



The Ideal HVAC Solution

DEDICATED OUTDOOR AIR SYSTEM

SURE
COMFORT®

Fresh Outdoor Air

HELPING BUILDINGS BREATHE

Sure Comfort's Dedicated Outdoor Air System offers exceptional energy savings, unprecedented comfort, and precise humidity control. Sure Comfort DOAS is the ideal HVAC solution for schools, hospitals, restaurants, grocery stores, hotel corridors, and any commercial application that requires conditioned outdoor air.



The Ideal Solution FOR YOUR SPACE.

Rapid leadtimes and retrofit-ready curb adaptors make installation effortless for any application:



RESTAURANTS



GROCERY



SCHOOLS



SENIOR LIVING /
APARTMENTS



GROW
FACILITIES



LABORATORIES /
CLEAN ROOMS




HOTELS



WAREHOUSES



NATATORIUMS



Engineered
to Last.

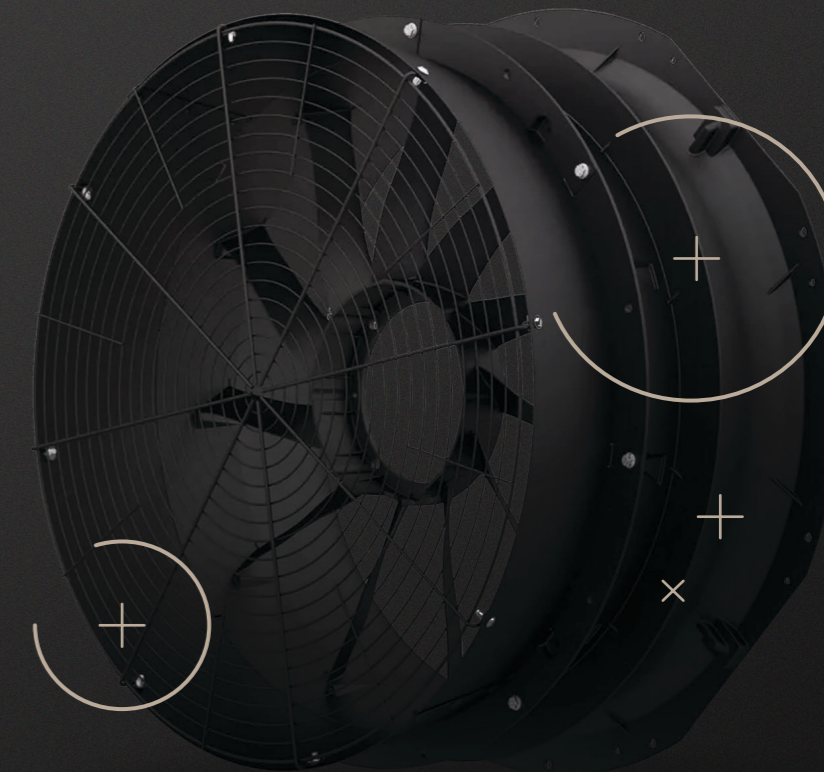
**INDUSTRY BEST
WARRANTY.**

Every Sure Comfort DOAS unit comes standard with a 5 year parts warranty. DOAS is designed with sustainability in mind and is built to last an industry leading 25 years. Removable hinged access doors and an insulated drain pan allow for easy maintenance and service. And double wall, insulated galvanized steel construction provides exceptional durability.



USER FRIENDLY WITH Complete Control.

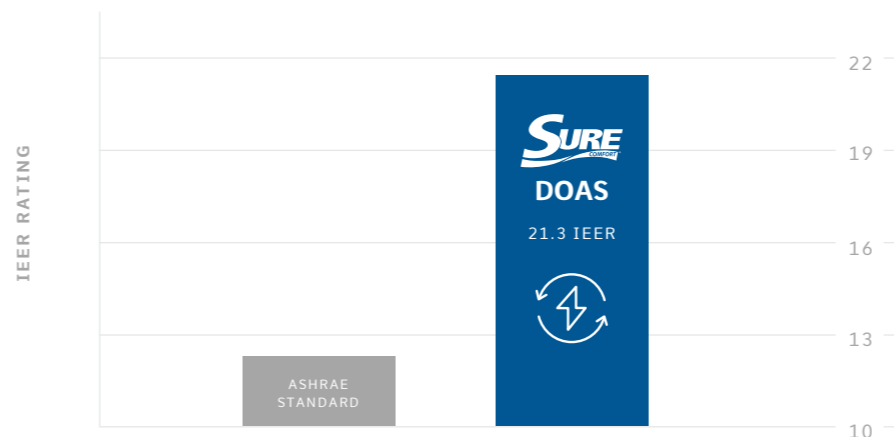
Sensors throughout Sure Comfort DOAS continually measure a wide variety of data points. All of this information is just a touch away through the onboard user control panel, as well as remotely accessible and configurable through an optional BACNet or Lonworks card that ties into your building's BMS system, ensuring that your unit operates at peak performance at all times.



Durable TOP QUALITY COMPONENTS

Every detail of Sure Comfort DOAS has been carefully designed and selected to provide an exceptionally high quality product. Each aspect of the unit has been intentionally curated with performance and longevity in mind. All fans are 100% direct drive for high efficiency and maintenance-free operation. A variable speed inverter duty compressor is provided standard, and aerodynamic bionic fan blades drastically reduce noise emissions. You can rely on Sure Comfort DOAS to operate headache free for years to come.

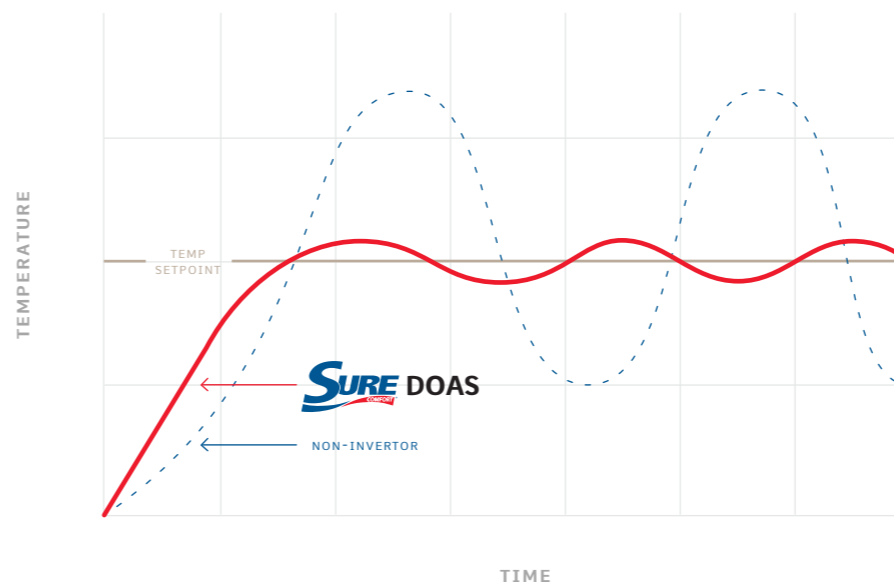
WITH DOAS
YOU HAVE THE
MOST EFFICIENT
TECHNOLOGY, THE
HIGHEST QUALITY
COMPONENTS,
AND THE TIGHTEST
HUMIDITY AND
TEMPERATURE
CONTROLS.



EXCEEDING EXCELLENCE

Superior Energy Efficiency

Sure Comfort DOAS achieves up to an impressive 21.3 Integrated Energy Efficiency Ratio (IEER) rating which is over 1.5x the ASHRAE 90.1-2016 IEER standard. Designed with the future in mind, Sure Comfort DOAS is poised to exceed rising IEER standards for years to come.



RELIABLE PRECISION

Precise Temperature & Humidity Control

Sure Comfort DOAS contains fully modulating refrigeration and optional hot gas reheat components that deliver the amount of air requested at the exact desired temperature and humidity. Variable speed components allow DOAS to adjust its heating and cooling capacity to match the required load. This provides a consistent temperature throughout the space and avoids large temperature swings often associated with single stage equipment.

Sure Comfort DOAS Details: Back of Unit

01 VARIABLE SPEED DIRECT DRIVE SUPPLY FAN

- + High efficiency Variable Frequency Drive (VFD) or Electronically Commutated Motor (ECM) control options available
- + Variable fan speed and total airflow monitoring with Sure Comfort controls
- + Low maintenance and reduced failures due to brushless / beltless design
- + High Efficiency fans provide quiet operation and significant energy savings

04 UP TO THREE LAYERS OF OUTDOOR AIR FILTRATION

- + Standard 2" metal mesh outdoor air filters
- + Filtration options available – 2" thick MERV-8 & 13, 4" thick MERV-15 & HEPA
- + Allowing for maximum clean airflow at reduced static pressures – available with clogged filter monitoring option

07 WIDE INDOOR COIL DESIGN

- + Up to 7-row coil allows for optimal equipment efficiencies, full conditioning of outdoor air, and moisture control through increased residence time of airstream
- + Staggered coil design reduces supply air bypass

02 LOW-LEAKAGE OUTDOOR AIR DAMPER / INTAKE LOUVER

- + Modulates to accurately meet variable outdoor air requirements
- + Integrated louver and bird screen assembly included, Exceeds AMCA Class 1A Leakage Standards
- + Low entering air velocity prevents debris or precipitation from entering the unit airstream

05 STAINLESS STEEL SLOPED CONDENSATE DRAIN PAN

- + Insulated drain pan allows for easy maintenance and serviceability
- + Float switch monitors water level and protects against condensate overflow
- + Exceeds ASHRAE 62.1 Standards

08 ELECTRONIC EXPANSION VALVE

- + Provides automated superheat control and monitoring by modulating from 0-100%
- + Precise position control prevents liquid migration during off-duty cycles

03 AVERAGING TEMPERATURE SENSOR / HUMIDITY SENSOR

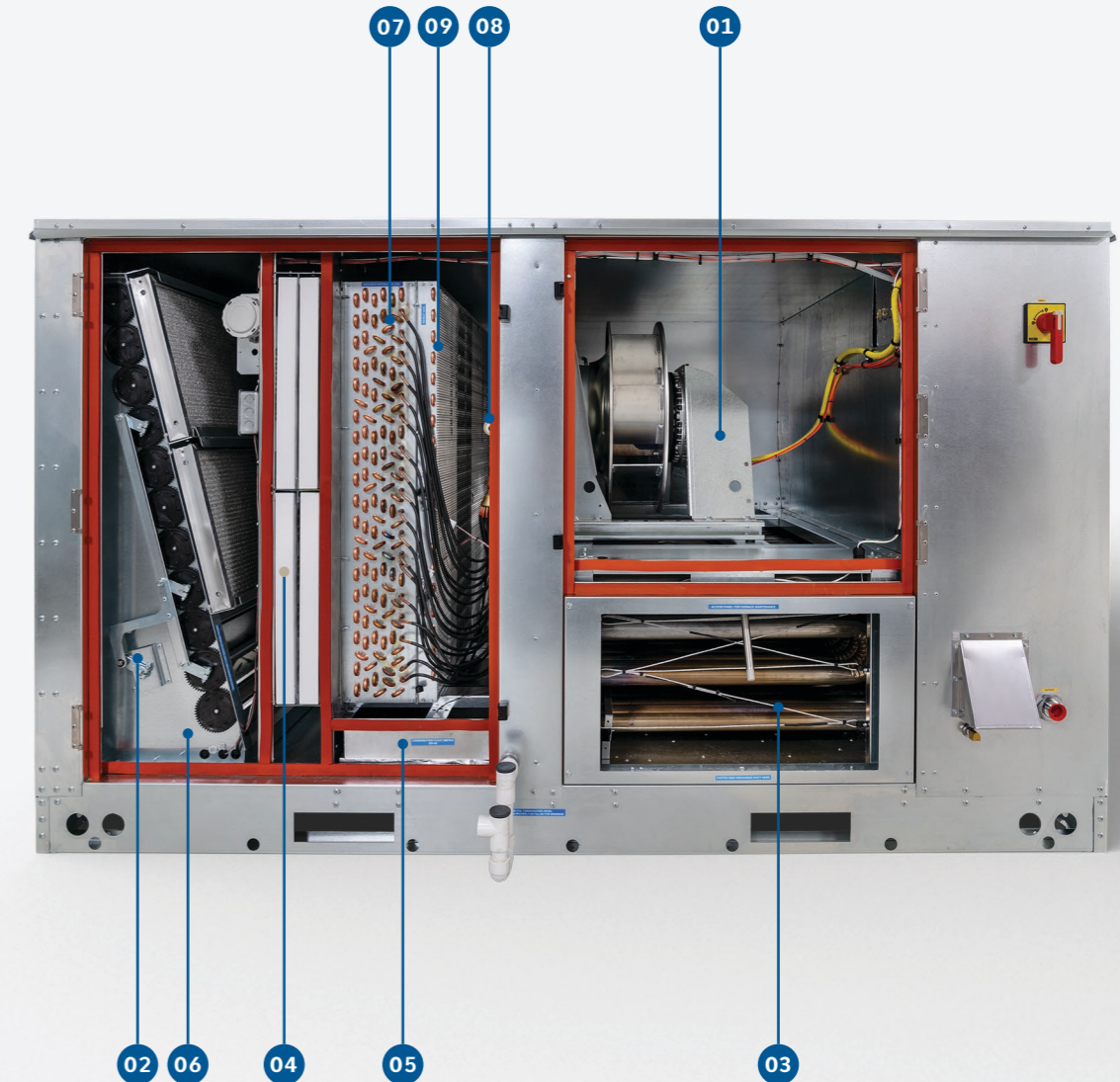
- + Monitors mixed air temperature / humidity
- + Available outdoor, return, mixed, discharge, and space air temperature / humidity measurements
- + Averaging Intake, Indoor Coil, and Discharge temperature sensors provide accurate temperature readings for correct unit modulation

06 SMOKE DETECTOR (OPTIONAL)

- + Monitors "fire activity" in the return airstream
- + Shuts down blower to protect unit from smoke or fire damage
- + Available to "Ship Loose" for preferred installation locations

09 FULLY MODULATING HOT GAS REHEAT COIL (OPTIONAL)

- + Provides highly accurate humidity / temperature control
- + Electronic reheat valve allows for precise capacity control





10 MODULAR / SPLIT MANIFOLD HEATING (OPTIONAL)

- + Natural gas indirect fired furnace with constant 80% efficiency throughout modulation (90% high efficiency option available)
- + Propane, Heat Pump, and Modulating SCR Electric Heat options available
- + Enhanced heating turndown (18:1) for minimum temp. rise at low loads
- + Double safety components (Pressure Switch, On/Off Gas Valve, Modulating Valve, Gas Shut-off Valve)

13 HUMAN MACHINE INTERFACE (HMI)

- + Total control of the unit through HMI with access to real-time space temperature, humidity, refrigerant temperature, and pressure data
- + Customizable user-friendly interface allows for simple programming of temperature, humidity and scheduling settings
- + Integrated temperature/humidity sensor avoids need for additional space measurements

16 VARIABLE SPEED OUTDOOR FANS WITH EC MOTORS

- + 10:1 turndown maintains peak efficiency for all outdoor air conditions
- + Aerodynamically designed bionic blades drastically reduce noise emissions

11 INTEGRATED CONTROLS

- + In-house controls developed using multiple PID loops to maximize energy efficiency
- + Several control offerings – full integration to BAS/DDC
- + Available extreme low ambient logic allows for DX cooling operation in ambient conditions down to -25 °F
- + Total Unit Economizer monitors intake conditions to provide exact (least) amount of conditioning needed to meet space conditions, reducing energy consumption

14 HEAVY DUTY PIPING & SUPPORTS

- + Hanging supports and vibration isolators prevent refrigeration piping from moving during transport and operation
- + Machine-bent copper piping reduces amount of brazes and possible failure points

17 DOUBLE WALL, GALVANIZED STEEL CONSTRUCTION

- + Insulated with 2" thick, R13 closed cell foam or 1" thick, R4.3 fiberglass board
- + Corrosion resistant, heavy gauge, G-90 galvanized steel

12 DANFOSS VARIABLE SPEED INVERTER SCROLL COMPRESSOR

- + Modulating and throttling ability to provide precise load matching with reduced energy consumption
- + Protective operating envelope and Pumpdown logic minimizes risk of damage and premature failure
- + Variable Frequency Drive (VFD) provides phase and over-amp protection to maximize life of unit
- + Standard oil level sensor, crankcase heater, and suction line accumulator

15 CONDENSING COIL HAIL GUARD (OPTIONAL)

- + Protects condenser coil from damage
- + Correctly sized to ensure a clean overall look with total protection
- + Undamaged coils provide more efficient heat transfer during normal operation

18 REMOVABLE HINGED ACCESS DOORS

- + Allow for easier maintenance and serviceability
- + Fully insulated controls cabinet reduces condensation, avoiding damage to controls

System Sizing & Specifications

UNIT SIZE (Nominal Tonnage)	5.0	6.0	7.5	8.0	10.0	12.5	15.0	20.0	22.0	25.0	30.0
Min Airflow (CFM)	500	600	750	800	1000	1250	1500	2000	2200	2500	3000
Max Airflow (CFM)	2000	2400	3000	3200	4000	5000	6000	7000	8800	10000	12000
Indoor Coil Rows	4	4	5	5	5	6	6	7	5	5	6
Cooling Turndown Ratio	7:1	7:1	7:1	7:1	7:1	7:1	4:1	4:1	4:1	4:1	4:1
IEER	17.9	19.5	18.6	20.2	18.6	21.3	18.8	18.2	18.1	17.9	17.8
Max Heating Turndown Ratio*	20:1	17:1	14:1	21:1	16:1	25:1	16:1	16:1	18:1	18:1	18:1
Furnace Input Capacity (MBH)	50-200	50-200	50-200	50-300	50-300	150-500	150-500	150-500	200-600	200-600	200-600
Electric Coil Capacity (kW)	10-60	10-60	10-60	15-60	15-60	15-100	15-100	15-100	30-150	30-150	30-150
Curb Size (L x W)	71" x 41"	71" x 41"	71" x 41"	75" x 49.5"	75" x 49.5"	91" x 59.5"	91" x 59.5"	91" x 59.5"	111" x 80"	111" x 80"	111" x 80"
Unit Length	77.25"	77.25"	77.25"	81.75"	81.75"	99"	99"	99"	160"	160"	160"
Unit Width	62"	62"	62"	80.75"	80.75"	89.75"	89.75"	89.75"	89.75"	89.75"	89.75"
Unit Height	47.5"	47.5"	47.5"	60.75"	60.75"	69"	69"	69"	94"	94"	94"
Approximate Weight (lbs)	1000	1100	1200	1650	1730	2440	2500	2650	3750	4200	4500

*Contingent upon heat source



For additional information, contact your local Sure Comfort sales representative.

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