

**JYOTI ELECTRO TECH**  
HVAC Business Group

# AIR HANDLING UNIT



**JET**

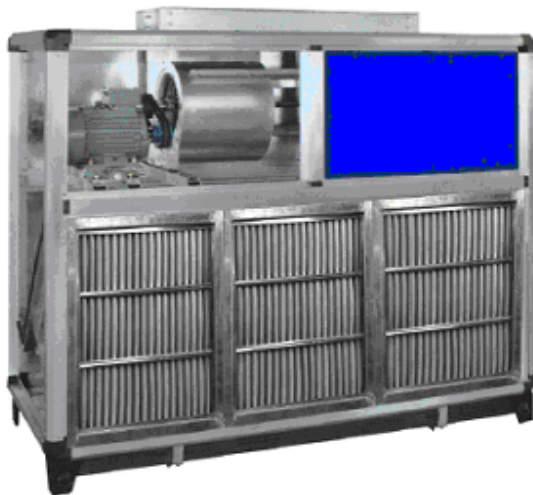
## JET Modular air Handling Unit

JET AHUs are backed with design, manufacturing and project execution capabilities of more than 5 Years. These are compact modular units, which enable customized design to meet your needs of varying air volumes and static pressures.

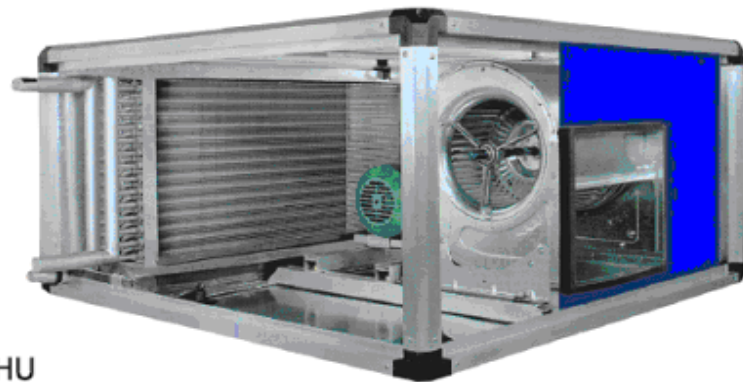
The construction provides a great amount of flexibility to meet any kind of space constraints using horizontal, vertical or two tier designs.

### Salient Features:

- ◇ Capable of delivering 3400 CMH up to 60000 CMH
- ◇ Can cater to Static pressures from 400 Pa to 1500 Pa
- ◇ Available in Double Skin and Single Skin options
- ◇ Range covers Horizontal, Vertical & Ceiling suspended type
- ◇ Suitable for installation in shopping arcades, offices, restaurants, hotels, schools, multiplexes, theatres, control rooms and a variety of other comfort and industrial applications
- ◇ Suitable for Cooling, Heating, Humidification and Clean room applications
- ◇ Software assisted selection ensures optimum design

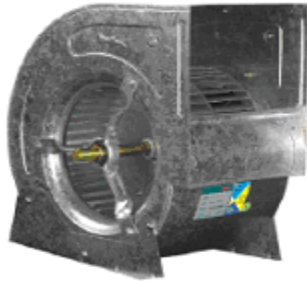


Vertical AHU



Ceiling Suspended AHU

## CONSTRUCTION FEATURES

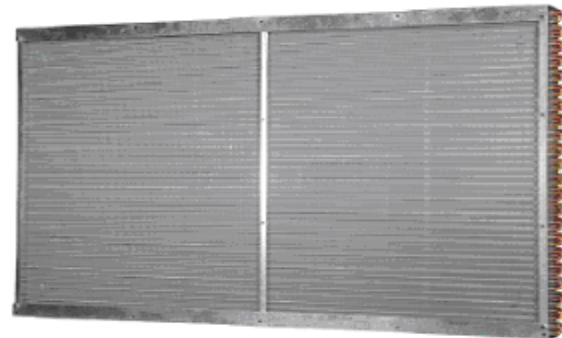


### Fan

- ◇ Energy efficient, AMCA certified fans, forward / backward curved. Plug fans are optional
- ◇ Electric motor of TEFC type with IP55 and Class F insulation
- ◇ Fan & Motor are mounted on a common extruded aluminum channel using anti vibration mountings for silent and vibration free operation
- ◇ Electrical interlock trips the fan immediately on opening of AHU door to ensure absolute safe operation

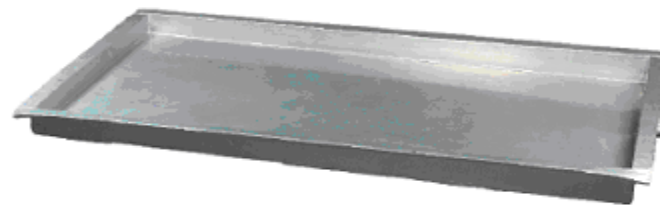
### Coil

- ◇ Optimum Chilled water, DX or Heating coil selection through software assisted program
- ◇ State of the art coil manufacturing facility ensures best quality
- ◇ Free flow Aluminum fin configuration provides excellent heat transfer capability with low airside pressure drop
- ◇ Copper tubes mechanically expanded on to the above fins ensure efficient heat transfer
- ◇ Flexibility in terms of number of rows and circuitry to meet supply air conditions
- ◇ Copper fins, anti-corrosive coating on fins and SS end sheets are available as options



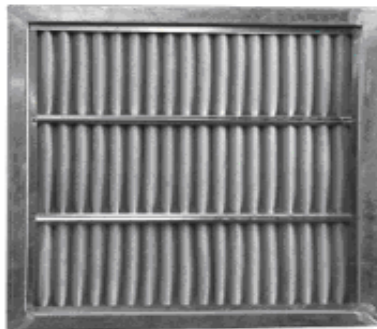
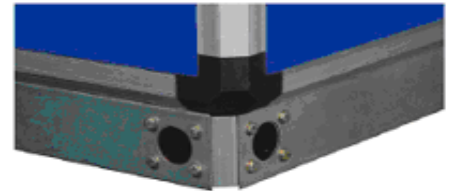
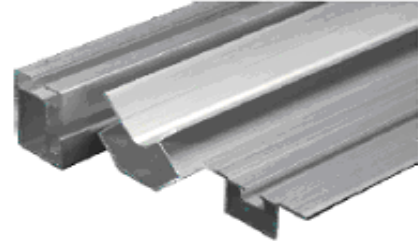
### Condensate Drain Pan

- ◇ Drain pan made of corrosion resistant Stainless steel of grade SS 304 as a standard feature
- ◇ Wider collection area with dual slope ensures quick drainage of condensate, prevents microbial growth and hence maintains Indoor Air Quality
- ◇ Drain pan is insulated with closed cell elastomeric insulation to avoid surface condensation
- ◇ Ultra violet lamps are available as an option to kill fungus and molds, minimizing allergens and allergy causing irritants



## Framework & Panels

- ◇ Rigid framework made of hollow, anodized, and extruded aluminum profile held together by fiberglass corner joints
- ◇ The extruded aluminum profiles are inside coved, as a standard feature to provide smooth edges
- ◇ Double skin sandwiched panels with inner skin of 24G (0.6mm) galvanized sheet conforming to IS277. Out side panel of 24G (0.6mm) is made of pre-painted galvanized sheet
- ◇ Panels are pressure injected with PUF insulation using a CFC free R-141b blowing agent
- ◇ High and uniform PUF density of 40 Kg/ m3 provides better thermal insulation and sound attenuation
- ◇ Double skin panel of 25mm or 46 mm depending upon requirement can be provided
- ◇ Thermal break profiles are available as an option
- ◇ EPDM foam gaskets on aluminum frame provide superior sealing effect to avoid casing leakages
- ◇ A leak proof casing ensures Indoor Air Quality by preventing contaminated air to enter into the system
- ◇ Base frame is rugged in construction, made of galvanized steel with intermediate cross members and has lifting holes for ease of installation



## Filters

- ◇ A complete line of filters are available to meet all kinds of filtration needs
- ◇ Single or Multi stage filtration to suit different applications conforming to ASHRAE & EUROVENT (EU-4 of EU-779 specifications) standards
- ◇ Separate pre- filter, fine and HEPA filter sections provided
- ◇ The filters are arranged in a grid in heavy-duty specially designed galvanized sheet steel frame to avoid air bypass and are removable from front
- ◇ Pre filters are of flange type provided with handles for easy removal & are washable
- ◇ Fine & HEPA filter sections are provided with access door panel with positive locking. The door is provided with aluminum die cast powder coated heavy duty hinges & nylon handles

## Accessories: Standard

- ◇ Hinged service door: For ease of access to the fan and motor
- ◇ Marine lamp: For better visibility during servicing
- ◇ View port : Provided for inspection during AHU operation
- ◇ Door limit switches : Automatically trips the motor to ensure safety
- ◇ GI / powder coated, opposed blade volume control dampers for air balancing



## Accessories: Optional

- ◇ Mixing box section for efficient mixing of return and fresh air intake
- ◇ Steam and spray humidifier section integral with the unit
- ◇ Face and by pass dampers of opposed blade type
- ◇ Cross flow type and wheel type heat recovery sections can be provided for energy saving
- ◇ 2 pass GI / PVC or 4 pass GI / PVC Droplet eliminator sections can be provided to prevent spray water carryover into fan section
- ◇ Sound attenuation section with sound absorbing walls and sound traps in the fan and discharge areas to meet critical sound level requirements

