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# Precedent<sup>®</sup> eFlex<sup>™</sup> Enabled by Symbio<sup>®</sup>

12.5-25 Tons

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### **Engineered for Efficiency**

Trane® Precedent rooftop units that incorporate eFlex™ technology precisely match output to the cooling demands of the space. They operate at their fastest levels when demand is high; they modulate to slower levels when demand is low. This delivers industry-leading part-load efficiencies (IEER) and is accomplished via variable speed indoor and outdoor fans, as well as variable speed compressors controlled by the new Symbio 700-unit controller.

## **Smart Savings**

Adding eFlex™ technology adds up to significant savings and produces superior results with less energy. After implementing eFlex technology, many businesses see a 30%-40% reduction in their energy use when compared to conventional single speed products.

### Variable Speed vs Fixed Speed

**Benefits of Variable Speed** 

	Variable Speed	Fixed Speed	Benefit of Variable Speed
Energy Efficiency			VFDs and ECMs match the compressor and fan speed to the specific demands of the work being performed.
Space Temperature Control	Best	Good	By matching the load needs of the zone being cooled, space temperature variation is reduced.
Dehumidification Capabilities			When properly sized, compressors and indoor fans run longer (at reduced speeds) improving latent work in many applications where active dehumidification is not required.
Compressor Cycling	Reduced	Increased	Reduced compressor cycling leads to increased compressor extended life.

### Part of the Package: Comfort and Reliability

With the flexibility to modulate capacity based on demand, Trane® variable speed rooftop units run more effectively than traditional rooftop units. This, in addition to varying the indoor fan speed, has the beneficial side effect of providing improved comfort control without equipment add-ons or additional expense. Optional modulating hot gas reheat is available for further control and active dehumidification. eFlex™ units also provide stable discharge air temperatures over a wide range of operating conditions to deliver superior comfort levels to building occupants.

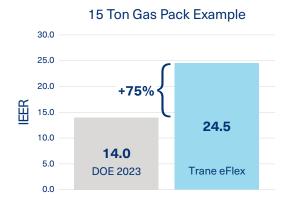
Precedent eFlex™ units are built to last. Minimized compressor cycling means less wear-and-tear on the unit and standard coil guards provide extra protection. All new Precedent models include a 5-year limited compressor warranty and 3-year limited parts warranty with extended warranty options.

### **Industry-Leading Expertise**

Trane® engineers remain on the cutting edge of the industry. Our products perform above and beyond future regulatory requirements for part load efficiency (IEER). Our sales team provides expert guidance, helping customers match the right equipment with the right specification, sizing and the right installation plan.

### **Payback**

- Rooftops with eFlex<sup>™</sup> technology offer solutions with efficiencies up to 85% higher than standards established by the Department of Energy and ASHRAE®.
- With the widest variety of factory installed options in the industry, Precedent units can be configured to specifications before delivery, saving the expense of costly site-installed options.
- Precedent eFlex™ units meet CEE's advanced tier for energy efficiency which may qualify for local utility efficiency incentives.



### **Easy Maintenance for Optimal Performance**

- · Optional enhanced air filtration, including 2-inch MERV 8 or MERV 13 filters
- · Hinged access doors provide easy entry to the unit's service access areas. This reduces maintenance time and helps prevent roof damage.
- Safer access to low voltage components with separated control panel
- · Beltless, variable direct-drive fans with easy access require less maintenance
- Color-coded, numbered wiring with key connectors allows for faster identification of wires, saving time and money when diagnosing and servicing the unit.

## **Multiple Zone VAV**

A multiple-zone VAV (MZVAV) system consists of a packaged rooftop unit that serves several individually controlled zones. Each zone is equipped with a VAV terminal unit that varies the quantity of air delivered to maintain the desired temperature in that zone. The rooftop unit controller varies the speed of the indoor fan to maintain the static pressure in the supply ductwork at a setpoint, ensuring that all zones receive the necessary quantity of air. In addition, cooling capacity is cycled to maintain the supply air temperature at the desired setpoint. For decades, Trane® has been an industry leader in rooftop VAV systems.

### Control Your Site. Control Your Costs.

Run your site as efficiently as your system with Trane controls.

### **Digital Controls Simplify and Optimize**

Building connectivity will become increasingly more common within the unit's lifespan. Precedent's digital Symbio® 700 controller optimizes unit performance and simplifies operation—while ensuring seamless integration into Trane and non-Trane building automation systems (BAS).

- Symbio® 700's intuitive user interface and service app make troubleshooting quick and simple. It clearly displays system alarms, diagnostics, and resolutions.
- Gain seamless integration into any building automation system leveraging open standard protocols, such as BACnet®/MS TP, BACnet/IP or MODBUS RTU, TCP/IP or LonTalk.
- No BAS in place? No problem. TraneConnect<sup>™</sup> can give you secure remote access to your Precedent and digital services from the unit controller.





# Tracer® Ensemble® Building Management System

Tracer® Ensemble® is a web-enabled, enterprise-wide building management system. Whether you have one commercial building or many, it provides the ultimate user experience with 24-hour secure, remote access to help monitor and troubleshoot your building systems. Unique custom reporting and dashboards give facility management enhanced visibility to optimize building assets. It provides a wealth of information that can be tracked, stored, and analyzed to help ensure overall system performance and efficiency.



### **Tracer Concierge®**

Tracer Concierge® is an innovative building automation system for small and mid-sized commercial buildings. Packed with the power of Trane's factory-engineered applications, it delivers top-to-bottom control over single- and multiple-zone rooftop and split systems, exhaust fans, indoor air quality, lighting and more. Concierge features an easy-to-use 10-inch user interface that gives access to special technician tools for a smooth installation and makes system management easy for occupants. In combination with the advanced technologies of your rooftop unit, Tracer Concierge® enhances buildings efficiency and optimizes system performance without sacrificing comfort.

Learn more at trane.com



Trane – by Trane Technologies (NYSE: TT), a global climate innovator – creates comfortable, energy efficient indoor environments through a broad portfolio of heating, ventilating and air conditioning systems and controls, services, parts and supply. For more information, please visit *trane.com or tranetechnologies.com.* 

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