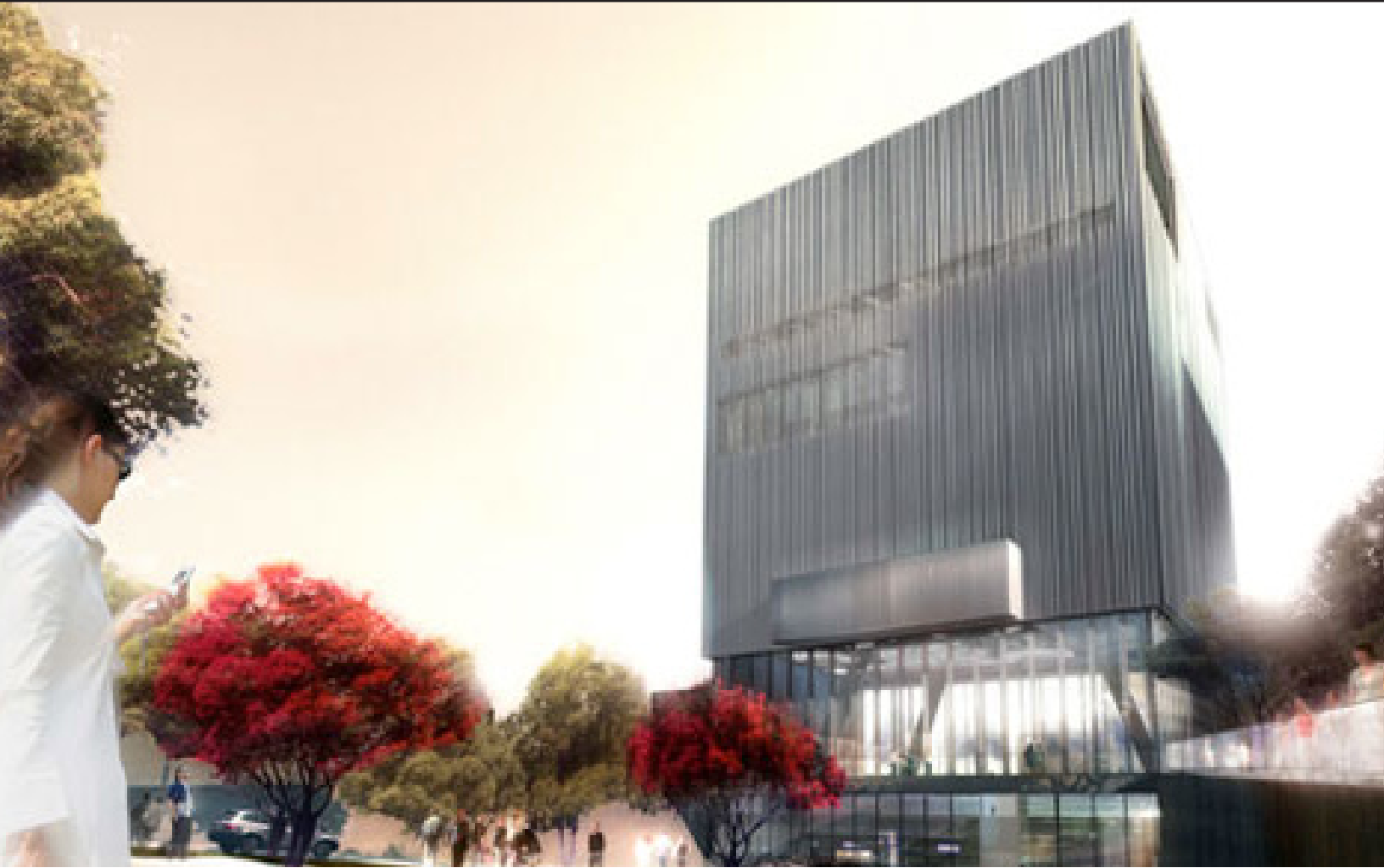


energy
SOLUTIONS



www.titus-hvac.com

Titus Energy Solutions



ECO UnderFloor Air Distribution (UFAD) System

- Utilizing UFAD HVAC design can help achieve LEED EA Credit 1: Optimize Energy Performance, EQ Credit 6.2: Controllability of Systems: Thermal Comfort, EQ Credit 7.1: Thermal Comfort: Design, and, if the building utilizes an existing structure, MR Credit 1.1: Building Reuse
- Models in the ECO UFAD System include the TAF-R / TAF-R-FR high induction supply diffuser, the TAF-L Perimeter System's TAF-L-V cooling plenum and TAF-L-W self contained fin tube perimeter heating plenum, the TAF-V, TAF-D, and TAF-HC special application plenums, and the LHK and PFC fan powered terminals

| Can Contribute toward LEED Credits | | |
|------------------------------------|--------|--------|
| EAc1 | EQc6.2 | MRC1.1 |
| ✔ | ✔ | ✔ |



Displacement Ventilation

- Unique alternative to conventional overhead ceiling supply systems
- Provides design flexibility, energy savings, and the highest level of indoor air quality (IAQ)
- Can contribute toward achieving LEED EA Credit 1: Optimize Energy Performance; EQc2: Increased Ventilation; & EQc7.1: Thermal Comfort: Design
- Higher supply air temperature provides savings from downsizing central air system and ductwork
- Savings from extended economizer range (due to warmer supply air)
- Models in the DV family include the DVBC, DVCP, DVHC, DVIR, DVRI, and DVVC. All units offer a wide range of comfort

| Can Contribute toward LEED Credits | | |
|------------------------------------|------|--------|
| EAc1 | EQc2 | EQc7.1 |
| ✔ | ✔ | ✔ |



Chilled Beam

- Chilled Beams are designed to provide energy savings, excellent comfort, and operate with minimal noise
- Higher chilled water temperature than conventional cooling system translates into 15-20% higher efficiency for chiller
- When used with dedicated outdoor air systems (DOAS), cooling and ventilation energy consumption is reduced by 25-30% relative to VAV system
- Can contribute toward achieving LEED EA Credit 1: Optimize Energy Performance; EQp1: Minimum IAQ Performance
- Ductwork can be reduced by as much as 50% compared to conventional systems
- Chilled Beam models include the TCM2, LCB2, LPE2, LPF2, and the RCP

| Can Contribute toward LEED Credits | |
|------------------------------------|------|
| EAc1 | EQp1 |
| ✔ | ✔ |



GreenSpec Listed Products



DynaFuser

- Designed as the perfect solution for the perimeter heating challenge
- Automatically changes the air discharge pattern to the correct position for heating and cooling applications
- Allows 100% of the supply air to be utilized in either application to achieve optimum comfort in the occupied zone to help meet LEED EQ Credit 7.1: Thermal Comfort: Design
- Auto-changeover of air direction can achieve room setpoint faster than the typical compromised solution thus reducing energy usage and can help achieve LEED EA Credit 1: Optimize Energy Performance
- Patented shape memory alloy requires no external power connection to activate diffuser

| Can Contribute toward LEED Credits | |
|------------------------------------|------|
| EQc7.1 | EAc1 |
| ✔ | ✔ |



Titus ECM Motors

- Ultra high-efficiency, brushless DC electronically commutated motors (ECM) with microprocessor based controllers used in Titus fan powered terminals offer 70% minimum efficiency across the entire operating range (300 – 1200 rpm), and 80% efficiency above 400 rpm helps to achieve LEED EA Credit 1: Optimize Energy Performance
- Developed in the Titus ISO 9001:2000 certified lab through the TITAN ECM Programming Process, the pressure independent ECM motor can be factory preset for cfm to simplify commissioning
- Using the remote PWM option allows the DDC controls to control the ECM motor for unique energy saving sequences of operation

| Can Contribute toward LEED Credits |
|------------------------------------|
| EAc1 |
| ✔ |



T₃SQ VAV Diffusers

- An occupant-controllable variable-volume ceiling diffuser to provide cost-effective, individual comfort control and achieve LEED EQ Credit 6.2, Controllability of Systems – Thermal Comfort
- Thermal model uses no electrical input providing for energy savings operation which can help achieve LEED EA Credit 1: Optimize Energy Performance
- Low pressure requirement mean that central fans can be sized smaller when compared to conventional VAV systems further assisting in meeting LEED EA Credit 1: Optimize Energy Performance

| Can Contribute toward LEED Credits | |
|------------------------------------|------|
| EQc6.2 | EAc1 |
| ✔ | ✔ |



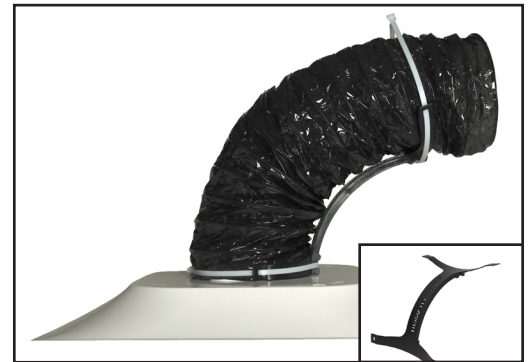
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Energy Solution Products continued...

FlexRight

- FlexRight is a plastic 90 degree elbow that connects the flex duct to the diffuser inlet with a gentle 90 degree transition
- Eliminates kinking or improper positioning of the flex duct
- Made of 100% recycled materials, UL listed and saves energy by reducing the total pressure
- Universal design accomodates all flexible duct sizes and diffuser inlets from 4" to 16"
- It is a less expensive alternative to hard duct transitions and is easy to transport and install



VAV Retrofit Terminal

- Upgrades old existing HVAC systems to current standards of energy efficiency and comfort
- Units can be used in newly designed systems as air measuring devices and exhaust control valves
- Compact and lightweight
- Units install quickly in tight spaces supported only by the existing ductwork
- ECV series is a round retrofit terminal available with pneumatic, electric, analog electronic or direct digital controls (DDC)
- QCV series is a rectangular slide-in retrofit terminal available with pneumatic, electric, analog electronic or direct digital controls (DDC)
- ECT series is an internal retrofit for old mechanically-regulated terminal units available with pneumatic, electric, analog electronic or direct digital controls (DDC)

