

PURCHASER	P.O. #	DATE
PROJECT	LOCATION	
ENGINEER	ARCHITECT	
SUBMITTED BY	FOR APPROVAL	FOR REFERENCE

ITEM	PLAN DESIGNATION	QUANTITY	COOLING BTU/H	VOLTAGE	FRIEDRICH MODEL

### FEATURES

- Direct wire connection
- Utilizes direct-wired, 15-amp circuit with time-delay fuse
- Hermetically sealed refrigeration system
- 22 gauge steel cabinet
- Larger, commercial grade fan motor with hermetically sealed overload for arc-free operation
- Permanent split capacitor and totally enclosed fan motor
- Enclosed fan motor has hermetically sealed overload for arc-free operation
- Stainless steel fan shaft
- Environmentally sealed on/off switch and gold plated contacts in thermostat for corrosion resistance
  - Solid-state control relays for compressor and fan operation
  - Hot gas bypass allows the air conditioner to operate at low ambient conditions without freezing

### COILS COATED FOR CORROSION RESISTANCE

#### MODEL SH24N30A

- ElectroFin® 5-stage, immersion ecoat process on 100% of metallic surfaces on the outdoor coil provides outstanding corrosion resistance protection in coastal or corrosive environments

#### ELECTROFIN BENEFITS:

Excellent adhesion characteristics  
 Less than 1% thermal degradation  
 Outstanding chemical resistance  
 Passed 6048 hrs.ASTM B-117 Salt Spray

- ELECTROFIN MEETS THE FOLLOWING:
  - MIL-C-46168 Chemical Agent Resistance -DS2, HCl Gas
  - CID A-A-52474A (GSA)
  - MIL-STD 810F, Method 509.4 (Sand and Dust)
  - MIL-P-53084 (ME)-TACOM Approval
  - MIL-DTL-12468 Decontamination Agent (STB)
  - DPG (Douglas Proving Grounds) Soil & Water Exposure Tests
  - GM9540P-97 Accelerated Corrosion Test (120 cycles)
  - ASTM B117-G85 Modified Salt Spray (Fog) Testing-2,000 hours
  - ASTM B117 Salt Spray (tested by ARL for Lockheed Martin)

#### MODELS SH15M30A, SH20M30SA, SH20M50B, HCM15A30A, HCM20A30A

Diamonblue™ Advanced Corrosion Protection on the outdoor coil protects the coil against deterioration and extends the life of the unit especially in coastal or corrosive environments.

**UL LISTED**  
 for CLASS 1, DIV 2,  
 GROUPS A, B, C and D.

**CERTIFIED**  
 in accordance with  
 ISA 12.12.01 and NFPA 70  
 (NATIONAL ELECTRIC CODE),  
 ANSI/UL 484 Room Air  
 Conditioners

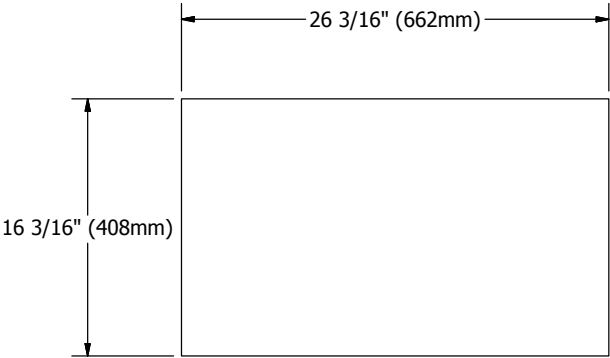
**KSA REGISTERED**  
 and TESTED in accordance with  
 SASO 2681\*



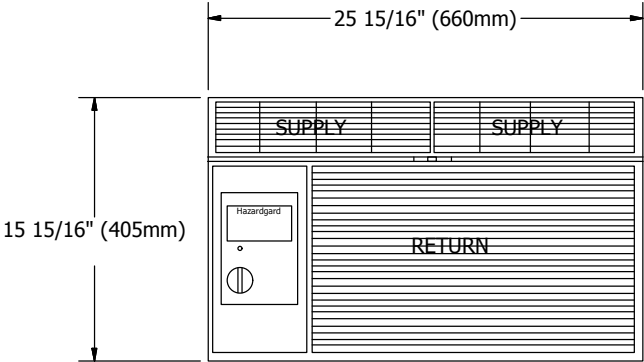
HCM R32 Models Only

# Installation: Wall Cut Out & Chassis Dimensions

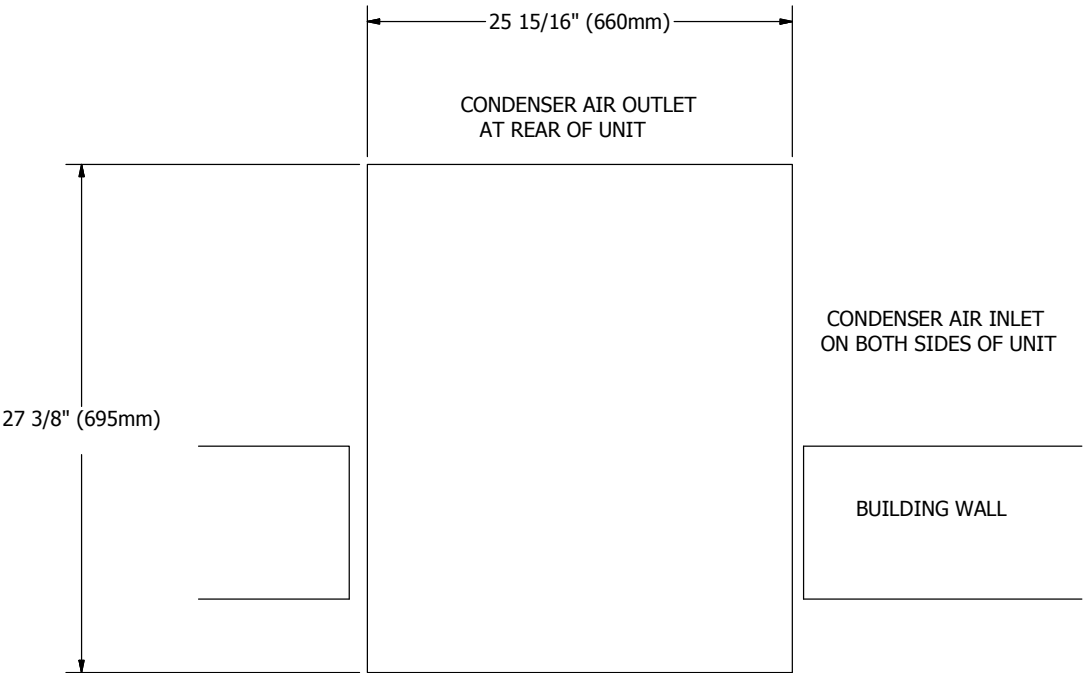
Hazardgard Model: HCM15A30A, SH15M30A



**BUILDING WALL CUT OUT  
FOR UNIT/SLEEVE**



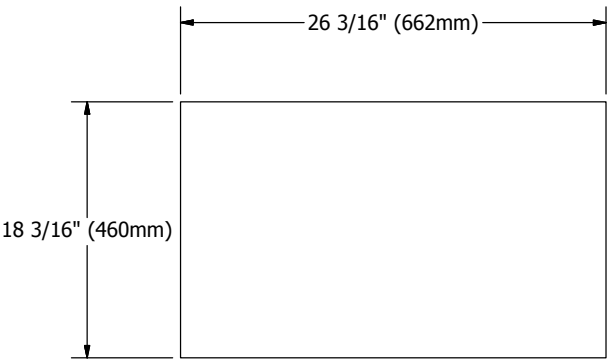
**INDOOR, FACE VIEW**



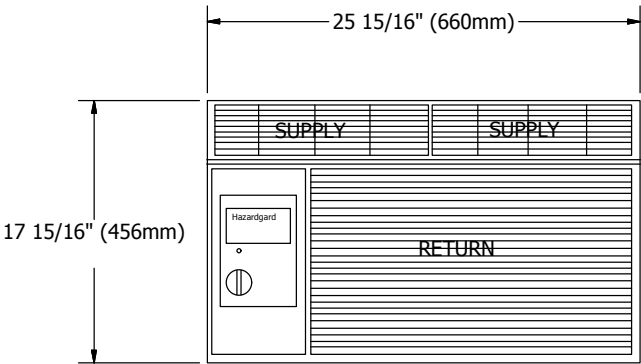
**TOP VIEW**

# Installation: Wall Cut Out & Chassis Dimensions

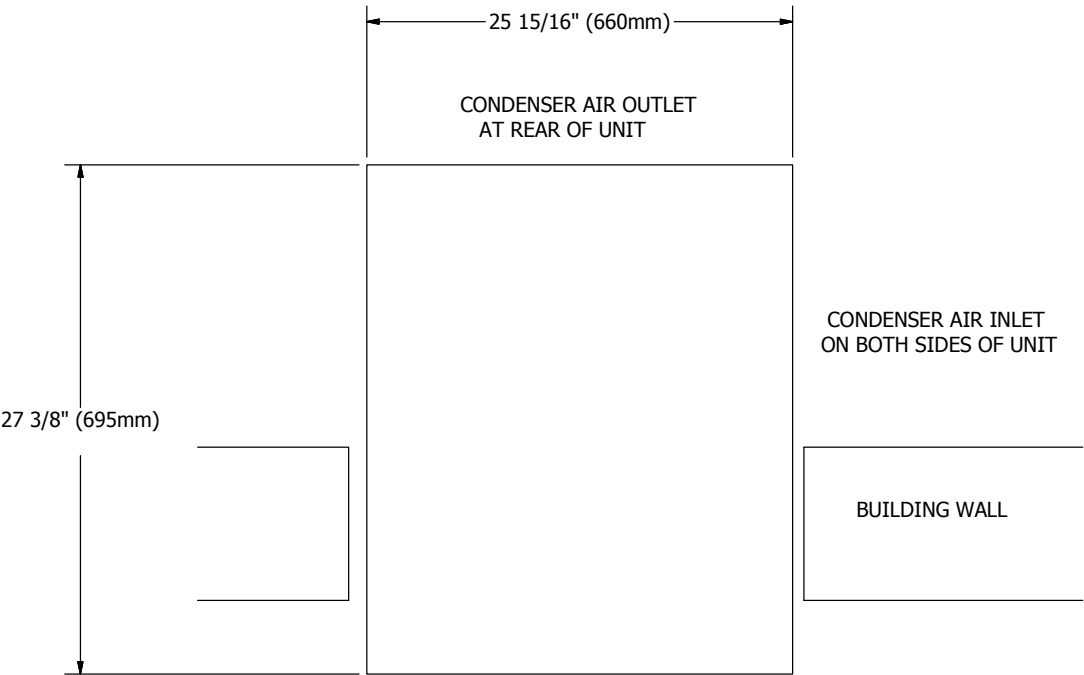
Hazardgard Model: HCM20A30A, SH20M30SA, SH20M50B, SH24N30A



**BUILDING WALL CUT OUT  
FOR UNIT/SLEEVE**



**INDOOR, FACE VIEW**



**TOP VIEW**

## SPECIFICATIONS

Model	Cooling Capacity Btu/Hr.	Electrical Characteristics			Circuit Rating Breaker or T - D Fuse	Energy Efficiency Ratio EER	Moisture Removal Pints/ Hr	Air Circulation CFM	Refrigerant
		Volts Rated	Cooling Amps	Cooling Capacity (KW)					
					Volts - Amps				
60 HERTZ									
SH15M30A	15,700/15,700	230/208	7.9/7.8	4.60/4.10	250V-15	9.7/9.7	4.0	375	R-410A
HCM15A30A	15,000	230/208	7.0/7.3	4.4	250V-15	10.2	5.0	375	R-32
HCM20A30A	20,000	230/208	10.0/10.7	5.86	250V-20	10.0	7.5	375	R-32
SH20M30SA	19,000/19,000	220	8.5	5.57	250V-20 (230V) / 250V-20 (208V)	9.7/9.6	5.5	375	R-410A
SH24N30A	24,000/24,000	230/208	11.8	6.8	250V-20	9.7/8.5	8.0/7.5	385	R-410A
50 HERTZ									
SH20M50B	21,000/19,100	240/220	11.6/10.3	6.15/6.15	250V-15	8.8/8.8	7.0/7.0	425	R-410A

## INSTALLATION INFORMATION

Model	Dimensions Inches						Window Width Inches		In-Wall Installation Finished Hole Inches			Weight Lbs.	
	Height	<b>A</b>	Depth with Front <b>B</b>	Depth J Box to Louvers	Minimum Extension Into Room	Minimum Extension Outside	Min.	Max.	Height	Width	<b>C</b>	Net	Shipping
		Width									Max. Depth		
SH15M30A/HCM15A30A	15 15/16"	25 15/16"	27 3/8"	6"	3 1/16"	16 15/16"	27 7/8"	42"	16 3/16"	26 3/16"	6"	140	167
HCM20A30A	17 15/16"	25 15/16"	27 3/8"	6"	3 1/16"	16 15/16"	27 7/8"	42"	18 3/16"	26 3/16"	6"	166	198
SH20M30SA	17 15/16"	25 15/16"	27 3/8"	6"	3 1/16"	16 15/16"	27 7/8"	42"	18 3/16"	26 3/16"	6"	166	170
SH24N30A	17 15/16"	25 15/16"	27 3/8"	6"	3 1/16"	16 15/16"	27 7/8"	42"	18 3/16"	26 3/16"	6"	180	185
SH20M50B	17 15/16"	25 15/16"	27 3/8"	6"	3 1/16"	16 15/16"	27 7/8"	42"	18 3/16"	26 3/16"	6"	171	175

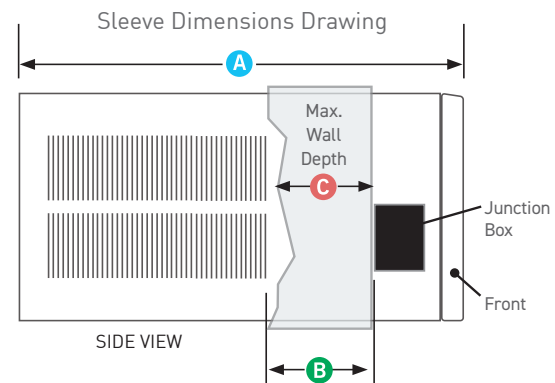
Due to continuing engineering research and technology, specifications are subject to change without notice.

U.S. MAXIMUM outdoor ambient operating temperature is 115°F. (46°C) MAXIMUM TEMPERATURE RATING FOR CLASS 1, DIVISION 2, GROUPS A, B, C, D.

Capacity and efficiency values at each climate conditions are available upon request.

NOTE: Hazardgard unit must be hard-wired.

Manufactured under Design Patent DES 368, 306 decorative front; Utility Patent 5, 662, 058.



Friedrich Air Conditioning Co. | Friedrich.com



HCM R32 Models Only



HAZARDGARD SUBMITTAL (REV 07-23-25)