

**Highly Efficient,
H13 HEPA Air Scrubber
With optional ERV**



MD-1000

The MD-1000 is a tower HEPA air scrubber that is designed to remove indoor air particles as small as 0.3 micrometers (μm) in diameter, with a 99.97% efficient H13 HEPA filter, while maintaining a low operating sound level with a high efficiency motor. This unit is available with or without an energy recovery ventilator.

Typical installations for the MD-1000 include:

- Classrooms
- Medical Offices
- Hotels
- Motels
- Independent Care Facilities
- Retail Stores
- Single Family Homes
- Student Housing



Features

Highly Efficient/High Performance Motor

Standard 4-speed DC motor provides a maximum of 662 CFM of airflow with low amp draw.

Multiple Layer Filtration

- Woven Cloth MERV 8 Pre-Filter.
- H13 HEPA Filter, with 99.97% Efficiency.

Optional ERV (MD-1000E-A Only)

Option ERV with a range of 265 CFM (High) -177 CFM (Low)

Small Footprint

With dimension of 64.8" tall x 20.5" wide x 15.4" deep, this unit has a smaller footprint than many competitors.

Attractive Heavy-Duty Cabinet

The powder coated steel cabinet will blend with any office décor.

Easy to Install

An 8-foot power cord with 115V plug and easy-install brackets are included with each unit.

State-of-the-art Control Panel

The unit mounted advanced control panel is simple to use and allows the user to assess the unit status easily.

Quiet

Quiet operation with a maximum noise level of 58 dBA(High Speed).



Dimensions and Specifications



MD-1000X-A (H13 HEPA) and MD-1000E-A (H13 HEPA + ERV)

Electrical	V/Hz/Ph	120 / 60 / 1
Connection	Type	3-Prong 120V plug with 8' wire
Unit Airflow (CFM)	H / M1 / M2 / L	662 / 506 / 385 / 165
Unit Max Power Usage	Watts	220
ERV Airflow (CFM)	H / M / L	265 / 235 / 177
ERV Max Power Usage	Watts	150
Sound Level dBA	H - L Range	58 - 40
Main Filter	Type	H13 HEPA 99.97% Efficiency
Pre-Filter	Type	MERV 8
Additional Filter	Type	Activated Carbon
Controls	Type	Advanced Control Panel
Dimensions	H x W x D	64.8" x 20.5" x 15.4"
Cabinet	Material	Powder Coated Steel with Aluminum Grates
Weight	Lbs	172

Operation with ERV (MD-1000E-A)

Indoor Air Filtration

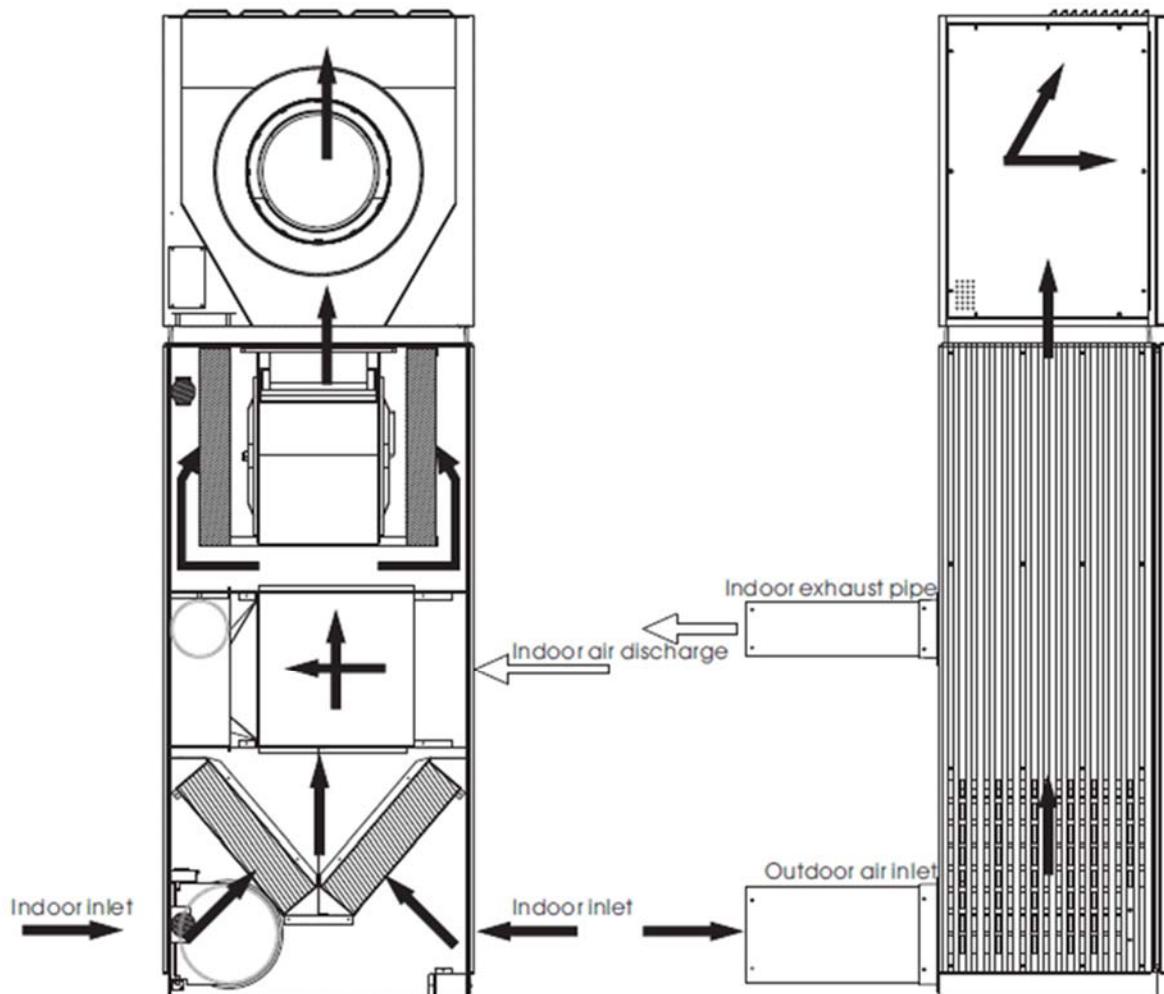
- 1) Air is pulled through the lower louvered air inlet, into the unit cabinet and through the pre-filters.
- 2) Air continues through the ERV, and tempers the core.
- 3) Air then passes through the 99.97% H13 HEPA filters and into the blower and purified air travels through the outlet at the top of the cabinet.

Outdoor Air Supply

- 1) Outdoor air is pulled through the outdoor inlet, through a 6.3" diameter duct, toward the bottom of the unit. T.
- 2) The air passes through the pre-filters and through the ERV, where it is tempered by the core.
- 3) Air then passes through the 99.97% H13 HEPA filters and into the blower, the purified air then travels through the outlet at the top of the cabinet.

Indoor Air Exhaust

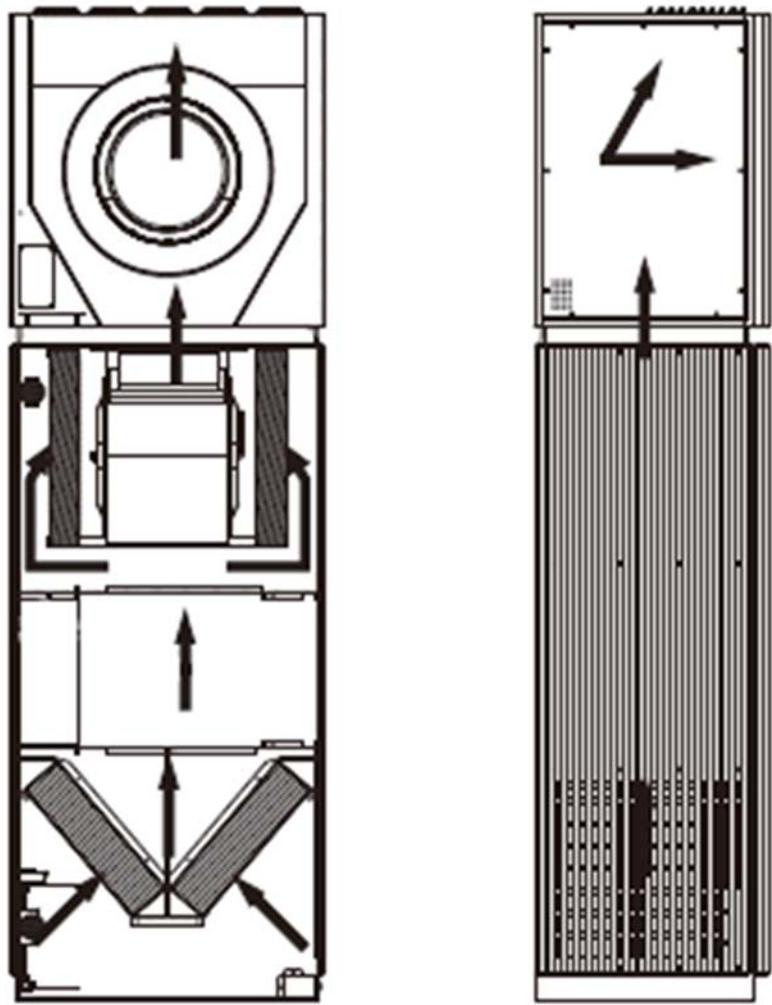
- 1) Air is pulled through the middle side of the cabinet and passes horizontally through the ERV, tempering the core.
- 2) Air then passes through a 3.5" diameter duct, toward the middle of the unit, then outdoors.



Operation Standard Unit (MD-1000X-A)

Indoor Air Filtration

Air is pulled through the lower louvered air inlet, into the cabinet and through the pre-filters. Air then passes through the 99.97% HEPA filters and into the blower, the purified air then travels through the outlet at the top of the cabinet.



Unit Mount Controller



The state-of-the-art control panel provides easy access to the status of the unit, as well as simple control of the unit settings. The unit mounted Advanced Control Panel includes the following functions:

- On/Off Switch
- Child Lock
- Fan Speed Selection
- Timer Set
- Smart Mode
- Sleep Mode
- Filter Reset
- CO₂ Concentration Reading
- Temperature and Humidity Reading
- PM2.5 Value
- HEPA Filter Status



Unit Air Changes

		Room Width (Feet)															
		20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50
Room Width (Feet)	20	9.9	9.0	8.3	7.6	7.1	6.6	6.2	5.8	5.5	5.2	5.0	4.7	4.5	4.3	4.1	4.0
	22	9.0	8.2	7.5	6.9	6.4	6.0	5.6	5.3	5.0	4.8	4.5	4.3	4.1	3.9	3.8	3.6
	24	8.3	7.5	6.9	6.4	5.9	5.5	5.2	4.9	4.6	4.4	4.1	3.9	3.8	3.6	3.4	3.3
	26	7.6	6.9	6.4	5.9	5.5	5.1	4.8	4.5	4.2	4.0	3.8	3.6	3.5	3.3	3.2	3.1
	28	7.1	6.4	5.9	5.5	5.1	4.7	4.4	4.2	3.9	3.7	3.5	3.4	3.2	3.1	3.0	2.8
	30	6.6	6.0	5.5	5.1	4.7	4.4	4.1	3.9	3.7	3.5	3.3	3.2	3.0	2.9	2.8	2.6
	32	6.2	5.6	5.2	4.8	4.4	4.1	3.9	3.7	3.4	3.3	3.1	3.0	2.8	2.7	2.6	2.5
	34	5.8	5.3	4.9	4.5	4.2	3.9	3.7	3.4	3.2	3.1	2.9	2.8	2.7	2.5	2.4	2.3
	36	5.5	5.0	4.6	4.2	3.9	3.7	3.4	3.2	3.1	2.9	2.8	2.6	2.5	2.4	2.3	2.2
	38	5.2	4.8	4.4	4.0	3.7	3.5	3.3	3.1	2.9	2.8	2.6	2.5	2.4	2.3	2.2	2.1
	40	5.0	4.5	4.1	3.8	3.5	3.3	3.1	2.9	2.8	2.6	2.5	2.4	2.3	2.2	2.1	2.0
	42	4.7	4.3	3.9	3.6	3.4	3.2	3.0	2.8	2.6	2.5	2.4	2.3	2.1	2.1	2.0	1.9
	44	4.5	4.1	3.8	3.5	3.2	3.0	2.8	2.7	2.5	2.4	2.3	2.1	2.1	2.0	1.9	1.8
	46	4.3	3.9	3.6	3.3	3.1	2.9	2.7	2.5	2.4	2.3	2.2	2.1	2.0	1.9	1.8	1.7
	48	4.1	3.8	3.4	3.2	3.0	2.8	2.6	2.4	2.3	2.2	2.1	2.0	1.9	1.8	1.7	1.7
	50	4.0	3.6	3.3	3.1	2.8	2.6	2.5	2.3	2.2	2.1	2.0	1.9	1.8	1.7	1.7	1.6
AC/H with Unit on High Speed, with a 10 Foot Ceiling																	

		Room Width (Feet)															
		20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50
Room Width (Feet)	20	7.6	6.9	6.3	5.8	5.4	5.1	4.7	4.5	4.2	4.0	3.8	3.6	3.5	3.3	3.2	3.0
	22	6.9	6.3	5.8	5.3	4.9	4.6	4.3	4.1	3.8	3.6	3.5	3.3	3.1	3.0	2.9	2.8
	24	6.3	5.8	5.3	4.9	4.5	4.2	4.0	3.7	3.5	3.3	3.2	3.0	2.9	2.8	2.6	2.5
	26	5.8	5.3	4.9	4.5	4.2	3.9	3.6	3.4	3.2	3.1	2.9	2.8	2.7	2.5	2.4	2.3
	28	5.4	4.9	4.5	4.2	3.9	3.6	3.4	3.2	3.0	2.9	2.7	2.6	2.5	2.4	2.3	2.2
	30	5.1	4.6	4.2	3.9	3.6	3.4	3.2	3.0	2.8	2.7	2.5	2.4	2.3	2.2	2.1	2.0
	32	4.7	4.3	4.0	3.6	3.4	3.2	3.0	2.8	2.6	2.5	2.4	2.3	2.2	2.1	2.0	1.9
	34	4.5	4.1	3.7	3.4	3.2	3.0	2.8	2.6	2.5	2.3	2.2	2.1	2.0	1.9	1.9	1.8
	36	4.2	3.8	3.5	3.2	3.0	2.8	2.6	2.5	2.3	2.2	2.1	2.0	1.9	1.8	1.8	1.7
	38	4.0	3.6	3.3	3.1	2.9	2.7	2.5	2.3	2.2	2.1	2.0	1.9	1.8	1.7	1.7	1.6
	40	3.8	3.5	3.2	2.9	2.7	2.5	2.4	2.2	2.1	2.0	1.9	1.8	1.7	1.7	1.6	1.5
	42	3.6	3.3	3.0	2.8	2.6	2.4	2.3	2.1	2.0	1.9	1.8	1.7	1.6	1.6	1.5	1.4
	44	3.5	3.1	2.9	2.7	2.5	2.3	2.2	2.0	1.9	1.8	1.7	1.6	1.6	1.5	1.4	1.4
	46	3.3	3.0	2.8	2.5	2.4	2.2	2.1	1.9	1.8	1.7	1.7	1.6	1.5	1.4	1.4	1.3
	48	3.2	2.9	2.6	2.4	2.3	2.1	2.0	1.9	1.8	1.7	1.6	1.5	1.4	1.4	1.3	1.3
	50	3.0	2.8	2.5	2.3	2.2	2.0	1.9	1.8	1.7	1.6	1.5	1.4	1.4	1.3	1.3	1.2
AC/H with Unit on Medium 1 Speed with a 10 Foot Ceiling																	

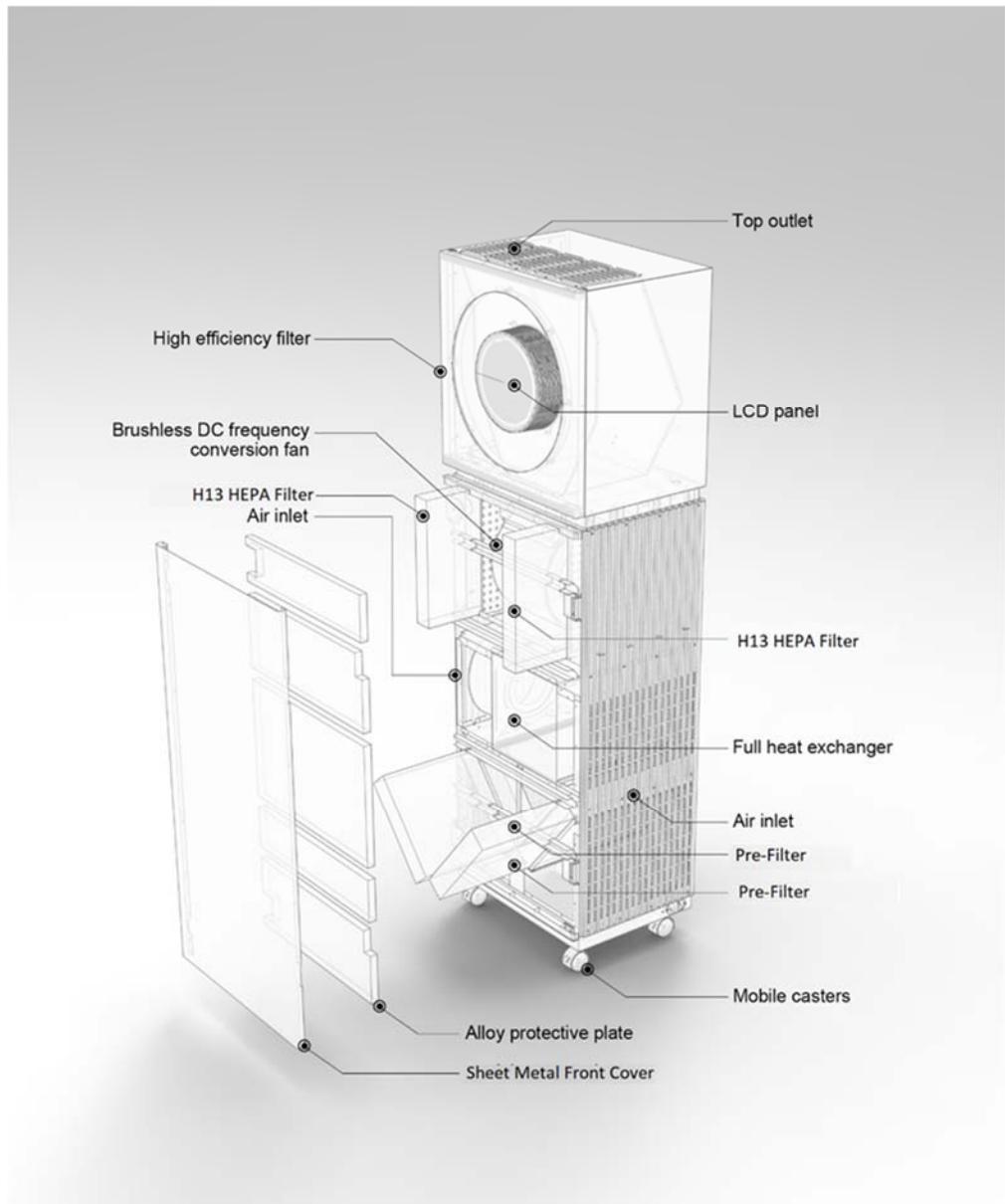
Unit Air Changes (Continued)

		Room Width (Feet)															
		20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50
Room Depth (Feet)	20	5.8	5.3	4.8	4.4	4.1	3.9	3.6	3.4	3.2	3.0	2.9	2.8	2.6	2.5	2.4	2.3
	22	5.3	4.8	4.4	4.0	3.8	3.5	3.3	3.1	2.9	2.8	2.6	2.5	2.4	2.3	2.2	2.1
	24	4.8	4.4	4.0	3.7	3.4	3.2	3.0	2.8	2.7	2.5	2.4	2.3	2.2	2.1	2.0	1.9
	26	4.4	4.0	3.7	3.4	3.2	3.0	2.8	2.6	2.5	2.3	2.2	2.1	2.0	1.9	1.8	
	28	4.1	3.8	3.4	3.2	2.9	2.8	2.6	2.4	2.3	2.2	2.1	2.0	1.9	1.8	1.7	1.7
	30	3.9	3.5	3.2	3.0	2.8	2.6	2.4	2.3	2.1	2.0	1.9	1.8	1.8	1.7	1.6	1.5
	32	3.6	3.3	3.0	2.8	2.6	2.4	2.3	2.1	2.0	1.9	1.8	1.7	1.6	1.6	1.5	1.4
	34	3.4	3.1	2.8	2.6	2.4	2.3	2.1	2.0	1.9	1.8	1.7	1.6	1.5	1.5	1.4	1.4
	36	3.2	2.9	2.7	2.5	2.3	2.1	2.0	1.9	1.8	1.7	1.6	1.5	1.5	1.4	1.3	1.3
	38	3.0	2.8	2.5	2.3	2.2	2.0	1.9	1.8	1.7	1.6	1.5	1.4	1.4	1.3	1.3	1.2
	40	2.9	2.6	2.4	2.2	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.4	1.3	1.3	1.2	1.2
	42	2.8	2.5	2.3	2.1	2.0	1.8	1.7	1.6	1.5	1.4	1.4	1.3	1.3	1.2	1.1	1.1
	44	2.6	2.4	2.2	2.0	1.9	1.8	1.6	1.5	1.5	1.4	1.3	1.3	1.2	1.1	1.1	
	46	2.5	2.3	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.1	1.1	1.0	
	48	2.4	2.2	2.0	1.9	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.1	1.1	1.0	1.0	
	50	2.3	2.1	1.9	1.8	1.7	1.5	1.4	1.4	1.3	1.2	1.2	1.1	1.1	1.0	1.0	0.9

AC/H with Unit on Medium 2 Speed (estimated), with a 10 Foot Ceiling

		Room Width (Feet)															
		20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50
Room Depth (Feet)	20	2.5	2.3	2.1	1.9	1.8	1.7	1.5	1.5	1.4	1.3	1.2	1.2	1.1	1.1	1.0	1.0
	22	2.3	2.0	1.9	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.1	1.1	1.0	1.0	0.9	0.9
	24	2.1	1.9	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.1	1.0	1.0	0.9	0.9	0.9	0.8
	26	1.9	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.1	1.0	1.0	0.9	0.9	0.8	0.8	0.8
	28	1.8	1.6	1.5	1.4	1.3	1.2	1.1	1.0	1.0	0.9	0.9	0.8	0.8	0.8	0.7	0.7
	30	1.7	1.5	1.4	1.3	1.2	1.1	1.0	1.0	0.9	0.9	0.8	0.8	0.8	0.7	0.7	0.7
	32	1.5	1.4	1.3	1.2	1.1	1.0	1.0	0.9	0.9	0.8	0.8	0.7	0.7	0.7	0.6	0.6
	34	1.5	1.3	1.2	1.1	1.0	1.0	0.9	0.9	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.6
	36	1.4	1.3	1.1	1.1	1.0	0.9	0.9	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.6
	38	1.3	1.2	1.1	1.0	0.9	0.9	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.5
	40	1.2	1.1	1.0	1.0	0.9	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5
	42	1.2	1.1	1.0	0.9	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.5
	44	1.1	1.0	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5
	46	1.1	1.0	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4
	48	1.0	0.9	0.9	0.8	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4
	50	1.0	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4

AC/H with Unit on Low Speed, with a 10 Foot Ceiling





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