

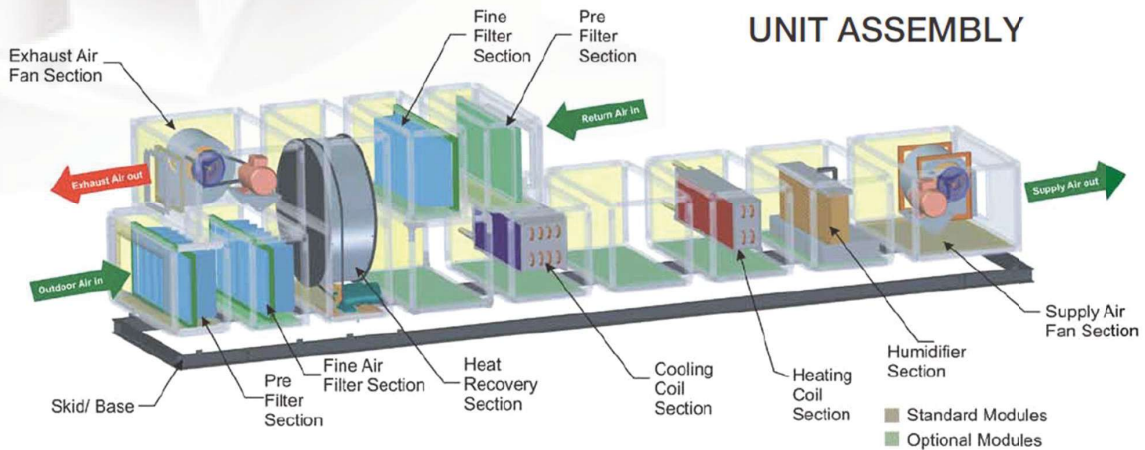
AIR HANDLING UNITS

Introduction

Double Skin Air Handling Units that are designed and manufactured for use in various applications from commercial, institutional, and industrial buildings.

With the constant focus on high quality, our Air Handling units are Robust and Reliable in construction. We are determined to meet the project requirements and render solutions that can be customized based on the design. We source from the reliable suppliers and offer the shortest lead time.

The Quality Management System of these Air Handling Units conforms to ISO 9001:2015. Aire Maskin Air handling units have been specified and accepted by consultants, contractors and building owners.



Constructional Features

Casing

Aire Maskin AHUs are manufactured in Modular construction. Frame is composed of hollow extruded Aluminum Anodized profiles that outlines the AHU edges perfectly resulting in Sturdy and seamless finish.

Panels are of double skin construction with Pre coated Galvanized steel as outer skin and Plain Galvanized Steel as inner skin. However, it can be customized as per the customer requirement. Insulation material between the two sheets is either machine injected polyurethane foam insulation or rockwool / glass wool to ensure excellent thermal & acoustic insulation.

Double Skin Panels are offered with 25/45 mm thickness chosen as per the tender specification. All plain galvanized sheets used shall have a minimum of 120 / 275 gsm Zinc Coating for anti-corrosion.

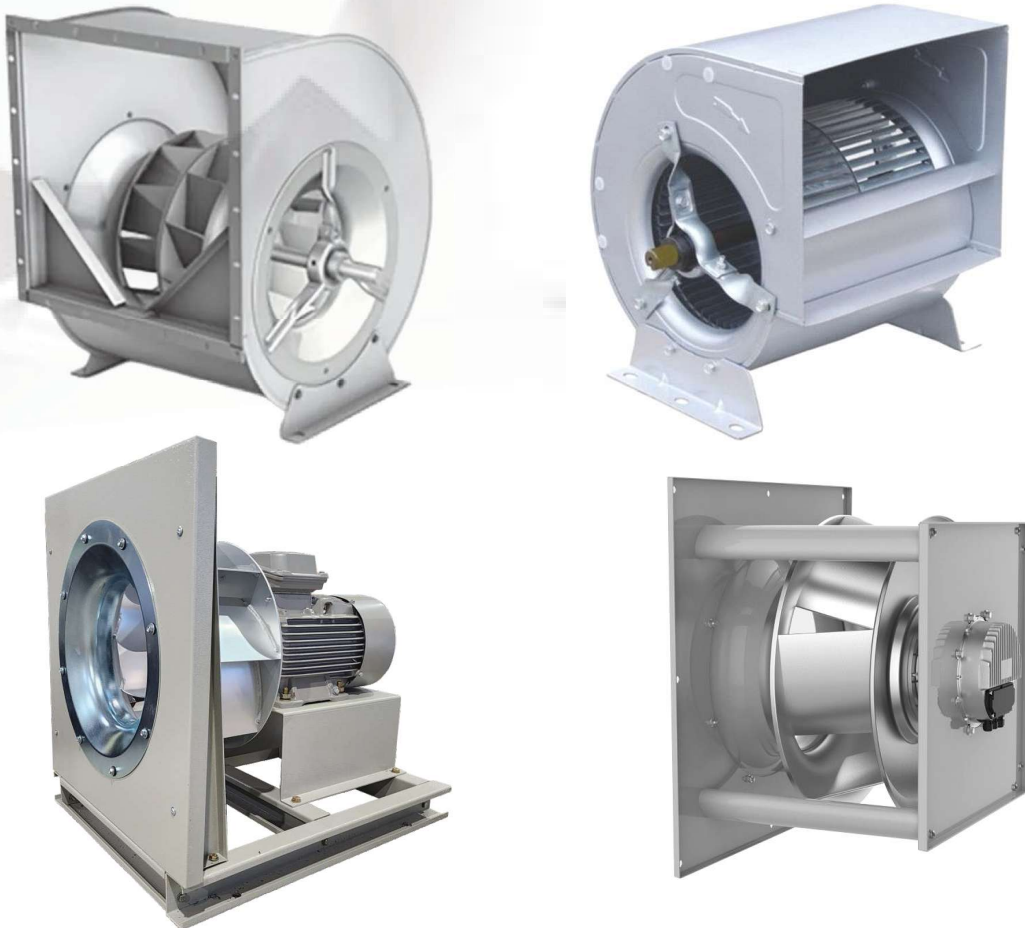
Framework for each section is joined together with soft rubber gasket (EDPM) in between to make the joints airtight.

Suitable airtight access doors/panels with Nylon hinges with the door hinge pin fabricated of stainless steel.

The door shall be fitted with double wall inspection window and robust glass filled nylon handles. The entire housing shall be mounted on GSS Powder coated channel framework with provision for handling the units at site.

Fan and Motor

Aire Maskin offers a range of fans like Centrifugal Forward Curved/Backward Curved, Plug fans, External rotor AC Motor, EC fans suitable for your application requirement.



All fans are fully balanced both statically and dynamically by the manufacturers. The fan impeller with motor shall be mounted on a common Galvanized steel base mounted inside the AHU housing on anti-vibration spring mounts. The fan inlet shall be connected to the casing with the help of fire-retardant canvas acting as, a flexible connection for anti-vibration.

For flameproof areas application (as specified), fan shall be spark proof based on Hazardous areas classification.

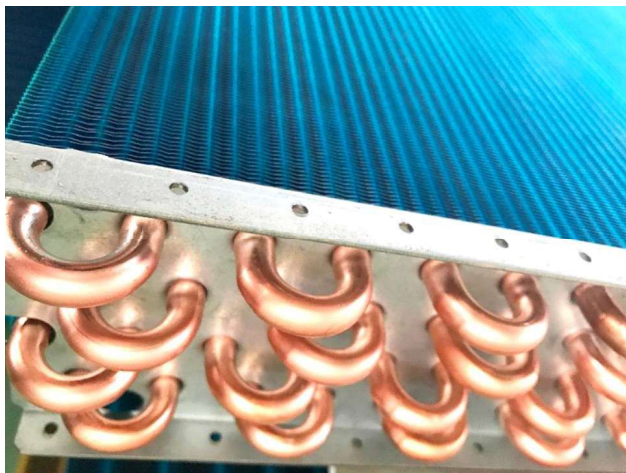
Fan motors shall be 415 for 10% volts, 50 cycles, 3 phase, squirrel-cage, totally enclosed fan cooled with IP - 55 protections The Motors are suitable for VFD operations. Fan section in AHU shall be provided with cable inlet set fitted at factory.

COIL

Based on the design requirements we can offer Cooling and Heating coils. The coils are manufactured of Copper tubes (0.41mm thickness) and Aluminium fins mechanically bonded to ensure maximum contact for efficient heat transfer. Coils are designed to maximize the utilization of available unit cross section area with the connections clearly labelled. Cartridge type coil mounted on steel channels shall be easily removed.



Anti-Corrosion coated coils and fins can be provided to meet the design requirements.



The cooling coil shall have SS drain pan to drain the condensate out. The pan will be slightly tilted for easier drainage in order to prevent the growth of harmful bacteria inside the AHU.

Filters

We can supply both standard and custom filters in various sizes to match the project requirements.

Primary Filters

Pre filters shall be made of non-woven washable type synthetic media. The filter frame shall be anodized aluminium. On the leaving side of filters, no fibrous media shall be exposed. The filter media shall be supported by multiple HDPE wire mesh towards air outlet side.



Secondary Filters

Fine filter shall be flanged type non-woven synthetic medium supported by HDPE mesh. Filter frame shall be anodized aluminium.



HEPA Filters (H-13)

HEPA filters shall be either non-woven microfiber glass or cellulose. The filter media shall be pleated and separated aluminium spacers or separators and fixed to aluminum frame with food grade silicon sealant. The filter frame shall be of anodized Aluminium. The filter shall be resistant to fungus and bacterial growth. The filter frame shall be anodized aluminium. The sealing media shall be food grade neoprene rubber gasket on flanges.



Carbon Filters

Carbon filters shall be non-woven type polyester media filled with fine mesh activated carbon throughout.



Air Washers

We manufacture and supply high performing, reliable, efficient and economic cooling solutions to Industries.

Air washers can be offered in Single skin or double skin construction assembled with:

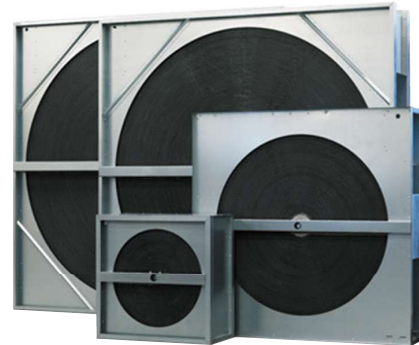
- CPVC Water Pipe
- SS 304 water tank
- Celldeck pad
- 2 bend PVC mist eliminator
- Float Valve
- Strainer
- Receiver Valves

Energy Recovery

As we know, a large portion of heating and cooling provided to indoor spaces is exhausted to the outdoor environment and wasted. To use proper ventilation; recovery is a cost-efficient, sustainable and quick way to reduce global energy consumption and give better indoor air quality (IAQ) and protect buildings, and environment.

Aire Maskin offers a variety of Energy recovery systems to choose from and ensure the right system is supplied as per the design requirements.

Rotary Heat Exchangers

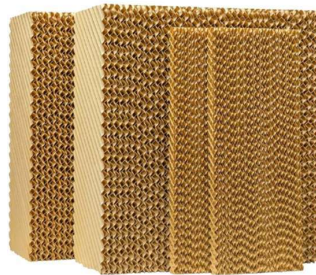


Accessories

Mist Eliminator



Cell Deck Pad



Drain Tray



Flame Proof Applications

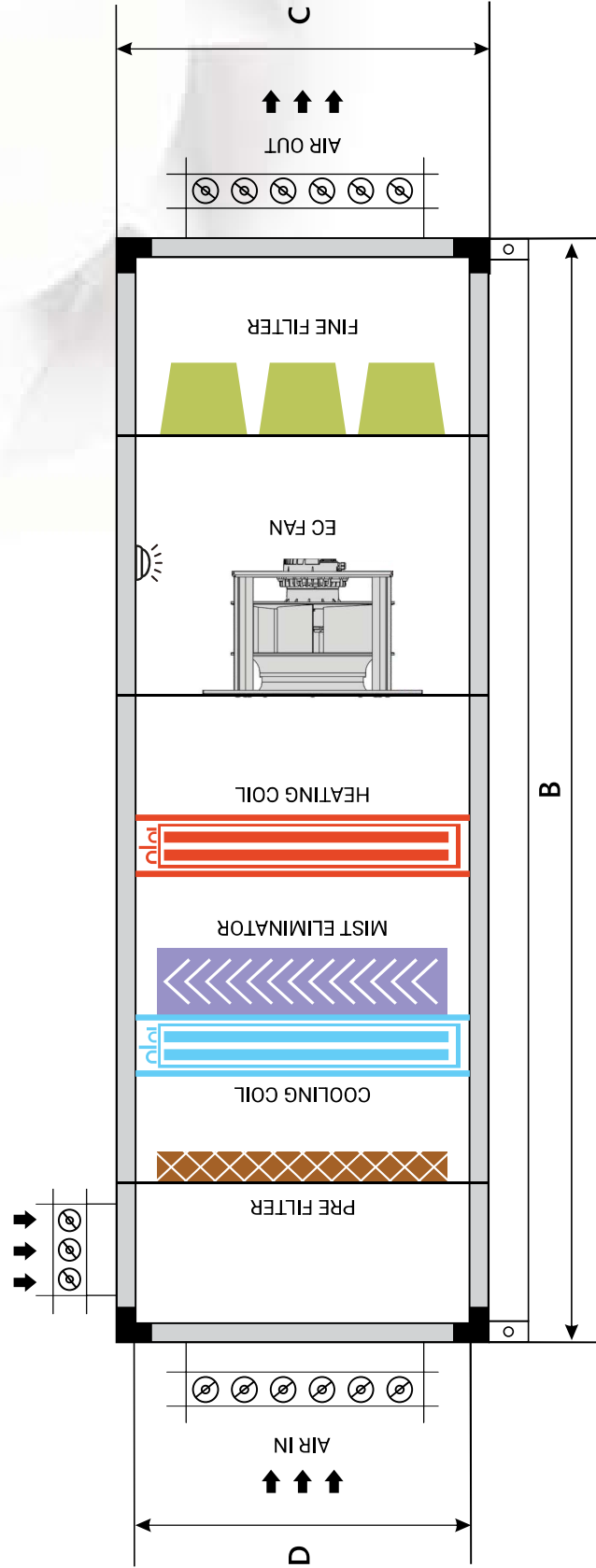
Flame Proof Bulk Head Lamp



Flame Proof Limit Switch



Air Handling Units
AM-BD-AHU



Unit Model AM-FD-VU	Air Volume (CFM)	MB	G4 (Pre Filter)	Pre + Bag on Common Frame	Gap	CHW 4/6 RD	HW 2 RD	Gap	Fan	Gap	F7 Fine Filter	Gap	F9 Fine Filter	Gap	Hepa Filter	Outlet Plenum	Width (MM)	Height (MM)
250	1000	450	50	500	500	450	220	200	750	500	300	500	300	500	300	480	850	710
250	2000	450	50	500	500	450	220	200	550	500	300	500	300	500	300	480	1150	750
280	2500	450	50	500	500	450	220	200	600	500	300	500	300	500	300	480	1250	810
315	3000	550	50	500	500	450	220	200	650	500	300	500	300	500	300	570	1300	870
355	4000	550	50	500	500	450	220	200	700	500	300	500	300	500	300	570	1500	950
400	5000	550	50	500	500	450	220	200	750	500	300	500	300	500	300	570	1550	1100
450	6000	650	50	500	500	450	220	250	850	500	300	500	300	500	300	690	1550	1170
500	8000	650	50	500	500	450	220	250	900	500	300	500	300	500	300	690	1550	1470
560	10000	700	50	500	500	500	220	250	1000	500	300	500	300	500	300	790	1850	1470
630	12000	700	50	500	500	500	220	350	1100	500	300	500	300	500	300	790	2150	1470
710	15000	750	50	500	500	550	220	350	1250	500	300	500	300	500	300	880	2150	1800
710	18000	750	50	500	500	550	220	350	1250	500	300	500	300	500	300	880	2500	1800
800	20000	800	50	500	500	550	220	350	1350	500	300	500	300	500	300	880	2650	1950
900	25000	800	50	500	500	550	220	350	1500	500	300	500	300	500	300	880	2750	2200
1000	30000	850	50	500	500	550	220	350	1650	500	300	500	300	500	300	880	2900	2450
1000	35000	850	50	500	500	550	220	350	1650	500	300	500	300	500	300	1000	3150	2570