 × 33-1/16 × 33-1/16 (246 × 840 × 840)		9-11/16 × 33-1/16 × 33-1/16 (246 × 840 × 840)
Coil (cross fin coil)	Rows × Stages × FPI	2 × 8 × 21		2 × 8 × 21	
	Face area	ft <sup>2</sup> (m <sup>2</sup> )	2.63 (0.244)		2.63 (0.244)
Fan	Model	QTS48C15M		QTS48C15M	
	Type	Turbo fan		Turbo fan	
	Motor output	W	48		48
	Airflow rate (HH/H/L)	cfm (m <sup>3</sup> /min)	420/406/353 (11.9/11.5/10.0)		441/406/353 (12.5/11.5/10.0)
	Drive	Direct drive		Direct drive	
Temperature control		Microprocessor thermostat for cooling and heating		Microprocessor thermostat for cooling and heating	
Sound absorbing thermal insulation material		Polyurethane form		Polyurethane form	
★4 Sound pressure level (reference data) (HH/H/L)	dBA	30.0/28.5/27.0		30.0/28.5/27.0	
★4 Sound power level (reference data)	dB	49		49	
Weight	lbs (kg)	42 (19)		42 (19)	
Piping connections	Liquid pipes	in. (mm)	ϕ1/4 (ϕ6.4) (flare connection)		ϕ1/4 (ϕ6.4) (flare connection)
	Gas pipes	in. (mm)	ϕ1/2 (ϕ12.7) (flare connection)		ϕ1/2 (ϕ12.7) (flare connection)
	Drain pipe	in. (mm)	VP25 (external dia. 1-1/4 (32), internal dia. 1 (25))		VP25 (external dia. 1-1/4 (32), internal dia. 1 (25))
Safety devices		Fuse		Fuse	
Refrigerant control		Electronic expansion valve		Electronic expansion valve	
Connectable outdoor unit		R410A <b>VRV</b> series		R410A <b>VRV</b> series	
Standard accessories		Operation manual, Installation manual, Paper pattern for installation, Drain hose, Sealing pads, Clamps, Washers, Screws, Insulation for fitting, Clamp metal		Operation manual, Installation manual, Paper pattern for installation, Drain hose, Sealing pads, Clamps, Washers, Screws, Insulation for fitting, Clamp metal	
Decoration panel (option)	Model	BYCQ125B-W1 / BYCQ125BGW1		BYCQ125B-W1 / BYCQ125BGW1	
	Color	Fresh white		Fresh white	
	Dimensions: (H × W × D)	in. (mm)	2 × 37-3/8 × 37-3/8 / 5-1/8 × 37-3/8 × 37-3/8 (50 × 950 × 950 / 130 × 950 × 950)		2 × 37-3/8 × 37-3/8 / 5-1/8 × 37-3/8 × 37-3/8 (50 × 950 × 950 / 130 × 950 × 950)
	Air filter	Resin net (with mold resistance)		Resin net (with mold resistance)	
	Weight	lbs (kg)	12.2/22.1 (5.5/10.0)		12.2/22.1 (5.5/10.0)

#### Note:

- ★1. Nominal cooling capacities are based on the following conditions:  
Return air temperature: 80°FDB (26.7°CDB), 67°FWB (19.4°CWB)  
Outdoor temperature: 95°FDB (35.0°CDB)  
Equivalent refrigerant piping length: 25 ft (7.6 m) (horizontal)
- ★2. Nominal heating capacities are based on the following conditions:  
Return air temperature: 70°FDB (21.1°CDB).  
Outdoor temperature: 47°FDB (8.3°CDB), 43°FWB (6.1°CWB)  
Equivalent refrigerant piping length: 25 ft (7.6 m) (horizontal)
- ★3. Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★4. Anechoic chamber conversion value, measured under JIS conditions. During actual operation, these values may be higher as a result of installation conditions.

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## Ceiling mounted cassette (round flow with sensing) type

Model		FXFQ12TVJU		FXFQ15TVJU	
Power supply		1 phase, 60 Hz, 208/230 V		1 phase, 60 Hz, 208/230 V	
★1, ★3 Cooling capacity	Btu/h (kW)	12,000 (3.5)		14,400 (4.2)	
★2, ★3 Heating capacity	Btu/h (kW)	13,500 (4.0)		17,000 (5.0)	
Casing/Color		Galvanized steel plate		Galvanized steel plate	
Dimensions: (H × W × D)		in. (mm)	9-11/16 × 33-1/16 × 33-1/16 (246 × 840 × 840)	in. (mm)	9-11/16 × 33-1/16 × 33-1/16 (246 × 840 × 840)
Coil (cross fin coil)	Rows × Stages × FPI	2 × 8 × 21		2 × 8 × 21	
	Face area	ft <sup>2</sup> (m <sup>2</sup> )	2.63 (0.244)	ft <sup>2</sup> (m <sup>2</sup> )	2.63 (0.244)
Fan	Model	QTS48C15M		QTS48C15M	
	Type	Turbo fan		Turbo fan	
	Motor output	W	48	W	48
	Airflow rate (HH/H/L)	cfm (m <sup>3</sup> /min)	441/406/353 (12.5/11.5/10.0)	cfm (m <sup>3</sup> /min)	512/459/388 (14.5/13.0/11.0)
	Drive	Direct drive		Direct drive	
Temperature control		Microprocessor thermostat for cooling and heating		Microprocessor thermostat for cooling and heating	
Sound absorbing thermal insulation material		Polyurethane form		Polyurethane form	
★4 Sound pressure level (reference data) (HH/H/L)	dB	30.0/28.5/27.0		31.0/29.0/27.0	
★4 Sound power level (reference data)	dB	49		51	
Weight		lbs (kg)	42 (19)	lbs (kg)	42 (19)
Piping connections	Liquid pipes	in. (mm)	φ1/4 (φ6.4) (flare connection)	in. (mm)	φ1/4 (φ6.4) (flare connection)
	Gas pipes	in. (mm)	φ1/2 (φ12.7) (flare connection)	in. (mm)	φ1/2 (φ12.7) (flare connection)
	Drain pipe	in. (mm)	VP25 (external dia. 1-1/4 (32), internal dia. 1 (25))	in. (mm)	VP25 (external dia. 1-1/4 (32), internal dia. 1 (25))
Safety devices		Fuse		Fuse	
Refrigerant control		Electronic expansion valve		Electronic expansion valve	
Connectable outdoor unit		R410A <b>VRV</b> series		R410A <b>VRV</b> series	
Standard accessories		Operation manual, Installation manual, Paper pattern for installation, Drain hose, Sealing pads, Clamps, Washers, Screws, Insulation for fitting, Clamp metal		Operation manual, Installation manual, Paper pattern for installation, Drain hose, Sealing pads, Clamps, Washers, Screws, Insulation for fitting, Clamp metal	
Decoration panel (option)	Model	BYCQ125B-W1 / BYCQ125BGW1		BYCQ125B-W1 / BYCQ125BGW1	
	Color	Fresh white		Fresh white	
	Dimensions: (H × W × D)	in. (mm)	2 × 37-3/8 × 37-3/8 / 5-1/8 × 37-3/8 × 37-3/8 (50 × 950 × 950 / 130 × 950 × 950)	in. (mm)	2 × 37-3/8 × 37-3/8 / 5-1/8 × 37-3/8 × 37-3/8 (50 × 950 × 950 / 130 × 950 × 950)
	Air filter	Resin net (with mold resistance)		Resin net (with mold resistance)	
	Weight	lbs (kg)	12.2/22.1 (5.5/10.0)	lbs (kg)	12.2/22.1 (5.5/10.0)

**Note:**

- ★1. Nominal cooling capacities are based on the following conditions:  
Return air temperature: 80°FDB (26.7°CDB), 67°FWB (19.4°CWB)  
Outdoor temperature: 95°FDB (35.0°CDB)  
Equivalent refrigerant piping length: 25 ft (7.6 m) (horizontal)
- ★2. Nominal heating capacities are based on the following conditions:  
Return air temperature: 70°FDB (21.1°CDB).  
Outdoor temperature: 47°FDB (8.3°CDB), 43°FWB (6.1°CWB)  
Equivalent refrigerant piping length: 25 ft (7.6 m) (horizontal)
- ★3. Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★4. Anechoic chamber conversion value, measured under JIS conditions. During actual operation, these values may be higher as a result of installation conditions.

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## Ceiling mounted cassette (round flow with sensing) type

Model		FXFQ18TVJU	FXFQ24TVJU
Power supply		1 phase, 60 Hz, 208/230 V	1 phase, 60 Hz, 208/230 V
★1, ★3 Cooling capacity	Btu/h (kW)	18,000 (5.3)	23,000 (6.7)
★2, ★3 Heating capacity	Btu/h (kW)	20,000 (5.9)	27,000 (7.9)
Casing/Color		Galvanized steel plate	Galvanized steel plate
Dimensions: (H × W × D)		in. (mm) 9-11/16 × 33-1/16 × 33-1/16 (246 × 840 × 840)	9-11/16 × 33-1/16 × 33-1/16 (246 × 840 × 840)
Coil (cross fin coil)	Rows × Stages × FPI	3 × (12 + 15 × 2) × (20 + 21 × 2)	3 × (12 + 15 × 2) × (20 + 21 × 2)
	Face area	ft <sup>2</sup> (m <sup>2</sup> ) 4.59 (0.427)	4.59 (0.427)
Fan	Model	QTS48C15M	QTS48C15M
	Type	Turbo fan	Turbo fan
	Motor output	W 48	48
	Airflow rate (HH/H/L)	cfm (m <sup>3</sup> /min) 742/618/477 (21.0/17.5/13.5)	777/618/477 (22.0/17.5/13.5)
	Drive	Direct drive	Direct drive
Temperature control		Microprocessor thermostat for cooling and heating	Microprocessor thermostat for cooling and heating
Sound absorbing thermal insulation material		Polyurethane form	Polyurethane form
★4 Sound pressure level (reference data) (HH/H/L)	dB	35.5/32.0/28.0	36.0/32.0/28.0
★4 Sound power level (reference data)	dB	53	53
Weight		lbs (kg) 51 (23)	51 (23)
Piping connections	Liquid pipes	in. (mm) $\phi$ 1/4 ( $\phi$ 6.4) (flare connection)	$\phi$ 3/8 ( $\phi$ 9.5) (flare connection)
	Gas pipes	in. (mm) $\phi$ 1/2 ( $\phi$ 12.7) (flare connection)	$\phi$ 5/8 ( $\phi$ 15.9) (flare connection)
	Drain pipe	in. (mm) VP25 (external dia. 1-1/4 (32), internal dia. 1 (25))	VP25 (external dia. 1-1/4 (32), internal dia. 1 (25))
Safety devices		Fuse	Fuse
Refrigerant control		Electronic expansion valve	Electronic expansion valve
Connectable outdoor unit		R410A <b>VRV</b> series	R410A <b>VRV</b> series
Standard accessories		Operation manual, Installation manual, Paper pattern for installation, Drain hose, Sealing pads, Clamps, Washers, Screws, Insulation for fitting, Clamp metal	Operation manual, Installation manual, Paper pattern for installation, Drain hose, Sealing pads, Clamps, Washers, Screws, Insulation for fitting, Clamp metal
Decoration panel (option)	Model	BYCQ125B-W1 / BYCQ125BGW1	BYCQ125B-W1 / BYCQ125BGW1
	Color	Fresh white	Fresh white
	Dimensions: (H × W × D)	in. (mm) 2 × 37-3/8 × 37-3/8 / 5-1/8 × 37-3/8 × 37-3/8 (50 × 950 × 950 / 130 × 950 × 950)	2 × 37-3/8 × 37-3/8 / 5-1/8 × 37-3/8 × 37-3/8 (50 × 950 × 950 / 130 × 950 × 950)
	Air filter	Resin net (with mold resistance)	Resin net (with mold resistance)
	Weight	lbs (kg) 12.2/22.1 (5.5/10.0)	12.2/22.1 (5.5/10.0)

**Note:**

- ★1. Nominal cooling capacities are based on the following conditions:  
Return air temperature: 80°FDB (26.7°CDB), 67°FWB (19.4°CWB)  
Outdoor temperature: 95°FDB (35.0°CDB)  
Equivalent refrigerant piping length: 25 ft (7.6 m) (horizontal)
- ★2. Nominal heating capacities are based on the following conditions:  
Return air temperature: 70°FDB (21.1°CDB).  
Outdoor temperature: 47°FDB (8.3°CDB), 43°FWB (6.1°CWB)  
Equivalent refrigerant piping length: 25 ft (7.6 m) (horizontal)
- ★3. Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★4. Anechoic chamber conversion value, measured under JIS conditions. During actual operation, these values may be higher as a result of installation conditions.

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### Ceiling mounted cassette (round flow with sensing) type

Model		FXFQ30TVJU		FXFQ36TVJU	
Power supply		1 phase, 60 Hz, 208/230 V		1 phase, 60 Hz, 208/230 V	
★1, ★3 Cooling capacity	Btu/h (kW)	30,000 (8.8)		36,000 (10.6)	
★2, ★3 Heating capacity	Btu/h (kW)	34,000 (10.0)		40,000 (11.7)	
Casing/Color		Galvanized steel plate		Galvanized steel plate	
Dimensions: (H × W × D)		in. (mm)	11-5/16 × 33-1/16 × 33-1/16 (288 × 840 × 840)	11-5/16 × 33-1/16 × 33-1/16 (288 × 840 × 840)	
Coil (cross fin coil)	Rows × Stages × FPI	3 × 18 × (20 + 21 × 2)		3 × 18 × (20 + 21 × 2)	
	Face area	ft <sup>2</sup> (m <sup>2</sup> )	5.92 (0.550)	5.92 (0.550)	
Fan	Model	QTS48C15M		QTS48C15M	
	Type	Turbo fan		Turbo fan	
	Motor output	W	106	106	
	Airflow rate (HH/H/L)	cfm (m <sup>3</sup> /min)	1,112/918/671 (31.5/26.0/19.0)	1,165/918/671 (33.0/26.0/19.0)	
	Drive	Direct drive		Direct drive	
Temperature control		Microprocessor thermostat for cooling and heating		Microprocessor thermostat for cooling and heating	
Sound absorbing thermal insulation material		Polyurethane form		Polyurethane form	
★4 Sound pressure level (reference data) (HH/H/L)	dBA	43.5/38.0/32.0		44.0/38.0/32.0	
★4 Sound power level (reference data)	dB	60		60	
Weight		lbs (kg)	58 (26)	58 (26)	
Piping connections	Liquid pipes	in. (mm)	ϕ3/8 (ϕ9.5) (flare connection)	ϕ3/8 (ϕ9.5) (flare connection)	
	Gas pipes	in. (mm)	ϕ5/8 (ϕ15.9) (flare connection)	ϕ5/8 (ϕ15.9) (flare connection)	
	Drain pipe	in. (mm)	VP25 (external dia. 1-1/4 (32), internal dia. 1 (25))	VP25 (external dia. 1-1/4 (32), internal dia. 1 (25))	
Safety devices		Fuse		Fuse	
Refrigerant control		Electronic expansion valve		Electronic expansion valve	
Connectable outdoor unit		R410A <b>VRV</b> series		R410A <b>VRV</b> series	
Standard accessories		Operation manual, Installation manual, Paper pattern for installation, Drain hose, Sealing pads, Clamps, Washers, Screws, Insulation for fitting, Clamp metal		Operation manual, Installation manual, Paper pattern for installation, Drain hose, Sealing pads, Clamps, Washers, Screws, Insulation for fitting, Clamp metal	
Decoration panel (option)	Model	BYCQ125B-W1 / BYCQ125BGW1		BYCQ125B-W1 / BYCQ125BGW1	
	Color	Fresh white		Fresh white	
	Dimensions: (H × W × D)	in. (mm)	2 × 37-3/8 × 37-3/8 / 5-1/8 × 37-3/8 × 37-3/8 (50 × 950 × 950 / 130 × 950 × 950)	2 × 37-3/8 × 37-3/8 / 5-1/8 × 37-3/8 × 37-3/8 (50 × 950 × 950 / 130 × 950 × 950)	
	Air filter	Resin net (with mold resistance)		Resin net (with mold resistance)	
	Weight	lbs (kg)	12.2/22.1 (5.5/10.0)	12.2/22.1 (5.5/10.0)	

**Note:**

- ★1. Nominal cooling capacities are based on the following conditions:  
 Return air temperature: 80°FDB (26.7°CDB), 67°FWB (19.4°CWB)  
 Outdoor temperature: 95°FDB (35.0°CDB)  
 Equivalent refrigerant piping length: 25 ft (7.6 m) (horizontal)
- ★2. Nominal heating capacities are based on the following conditions:  
 Return air temperature: 70°FDB (21.1°CDB).  
 Outdoor temperature: 47°FDB (8.3°CDB), 43°FWB (6.1°CWB)  
 Equivalent refrigerant piping length: 25 ft (7.6 m) (horizontal)
- ★3. Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★4. Anechoic chamber conversion value, measured under JIS conditions. During actual operation, these values may be higher as a result of installation conditions.

C: 3D086889B

**Ceiling mounted cassette (round flow with sensing) type**

Model		FXFQ48TVJU	
Power supply		1 phase, 60 Hz, 208/230 V	
★1, ★3 Cooling capacity	Btu/h (kW)	48,000 (14.1)	
★2, ★3 Heating capacity	Btu/h (kW)	54,000 (15.8)	
Casing/Color		Galvanized steel plate	
Dimensions: (H × W × D)		in. (mm) 11-5/16 × 33-1/16 × 33-1/16 (288 × 840 × 840)	
Coil (cross fin coil)	Rows × Stages × FPI	3 × 18 × (20 + 21 × 2)	
	Face area	ft <sup>2</sup> (m <sup>2</sup> )	5.92 (0.550)
Fan	Model	QTS48C15M	
	Type	Turbo fan	
	Motor output	W	106
	Airflow rate (HH/H/L)	cfm (m <sup>3</sup> /min)	1,218/971/742 (34.5/27.5/21.0)
	Drive	Direct drive	
Temperature control		Microprocessor thermostat for cooling and heating	
Sound absorbing thermal insulation material		Polyurethane form	
★4 Sound pressure level (reference data) (HH/H/L)	dBA	45.0/40.0/35.0	
★4 Sound power level (reference data)	dB	61	
Weight	lbs (kg)	58 (26)	
Piping connections	Liquid pipes	in. (mm)	φ3/8 (φ9.5) (flare connection)
	Gas pipes	in. (mm)	φ5/8 (φ15.9) (flare connection)
	Drain pipe	in. (mm)	VP25 (external dia. 1-1/4 (32), internal dia. 1 (25))
Safety devices		Fuse	
Refrigerant control		Electronic expansion valve	
Connectable outdoor unit		R410A <b>VRV</b> series	
Standard accessories		Operation manual, Installation manual, Paper pattern for installation, Drain hose, Sealing pads, Clamps, Washers, Screws, Insulation for fitting, Clamp metal	
Decoration panel (option)	Model	BYCQ125B-W1 / BYCQ125BGW1	
	Color	Fresh white	
	Dimensions: (H × W × D)	in. (mm)	2 × 37-3/8 × 37-3/8 / 5-1/8 × 37-3/8 × 37-3/8 (50 × 950 × 950 / 130 × 950 × 950)
	Air filter	Resin net (with mold resistance)	
	Weight	lbs (kg)	12.2/22.1 (5.5/10.0)

**Note:**

- ★1. Nominal cooling capacities are based on the following conditions:  
 Return air temperature: 80°FDB (26.7°CDB), 67°FWB (19.4°CWB)  
 Outdoor temperature: 95°FDB (35.0°CDB)  
 Equivalent refrigerant piping length: 25 ft (7.6 m) (horizontal)
- ★2. Nominal heating capacities are based on the following conditions:  
 Return air temperature: 70°FDB (21.1°CDB).  
 Outdoor temperature: 47°FDB (8.3°CDB), 43°FWB (6.1°CWB)  
 Equivalent refrigerant piping length: 25 ft (7.6 m) (horizontal)
- ★3. Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★4. Anechoic chamber conversion value, measured under JIS conditions. During actual operation, these values may be higher as a result of installation conditions.

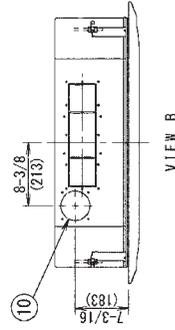
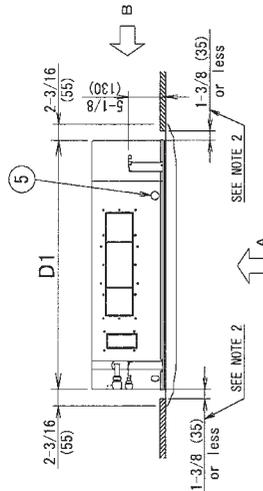
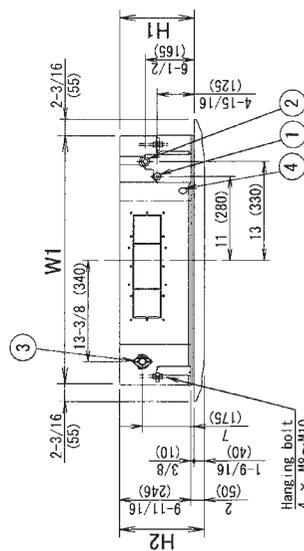
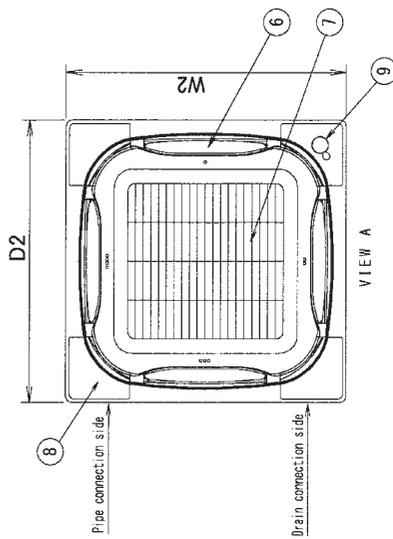
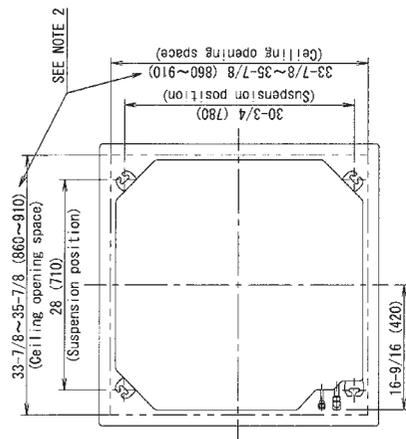
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### 3. Simplified Dimensions

#### FXFQ07-18TVJU

Unit : in. (mm)

ITEM	PART NAME	REMARK
1	Liquid pipe connection	φ1/4 (φ6.4) Flare connection
2	Gas pipe connection	φ1/2 (φ12.7) Flare connection
3	Drain pipe connection	PP25(O.D. φ1-1/4 (φ32), I.D. φ1 (φ25))
4	Power supply entry hole	
5	Transmission wiring entry hole	
6	Air Outlet	
7	Air Inlet grille	
8	Corner decoration cover	
9	Sensor	Infrared presence sensor Infrared floor sensor
10	Knock out hole	φ3-15/16 (φ100)



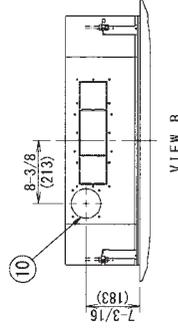
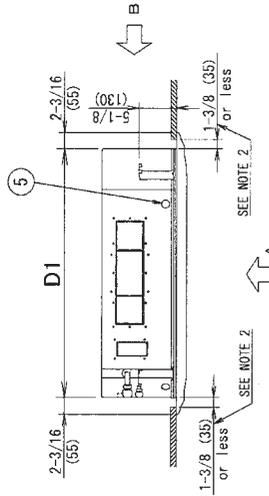
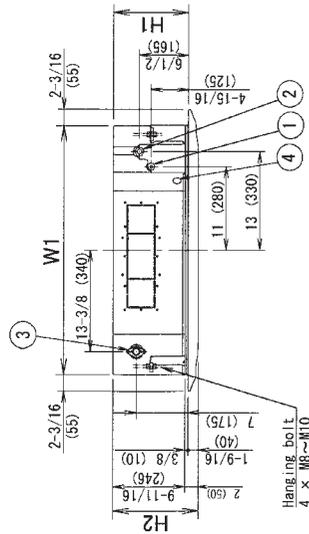
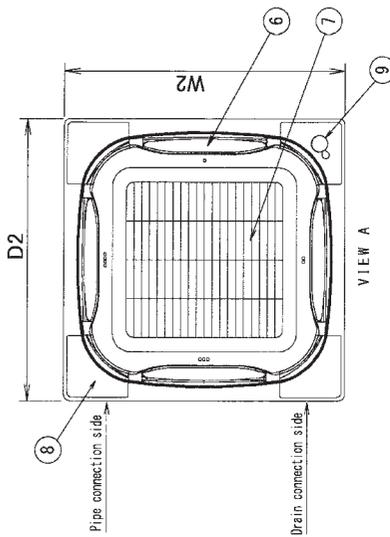
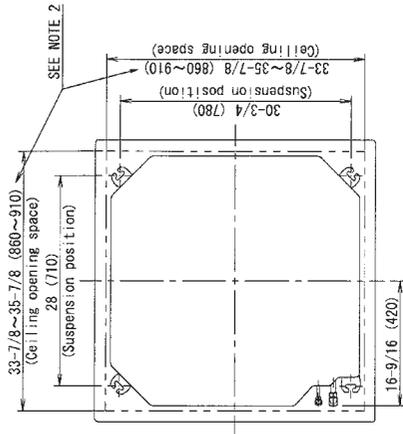
	H1	10 (256)
Without panel	W1	33-1/16 (840)
	D1	33-1/16 (840)
With panel	W2	37-3/8 (950)
	D2	37-3/8 (950)

- Notes) 1. Location of the nameplates:  
 - Unit body: on the control box cover.  
 - Decoration panel: on the panel frame at the motor side under the corner cover.
2. Make sure the spacing between the ceiling and the cassette is no more than 1-3/8" (35mm).  
 MAX ceiling opening: 35-7/8" (91mm).
3. When the conditions exceed 86°F (30°C) and RH 80% in the ceiling or fresh air is injected into the ceiling, an additional insulation is required (polyethylene foam, thickness 3/8" (10mm) or more).

FXFQ24TVJU

Unit : in. (mm)

ITEM	PART NAME	REMARK
1	Liquid pipe connection	φ3/8 (φ9.5) Flare connection
2	Gas pipe connection	φ5/8 (φ15.9) Flare connection
3	Drain pipe connection	WF25 (O.D. φ1-1/4 (φ32), I.D. φ1 (φ25))
4	Power supply entry hole	
5	Transmission wiring entry hole	
6	Air Outlet	
7	Air Inlet grille	
8	Corner decoration cover	
9	Sensor	Infrared presence sensor Infrared floor sensor
10	Knock out hole	φ3-15/16 (φ100)



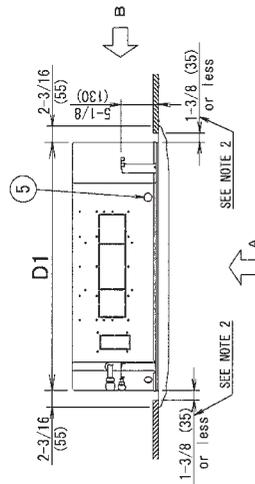
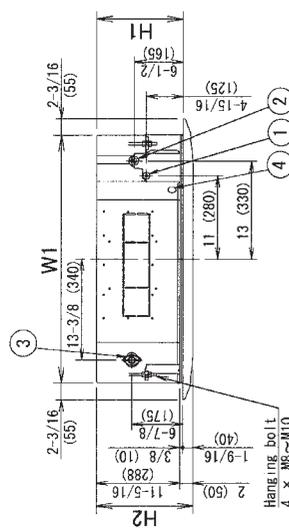
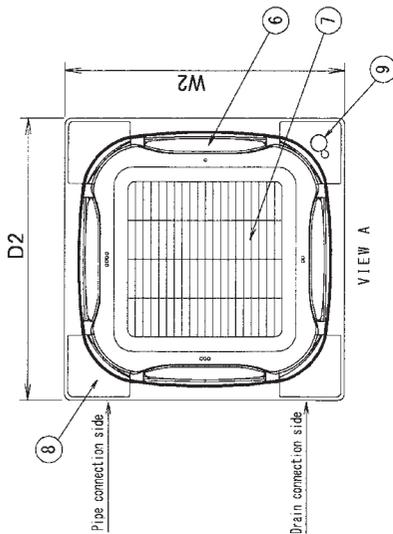
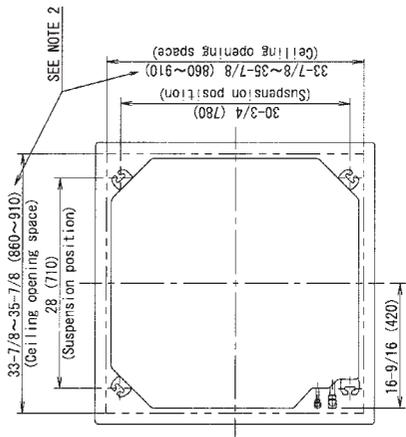
	H1	H2
Without panel	10 (256)	11-11/16 (296)
With panel	33-1/16 (840)	37-3/8 (950)

- Notes) 1. Location of the nameplates:  
 - Unit body: on the control box cover.  
 - Decoration panel: under the corner cover.
2. Make sure the spacing between the ceiling and the cassette is no more than 1-3/8" (35mm).  
 MAX ceiling opening: 35-7/8" (910mm).
3. When the conditions exceed 86°F (30°C) and RH 80% in the ceiling or fresh air is inducted into the ceiling an additional insulation is required (polyethylene foam, thickness 3/8" (10mm) or more).

FXFQ30-48TVJU

Unit : in. (mm)

ITEM	PART NAME	REMARK
1	Liquid pipe connection	φ3/8 (φ9.5) Flare connection
2	Gas pipe connection	φ5/8 (φ15.9) Flare connection
3	Drain pipe connection	VP25(O.D.φ1-1/4 (φ32), I.D.φ1 (φ25))
4	Power supply entry hole	
5	Transmission wiring entry hole	
6	Air Outlet	
7	Air Inlet grille	
8	Corner decoration cover	
9	Sensor	Infrared presence sensor Infrared floor sensor
10	Knock out hole	φ3-15/16 (φ100)



	H1	11-3/4 (298)
Without panel	W1	33-1/16 (840)
	D1	33-1/16 (840)
With panel	H2	13-5/16 (338)
	W2	37-3/8 (950)
	D2	37-3/8 (950)

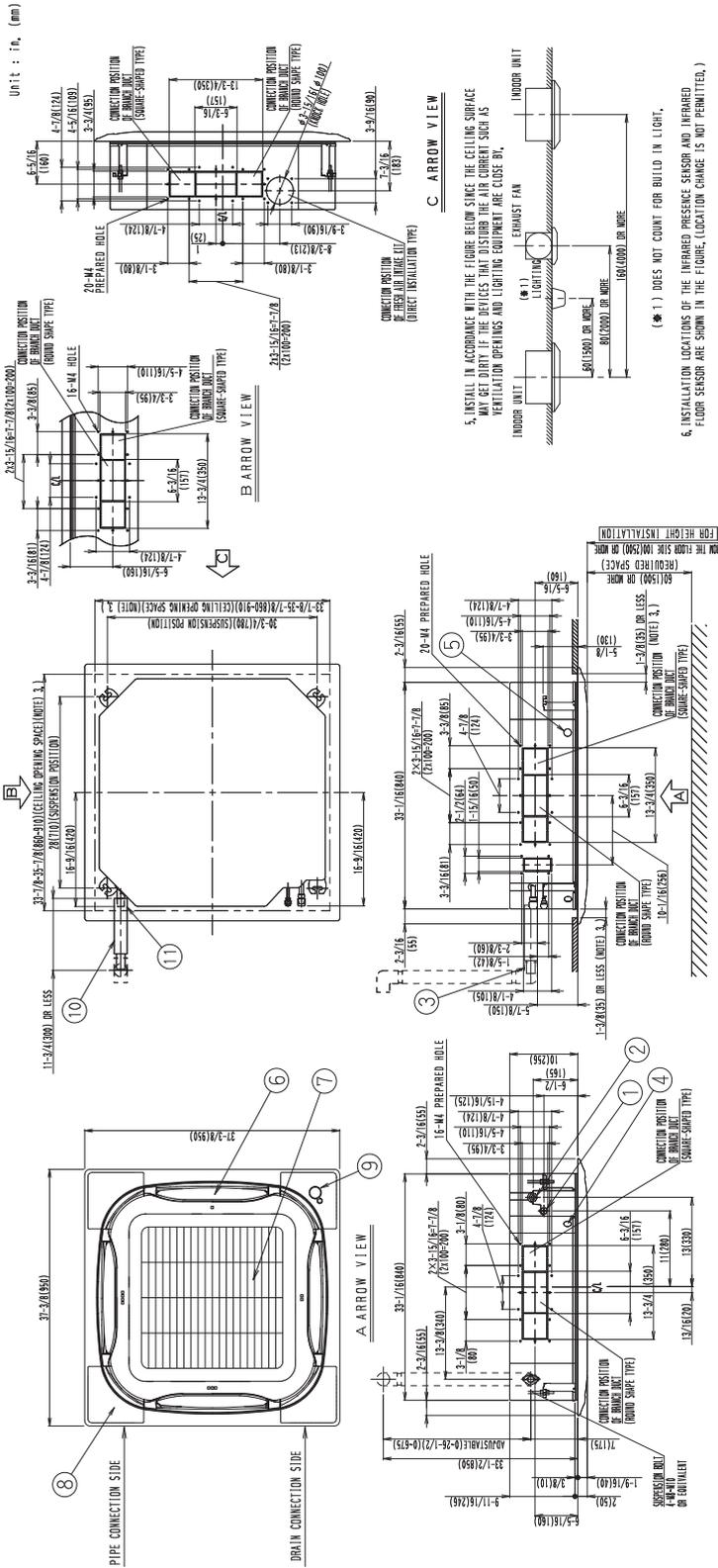
- Notes) 1. Location of the nameplates:  
 - Unit body: on the control box cover.  
 - Decoration panel: on the panel frame at the motor side under the corner cover.
2. Make sure the spacing between the ceiling and the cassette is no more than 1-3/8 (35mm).  
 MAX ceiling opening: 35-7/8 (910mm).
3. When the conditions exceed 86 F (30°C) and RH 80% in the ceiling or fresh air is inducted into the ceiling, an additional insulation is required (polyethylene foam, thickness 3/8 (10mm) or more).

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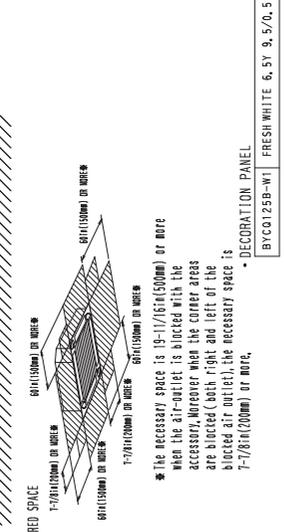


FXFQ24TVJU

Unit : in. (mm)



1	DRAIN HOSE CONNECTION	VP20 (OD φ 1 (φ 26))
1	DRAIN HOSE (ACCESSORY)	
9	SENSOR	INFRARED PRESENCE SENSOR INFRARED FLOOR SENSOR
8	CORNER DECORATION COVER	
6	SUCTION GRILLE	
5	CONNECTION WIRING / REMOTE CONTROL WIRING CONNECTION	
4	POWER-SOURCE WIRING AND A UNIT WIRING CONNECTION	
3	DRAIN PIPE CONNECTION	VP25 (OD φ 1-1/4 (φ 32)) 25/8 (φ 32) 25/8 (φ 32)
1	LIQUID PIPE CONNECTION	25/8 (φ 32) 25/8 (φ 32)
ITEM	PART NAME	REMARK



NOTE) 1. STICKING LOCATION FOR MANUFACTURE'S LABEL  
 2. WHEN THE TEMPERATURE AND HUMIDITY IN THE CEILING EXCEED 86°F (30°C) AND RH 80% OR THE FRESH AIR IS INDUCED INTO THE CEILING OR THE UNIT CONTINUES 24 HOUR OPERATION, AN ADDITIONAL INSULATION (THICKNESS 3/8(10mm) OR MORE OF GLASSWOOL OR POLYURETHANE FOAM) IS REQUIRED.  
 3. THROUGH THE INSTALLATION IS ACCEPTABLE UP TO MAXIMUM OF 35-7/8(910mm) SQUARE CEILING OPENING, BUT THE PANEL OVERLAP ALIGNMENT CAN BE ENSURED.  
 4. DO NOT PLACE ANYTHING SENSITIVE TO MOISTURE UNDER THE INDOOR UNIT, CONDENSATION MAY FORM WHEN HUMIDITY IS 80% OR MORE, THE OUTLET IS CLOGGED, OR THE AIR FILTER IS DIRTY.

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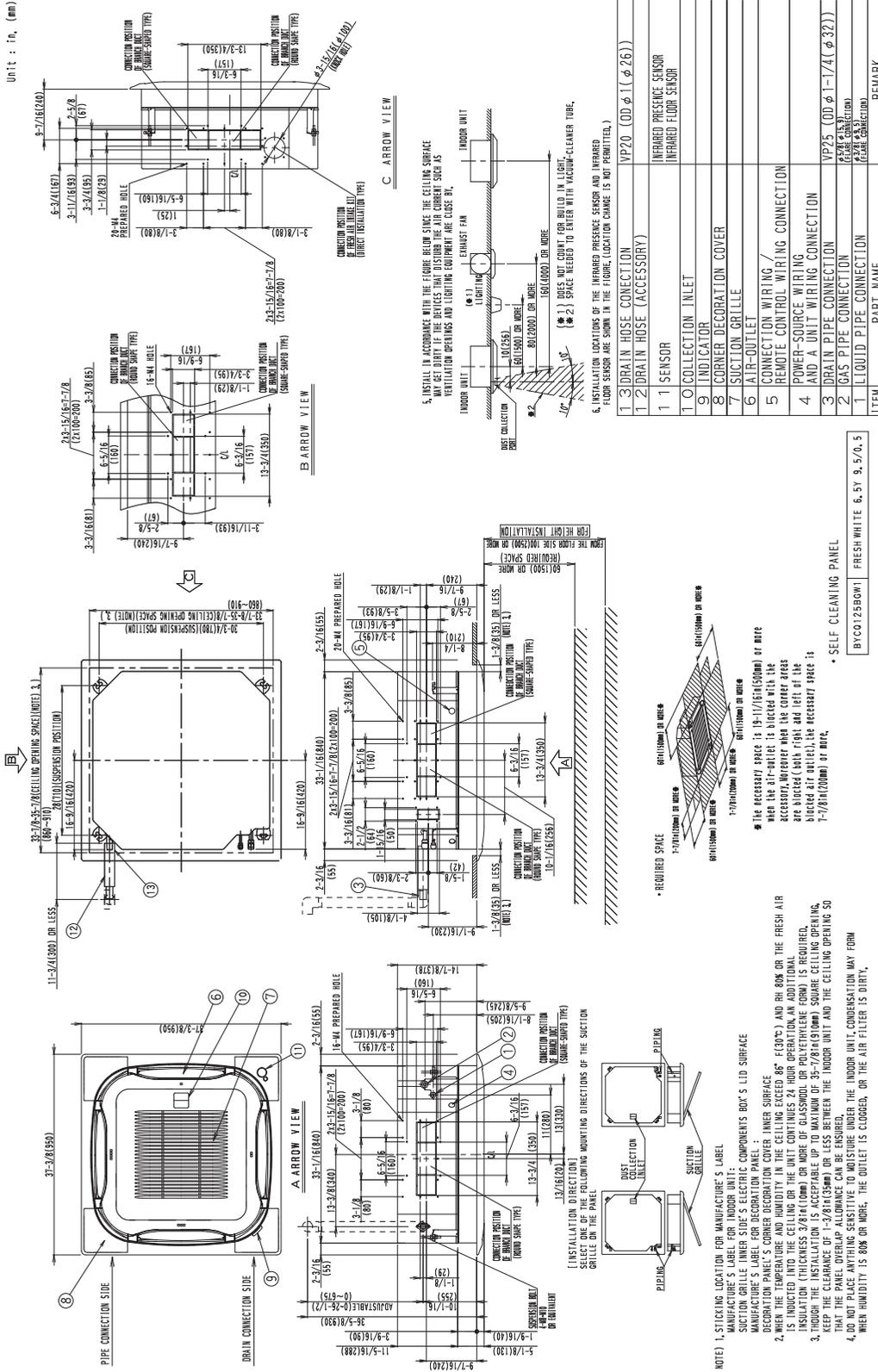






FXFQ30-48TVJU

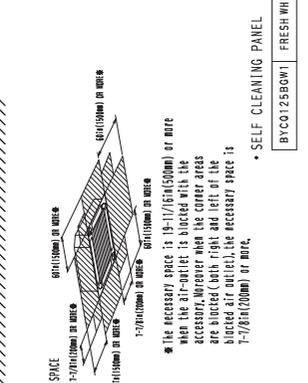
Unit : In. (mm)



5. INSTALL IN ACCORDANCE WITH THE FIGURE BELOW SINCE THE CEILING SURFACE MAY BE DIRTY IF THE DEVICES THAT DISTURB THE AIR CURRENT SUCH AS VENTILATION OPENINGS AND LIGHTING EQUIPMENT ARE CLOSED BY.

6. INSTALLATION LOCATIONS OF THE INFRARED PRESENCE SENSOR AND INFRARED FLOOR SENSOR ARE SHOWN IN THE FIGURE. LOCATION CHANGE IS NOT PERMITTED.

1	3	DRAIN HOSE CONNECTION	VP20 (OD φ 1-1/4 (φ 32))
1	2	DRAIN HOSE (ACCESSORY)	
1	1	SENSOR	INFRARED PRESENCE SENSOR
1	0	COLLECTION INLET	INFRARED FLOOR SENSOR
9	0	INDICATOR	
8	0	CORNER DECORATION COVER	
7	0	SUCTION GRILLE	
6	0	AIR-OUTLET	
5	0	CONNECTION WIRING / REMOTE CONTROL WIRING CONNECTION AND A UNIT WIRING CONNECTION	
4	0	POWER-SOURCE WIRING	
3	0	DRAIN PIPE CONNECTION	VP25 (OD φ 1-1/4 (φ 32))
2	0	GAS PIPE CONNECTION	(PLEASE CONSULT TO LOCAL AGENCY)
1	0	LIQUID PIPE CONNECTION	(PLEASE CONSULT TO LOCAL AGENCY)
ITEM		PART NAME	REMARK



NOTE) 1. STICKING LOCATION FOR MANUFACTURE'S LABEL  
 MANUFACTURE'S LABEL FOR INDOOR UNIT:  
 SUCTION GRILLE: INNER SIDE'S ELECTRIC COMPONENTS BOX'S LID SURFACE  
 DECORATION PANEL'S CORNER DECORATION COVER: INNER SURFACE  
 2. WHEN THE TEMPERATURE AND HUMIDITY IN THE CEILING EXCEED 86°F(30°C) AND RH 80% OR THE FRESH AIR IS INDICATED INTO THE CEILING OR THE UNIT CONTINUES 24 HOUR OPERATION, AN ADDITIONAL CLEANING SHOULD BE PERFORMED.  
 3. THROUGH THE INSTALLATION IS ACCEPTABLE UP TO MAXIMUM OF 25-7/8(650mm) SQUARE CEILING OPENING. KEEP THE CLEARANCE OF 1-3/8(13mm) OR LESS BETWEEN THE INDOOR UNIT AND THE CEILING OPENING SO THAT THE PANEL OVERLAP ALLOWANCE CAN BE ENSURED.  
 4. DO NOT PLACE ANYTHING SENSITIVE TO MOISTURE UNDER THE INDOOR UNIT. CONDENSATION MAY FORM WHEN HUMIDITY IS 80% OR MORE, THE OUTLET IS CLOGGED, OR THE AIR FILTER IS DIRTY.

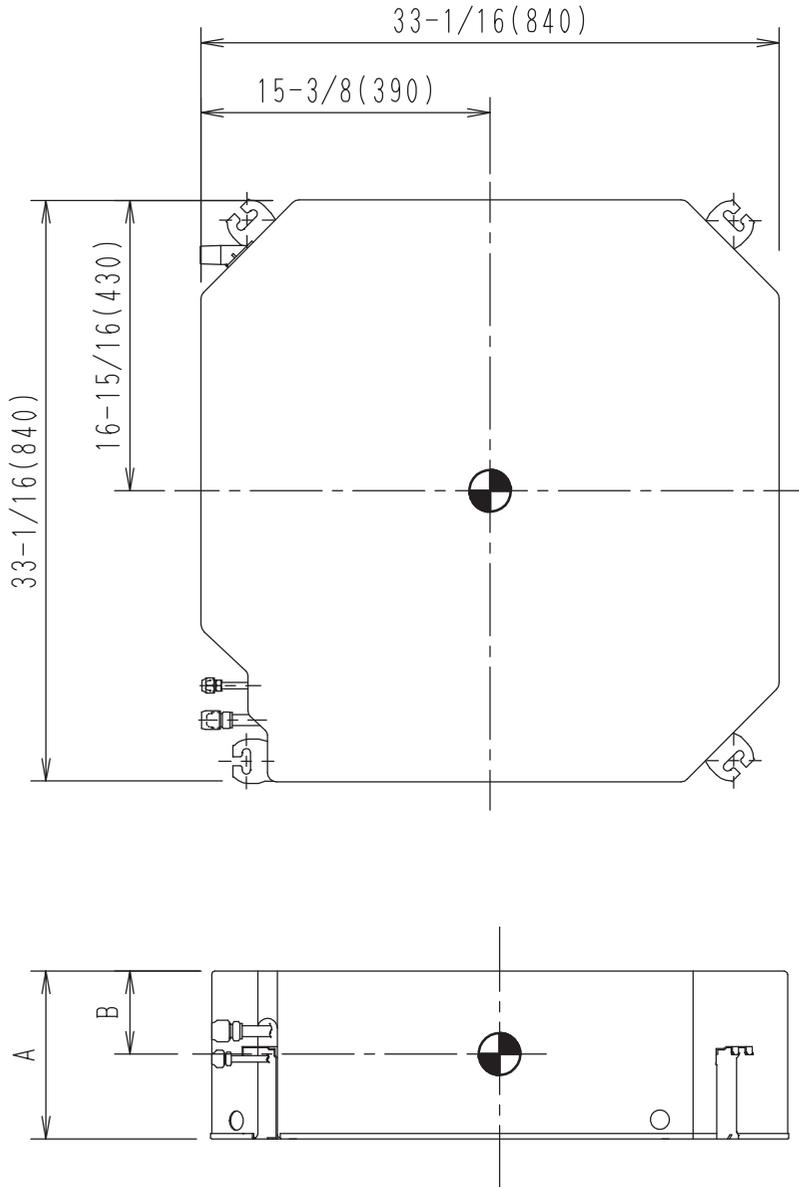
• SELF-CLEANING PANEL  
 BYC0125B001 | FRESH WHITE, 6.5Y, 9.5/0, 5

3D086986B

# 6. Center of Gravity

FXFQ07-48TVJU

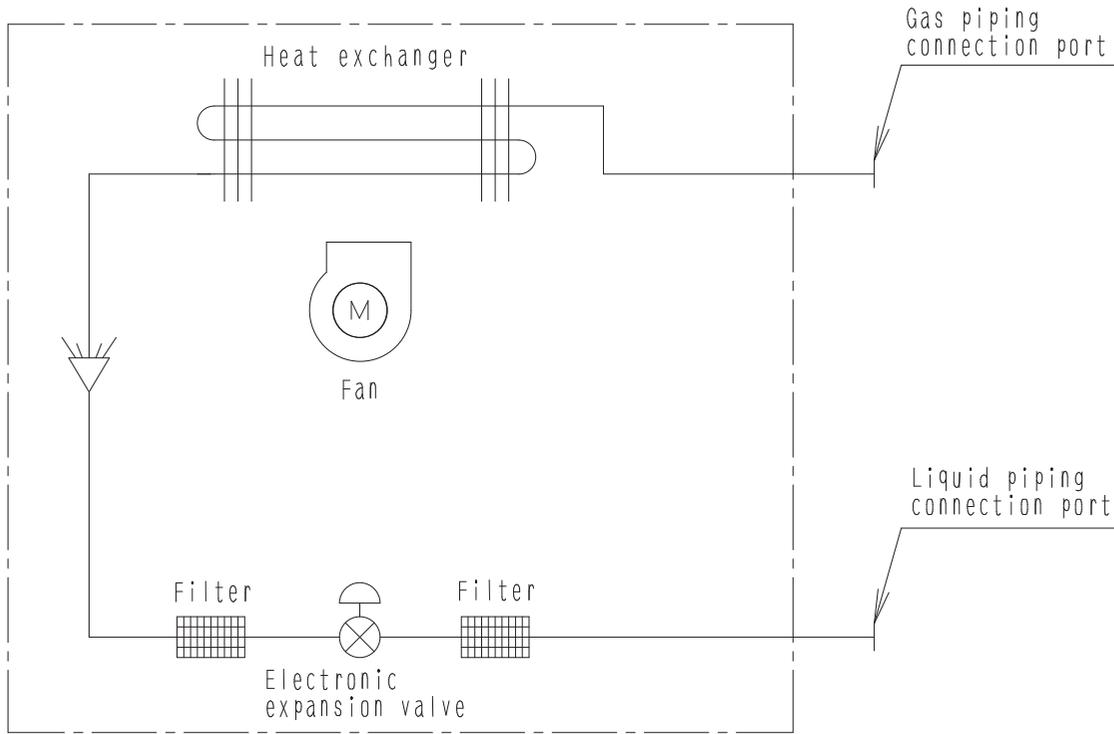
Unit : in. (mm)



MODEL NAME	A	B
FXFQ07~24TVJU	$9\frac{11}{16}$ (246)	$3\frac{9}{16}$ (90)
FXFQ30~48TVJU	$11\frac{5}{16}$ (288)	$4\frac{3}{4}$ (120)

# 7. Piping Diagrams

## FXFQ07-48TVJU



4D024460P

Unit: in. (mm)

Model	Gas	Liquid
FXFQ07TVJU FXFQ09TVJU FXFQ12TVJU FXFQ15TVJU FXFQ18TVJU	$\phi 1/2$ ( $\phi 12.7$ )	$\phi 1/4$ ( $\phi 6.4$ )
FXFQ24TVJU FXFQ30TVJU FXFQ36TVJU FXFQ48TVJU	$\phi 5/8$ ( $\phi 15.9$ )	$\phi 3/8$ ( $\phi 9.5$ )



## FXFQ07-48TVJU

INDOOR UNIT	
A1P	PRINTED CIRCUIT BOARD
A2P	PRINTED CIRCUIT BOARD
A3P	PRINTED CIRCUIT BOARD (INFRARED FLOOR SENSOR)
A4P	PRINTED CIRCUIT BOARD (INFRARED PRESENCE SENSOR)
C21	CAPACITOR
C105	CAPACITOR
F1U	FUSE (T, 3.15 A, 250 V)
HAP	FLASHING LAMP (A1P, A2P) (SERVICE MONITOR GREEN)
M1F	MOTOR (INDOOR FAN)
M1P	MOTOR (DRAIN PUMP)
M1S~M4S	MOTOR (SWING BLADE)
R1T	THERMISTOR (AIR)
R2T~R3T	THERMISTOR (COIL)
S1L	FLOAT SWITCH
V1R	DIODE BRIDGE
X1M	TERMINAL BLOCK
X2M	TERMINAL BLOCK
Y1E	ELECTRONIC EXPANSION VALVE
Z1C	FERRITE CORE
Z1F	NOISE FILTER
PS	POWER SUPPLY CIRCUIT (A1P, A2P)
CONNECTOR FOR OPTIONAL PARTS	
X8A	CONNECTOR (SELF CLEAN PANEL)
X33A	CONNECTOR (ADAPTOR FOR WIRING)
X35A	CONNECTOR (POWER SUPPLY FOR ADAPTOR)
X36A	CONNECTOR (SELF CLEAN PANEL)

C: 3D086460B

## 9. Electric Characteristics

### FXFQ07-48TVJU

Model	Power supply				IFM		Input (W)		
	Hz	Volts	Voltage range	MCA	MOP	KW	FLA	Cooling	Heating
FXFQ07TVJU	60	208/230 V	Max. 253 V Min. 187 V	0.3	15	0.048	0.2	28	24
FXFQ09TVJU				0.3	15	0.048	0.2	31	27
FXFQ12TVJU				0.3	15	0.048	0.2	31	27
FXFQ15TVJU				0.4	15	0.048	0.3	41	37
FXFQ18TVJU				0.6	15	0.048	0.5	76	72
FXFQ24TVJU				0.7	15	0.048	0.5	80	75
FXFQ30TVJU				1.3	15	0.106	1.0	169	161
FXFQ36TVJU				1.5	15	0.106	1.2	194	180
FXFQ48TVJU				1.8	15	0.106	1.4	219	199

**Symbol:**

MCA: Min. Circuit Amps (A)  
 MOP: Max. Overcurrent Protective Device (A)  
 KW: Fan Motor Rated Output (kW)  
 FLA: Full Load Amps (A)  
 IFM: Indoor Fan Motor

**Note:**

- Voltage range  
Units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits.
- Maximum allowable voltage unbalance between phases is 2%.
- MCA/MOP  
 $MCA = 1.25 \times FLA$   
 $MOP \leq 4 \times FLA$   
 (Next lower standard fuse rating. Min. 15 A)
- Select wire size based on the MCA.

C: 4D086936A

# 10.Safety Devices Setting

Model		FXFQ07TVJU	FXFQ09TVJU	FXFQ12TVJU	FXFQ15TVJU	FXFQ18TVJU
Printed circuit board fuse		250 V, 3.15 A				
Drain pump thermal fuse	°F (°C)	—	—	—	—	—
Fan motor thermal protector	°F (°C)	—	—	—	—	—
Fan motor thermal fuse	°F (°C)	—	—	—	—	—

Model		FXFQ24TVJU	FXFQ30TVJU	FXFQ36TVJU	FXFQ48TVJU
Printed circuit board fuse		250 V, 3.15 A			
Drain pump thermal fuse	°F (°C)	—	—	—	—
Fan motor thermal protector	°F (°C)	—	—	—	—
Fan motor thermal fuse	°F (°C)	—	—	—	—

C: 3D086932C

# 11.Capacity Tables

## 11.1 Cooling Capacity at Te: 43°F (6°C)

Model	Indoor air temp. °FWB (°CWB) (Te: 43°F (6°C))											
	61 (16.1)		64 (17.8)		67 (19.4)		70 (21.1)		72 (22.2)		75 (23.9)	
	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH
FXFQ07TVJU	5.7	5.7	6.4	6.2	7.2	6.4	7.3	6.6	7.4	6.2	7.6	6.1
FXFQ09TVJU	7.5	7.5	8.5	8.2	9.5	8.5	9.7	8.6	9.8	8.1	10.0	8.0
FXFQ12TVJU	9.5	8.2	10.7	8.8	12.0	9.7	12.2	9.5	12.4	9.0	12.6	8.6
FXFQ15TVJU	11.4	9.5	12.9	10.1	14.4	10.9	14.7	10.9	14.9	10.4	15.2	10.1
FXFQ18TVJU	14.2	13.9	16.1	15.5	18.0	16.1	18.4	16.1	18.6	15.4	18.9	15.1
FXFQ24TVJU	18.2	16.6	20.6	18.1	23.0	19.1	23.5	18.9	23.8	18.0	24.2	17.8
FXFQ30TVJU	23.7	19.4	26.8	21.1	30.0	22.3	30.6	22.2	31.0	21.3	31.6	20.6
FXFQ36TVJU	28.4	24.3	32.2	26.7	36.0	28.3	36.7	27.9	37.2	26.9	37.9	26.1
FXFQ48TVJU	37.9	30.2	43.0	33.1	48.0	35.0	49.0	34.8	49.6	33.2	50.5	31.9

TC: Total capacity: MBH  
 SHC: Sensible heat capacity: MBH

**Note:**

1. These capacity tables can be used when selecting a **VRV** indoor unit. The actual capacity of the **VRV** system depends on factors such as the selected model of outdoor units, outdoor air temperature and piping length. Please confirm that the corrected capacity of the **VRV** system satisfies the required heat load.
2.  shows rated condition.

CA14A023A

## 11.2 Heating Capacity

Model	Indoor air temp. °FDB (°CDB) (Tc: 115°F (46°C))											
	62 (16.7)		65 (18.3)		68 (20.0)		70 (21.1)		72 (22.2)		75 (23.9)	
	TC	TC	TC	TC	TC	TC	TC	TC	TC	TC	TC	
	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	
FXFQ07TVJU	9.9	9.3	8.8	8.5	8.2	7.7						
FXFQ09TVJU	12.3	11.5	10.9	10.5	10.1	9.5						
FXFQ12TVJU	15.8	14.8	14.0	13.5	13.0	12.3						
FXFQ15TVJU	19.2	18.0	17.1	16.5	15.9	15.0						
FXFQ18TVJU	23.3	21.9	20.7	20.0	19.3	18.1						
FXFQ24TVJU	31.5	29.5	28.0	27.0	26.0	24.5						
FXFQ30TVJU	39.7	37.1	35.3	34.0	32.7	30.9						
FXFQ36TVJU	46.7	43.7	41.5	40.0	38.5	36.3						
FXFQ48TVJU	63.0	59.0	56.0	54.0	52.0	49.0						

TC: Total capacity: MBH

**Note:**

1. These capacity tables can be used when selecting a **VRV** indoor unit. The actual capacity of the **VRV** system depends on factors such as the selected model of outdoor units, outdoor air temperature and piping length. Please confirm that the corrected capacity of the **VRV** system satisfies the required heat load.
2.  shows rated condition.

CA14A023A

### 11.3 Correction Factor for Cooling Capacity at Te: 48°F (9°C)

Refer to the correction factor table below when a mini-split indoor unit is connected to a **VRV** Heat Pump system using a Branch Port box.

Model	Indoor air temp. °FWB (°CWB) (Te: 48°F (9°C))											
	61 (16.1)		64 (17.8)		67 (19.4)		70 (21.1)		72 (22.2)		75 (23.9)	
	TC	SHF	TC	SHF	TC	SHF	TC	SHF	TC	SHF	TC	SHF
FXFQ07TVJU	0.72	1.16	0.77	1.11	0.80	1.08	0.83	1.06	0.85	1.05	0.87	1.03
FXFQ09TVJU	0.72	1.16	0.77	1.11	0.80	1.08	0.83	1.06	0.85	1.05	0.87	1.03
FXFQ12TVJU	0.72	1.16	0.77	1.11	0.80	1.08	0.83	1.06	0.85	1.05	0.87	1.03
FXFQ15TVJU	0.72	1.16	0.78	1.11	0.81	1.08	0.83	1.06	0.85	1.05	0.87	1.03
FXFQ18TVJU	0.69	1.18	0.75	1.13	0.78	1.09	0.81	1.07	0.83	1.05	0.85	1.03
FXFQ24TVJU	0.69	1.18	0.75	1.13	0.78	1.09	0.81	1.07	0.83	1.05	0.85	1.03
FXFQ30TVJU	0.69	1.18	0.75	1.13	0.78	1.09	0.81	1.07	0.83	1.05	0.85	1.04
FXFQ36TVJU	0.69	1.18	0.75	1.13	0.78	1.09	0.81	1.07	0.83	1.05	0.85	1.04
FXFQ48TVJU	0.69	1.18	0.75	1.13	0.78	1.09	0.81	1.07	0.83	1.05	0.85	1.04

TC: Total capacity  
 SHF: Sensible heat factor

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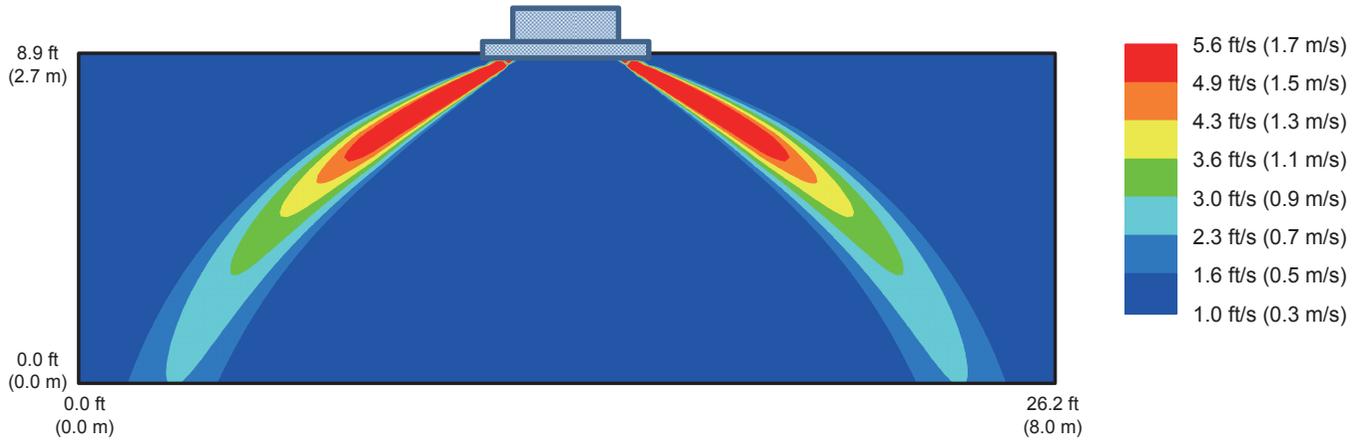
## 12. Air Velocity and Temperature Distributions (Reference Data)

### 12.1 Cooling Operation

FXFQ07TVJU

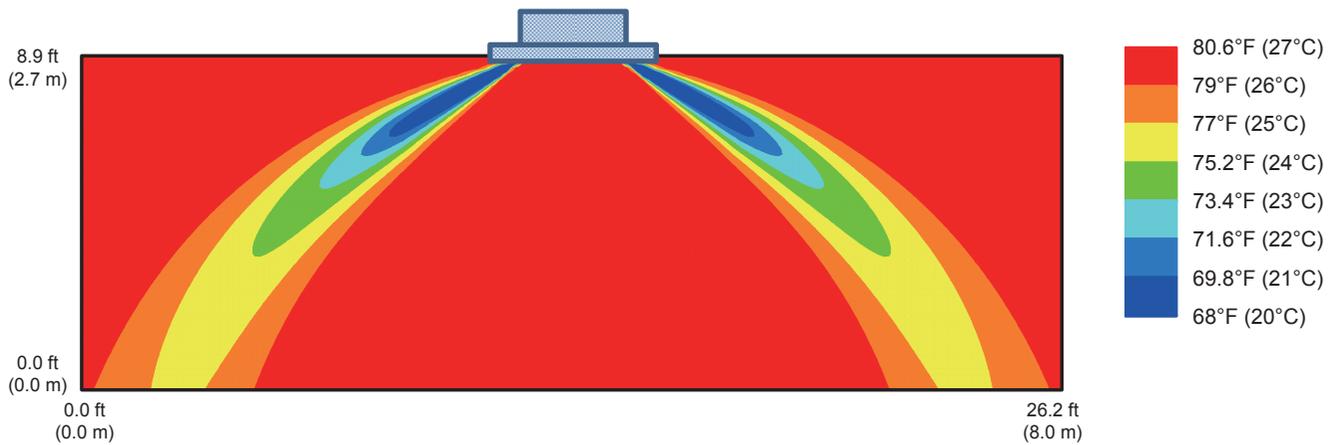
#### Air velocity distribution of FXFQ07TVJU (Cooling operation)

Air flow direction : Horizontal



#### Air temperature distribution of FXFQ07TVJU (Cooling operation)

Air flow direction : Horizontal

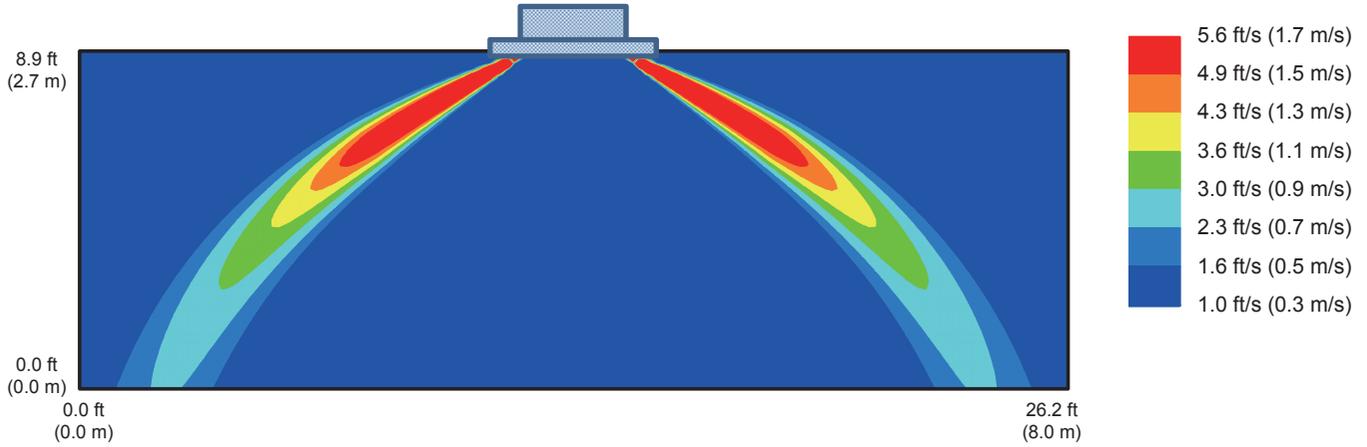


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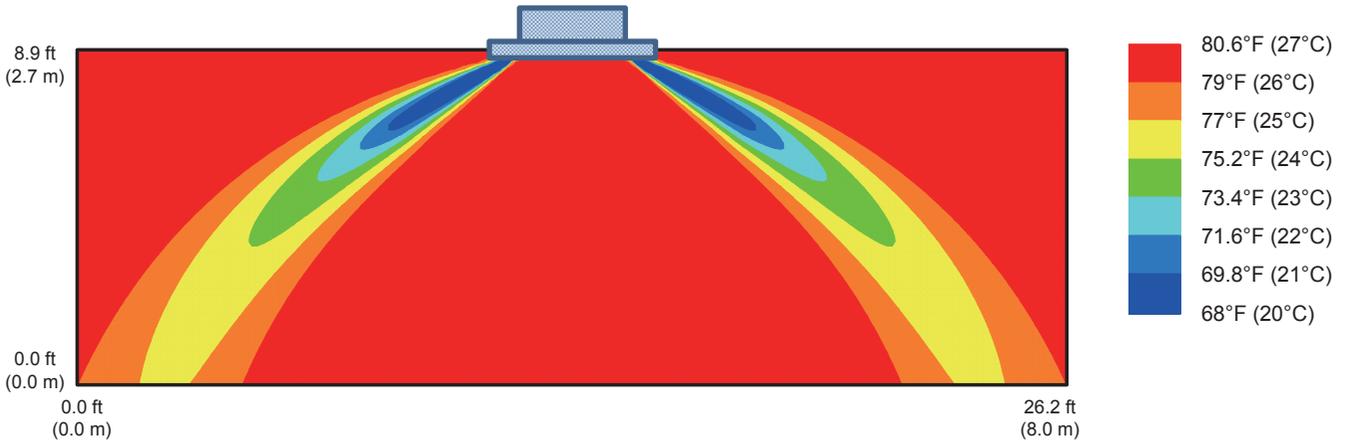
*Please understand that the analysis results may differ with actual installation conditions, or furniture arrangement.*

**FXFQ09TVJU**

**Air velocity distribution of FXFQ09TVJU (Cooling operation)**  
**Air flow direction : Horizontal**



**Air temperature distribution of FXFQ09TVJU (Cooling operation)**  
**Air flow direction : Horizontal**

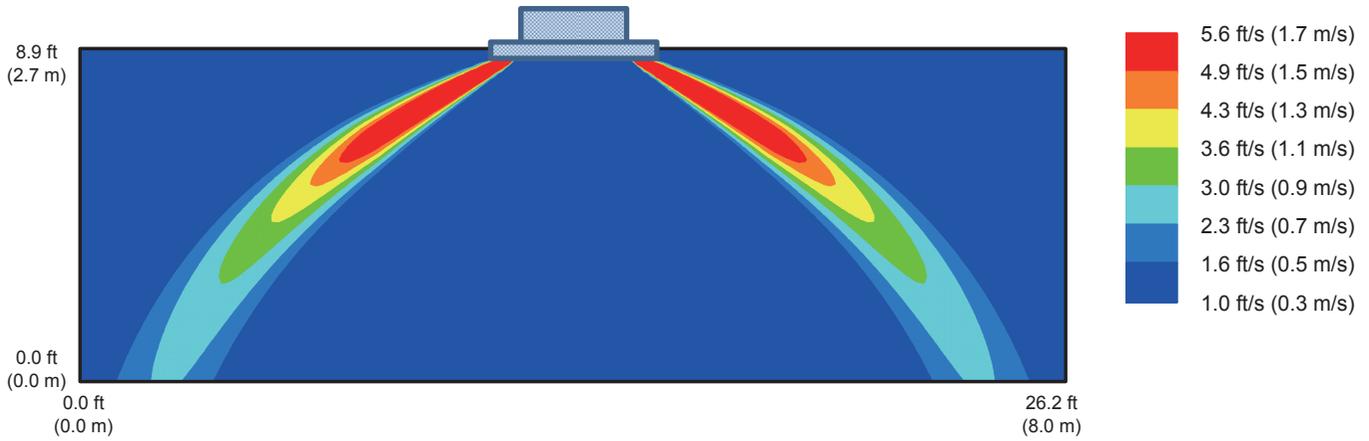


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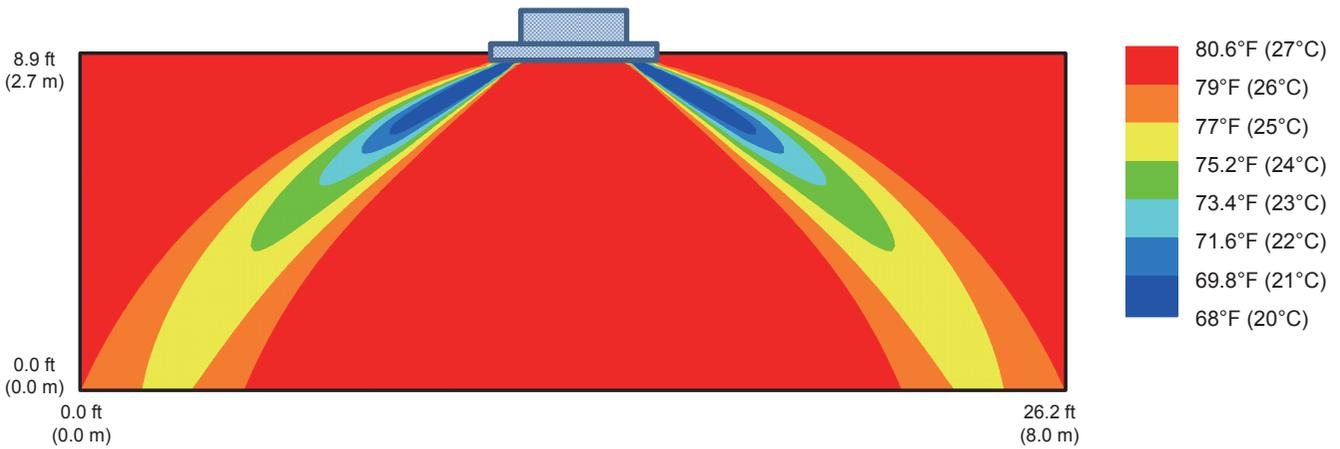
*Please understand that the analysis results may differ with actual installation conditions, or furniture arrangement.*

**FXFQ12TVJU**

**Air velocity distribution of FXFQ12TVJU (Cooling operation)**  
**Air flow direction : Horizontal**



**Air temperature distribution of FXFQ12TVJU (Cooling operation)**  
**Air flow direction : Horizontal**

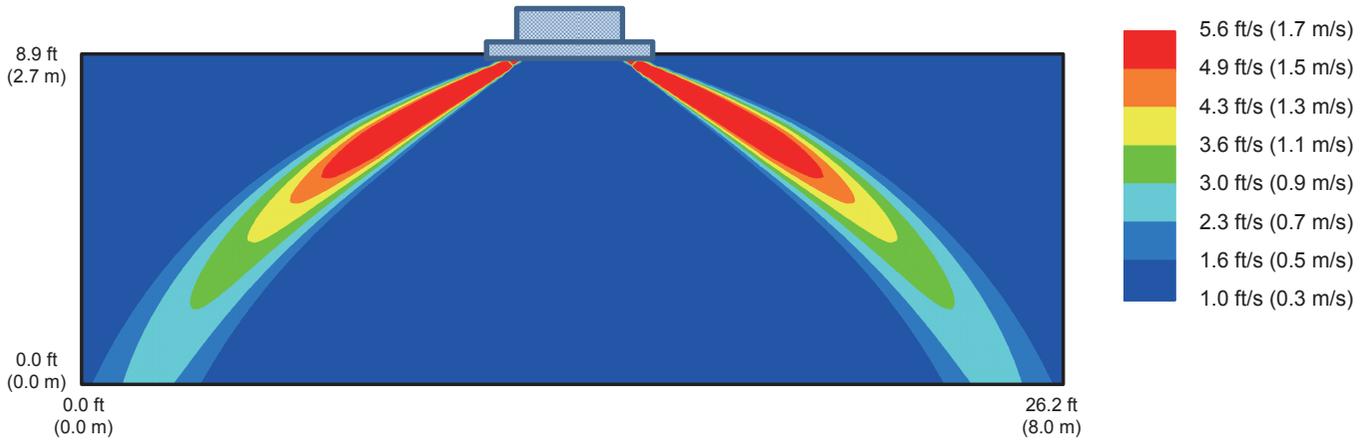


**Note:**

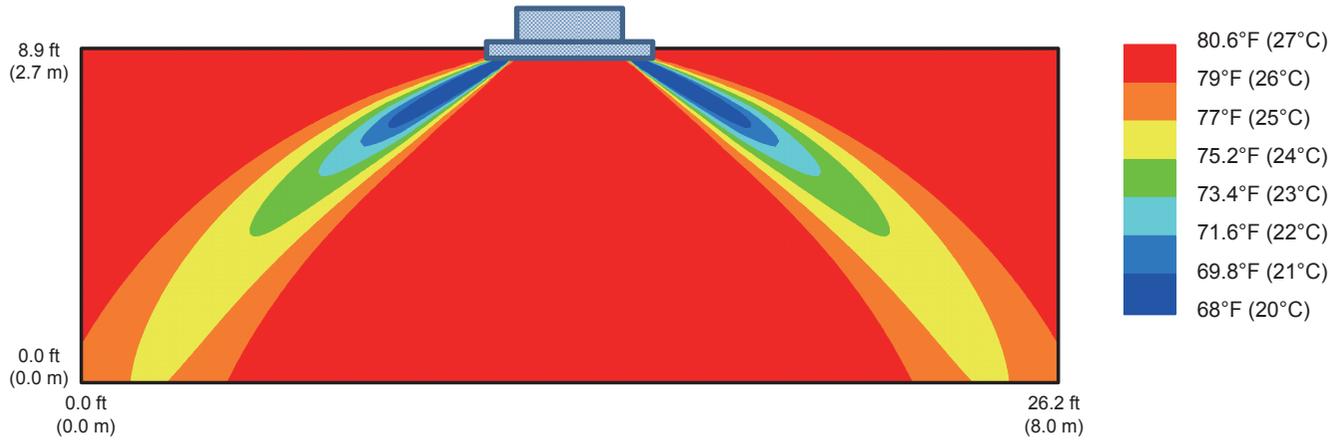
*Please understand that the analysis results may differ with actual installation conditions, or furniture arrangement.*

**FXFQ15TVJU**

**Air velocity distribution of FXFQ15TVJU (Cooling operation)**  
**Air flow direction : Horizontal**



**Air temperature distribution of FXFQ15TVJU (Cooling operation)**  
**Air flow direction : Horizontal**

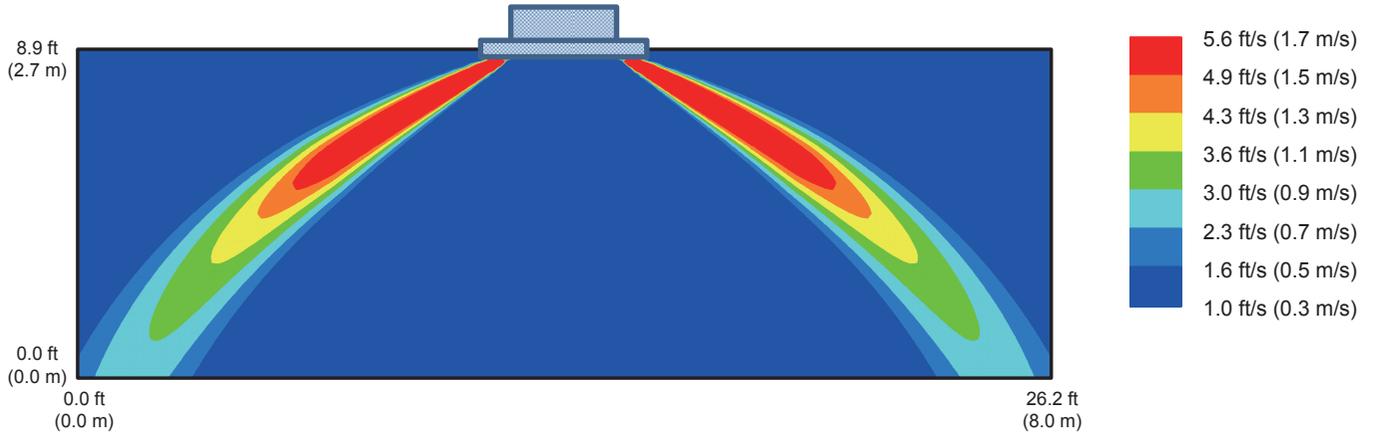


**Note:**

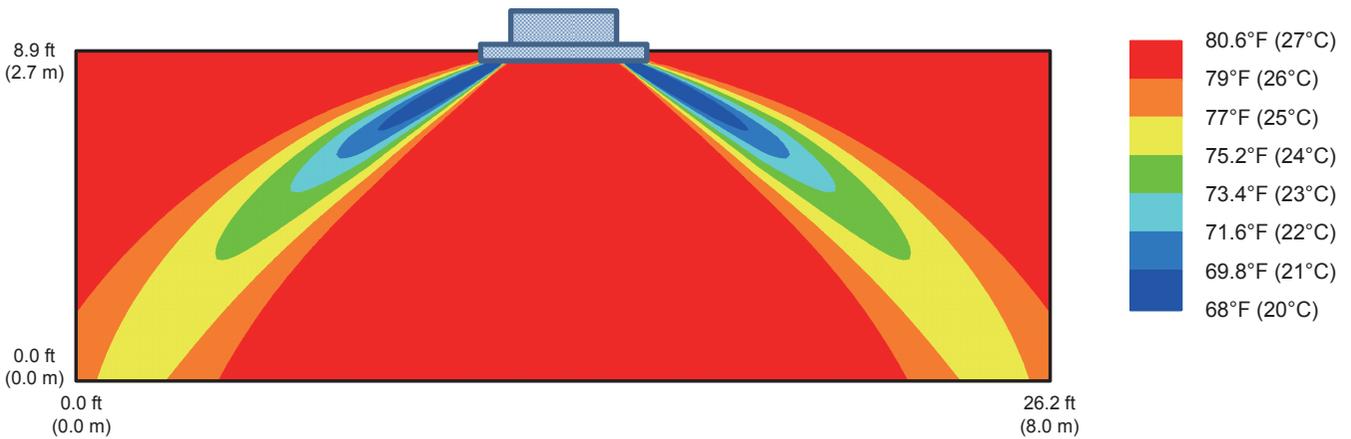
*Please understand that the analysis results may differ with actual installation conditions, or furniture arrangement.*

FXFQ18TVJU

**Air velocity distribution of FXFQ18TVJU (Cooling operation)**  
**Air flow direction : Horizontal**



**Air temperature distribution of FXFQ18TVJU (Cooling operation)**  
**Air flow direction : Horizontal**

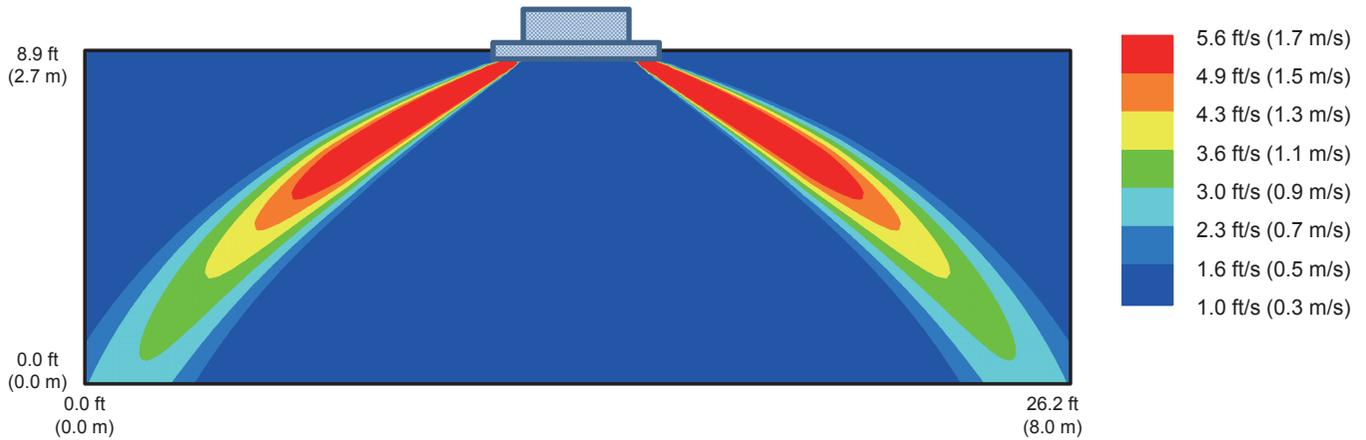


**Note:**

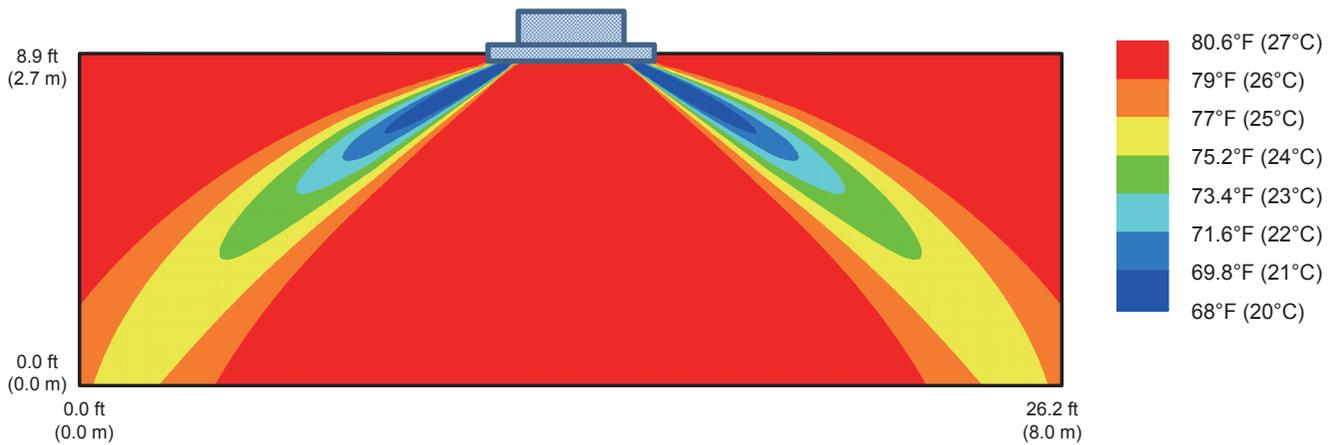
*Please understand that the analysis results may differ with actual installation conditions, or furniture arrangement.*

**FXFQ24TVJU**

**Air velocity distribution of FXFQ24TVJU (Cooling operation)**  
**Air flow direction : Horizontal**



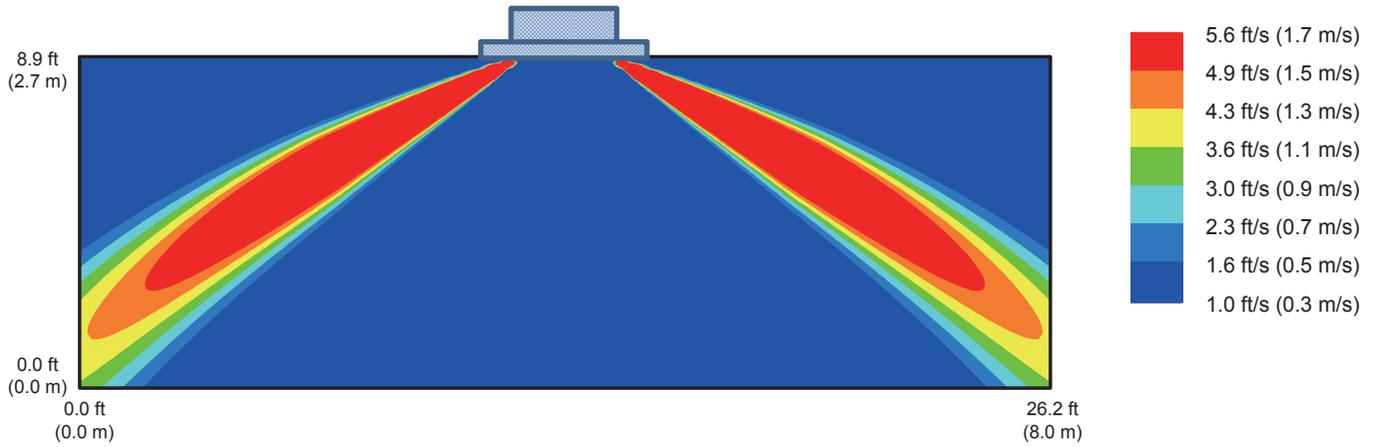
**Air temperature distribution of FXFQ24TVJU (Cooling operation)**  
**Air flow direction : Horizontal**



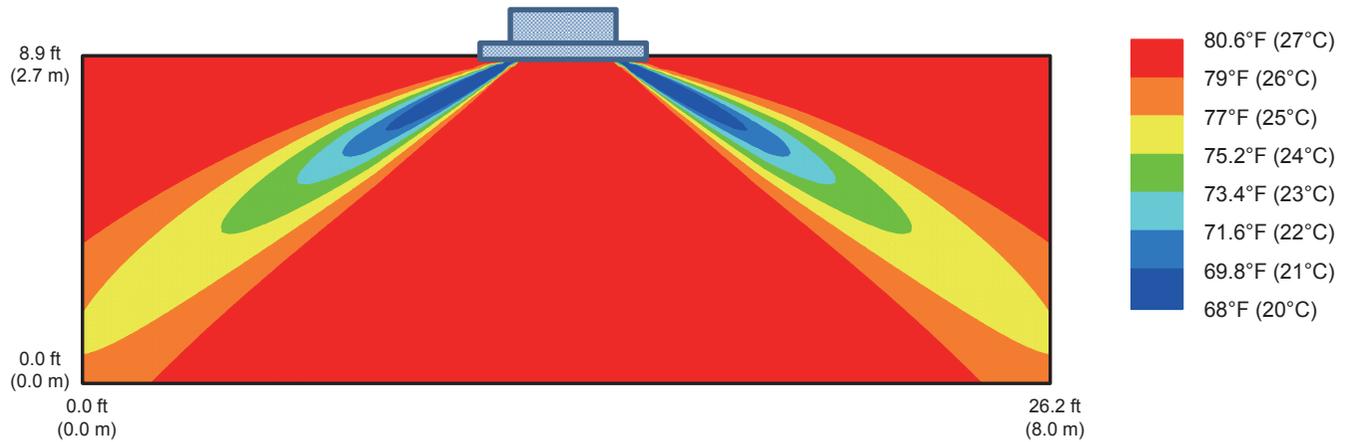
*Note:*  
 Please understand that the analysis results may differ with actual installation conditions, or furniture arrangement.

**FXFQ30TVJU**

**Air velocity distribution of FXFQ30TVJU (Cooling operation)**  
**Air flow direction : Horizontal**



**Air temperature distribution of FXFQ30TVJU (Cooling operation)**  
**Air flow direction : Horizontal**

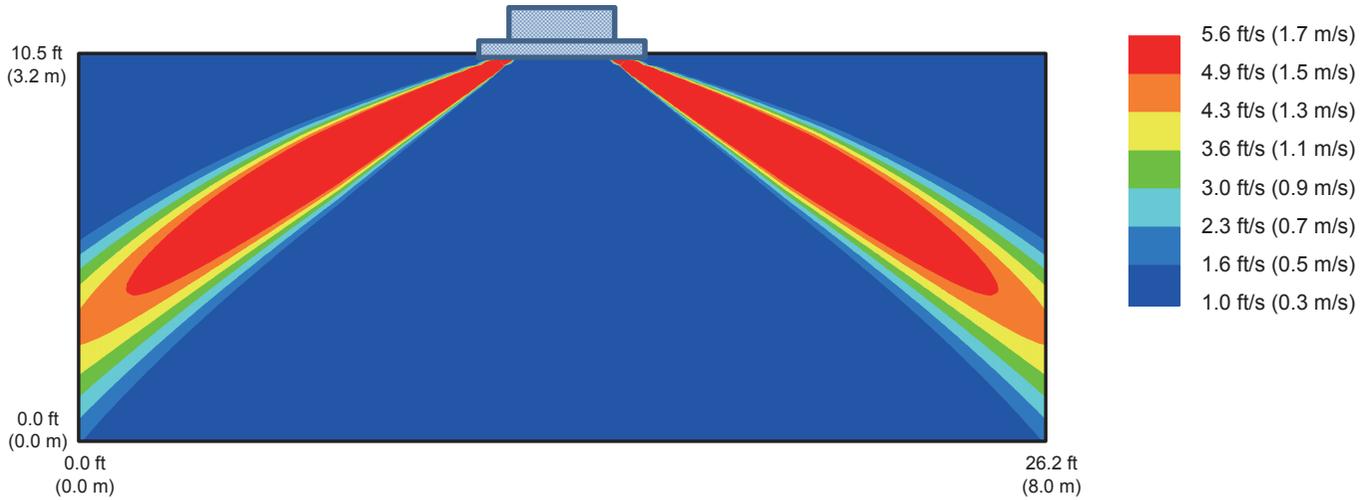


**Note:**

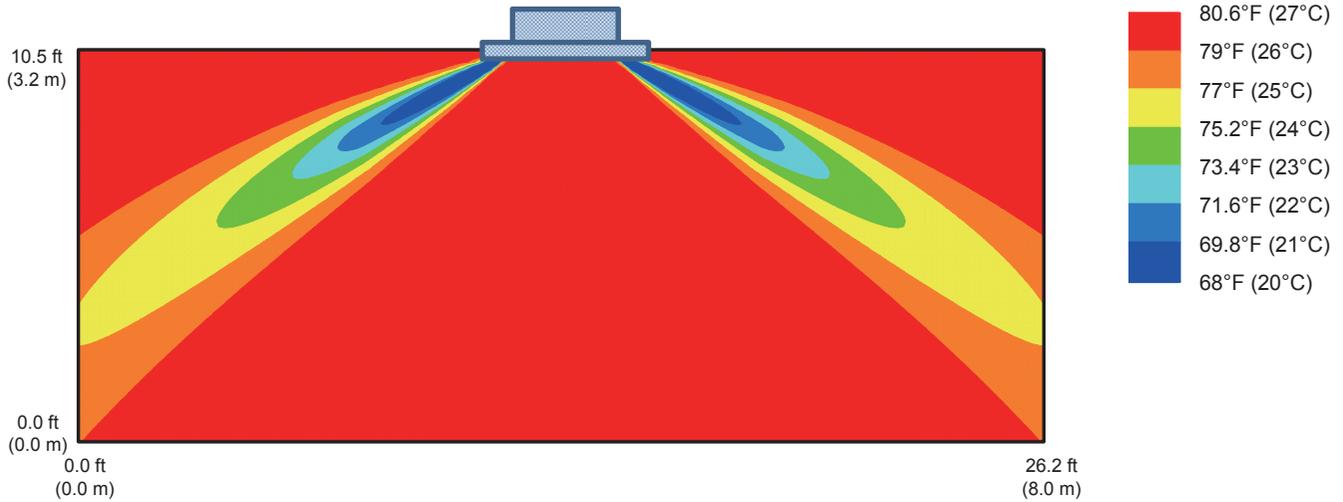
*Please understand that the analysis results may differ with actual installation conditions, or furniture arrangement.*

FXFQ36TVJU

**Air velocity distribution of FXFQ36TVJU (Cooling operation)**  
**Air flow direction : Horizontal**



**Air temperature distribution of FXFQ36TVJU (Cooling operation)**  
**Air flow direction : Horizontal**

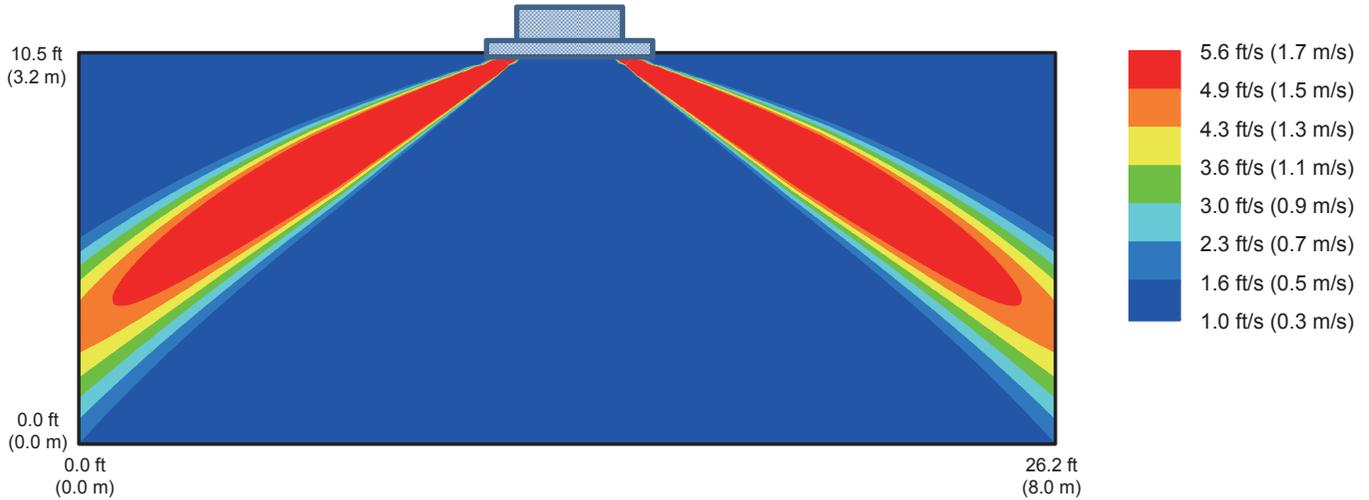


**Note:**

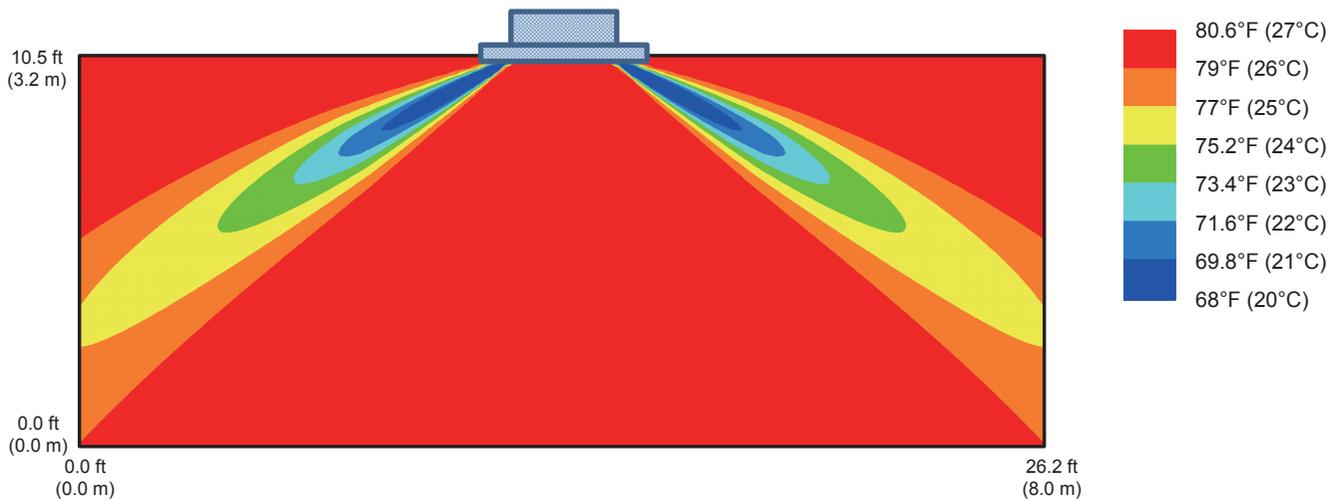
*Please understand that the analysis results may differ with actual installation conditions, or furniture arrangement.*

**FXFQ48TVJU**

**Air velocity distribution of FXFQ48TVJU (Cooling operation)**  
**Air flow direction : Horizontal**



**Air temperature distribution of FXFQ48TVJU (Cooling operation)**  
**Air flow direction : Horizontal**

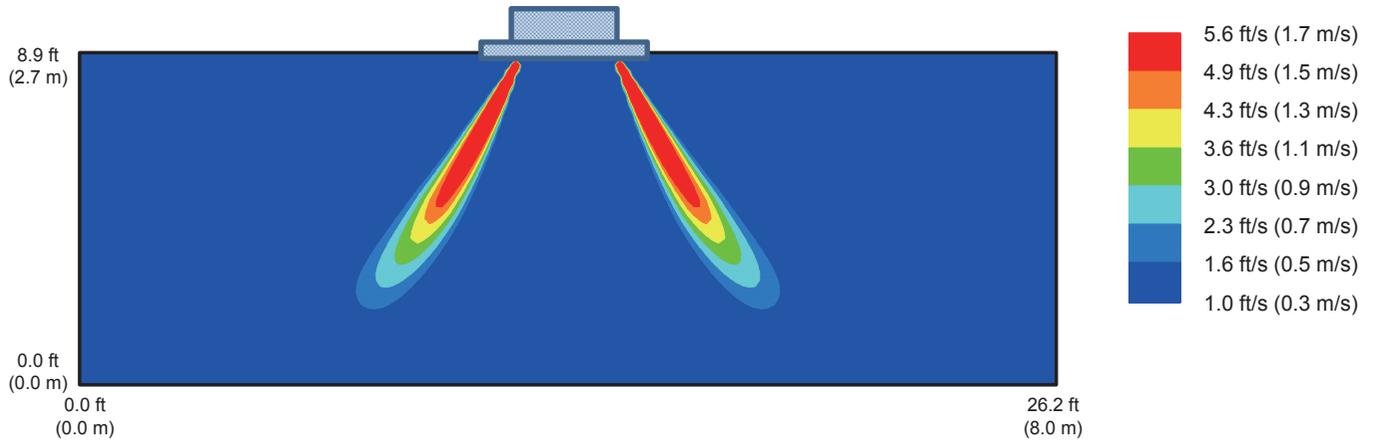


**Note:**

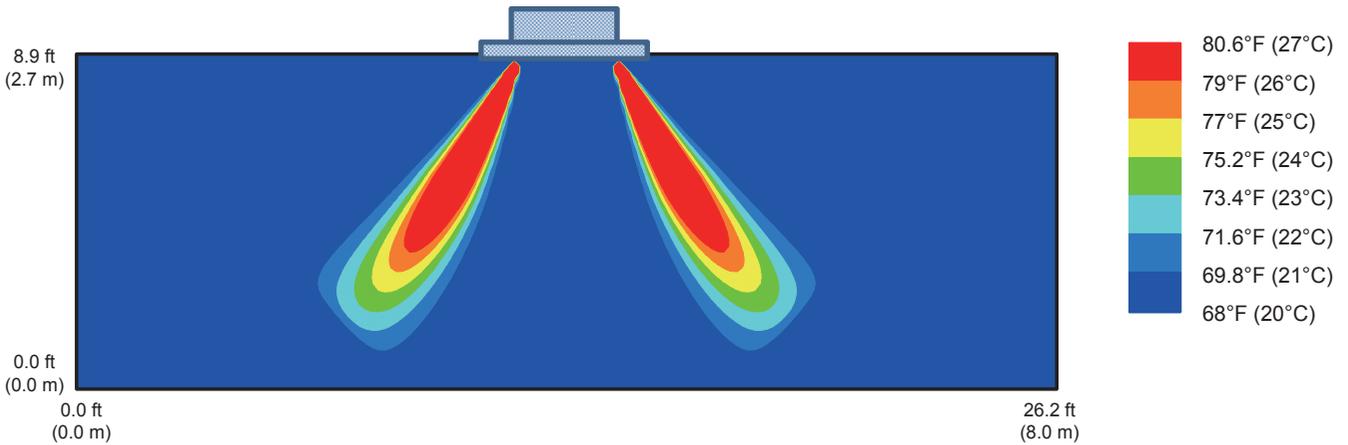
*Please understand that the analysis results may differ with actual installation conditions, or furniture arrangement.*

## 12.2 Heating Operation FXFQ07TVJU

**Air velocity distribution of FXFQ07TVJU (Heating operation)**  
Air flow direction : Down



**Air temperature distribution of FXFQ07TVJU (Heating operation)**  
Air flow direction : Down

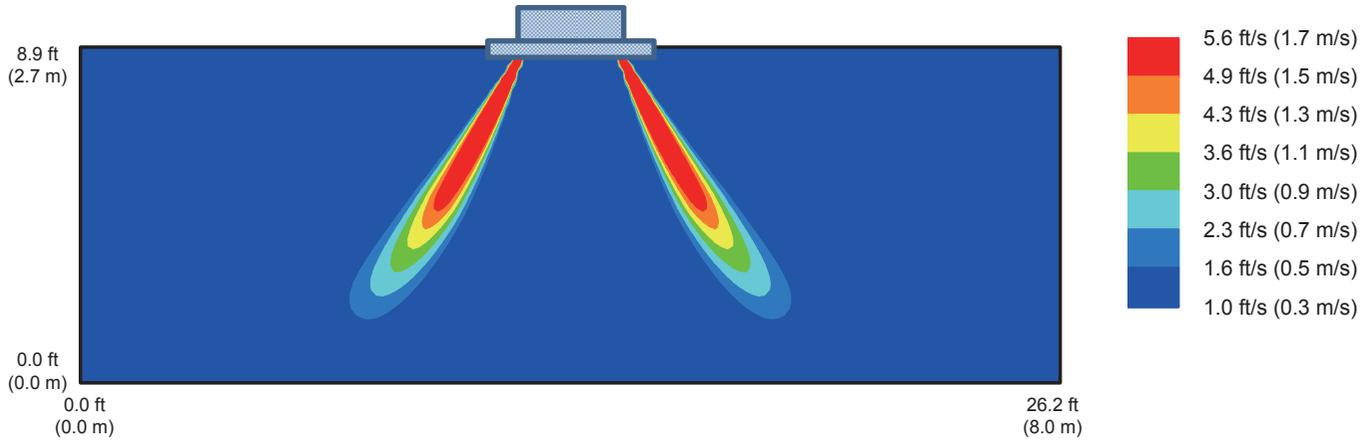


**Note:**

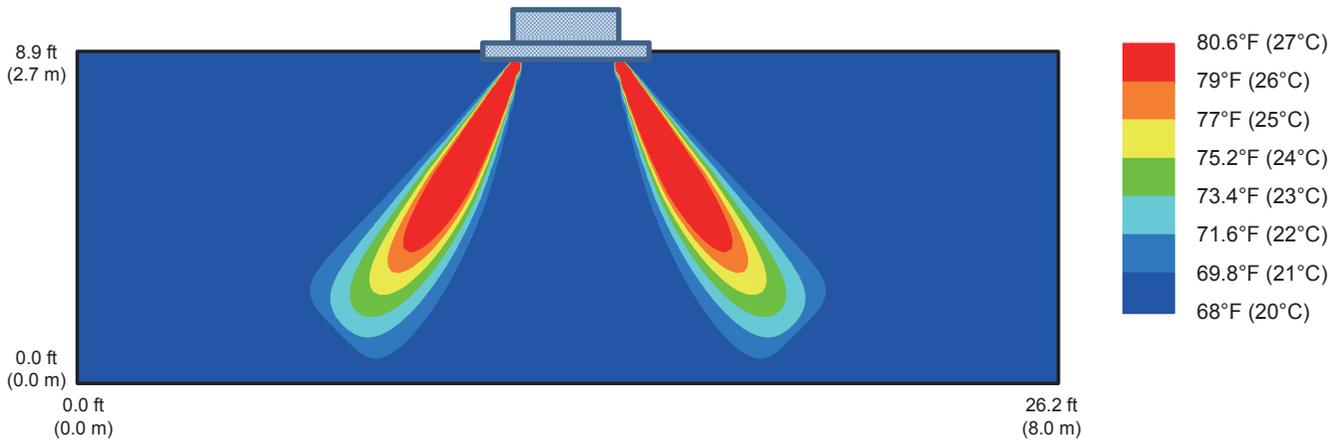
*Please understand that the analysis results may differ with actual installation conditions, or furniture arrangement.*

FXFQ09TVJU

**Air velocity distribution of FXFQ09TVJU (Heating operation)**  
Air flow direction : Down



**Air temperature distribution of FXFQ09TVJU (Heating operation)**  
Air flow direction : Down

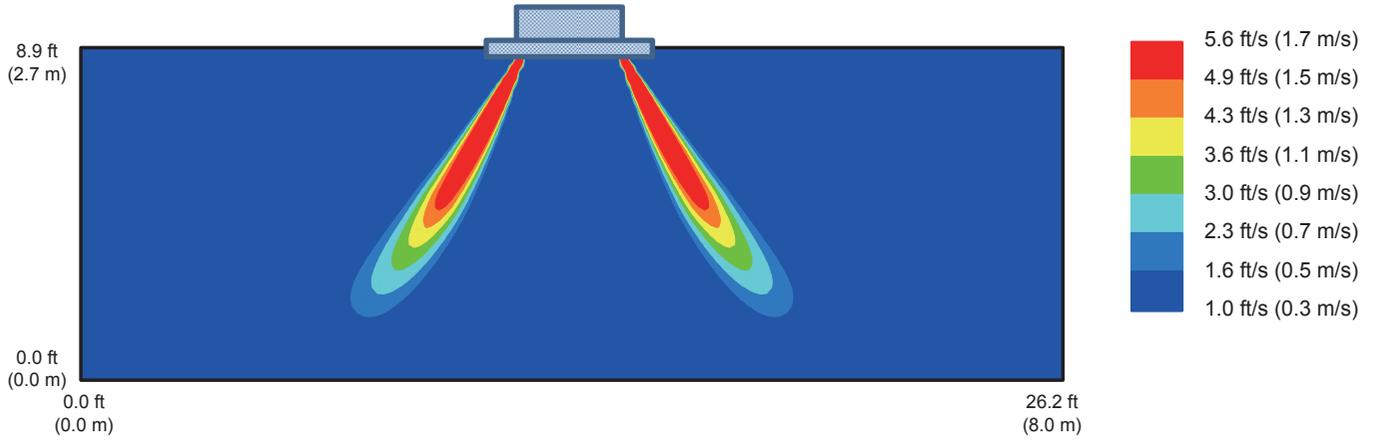


**Note:**

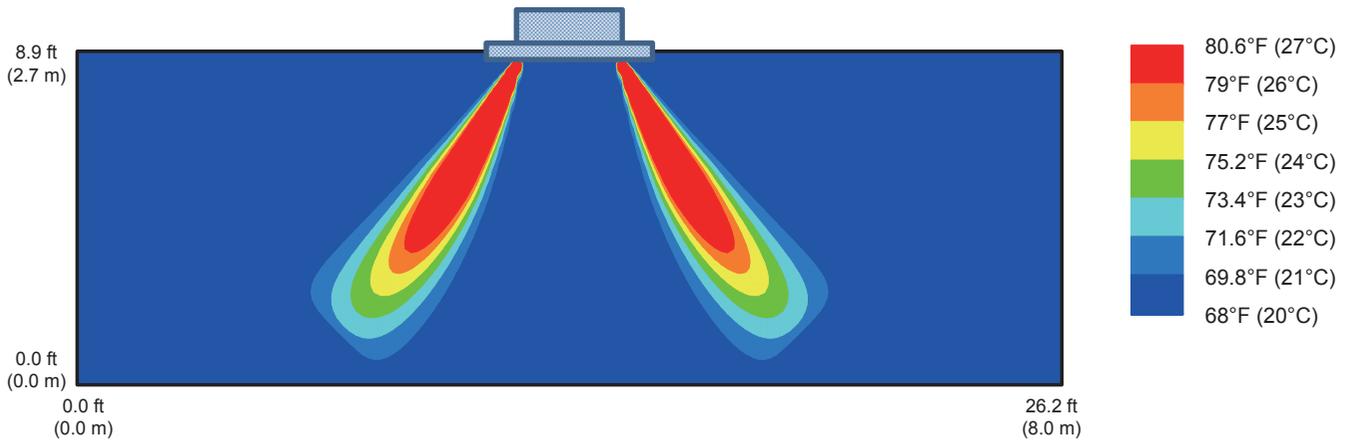
*Please understand that the analysis results may differ with actual installation conditions, or furniture arrangement.*

**FXFQ12TVJU**

**Air velocity distribution of FXFQ12TVJU (Heating operation)**  
**Air flow direction : Down**



**Air temperature distribution of FXFQ12TVJU (Heating operation)**  
**Air flow direction : Down**

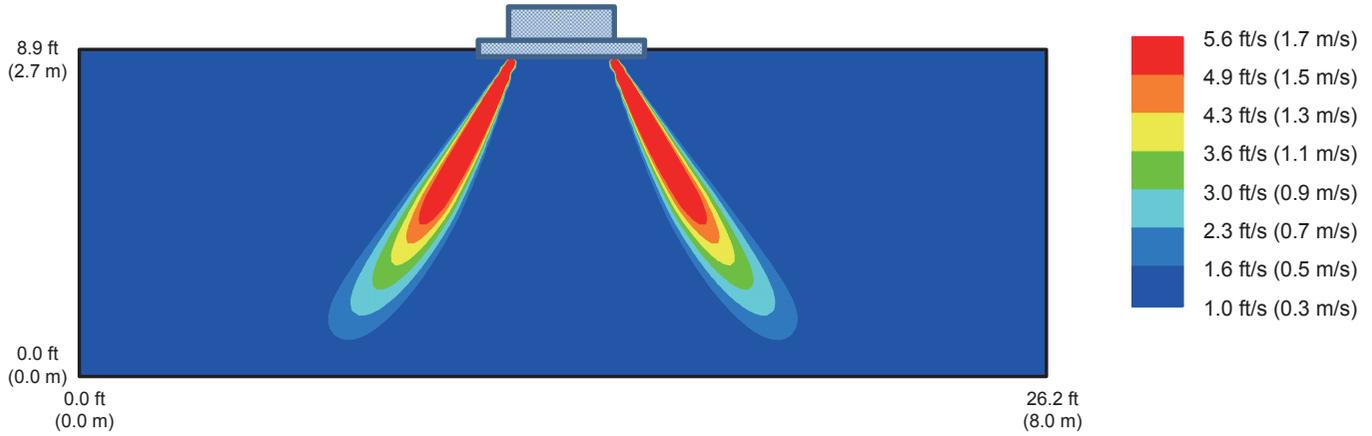


**Note:**

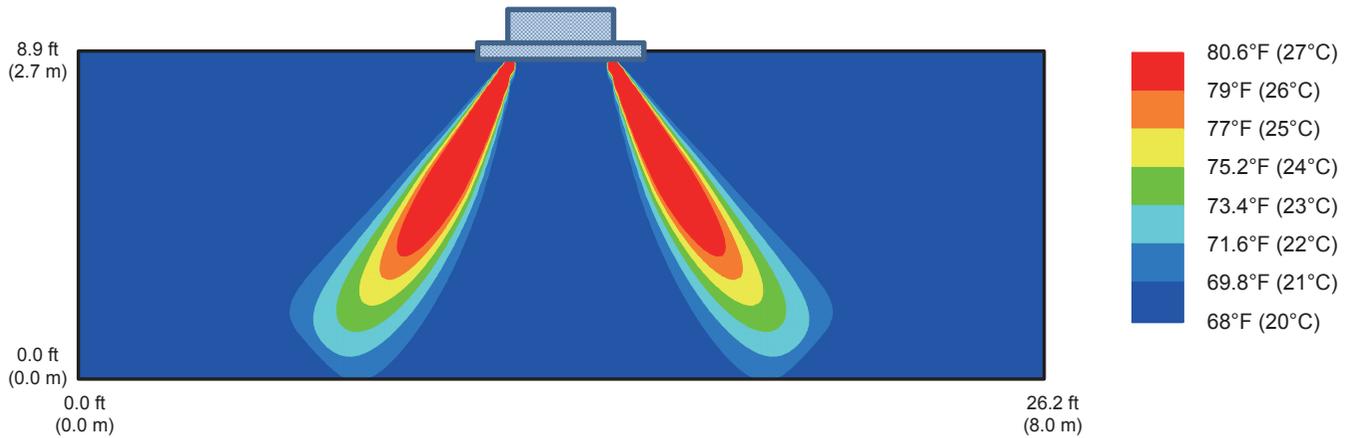
*Please understand that the analysis results may differ with actual installation conditions, or furniture arrangement.*

**FXFQ15TVJU**

**Air velocity distribution of FXFQ15TVJU (Heating operation)**  
**Air flow direction : Down**



**Air temperature distribution of FXFQ15TVJU (Heating operation)**  
**Air flow direction : Down**

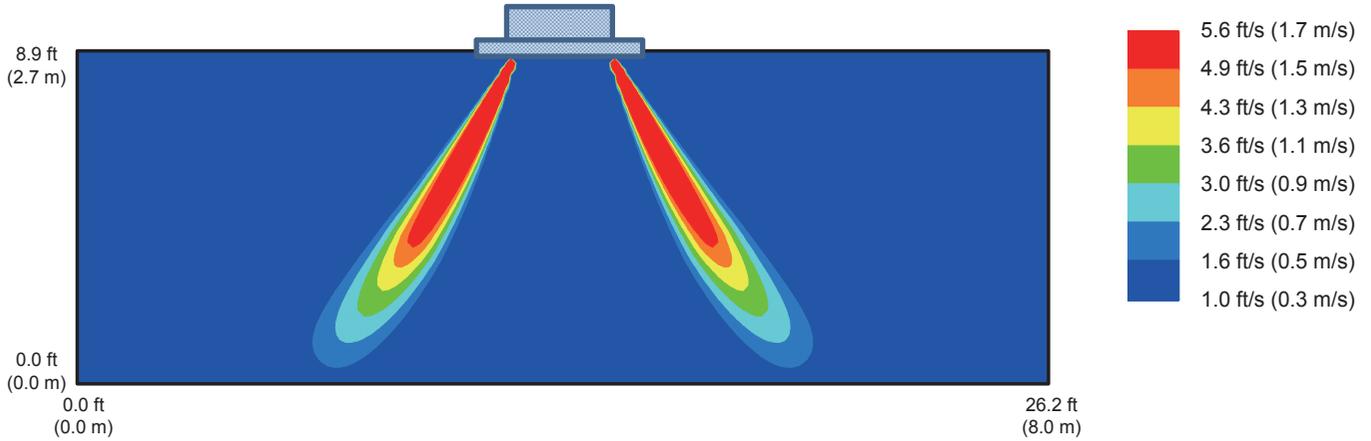


**Note:**

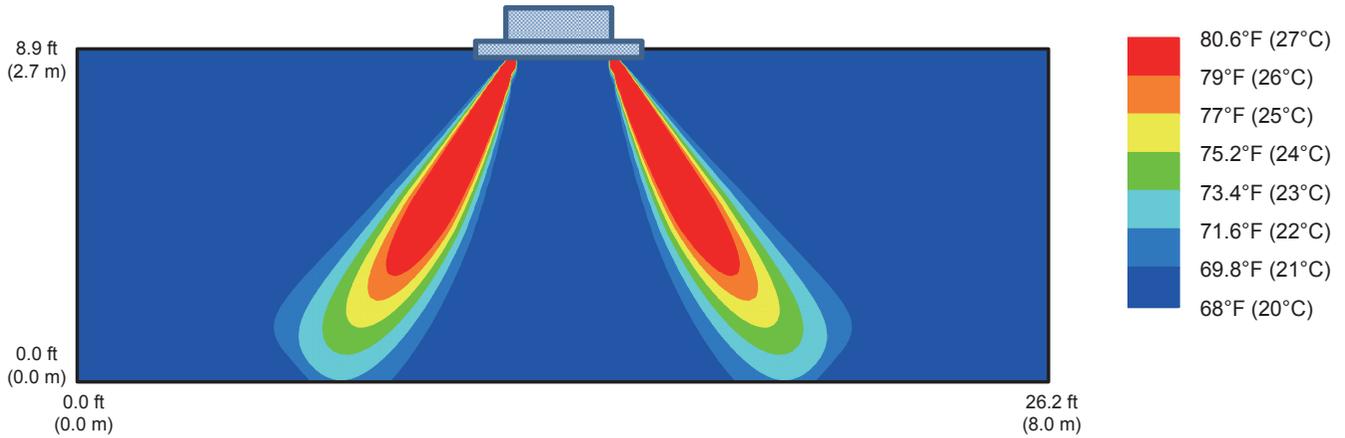
*Please understand that the analysis results may differ with actual installation conditions, or furniture arrangement.*

FXFQ18TVJU

**Air velocity distribution of FXFQ18TVJU (Heating operation)**  
**Air flow direction : Down**



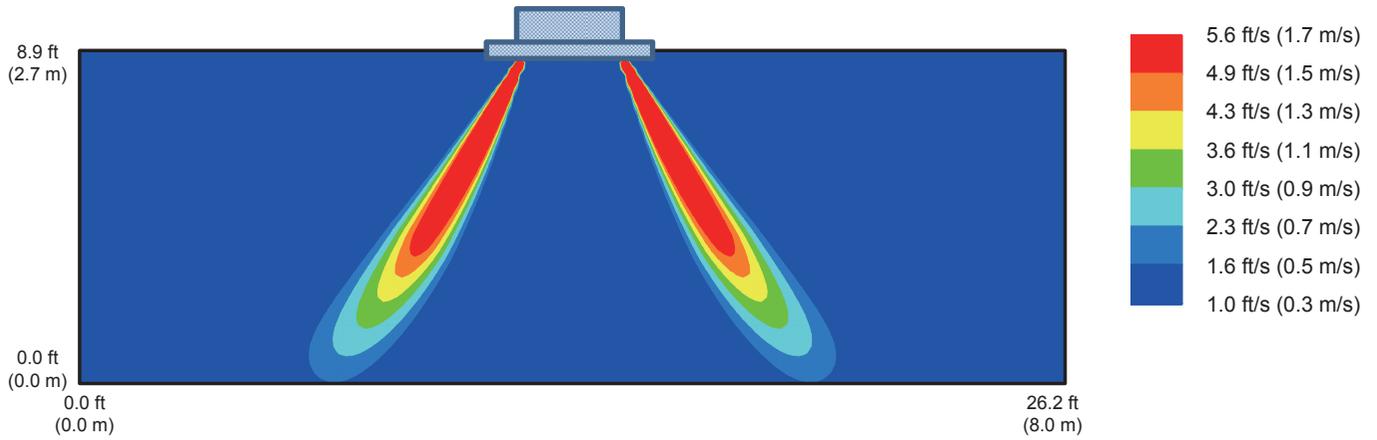
**Air temperature distribution of FXFQ18TVJU (Heating operation)**  
**Air flow direction : Down**



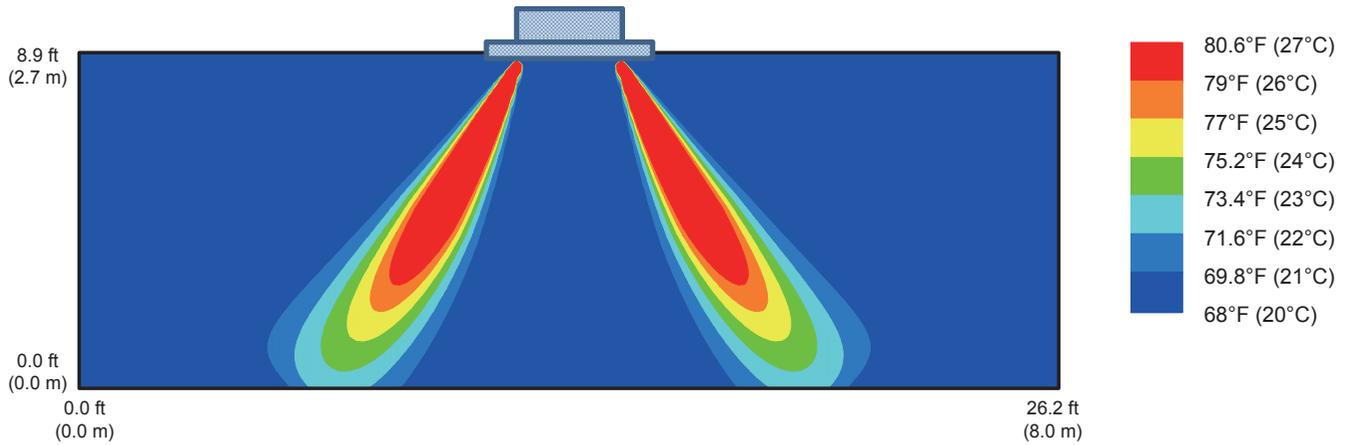
*Note:*  
 Please understand that the analysis results may differ with actual installation conditions, or furniture arrangement.

FXFQ24TVJU

**Air velocity distribution of FXFQ24TVJU (Heating operation)**  
**Air flow direction : Down**



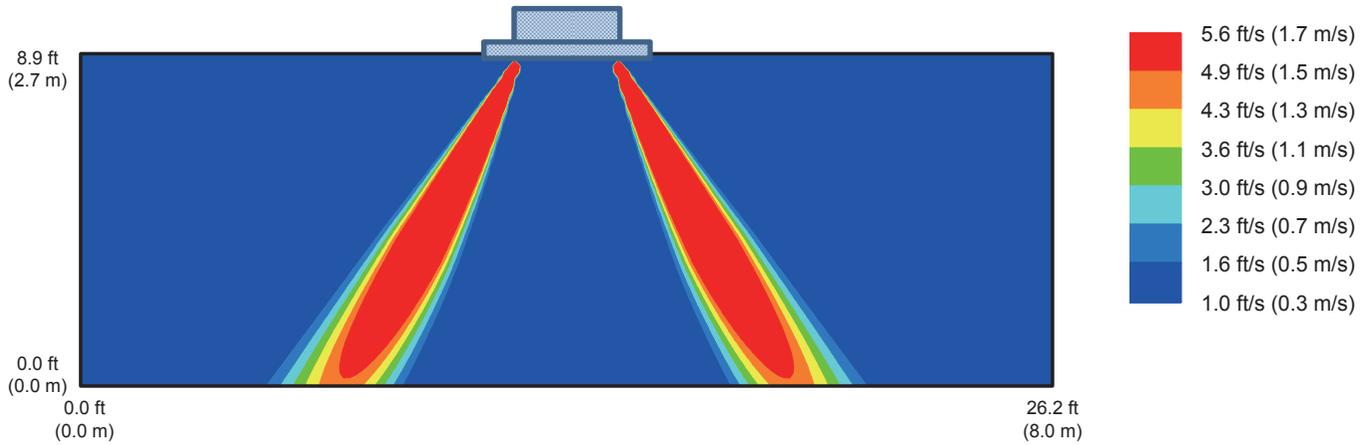
**Air temperature distribution of FXFQ24TVJU (Heating operation)**  
**Air flow direction : Down**



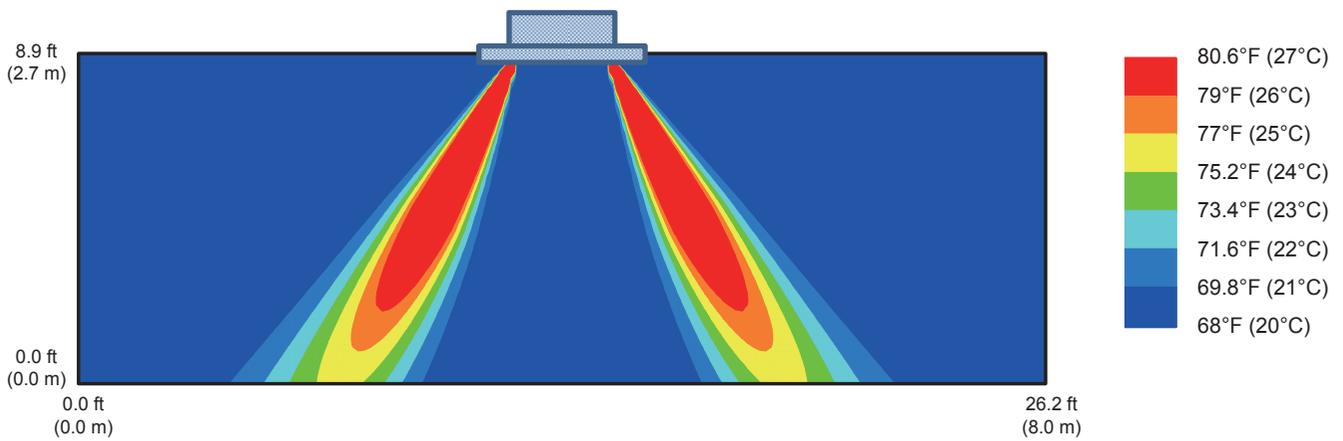
*Note:*  
 Please understand that the analysis results may differ with actual installation conditions, or furniture arrangement.

**FXFQ30TVJU**

**Air velocity distribution of FXFQ30TVJU (Heating operation)**  
**Air flow direction : Down**



**Air temperature distribution of FXFQ30TVJU (Heating operation)**  
**Air flow direction : Down**

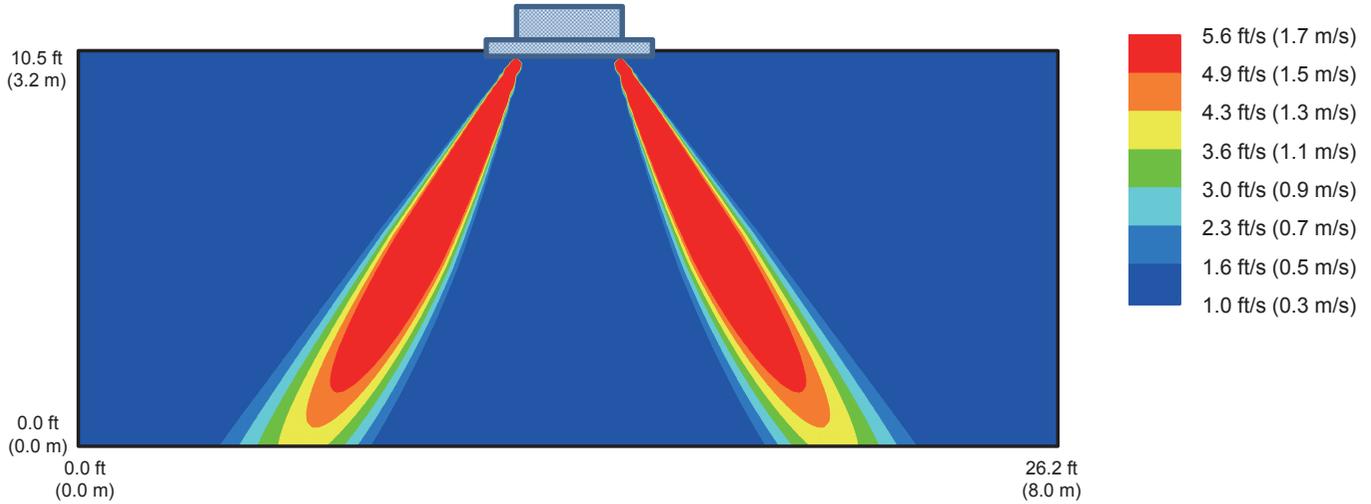


**Note:**

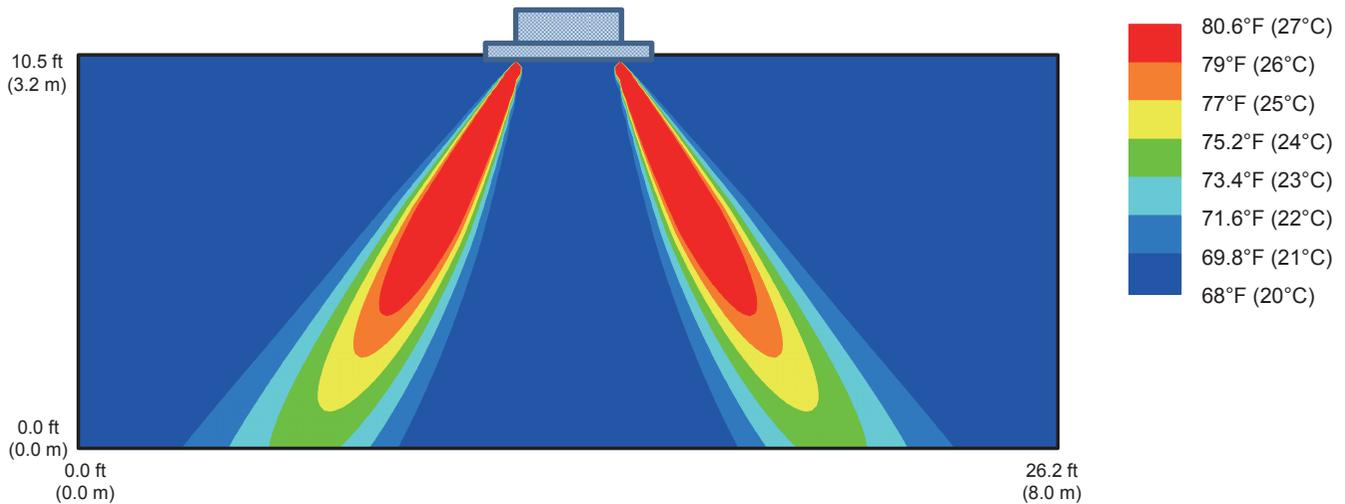
*Please understand that the analysis results may differ with actual installation conditions, or furniture arrangement.*

FXFQ36TVJU

**Air velocity distribution of FXFQ36TVJU (Heating operation)**  
**Air flow direction : Down**



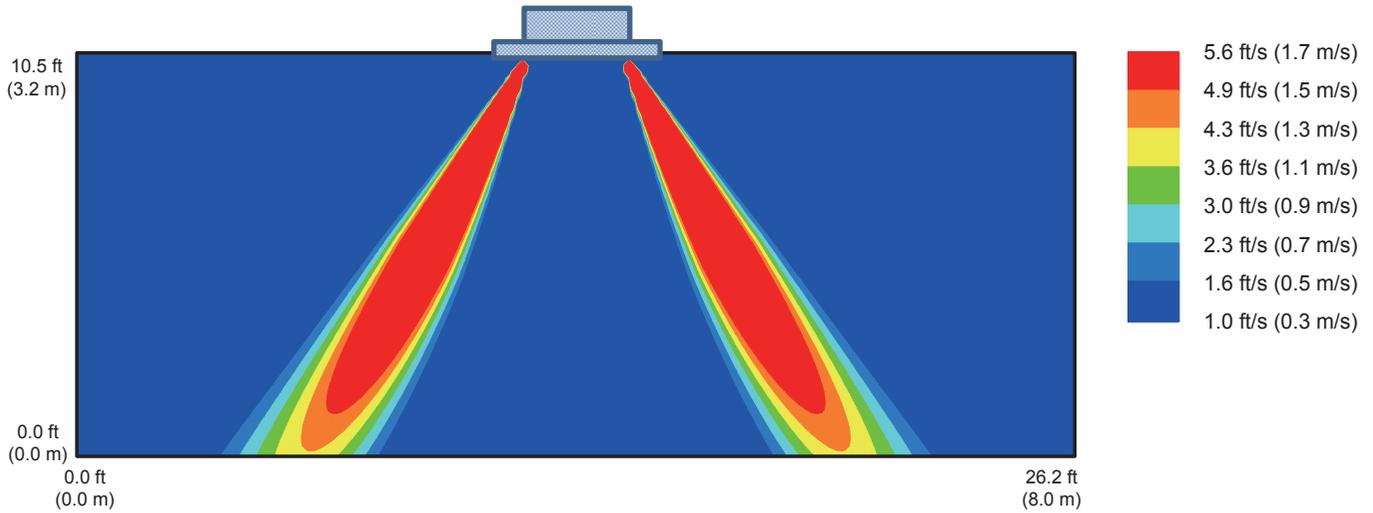
**Air temperature distribution of FXFQ36TVJU (Heating operation)**  
**Air flow direction : Down**



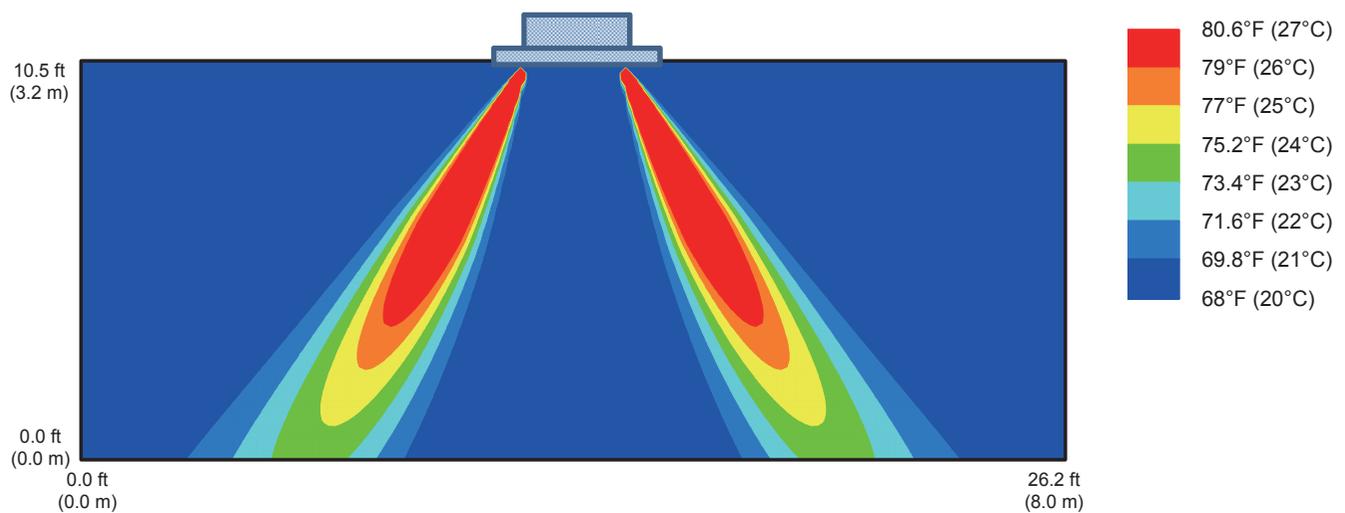
*Note:*  
 Please understand that the analysis results may differ with actual installation conditions, or furniture arrangement.

FXFQ48TVJU

**Air velocity distribution of FXFQ48TVJU (Heating operation)**  
**Air flow direction : Down**



**Air temperature distribution of FXFQ48TVJU (Heating operation)**  
**Air flow direction : Down**

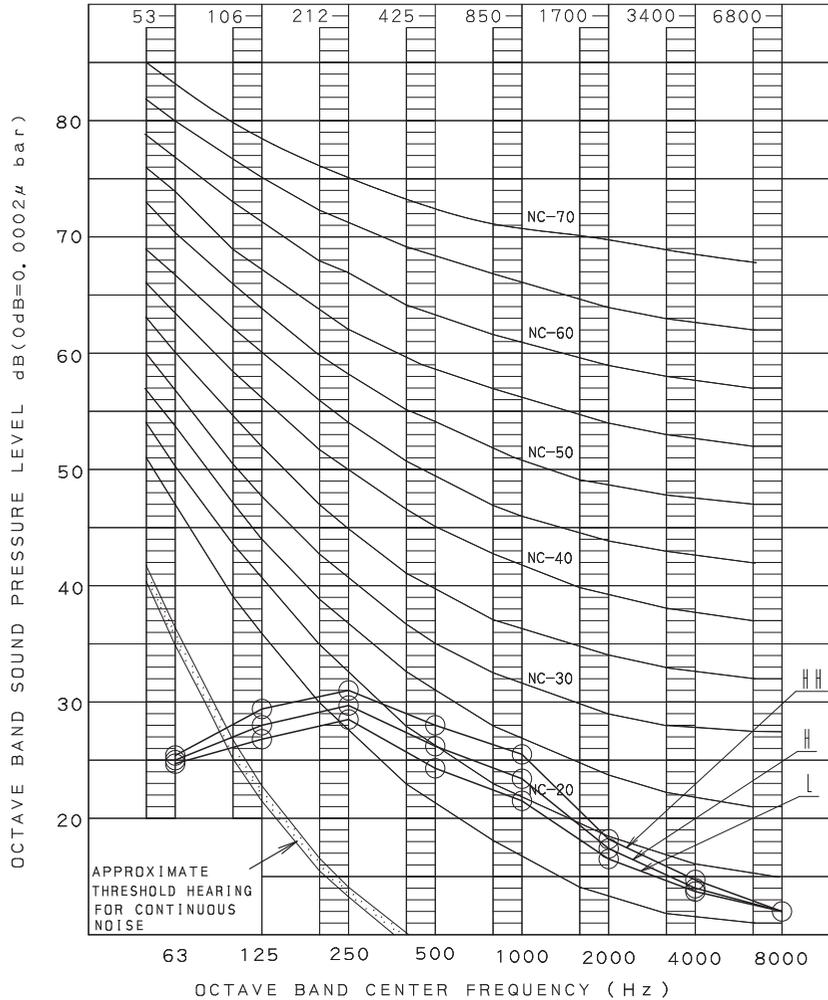


**Note:**

*Please understand that the analysis results may differ with actual installation conditions, or furniture arrangement.*

# 13.Sound Levels (Reference Data)

FXFQ07-12TVJU



OVER ALL (dB)

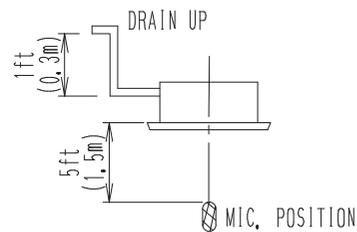
SCALE	HH	H	L
A	30.0	28.5	27.0

(B. G. N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

POWER SOURCE	208/230V 60Hz
COOLING	RETURN AIR TEMPERATURE: 80.0 °F (26.7 °C) DB, 67.0 °F (19.4 °C) WB OUTDOOR TEMPERATURE: 95.0 °F (35.0 °C) DB, 75.0 °F (23.9 °C) WB
HEATING	RETURN AIR TEMPERATURE: 70.0 °F (21.1 °C) DB, 60.0 °F (15.6 °C) WB OUTDOOR TEMPERATURE: 47.0 °F (8.3 °C) DB, 43.0 °F (6.1 °C) WB

LOCATION OF MICROPHONE

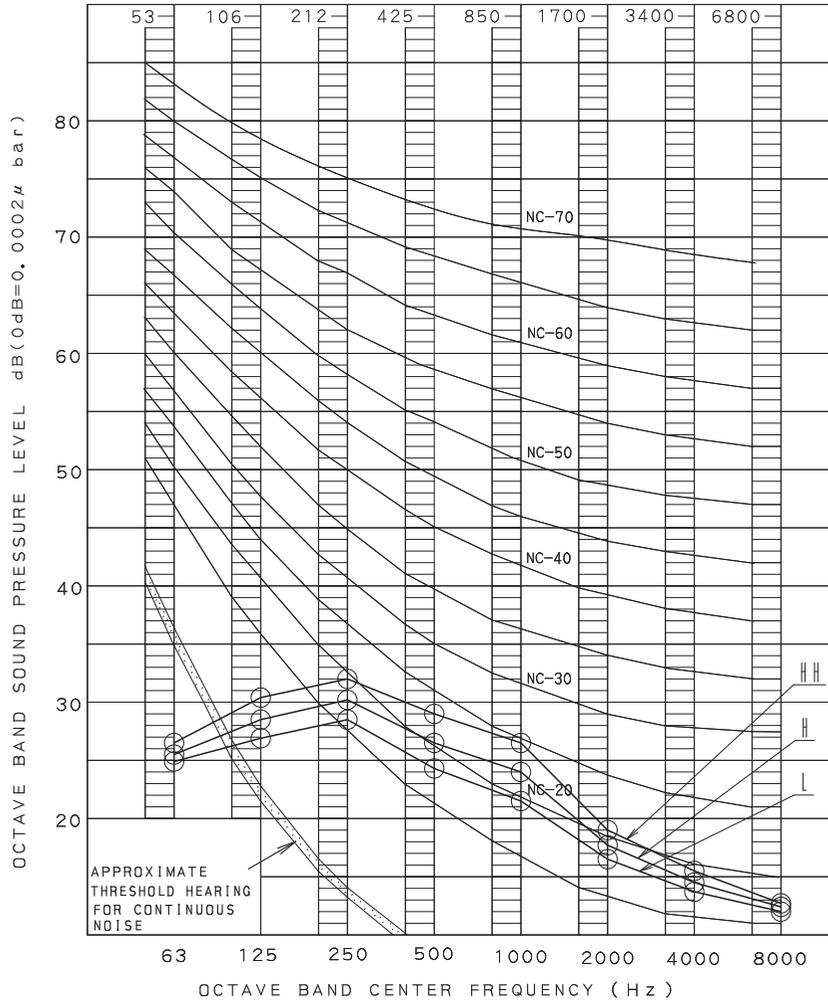


MEASURING PLACE

ANECHOIC CHAMBER

NOTE: Operation noise differs with operation and ambient conditions.

FXFQ15TVJU



OVER ALL (dB)

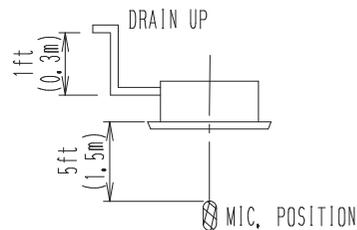
SCALE	HH	H	L
A	31.0	29.0	27.0

(B. G. N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

POWER SOURCE	208/230V 60Hz
COOLING	RETURN AIR TEMPERATURE: 80.0 °F (26.7 °C) DB, 67.0 °F (19.4 °C) WB OUTDOOR TEMPERATURE: 95.0 °F (35.0 °C) DB, 75.0 °F (23.9 °C) WB
HEATING	RETURN AIR TEMPERATURE: 70.0 °F (21.1 °C) DB, 60.0 °F (15.6 °C) WB OUTDOOR TEMPERATURE: 47.0 °F (8.3 °C) DB, 43.0 °F (6.1 °C) WB

LOCATION OF MICROPHONE

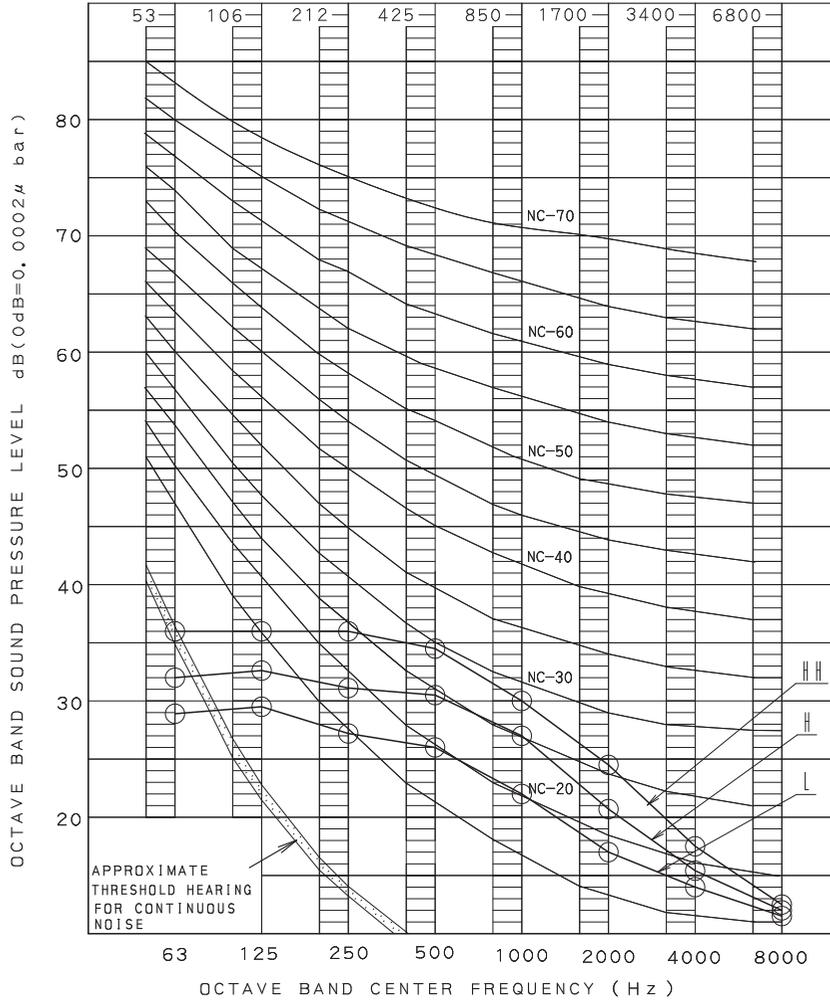


MEASURING PLACE

ANECHOIC CHAMBER

NOTE: Operation noise differs with operation and ambient conditions.

FXFQ18TVJU



OVER ALL (dB)

SCALE	HH	H	L
A	35.5	32.0	28.0

OPERATING CONDITIONS

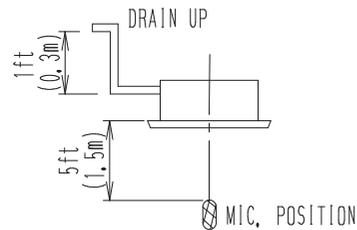
POWER SOURCE	208/230V 60Hz
COOLING	RETURN AIR TEMPERATURE: 80.0 °F (26.7 °C) DB, 67.0 °F (19.4 °C) WB OUTDOOR TEMPERATURE: 95.0 °F (35.0 °C) DB, 75.0 °F (23.9 °C) WB
HEATING	RETURN AIR TEMPERATURE: 70.0 °F (21.1 °C) DB, 60.0 °F (15.6 °C) WB OUTDOOR TEMPERATURE: 47.0 °F (8.3 °C) DB, 43.0 °F (6.1 °C) WB

(B, G, N IS ALREADY RECTIFIED)

LOCATION OF MICROPHONE

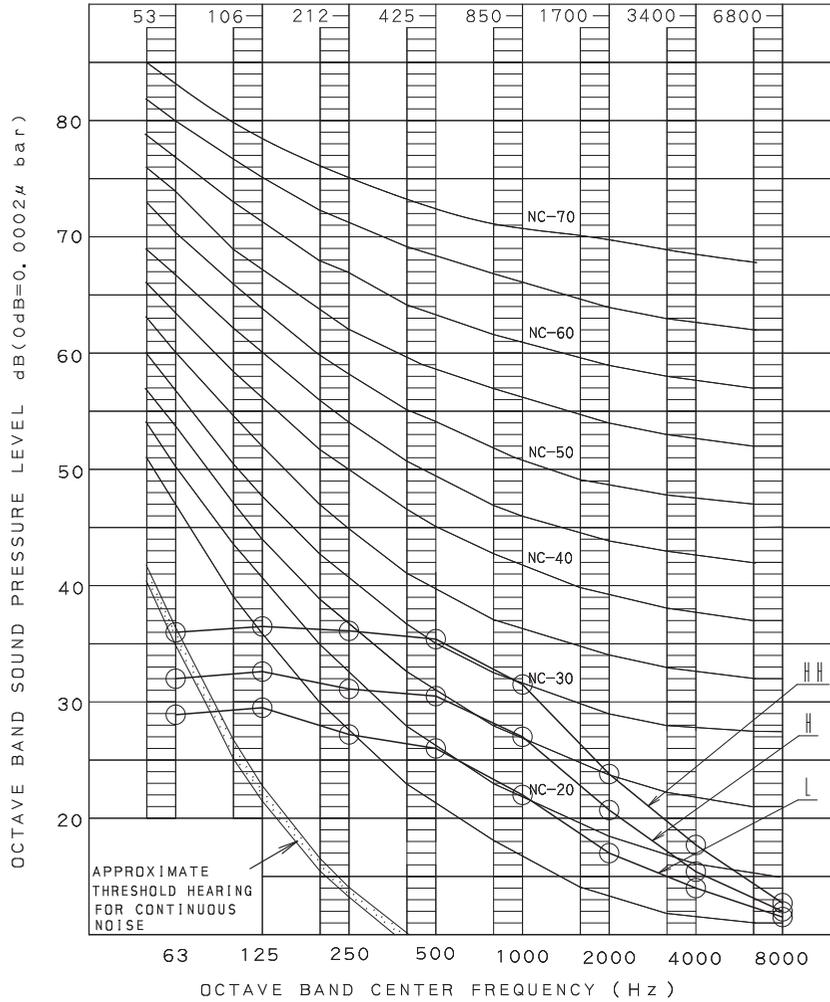
MEASURING PLACE

ANECHOIC CHAMBER



NOTE: Operation noise differs with operation and ambient conditions.

FXFQ24TVJU



OVER ALL (dB)

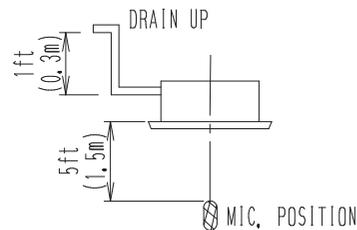
SCALE	HH	H	L
A	36.0	32.0	28.0

(B, G, N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

POWER SOURCE	208/230V 60Hz
COOLING	RETURN AIR TEMPERATURE: 80.0 °F (26.7 °C) DB, 67.0 °F (19.4 °C) WB OUTDOOR TEMPERATURE: 95.0 °F (35.0 °C) DB, 75.0 °F (23.9 °C) WB
HEATING	RETURN AIR TEMPERATURE: 70.0 °F (21.1 °C) DB, 60.0 °F (15.6 °C) WB OUTDOOR TEMPERATURE: 47.0 °F (8.3 °C) DB, 43.0 °F (6.1 °C) WB

LOCATION OF MICROPHONE

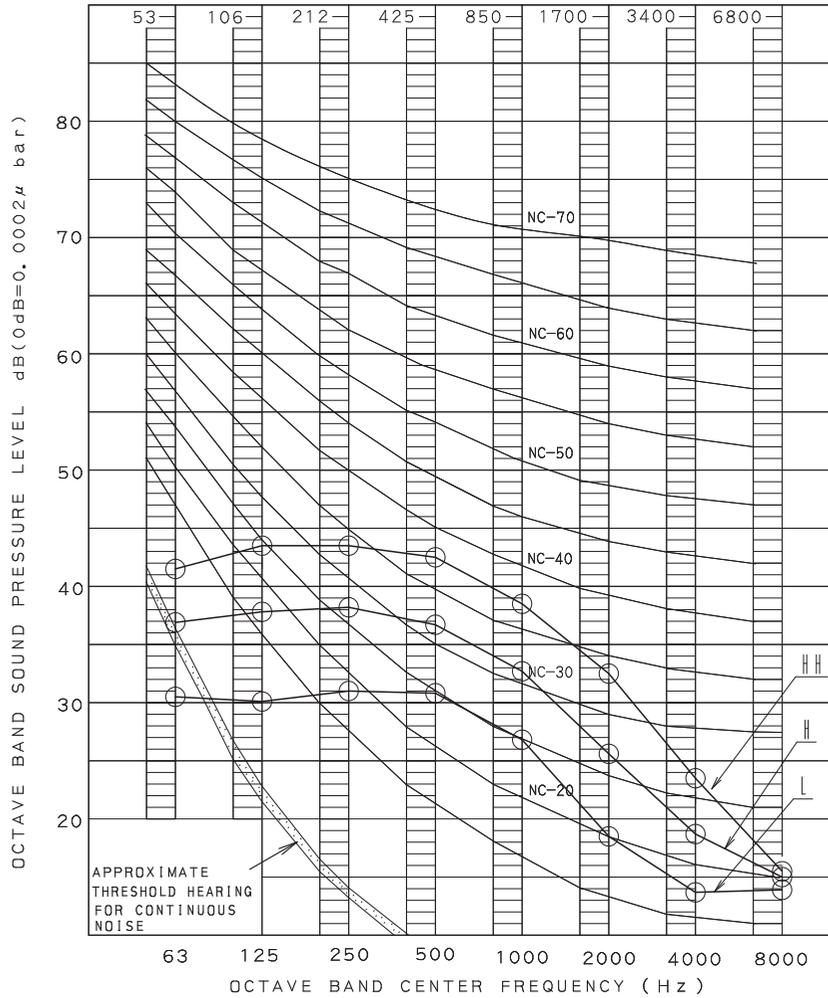


MEASURING PLACE

ANECHOIC CHAMBER

NOTE: Operation noise differs with operation and ambient conditions.

FXFQ30TVJU



OVER ALL (dB)

SCALE	HH	H	L
A	43.5	38.0	32.0

(B, G, N IS ALREADY RECTIFIED)

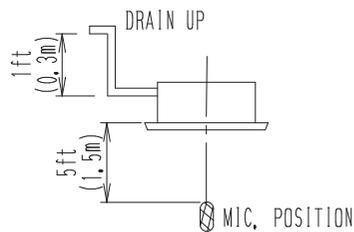
OPERATING CONDITIONS

POWER SOURCE 208/230V 60Hz

COOLING RETURN AIR TEMPERATURE: 80, 0 °F (26, 7 °C) DB, 67, 0 °F (19, 4 °C) WB  
 OUTDOOR TEMPERATURE: 95, 0 °F (35, 0 °C) DB, 75, 0 °F (23, 9 °C) WB

HEATING RETURN AIR TEMPERATURE: 70, 0 °F (21, 1 °C) DB, 60, 0 °F (15, 6 °C) WB  
 OUTDOOR TEMPERATURE: 47, 0 °F (8, 3 °C) DB, 43, 0 °F (6, 1 °C) WB

LOCATION OF MICROPHONE

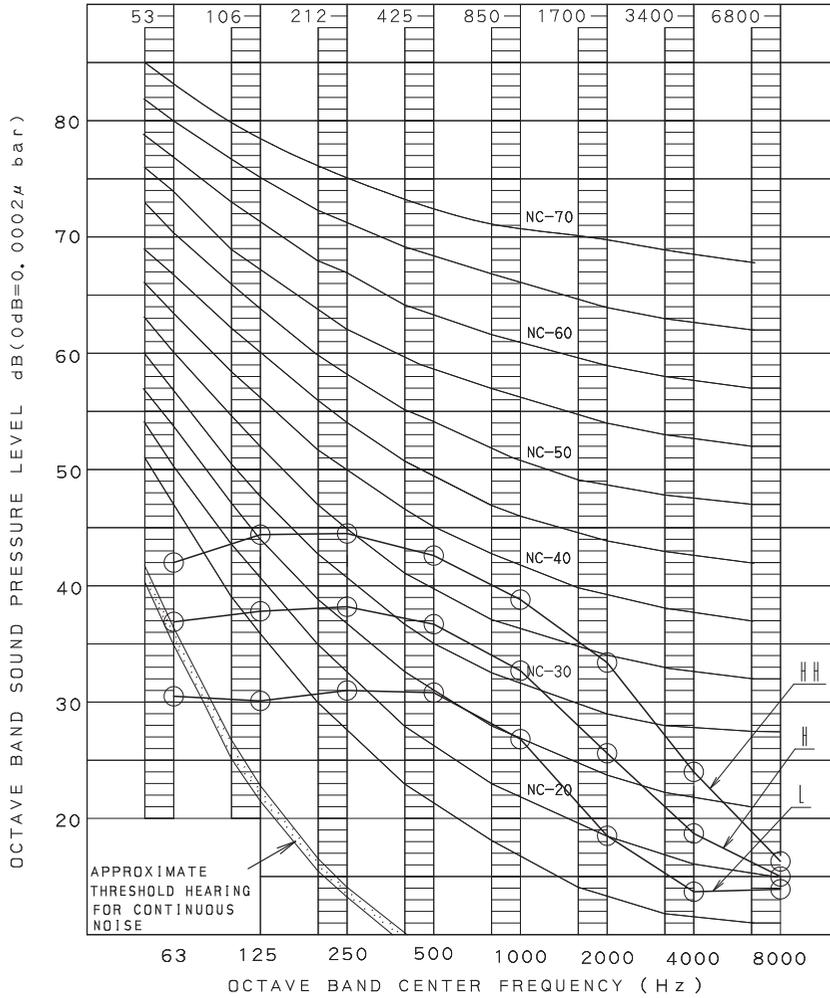


MEASURING PLACE

ANECHOIC CHAMBER

NOTE: Operation noise differs with operation and ambient conditions.

FXFQ36TVJU



OVER ALL (dB)

SCALE	HH	H	L
A	44.0	38.0	32.0

(B, G, N IS ALREADY RECTIFIED)

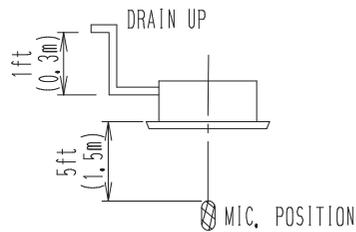
OPERATING CONDITIONS

POWER SOURCE 208/230V 60Hz

COOLING RETURN AIR TEMPERATURE: 80.0 °F (26.7 °C) DB, 67.0 °F (19.4 °C) WB  
 OUTDOOR TEMPERATURE: 95.0 °F (35.0 °C) DB, 75.0 °F (23.9 °C) WB

HEATING RETURN AIR TEMPERATURE: 70.0 °F (21.1 °C) DB, 60.0 °F (15.6 °C) WB  
 OUTDOOR TEMPERATURE: 47.0 °F (8.3 °C) DB, 43.0 °F (6.1 °C) WB

LOCATION OF MICROPHONE

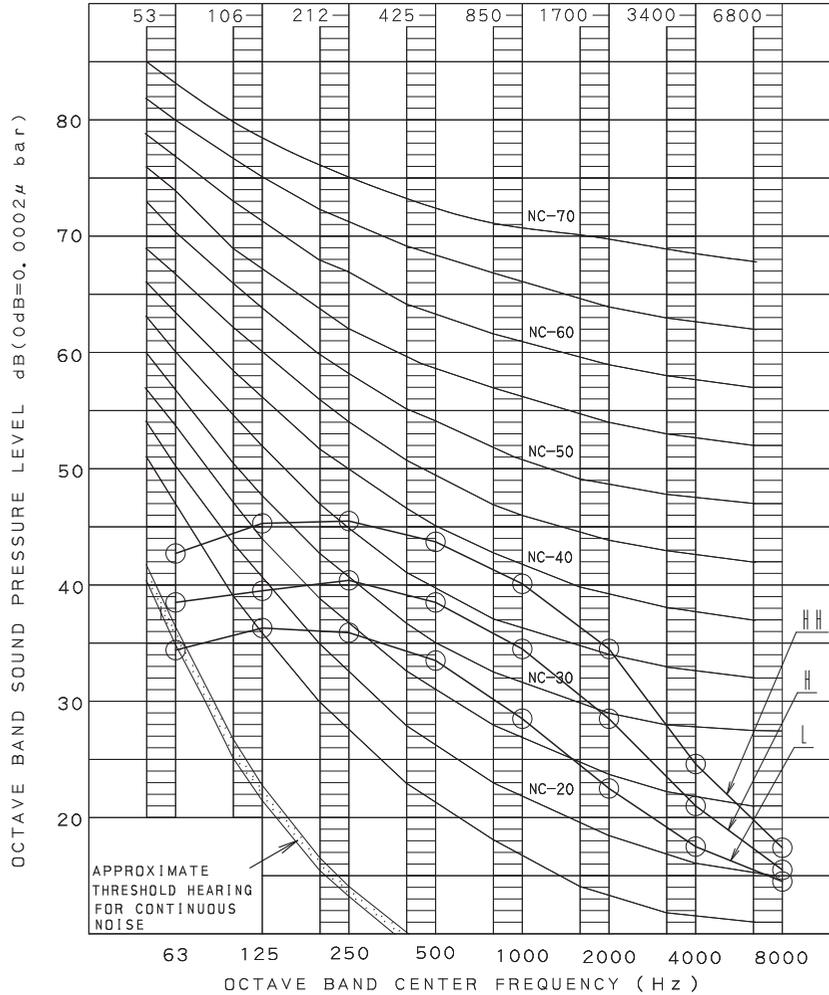


MEASURING PLACE

ANECHOIC CHAMBER

NOTE: Operation noise differs with operation and ambient conditions.

FXFQ48TVJU



OVER ALL (dB)

SCALE	HH	H	L
A	45.0	40.0	35.0

(B. G. N IS ALREADY RECTIFIED)

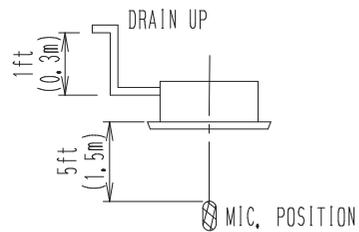
OPERATING CONDITIONS

POWER SOURCE 208/230V 60Hz

COOLING RETURN AIR TEMPERATURE: 80.0 °F (26.7 °C) DB, 67.0 °F (19.4 °C) WB  
 OUTDOOR TEMPERATURE: 95.0 °F (35.0 °C) DB, 75.0 °F (23.9 °C) WB

HEATING RETURN AIR TEMPERATURE: 70.0 °F (21.1 °C) DB, 60.0 °F (15.6 °C) WB  
 OUTDOOR TEMPERATURE: 47.0 °F (8.3 °C) DB, 43.0 °F (6.1 °C) WB

LOCATION OF MICROPHONE



MEASURING PLACE

ANECHOIC CHAMBER

NOTE: Operation noise differs with operation and ambient conditions.

## 14. Accessories

### 14.1 Optional Accessories (for Unit)

Option		Note	FXFQ07TVJU FXFQ09TVJU FXFQ12TVJU FXFQ15TVJU FXFQ18TVJU FXFQ24TVJU	FXFQ30TVJU FXFQ36TVJU FXFQ48TVJU	FXFQ07TVJU FXFQ09TVJU FXFQ12TVJU FXFQ15TVJU FXFQ18TVJU FXFQ24TVJU	FXFQ30TVJU FXFQ36TVJU FXFQ48TVJU
Type of decoration panel			WHEN USING SELF CLEANING DECO PANEL		WHEN USING STANDARD DECO PANEL	
Self cleaning decoration panel			BYCQ125BGW1		—	
Connection pipe (Nozzule for dust recovery)			KKHAP55B160		—	
L-shape extension pipe			KKHAP55A160		—	
Decoration panel			—		BYCQ125B-W1	
Sealing material of air discharge outlet			KDBH55K160F		KDBHQ55B140	
Panel spacer			KDB55J160F		KDB55J160F	
Fresh air intake kit	Chamber type	Without T-duct joint	—		KDDQ55B140 [KDDP55C160-1, KDDQ55B140-2]	
		With T-duct joint	—		KDDP55B160K [KDDP55C160-1, KDDP55B160K2]	
	Direct installation type	—		KDDP55X160A		
Filter chamber			—		KDDFP55C160	
Ultra long life filter unit			—		KAF555D160	
Replacement ultra long life filter			—		KAF550D160	
Replacement filter for self cleaning decoration panel			KAFP554A160		—	
Branch duct chamber			KDJP55B80	KDJP55B160	KDJP55B80	KDJP55B160

C: 3D086933C

# Appendix 1

## Installation of Self Cleaning Decoration Panel

### BYCQ125BGW1

1. Installation Manual ..... i

# 1. Installation Manual

## BYCQ125BGW1



BYCQ125BGW1

Self cleaning decoration panel

Installation manual

### 1. Safety Considerations

Please read these "Safety Considerations" carefully before installing air conditioning equipment and be sure to install it correctly. After completing installation, conduct a trial operation to check for faults and explain to the customer how to operate the air conditioner and take care of it with the aid of the operation manual. Ask the customer to store the installation manual along with the operation manual for future reference.

**This air conditioner comes under the term "appliances not accessible to the general public".**

Meaning of WARNING and CAUTION notices.



**WARNING**..... Failure to follow these instructions properly may result in personal injury or loss of life.



**CAUTION**..... Failure to observe these instructions properly may result in property damage or personal injury, which may be serious depending on the circumstances.



**WARNING**

- Ask your dealer or qualified personnel to carry out installation work.  
Do not attempt to install the air conditioner yourself. Improper installation may result in water leakage, electric shocks or fire.
- Perform installation work in accordance with the instructions in this installation manual. Do not modify the product.  
Improper installation may result in water leakage, electric shocks, or fire.
- Be sure to use only the specified accessories and parts for installation work.  
Failure to use the specified parts may result in the unit falling, water leakage, electric shocks or fire.
- Make sure that specified wires are used and that there is no strain on the terminal connections or wires.  
Improper connections or securing of wires may result in abnormal heat radiation or fire.
- Be sure to switch off the unit before touching any electrical parts.
- Arrange the lead wires of the provided harness so that the control box cover of the indoor unit will not rise, and attach the cover securely.  
Heat radiation, electric shocks, or fire may result if the control box cover is not attached properly.
- Tear up and dispose of the plastic bag.  
Children playing with the plastic bag may be suffocated.

### — ⚠ CAUTION —

- Install the indoor and outdoor units, power cord, remote controller wiring, and transmission wiring at least 1m away from TV or radio sets. This is for the prevention of TV and radio interference. (Depending on the incoming signal strength, a distance of 1 m may not be sufficient to eliminate noise.)
- Pay the utmost attention to the transportation of the product. Hold the handles on the package to carry the product. Do not carry the package with the polypropylene band on the package held, which will be dangerous because the polypropylene band may be deformed.
- Do not touch the fin of the heat exchanger. Touching the fin improperly may result in injury.
- Do not turn the product power off immediately after the operation of the product comes to a stop. Always wait for at least 5 minutes before turning the product power off. Otherwise, water leakage and malfunctions may result.
- Do not install the air conditioner in the following locations:
  1. Where there is a high concentration of mineral oil spray or vapour (e.g. a kitchen).  
Plastic parts will deteriorate, parts may fall off and water leakage could result.
  2. Where corrosive gas, such as sulphurous acid gas, is produced.  
Corroding of copper pipes or soldered parts may result in refrigerant leakage.
  3. Near machinery emitting electromagnetic radiation.  
Electromagnetic radiation may disturb the operation of the control system and result in a malfunction of the unit.
  4. Where flammable gas may leak, where there is carbon fibre or ignitable dust suspensions in the air, or where volatile flammables such as paint thinner or gasoline are handled.  
Operating the unit in such conditions may result in fire.

### 2. Instructions Peculiar to This Product

#### Note

- The product requires periodic maintenance. Do not use the product in the following places. Otherwise, dust adhering to the filter may not be removed and a malfunction may result because the dust can become sticky due to oil, tobacco smoke, and steam.
- Places where oil smoke is generated: Restaurants, factories, etc.
  - Smoking areas: Smoking room, etc.
  - Places with excessive special spray vapor or steam: Barber-shops, beauty salons, restaurants, laundry shops, pet shops, factories, etc.
  - Other places: Places where dust adhering to the filter becomes sticky (places including salt damage from a salty atmosphere), places where dust is generated (because the air filter cannot collect dust), server rooms (the product is not in operation during cleaning), or places where a large quantity of fine dust is generated (the air filter is clogged and the filter needs to be cleaned frequently).
- \* Use the standard series for the air conditioning of the customer areas of restaurants and cafeterias.
- \* The product may not be used in cases other than the above. For details, contact your dealer.

#### Note

- Have the customer actually operate the air conditioner while referring to the operation manual and explain the right operation of the air conditioner with useful tips given.
- Refer to the operation manual along with the installation manual provided with the indoor unit.

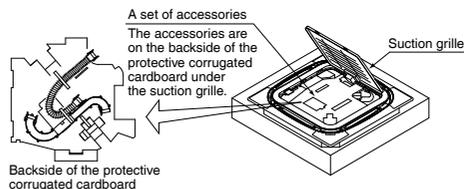
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The English text is the original instruction. Other languages are translations of the original instructions.

### 3. Accessory

Check that the following accessories provided with the air conditioner are correct in number. See the following illustration, which shows where the accessories are kept.



Name	Spacer (1)	Flexible hose (2)	S-shaped pipe (3)	Harness (4)	Clamp (5)
Quantity	1 pc.	1 pc.	1 pc.	1 pc.	2 pcs.
Shape					

Name	Seal (6)	Others
Quantity	1 pc.	
Shape		<ul style="list-style-type: none"> <li>• Operation manual</li> <li>• Installation manual</li> </ul>

**Pay the utmost attention to the following items when conducting installation work, and recheck the items on completion of the work.**

#### a. Test items on completion of work

Test items	In case of failure	Result
Is the air conditioner free of wiring and connection mistakes or omissions?	Operation failure and wire burnout	
Are you sure that there is no space between the ceiling and ceiling material?	Water leakage	
Are the fixing knobs (in 2 points) of the dust box secured tightly?	Vibration, noise, and dust collection failure	
Are the fixed knobs (in 5 points) of the air filter secured tightly?	Vibration, noise, and dust collection failure	
Is the fall prevention cord for the dust box and grille hooked to the mounting bracket?	Fall	
Did you attach the control box cover, dust box, flexible hose, S-shaped pipe, suction grille, and decoration corner covers?	Noise and dust collection failure	

\* Be sure to recheck the items provided in the section "1. Safety Considerations" on page i.

#### b. Test items before delivery

Test items	Result
Was the test operation of the air conditioner finished?	
Did you explain the operation method of the air conditioner to the customer while showing the customer the operation manual? *	
Did you make mode settings for filter auto-cleaning (automatic control operation settings or timer operation settings with an operation time zone specified) and provide information on the set mode operation of the air conditioner to the customer?	
Did you deliver the operation manual to the customer? (Be sure to hand the customer the operation manual as well as the installation manual.)	

#### \* Point of operation explanation

In addition to the general usage of the air conditioner, it is necessary to explain the descriptions of the **⚠ WARNING** and **⚠ CAUTION** marked items in the operation manual and have the customer read the descriptions carefully, because these items indicate information that, if not heeded, is likely to result in loss of life, serious injury, or property damage.

### 4. Installation Site

This product offers selectable air outlet directions. A closure kit (an optional accessory) is required to achieve three-way flow patterns. Two-way flow patterns are not available to this product.

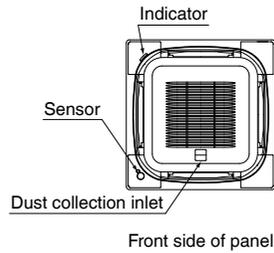
#### 4-1 Select the installation site that meets the following conditions with the consent of the customer

- The surface of the ceiling is not inclined.
- Installation and service workspace is secured (see the following illustrations).
- The panel indicators are seen with ease.
- The indoor and outdoor units, power cord, transmission wiring, and remote controller wiring are at least 3.5 feet (1 m) away from TV or radio sets.

(The above is for the prevention of TV and radio interference. Depending on the incoming signal strength, a distance of 3.5 feet (1 m) may not be sufficient to eliminate noise.)

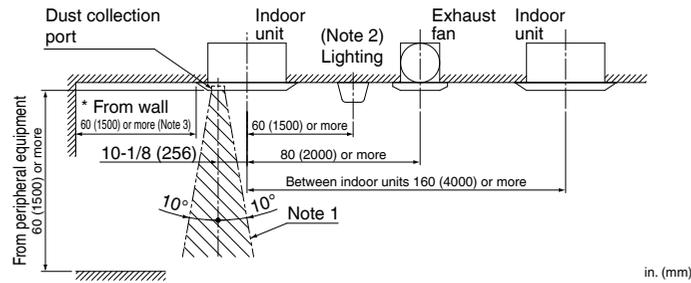
### 4-2 Required installation space

Install the indoor unit according to the installation manual and the following illustrations.



#### [Required installation space]

Refer to the installation instructions of the indoor unit and install the product according to the following figure.

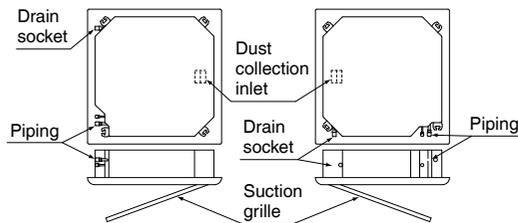


Note:

1. A space to allow dust vacuuming is required.
2. This restriction applies to the exposed type lighting, but does not apply to the recessed type (which does not protrude below the ceiling line).
3. The clearance from the wall\* will be 20 in. (500mm) or more if the air outlet is closed or the louver is controlled to "Blocked". In addition, it will be 8 in. (200mm) if the air outlet and the both right and left corners are all closed.
4. Refer to the operation manual provided with the remote controller for a setting method of the airflow directions of the louver **Individual Airflow Direction**.

### 4-3 Mounting directions of suction grille

Select one of the following mounting directions of the suction grille on the panel.



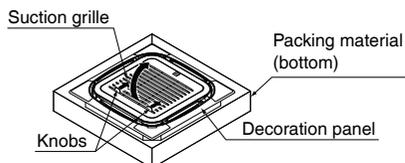
## 5. Preparations for Panel

### Note

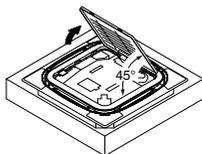
- Perform all the required work with the panel kept in the packing material (on the bottom side).
- Do not put the panel downward or upright or leave the panel on protruding parts. Otherwise, scratch damage to the surface of the panel may result.
- Do not touch the louver and do not apply any force on the louver. This may result in malfunction of the unit.

### 5-1 Removal of suction grille from panel, protective corrugated cardboard, and set of accessories

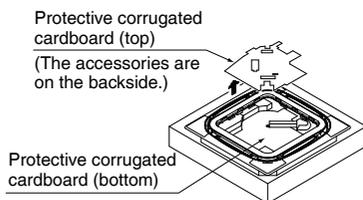
- (1) Press the knobs of the suction grille and lift up the knobs.



- (2) Open the suction grille to an angle of approximately 45° and remove the suction grille from the panel.

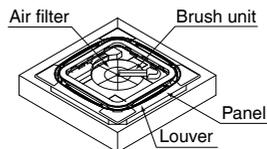


- (3) Take out the protective corrugated cardboard. Take out the protective corrugated cardboard (on top of the panel) together with the accessories attached to the backside of the protective corrugated cardboard.

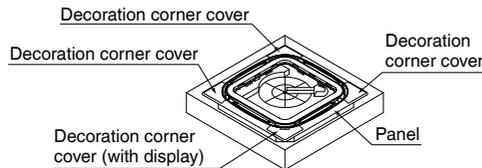


### Note

Do not impose force on the louver, brush unit, or air filter when handling the panel.



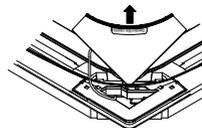
### 5-2 Removal of decoration corner covers



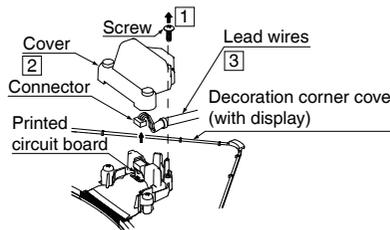
- (1) Raise and remove the decoration corner cover (with the display) in the direction of the arrow.

### Note

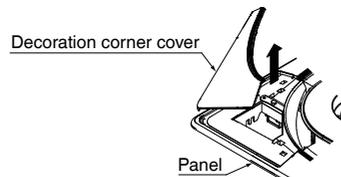
Do not impose force on the lead wires.



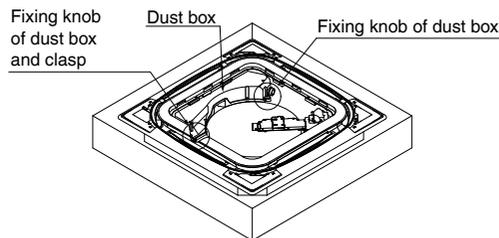
- (2) Remove the screws on the backside of the decoration corner cover (with the display), open the cover, and remove the connector attached to the front end of the lead wires from the printed circuit board.



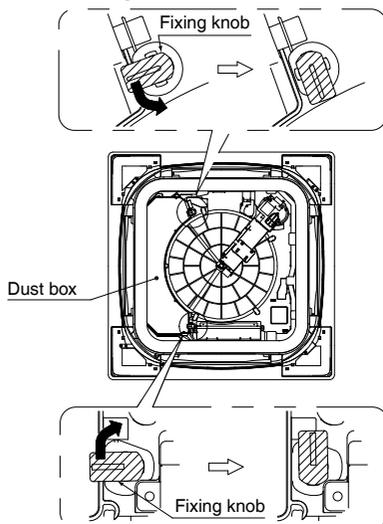
- (3) Remove each of the remaining decoration corner covers (i.e., three covers) in the direction of the arrow.



### 5-3 Removal of dust box

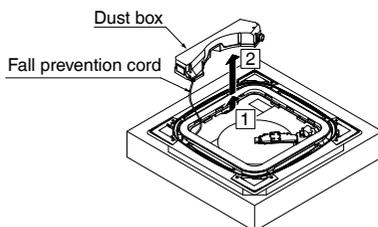


(1) Turn the 2 fixing knobs of the dust box.

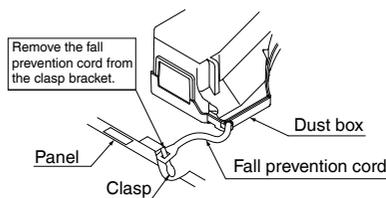


(The front side of the panel is shown for ease of explanation.)

(2) Remove the dust box from the panel while paying attention not to cut the fall prevention cord.



(3) Remove the fall prevention cord for the dust box from the clasp bracket of the panel.



## 6. Preparations for Indoor Unit

### ⚠ WARNING

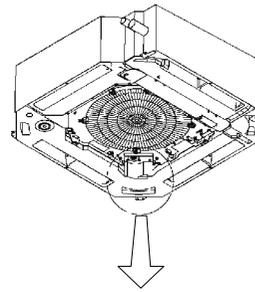
Check that the indoor and outdoor units are turned power off before conducting wiring work.

Otherwise, it may result in an electric shock.

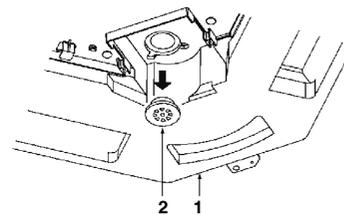
### ⚠ CAUTION

- Conduct the following work after installing the indoor unit.
- Install the indoor unit according to the installation manual provided with the indoor unit.

## 6-1 Attaching spacer (accessory (1))



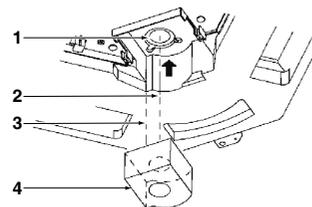
(1) Remove the bypass hole closing cap.



- 1 Indoor unit
- 2 Remove the bypass hole closing cap

(2) Peel off the release paper of the double-stick tape on the backside of the spacer (accessory (1)).

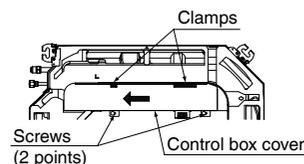
(3) Attach the spacer (accessory (1)) on the air bypass hole. Check that the air bypass hole is not blocked after the spacer is attached.



- 1 Air bypass hole
- 2 Pasted to align with the air bypass hole
- 3 Align the corners
- 4 Spacer (accessory (1))

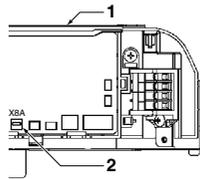
## 6-2 Attaching harness (accessory (4))

(1) Remove the control box cover from the indoor unit.



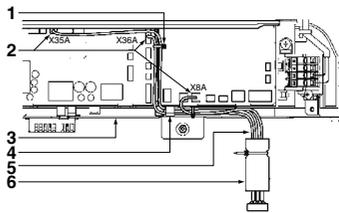
Loosen the screws (in 2 points) and slide the control box cover in the direction of the arrow to unhook the cover from the clamps.

- (2) Remove jumper connector from X8A.



- 1 Control box  
2 Jumper connector

- (3) Connect the harness (accessory (4)) to the connectors (X8A, X35A and X36A) and the three points of the harness on the unit side.



- 1 Harness on the unit side  
2 Connector  
Be sure to connect them securely  
3 Control box  
4 Hook X35A, X36A  
5 Harness (accessory (4))  
6 Glass tube

**Note**

Make sure that the connectors are securely connected, or otherwise the louver, brush unit, or air filter will not work.

**6-3 Attaching control box cover**

Attach the control box cover in the order opposite to the procedure in "6-2 Attaching harness (accessory (4))" on page 5 (1).

**Note**

Make sure that the wires or glass tube will not be caught by the control box cover.

**WARNING**

Arrange the electric wires neatly and attach the control box cover securely.

The electric wires being caught or the rising of the control box cover may result in an electric shock or fire.

**7. Attaching Panel to Indoor Unit**

Install the indoor unit by referring to the installation manual provided with the indoor unit.

**Note**

Do not impose force on the louver, brush unit, or air filter when taking out the panel from the packing material (on the bottom side).

**7-1 Checks before attaching panel**

- Check the directions of the indoor unit and the engraved marks on the panel as shown below.  
The piping block to the **PIPING SIDE** and the drain socket to the **DRAIN SIDE**.
- Stand the temporary latching bracket upright.
- Draw out the lead wires (on the panel side) from the opening.

**7-2 Attaching panel**

- (1) Tentatively put the two temporary latching brackets of the suction port of the panel (on the internal circumference side) to the hooks of the indoor unit.

**Note**

Let go your hands after confirming through the check window that the temporary latching brackets are engaged with the hooks.

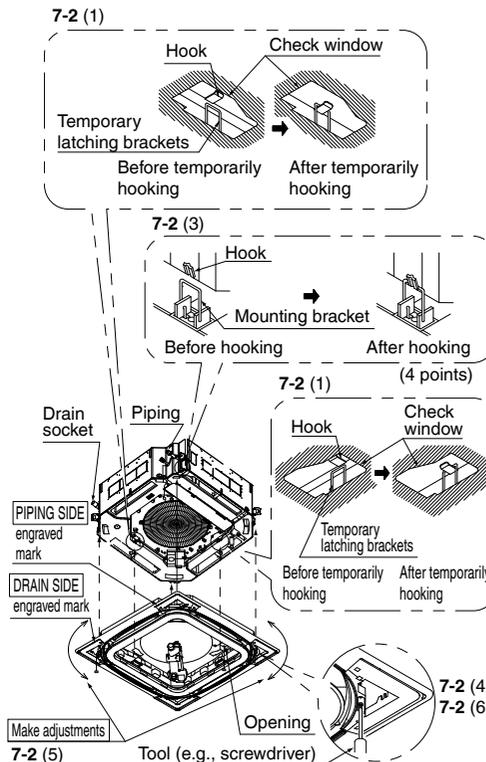
- (2) Remove from the harness opening as described in "6. Preparations for Indoor Unit" on page 5. Pull out the lead wires disconnected from the decoration cover in the corner carefully so that lead wires are not caught by the mounting bracket. See "5. Preparations for Panel" on page 4.
- (3) Put the mounting brackets (in 4 points) on the corners of the panel to the hooks of the circumference of the indoor unit. (Hook the mounting bracket engraved with the **PIPING SIDE** first, followed by the mounting bracket on the opposite angle side.)

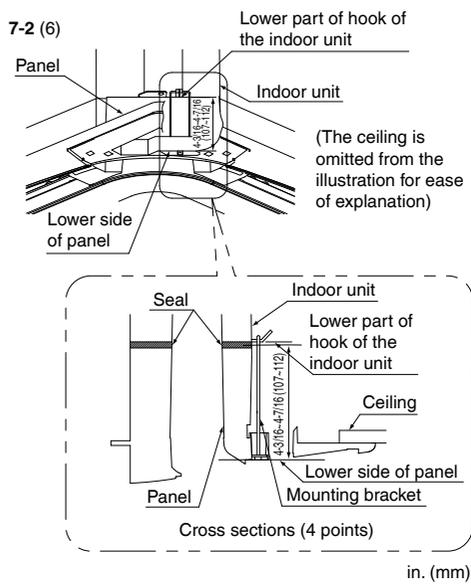
At that time, pay attention that the harness and lead wires (on the panel side) will not be caught between the panel and indoor unit.

**Note**

Let go your hands after confirming that the mounting brackets are engaged with the hooks.

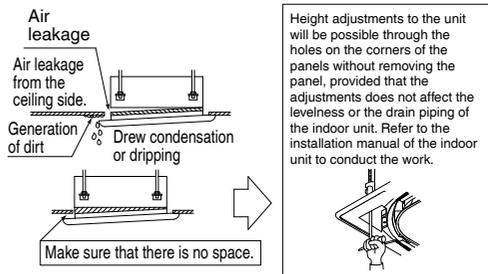
- (4) Tighten the four hexagon head screws right under the mounting bracket for approximately 3/16 in. (5 mm.) (The panel will move upward.)
- (5) Turn the panel in the directions of the arrows so that the opening on the ceiling will be perfectly covered by the panel.
- (6) Furthermore, tighten the screw (4) until the distance from the lower part of the hook of the indoor unit to the lower part of the panel becomes 4-3/16 (107) to 4-7/16 in. (112 mm.)





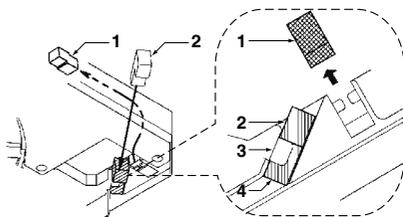
**Note**

- Tighten the screws securely, or otherwise a defect as shown below may result.
- Readjust the height of the indoor unit if there is a space between the ceiling and panel with the screws tightened securely.



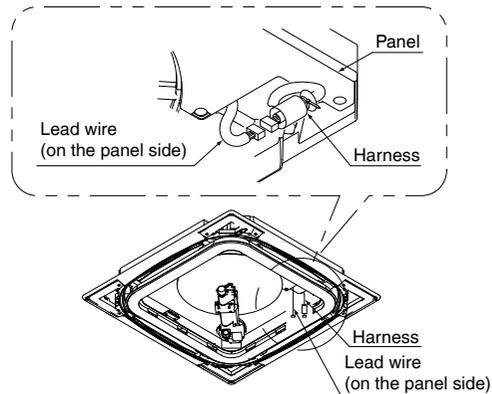
**7-3 Checking panel**

(1) Remove sealing of panel.

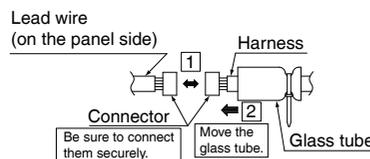


- 1 Remove seal of panel
- 2 Insert the seal until the seal comes in contact with the clamp
- 3 Clamp
- 4 Sealing (accessory (6))

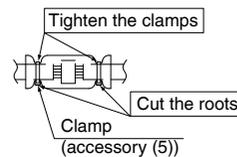
(2) Draw the harness and lead wires (on the panel side).



(3) Connect the connector of the lead wires and move the glass tube to cover the connector part.



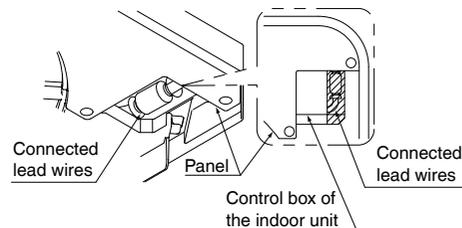
(4) Tighten and secure both ends of the glass tube with the clamps on the glass tube together with provided clamps (accessories (5)). Cut the excess portions of the clamps from their roots after the both ends are secured.



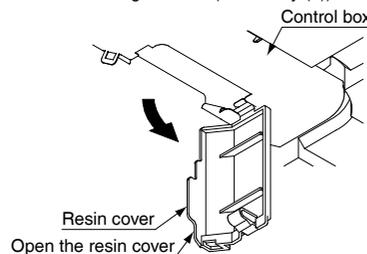
(5) Return the connected lead wires to the space between the indoor unit and panel. (Accommodate the lead wires in the shaded part shown in the illustration.)

**Note**

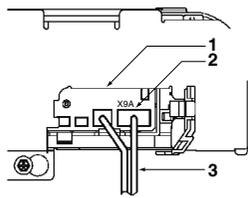
Accommodate the lead wires carefully so that the lead wires do not come in contact with the air filter.



(6) Remove the control box cover from the indoor unit. Refer to "6-2 Attaching harness (accessory (4))" on page 5.

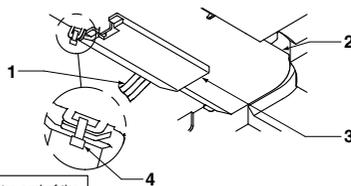


- (7) Connect the swing lead wire connector to the Printed circuit board.



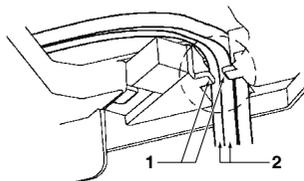
- 1 Printed circuit board
- 2 Connect the swing lead wire connector to the Printed circuit board  
Be sure to connect them securely.
- 3 Swing lead wire (to X9A)

- (8) Attach the control box cover in the order opposite to the procedure in "6-2 Attaching harness (accessory (4))" on page 5.



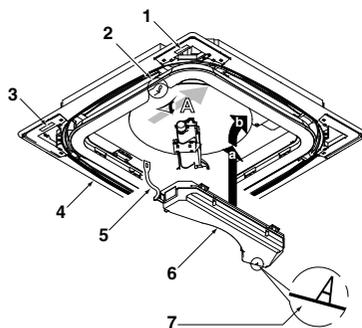
- 1 Swing motor lead wire, sensor lead wire, harness (1)
- 2 Control box
- 3 Close the resin cover
- 4 Secure with the clamp (accessory (5))

- (9) Guide the lead wires through the hook.



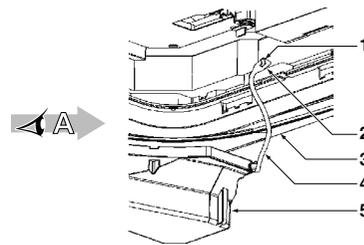
- 1 Hook
- 2 Guide the wires through the hook

#### 7-4 Attaching dust box



- 1 Engraved mark on piping side
- 2 Panel clasp
- 3 Engraved mark on drain side
- 4 Panel
- 5 Fall prevention cord
- 6 Dust box
- 7 Mount the dust box with the side where the mark is engraved faced downward.

- (1) Hook the fall prevention cord for the dust box to the panel clasp as shown in the illustration.



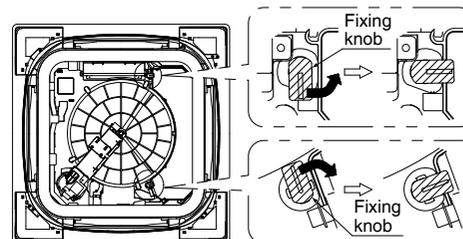
- 1 Clasp
- 2 Hooked fall prevention cord
- 3 Panel
- 4 Fall prevention cord
- 5 Dust box

- (2) Attach the dust box in the order opposite to the procedure in "5-3 Removal of dust box" on page 4.

#### Note

Make sure that the fall prevention cord is not caught by the exhaust opening on the dust box when attaching the dust box. Otherwise, the dust box may not function normally.

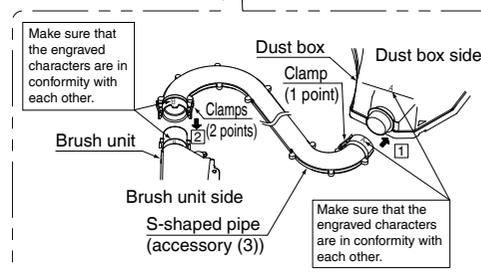
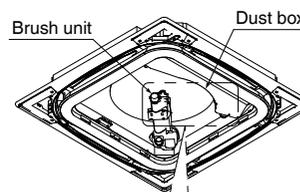
- (3) Turn the fixing knobs (in 2 points) of the dust box and secure the dust box.



(The front side of the panel is shown for ease of explanation.)

#### 7-5 Mounting S-shaped pipe (accessory (3))

Mount the dust box side (engraved with A) before mounting the brush side (engraved with B).  
(Mount them so that the engraved characters will be in conformity.)



#### Note

Check that the clamps are engaged securely. Otherwise, a dust collection failure may result.

## 8. Attaching Suction Grille and Decoration Corner Covers

The suction grille can be rotated and attached in two directions, either one of which is selectable.  
If a number of units are installed, adjust the directions of the suction grilles if necessary. Make directional changes as well at the request of the customer.

### 8-1 Attaching suction grille

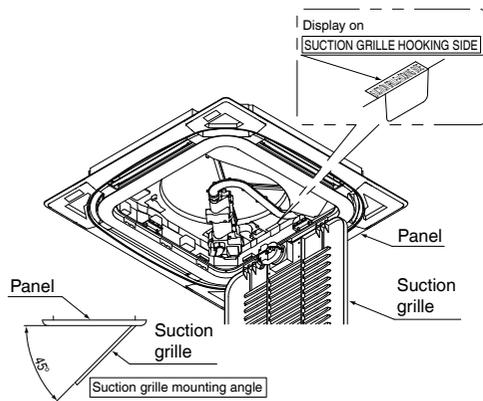
\* Select either the hook (A) or (B), and hook the clamps of the suction grille.

**Note** 

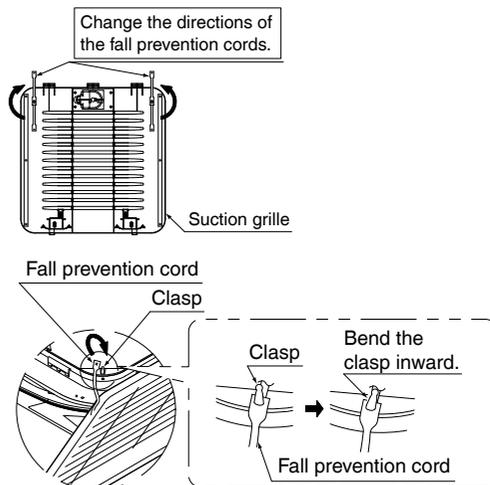
The suction grille may be damaged if the wrong hooking side is selected.

### 8-2 Hook (A)

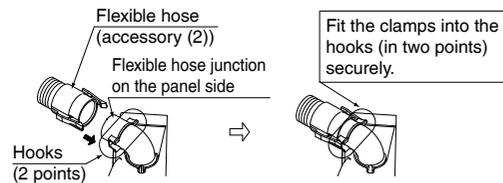
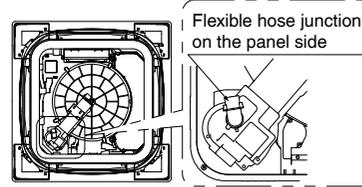
- (1) Set the suction grille to an angle of approximately 45° and put the hooks (in three points) onto the panel.



- (2) As shown in the illustration, hook the fall prevention cords for the suction grille to the corner clasps (on 2 corners).



- (3) Connect the flexible hose (accessory (2)) onto the panel side.  
(The flexible hose (accessory (2)) has no directionality constraint.)



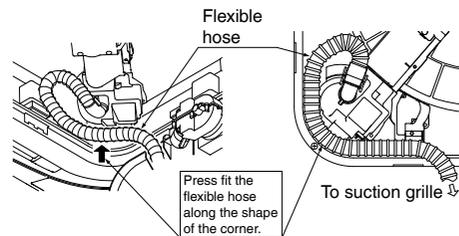
**Note** 

Check that the clamps are engaged securely. Otherwise, a dust collection failure may result.

- (4) Press fit the flexible hose connected in (3) into the panel.  
(Make sure that the hose will not be caught while closing the suction grille.)

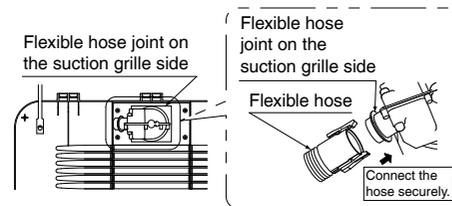
**Note** 

Be sure not to break the flexible hose when press fitting the flexible hose.



- (5) Connect the opposite end of the flexible hose connected in (3) onto the suction grille side.

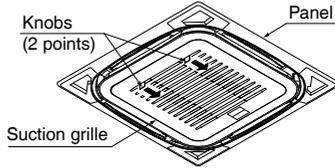
\* Rotate the flexible hose joint on the suction grille side according to the mounting direction of the suction grille as shown in the illustration.



**Note** 

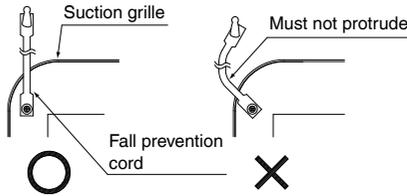
Check that the clamps are engaged securely. Otherwise, a dust collection failure may result.

- (6) Push up the suction grille slowly first, and while pressing the two knobs, finally fit the grille into the panel securely.



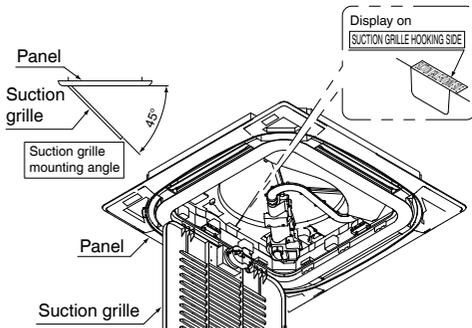
**Note**

The suction grille can catch the fall prevention cords while the suction grille is closed. Check that the fall prevention cords do not protrude from the suction grille before closing the suction grille.

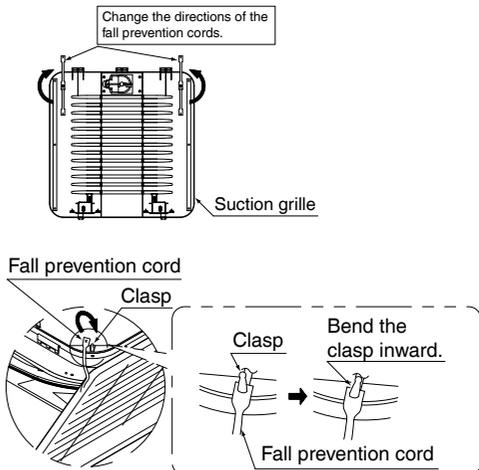


**8-3 Hook (B)**

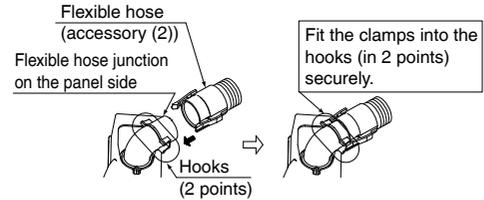
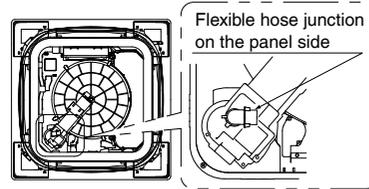
- (1) Set the suction grille to an angle of approximately 45° and put the hooks (in 3 points) onto the panel.



- (2) As shown in the illustration, hook the fall prevention cords for the suction grille to the corner clasps (on 2 corners).



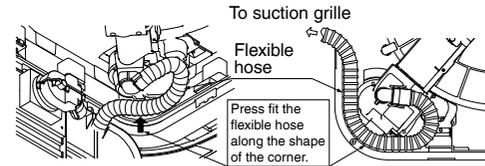
- (3) Connect the flexible hose (accessory (2)) onto the panel side. (The flexible hose (accessory (2)) has no directionality constraint.)



**Note**

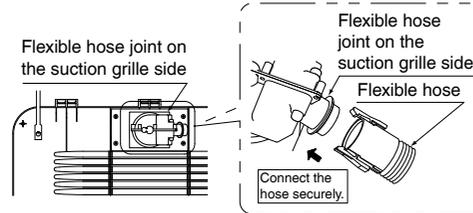
Check that the clamps are engaged securely. Otherwise, a dust collection failure may result.

- (4) Press fit the flexible hose connected in (3) into the panel. Make sure that the hose will not be caught while closing the suction grille.



- (5) Connect the opposite end of the flexible hose connected in (3) onto the suction grille side.

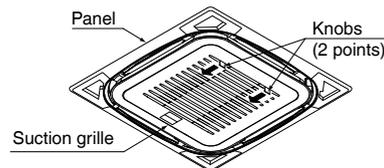
\* Rotate the flexible hose joint on the suction grille side according to the mounting direction of the suction grille as shown in the illustration.



**Note**

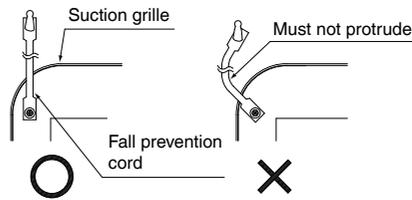
Check that the clamps are engaged securely. Otherwise, a dust collection failure may result.

- (6) Push up the suction grille slowly first, and while pressing the two knobs, finally fit the grille into the panel securely.

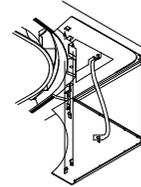


**Note**

The suction grille can catch the fall prevention cords while the suction grille is closed. Check that the fall prevention cords do not protrude from the suction grille before closing the suction grille.



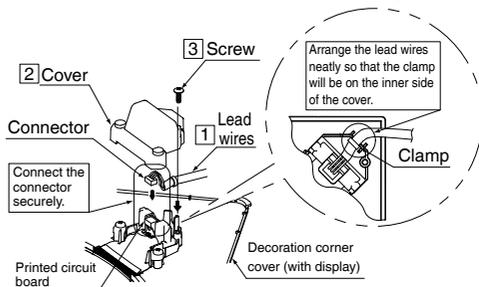
(4) Attach the decoration corner covers (i.e., the three covers) to the panel.



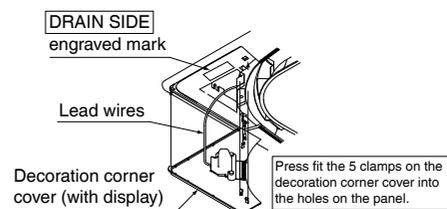
Press fit the five clamps on the decoration corner cover into the holes on the panel.

**8-4 Attaching decoration corner covers**

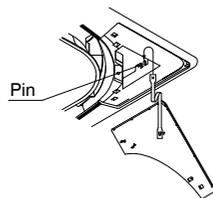
(1) Connect the decoration corner cover (with the display) securely to the Printed circuit board in the order opposite to the procedure in "5. Preparations for Panel" on page 4.



(2) Attach the decoration corner cover (with the display) to the corner with the **DRAIN SIDE** engraved mark. Push the connected lead wires through the corner hole onto the backside of the ceiling.



(3) Hook each of the cords of the remaining decoration corner covers (i.e., three covers) onto the corresponding pin on the panel.



**9. Operation Mode Settings**

Any one of the following operation modes can be selected for the filter auto-cleaning of the self-clean panel.

Operation mode	Description
(1) Scheduled timer operation	Performs filter auto-cleaning during the designated period selected from eight periods. (factory-set period of time (12:00A-3:00A))
(2) Auto control operation	Performs filter auto-cleaning according to the control reference.

In consultation with the customer, set the desired operation mode by referring to the instructions on **Filter Auto Clean** in the operation manual for the Self Cleaning decoration panel. At the time of delivery, refer to the contents of descriptions (1) through (2) in the above table and explain the customer when filter auto-cleaning will start.

**10. Field Settings**

Make settings in consultation with the customer according to the installation and usage conditions of the air conditioner. The following three settings are possible.

**10-1 Dust quantity settings**

- Make settings according to the quantity of dust in the room.
- Standard quantity of dust (General offices)
  - Large quantity of dust (Stores dealing in clothing)

**10-2 Panel indicator (green) On/Off**

The panel indicator (green) can display the following operating conditions. Make indicator settings according to the request of the customer.

Indicator	Operating conditions	Remarks
Green	Lit	Air-conditioning operation
	Flashing	Filter auto-cleaning

The red lamp to inform the customer of the time of dust collection will not be turned off.

Make field settings according to the installation manual of the remote controller. (Settings in bold cells are made before shipping.)

Setting item	Mode No.	FIRST CODE NO.	SECOND CODE NO.			
			01	02	03	04
Display Dust Collection sign 1	10 (20)	(3)	Display	No display	-	-
Dust quantity settings	14 (24)	(9)	Standard quantity of dust	Large quantity of dust	-	-
Panel indicator (green) on/off	14 (24)	(4)	On while in air-conditioning operation and filter cleaning operation.	Possible to turn on while in filter cleaning operation only.	Off while in air-conditioning operation and filter cleaning operation.	-

### 11. Test Operation

Perform the test operation of the Self Cleaning decoration panel after the test operation of the indoor unit is finished. The test operation of the Self-Cleaning Decoration Panel is not possible while the indoor unit is in operation.

**Note** 

Perform the test operation of the product after referring to "a. Test items on completion of work".

#### 11-1 Check that the control box covers of the indoor unit, outdoor unit, and self-clean panel, respectively, are closed

#### 11-2 Turn the indoor unit power on

The panel will go into initialization operation after the power is turned on.

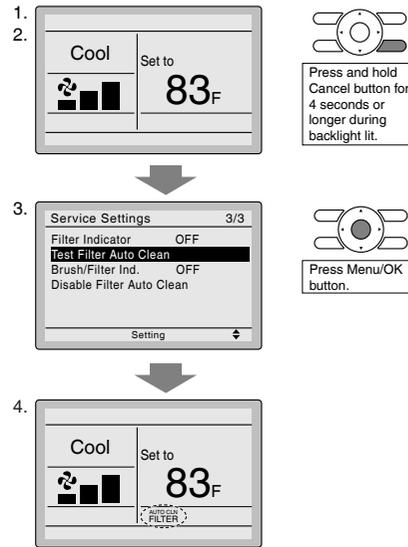
#### 11-3 Conduct the test operation of the panel 2 minutes after the power is turned on

Confirm the cleaning operation of the filter with the remote controller.

**Test operation method with remote controller**

1. Stop the operation of the panel if the panel is in air-conditioning operation.
2. Continue pressing the Cancel button at least 4 seconds while the backlight is lit. The service settings menu will appear.
3. Select **Test Filter Auto Clean** from the service settings menu, and press the Menu/OK button.
4. "AUTO CLEAN FILTER" will appear on the basic screen.  
The display will disappear when the test operation is finished. The required test operation time is approximately 10 minutes (in the case of setting the standard quantity of dust).

This remote controller is the BRC1E73 model. Other remote controllers may vary in display.



**Backlight for LCD**

Press any button and the backlight will be lit for approximately 30 seconds. Perform the operation of buttons while the backlight is lit (except the On/Off button).

**Test items on test operation**

Test items	Remedy	Check result
Is the filter rotating?	Check the connector connections.	
Are the louvers fixed horizontally?		
Is "AUTO CLEAN FILTER" displayed on the screen of the remote controller?		

\* The remote controller will display "AH" if the self-clean panel has an error.

**Note** 

- After the test operation of the product is finished, refer to "b. Test items before delivery".
- In some models "AH" might appear instead of "AUTO CLEAN FILTER".

# Appendix 2

## Installation of L-shape Extension Pipe

### KKHAP55A160

1. Installation Manual ..... 1

# 1. Installation Manual

## KKHAP55A160

Daikin Air Conditioners L-type Extension pipe Operation Manual

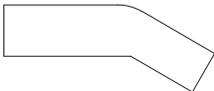
KKHAP55A160

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### CAUTION

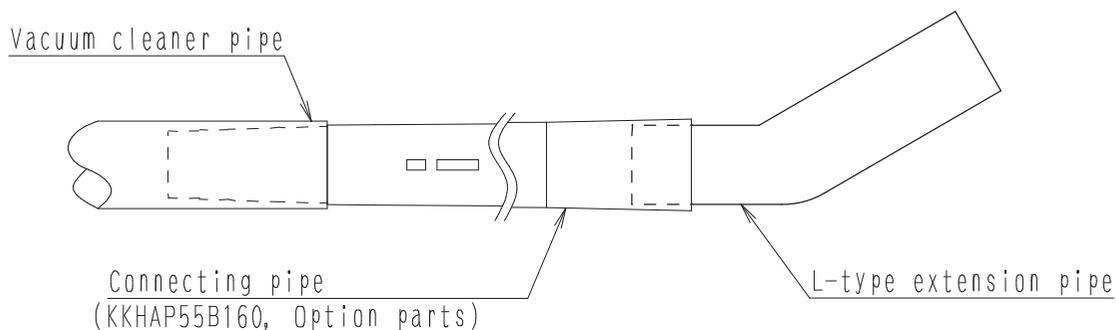
- This product is designed exclusively for use of air conditioners with Self cleaning decoration panels.
- When installing, refer to the section entitled "Removing dust from the dust box" in the Self cleaning decoration panel instruction manual.
- Store the L-type extension pipe with the connecting pipe (KKHAP55B160 : Option parts) attached.
- Store this instruction manual together with the instruction manuals for the Self cleaning decoration panel and the connecting pipe.

**Package contents** Ensure that the package contains the following parts:

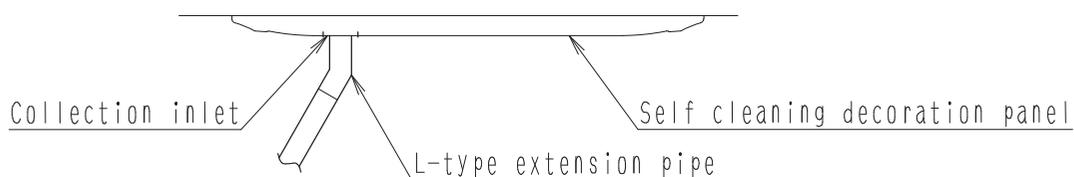
Name	L-type extension pipe	Instruction manual
Shape		
Quantity	1	1 (this manual)

### 1 Instruction

- (1) Attach the L-type extension pipe along with the connecting pipe (KKHAP55B160) (Option parts) to the tip of the vacuum cleaner pipe.



- (2) Insert the L-type extension pipe with the pipe tip faced right below the collection inlet of the suction grill.



# Appendix 3 Installation of Replacement Filter for Self Cleaning Decoration Panel KAFP554A160

1. Installation Manual ..... 1

# 1. Installation Manual

## KAFP554A160

### Daikin Air Conditioners Replacement Air Filter Installation Manual

KAFP554A160

Please read before installing the replacement air filter and follow all instructions.

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#### CAUTION

- This product is designed exclusively for use of air conditioners with Self cleaning decoration panels (BYCP160KGF/KAGF, BYCP160BGF/BAGF/BEGF, and BYCQ125BGW1).
- When installing, refer to the indoor unit's installation manual.

#### Package contents

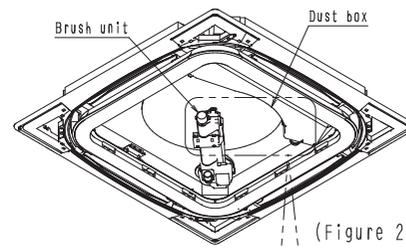
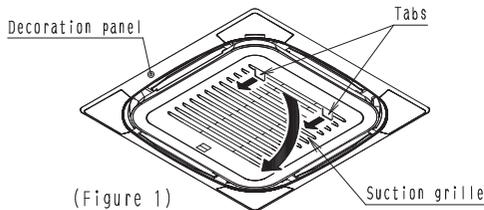
Ensure that the package contains the following parts:

Name	Replacement air filter	Installation manual
Shape	1 	2 
Quantity	1	1 (this instructions)

### 1 Preparation before replacing the air filter

#### <1> Open the suction grille.

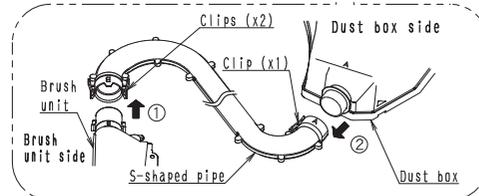
Push up on the two tabs on the suction grille and open it. (See Figure 1.)



#### <2> Remove the S-shaped pipe.

Remove the S-shaped pipe as described below. (See Figure 2.)

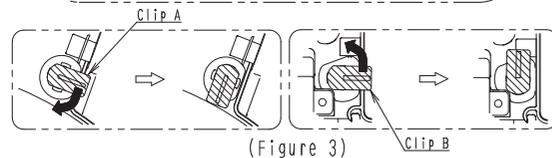
- (1) Disconnect the S-shaped pipe from the brush unit side (the side marked with "B") by pulling on it while pressing down on the clips on the end of the pipe.
- (2) Disconnect the S-shaped pipe from the dust box side (the side marked with "A") by pulling on it while pressing down on the clip on the end of the pipe.



#### <3> Remove the dust box.

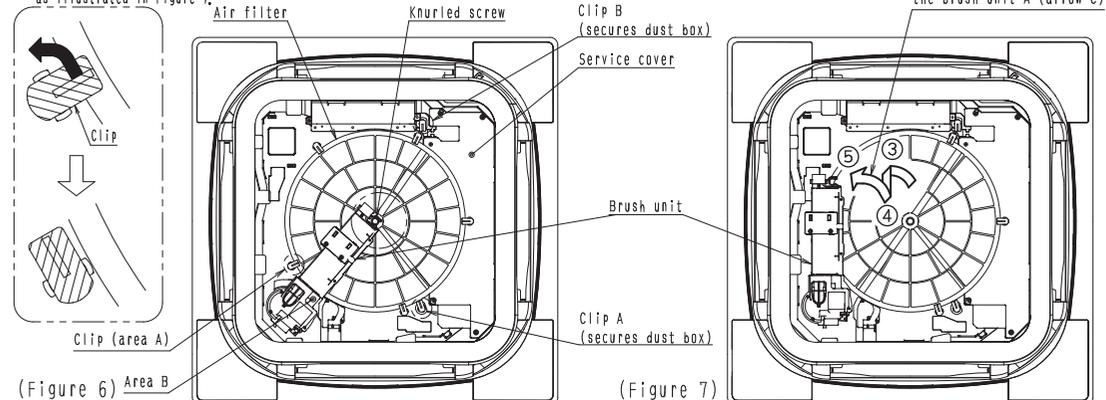
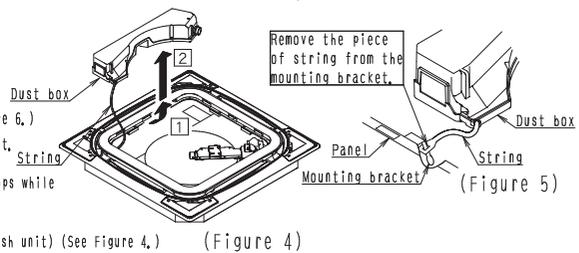
Remove the dust box as described below.

- (1) Rotate the two clips that hold the dust box in place. (See Figures 3 and 6.)
- (2) Remove the dust box without cutting the string that prevents the panel from falling off. (See Figure 4.)
  - a. Tilt the dust box about 45°
  - b. Remove the dust box.
- (3) Detach the piece of string from the panel mounting bracket. (See Figure 5.)



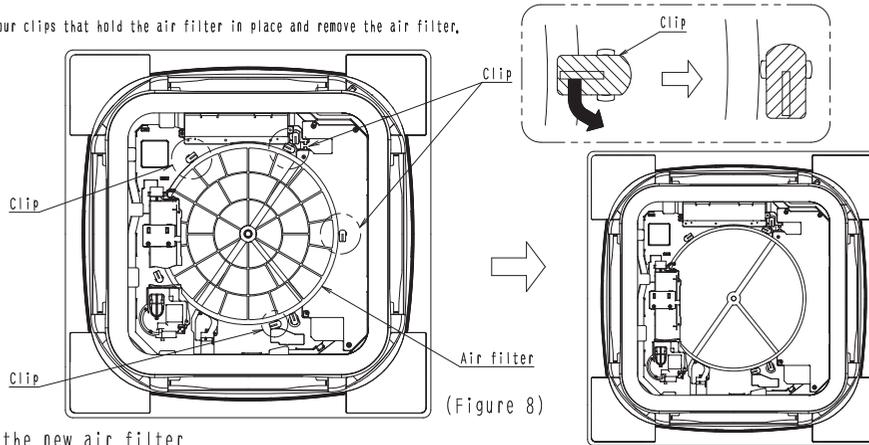
#### <4> Move the brush unit.

- (1) Rotate the clip in area (A) that holds the air filter in place. (See Figure 6.)
- (2) Turn the knurled screw in the center of the air filter by hand to loosen it. (See Figure 6.) (Do not remove the knurled screw.)
- (3) Rotate the brush unit in the direction indicated by arrow (C) until it stops while pushing up on area (B). (See Figure 7.)
- (4) Pull down slightly the entire brush unit away from the air filter (About 20 mm (3/4 in.) gap will open up between the air filter and the brush unit) (See Figure 4.)
- (5) Rotate the brush unit from its orientation at the end of step (4) until it is positioned as illustrated in Figure 7.



## 2 Replacing the air filter

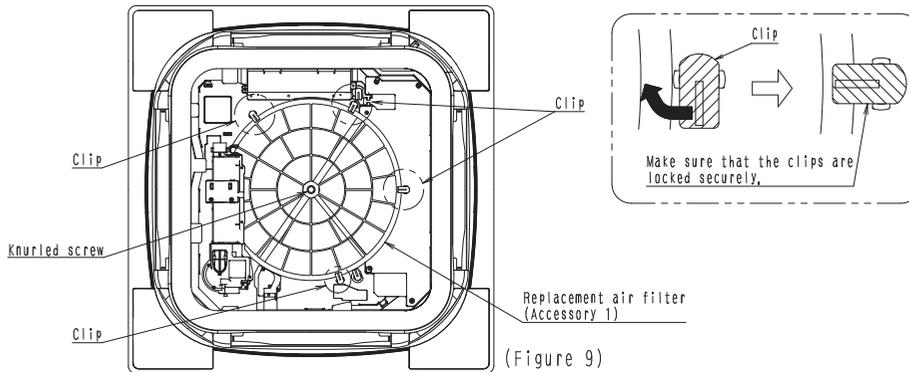
(6) Rotate the four clips that hold the air filter in place and remove the air filter.



(Figure 8)

<5> Install the new air filter

- (1) Place the replacement air filter (Accessory 1) onto the knurled screw.
- (2) Rotate the clips to lock the filter in place by reversing step <4>-(6) above.
  - Make sure that the clips are locked in the orientation shown in the figure.
  - Failure to do so may result in damage to the air filter



(Figure 9)

- (3) Return the brush unit to its original position by reversing steps <4>-(1) through <5> above and tighten the knurled screw.
  - When proceeding from step (4) to step (3), be sure to push up on area B toward the air filter before rotating the brush unit. Failure to do so may result in damage to the filter unit.
  - Attach the brush unit securely.
  - Failure to do so may result in damage to the air filter or cause the air conditioner to malfunction.
- (4) Lock the clips in area (A) shown in Figure 6 by repeating step (2) above.
  - Make sure that the clips are locked in the orientation shown in the figure.
  - Failure to do so may result in damage to the air filter

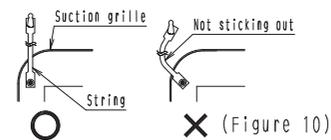
## 3 After replacing the air filter

<1> Attach the dust box and S-shaped pipe

Reattach the dust box and S-shaped pipe by reversing the steps described in "3" Remove the dust box " and "2" Remove the S-shaped pipe" under

### 1 Preparation before replacing the air filter

- Attach the dust box securely.
- Failure to do so may prevent dust from being collected properly.
- Verify that the clips on the S-shaped pipe are securely engaged.
- Failure to do so may prevent dust from being collected properly.



<2> Close the suction grille.

Close the suction grille by reversing the steps described in "1" Open the suction grille" under 1 Preparation before replacing the air filter

- When closing the suction grille, the piece of string that keeps the panel from falling off could become caught between the grille and the air conditioner frame. (See Figure 10.) Before closing the grille, make sure that the string is not hanging out of the suction grille.

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1P367830-1A











**Warning** ● Ask a qualified installer or contractor to install this product. Do not try to install the product yourself.



Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion.

- Use only those parts and accessories supplied or specified by Daikin. Ask a qualified installer or contractor to install those parts and accessories. Use of unauthorised parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Read the user's manual carefully before using this product. The user's manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

If you have any inquiries, please contact your local importer, distributor and/or retailer.

### **Cautions on product corrosion**

1. Air conditioners should not be installed in areas where corrosive gases, such as acid gas or alkaline gas, are produced.
2. If the outdoor unit is to be installed close to the sea shore, direct exposure to the sea breeze should be avoided. If you need to install the outdoor unit close to the sea shore, contact your local distributor.