

**55 Gates Street
Map 103 Lot 90**

To permit the following:

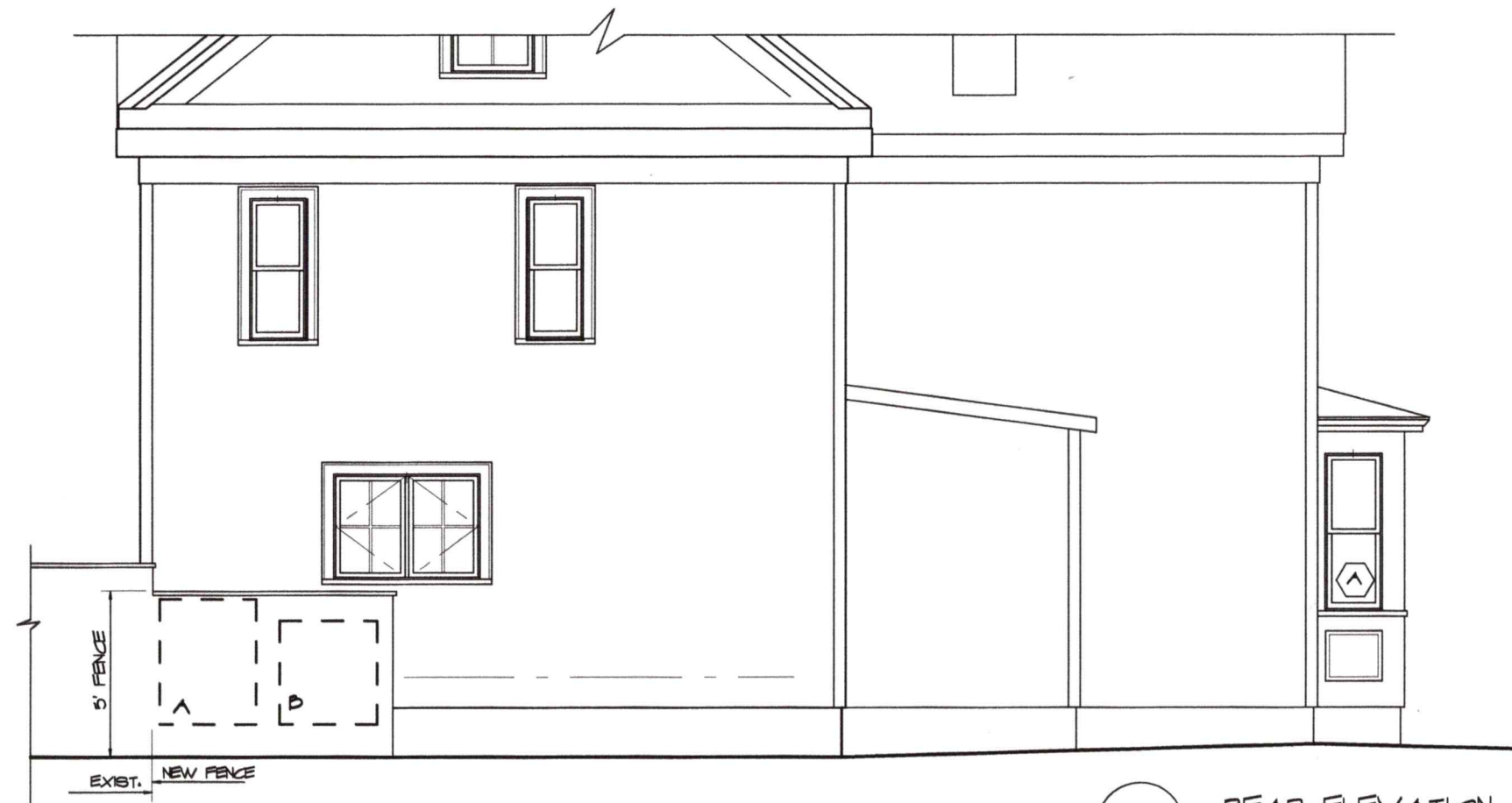
1. Heat Pump with a Rear Setback of +/- 3.5 feet where 10' is required.

The undersigned agrees that the following circumstances exist.....

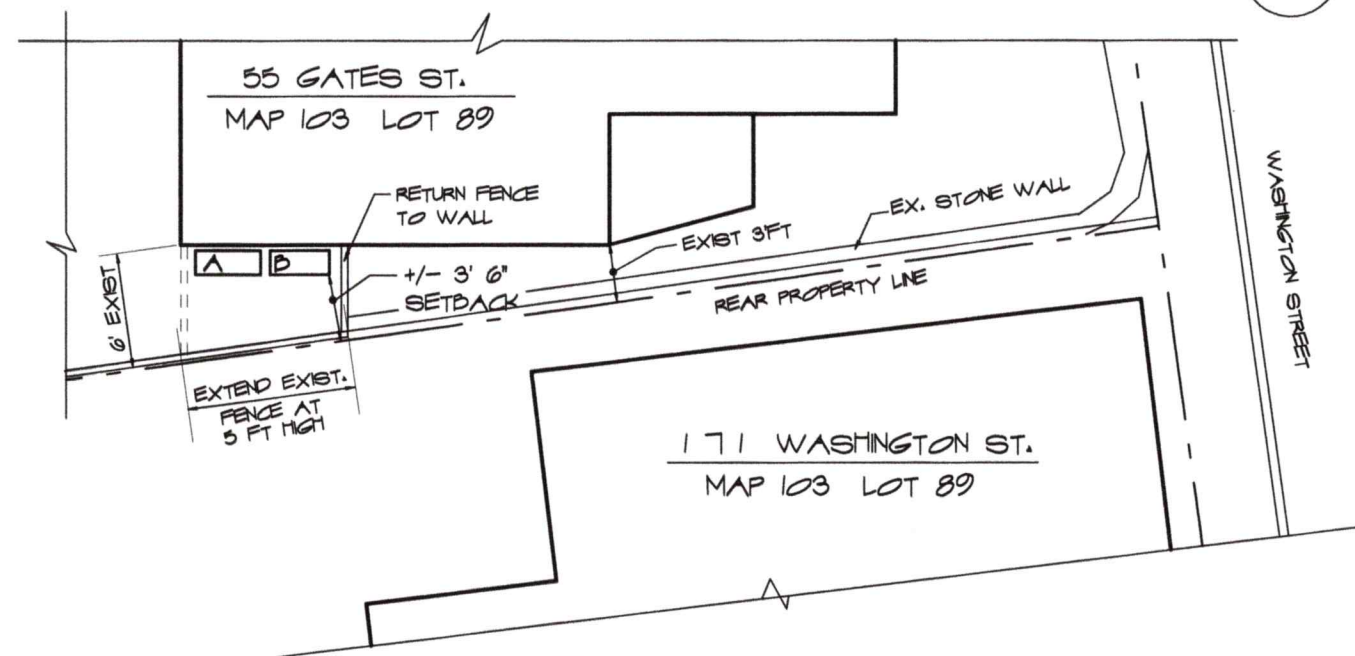
1. This irregular shaped corner lot has few locations to locate the required Heat Pumps. The location shown is out of any public view and screened by extending the existing rear fence. All piping to the Units will run inside the residence and there is room to service the Units..

Criteria for the Variance:

1. The Variances are not contrary to the public interest in that this location will have no the public view of the Heat Pumps and will be fenced from the Abutter's rear yard.
2. The Variances are consistent with the spirit of the ordinance as noted in Item 1.
3. Substantial justice will be done, as this work will allow the upgrade of the existing. mechanical system without impacting the neighborhood.
4. This Variances will not diminish the value of surrounding properties.
5. The special condition of this property is the existing non-conforming Rear Setback, the Front & Left Sides are on Streets and there is not room on the small Right Side yard.



REAR ELEVATION
SCALE: 3/16" = 1'-0"



PROPOSED HEAT PUMP LOCATION
SCALE: 1" = 10'-0"
NOTE: LOT PLAN GENERATED FROM TAX MAP AND FIELD MEASUREMENT BY ANNE WHITNEY ARCHITECT

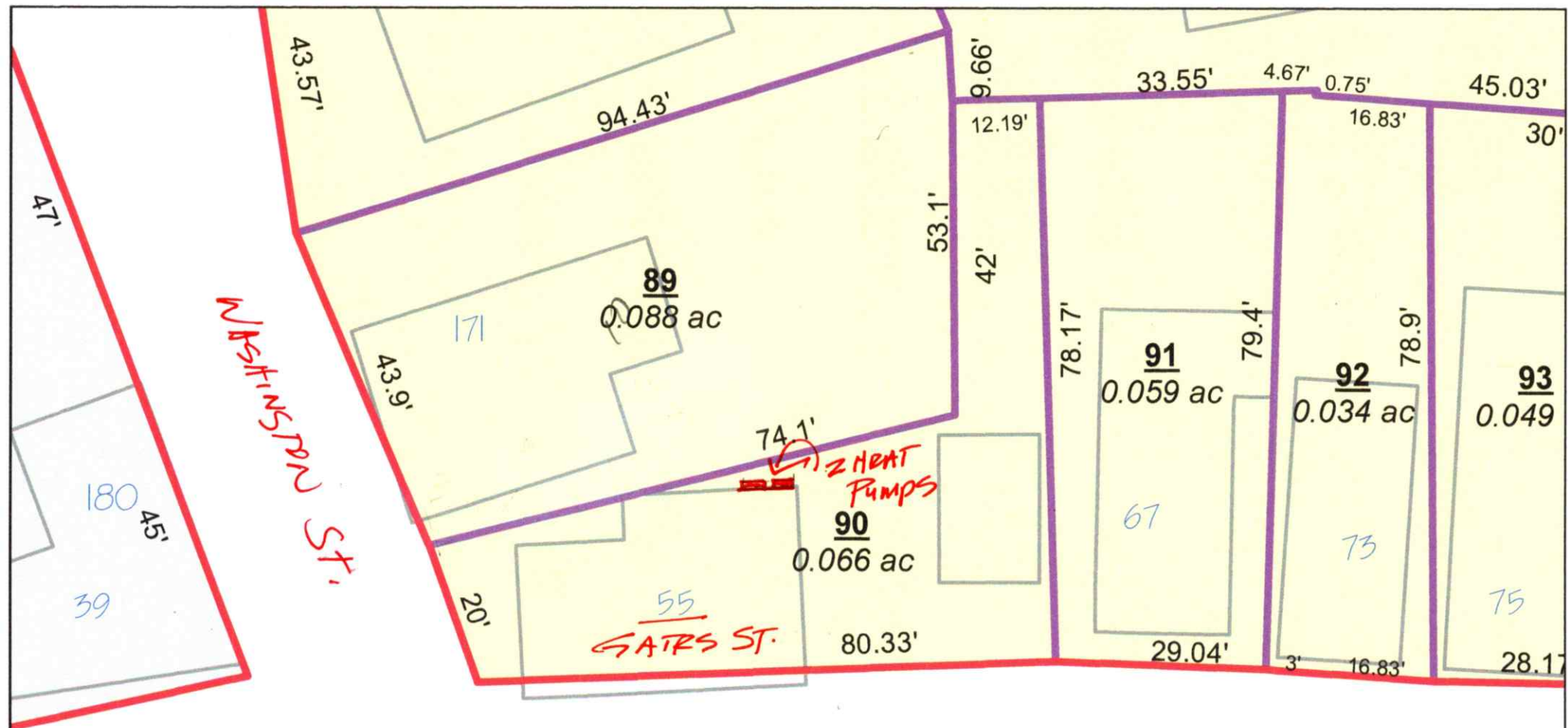


RIGHT SIDE & REAR ELEVATION

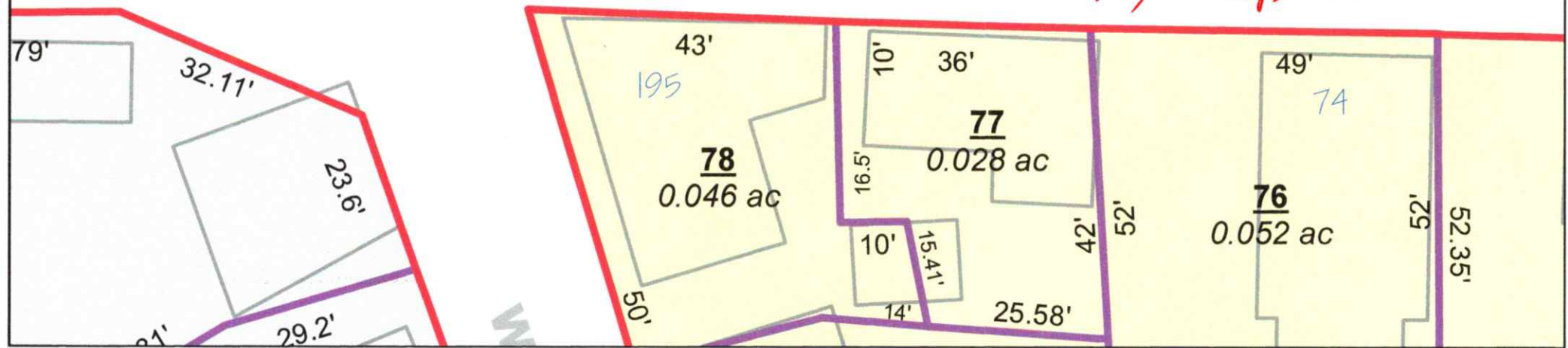


VIEW FROM MANCOCK STREET

<p>HDC ADMIN. HEATPUMPS</p> <p>RENOVATIONS, STONE RESIDENCE</p> <p>55 GATES STREET</p>	<p>801 Islington St, Suite 32 Portsmouth, NH 03801 603-502-4387 archwhit@aol.com</p>	<p>Project: 2110</p> <p>Revisions:</p>	<p>Date: 10/26/22</p>
	<p>ANNE WHITNEY ARCHITECT</p>		
	<p>PORTSMOUTH, NH</p>		



TAX MAP 103



Samsung "Max Heat" FJM Series, 4 Port Condensing Unit

Job Name _____
 Purchaser _____
 Submitted to _____
 Unit Designation _____

Location _____
 Engineer _____
 Reference ☐ Approval ☐ Construction ☐
 Schedule # _____

Model	US Code		JXH36S4B
	Model Number		AJ036BXS4CH/AA
Performance*	Capacity (standard / max.)	Cooling (Btu/h)	34,000 / 39,600
		Heating (Btu/h)	36,000 / 36,600
	Heating Capacity at 5°F OA, 70° Indoor DB (Btu/h)		36,600
	Heating Capacity at -13°F OA, 70° Indoor DB (Btu/h)		25,590
	Minimum Cooling Capacity (Btu/h)		6,500
	Minimum Heating Capacity (Btu/h)		7,500
	SEER (Ducted / Mixed / Non-ducted)		18.0 / 19.0 / 20.0
	EER (Ducted / Mixed / Non-ducted)		11.0 / 11.75 / 12.5
	HSPF (Ducted / Mixed / Non-ducted)		9.1 / 9.8 / 10.5
Power	Voltage	(v/Hz)	1 / 208-230 / 60
	Nominal Current ¹	Cooling (A)	13.0
		Heating (A)	12.2
	Max. Breaker	Amps	40
	Minimum Circuit Ampacity (A)		36.5
Dimensions	W X H X D	Inches	37 x 47 5/8 x 13
	Weight	lbs.	192.9
Noise Level	Cooling	dB (A)	52
	Heating	dB (A)	55
Operating Temperatures	Cooling		14 ~ 114.8°F (-5 ~ 46.0°C)
	Heating		-13 ~ 75°F (-25 ~ 24.0°C)
Pipe Connections	High Side		1/4" X 4
	Low Side (suction)		3/8" X 2 + 1/2" X 2
	Maximum Individual Line Set Length		82 ft
	Maximum Line Set Length (total)		230 ft
	Maximum Vertical Separation	Outdoor to Indoor	49 ft
		Highest to lowest indoor	25 ft
	Included Pipe Adapters		2 - 1/2" X 3/8", 2 - 1/2" X 5/8"
Condenser Fan	Motor		BLDC With Propeller Fan (2)
	Output	Watts / FLA	125 X 2 / 1.28 X 2
		CFM	3,885
Compressor	Type		Twin BLDC Rotary Inverter
	RLA	Amps	25.6
Heat Exchanger	Type	Aluminum Fin - Copper Tube	
Refrigerant	Type		R410A
	Control Method		Electronic Expansion Valve
	Factory Charge		127 oz
	Charged for		164 ft
	Additional Refrigerant		0.22 oz/ft over 164 ft
Accessories	Wall Bracket		<input type="checkbox"/> CKN-250
	Wind Baffle	Front	<input type="checkbox"/> WBF-1M2
		Back	<input type="checkbox"/> WBB-2M-B
Certifications	Safety		ETL (UL 1995)
	AHRI Certification Number	Non-Ducted	207349920
		Ducted	207350085
		Mixed	207350834
	ENERGY STAR® Certification		Applies to AHRI non ducted listing
Warranty	10 Years compressor, 10 year parts, 1 year limited labor (registration required)		

* Certified in accordance with the AHRI Unitary Small Air-Source Heat Pumps (USHP) Certification Program which is based on the latest edition of AHRI Standard 210/240. Refer to www.AHRIdirectory.org for current reference numbers.

¹ Rated current is based on highest combination ratio of non-ducted indoor units.

Samsung HVAC maintains a policy of ongoing development, specifications are subject to change without notice.



A

General Information

- The Samsung Max Heat system shall provide high heating capacity at -13°F outside temperature
- The outdoor unit shall supply power individually to the indoor units via 14 AWG X 3 power wire
- The outdoor unit shall have a base pan heater as standard to ensure optimal defrost cycle water drainage
- Auto-restart after power loss
- Available maximum current setting option to reduce operating current.
- System energy consumption can be viewed using Samsung SmartThings mobile app (not revenue grade, for reference only).
- Soft-start to reduce current demand during compressor start
- Optional snow accumulation prevention setting to prevent snow drifting against idle outdoor units
- Auto or manual addressing of indoor units

Construction

- The outdoor unit shall be galvanized steel with a baked on powder coated finish for durability

Heat Exchanger

- The heat exchanger shall be mechanically bonded fin to copper tube

Controls

- Control signal shall be a DDC type signal
- Interconnect control wire between outdoor and indoor units shall be 16AWG X 2
- Controls shall integrate with a BMS system
- The system shall integrate with the Samsung Controls solution

Refrigerant System

- The refrigerant shall be R410A
- The compressor shall be hermetically sealed, inverter controlled, Twin BLDC Rotary
- Refrigerant flow shall be controlled by 4 separate electronic expansion valves at outdoor unit

Indoor Unit Compatibility

Will only operate with Samsung evaporator model numbers:
 AR**TSFABWKNCV (RNS**ABT): 7,000 - 24,000 Btu/h models
 AR**BSFCMWKNCV (RNS**CMB): 7,000 - 24,000 Btu/h models
 AR**TSFYBWKNCV (RNS**YBT): 7,000 - 24,000 Btu/h models
 AC0**BNNDCH/AA (CNH**NDB): 9,000 - 18,000 Btu/h models
 AC0**BN1DCH/AA (CNH**1DB): 9,000 - 12,000 Btu/h models
 AC0**BNJDCH/AA (CNH**JDB): 9,000 - 18,000 Btu/h models
 AC0**BNLDCH/AA (CNH**LDB): 9,000 - 18,000 Btu/h models
 AC0**BNZDCH/AA (CNH**ZDB): 12,000 - 24,000 Btu/h models
 AJ0**BNHDCH/AA (JNH**HDB): 9,000 - 18,000 Btu/h models

Proper sizing and installation of equipment is critical to achieve optimal performance. Split system air conditioners and (excluding ductless systems) must be matched with appropriate coil components to meet ENERGY STAR® criteria. Ask your contractor for details or visit www.energystar.gov.



Samsung "Max Heat" FJM Series, 4 Port Condensing Unit

Job Name _____
 Purchaser _____
 Submitted to _____
 Unit Designation _____

Location _____
 Engineer _____
 Reference ☐ Approval ☐ Construction ☐
 Schedule # _____

Model	US Code		JXH30S4B
	Model Number		AJ030BXS4CH/AA
Performance*	Capacity (standard / max.)	Cooling (Btu/h)	28,400 / 28,400
		Heating (Btu/h)	28,600 / 28,600
	Heating Capacity at 5°F OA, 70° Indoor DB (Btu/h)		28,600
	Heating Capacity at -13°F OA, 70° Indoor DB (Btu/h)		20,000
	Minimum Cooling Capacity (Btu/h)		6,500
	Minimum Heating Capacity (Btu/h)		7,500
	SEER (Ducted / Mixed / Non-ducted)		17.0 / 18.0 / 19.0
	EER (Ducted / Mixed / Non-ducted)		10.5 / 11.5 / 12.5
	HSPF (Ducted / Mixed / Non-ducted)		9.8 / 10.4 / 11.0
Power	Voltage	(v/Hz)	1 / 208-230 / 60
	Nominal Current ¹	Cooling (A)	10.9
		Heating (A)	10.0
	Max. Breaker	Amps	30
Dimensions	W X H X D	Inches	37 x 39 5/16 x 13
	Weight	lbs.	173.1
Noise Level	Cooling	dB (A)	54
	Heating	dB (A)	58
Operating Temperatures	Cooling		14 ~ 114.8°F (-10 ~ 46.0°C)
	Heating		-13 ~ 75°F (-25 ~ 24.0°C)
Pipe Connections	High Side		1/4" X 4
	Low Side (suction)		3/8" X 2 + 1/2" X 2
	Maximum Individual Line Set Length		82 ft
	Maximum Line Set Length (total)		230 ft
	Maximum Vertical Separation	Outdoor to Indoor	49 ft
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Condenser Fan	Motor		BLDC With Propeller Fan (1)
	Output	Watts / FLA	125 / 1.28
		CFM	2,493
Compressor	Type		Twin BLDC Rotary Inverter
	RLA	Amps	18.4
Heat Exchanger	Type	Aluminum Fin - Copper Tube	
Refrigerant	Type		R410A
	Control Method		Electronic Expansion Valve
	Factory Charge		119.9 oz
	Charged for		131 ft
	Additional Refrigerant		0.22 oz/ft over 131 ft
Accessories	Wall Bracket		<input type="checkbox"/> CKN-250
	Wind Baffle	Front	<input type="checkbox"/> WBF-2M-B
		Back	<input type="checkbox"/> WBB-11M
Certifications	Safety		ETL (UL 1995)
	AHRI Certification Number	Non-Ducted	207349919
		Ducted	207350083
		Mixed	207350096
	ENERGY STAR® Certification		Applies to AHRI non ducted listing
Warranty	10 Years compressor, 10 year parts, 1 year limited labor (registration required)		

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