

Air Curtains

HAVACO®

Installation manual

DELTA 100-A

DELTA 150-A

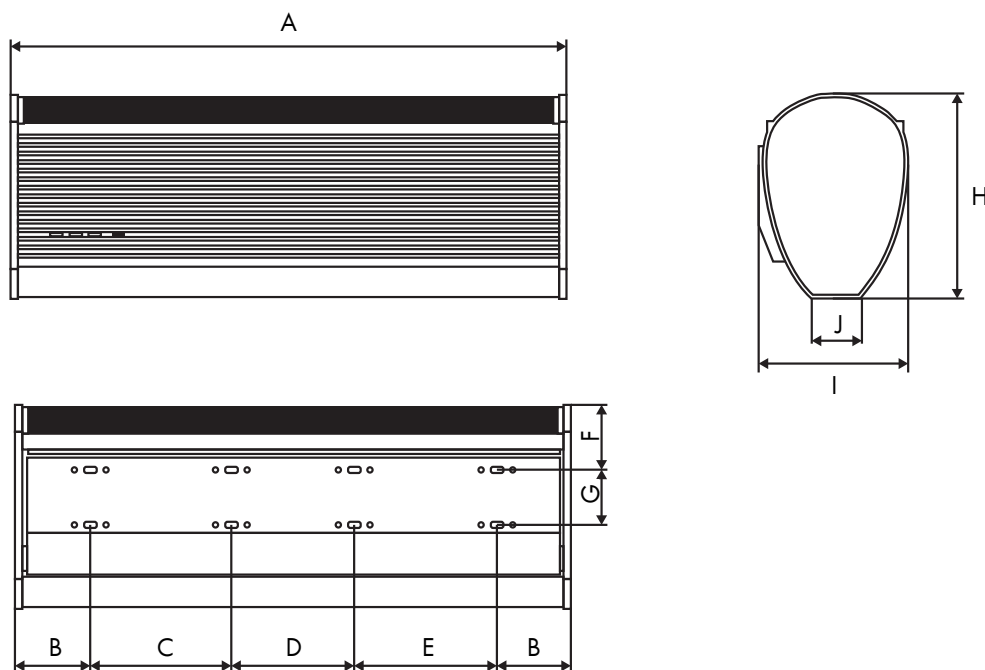
DELTA 200-A

Thanks for purchasing this Air Curtain,
Please read these instructions carefully before use.

1. PRODUCT INTRODUCTION

Air curtains are the new top-class products used as a part of modern interiors, cooperating with ventilation and air conditioning systems. Units are installed at the entrances of supermarkets, theatres, meeting rooms, hotels, office rooms, storerooms, etc. to protect heated areas against entering the cold air inside (in winter) and against the warm air entering into the air conditioned areas (in summer). Additional function is prevention against the dust, mosquito and nocuous air.

2. IDENTIFICATION & INSTALLATION DIMENSIONS

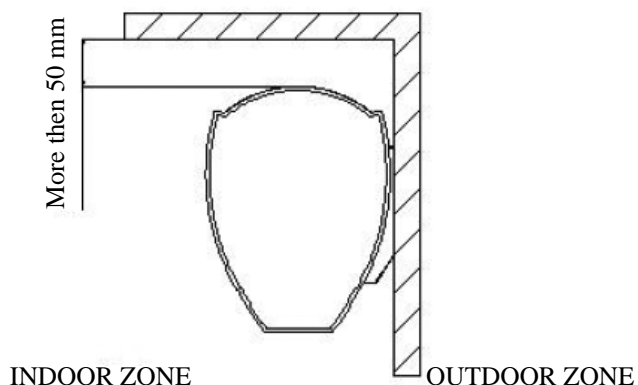


MODEL	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]	J [mm]
DELTA 100-A	1000	102,5	695	--	--	91	90	280	215	56
DELTA 150-A	1500	105,0	390	505	390					
DELTA 200-A	2000	107,5	500	500	500					

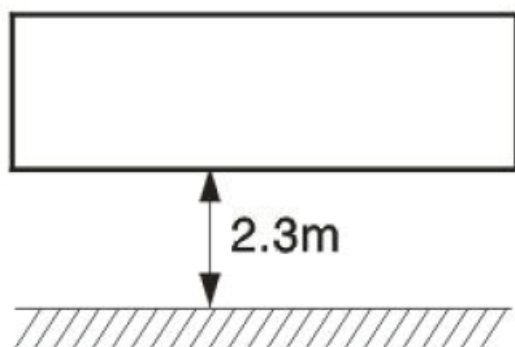
3. INSTALLATION CAUTION

Follow below recommendations when installing the air curtain:

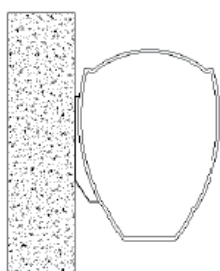
- 3.1 Please install the unit in a stable place to avoid the shaking and ensure its security (because it maybe causes vibrations, loosening or noise).
- 3.2 Please install the unit inside the room.



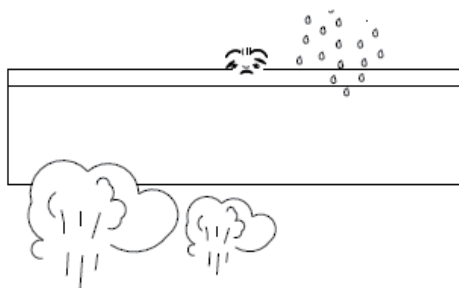
- 3.3 Don't install the unit too low, no less than 2.3 meter from the ground. When the entrance is wider than the unit, it is recommended to install two or more units in parallel. In this case, provide 20-40 mm gaps between the units.



- 3.4 Install the unit using supplied mounting plate. When hanging it from the ceiling, use the enclosed ceiling brackets.



- 3.5 Don't install the unit in a place where it can be exposed to splashing water, excessive steam, explosive gas or corrosive gas.

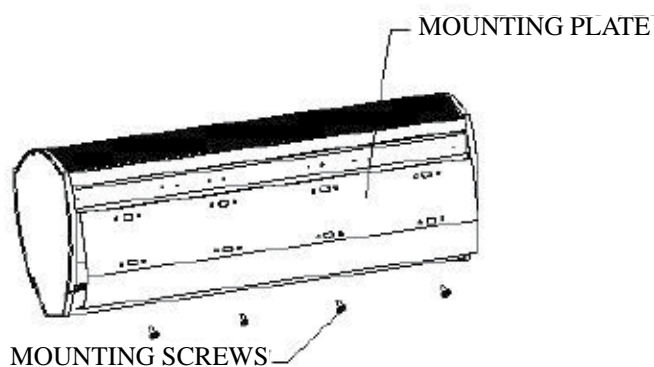


4. INSTALLATION

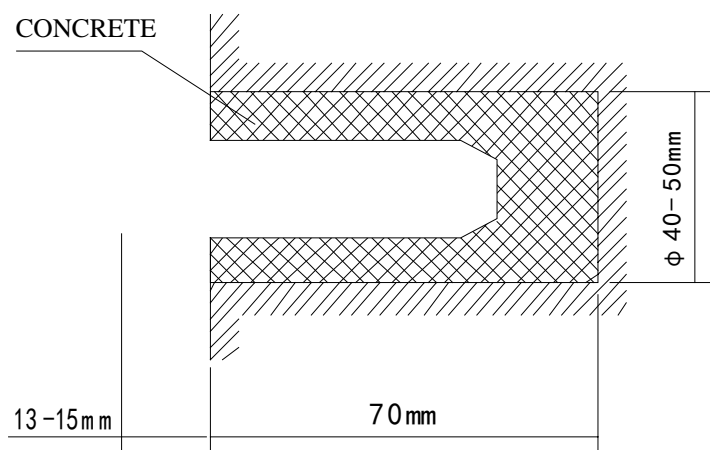
A. Installing on the concrete wall:

4.1.1 Removing the mounting plate

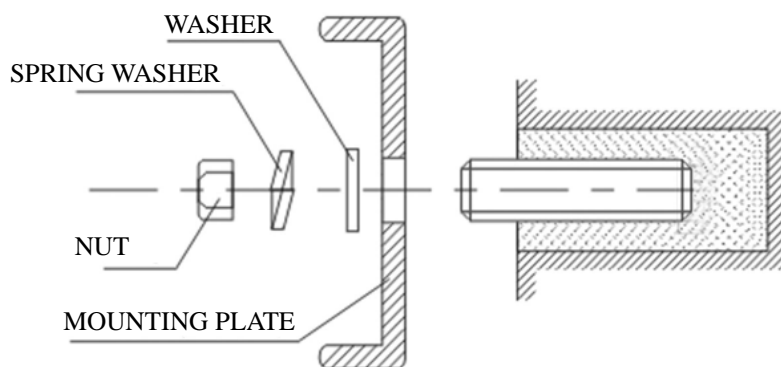
Remove the plastic parts, unclamping the fixed screws on the back of main body to remove the mounting plate.



4.1.2 Drill out the holes for the dowels or plugs (proper position in accordance with the mounting plate):

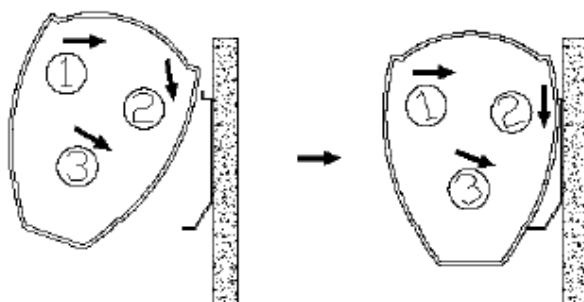


4.1.3 Fit the mounting plate (use dowels or plugs for concrete, washers and nuts according to the below drawing):



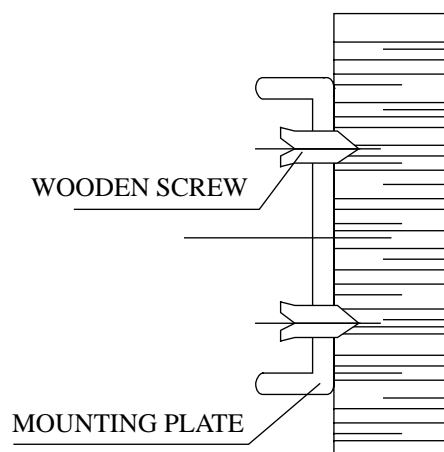
4.1.4 Install the main body

Set the main body onto the upper part of the mounting plate and clamp it as shown below. Tighten the screws to fix air curtain and mounting plate:

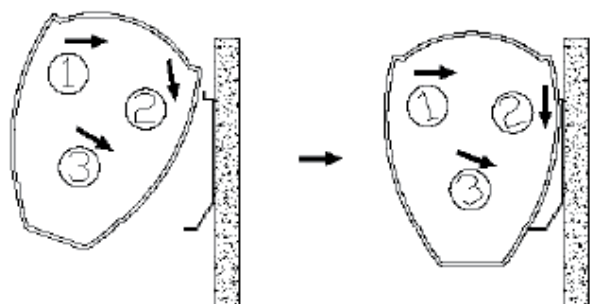


B. Installing on the wooden wall

4.2.1 Fix the mounting plate in the proper positions with tapping screw.

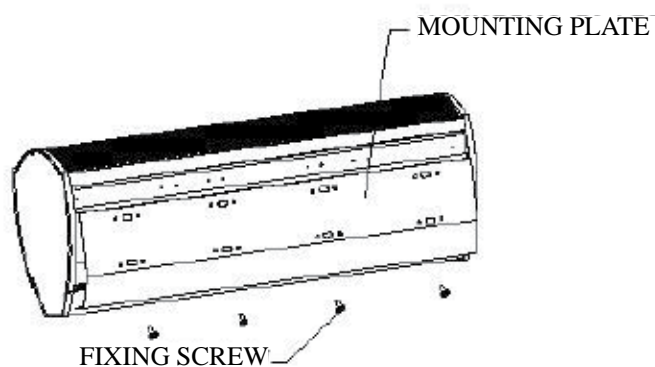


4.2.2 Follow according to the step 4 of part A

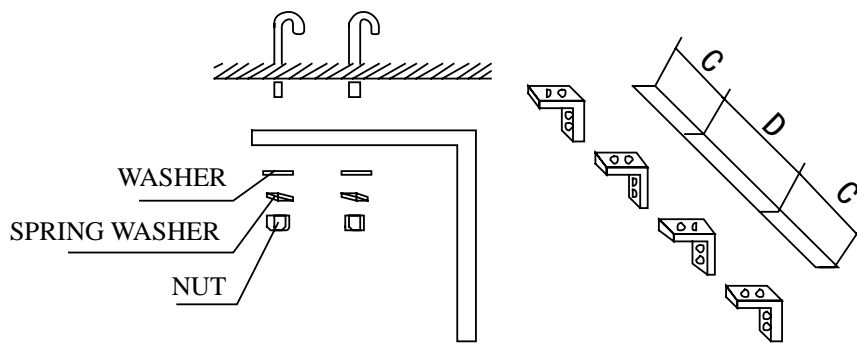


C. Hanging from the ceiling

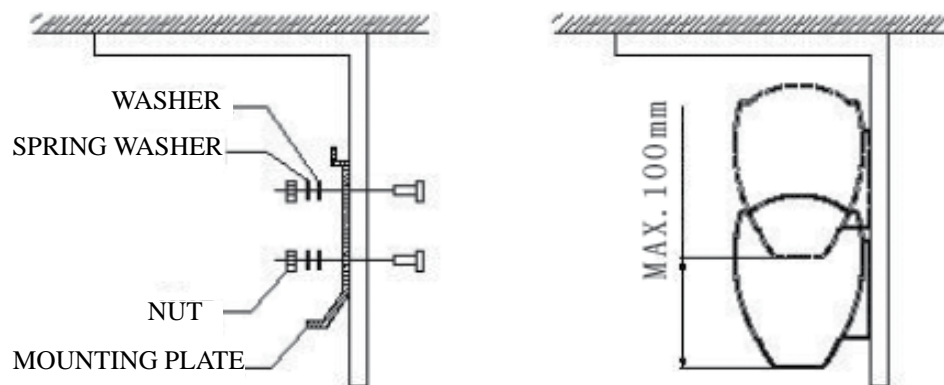
4.3.1 Remove the mounting plate from main body (look at the step 4.1.1)



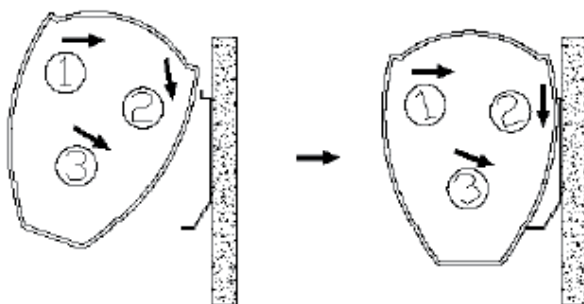
4.3.2 Fixing of the ceiling brackets (which are not a part of a delivery), as shown below:



4.3.3 Set and tighten the mounting plate on the ceiling brackets:



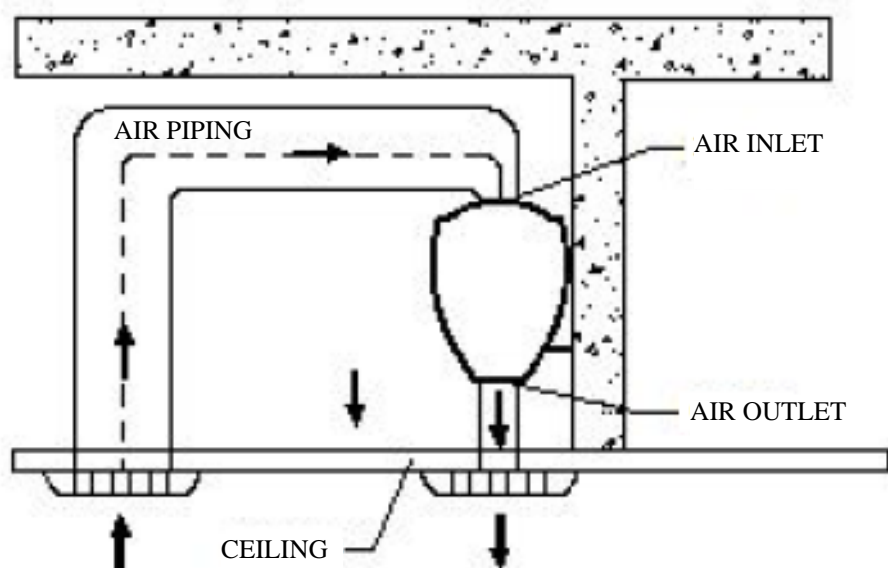
4.3.4 Install the main body, according to part A of such manual:



D. For above ceiling

4.4.1 Fix the air curtain as in the procedure for installing on the concrete wall.

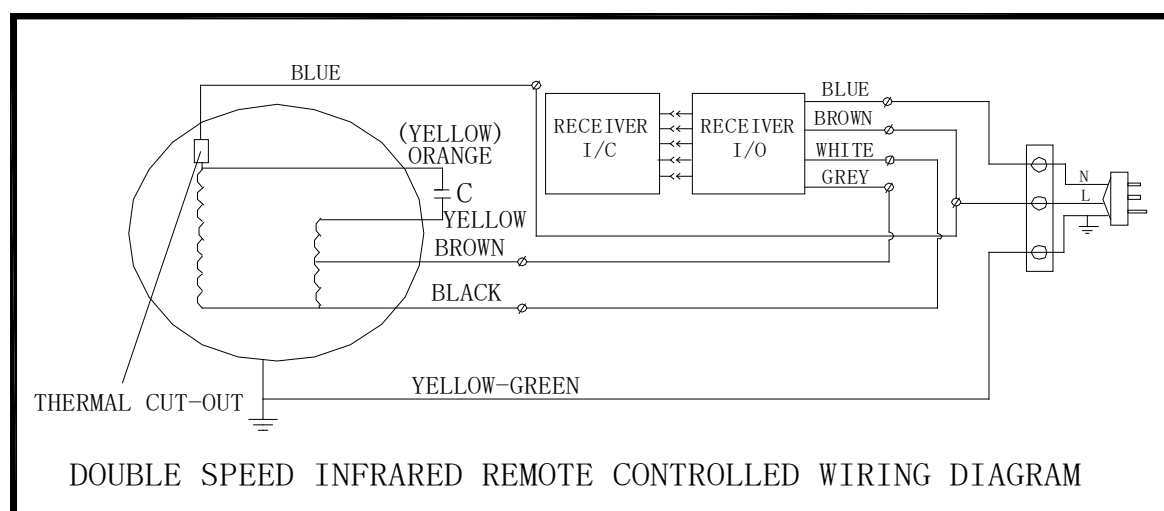
4.4.2 Lead the inlet air duct (according to below drawing) or install only inlet grille in the underceiling (without duct)



5. TECHNICAL PARAMETERS

MODEL	Volt. / Freq [V~/Hz]	Motor power [W]	Max. air speed [m/s]		Air volume [m³/h]		Noise level [dB]		Net weigh [Kg]
			min.	max.	min.	max.	min.	max.	
DELTA 100-A	230/50	180	8,0	10,0	1400	1700	55	57	13,0
DELTA 150-A		230			2200	2700	57	59	17,0
DELTA 200-A		350	7,5	9,0	2800	3350	58	60	21,5

6. WIRING DIAGRAM



7. OPERATION OF THE DEVICE

- 7.1 Turn on the power switch
- 7.2 Select the proper fan speed: High[H], Low[L]
- 7.3 According to the installation place, adjust the air deflectors direction to obtain the best effect.

8. CAUTIONS

- a) Use the unit at the right voltage and frequency indicated on the nameplate.
- b) Disconnect power source before unit operation.
- c) Routing maintenances must be done twice every year.
- d) Never use petrol, benzene, thinner or any other chemicals for cleaning the unit.
- e) Do not allow ingress of water or other substances to the motor.
- f) When power supply comes from socket, the plug must accord with IEC60335-1.
- g) When the power cord is connected with charging line directly, all polarity switches that the contact gap is 3 mm at least must be installed in the charging line.
- h) In order to avoid the injury, all work must be performed by a qualified person In accordance with current regulations in a given country.