



# Self-Contained Air Conditioning Systems



20 to 130 tons

# Reaching Better Outcomes

Daikin's Self-Contained units are a packaged HVAC solution that feature single-point power, optimized factory controls, and easy installation. Their small footprint minimizes mechanical space and maximizes usable space for architectural design. These compact units allow the facility managers to customize every space for distinct uses in each area of the building to create better outcomes for occupants inside, fitting their specific needs.



## One World Trade Center

At 1,776 feet high and the tallest building in the Western Hemisphere, One World Trade Center is the prominent skyscraper amidst the Manhattan skyline.

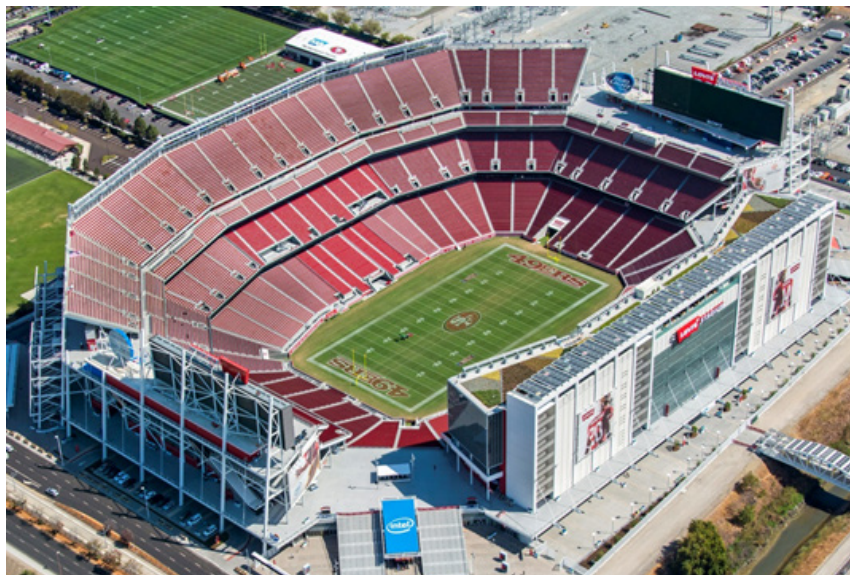
The Port Authority of New York and New Jersey (PANYNJ) had strict building code requirements that called for highly customized equipment to meet efficiency, indoor air quality (IAQ), and sound performance measures, which Daikin was uniquely able to meet.

166 cooling Self-Contained systems were installed, with high water pressure shell and tube condensers, variable speed efficiency fans, full integrated factory controls, customized scroll compressors, and waterside economizers. The focus on advanced technology and optimizing energy efficiency has created better outcomes for building occupants.

## Levi's® Stadium

Daikin supplied 21 Self-Contained air conditioning units to the \$1.2B Levi's Stadium, home of the San Francisco 49ers. Because of limitations of the area available for equipment, the engineers specified 100-ton Daikin units, which allowed them to make better use of the available space.

Thanks to the Daikin equipment and other energy saving measures, Levi's Stadium achieved LEED Gold Certification, becoming the first stadium to host a professional NFL team with that distinction.





# Engineered to Meet Your Demand

## Configurability

- Complete configurability for maximum system performance and efficiency.
- Modular design provides easy installation into both retrofit and new construction mechanical spaces.

## Sound Performance

- Single width, single inlet (SWSI) airfoil plenum fan operates at ideal speed to reduce turbulence and rumble.
- Perforated liners reduce sound power by 3 dBA to provide quieter operation.
- Configurable plenum heights help optimize sound in lower octave bands by 8-10 dB and can eliminate the need for duct transitions.
- Up to 8 scroll compressors are applied in a 2" R13 foam cabinet for quiet radiated sound during cooling operation.
- Factory-mounted variable frequency drives (VFDs) control fan motor speed, fan operating costs, and sound levels.

## Application Efficiency

- SWSI airfoil plenum fans have static efficiencies greater than 60 percent and reduce total fan power by over 30 percent when compared to traditional forward curved fans at real world static pressures; generating total operating cost savings of 15 percent.
- To minimize cooling operating costs, condensers can be optimized specific to application needs, generating lower gpm/ton flow rates and higher condensing water temperatures that increase system efficiency.
- Evaporator coils are sized to provide a balance of turndown and full load capacities, adjusting to needs to maximize energy savings.

## Maintenance

- Durable construction with pre-painted or G90 galvanized steel exterior cabinet panels resists corrosion.
- Access panel and doors are flush mounted to cabinetry, with quick access latch and handle assemblies.
- Mechanically cleanable waterside economizer and condenser coils to prolong equipment life.



# Building Intelligence

## 1] Intelligent Systems™ Packaged System Manager

- Optional centralized control system making it simple to monitor your equipments' operating performance.
- Monitor and control your HVAC system remotely via email, text alerts, and browser interface.

## 2] Automatic Integration

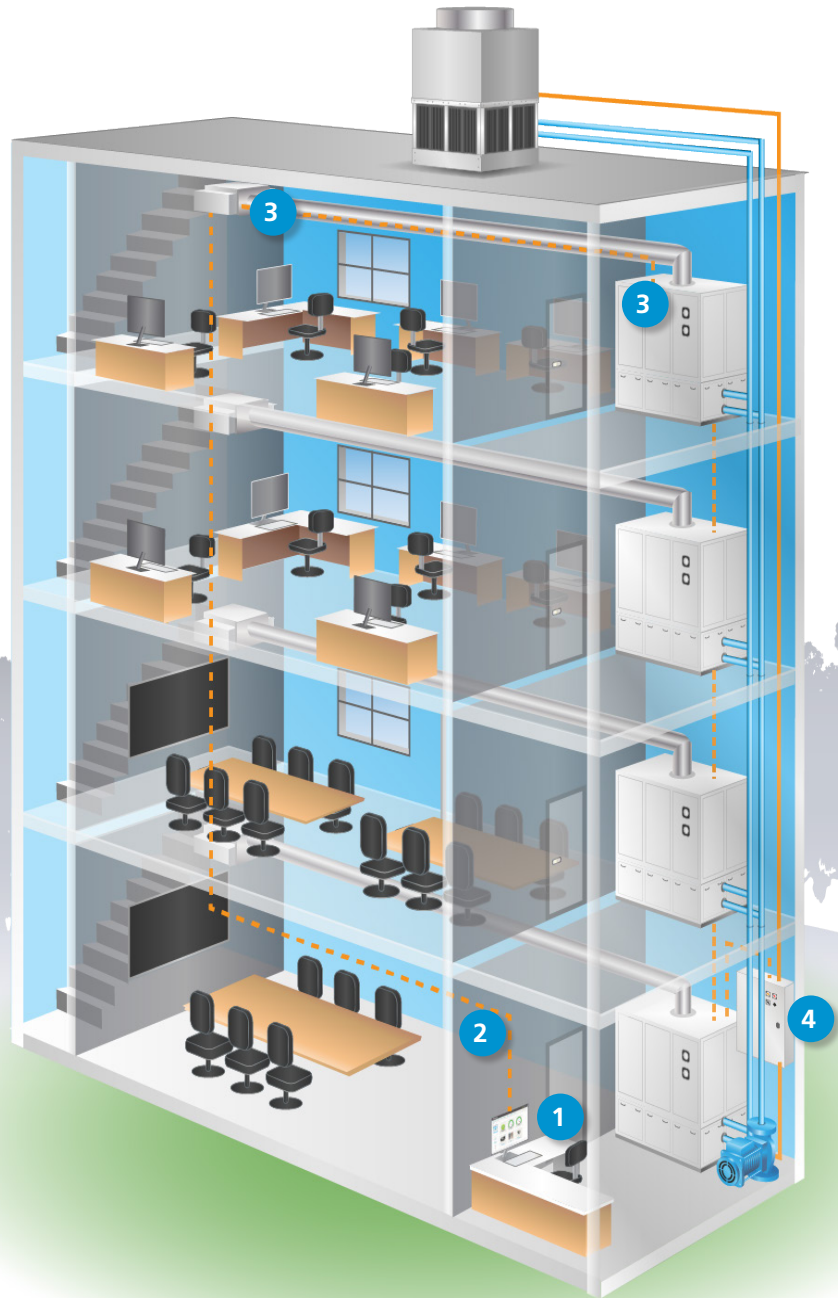
- Intelligent Systems automatically discovers and aggregates all of the HVAC equipment data points into one view, allowing for quick and easy control of your building.

## 3] Self-Contained and VAV

- Intelligent Systems pre-addresses and pre-programs your Self-Contained units and VAV boxes for plug-and-play installation and easy operation.
- Individualized zone comfort control allows tenants to select their own setpoints and improves energy efficiency with floor-by-floor control.

## 4] Loop Water Manager

- Intelligent Systems finds and easily integrates with a centralized BACnet™ loop water manager to gain additional control and monitoring of cooling towers, boilers, and pumps.



To learn more about Self-Contained air conditioning systems or Intelligent Systems™, contact your local Daikin Applied sales office or visit [DaikinApplied.com](http://DaikinApplied.com).