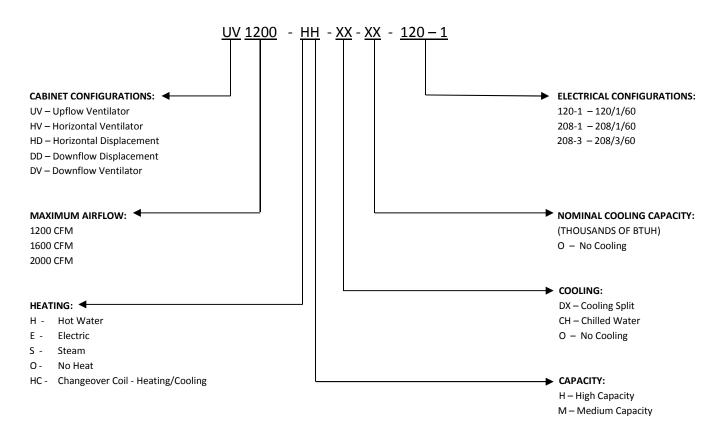


**Specifications** 

# **MODEL NOMENCLATURE**



## Specification for Apollo Standard Vertical Unit Ventilator

#### **Unit Ventilators**

#### A. Manufacturer

• Unit ventilators shall be manufactured by Apollo Sheet Metal Ltd. Unit(s) construction shall meet the requirements of CSA/NRTL, UL or ETL approvals.

## **B.** General Assembly

- Unit casing(s) shall be constructed of minimum 18ga satin coat steel and are welded and reinforced for rigidity. All exterior finish shall be powder coated with slight texture in Apollo beige (standard).
- Unit casing(s) interior metal shall be lined with 2" Fiberglass Free acoustic insulation, neoprene coated on air side. Interior bracing and bulkheads will be constructed of 18 gage galvanized steel welded and reinforced for rigidity to prevent vibration.
- Access doors shall be constructed as casing, c/w 2" fiberglass free acoustic insulation. The finish shall be
  the same as the casing exterior. Access doors shall be fully hinged and removable for complete
  serviceability with secure cam-lock fasteners. Return air grill is constructed into the unit and is
  manufactured with an oval punch pattern.
- Upflow and downflow unit(s) construction shall have supply air opening suitable for direct duct connection by others. Horizontal application shall have supply air opening and return air opening suitable for direct duct connection by others.

## C. Heating Coil

• The hot water coil shall be constructed of ½" copper tubes, aluminum fins and a 16 gage galvanized frame. Coil shall be configured for ease of field connection and future removal. A manual air vent shall be factory installed. Hot water coil capacities shall be shown in the schedule.

#### D. Chilled Water Coil

• The optional chilled water A-Coils shall be 0.375" O.D. smooth tube, 0.016" wall thickness. Coils are tested at 500 psi and have UL burst pressure rating of 2500 psi. Coils are UL and ETL listed.

#### E. Supply Fan and Motor

• The supply air fan shall be a direct drive, double inlet centrifugal fan with a galvanized steel finish. Fan motor (ECM) shall be high efficiency and programmable for 0-10 VDC from a DDC signal for variable speeds. Motor shall be isolated from the fan housing with rubber grommets. Fan and motor shall be a complete assembly and installed in the factory, with release latches and power disconnect for ease of serviceability. Motor voltage shall be specified in the schedule.

#### F. Air Filters

• Filter(s) shall be a manufactured 2" filter, horizontal arrangement with slide out track serviced from access door.

#### **G.** Dampers

- The return air and outside air dampers shall be aluminum air foil type, low leakage and interconnected for simultaneous operation. Damper actuators shall be factory installed and shipped with unit(s).
- **H. Plumbing** Plumbing shall be pre-piped within the unit complete with hot water control valve and actuator. All plumbing to be pressure tested at the factory to 120 psi.

## I. Line Voltage Wiring

• Line voltage wiring shall be factory installed in conduit within the unit(s) to a single point connection. An unfused disconnect, door switch, fan relay and 40 va transformer shall be factory installed. All components shall be contained inside a hinged control panel to access damper section.

#### J. Control Wiring

- Control wiring from valve actuator and damper actuator shall be factory installed in conduit within unit(s) to control panel terminal strip.
- A detailed wiring diagram shall be mounted inside the control panel door and it shall indicate all line and low voltage wiring, terminal strip connections, and foreign interface details.
- All third party control interface requirements shall be provided at the local terminal strip.

# **Specification for Apollo Optional Components**

## K. Acoustic Discharge Plenum

- Acoustic plenum casing(s) shall be constructed of 18 gauge satin coat steel and are welded and reinforced for rigidity. Exterior finish shall be powder coated with slight texture in Apollo beige (standard).
- Acoustic plenum casing(s) interior metal shall be lined with 2" acoustic insulation, neoprene coated on air side.
- Plenum(s) construction shall have supply air opening suitable for direct duct/pipe connection by others.
- Plenum(s) shall be shipped complete with ¼" neoprene foam and fasteners to seal and secure plenum to the unit ventilator.
- Access door on plenum(s) shall be removable and be constructed for accessibility of plumbing and conduit connections.

#### L. Extension Shroud

• Extension shroud(s) shall be constructed of 18 gauge satin coat steel. Exterior finish shall be powder coated with slight texture in Apollo beige (standard).

# M. Outside Air Plenum

- Outside air plenum shall be constructed of 18 gauge satin coat steel. Exterior finish shall be powder coated with slight texture in Apollo beige (standard).
- Plenum shall be insulated with 1" thermal acoustic insulation."
- **O. Interior Liner** Interior of unit to be completely lined with 22 gauge galvanized perforated metal.

## P. Raised Base

• Shall be constructed and finished the same as unit and to suit specific application of meeting engineered height requirements.