

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

ITEM	PLAN DESIGNATION	QUANTITY	COOLING BTU/H	VOLTAGE	FRIEDRICH MODEL

## 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\*

## Features

- Direct wire connection
- Utilizes direct-wired, 15-amp circuit with time-delay fuse
- Hermetically sealed reciprocating compressor
- 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
- Hermetically sealed refrigeration system
- Environmentally sealed on/off switch and gold plated contacts in thermostat for corrosion resistance
- Solid-state 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 SH24N20

- 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, SH20M30B, SH20M30SA, SH20M50A

- 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.

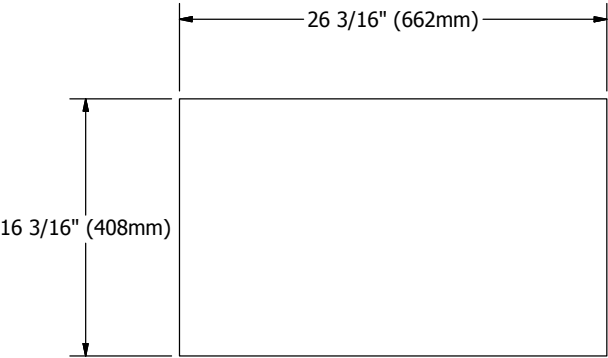


\*Only for model SH20M30B

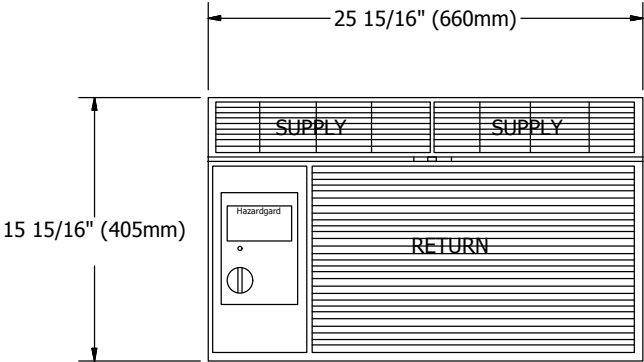


# Installation: Wall Cut Out & Chassis Dimensions

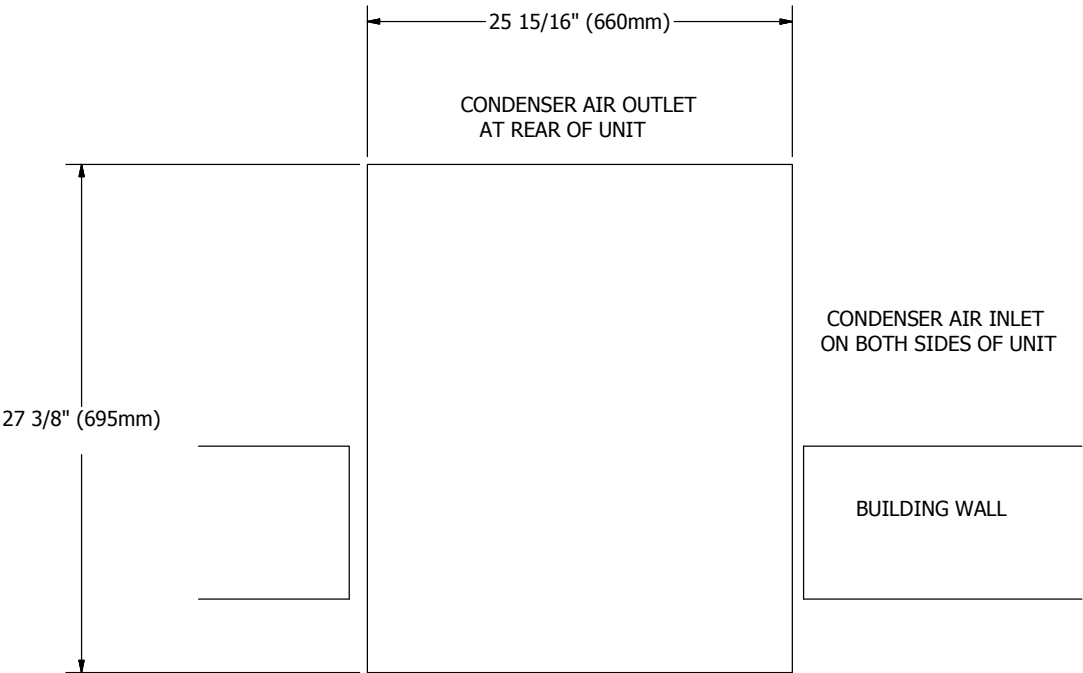
Hazardgard Model: SH15M30A



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



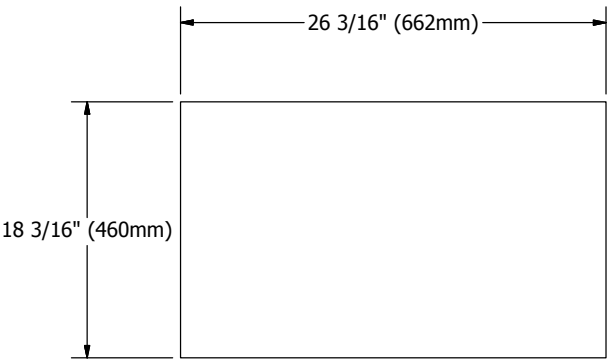
**INDOOR, FACE VIEW**



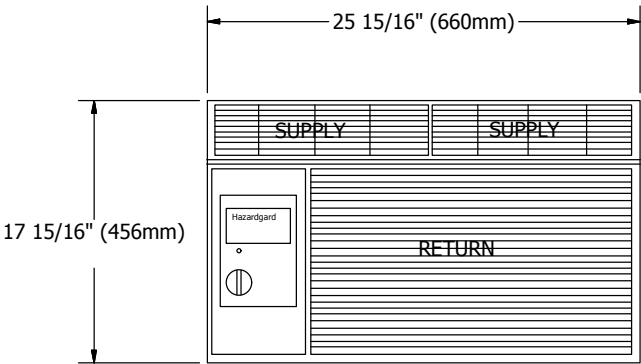
**TOP VIEW**

# Installation: Wall Cut Out & Chassis Dimensions

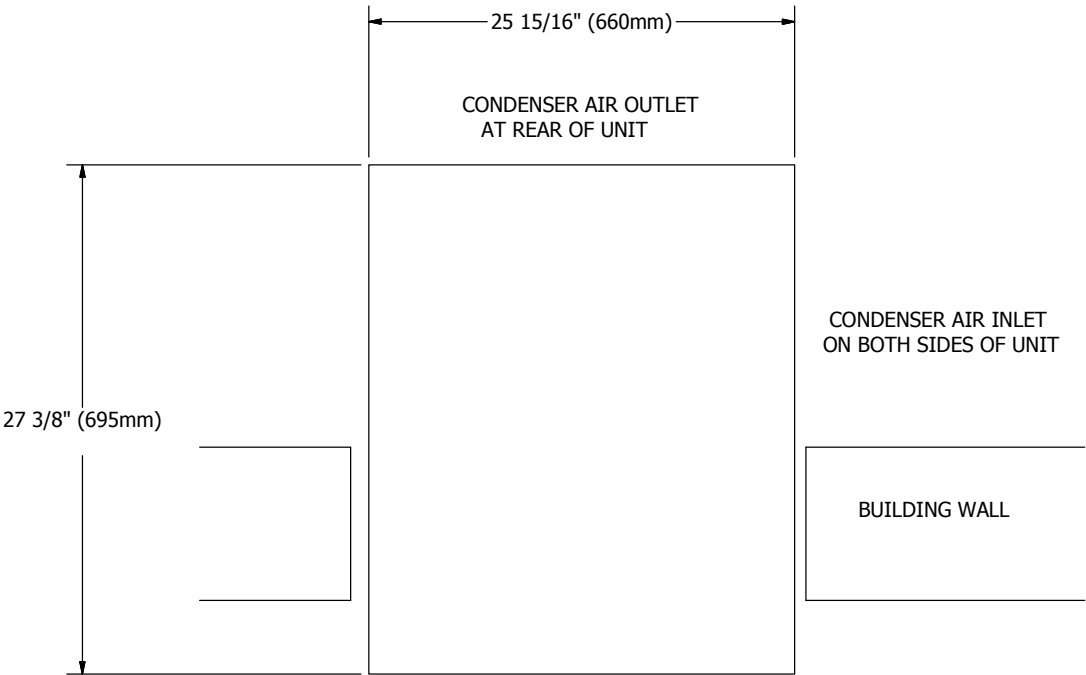
Hazardgard Model: SH20M30B / SH20M30SA / SH20M50A / SH24N20



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



**INDOOR, FACE VIEW**



**TOP VIEW**

## SPECIFICATIONS

Model	Electrical Characteristics				Circuit Rating Breaker or T - D Fuse  Volts - Amps	Energy Efficiency Ratio EER	Moisture Removal Pints/ Hr	Air Circulation CFM	Refrigerant
	Cooling Capacity Btu/Hr.	Volts Rated	Cooling Amps	Cooling Watts					
60 HERTZ									
SH15M30A	14500/14000	230/208	6.9/7.5	1495/1443	250V-15	9.7/9.7	4.0	375	R-410A
SH20M30B	19000/19000	230/208	8.5/9.4	1965/1970	250V-15 (230V) / 250V-20 (208V)	9.7/9.6	5.5	375	R-410A
SH20M30SA	19000/19000	230/208	8.5/9.4	1965/1970	250V-15 (230V) / 250V-20 (208V)	9.7/9.6	5.5	375	R-410A
SH24N20	24000/23700	230/208	12.6/13.5	2727/2788	250V-30	8.8/8.5	8.0/7.5	385	R-410A
50 HERTZ									
SH20M50A	19500/19100	240/220	9.8/10.3	2167/2156	250V-15	9.0/9.0	5.6/5.5	425	R-410A
SH24N20	21000/20500	240/220	15.0/13.2	2600/2412	250V-30	8.1/8.5	7.0/7.0	360	R-410A

## INSTALLATION INFORMATION

Model	Dimensions Inches						Window Width Inches		In-Wall Installation Finished Hole Inches			Weight Lbs.	
	Height	Width	Depth with Front A	Depth J Box to Louvers B	Minimum Extension Into Room	Minimum Extension Outside	Min.	Max.	Height	Width	Max. Depth C	Net	Shipping
SH15M30A	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
SH20M30B	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
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
SH20M50A	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
SH24N20	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

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

U.S. MAXIMUM outdoor ambient operating temperature is 130°F. (55°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.

T4 temperature classification means unit surface temperatures will not rise above 135° C/275° F. Operates at low ambient conditions without freezing at outdoor ambient temperatures as low as 7° C/45° F.

Tolerates higher outdoor temperatures up to 55° C /130° F.

Equipment is certified in accordance with ISA 12.12.01 and NFPA 70-10 (National Electric Code)

### ARTICLE 501

Class I, Div. 2, Group A and Group B

Class I, Div. 2, Group B

Class I, Div. 2, Group C

Class I, Div. 2, Group D

### ARTICLE 505

Class I, Zone 2, Group IIC

Class I, Zone 2, Group IIB  
plus hydrogen, or "+H2"

Class I, Zone 2, Group IIB

Class I, Zone 2, Group IIA

