

Specification Sheet

QT-35 (Column-Style Air Handling Unit)

Description

The **Quiet Tower (QT-35)** is a vertical column-style air handling unit. Available in either downflow or vertical upblast configurations, this unit is designed for providing supply air to overhead or underfloor plenums. With a compact footprint and ultra quiet sound performance, the QT-35 is ideal for saving mechanical space and providing an effective method for uniformly pressurizing an underfloor plenum or ducted system.

The QT-35 is available in three compact footprints, which range from 3,500 to 20,000 cfm. Air flow is typically provided by a single ECM fan that operates at a very low RPM under design conditions. The unit design is intended for two sides to be installed directly against the interior mechanical room walls, with 24" clearance for the front and the adjacent side - all resulting in a very small space requirement.

With a factory installed drain pan, the cooling coil (CW, VRE or DX) is designed to provide both latent and sensible cooling. An optional heating coil is available for designs that call for morning warm-up. In addition, the unit's design can accommodate full economizer mode.

The QT-35 is ETL certified for safety and is AHRI 410 certified.



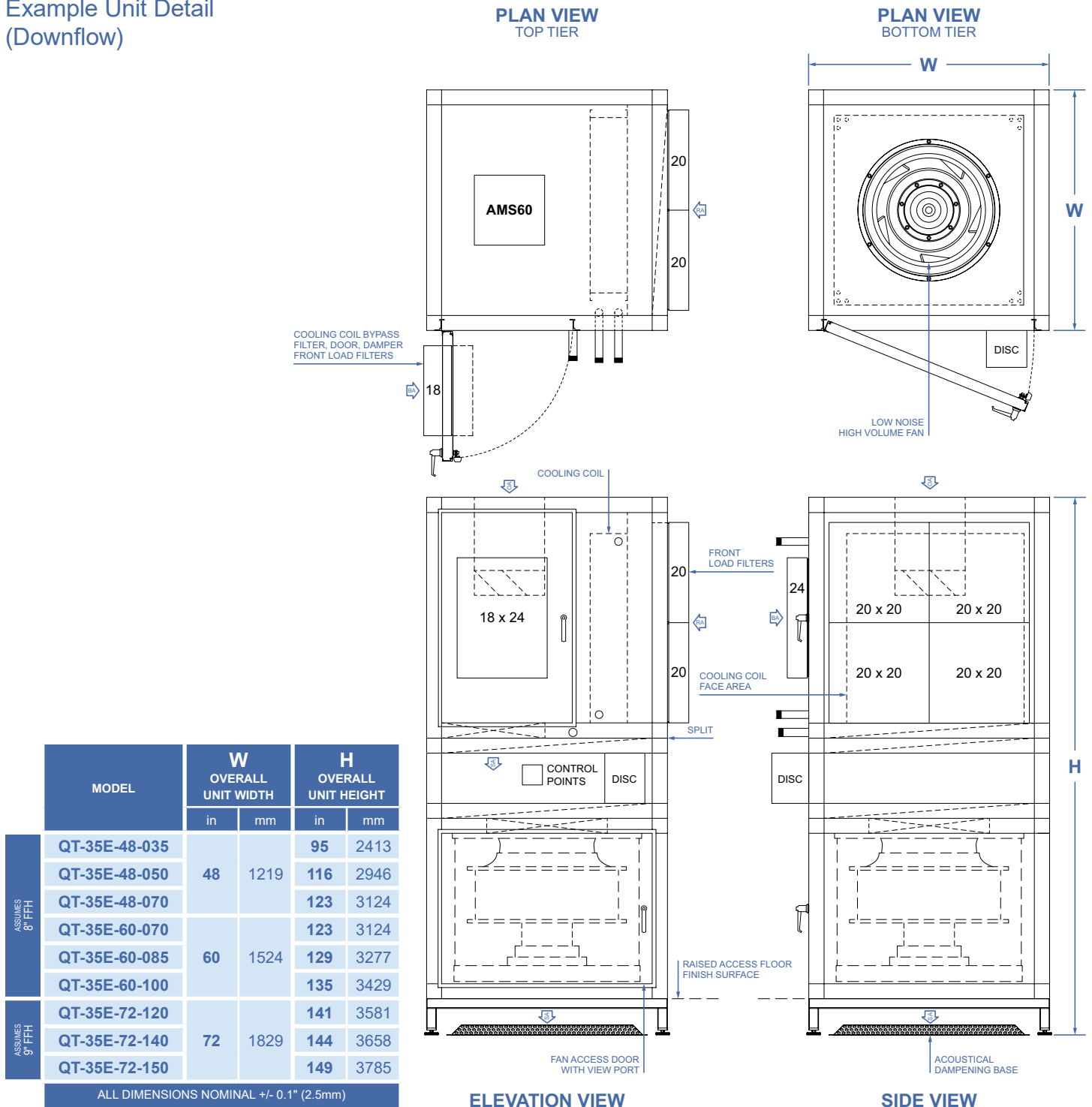
Features

- 2" (51mm) double-wall galvanized steel construction
- Available in downflow or vertical upblast configurations
- Custom unit base to match raised floor height with sound attenuating target
- Cooling coils with 304 series stainless steel drain pan
- Return air bypass
- Designed to work in raised access finish floor heights as low as 6" (152mm) (consult your local representative for qualifications)
- Shipped in three (3) demountable sections
- Ultra quiet performance (NC-35 to NC-40 typical)
- ECM fan designed for low RPM operation (optional multi-fan configurations available)
- Additional purification options:
 - UV lights
 - Bi-polar ionization
 - HEPA filtration
 - PCO technology
- Optional heating coil
- Optional outside air measuring station
- Optional exterior paint
- Optional factory-mounted controls
- Optional mixing-only unit without primary cooling
- 208V / 230V / 460V / 570V 3-Phase

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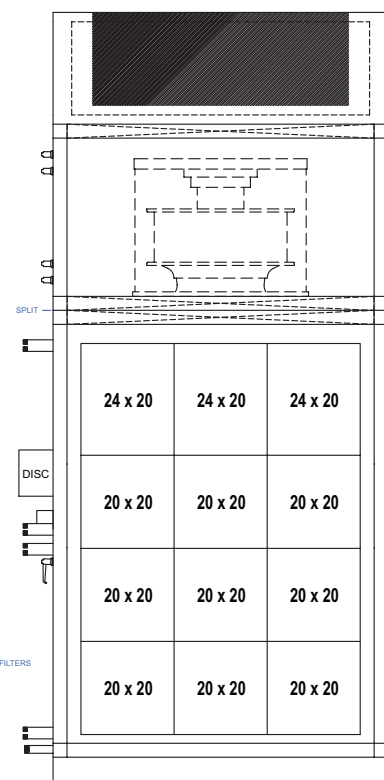
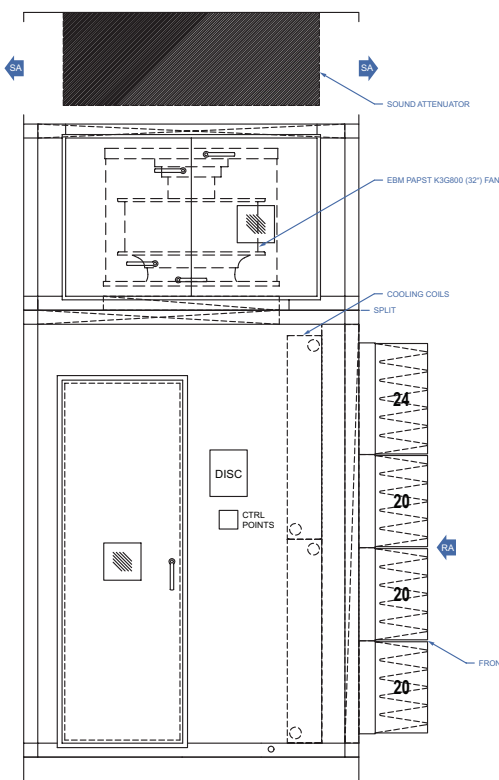
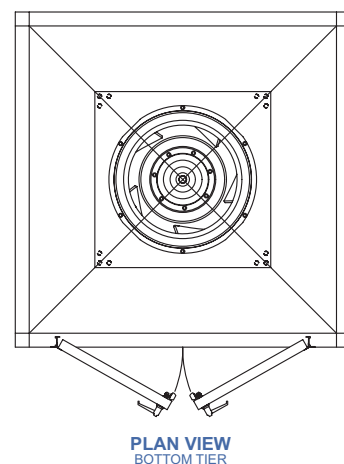
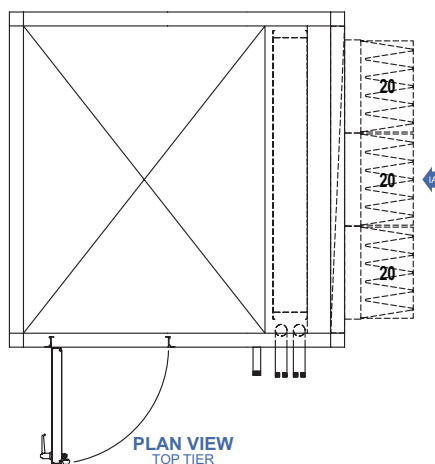
Example Unit Detail (Downflow)



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Example Unit Detail (Vertical Upblast)



MODEL	UNIT BASE (LENGTH x WIDTH)	UNIT HEIGHT (DISCHARGE PLENUM HEIGHT)
QT-35EU-48-035	48" x 48"	105" (14")
QT-35EU-48-050		126" (16")
QT-35EU-48-070		133" (18")
QT-35EU-60-070	60" x 60"	137" (20")
QT-35EU-60-085		143" (24")
QT-35EU-60-100		148" (24")
QT-35EU-72-120	72" x 72"	153" (24")
QT-35EU-72-140		158" (24")
QT-35EU-72-150		162" (24")
QT-35EU-72-170		166" (24")

ALL DIMENSIONS NOMINAL +/- 0.1"

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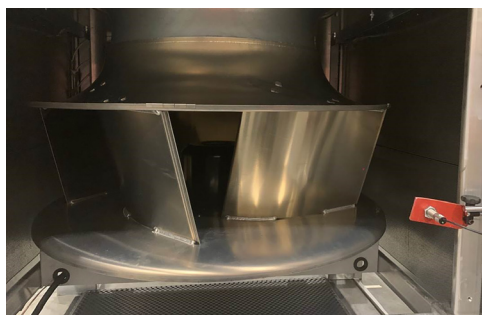
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Example Acoustical Performance (Downflow)

Guaranteed maximum sound power levels in db re: 10-12 watts for the fan (total sound power) at unit discharge are provided below.

MODEL	FAN SPEED	TSP	AIR FLOW	UNDERFLOOR DISCHARGE WITH 2" PERFORATED TARGET							
				OCTAVE BAND SOUND POWER LEVEL (dB re.1-pW)							
				63	125	250	500	1000	2000	4000	8000
QT-35E-60-070	490	1.25	7000	80	77	70	60	53	53	47	40
QT-35E-60-085	506	1.25	8500	82	79	70	61	52	53	45	38
QT-35E-60-100	540	1.25	10000	88	82	74	64	54	55	47	41
QT-35E-72-120	560	1.25	12000	91	85	77	67	55	56	48	42
QT-35E-72-140	593	1.25	14000	93	89	80	70	57	58	51	45
QT-35E-72-150	611	1.25	15000	93	90	81	71	58	59	51	45

Consult factory for details regarding insertion loss for raised floor and mechanical closet.
Factory mock-up testing available upon request.



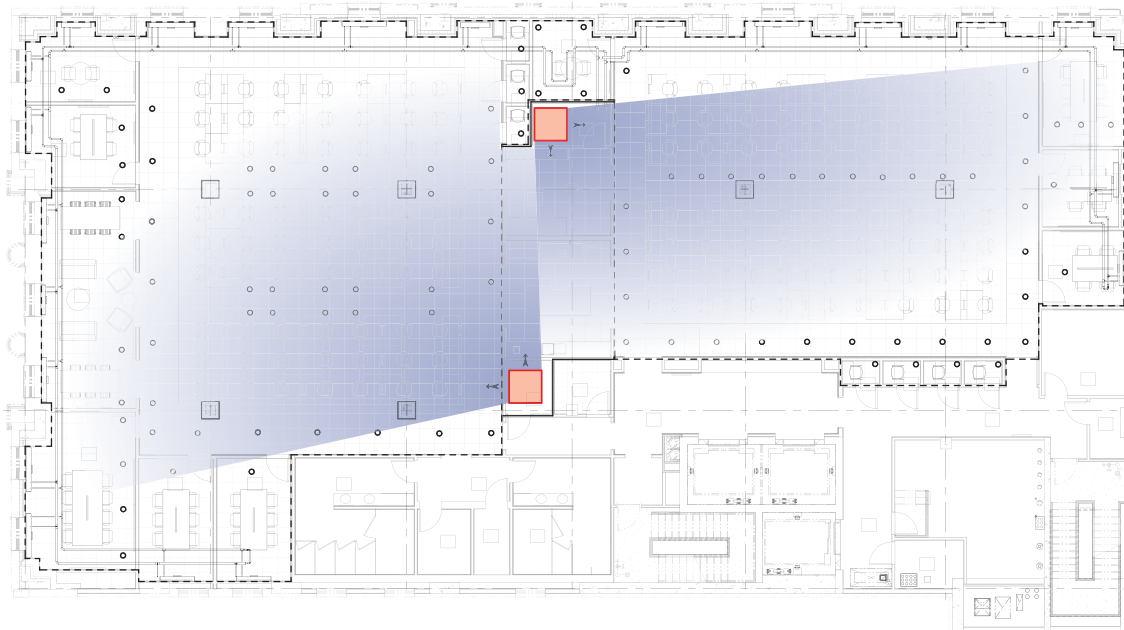
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Typical Application

Air Towers are best utilized when they are installed at the edges of the building core, under standard design conditions of 1.0-1.2 cfm/sq.ft. and a maximum throw distance of approximately 50 feet, eliminating the need for underfloor ductwork. Air Tower sizes are most commonly in the range of 7,000-12,000 cfm. Depending on the shape / dimensions of a building, a larger quantity of Air Towers in smaller sizes may be required. In most conditions, three (3) discharge sides are optimal. Refer to following examples:

EXAMPLE 1



EXAMPLE 2

