



## PACKAGED TERMINAL AIR CONDITIONER SOLUTIONS

**NEW CONSTRUCTION MODEL**



- MODEL EGN
- SUPERIOR SOUND PERFORMANCE
  - OPERATING AND TRANSMISSION LOSS (OITC)
- HIGH EFFICIENCY
  - 42" X 16" WALL SLEEVE
- SEMI-CUSTOM OPTIONS
- MODERN FEATURES AND CONTROLS

# PROFILE

Evergreen Products is your complete solution for Packaged Terminal Air Conditioning (PTAC) Products. Our innovative designs offer unique flexibility with custom options to suit any application (new construction, replacement, renovations, or retrofit).

Evergreen was founded in 2004 with the objective of delivering quality, innovative PTAC products to its customers. Existing products in the market consisted of low quality, antiquated designs in need of revision. Our mission is to meet the sophisticated demands of developers, existing buildings, and unit owners by offering the latest control technologies, sound packages, and the highest efficiency components. Evergreen products are designed to perform better and last longer.

What distinguishes us from our competitors is the support you will receive from our organization when you choose our products for your next project. We have decades of industry design knowledge and experience, along with talented service professionals, and are firmly committed to our customers.

## ADVANTAGES

- High Efficiency New Construction Model
- Semi-Custom Options
- Superior Quality
- Industry Leading Sound Performance
- Project Management/Support
- Skilled Service Professionals

## NEW CONSTRUCTION

The model EGN unit is specifically designed for the new construction market. It is our highest efficiency model and has many options for meeting the varying demands of this market (wall construction, sound attenuation, size, etc.). Our experienced engineering and project management team will make recommendations to help reduce project costs, adapt to complex field conditions, and speed construction time through proper coordination and component design. Evergreen is an excellent source for expedited custom and semi-custom components since all our PTAC accessories are manufactured in the USA.

## REPLACEMENT & RETROFIT

Our PTAC models are ideal for replacing existing units with longer lasting products that can increase efficiency, lower operating/maintenance costs, and increase occupant comfort. Our modern digital controls have many options for building or apartment owners to reduce energy consumption. Hotels, universities, and residential customers have all benefitted from our systems to curtail utility costs.

## FACTORY SERVICE

We back up all the products we sell with one of the best equipment warranties in the industry and a dedicated service department located in Woodside, NY. Evergreen service professionals are committed to customer satisfaction and maximizing the life of your equipment with timely service, preventative maintenance, and service agreements tailored to your building needs.



# STANDARD EGN CHASSIS

MAXIMUM EFFICIENCY FOR NEW CONSTRUCTION

## INDUSTRY LEADING WARRANTY

- 12 Months comprehensive parts
- 12 Month limited labor
- 5 year compressor parts

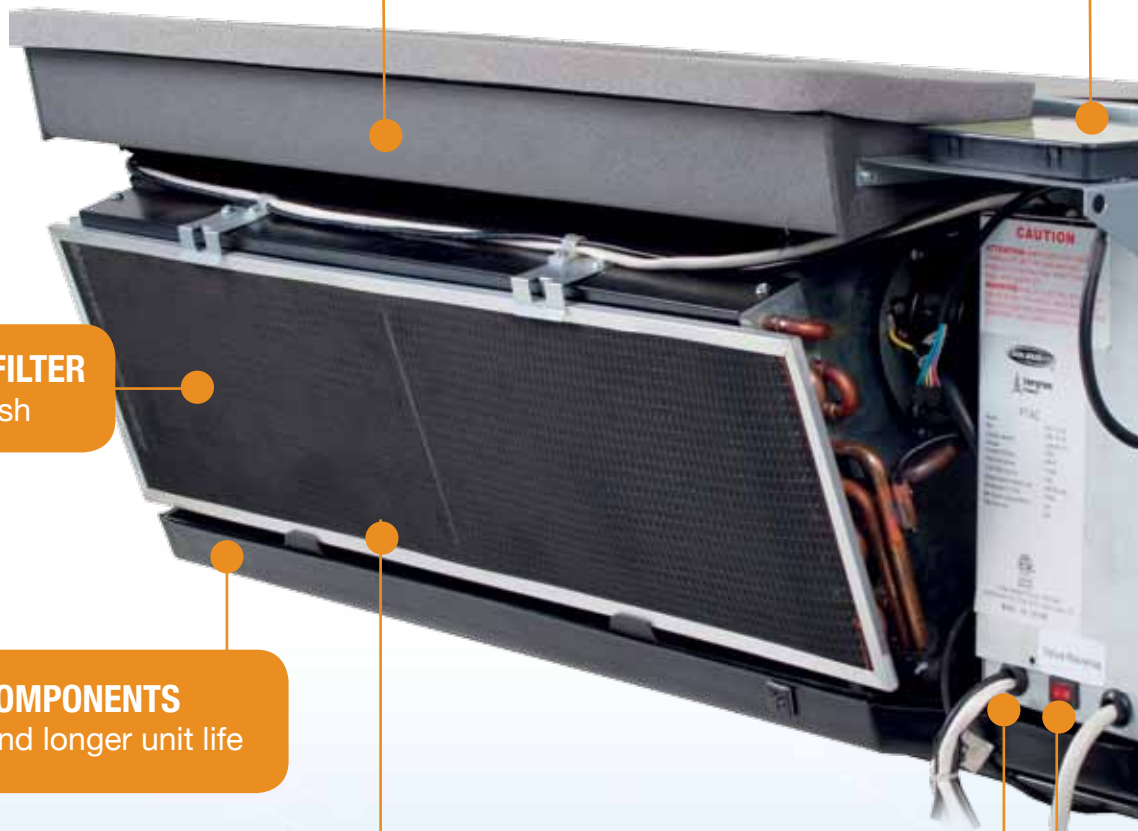
## TANGENTIAL FAN WHEEL:

Quieter, more efficient fan.



## PERMANENT WASHABLE FILTER

Durable polypropylene mesh



## PAINTED SHEET METAL COMPONENTS

For corrosion resistance and longer unit life

## WIDE CHANNEL CONDENSATE DRAIN:

Reduces chance of clogs and overflows



## 72" LCDI SAFETY PLUG

Reaches both sides of chassis



## QUICK CONNECT PLUGS:

Easy connection of control valve, aquastat and remote thermostat

### DIGITAL CONTROLS:

Simple backlit display and hand-held remote



### SLINGER WHEEL:

Vaporizes condensate to eliminate dripping



### FRESH AIR DAMPER

Manual or Automatic



### ROTARY COMPRESSOR

Reliable and energy efficient with overload protection and vibration isolators

### VALVE SELECTOR SWITCH:

Normally open or closed valve control

## ADDITIONAL UNIT OPTIONS

### SOUND PACKAGES

**Transmission loss sound package**  
for higher OITC rating (see page 11 for details)

### Operating noise package

With insulated enclosure, discharge, and compressor for lowest operating noise

### MOTORIZED FRESH AIR DAMPER

Opens and closes automatically upon call for heating or cooling

### FRONT RETURN

For applications when the unit is mounted close to the floor (to maintain proper airflow)

### ELECTRIC HEAT

Field Installed Kits available

### CONSTANT OUTSIDE AIR

Provides persistent filtered, tempered outside air

### POWER VENT OPTION

Additional outside air when required by application

### FILTERS AVAILABLE

Aluminum Mesh, Polypropylene, or Pleated

### EXTENDED WARRANTIES

Multi-year comprehensive parts  
Extended compressor parts  
Service and maintenance contracts

# STANDARD UNIT ACCESSORIES

## SLEEVE

- 42" x 16"
- Heavy Gauge Steel Construction
- Recessed Louver Design
- Exterior Drip Edge

## LOUVER

- Extruded Architectural Blade Design

## HEATING ASSEMBLY

- Snap in Cradle
- Reversible Connection Sides (field)
- Integral Pitch for Steam Coils

## HYDRONIC CONTROL VALVE

- Snap on Actuator
- Quick Connect Plug
- Manual Bypass Lever (normally closed)

## ROOM CABINET

- Furniture Grade Heavy Gauge Steel Construction
- Powder Coat Finish (off white)
- Stamped, Painted Discharge Grill
- Removable Front Panel for Easy Access
- Designed for Use with IR Remote While Door is Closed
- Fully Insulated Discharge

## ADDITIONAL OPTIONS



- Customized Depth
- Powder Coat Finish
- Mounting Flanges
- Leveling Legs
- Thermal Break Construction



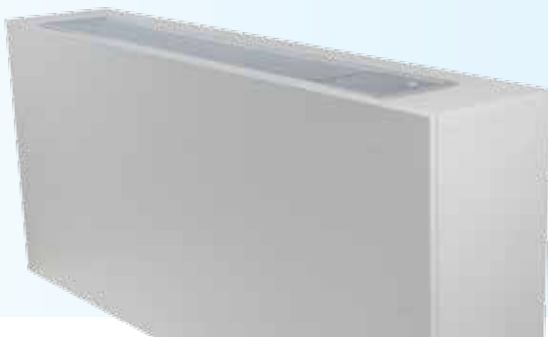
- Custom Colors and Sizes
- Brick Color Matching
- Stamped Construction



- Opposite End Connections
- Hot Water or Steam (headered)



- 2 Way
- 3 Way
- Extended Leads
- Normally Closed
- Normally Open



- Custom Depths
- Custom Colors
- Extruded, Aluminum Grill
- Flush Mounted Controls
- Front Return
- Kickplates

# STANDARD CONTROLS

## UNIT MOUNTED CONTROLS WITH THE MOST STANDARD FEATURES

- **One-Touch Economy Mode**
- **Backlit Display**
- **Hand-Held IR Remote**
- **24 hr Sleep/Wake Timer**
- **2-Speed Fan Control**
- **Self-Diagnostic Service Codes**  
Including maintenance alerts
- **Low Ambient Lockout**  
Adjustable compressor lockout.
- **Room Freeze Protection**
- **Heat Fan Lockout**  
Adjustable setpoint (AquaStat)
- **Return Air Temp Display**  
Hidden/Visible display option
- **Detachable Control Pad**  
For custom interior design applications
- **24V Interface**



Energy Star Compliant  
Thermostats





## BASIC OPTIONS

### Wired Thermostats

Non-programmable & fully-programmable thermostats are available



Builders Grade Programmable with Remote Sensor

### Wireless Thermostats

Reduce installation costs  
Perfect for Retrofit or remodel



7 Day Programmable



Non-Programmable

## ADVANCED OPTIONS



APP Ready to Control From Tablet or Smart phone



Sophisticated Control For Residential, Commercial, & Institutional Applications



## COMMERCIAL & INSTITUTIONAL OPTIONS

### Building Management Capabilities

Reduce operating costs via:

- Wired/Wireless equipment network
- Web management & control
- Occupancy sensors
- Demand Response Ready

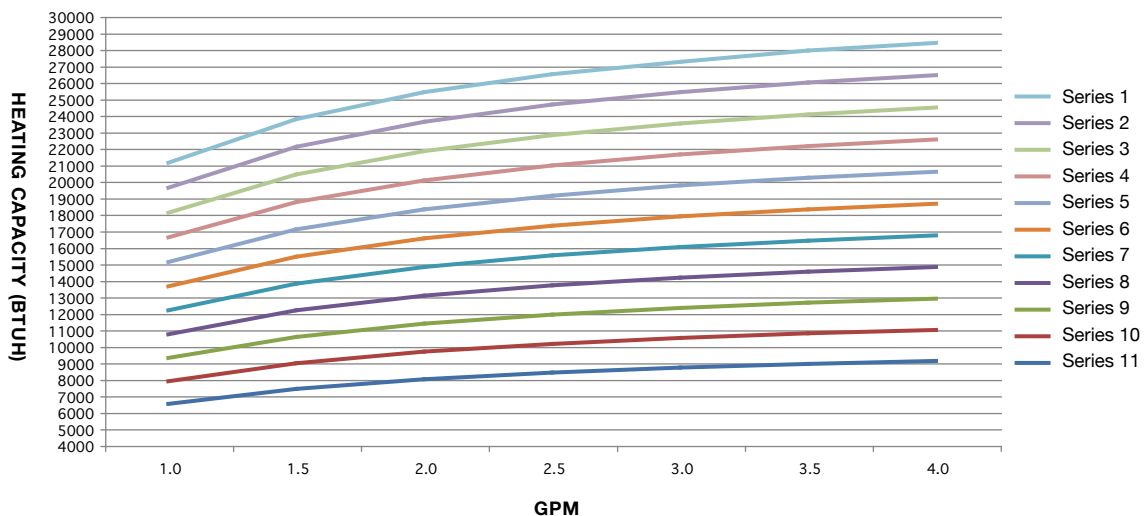
# PERFORMANCE DATA

## MODEL # EGN

MODEL			EGN 07		EGN 09		EGN 12		EGN 15	EGN 16	
COOLING	Total Cooling		BTUH	7,800	7,800	9,800	9,800	12,900	12,900	15,200	16,800
	VOLTAGE		V	115	208/230	115	208/230	115	208/230	208/230	208/230
	AMPERAGE		A	5.6	2.8	7.2	3.6	9.8	4.9	6.2	7.3
	WATTS		W	640	640	840	840	1120	1120	1420	1680
	EER			12.0	12.0	11.2	11.2	11.0	11.0	10.2	9.9
AIRFLOW		HI	CFM	375	375	375	375	375	375	375	490
		LOW	CFM	325	325	325	325	325	325	325	370
HEATING	HOT WATER	HI	BTUH	18,260	18,260	18,260	18,260	18,260	18,260	18,260	21,000
		LOW	BTUH	16,800	16,800	16,800	16,800	16,800	16,800	16,800	18,100
	STEAM	HI	BTUH	23,950	23,950	23,950	23,950	23,950	23,950	23,950	28,281
		LOW	BTUH	21,800	21,800	21,800	21,800	21,800	21,800	21,800	23,736
WEIGHTS	CHASSIS		Lbs.	100	100	100	100	112	118		
	CHASSIS (BOXED)		Lbs.	110	110	110	110	122	129		
	STANDARD SLEEVE (13.75")		Lbs.	31	31	31	31	31	31		
	STANDARD CABINET (10.5")		Lbs.	37	37	37	37	37	37		
WALL SLEEVE SIZE				42" X 16"	42" x 16"	42" x 16"	42" x 16"	42" x 16"	42" x 16"		
REFRIGERANT				410A	410A	410A	410A	410A	410A		

- Notes:**
- Cooling capacities are based on ASHRAE and ARI test conditions of 95°/75° outdoor DB/WB and 80°/67° indoor DB/WB
  - Hot water heating capacities are based on 200° EWT, 20° ΔT, and 70° EAT
  - Due to ongoing development and testing; specifications are subject to change without notice

## HEATING CAPACITY AT NONSTANDAR CONDITIONS – MODEL EGN



## OPERATING SOUND DATA

The EGN PTAC was specifically designed for limiting operating noise. By incorporating a tangential fan wheel from ultra-quiet Minisplit Air Conditioner designs, the EGN PTAC has proven to be one of the quietest hydronic PTAC units on the market. If additional sound mitigation is required, we can provide sound packages to further reduce the operating noise.

SIZE	MODE	FAN	DB RATING <sup>1</sup>
07	FAN ONLY	LOW	50.6
		HIGH	54.0
	COOLING	LOW	57.2
		HIGH	57.9
09	FAN ONLY	LOW	50.2
		HIGH	53.1
	COOLING	LOW	57.0
		HIGH	57.8
12	FAN ONLY	LOW	51.0
		HIGH	53.4
	COOLING	LOW	56.3
		HIGH	57.7
15	FAN ONLY	LOW	50.5
		HIGH	54.4
	COOLING	LOW	53.8
		HIGH	54.9
16	FAN ONLY	LOW	52.6
		HIGH	60.6
	COOLING	LOW	56.9
		HIGH	61.5

## TRANSMISSION LOSS SOUND DATA

Since noise has been classified as an environmental hazard and PTACS are incorporated into the building envelope, mitigating loud ambient street noise has become a critical requirement. Our standard PTAC unit has one of the highest OITC (Outdoor-Indoor Transmission Class) ratings in its class; and our industry leading sound attenuation packages offer the highest OITC ratings available on the market.

	STC	OITC
Standard Unit <sup>2</sup>	27	18
Standard Unit with Basic Sound Package	28	20
Sound Transmission Attenuation Package <sup>2</sup>	35	26
Custom Sound Transmission Attenuation Package		26+

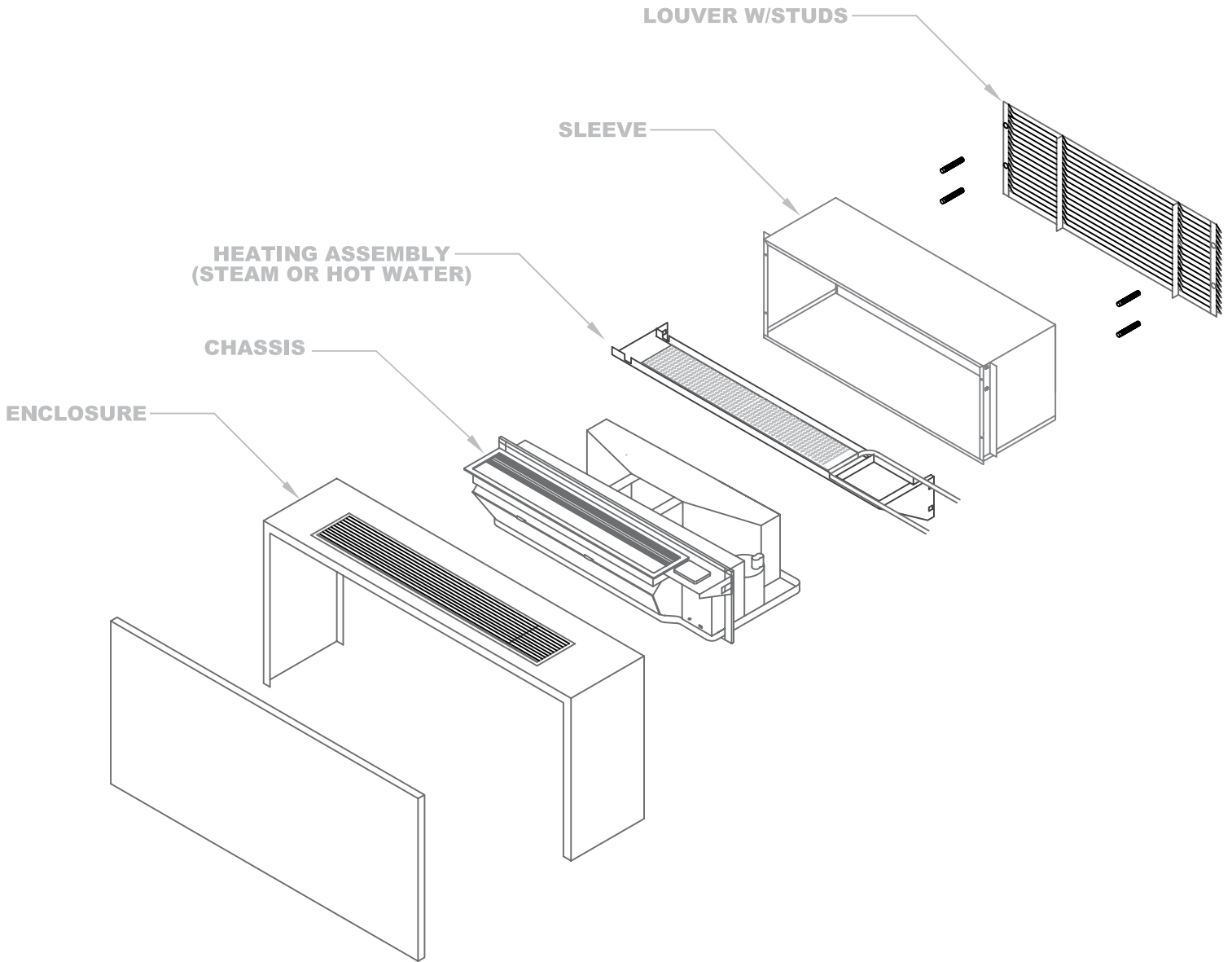
We offer custom sound packages to meet STC and OITC targets based on project specifications and job site requirements.

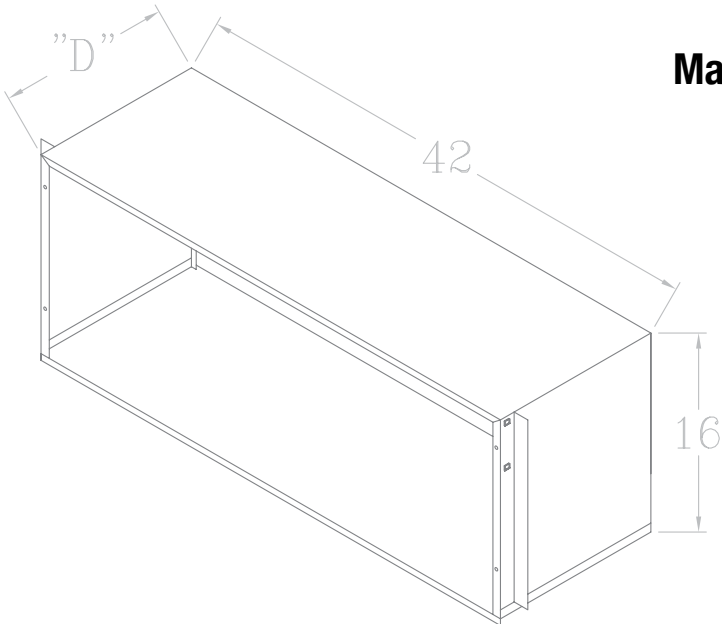
**Notes:** 1. DB ratings are A frequency rated

2. Units were tested in accordance with ASTM E90. Complete transmission sound loss data is available upon request.

# DIMENSIONAL DRAWINGS

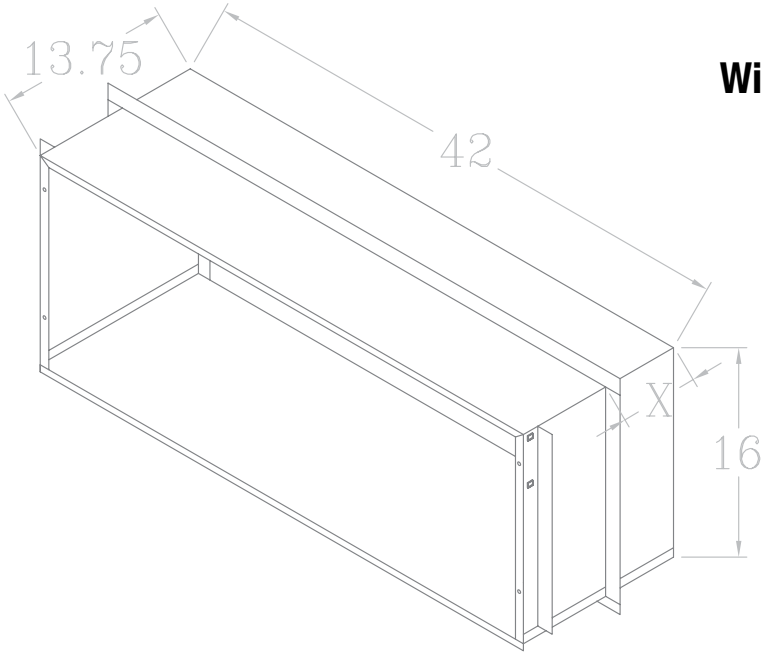
## Model EGN Assembly





**Masonry Wall Sleeve**

SLEEVE DEPTHS	
"D"	15 INCHES
	16 INCHES
	17 INCHES
	18 INCHES
	19 INCHES

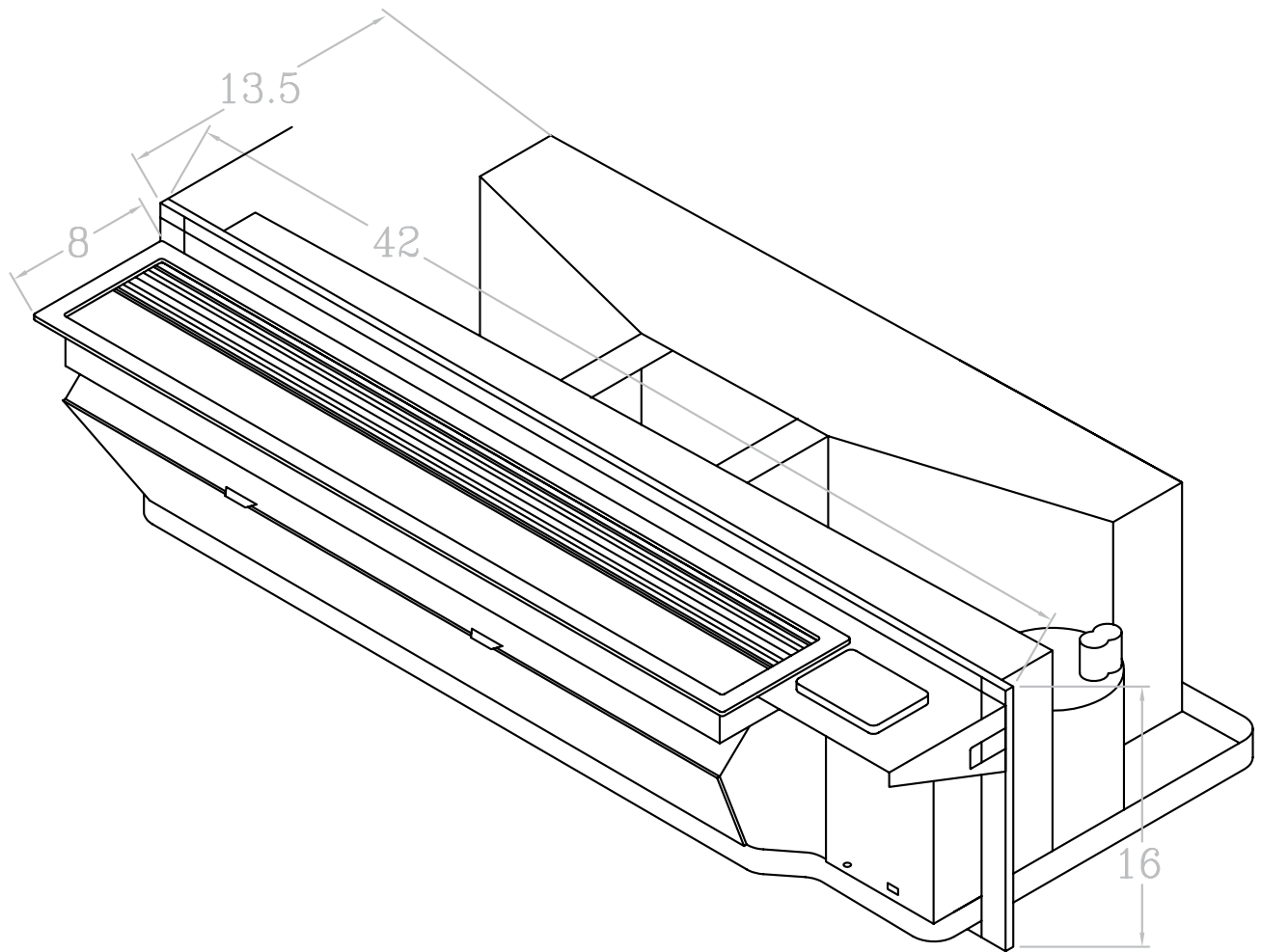


**Window or Panel Wall Sleeve**

**Notes:** Depth of the wall sleeve is customer specified  
 "X" = Thickness of the insulated panel (customer specified)  
 Wall sleeves should protrude 1.25" past the sheet rock when installed

# CHASSIS

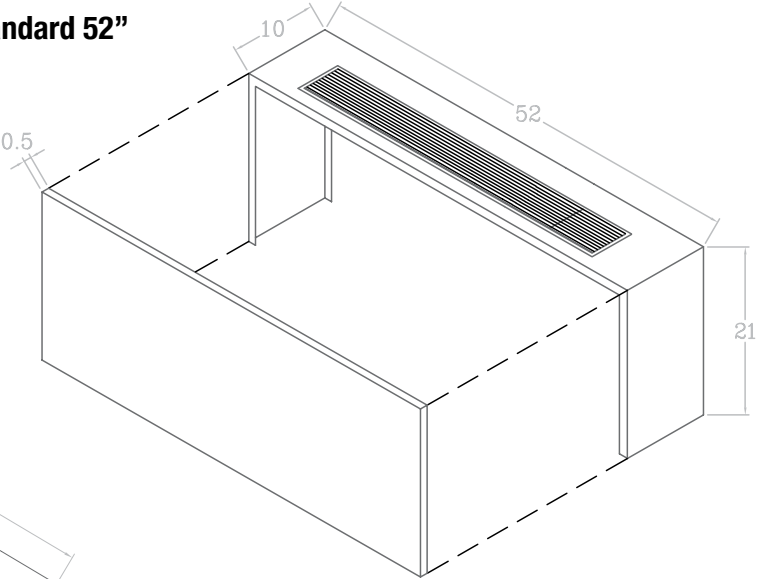
**Model EGN Chassis**



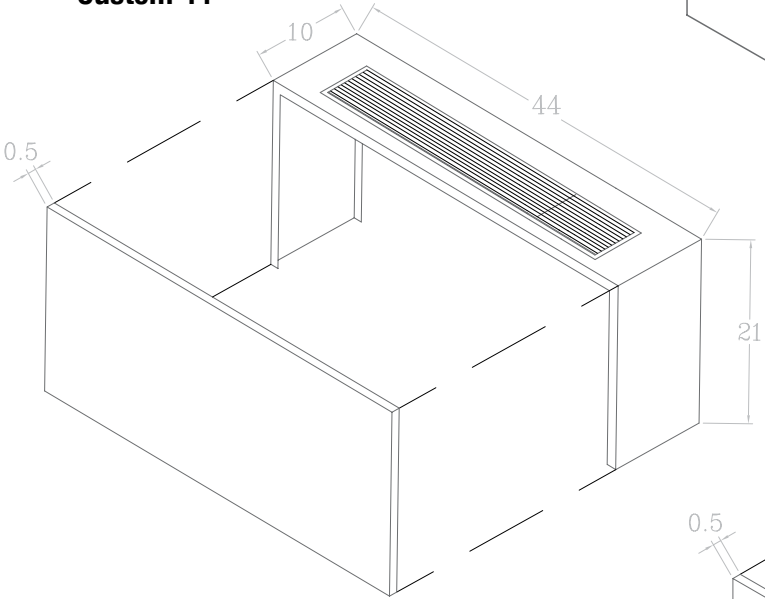
# ROOM ENCLOSURES

**BUILT PER CUSTOMER REQUIREMENTS**

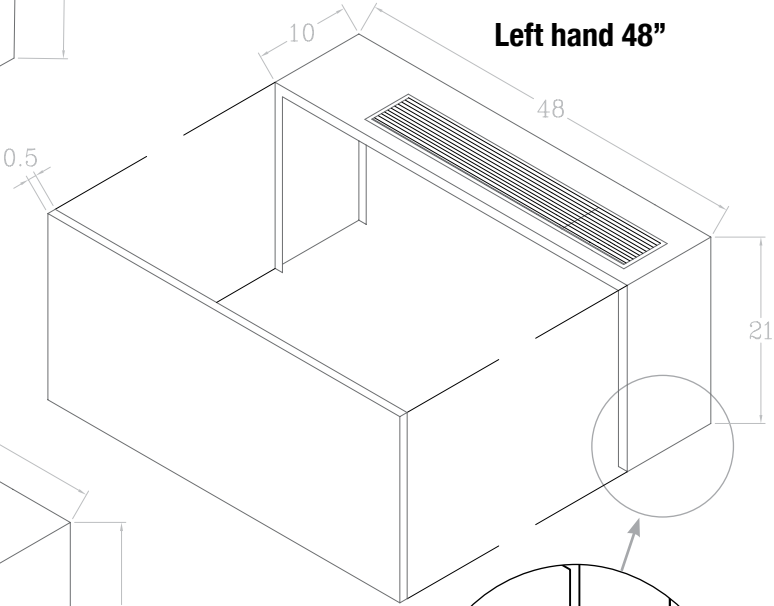
**Standard 52"**



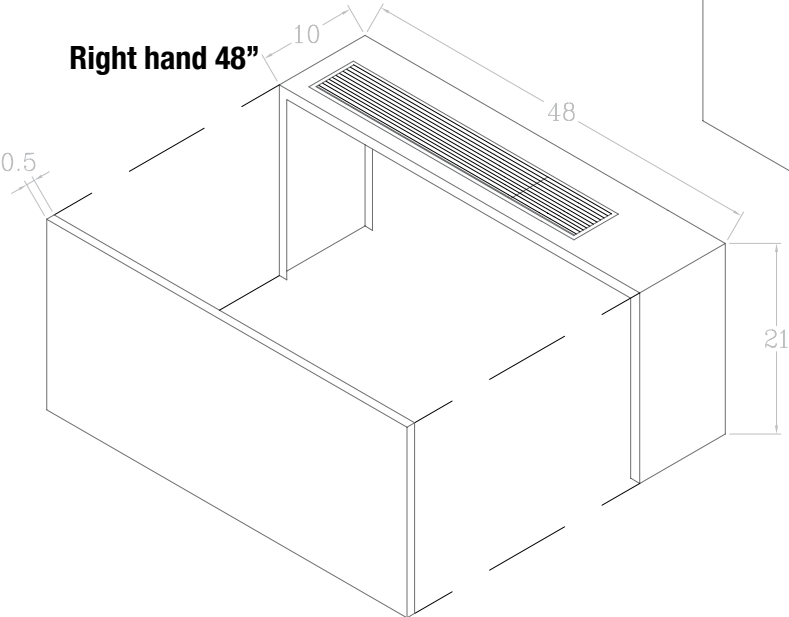
**Custom 44"**



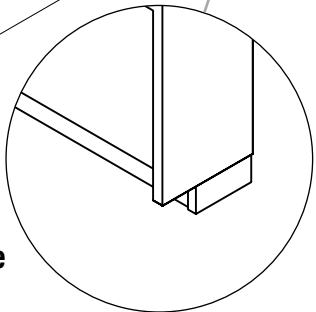
**Left hand 48"**



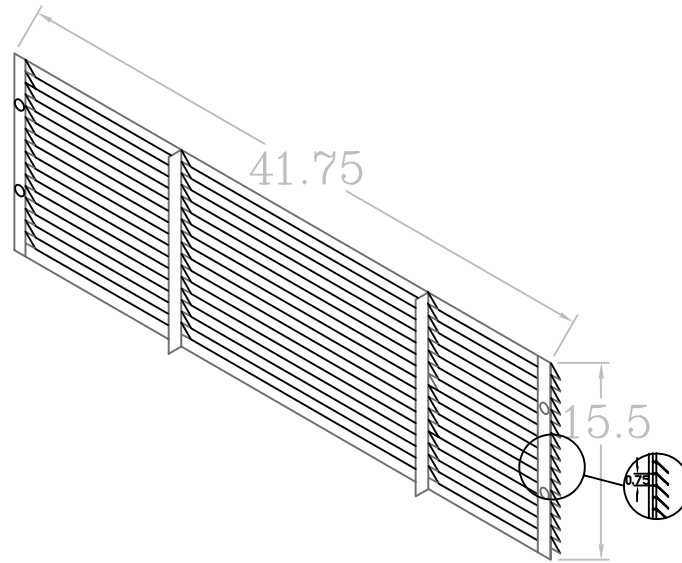
**Right hand 48"**



**Optional Kickplate**

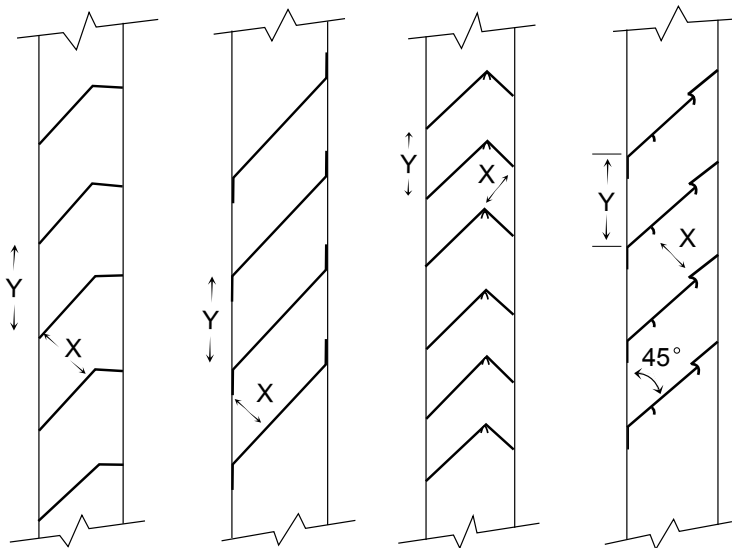


# STANDARD LOUVER



## CUSTOM LOUVERS

Louvers that are provided by others must have a minimum of 70% free area and a maximum static pressure drop of 0.05 w.g. at 300 fpm. Call us to confirm your project details and requirements if you are using a custom louver on your project.



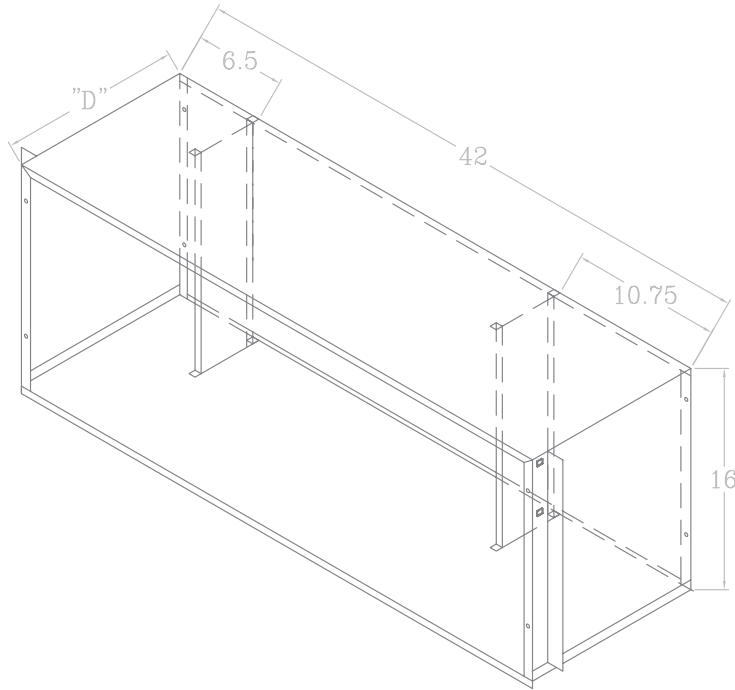
## TYPICAL LOUVER DESIGN

The illustrations below show some typical louver designs. The “X” dimension represents the narrowest dimension through which air must pass. The “Y” dimension represents the increment of rise between the blades. To calculate the percentage of free area, divide dimension “X” by dimension “Y”.



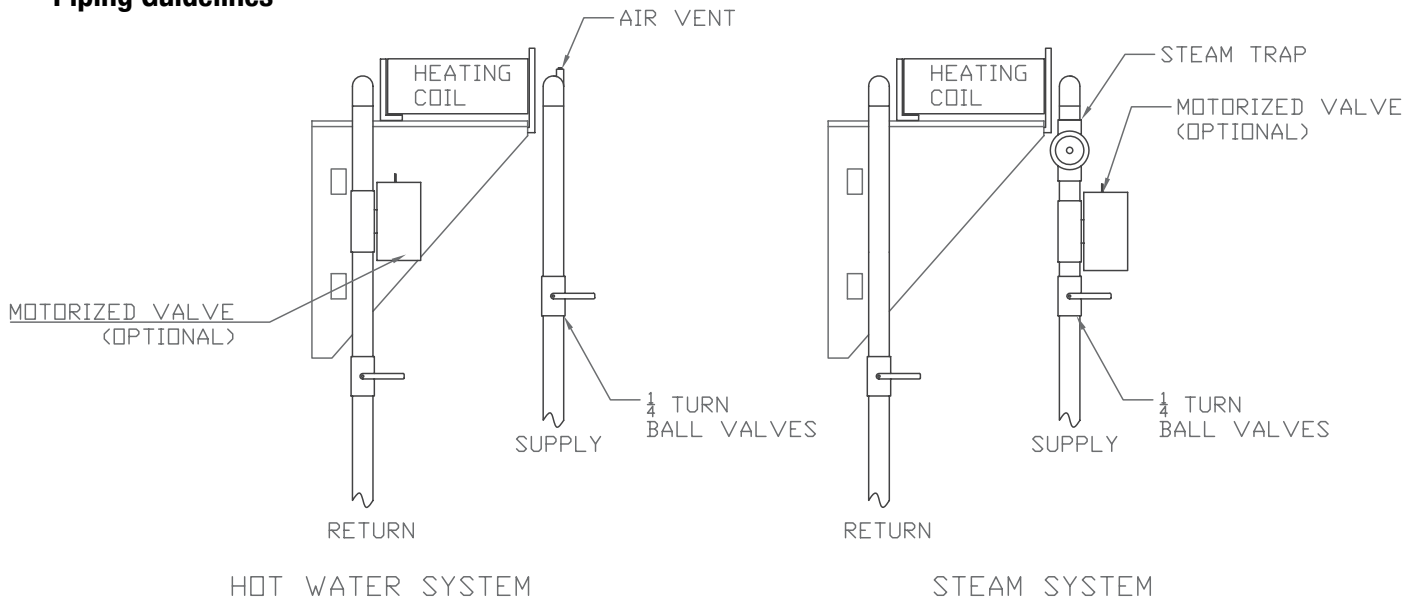
# INSTALLATION DETAILS

## Condenser Air Splitter Locations



	SLEEVE DEPTHS
"D"	14 INCHES
	15 INCHES
	16 INCHES
	17 INCHES
	18 INCHES
	19 INCHES

## Piping Guidelines



HOT WATER SYSTEM

STEAM SYSTEM

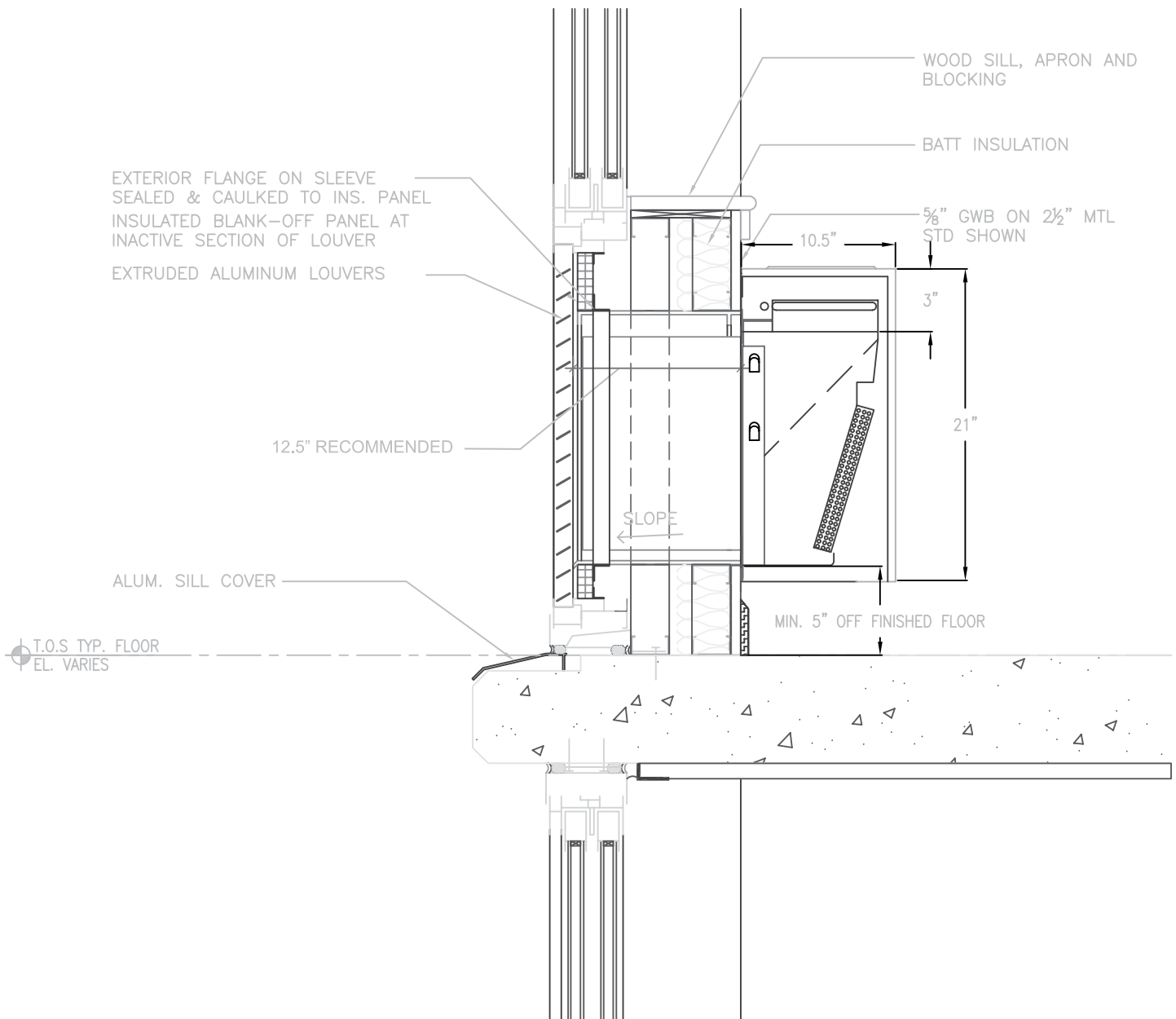
### Notes:

Left side view shown

All piping accessories required by the application (per engineer's design or building specification) to be installed within the piping vestibules of the room cabinet

# WALL ELEVATIONS

## Model EGN Panel Wall Sleeve Detail

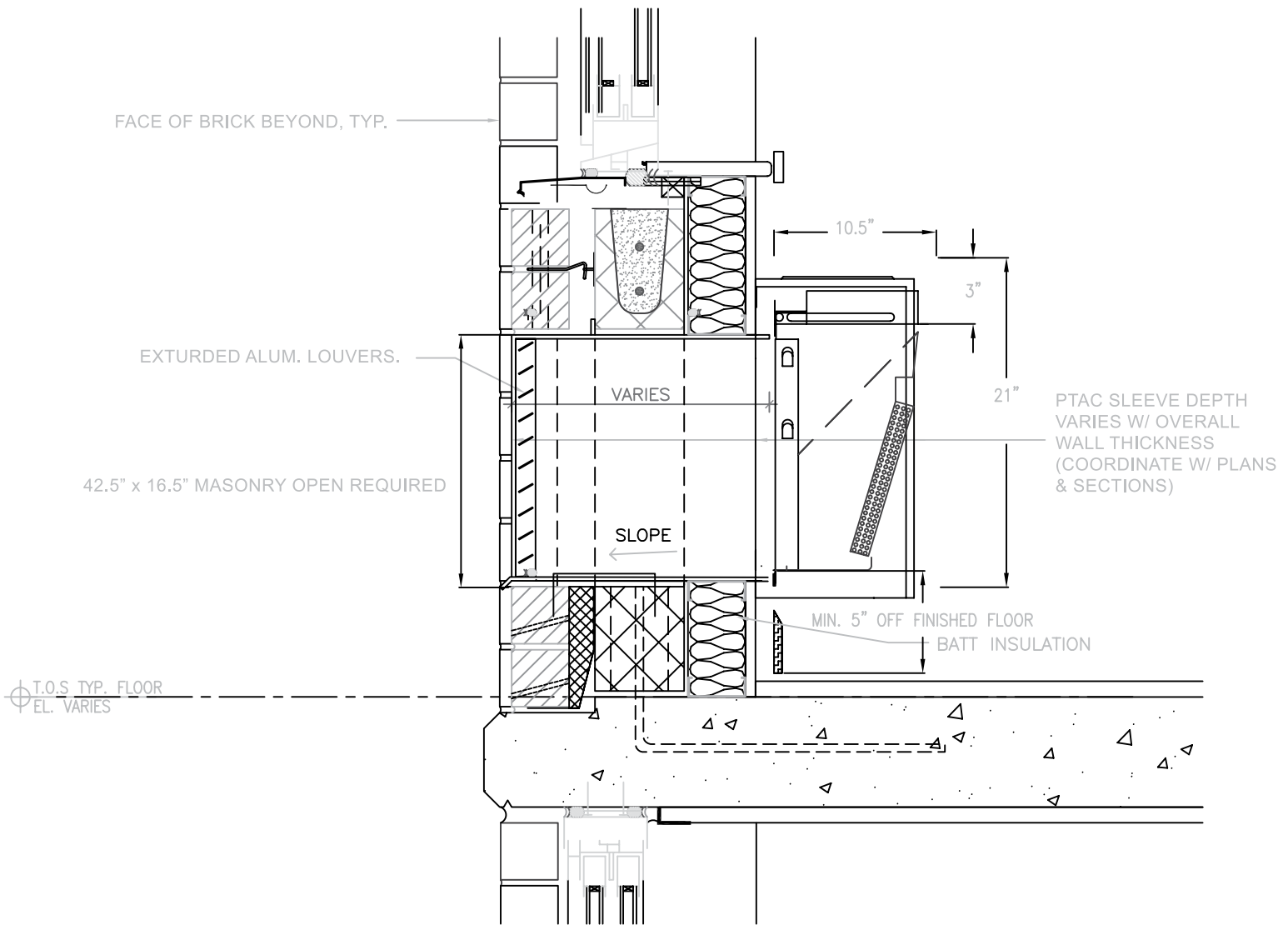


### Notes:

Rough opening through insulated blank-off panels should be 42.25" X 16.25"

Location of exterior flange on sleeve "X" to be confirmed prior to release of sleeves

## Model EGN Masonry Wall Sleeve Detail





## **CUSTOM PTAC SOLUTIONS**

EVERGREEN PRODUCTS, LLC.

51 -26 59<sup>TH</sup> STREET

WOODSIDE, NEW YORK 11377

PHONE: 718.803.2090

FAX: 718.803.2095

EMAIL: [INFO@EGREENPRODUCTS.COM](mailto:INFO@EGREENPRODUCTS.COM)

[WWW.EGREENPRODUCTS.COM](http://WWW.EGREENPRODUCTS.COM)