AirFixture®

CLEMIT
Electric Heating
Perimeter Terminal

Prestige
Fully Wireless
VAV Diffuser

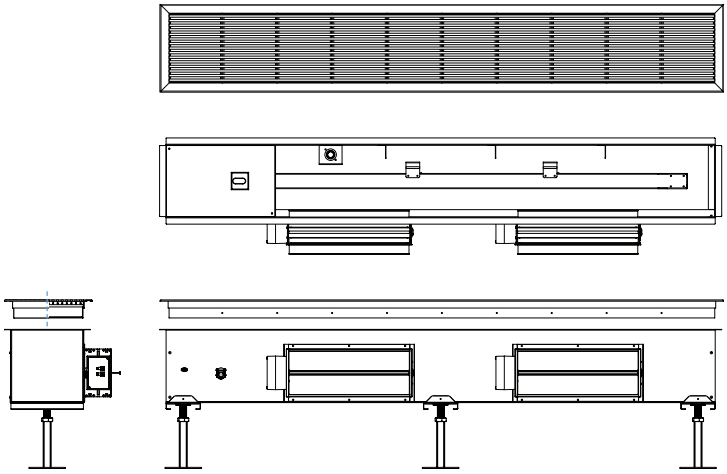
quietower
Downflow Air
Handling Unit

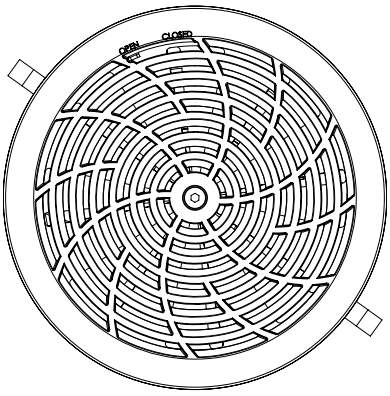
The Next Generation of UFAD

Introducing the Next Generation UFAD

Electric VAV Perimeter Heating

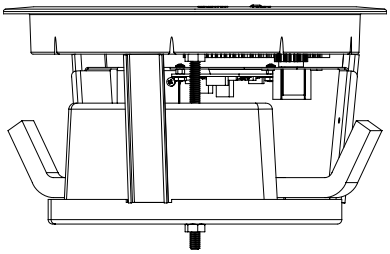
The CLEMIT is an electric heating / air cooling linear diffuser package, for use in raised access floor systems. It features fully customizable dimensions, multiple diffuser grille configurations, various options for VAV air flow, and electric heating to meet nearly any specification.

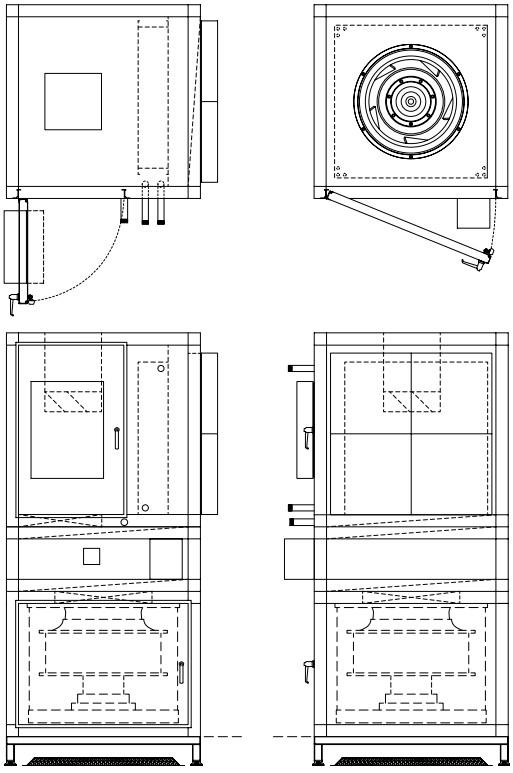




Fully Wireless VAV Cooling

The Prestige line of diffusers feature fully VAV operation in a compact drop-in design. Even more impressively, they require no wired connectivity of any kind to function. Power is provided by an integrated high capacity battery, and thermostatic control is handled via Zigbee 2.4 GHz wireless signal to a separate Concentrator connected to a standard 24 VAC zone controller. Diffuser grilles are available in a variety of patterns and configurations, in 8" and 10" diameter sizes.





Downflow Air Handling Unit

The QuietTower QT-35 is a vertical downflow air handling unit designed expressly for providing supply air to raised access floor underfloor air systems. With a compact footprint and ultra quiet sound performance, this unit is ideal for saving mechanical space and providing an effective method for uniformly cooling and pressurizing the underfloor plenum. Capable of cooling and/or heating, each QT-35 is fully customizable to meet the needs of any project space.

UFAD & Mass Timber

One of the few downsides to mass timber construction is the difficulty of running mechanical, electrical, and plumbing (MEP) elements, like air conditioning.

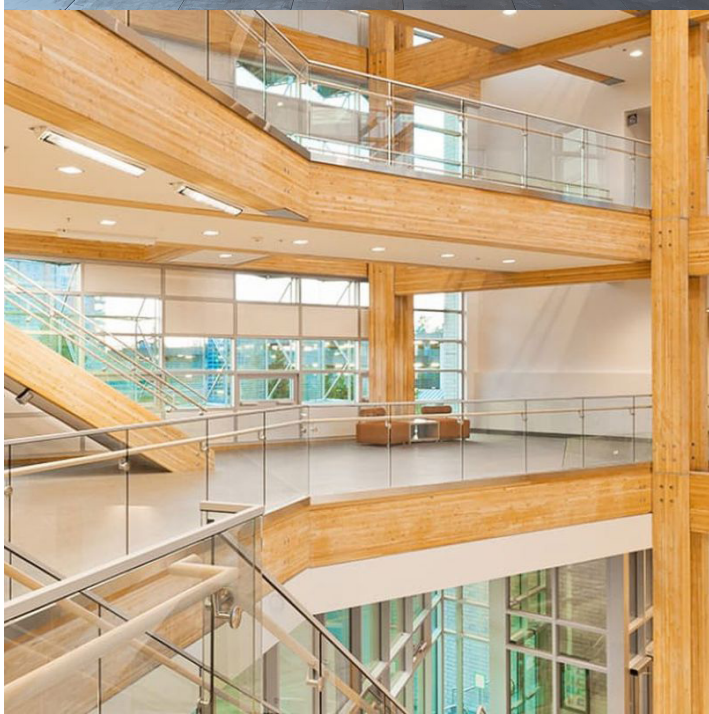
Because of the construction methods and lack of internal walls or covered ceilings, it's not easy for builders to find space to fit large ducts and vents. Many builders opt to leave ducts uncovered, but some property owners find it unsightly.

The solution to the problem, however, is installing an Underfloor Air Distribution System (UFAD).

A UFAD system can be tucked neatly under a raised floor, using small, flexible tubes and multiple diffusers to distribute air evenly throughout the space. In addition to being more aesthetically pleasing, especially in open mass timber buildings, UFAD systems provide a wide variety of benefits:

- More energy efficient due to a well-designed return air path
- Reduced energy costs
- Longer life cycle by using smaller, energy efficient distributors that don't need to work as hard to cool or heat a space
- Improved air quality by pushing air up and out of the space, instead of recirculating it for long periods of time
- Flexible wires and pipes for easy relocation
- Better air ventilation and circulation by working with the laws of physics and removing old, warm air at the ceiling and introducing cool air from the floor

With easier installation and increased energy efficiency, UFAD systems can save you money on HVAC costs and offer higher returns on your investment. They're truly the perfect cost-saving companion for mass timber projects.



Think Differently

Disputed or Undisputed: UFAD Facts

- An 8" UFAD system can be constructed without any air leakage...

  FACT. By following some basic best practice guidelines, an underfloor plenum can be completely sealed with no unwanted air leakage.

- An 8" UFAD system can be constructed at a reduced first cost...

  FACT. With fewer materials and less labor required, a UFAD system can be installed at a lower overall first cost.

- An 8" UFAD system produces improved indoor air quality...

  FACT. Air is blown upwards away from occupants to the return air path, rather than recirculating throughout a space and causing cross contamination.

- An 8" UFAD system provides better personal comfort control...

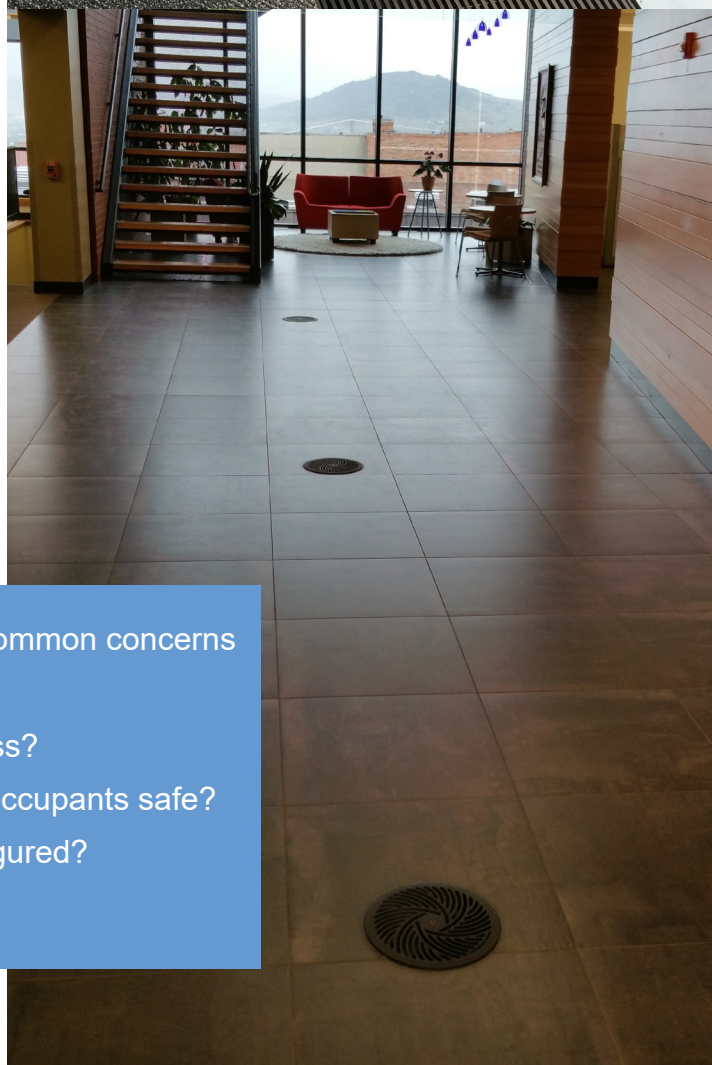
  FACT. By relying on a larger number of diffusers providing more localized air flow, UFAD provides significantly more options for individual control - even within the same zone.

- An 8" UFAD system can be built at least 12" shorter in overall building height...

  FACT. An optimized UFAD system requires significanlty less space than a comparable OHAD system, resulting in less slab-to-slab space and a reduced overall height.

- An 8" UFAD system is an unproven technology at fulfilling the optimal heating and cooling requirements of a commercial building...

  DISPUTED! UFAD has been in widespread use since the 1970s, and is fully recognized and endorsed by all common HVAC bodies, including ASHRAE. In fact, ASHRAE 62.1 Addendum assigns UFAD a Ventilation Effectiveness (E_z) rating of 1.2, compared to 0.8 or 1.0 for OHAD systems.



When negotiating leases in new spaces, there are three common concerns for any potential tenants:

1. How does the space address tenant health and wellness?
2. What measures has the building owner taken to keep occupants safe?
3. How flexible is the space? How easily can it be reconfigured?

UFAD address all of these concerns, and much more.