



# National Comfort Products

## Thru-the-Wall Packaged Heating & Cooling



# Comfort Pack *Flex* Thru-the-Wall Packaged Heat Pump

## *Go Thru-the-Wall*

Website



## Nomenclature 2025

FC	H	5	18	00	L	A	-	A	1
Product	Product Type	Refrigerant	Clg. Capacity	Htg. Capacity	Return Air and Blwr. Acc. Option	Generation		Option	Engineering Change
FC = Flex Comfort Pack	H = Heat Pump	5 = R454B	18 = 1.5 Ton 24 = 2 Ton 30 = 2.5 Ton	00 = 0 kW 03 = 3 kW 05 = 5 kW 07 = 7 kW 10 = 10 kW 15 = 15 kW	L = Left Hand Return Front Access R = Right Hand Return Front Access K = Front Return Left Hand Access F = Front Return Right Hand Access			A = Standard	

## Comfort Pack *Flex* Features

- Adjustable 5 Speed DC Indoor Motor
- Self-Contained Heat Pump
- Precharged and Prewired
- Multiple Returns and Blower access Options
- Complete Insulated cabinet to reduce thermal losses
- Various sizes of wall sleeves
- Refrigerant Leak detection system for occupants safety

## Heat Pump System

- Separate access for condenser and evaporator sections
- Easy Access coremax service ports
- R454B High Efficiency Scroll Compressor
- 1.5, 2.0 and 2.5 Ton cooling Capacities
- Separate TXVs for Cooling and Heat pump operation in all models for optimum performance
- 1" Primary and secondary Drain connection for Evaporator
- 1" Drain connection for condenser

## Optional Heating

- Field installed heat kits up to 15KW Electric Resistance Heat
- 2 Stage Electric Heat Control Board
- Internal Automatic Reset Thermal Limits
- Breaker Protection

## Comfort Pack *Flex* Advantages

- Self Contained Heat Pump with Single stage scroll compressor
- 2-Stage Electric heat with triac control board
- Multiple Returns and Blower access option to meet different building layouts
- Easy Access Refrigeration Service Ports Utilizing Low Loss Coremax Technology
- Separate Drain connection for Evaporator and condenser section





A photograph of a modern, multi-story apartment building with a swimming pool in the foreground. The building has white walls and large windows. Several palm trees are planted around the pool area. In the foreground, there are lounge chairs and a small table. The sky is clear and blue.

COMFORT  
PACK  
*Flex*

Where Design *Flexibility*  
meets **COMFORT.**

# Comfort Pack *Flex* Unit Information

## Comfort Pack Flex - up to 14.0 SEER2 and 7.5 HSPF2

Model	Shipping Weight (Lbs.)	Compressor		MCA	MOP
		RLA	LRA		
FCH51800*A-A	365	7.2	47	14.8	20
FCH52400*A-A	375	9.0	63	17.1	25
FCH53000*A-A	380	12.5	67	21.4	30
Cond. Fan Motor Specs.	1/4 HP, 1075 RPM, 2.0 FLA				
Cond. Coil Specs	4.49 ft2 Face Area, 15 FPI				
Evap. Fan Motor Specs.	1/2 HP, 1050 RPM, 3.8 FLA				
Evap. Coil Specs	3.33 ft2 Face Area, 16 FPI				

## Comfort Pack *Flex* Performance Data

### Comfort Pack Flex - Cooling Data (up to 14 SEER2)

Model	Nominal Tonnage	Rated Capacity <sup>1</sup> (Btu/h)	Rated EER2	Nominal Airflow (SCFM) <sup>2</sup>	Refrigerant Charge (Oz.)	SEER2
FCH51800*A-A	1.5	18,000	12	620	70	14.0
FCH52400*A-A	2.0	23,800	11.5	820	69	13.8
FCH53000*A-A	2.5	27,800	11.5	920	85	13.4

1. The cooling capacity are based of outdoor condition at 95°F DB and indoor condition at 80°F DB, 67°F WB  
2. The nominal Airflow values are from factory speed settings of the blower at 0.3" ESP.

### Comfort Pack Flex - Heating Data (7.5 HSPF2)

Model	Nominal Tonnage	Rated Capacity (47°F) (Btu/h)	Rated COP2	Rated Capacity (35°F) (Btu/h)	Rated Capacity (17°F) (Btu/h)	HSPF2
FCH51800*A-A	1.5	16,800	3.5	13,600	10,500	7.5
FCH52400*A-A	2.0	22,800	3.5	18,400	14,100	7.5
FCH53000*A-A	2.5	24,600	3.5	19,400	15,800	7.5

## Electric Heat Kit Information

Model	Nominal Tonnage	Heat Kit <sup>1</sup>	Heat Btu/h		Heating kW		Heating Amps	
			208V	230V	208V	230V	208V	230V
FCH51800*A-A	1.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		CPEHK03	8,900	10,900	2.61	3.19	12.54	13.89
		CPEHK05	13,100	16,000	3.84	4.69	18.45	20.39
		CPEHK07	18,300	22,400	5.36	6.56	25.78	28.54
		CPEHK10	26,000	32,000	7.62	9.38	36.63	40.77
		CPEHK15	39,000	48,000	11.43	14.06	54.94	61.15
FCH52400*A-A	2.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		CPEHK03	8,900	10,900	2.61	3.19	12.54	13.89
		CPEHK05	13,100	16,000	3.84	4.69	18.45	20.39
		CPEHK07	18,300	22,400	5.36	6.56	25.78	28.54
		CPEHK10	26,000	32,000	7.62	9.38	36.63	40.77
		CPEHK15	39,000	48,000	11.43	14.06	54.94	61.15
FCH53000*A-A	2.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		CPEHK03	8,900	10,900	2.61	3.19	12.54	13.89
		CPEHK05	13,100	16,000	3.84	4.69	18.45	20.39
		CPEHK07	18,300	22,400	5.36	6.56	25.78	28.54
		CPEHK10	26,000	32,000	7.62	9.38	36.63	40.77
		CPEHK15	39,000	48,000	11.43	14.06	54.94	61.15

1. The Packaged heat pump comes with no electric from factory. Field installation electric heat kits are available to order separately.



# Comfort Pack *Flex* Electrical Data

Model	Auxiliary Heat Kit	Compressor		Condenser Motor		Blower		Total Amps		MCA		MOP	
		RLA	LRA	HP	FLA	HP	FLA	208V	230V	208V	230V	208V	230V
FCH51800*A-A	N/A	7.2	47	1/4	2.0	1/2	3.8	13.0	13.0	14.8	14.8	20	20
	CPEHK03							16.4	17.7	20.5	22.1	25	25
	CPEHK05							22.2	24.2	27.8	30.2	30	35
	CPEHK07							29.6	32.4	37.0	40.5	40	45
	CPEHK10							40.5	44.5	50.7	55.6	60	60
	CPEHK15							38.8	42.6	49.1	54.0	50	60
								20.4	22.3	24.6	27.0	25	30
FCH52400*A-A	N/A	9.0	63	1/4	2.0	1/2	3.8	14.8	14.8	17.1	17.1	25	25
	CPEHK03							16.4	17.7	20.5	22.1	25	25
	CPEHK05							22.2	24.2	27.8	30.2	30	35
	CPEHK07							29.6	32.4	37.0	40.5	40	45
	CPEHK10							40.5	44.5	50.7	55.6	60	60
	CPEHK15							38.8	42.6	49.1	54.0	50	60
								20.4	22.3	24.6	27.0	25	30
FCH53000*A-A	N/A	12.5	67	1/4	2.0	1/2	3.8	18.3	18.3	21.4	21.4	30	30
	CPEHK03							30.9	32.2	21.4	22.1	30	30
	CPEHK05							36.7	38.7	27.8	30.2	30	35
	CPEHK07							44.1	46.9	37.0	40.5	40	45
	CPEHK10							55.0	59.0	50.7	55.6	60	60
	CPEHK15							49.0	52.8	49.1	54.0	50	60
								24.5	26.4	24.6	27.0	25	30

\*All units have a Voltage of 208/230-1-60

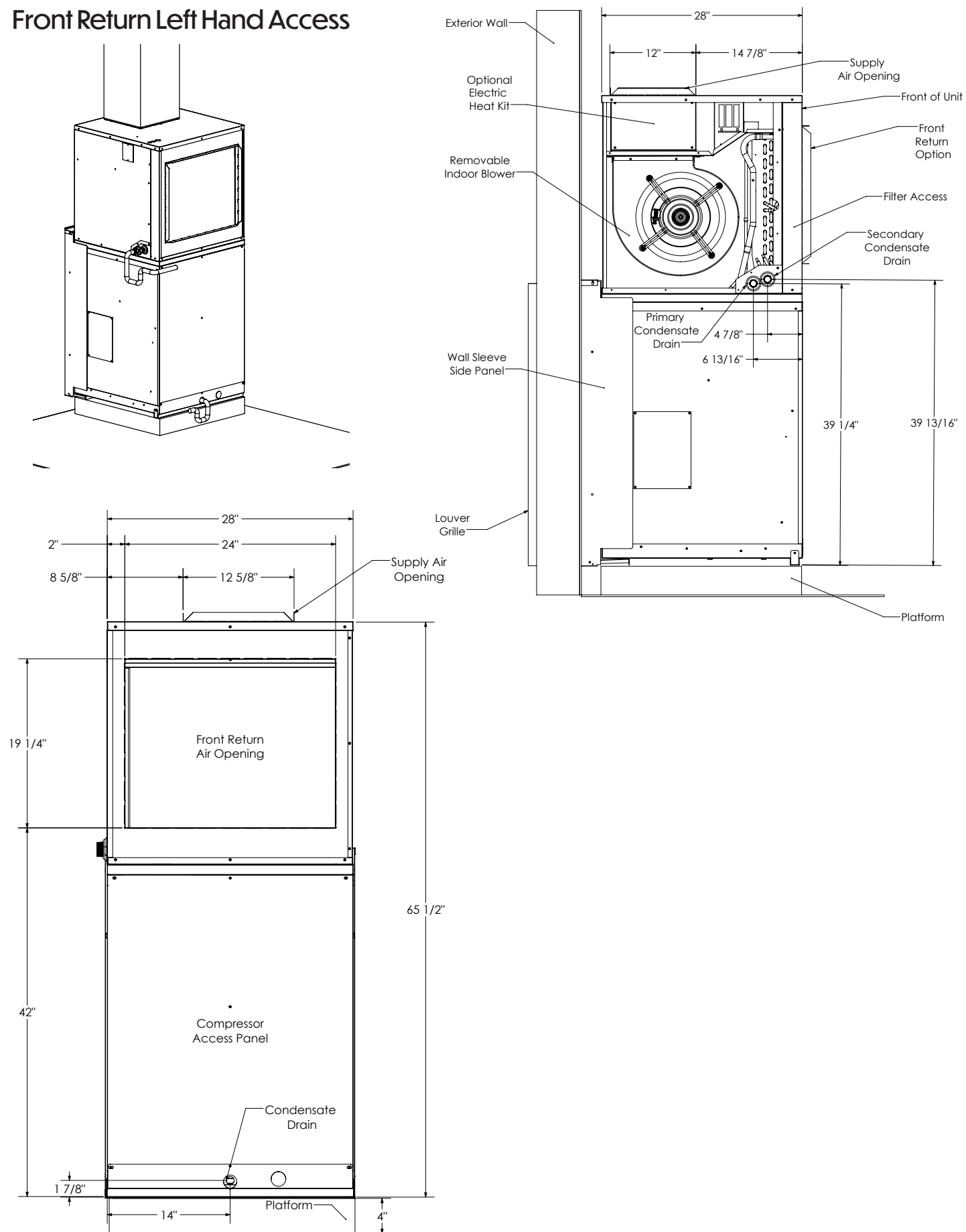
# Comfort Pack *Flex* Air Flow Data

Model	Blower Speeds	ESP (in. wc) / SCFM1				
		0.1	0.2	0.3	0.4	0.5
FCH51800*A-A FCH52400*A-A FCH53000*A-A	Orange (low)	675	624	563	493	414
	Black (Med. Low)	719	648	588	539	501
	Blue (Med.)	905	862	819	775	731
	Yellow (Med. High)	1006	946	924	886	849
	Red (High)	1042	998	959	924	893

1. The airflow data is conducted with a filter at dry coil conditions.

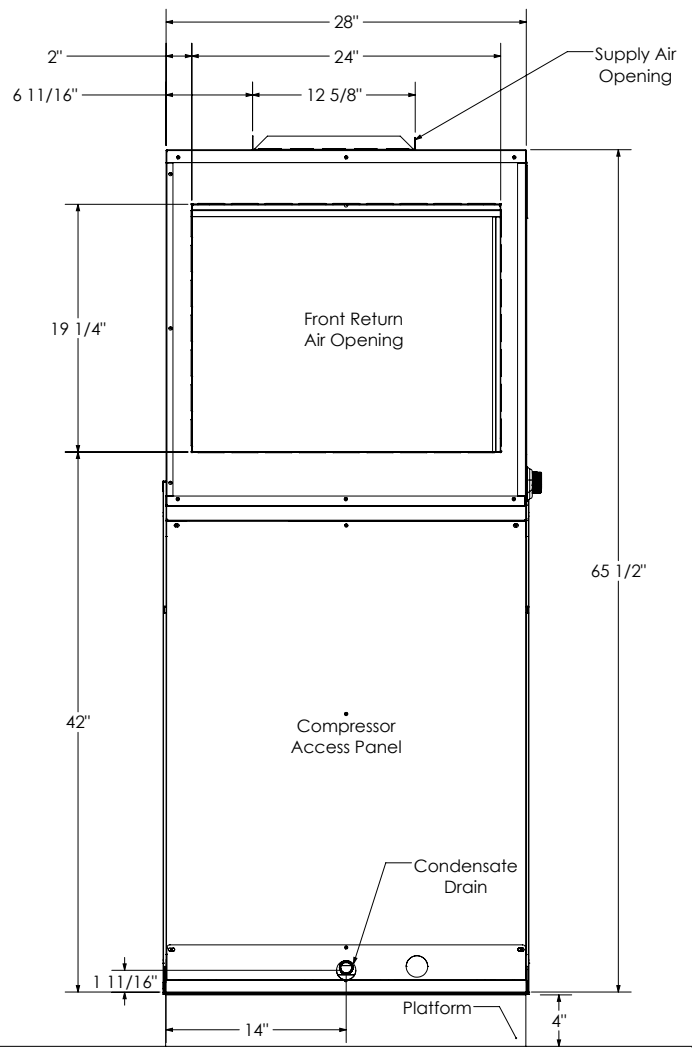
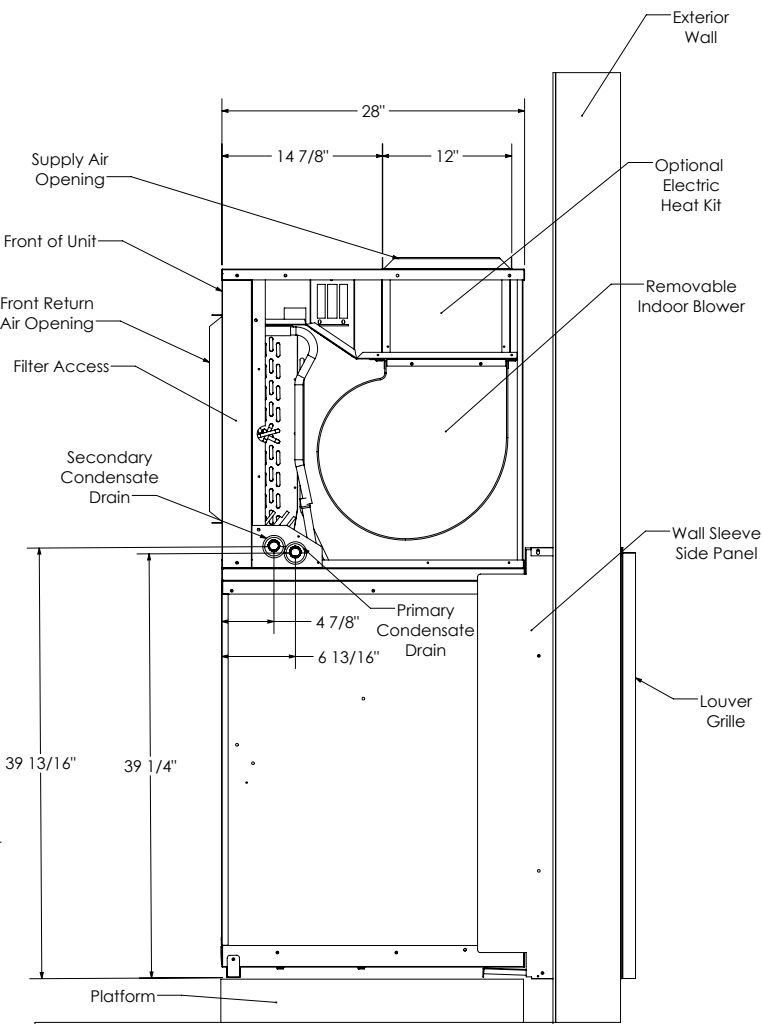
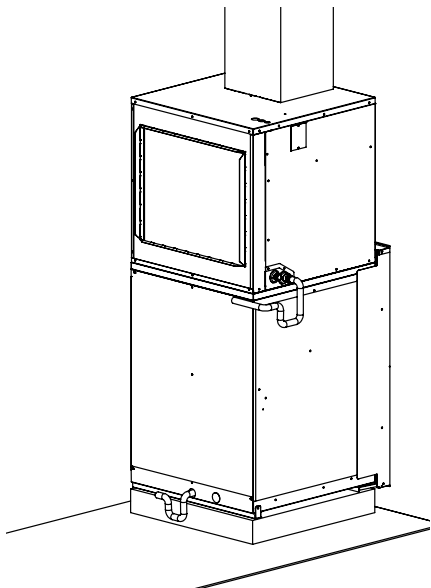
# Comfort Pack *Flex* Unit Dimensions

## Front Return Left Hand Access



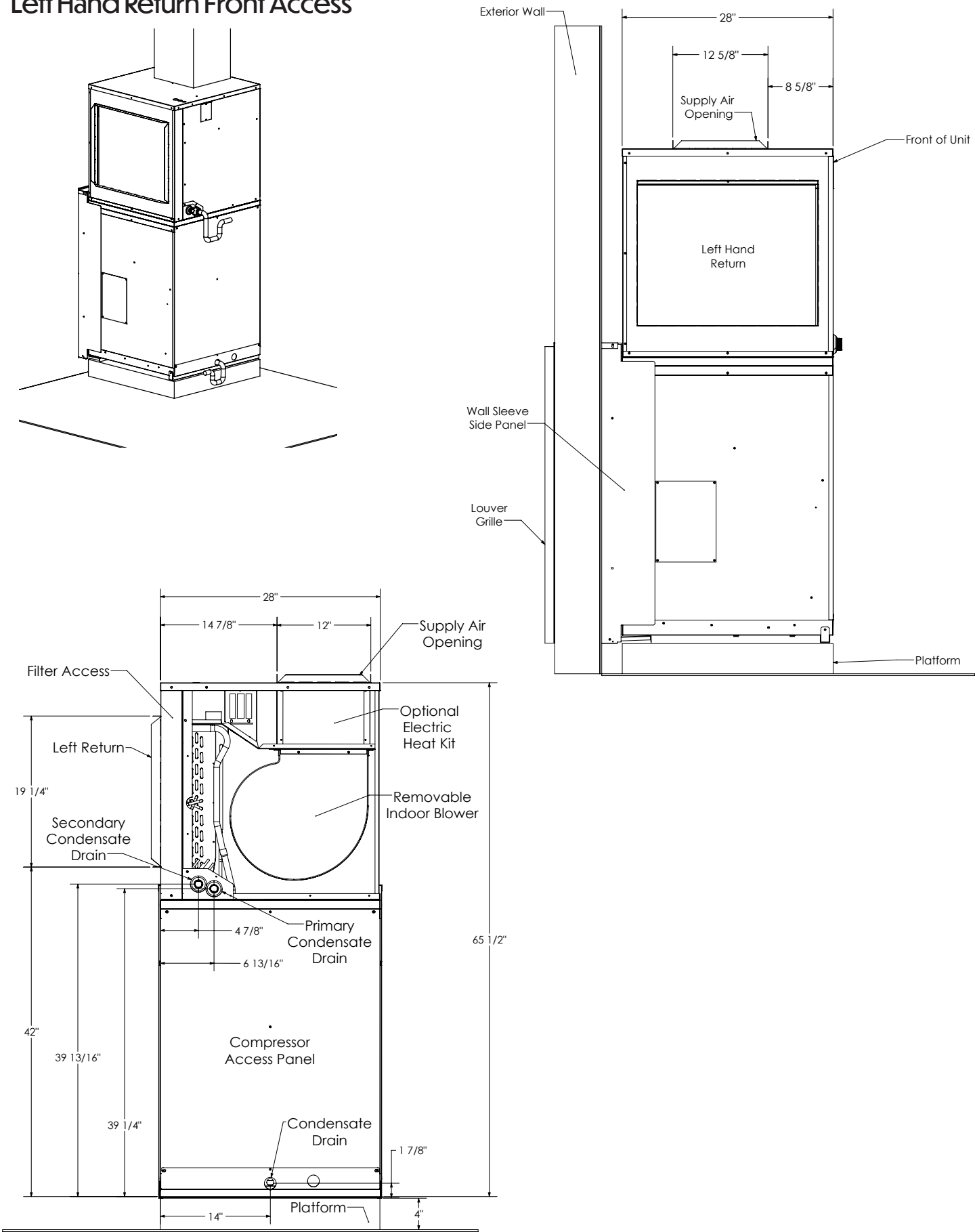
# Comfort Pack *Flex* Unit Dimensions

## Front Return Right Hand Access



# Comfort Pack *Flex* Unit Dimensions

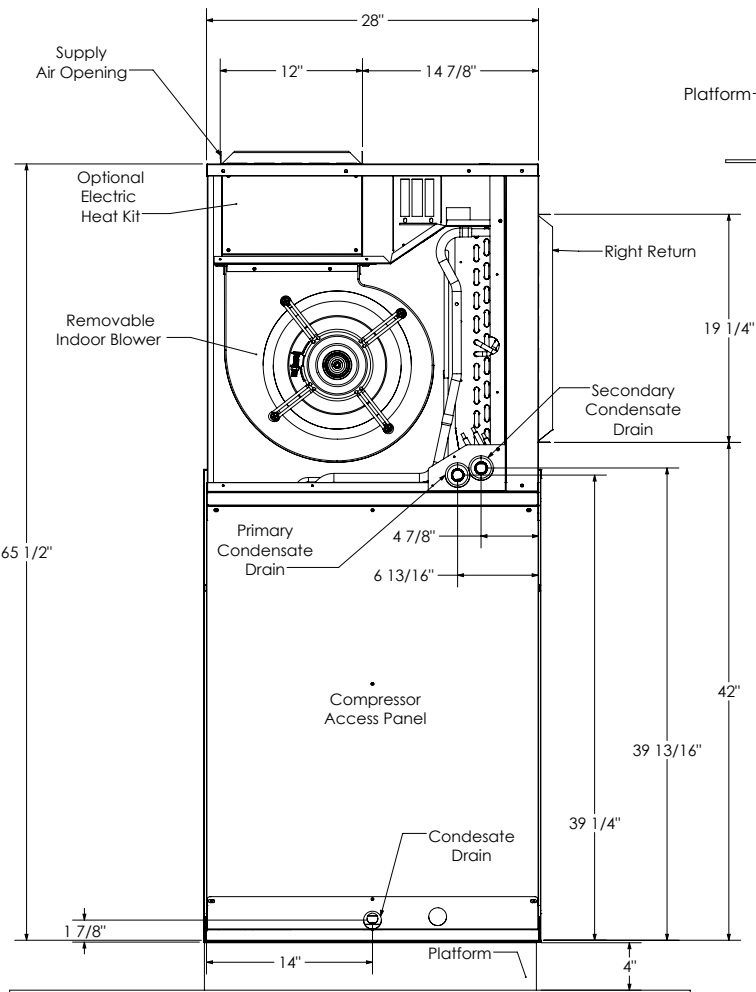
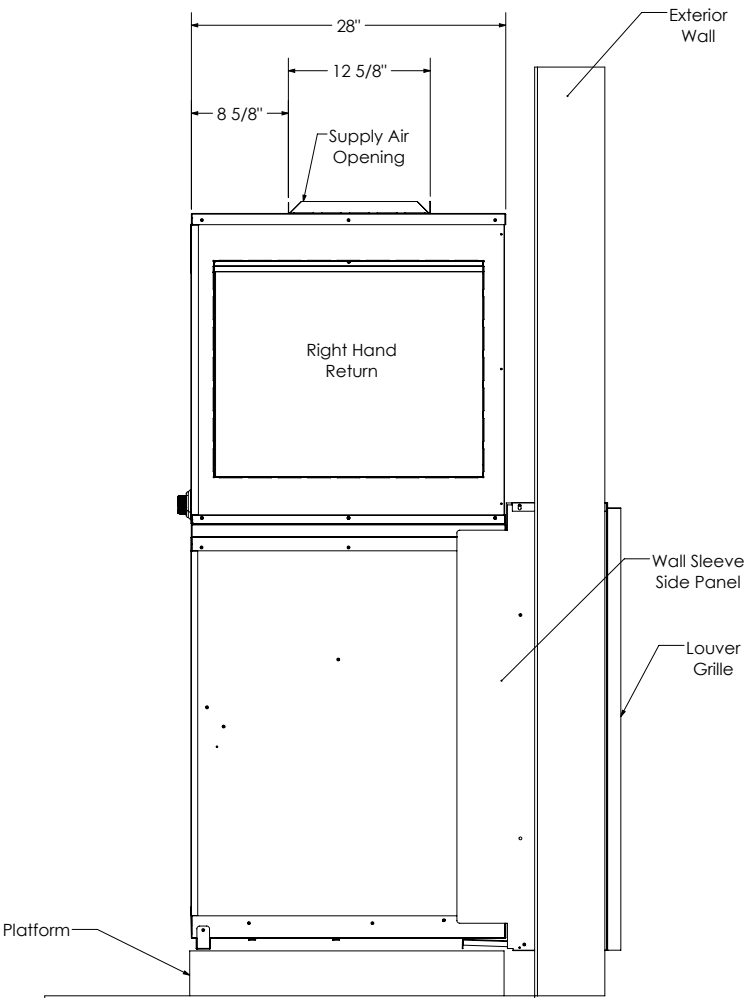
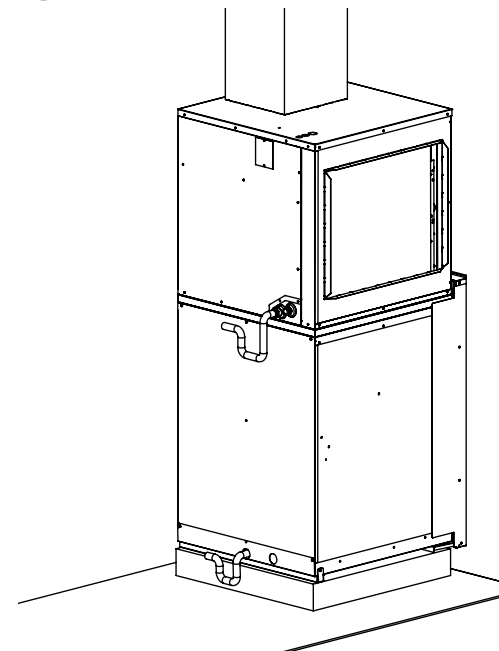
## Left Hand Return Front Access





# Comfort Pack *Flex* Unit Dimensions

## Right Hand Return Front Access



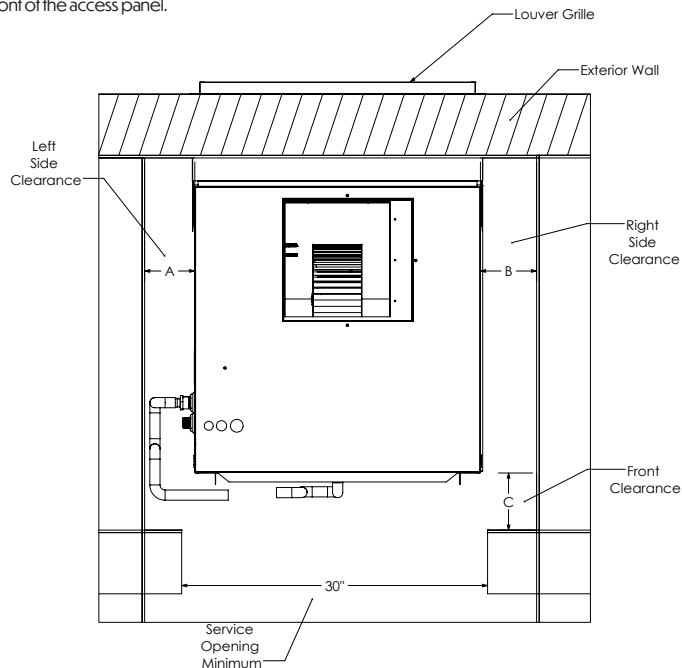
## Front Return Left Hand Access Service Clearance

### Rear Installation

A	B	C
**5 1/4"	1"	*4"

\*If ductwork is attached to the return opening, additional clearance is necessary. Local codes must be adhered to.

\*\*For servicing and maintenance, leave a minimum of 29" of unobstructed open area in front of the access panel.

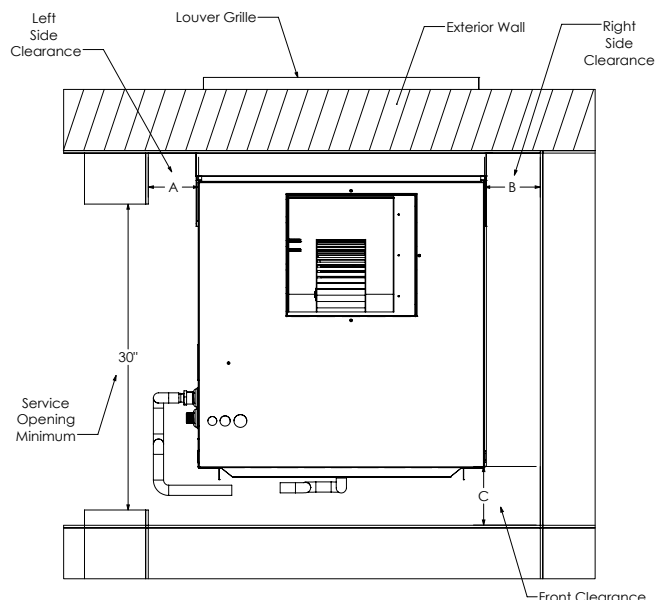


### Side Installation

A	B	C
**5 1/4"	1"	*12"

\*If ductwork is attached to the return opening, additional clearance is necessary. Local codes must be adhered to. For servicing and maintenance for compressor, leave a minimum of 30" of unobstructed open area in front of the compressor access panel.

\*\*For servicing and maintenance, leave a minimum of 29" of unobstructed open area in front of the blower access panel.



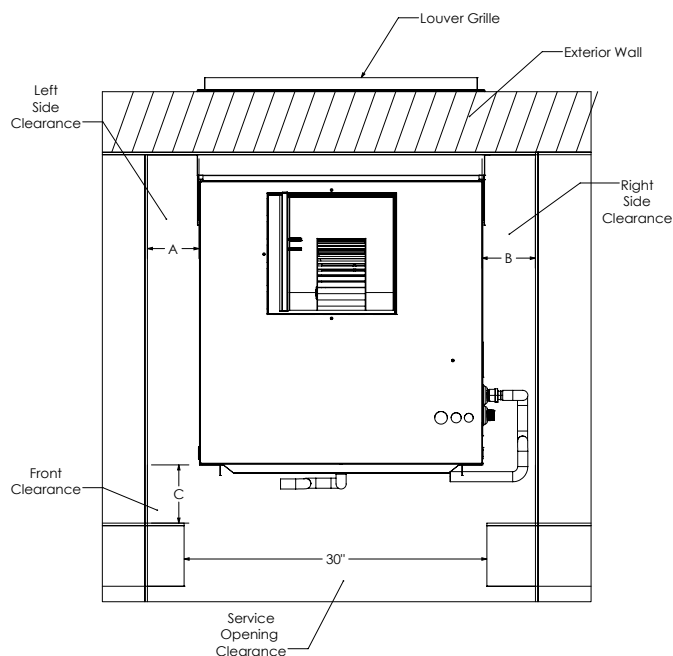
## Front Return Right Hand Access Service Clearance

### Rear Installation

A	B	C
1"	**5 1/4"	*4"

\*If ductwork is attached to the return opening, additional clearance is necessary. Local codes must be adhered to.

\*\*For servicing and maintenance, leave a minimum of 29" of unobstructed open area in front of the access panel.

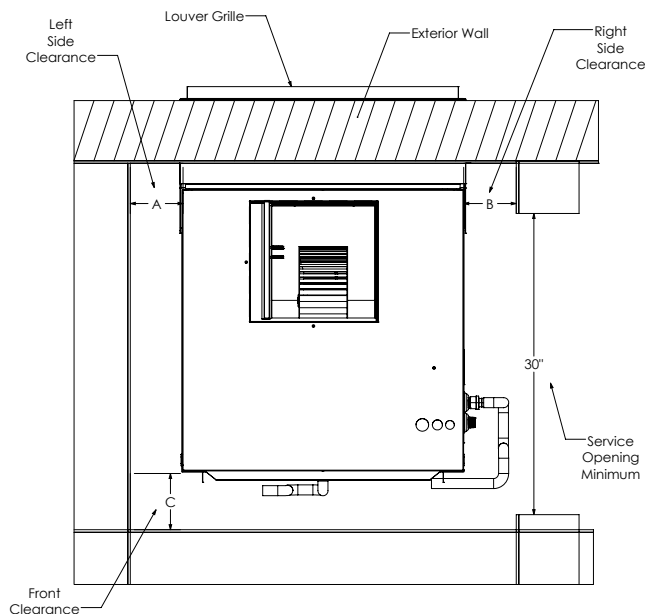


### Side Installation

A	B	C
1"	**5 1/4"	*12"

\*If ductwork is attached to the return opening, additional clearance is necessary. Local codes must be adhered to. For servicing and maintenance for compressor, leave a minimum of 30" of unobstructed open area in front of the compressor access panel.

\*\*For servicing and maintenance, leave a minimum of 29" of unobstructed open area in front of the blower access panel.



# Comfort Pack *Flex* Closet Installation & Service Clearances

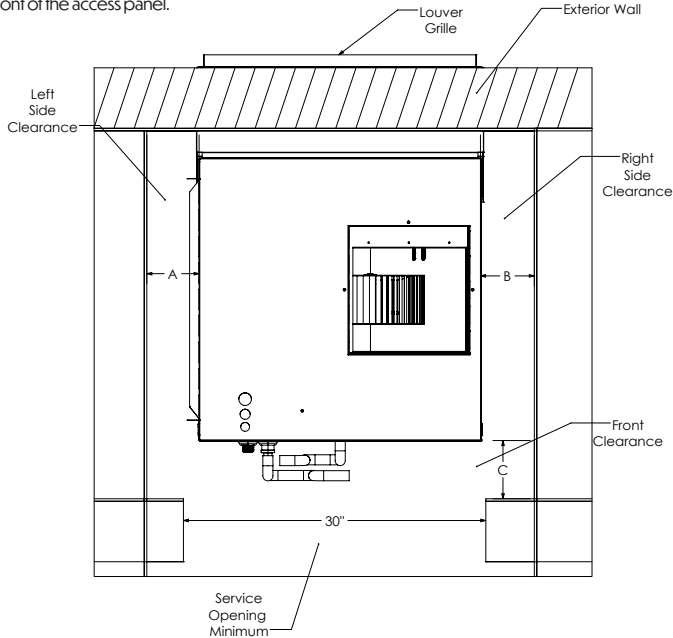
## Left Hand Return Front Access Service Clearance

### Rear Installation

A	B	C
*4"	1"	**5 1/4"

\*If ductwork is attached to the return opening, additional clearance is necessary. Local codes must be adhered to.

\*\*For servicing and maintenance, leave a minimum of 29" of unobstructed open area in front of the access panel.

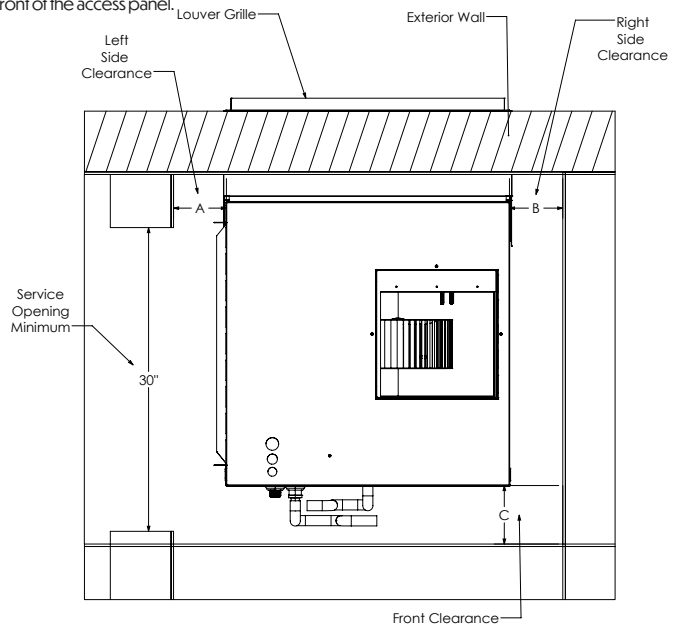


### Side Installation

A	B	C
*4"	1"	**12"

\*If ductwork is attached to the return opening, additional clearance is necessary. Local codes must be adhered to.

\*\*For servicing and maintenance, leave a minimum of 30" of unobstructed open area in front of the access panel.



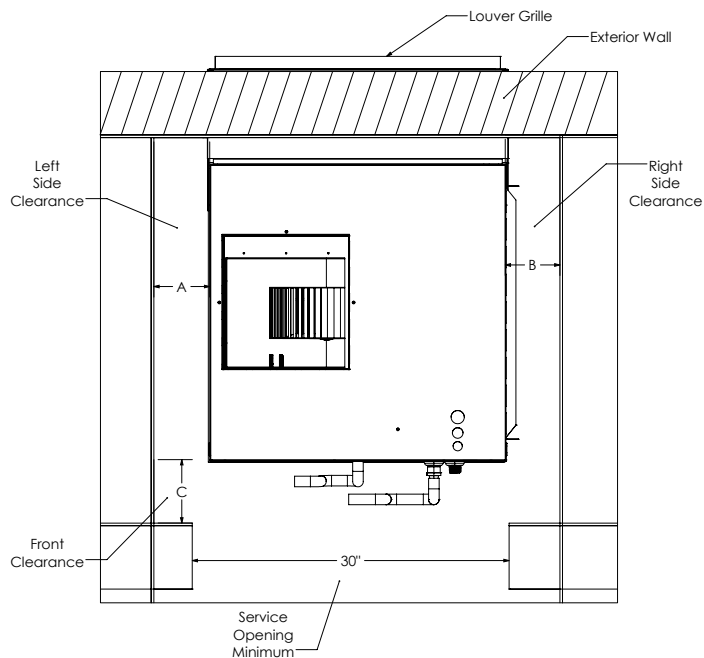
## Right Hand Return Front Access Service Clearance

### Rear Installation

A	B	C
1"	*4"	**5 1/4"

\*If ductwork is attached to the return opening, additional clearance is necessary. Local codes must be adhered to.

\*\*For servicing and maintenance, leave a minimum of 29" of unobstructed open area in front of the access panel.

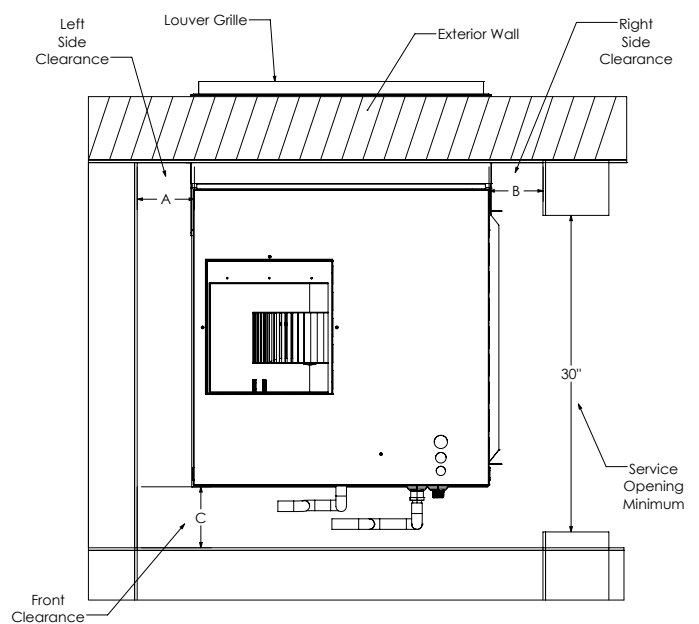


### Side Installation

A	B	C
1"	*4"	**12"

\*If ductwork is attached to the return opening, additional clearance is necessary. Local codes must be adhered to.

\*\*For servicing and maintenance, leave a minimum of 30" of unobstructed open area in front of the access panel.





## **National Comfort Products**

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All specifications are subject to change without notice.

\*\*AHRI Certification pending.



Spec Comfort Pack Flex Heat Pump 2/2025