

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 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)

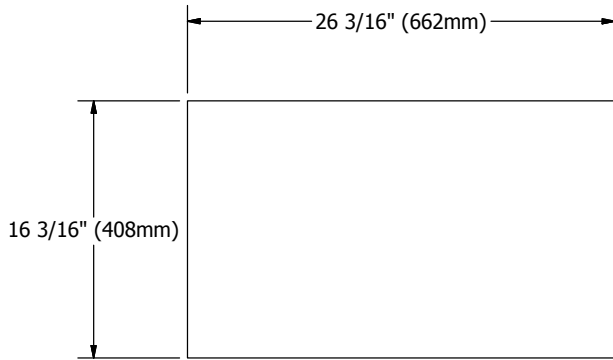
**MODELS SH15M30A, SH20M30B, SH20M30SA, SH20M50B,**

- 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.

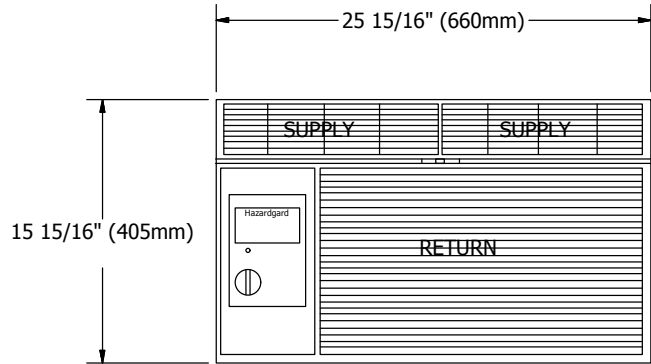


# Installation: Wall Cut Out & Chassis Dimensions

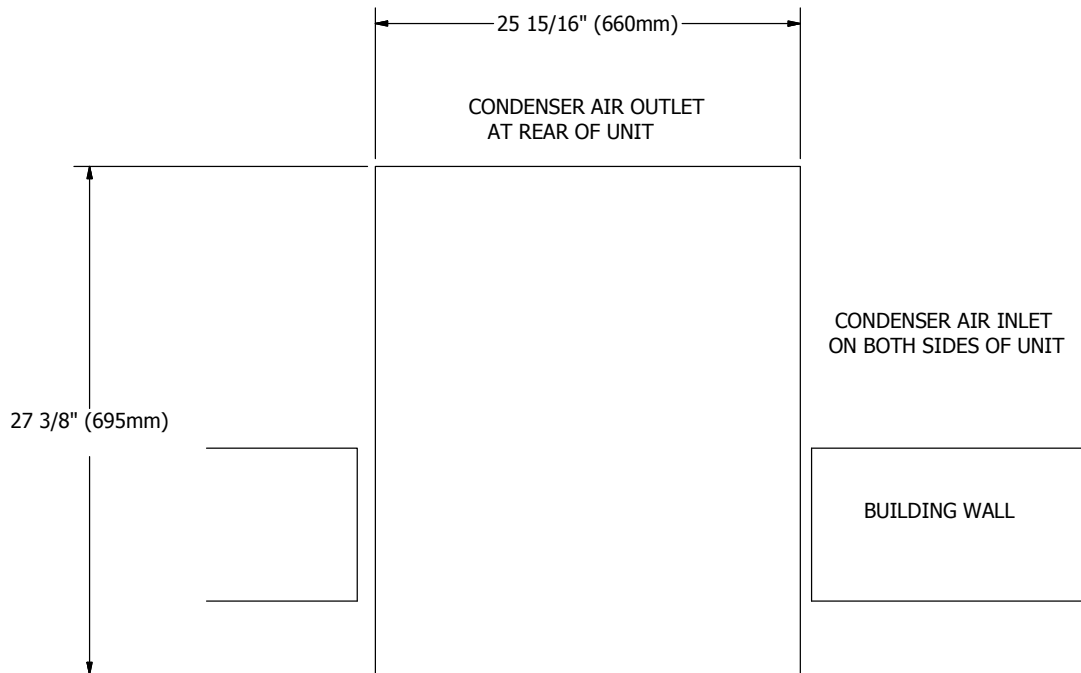
Hazardgard Model: SH15M30A



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



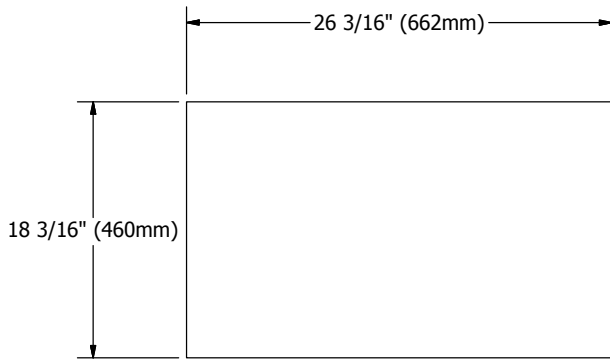
**INDOOR, FACE VIEW**



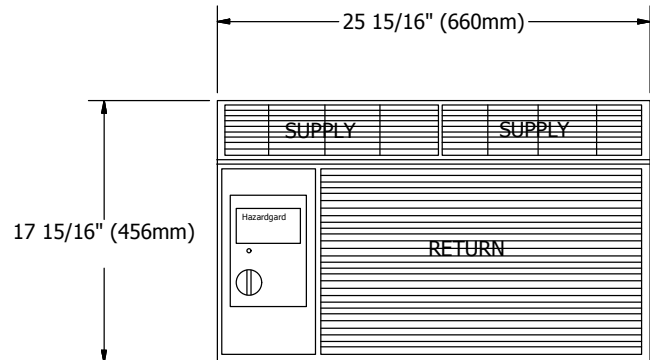
**TOP VIEW**

# Installation: Wall Cut Out & Chassis Dimensions

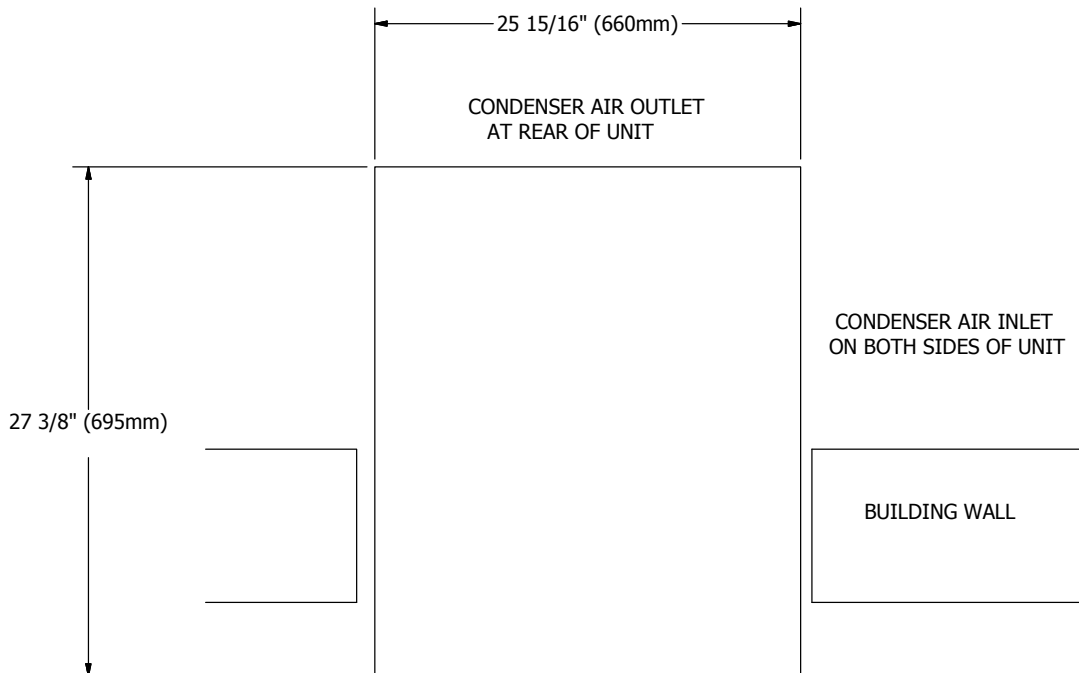
Hazardgard Model: SH20M30B, SH20M30SA, SH20M50B, SH24N30A



**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 Capacity (KW)					
<b>60 HERTZ</b>									
SH15M30A	15700/15700	230/208	7.9/7.8	4.60/4.10	250V-15	9.7/9.7	4.0	375	R-410A
SH20M30B	21000/21000	230/208	10.5/9.4	6.15/6.15	250V-15 (230V) / 250V-20 (208V)	9.7/9.6	5.5	375	R-410A
SH20M30SA	19000/19000	220	8.5	5.57	250V-20 (230V) / 250V-20 (208V)	9.7/9.6	5.5	375	R-410A
SH24N30A	24000/24000	230/208	11.8	6.8	250V-20	9.7/8.5	8.0/7.5	385	R-410A
<b>50 HERTZ</b>									
SH20M50B	21000/19100	240/220	11.6/10.3	6.15/6.15	250V-15	8.8/8.8	7.0/7.0	425	R-410A

Model	Hazardous Location Classification: Gases
SH15M30A, SH20M30SA SH20M30B, SH20M50B SH24N30A	National Electrical Code, NFPA 70 ARTICLE 501: Class 1, Division 2, Group A / B / C / D , Temperature Class T4 ARTICLE 505: Class 1, Zone 2, Group II C / IIB / II A , Temperature Class T4



For global applications, Hazardgard cooling capacities are tested in a certified laboratory at moderate (T1\*) and hot (T3\*) climate conditions in accordance with SASO (Saudi Arabian Standards Organization) Standard 2681. SASO Standard 2681 is adopted from ISO Standard 5151 for testing and rating for performance of non-ducted air conditioners and heat pumps. Model SH20M30SA is KSA Registered in accordance with SASO2681 and meets SASO 2663 Energy Efficiency standard.

# 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
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
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

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.

## Sleeve Dimensions Drawing

