

Revision & Reissue Notes

Rev #	Date	Description

STAMPS

HDC Submission

PROJECT NUMBER

24-050

87 Market Street
Portsmouth, NH

Market Street Elevation

A020

DR: DES SHEET SCALE SHEET DATE
CH: TMG 1/4" = 1'-0" 02/12/2025

PLOT DATE: 2/14/2025 9:38:12 AM



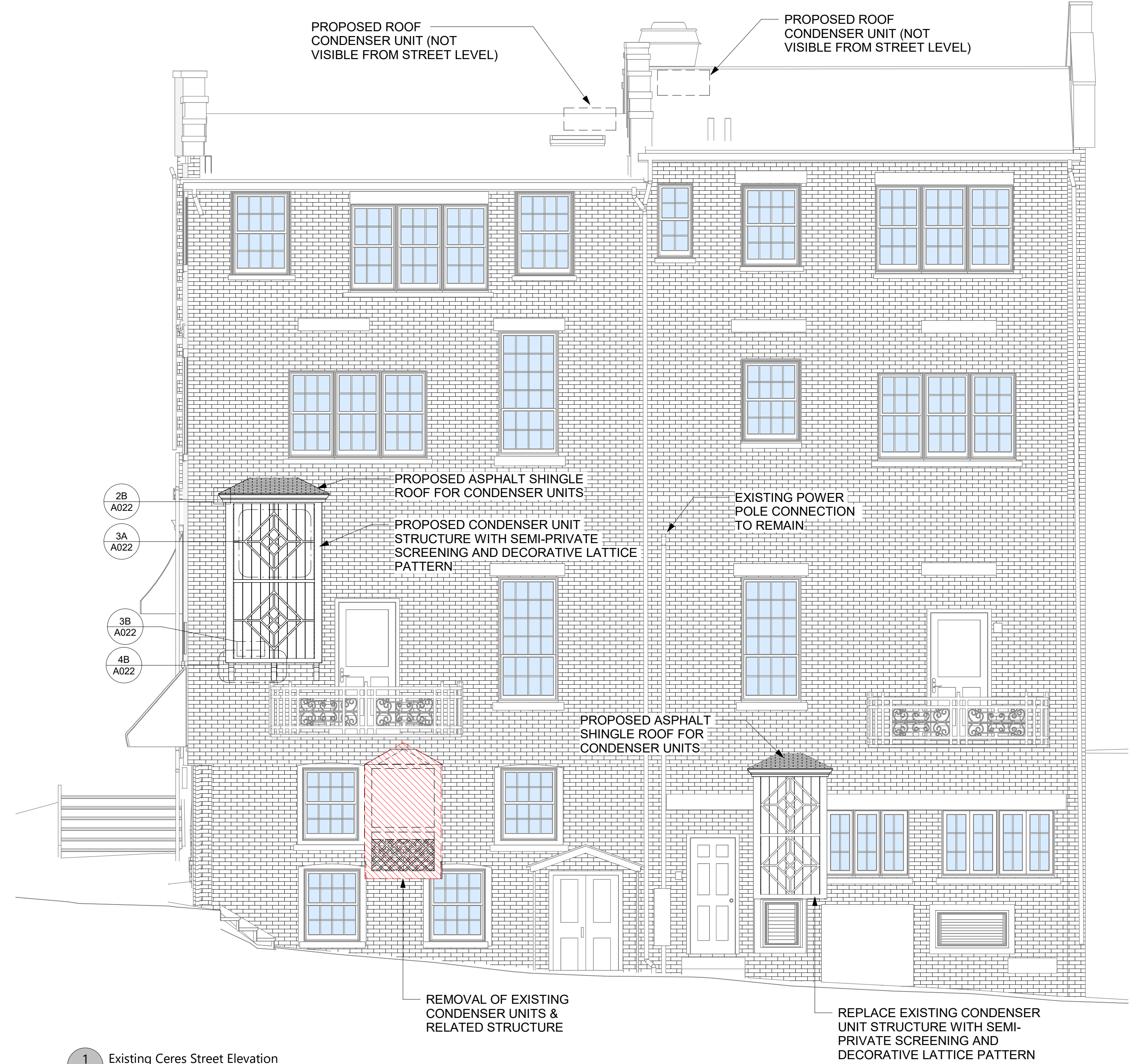
EXISTING MARKET STREET PHOTO REFERENCE IMAGE. NOT TO SCALE



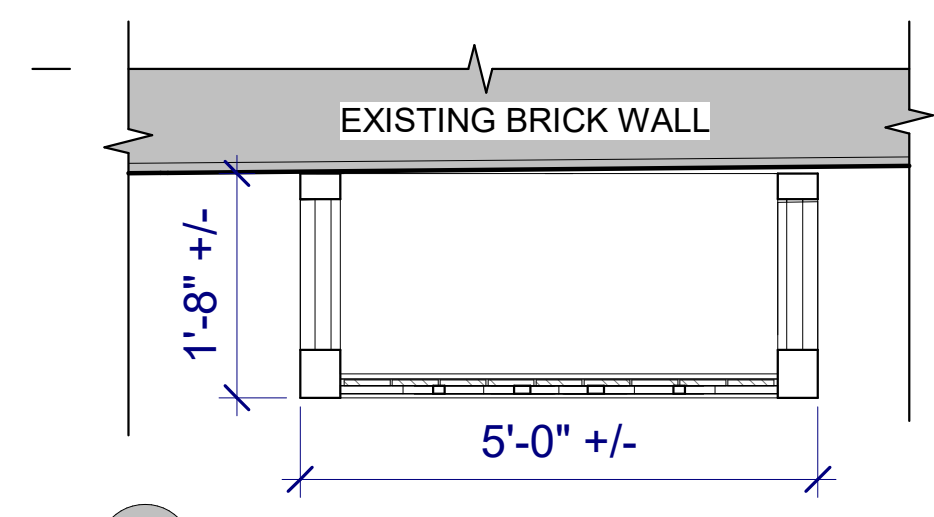
1 Market Street Elevation
A020 1/4" = 1'-0"



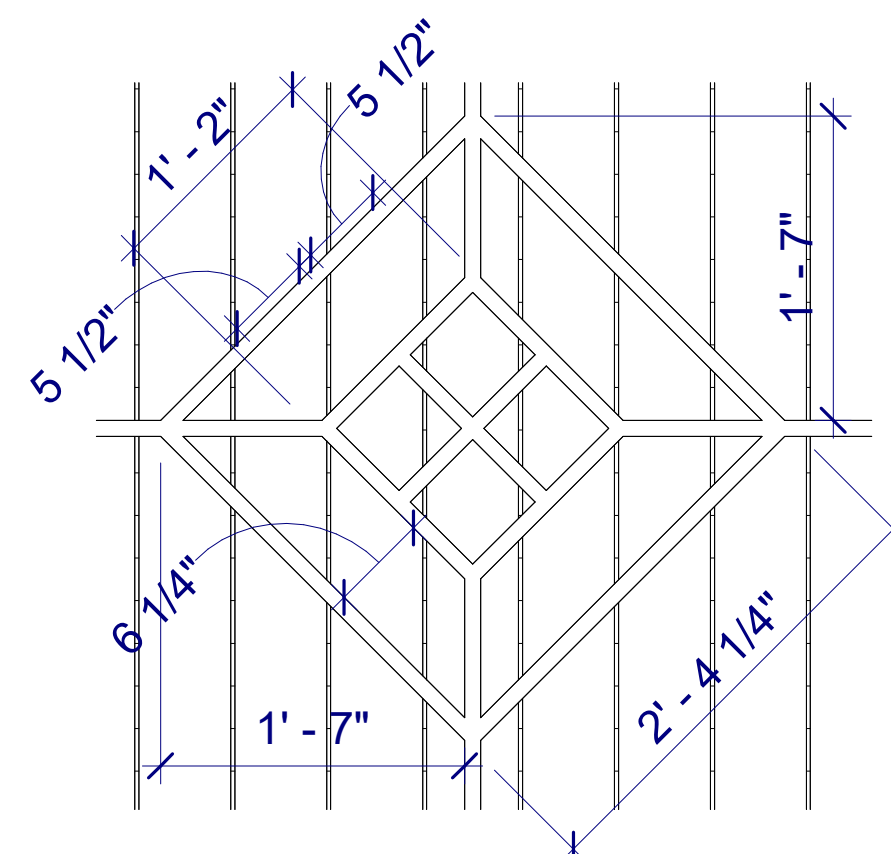
EXISTING CERES STREET PHOTO REFERENCE IMAGE. NOT TO SCALE



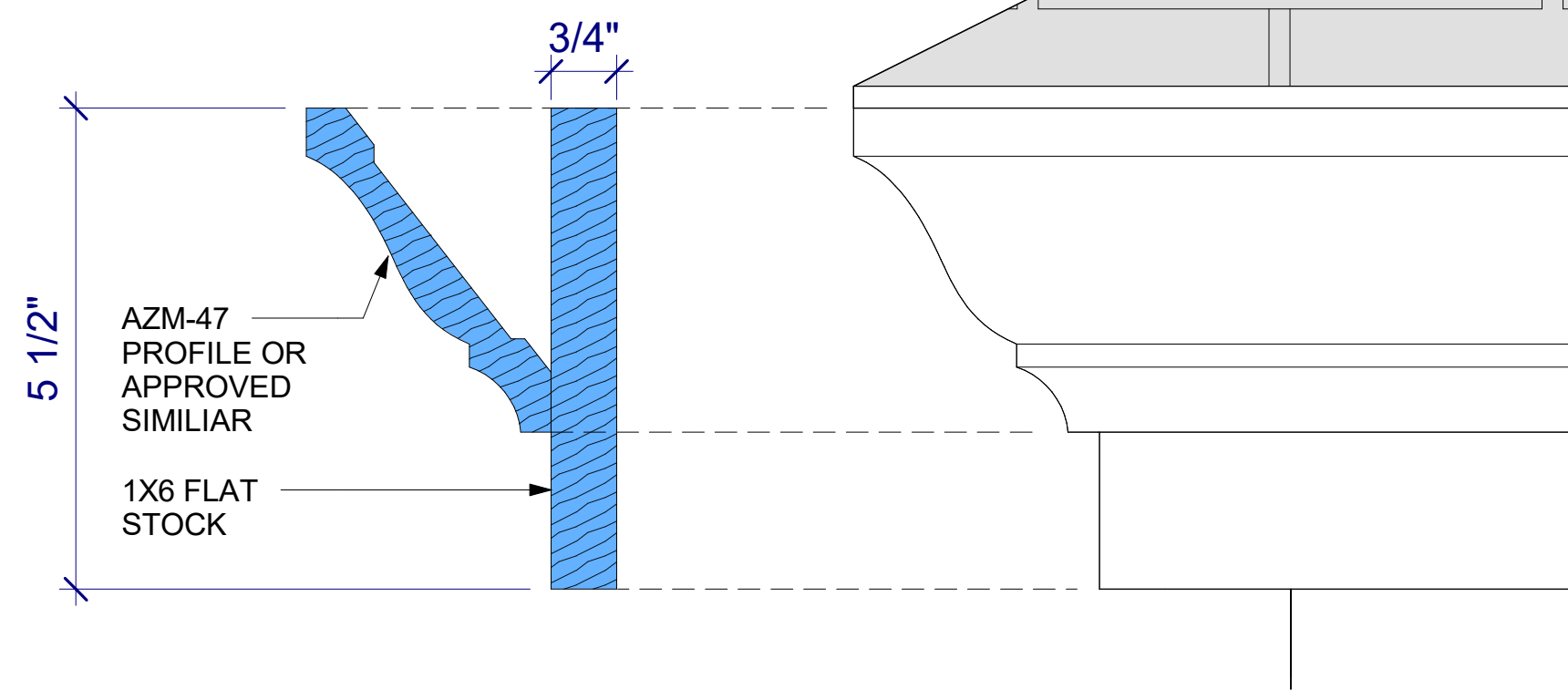
1 Existing Ceres Street Elevation
1/4" = 1'-0"



2 HVAC Condenser Unit Screening Structure - Plan View
1/2" = 1'-0"

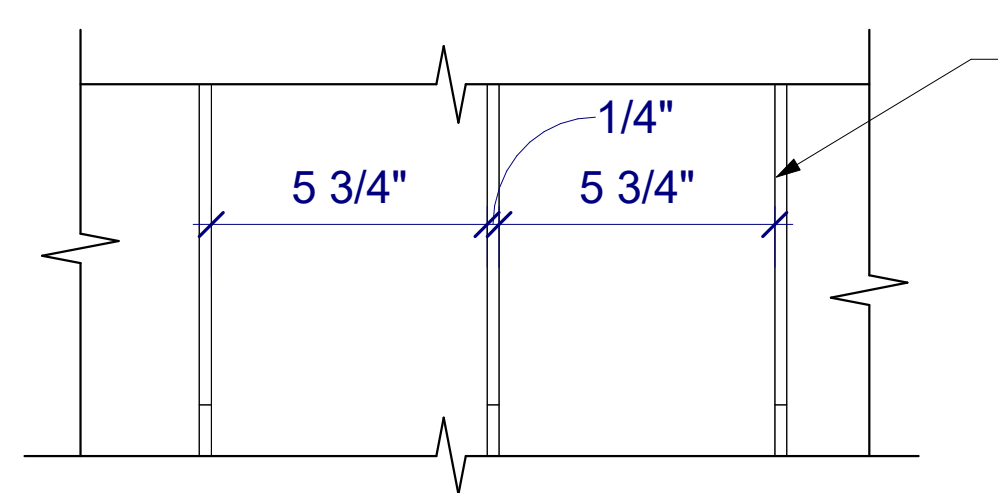


3A HVAC Screening - Decorative Latticework Detail View
1" = 1'-0"



2A Fascia Trim Profile Section
6" = 1'-0"

2B HVAC Roof Screening Structure - Fascia Detail View
6" = 1'-0"

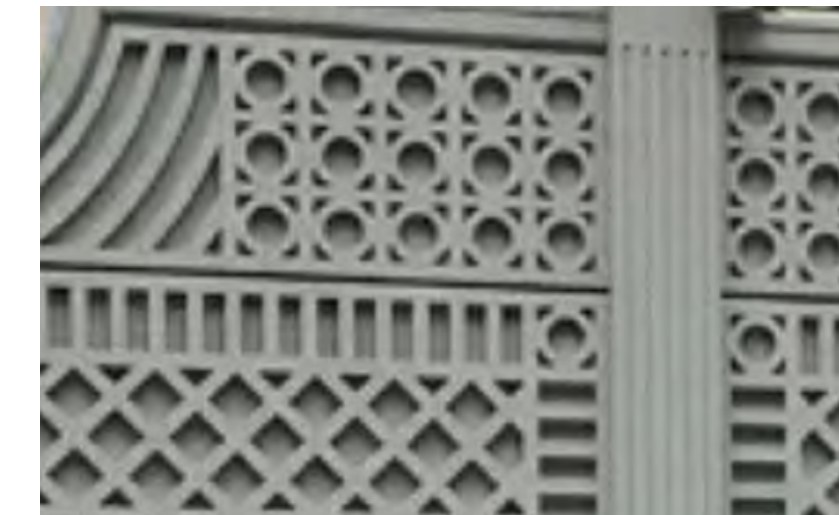


3B HVAC Screening - Semi-Private Screening
3" = 1'-0"

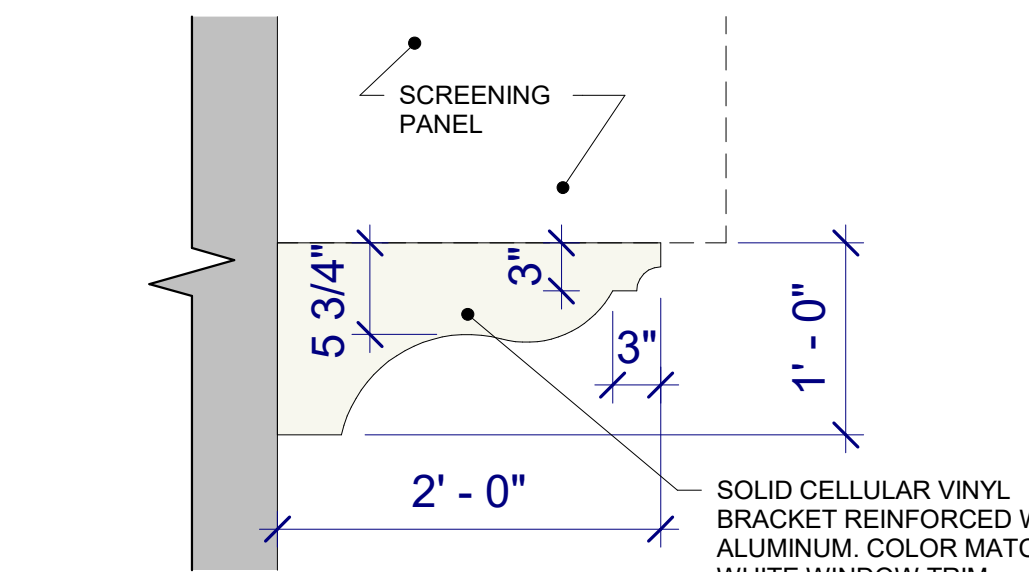
WALPOLE OUTDOORS
SOLID CELLULAR
VINYL SEMI PRIVATE
SCREENING W/
CUSTOM DECORATIVE
SOLID CELLULAR
VINYL LATTICE WORK.
COLOR TO MATCH
WHITE WINDOW TRIM



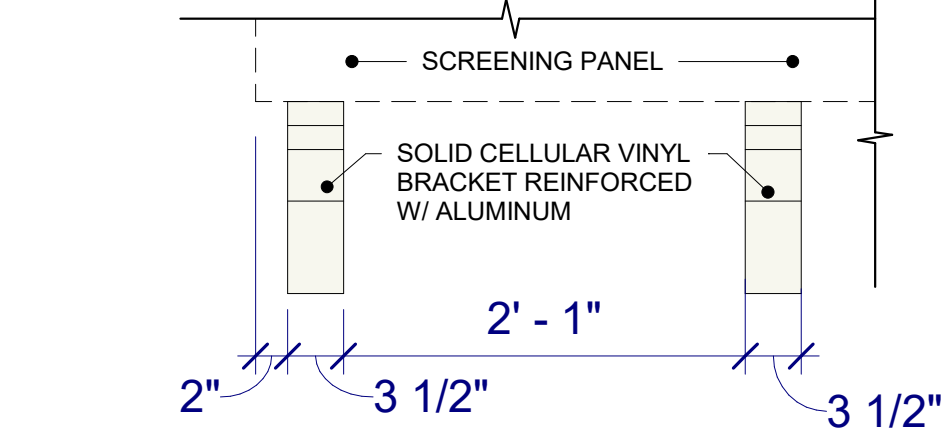
EXAMPLE IMAGE OF DECORATIVE LATTICE
CUSTOMIZATION



EXAMPLE IMAGE OF DECORATIVE LATTICE
CUSTOMIZATION



4A Screening Bracket Detail View
1" = 1'-0"



4B Screening Bracket Detail View 2
1" = 1'-0"



CONDENSER UNIT ROOF
CERTAINTED LANDMARK
30 YEAR ARCHITECTURAL
SHINGLES
COLOR: GEORGETOWN
GRAY OR OWNER
APPROVED SIMILAR

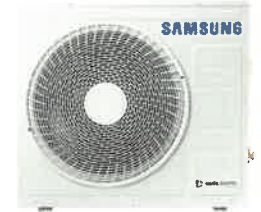
Rev #	Date	Description

Job Name Performance
 Purchaser _____
 Submitted to _____
 Unit Designation _____

Location TAG # 1 / 2 87 Market St
 Engineer _____
 Reference Approval Construction
 Schedule # _____

Specifications

Model	Indoor Unit Model Number (US Code)	AC018BNZDCH/AA (CNH18ZDB)		
	Outdoor Unit Model Number (US Code)	AC018BXADCH/AA (CXH18ADB)		
Performance	Nominal Capacity	Cooling / Heating (Btu/h)	18,000 / 20,000	
	Capacity Range	Cooling (Btu/h)	5,000 - 22,000	
		Heating (Btu/h)	5,000 - 29,000	
	AHRI 210-240 2023 ¹	SEER2	16.2	
		EER2	10.4	
HSPF2		8.1		
Power	Voltage	ø / V / Hz	1 / 208-230 / 60	
	Working Voltage Range (VAC)		187 - 253	
	Operating Current (min. / std. / max.)	Cooling (A)	3.0 / 7.9 / 11.5	
		Heating (A)	2.6 / 8.6 / 20.0	
	Max. Breaker	Amps	25	
Min. Circuit Ampacity (A)		20.1		
Dimensions	W X H X D (in.)	Indoor Unit	17 1/2 X 43 X 21	
		Outdoor Unit	34 5/8 X 31 7/16 X 12 1/4	
	Weight (lbs.)	Indoor Unit	98.1	
		Outdoor Unit	118.4	
	Duct Connections (W X H)	Supply (in.)	12 1/4 X 15 1/2	
Return (in.)		17 1/2 X 21		
Sound Pressure Level	Indoor Unit dB(A)	L / M / H	34 / 37 / 40	
	Outdoor Unit dB(A)	Cooling / Heating (high)	48 / 48	
Operating Temperatures	Outdoor	Cooling	23 ~ 122°F (-5 ~ 50°C) 0 ~ 122°F (-18 ~ 50°C) W/Baffle	
		Heating	-13 ~ 75°F (-25 ~ 24°C)	
	Indoor	Cooling	64 ~ 90°F (16 ~ 32°C)	
		Heating	T ≤ 86°F (30°C)	
Pipe Connections	Indoor & Outdoor	High side	1/4"	
		Low side	1/2"	
	Maximum (ft.)		164	
	Maximum Vertical Separation (ft.)		98.4	
Condensate Connection		3/4 in. FNPT		
Refrigerant	Type		R410A	
	Factory Charge	lbs.	4.41	
	Charged for		24.6 ft.	
Compressor	Manufacturer	Samsung		
	Type	Inverter Driven, Twin BLDC Rotary		
	RLA	Amps	12.7	
Evaporator Fan	Type	Double-inlet, forward curve, centrifugal (with ECM motor)		
	Air Volume	CFM (L/M/H)	494 / 530 / 600	
	Output	Watts	290	
	External Static Pressure	Standard ("WC)	0.58 in. WC	
		Min. / Max. ("WC)	0 / 0.80 in. WC	
Condenser Fan	Motor	BLDC With Axial Type Fan (1)		
	FLA / Watts / CFM (max.)	1.25A X 1 / 125W X 1 / 2,154 CFM		
Safety	Certifications	UL 60335-2-40		
	Devices	PCB fuses, indoor unit terminal block thermal fuse, current transformer, over-voltage protection, crankcase heating, temperature limit protection logic, compressor overload sensing		



General Information

- The outdoor unit shall supply power to indoor unit via 14 AWG X 3 power wire
- High-voltage terminal block temperature sensor to disable unit in the event of power connection overheating
- Auto-restart after power loss
- Soft-start compressor minimizing current inrush
- All heat exchangers shall be mechanically bonded aluminum fin to copper tube
- The condensing unit heat exchanger salt spray test method: ISO-9227- the heat exchanger showed no unusual rust or corrosion development to 3,000 hours.
- Base pan heater equipped as standard
- System shall provide 100% heating capacity at -4°F(-20°C)

Option settings

- The outdoor unit shall have snow accumulation prevention option setting to prevent snow drifting against an idle outdoor unit.
- Night-time Quiet Mode: reduction of operational sound during evening hours (automatic or manual activation).
- System can be set up as heating/cooling, cooling only, or heating only via outdoor unit option setting.
- Maximum Current Control configurable from 50% - 100% via outdoor unit, wired controller, or central controller

Indoor Fan

- Indoor fan is a double Inlet, forward curve, centrifugal type
- Three fan speed settings and auto setting
- Field configurable for downflow operation with optional conversion kit

Construction

- Outdoor unit shall be galvanized steel with a baked-on powder coated finish for durability
- Indoor Unit: Insulated, galvanized steel.

Controls

- Control wiring shall be 2 X 16 AWG
- No additional interface modules/adapters are required when connecting to Samsung central control options.
- The unit shall be operated via a wireless or wired remote control with DDC type signal
- Dual set temperature support when connected to MWR-WG00UN Advanced Wired Controller or central control options.
- Wired or wireless controllers must be purchased separately

Refrigerant System

- The compressor shall be hermetically sealed, inverter-controlled BLDC rotary type.
- Refrigerant flow shall be controlled by an electronic expansion valve at outdoor unit

Warranty

10 Years compressor, 10 years parts, 1 year limited labor when registered

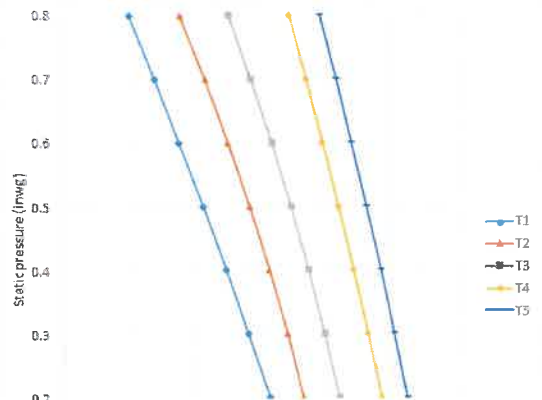
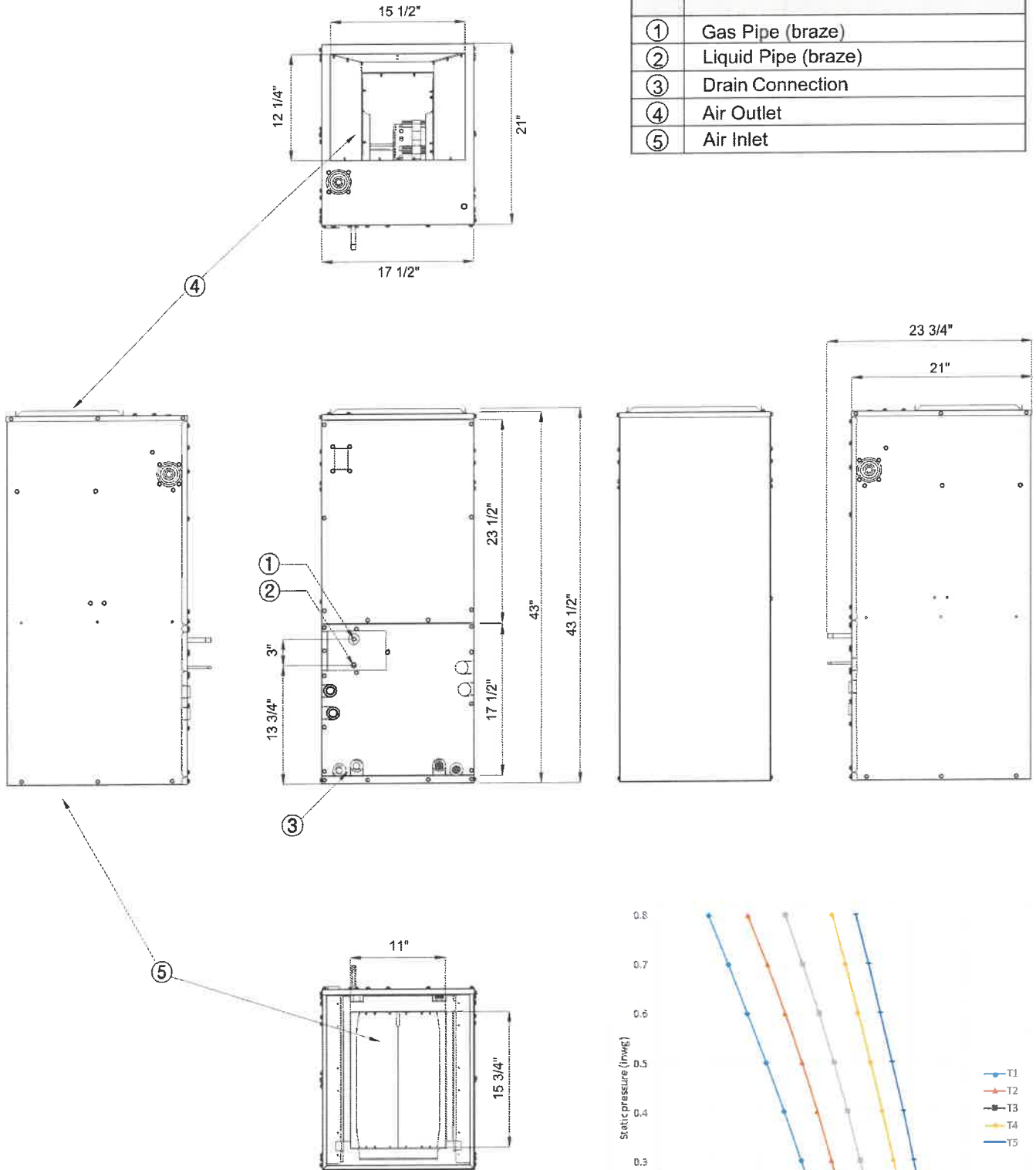
¹Performance data certified by AHRI to AHRI 210-240 (2023). Effective January 1st, 2023.

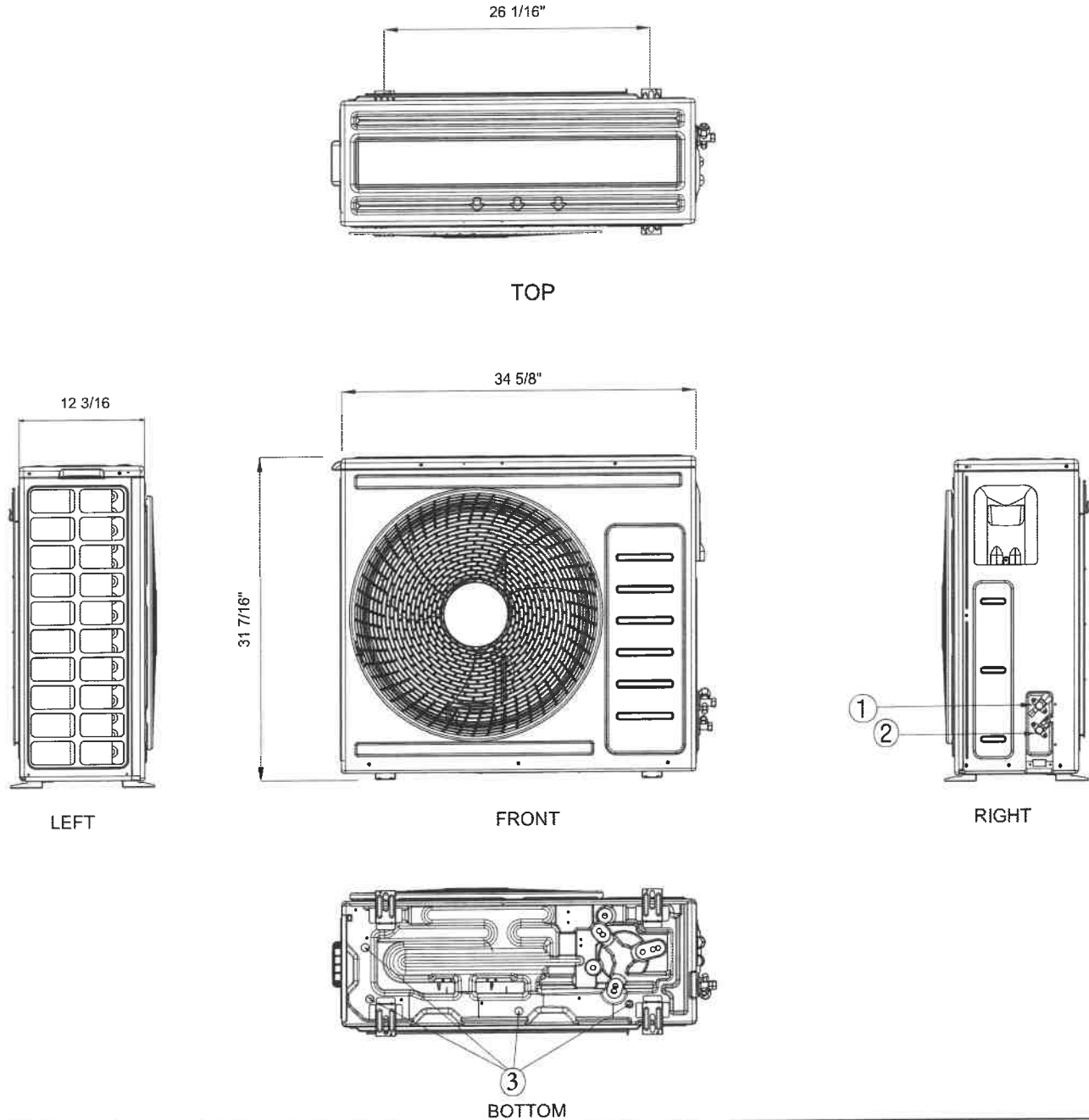
Proper sizing and installation of equipment is critical to achieve optimal performance. Split system air conditioners and heat pumps (excluding ductless systems) must be matched with appropriate coil components to meet ENERGY STAR criteria. Ask your contractor for details or visit

Optional Accessories

Wired Controller	Advanced	<input checked="" type="checkbox"/> MWR-WG00UN
	Touchscreen	<input type="checkbox"/> MWR-SH11UN
Thermostat Adaptor (for connection to a standard 24VAC thermostat)		<input type="checkbox"/> MIM-A60UN
Wireless Signal Control	Wireless Signal Receiver	<input type="checkbox"/> MRK-A10N
	Wireless Controller	<input type="checkbox"/> AR-EH04U
Wi-Fi Adapter		<input type="checkbox"/> MIM-H05UN
External Temperature Sensor		<input type="checkbox"/> MRW-TA
Filter Base (includes 1" MERV 8 filter)		<input type="checkbox"/> VFB-1
External Contact Control		<input type="checkbox"/> MIM-B14
Wall Bracket (for outdoor unit)		<input type="checkbox"/> CKN-250
Wind Baffles	Front	<input type="checkbox"/> WBF-7M
	Back	<input type="checkbox"/> WBB-7M-B
Hail Guard		<input type="checkbox"/> HGK-2
Line Sets - insulated and flared, interconnect cables included		<input type="checkbox"/> 25' - ILS-2507
		<input type="checkbox"/> 50' - ILS-5007
Supplemental Electric Heat Kit		<input type="checkbox"/> VHK-103B (3 kW)
		<input checked="" type="checkbox"/> VHK-105B (5 kW)
Downflow Conversion Kit		<input type="checkbox"/> VDK-1

No.	Description
①	Gas Pipe (braze)
②	Liquid Pipe (braze)
③	Drain Connection
④	Air Outlet
⑤	Air Inlet





No.	Name	Description
1	Refrigerant liquid pipe	Ø 1/4
2	Refrigerant gas pipe	Ø 1/2
3	Drain hole	Connect with provided drain plug