



THE TEMSPec TEAM

- 54 years of experience in Vertical Stack Fan Coils
- Sales, Engineering, R&D, & Production under one roof
- Support from the design thru to commissioning
- Engineering and service support to the field
- Expertise in sound analysis, riser systems & controls



UNIT SIZES & CAPACITY

- 3/4 thru 3 Ton Capacity
- 2 pipe : Cool Only, Heat Only, or Changeover
- 2 pipe : w/Primary or Auxiliary Electric Heat
- 4 pipe : CW Cooling and HW Heating
- Nominal CFM's :
300/400/600/800/1000/1200

CORE PRODUCT SERIES

- TL** • Concealed Cabinet (86" tall behind drywall)
typical of hotels and condos/apartments with a thru-the-wall RA access panel
- TM** • Mechanical Closet (70" tall ducted SA)
excellent for dorms & barracks where access to the unit can be achieved without entering the suite
- TF** • Finished (Painted) Cabinet (86" tall exposed install)
often used in dorms that do not have drywall, or more "industrial" spaces like IDF/electrical rooms
- TR** • Similar to TL, but c/w Energy Recovery Module
a residential application (condo/apartment) with fresh air requirements



COMMON APPLICATIONS

- Hotels
- Condos and Apartments
- College & University Dormitories
- Senior & Assisted Living Facilities
- Military Barracks

Don't get hung up on the stacking or "hi-rise" aspect, 3-5 story buildings are quite common, even a single story building can utilize our fan coil units

THE TEMSPEC DESIGN DIFFERENCE

Temspec is the only manufacturer that uses a backward inclined (BI) impeller fan in our units. These fans are complete with an integral EC motor, suitable for 0-10 vDC fan control. Using these fans in our unit and pursuing a VAV control strategy is excellent for energy efficiency, and noise reduction. A VAV strategy will start the fan at minimum fan speed, and attempt to maintain that speed for up to 66% of operation time, only ramping up to a maximum fan speed when far off set point. This works out to less than 10% of the time. This strategy means the fan is using less energy (approx. half that of a 3 speed ECM direct drive motor in a forward curve blower), and running quiet, especially off-peak load.

This allows for excellent dehumidification, as the fan running at minimum cfm, with the CW valve open, will wring the moisture out of the air, without the need for a more complex, expensive, and energy inefficient reheat strategy.



Coupled with other unique design elements such as: Our hinged RA access panel that allows for each filter changing with no exposed fasteners, and no need for tools. 1" glass-fiber insulation for optimal sound absorption. Polymer drain pans that will not sweat, or corrode. And our smaller unit footprints (15.75" x 15.75" in our 300/400 cfm cabinet). Temspec vertical stack fan coil units are truly unique in the market.



DESIGN RECOMMENDATIONS

- BI Fan with integral ECM (0-10 vDC) for a VAV control strategy
- Dehumidification by running the fan at minimum speed, and opening the CW valve (avoid reheat)
- 2 position control valves (simple valve control for low gpm)
- Hinged RA access panel - no exposed fasteners, easy filter changing without the use of tools
- 1" glass-fiber insulation - best thermal and acoustical performance
- Polymer drain pans - will not sweat or corrode (300-800cfm units only)
- Don't oversize the units - right size unit for the right size space
- Properly sized risers - should decrease in size as they move away from the mains, carrying less water



Polymer Drain Pan
lowest cost, best performance