

## TECHNICAL SPECIFICATIONS FOR MODEL H

### INDOOR COMMERCIAL/INDUSTRIAL HURACAN™ SERIES FORCED-AIR DESTRATIFICATION FAN



#### Table of Contents

Unit Sizes . . . . .	2
Features . . . . .	2
Factory-Installed Options . . . . .	2
Field-Installed Options . . . . .	2
Technical Data . . . . .	3
Fan Selection (Model and Number of Fans Needed) . . . . .	3
Dimensions . . . . .	4
Clearances . . . . .	4
Weights . . . . .	5
Certification . . . . .	5
Installation Codes . . . . .	5

**In keeping with our policy of continuous product improvement, we reserve the right to alter, at any time, the design, construction, dimensions, weights, etc., of equipment information shown here.**

## TECHNICAL SPECIFICATIONS—CONTINUED

### Unit Sizes

These destratification fans are available in four unit sizes based on maximum mounting height of 25–60 feet.

### Features

- Voltage/phase options: 115/1, 208/1, 230/1, 240/1, and 277/1
- Painted galvanized-steel cabinet with two-tone black and white glossy, scratch-resistant paint scheme
- Clean rounded corners and edges with no visible screws or fasteners
- Directional hanging brackets for air direction control to optimize space air movement
- Integrated louvers to direct air to improve destratification and occupant comfort
- Distributes existing space heat to occupant level to reduce heat load and improve building energy efficiency
- Provides cooling air movement to reduce cooling load during summer heat or warm spring and fall days
- Energy-saving axial fan motor
- Close mesh fan guard
- Control may be integrated with unit heaters to optimize building efficiency
- Lightweight and easy to install with external control and power connections
- External terminal strip for quick connection of 24V wiring
- Thermostat options: single-stage for simple temperature driven control, two-stage for coordinating unit heater and destratification fan operation, or BACnet-capable for Building Management System (BMS) integration

### Factory-Installed Options

Option	Description
AK1	Voltage/phase 115/1
AK19	Voltage/phase 208/1, 230/1, or 240/1
AK4	Voltage/phase 277/1

### Field-Installed Options

Option	Description
CL1	Single-stage thermostat
CL22	Two-stage thermostat
CL31, CL32	Multiple unit control: option CL31 includes components for one control unit and one additional unit—option CL32 includes components for each additional non-control unit
CL90	BACnet-capable thermostat
CM1	Thermostat guard with locking cover
CM3	Bracket assembly for mounting thermostat on unit
CN3F	Remote ON/OFF switch in 2 × 4 box
IT13	Unit-mounted thermostat

## Technical Data

Parameter	Unit of Measure	Model			
		H25	H35	H50	H60
Maximum recommended ceiling height	foot	25	35	50	60
Minimum recommended ceiling height		10	18	25	30
Air volume	CFM	650	1100	1500	2000
	meter <sup>3</sup> /minute	18.4	31.2	42.5	56.7
Recommended nominal floor area per fan	foot <sup>2</sup>	1000	1500	1500	2000
Recommended air volume per fan	foot <sup>3</sup>	25,000	52,500	75,000	120,000
Discharge air opening area	foot <sup>2</sup>	0.967	1.247	2.382	2.382
	meter <sup>2</sup>	0.090	0.116	0.221	0.221
Output velocity	FPM	672	882	630	840
	meter/minute	205	269	192	256
Fan diameter	inch	10	12	16	16
Fan motor horsepower	HP	0.03	0.06	1/15	1/6
Estimated sound level*	dBa	36	36	49	41
Full load amps, 115/1	amp	0.6	1.2	1.2	2.7
Full load amps, 208/1		0.3	0.5	0.5	1.1
Full load amps, 240/1		0.3	0.5	0.6	1.3
Full load amps, 277/1		0.3	0.4	0.5	1.1
Maximum overcurrent protection		15			

\*At maximum recommended ceiling height.

### Fan Selection (Model and Number of Fans Needed)

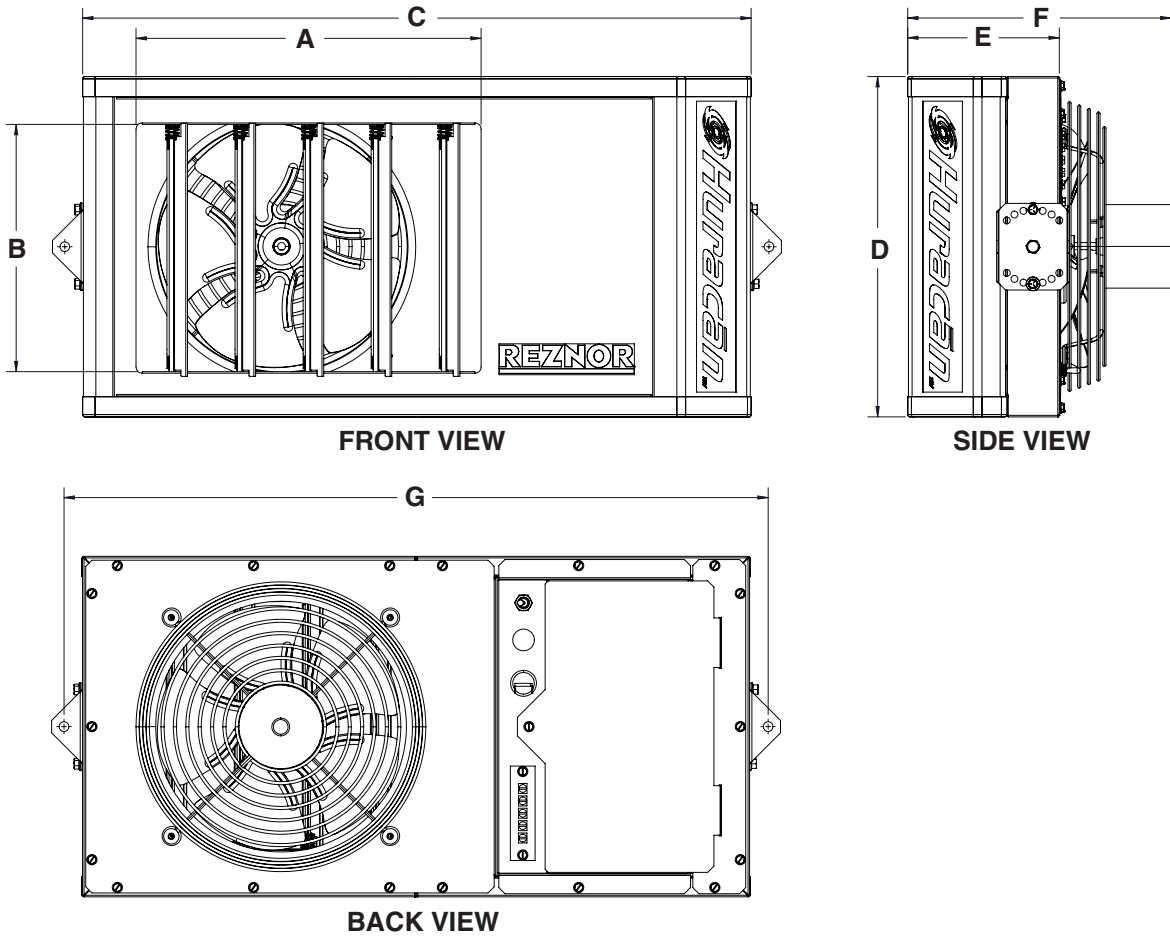
Refer to the above table to select the fan model needed and to determine the number of fans needed as follows:

1. Select model based on minimum and maximum ceiling height of space to be destratified. For example, 30-foot maximum ceiling height falls within 18- to 35-foot range that corresponds to H35 model.
2. Determine number of fans needed to properly destratify space during heating season (one complete air turn per hour minimum).
  - a. Determine number of fans needed based on square footage:
    - (1) Calculate square footage of floor area (L × W). Unique space layouts require breaking space into logical smaller geometric shapes and calculating area for each. For example, 70 feet long × 50 feet wide = 3,500 square feet.
    - (2) For fan model selected in step 1, divide floor area by recommended nominal floor area per fan. For example, nominal floor area for H35 model is 1,500 square feet.  $3,500 \div 1,500 = 2.33$  fans (three fans are needed to ensure proper destratification).
  - b. Determine number of fans needed based on space volume:
    - (1) Calculate space volume by multiplying maximum ceiling height by floor square footage. For example: 30 feet ceiling × 3,500 = 105,000 cubic feet.
    - (2) For fan model selected in step 1, divide space volume (cubic feet) by recommended air volume per fan. For example,  $105,000 \div 52,500 = 2$  fans.

**NOTE: Select the lowest number of fans calculated unless additional air movement is desired. If cooling air movement is the primary need, increase the number of fans up to double the calculations for heating to produce the best results.**

## TECHNICAL SPECIFICATIONS—CONTINUED

### Dimensions



Model	Dimension (See Graphic Above)						
	A	B	C	D	E	F	G
	Inches (mm)						
H25	14 (356)	10-1/8 (257)	27 (686)	13-3/4 (349)	6-1/4 (159)	12 (305)	28-1/2 (724)
H35		13 (330)		16-3/4 (425)		13 (330)	
H50	16-3/8 (416)	21-1/8 (537)		24-3/4 (629)		15 (381)	
H60							

### Clearances

Parameter	Inches (mm)
Top/bottom	36 (915)
Hanger side	2 (51)
Intake/discharge	18 (458)

## Weights

Model			
H25	H35	H50	H60
Pounds (kg)			
22 (10)	28 (13)	38 (18)	43 (20)

## Certification

These destratification fans are listed by Intertek for use in the United States and in Canada.

## Installation Codes

All electrical wiring and connections, including electrical grounding MUST be made in accordance with the *National Electric Code* (ANSI/NFPA No. 70, latest edition) or, in Canada, the *Canadian Electric Code* (Part 1, CSA C.22.1). In addition, the installer should be aware of any local ordinances that might apply.

**⚠ WARNING ⚠**

- This appliance is not intended for use by persons with reduced physical, sensory, or mental capabilities or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.

**⚠ CAUTION ⚠**

- Do not install the unit where it may be exposed to water spray, rain, or dripping water.
- Do not install the unit near high temperature heat sources. Do not install the unit in a position in which the downward air column created by the fan is directly bisected by another airflow source. Do not install the unit close to any object that might interfere with fan operation or allow fan blades to come into contact with any object.

**For more information on Reznor HVAC products:**

- **Contact your local Reznor representative at 1-800-695-1901**
- **Refer to the manuals and additional consumer materials found at [www.reznorhvac.com](http://www.reznorhvac.com)**

