



*Valve Series*  
*Fan Coil Unit*

*Vertical Stack*  
*“Fixed Chassis”*  
*300 to 1200 CFM*

# *Design Guide*

*Dimensional*  
*Performance*  
*Electrical*

The Whalen Company is committed to continuous product improvement. Prior to manufacturing, the information contained herein is subject to change without notice. Contact us for current design information that may affect your project.

# “Fixed Chassis” CABINET DRAWINGS

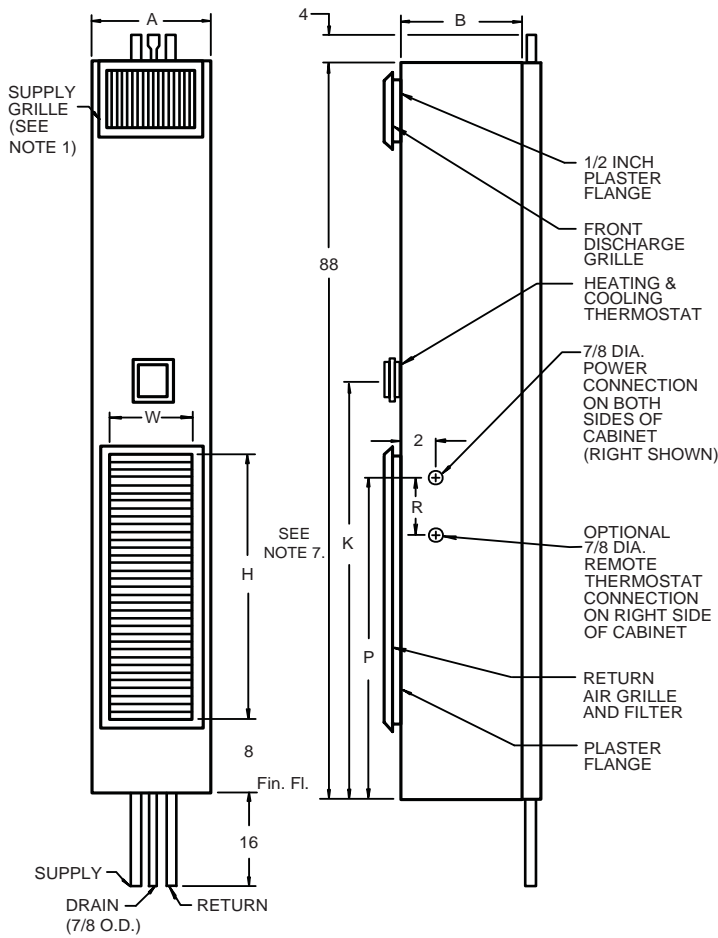
3/4 to 3 Tons  
(300 to 1200 CFM)

## Standard Riser Spacing

- Stand Alone with Risers  
(Risers attached to the unit)
- Master/Slave  
(Master unit contains risers attached to the cabinet with auxiliary connection for field connection to Slave unit that does not containing risers.)
- Stand Alone without Risers  
(Risers are not attached to the unit)

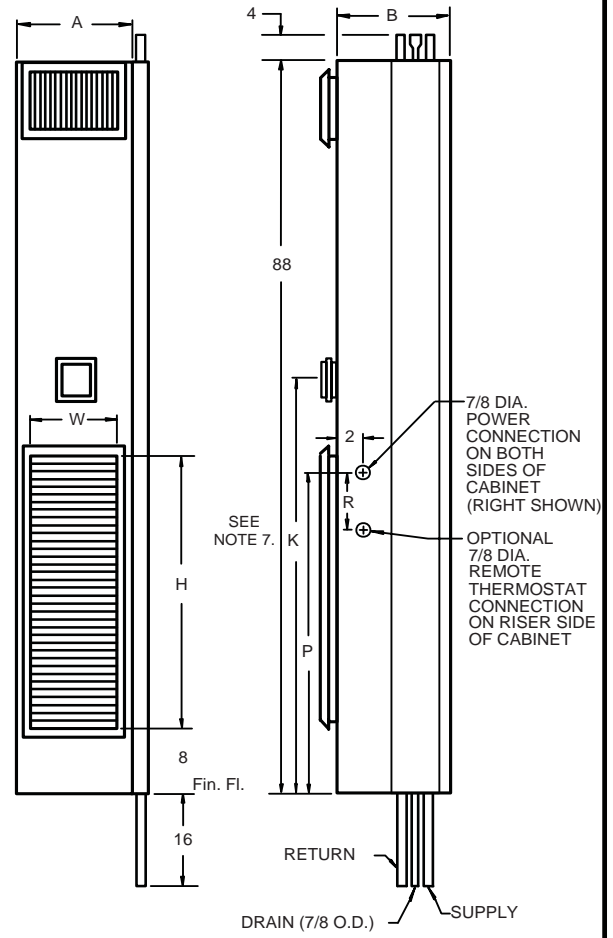
## Split Riser Spacing

- Stand Alone with Risers  
(Risers attached to the unit)



**FRONT VIEW**  
REAR RISERS

**RIGHT SIDE VIEW**  
REAR RISERS



**FRONT VIEW**  
RH SIDE RISERS SHOWN  
LH SIDE RISERS OPPOSITE

**RIGHT SIDE VIEW**  
RH SIDE RISERS SHOWN  
LH SIDE RISERS OPPOSITE

**NOTES:**

1. See drawing number 411 for supply grille or register options. The return air grille is always on the front of the unit.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is clear anodized aluminum.
4. Supply, return and drain risers are type M copper, standard or type L, optional. Riser assemblies include two ball valves inside the cabinet.
5. See drawing number 408-PT for detailed riser dimensions and plan views.
6. Remote thermostat is located on riser side for left or right side riser units. For rear risers, connection will be on right hand side of unit.
7. 48" thermostat height is standard on WF\* 300-400 units. Remote thermostat is required on WF\* 600 - 800 units for 48" thermostat height.

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P	R
WF*-300-##	300	16	16	14	32	48	34	5
WF*-400-##	400	16	16	14	36	48	38	5
WF*-600-##	600	18	16	14	40	52	41	5
WF*-800-##	800	18	16	14	44	56	45	9

\* C = 3 ROW  
D = 4 ROW  
## = 2P, ET or AE

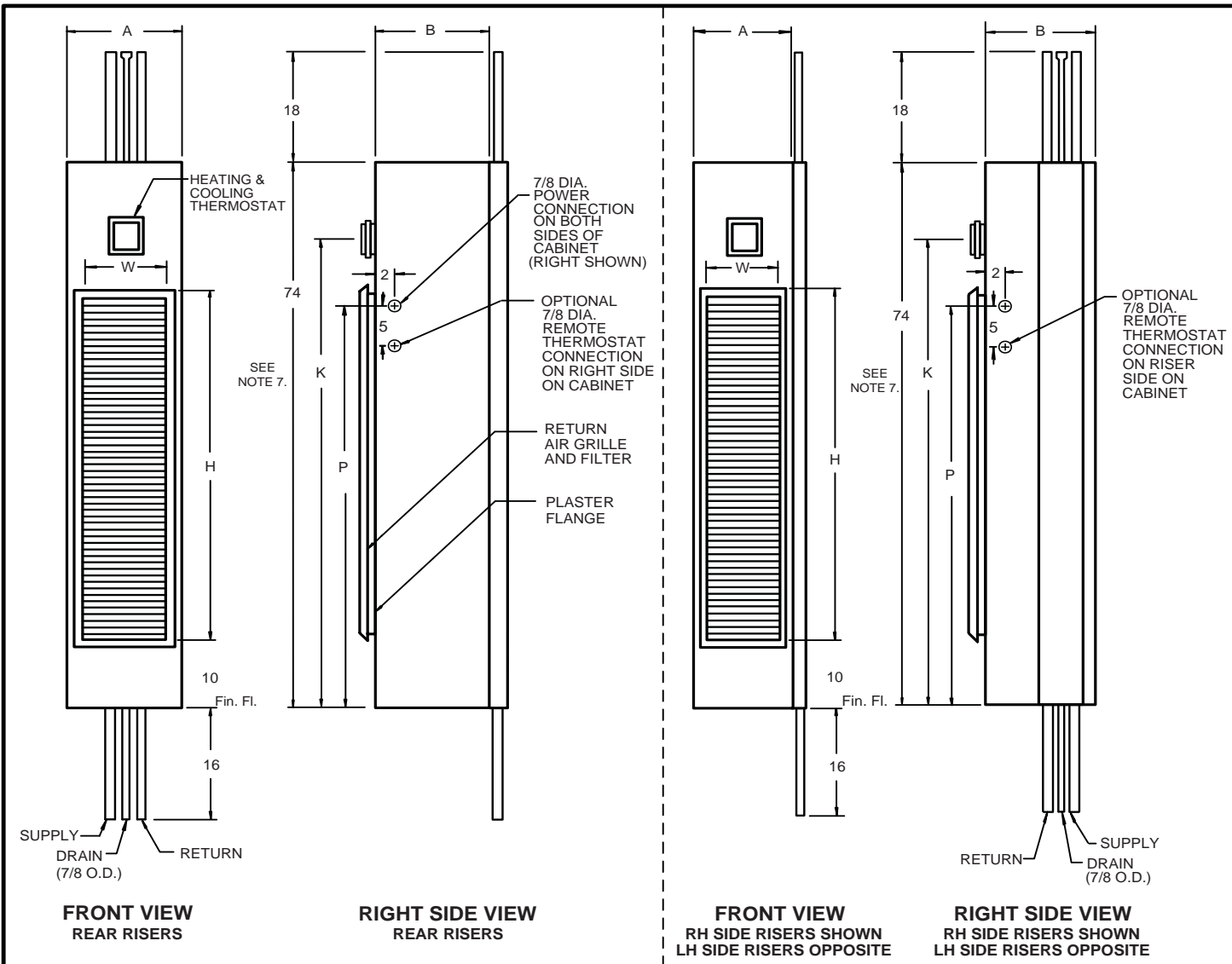
All dimensions in inches.

HI-RISE VERTICAL FAN-COIL UNITS

**THE WHALEN COMPANY**  
EASTON, MARYLAND

FAN COIL UNITS-2 PIPE  
AND OPTIONAL ELECTRIC HEAT  
3 OR 4 ROW COOLING COILS  
WITH INTERNAL DRAIN PAN

DRAWING NUMBER 401F-PT



- NOTES:
1. See drawing number 411-V-K for top discharge dimensions. The return air grille is always on the front of the unit.
  2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
  3. Return air grille is clear anodized aluminum.
  4. Supply, return and drain risers are type M copper, standard or type L, optional. Riser assemblies include four ball valves inside the cabinet.
  5. See drawing number 408-PT for detailed riser dimensions and plan views.
  6. Remote thermostat is located on riser side for left or right side riser units. For rear risers, connection will be on right hand side of unit.
  7. Remote thermostat is required on units for 48" thermostat height.

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P
WF*-1000-##	1000	24	24	20	48	62	51
WF*-1200-##	1200	24	24	20	56	70	59

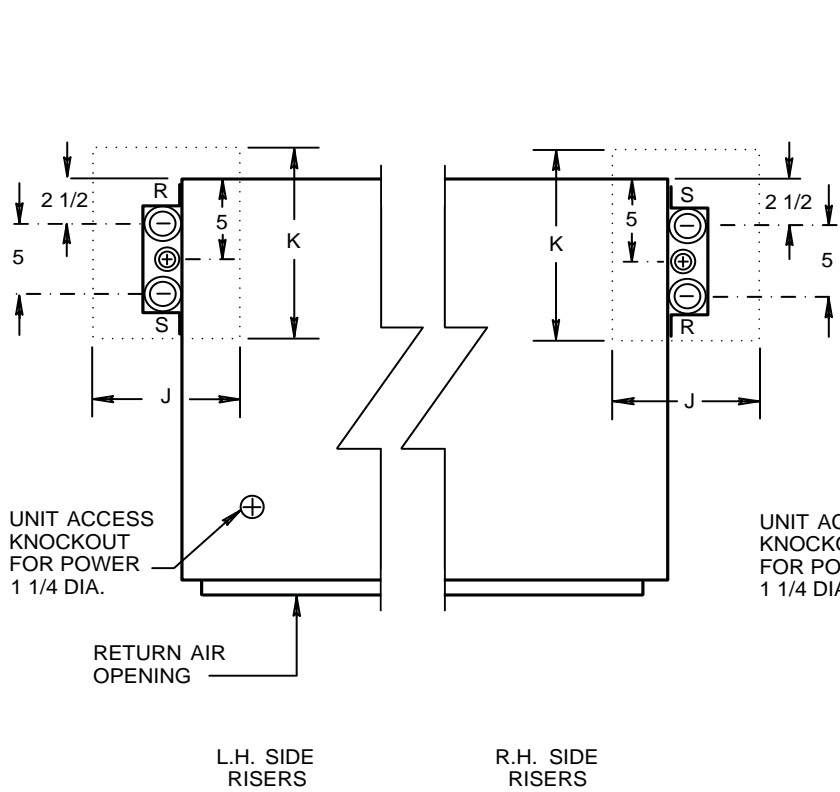
All dimensions in inches.  
 \* C = 3 ROW  
 \* D = 4 ROW  
 ## = 2P, ET or AE

**HI-RISE VERTICAL FAN-COIL UNITS**

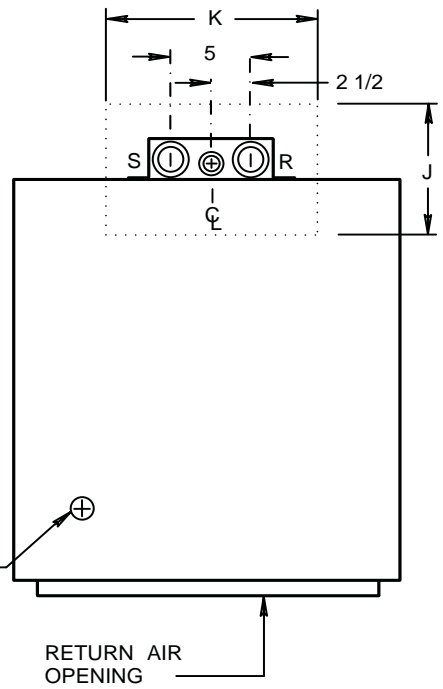
**THE WHALEN COMPANY**  
 EASTON, MARYLAND

**FAN COIL UNITS - 2 PIPE AND  
 OPTIONAL ELECTRIC HEAT - 1000  
 AND 1200 CFM UNITS WITH INTERNAL  
 DRAIN PAN - 3 OR 4 ROW COOLING COILS**

DRAWING NUMBER 401F-K-PT



**SIDE RISERS**



**REAR RISERS**

**RECOMENDED SLEEVE SIZE**

**Notes:**

1. "Riser size" refers to the larger of the supply and return risers on each unit.
2. Risers are protected by a steel riser cover extending the height of the cabinet.
3. Riser spacing shown accomodates 2" risers with 1/2" armafex insulation (standard) and a 1" condensate drain riser with **optional** 3/8" armafex insulation.

RISER SIZE	MINIMUM J	MINIMUM K
3/4	6	10
1	6	10
1 1/4	6	10
1 1/2	6	10
2	6	10

All dimensions in inches.

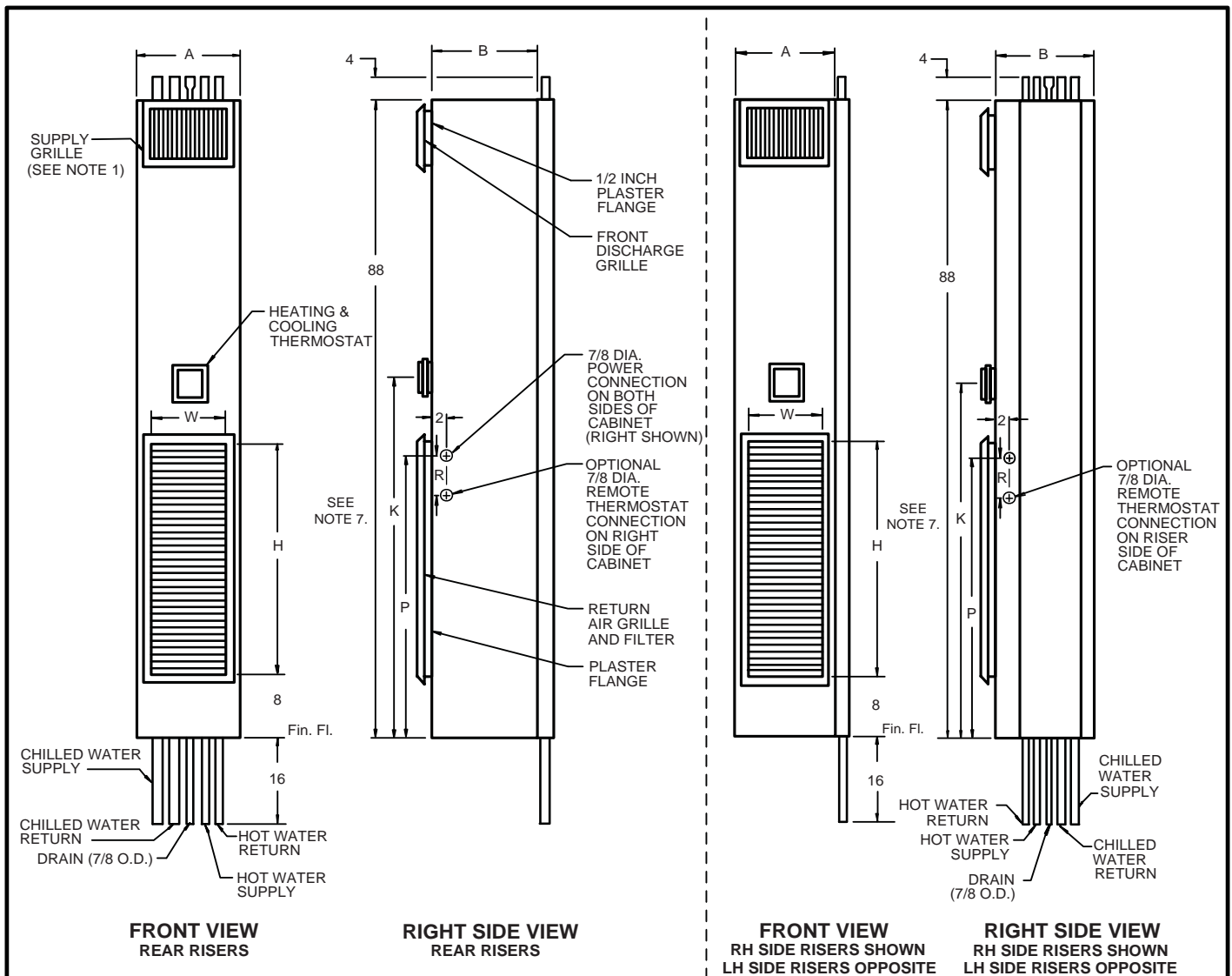
**VERTICAL FAN COIL UNITS**

**THE WHALEN COMPANY**  
EASTON, MARYLAND

**RISER DETAILS**  
**2 PIPE UNITS WITH**  
**P-TRAP DRAIN PAN**

DRAWING NUMBER 408C-PT

OCTOBER 2002



**NOTES:**

1. See drawing number 411 for supply grille or register options. The return air grille is always on the front of the unit.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is clear anodized aluminum.
4. Supply, return and drain risers are type M copper, standard or type L, optional. Riser assemblies include four ball valves inside the cabinet.
5. See drawing number 409-PT for detailed riser dimensions and plan views.
6. Remote thermostat is located on riser side of cabinet for left or right side riser units. For rear risers, connection will be on right hand side of unit.
7. 48" thermostat height is standard on WF\* 300 units. Remote thermostat is required on WF\* 400 - 800 units for 48" thermostat height.

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P	R
WF*-300-4P	300	16	18	14	36	48	38	5
WF*-400-4P	400	16	18	14	40	52	42	5
WF*-600-4P	600	18	18	14	44	56	45	5
WF*-800-4P	800	18	18	14	48	60	49	9

\* C = 3 ROW  
\* D = 4 ROW

All dimensions in inches.

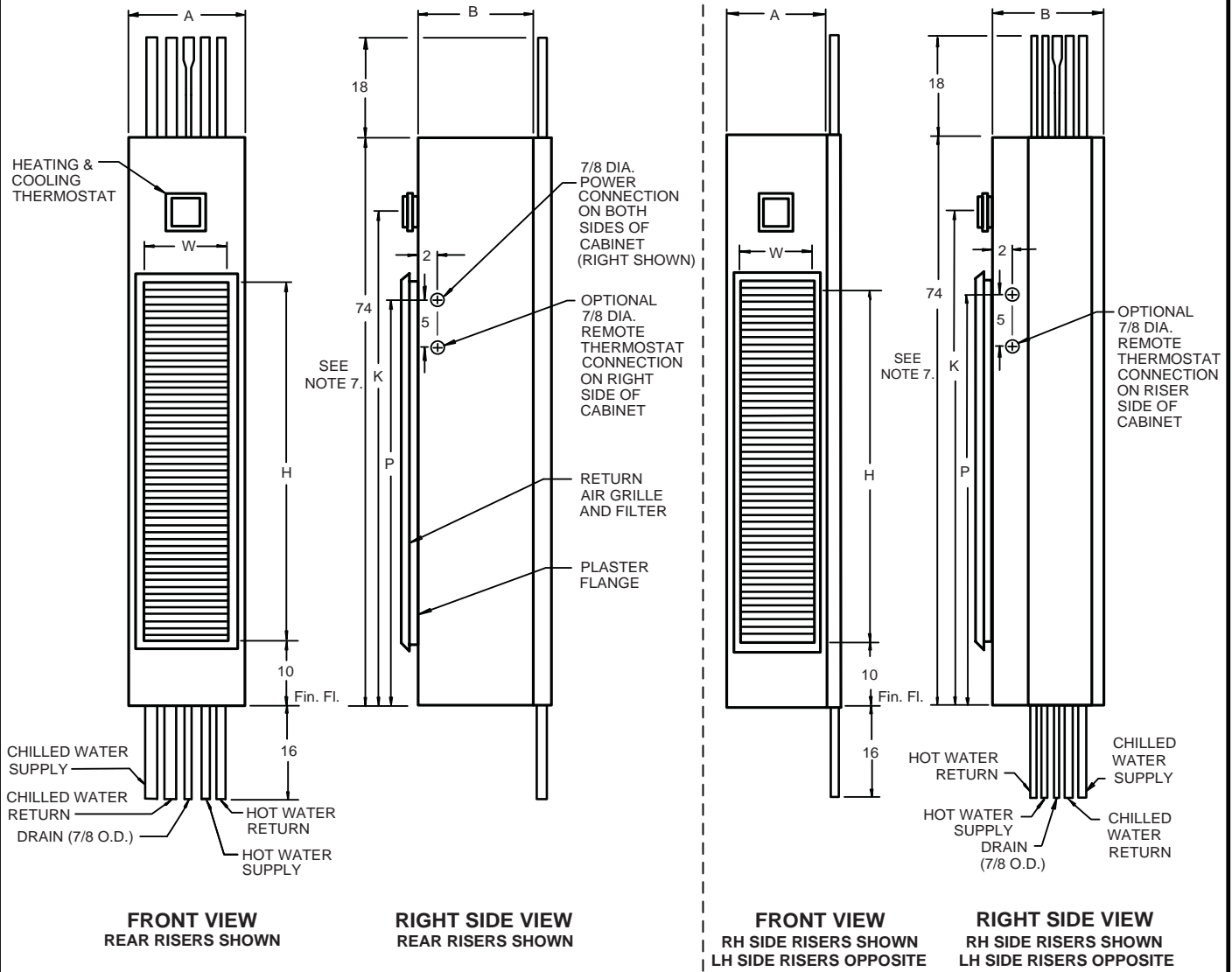
**VERTICAL FAN-COIL UNITS**

**THE WHALEN COMPANY**

EASTON, MARYLAND

**FAN COIL UNITS-4 PIPE  
WITH INTERNAL DRAIN PAN  
3 OR 4 ROW COOLING COILS**

DRAWING NUMBER 403E-PT



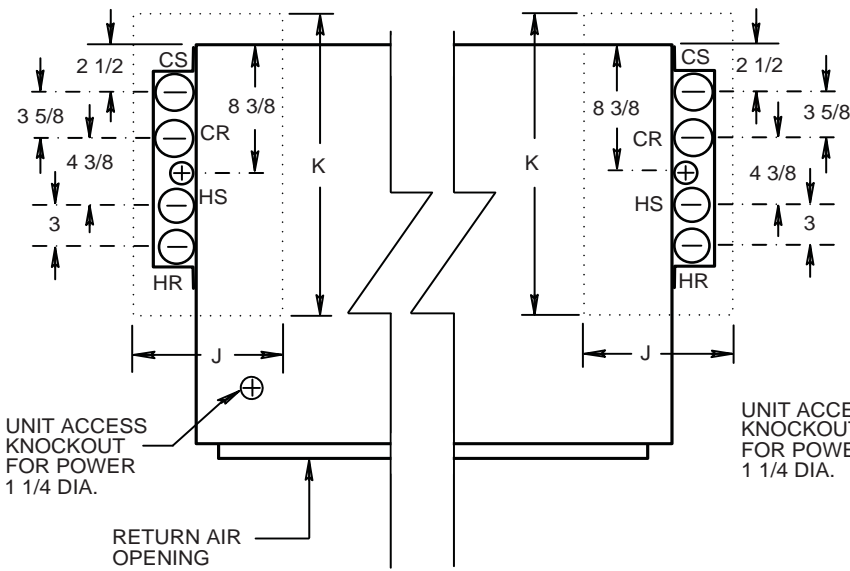
**NOTES:**

1. See drawing number 411-V-K for top discharge dimensions. The return air grille is always on the front of the unit.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is extruded aluminum.
4. Supply, return and drain risers are type M copper, standard or type L, optional. Riser assemblies include four ball valves inside the cabinet.
5. See drawing number 409-PT for detailed riser dimensions and plan views.
6. Remote thermostat is located on riser side of cabinet for left or right side riser units. For rear risers, connection will be on right hand side of unit.
7. Remote thermostat is required on units for 48" thermostat height.

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P
WF*-1000-4P	1000	24	24	20	48	62	51
WF*-1200-4P	1200	24	24	20	56	70	59

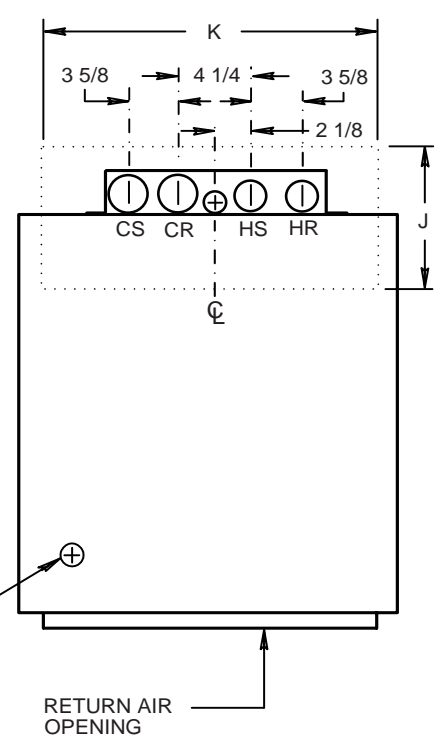
All dimensions in inches.  
 \* C = 3 ROW  
 \* D = 4 ROW

<b>VERTICAL FAN-COIL UNITS</b>  <b>THE WHALEN COMPANY</b> EASTON, MARYLAND	<b>FAN COIL UNITS - 4 PIPE</b> <b>1000 AND 1200 CFM UNITS</b> <b>WITH INTERNAL DRAIN PAN</b> <b>3 OR 4 ROW COOLING COILS</b> DRAWING NUMBER 403E-K-PT
---	---



L.H. SIDE RISERS                      R.H. SIDE RISERS

**SIDE RISERS**



**REAR RISERS**

Notes:

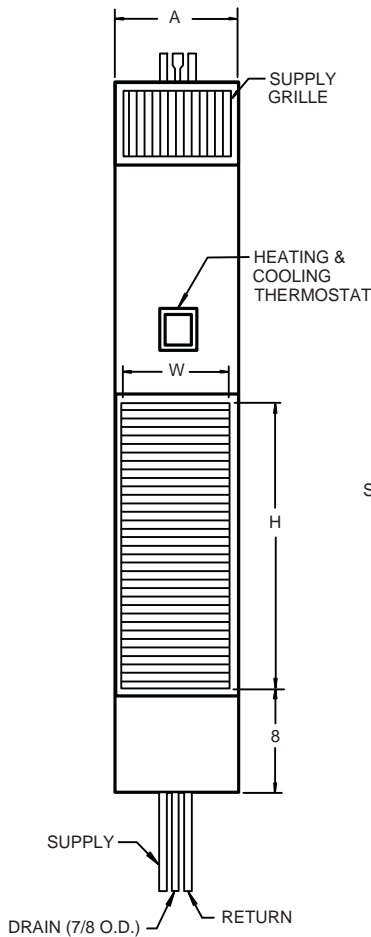
1. "Riser size" refers to the larger of the supply and return risers on each unit.
2. Risers are protected by a steel riser cover extending the height of the cabinet. Risers are clamped to help prevent movement during shipment and jobsite handling.

RISER SIZE	MINIMUM J	MINIMUM K
3/4	6	16
1	6	16
1 1/4	6	16
1 1/2	6	16
2	6	16
2 1/2	8	17

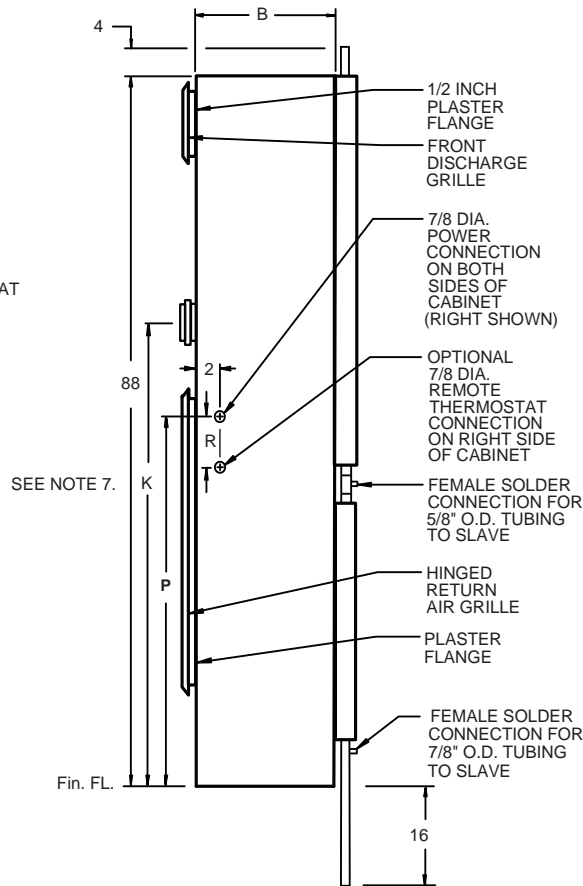
All dimensions in inches.

<p><b>VERTICAL FAN COIL UNITS</b></p> <p><b>THE WHALEN COMPANY</b> EASTON, MARYLAND</p>	<p><b>RISER DETAILS</b> 4 PIPE UNITS WITH INTERNAL DRAIN PAN</p> <p>DRAWING NUMBER 409D-PT</p>
---	--

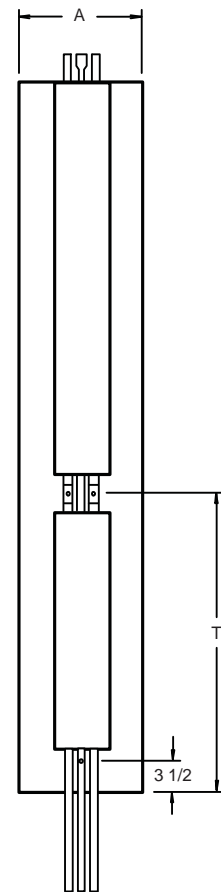




**FRONT VIEW**  
REAR RISERS SHOWN



**RIGHT SIDE VIEW**



**REAR VIEW**  
REAR RISERS SHOWN

**NOTES:**

1. See drawing number 411 for supply grille or register options.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is clear anodized aluminum.
4. Supply, return and drain risers are type M copper, standard or type L, optional. Riser assemblies include two ball valves inside the cabinet.
5. Unless otherwise noted, the fan motor runs continuously on either high or low speed.
6. Remote thermostat connection is located on the right hand side of cabinet for rear riser units.
7. 48" thermostat height is standard on WF\* 300-400 units. Remote thermostat is required on WF\* 600 - 800 units for 48" thermostat height.
8. See drawing 428-PT for detailed riser dimensions and plan views.

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P	R	T
WF*-300-##	300	16	16	14	32	48	34	5	22
WF*-400-##	400	16	16	14	36	48	38	5	26
WF*-600-##	600	18	16	14	40	52	41	5	29
WF*-800-##	800	18	16	14	44	56	45	9	33

\* C = 3 ROW  
D = 4 ROW  
## = 2P, ET, AT

All dimensions in inches.

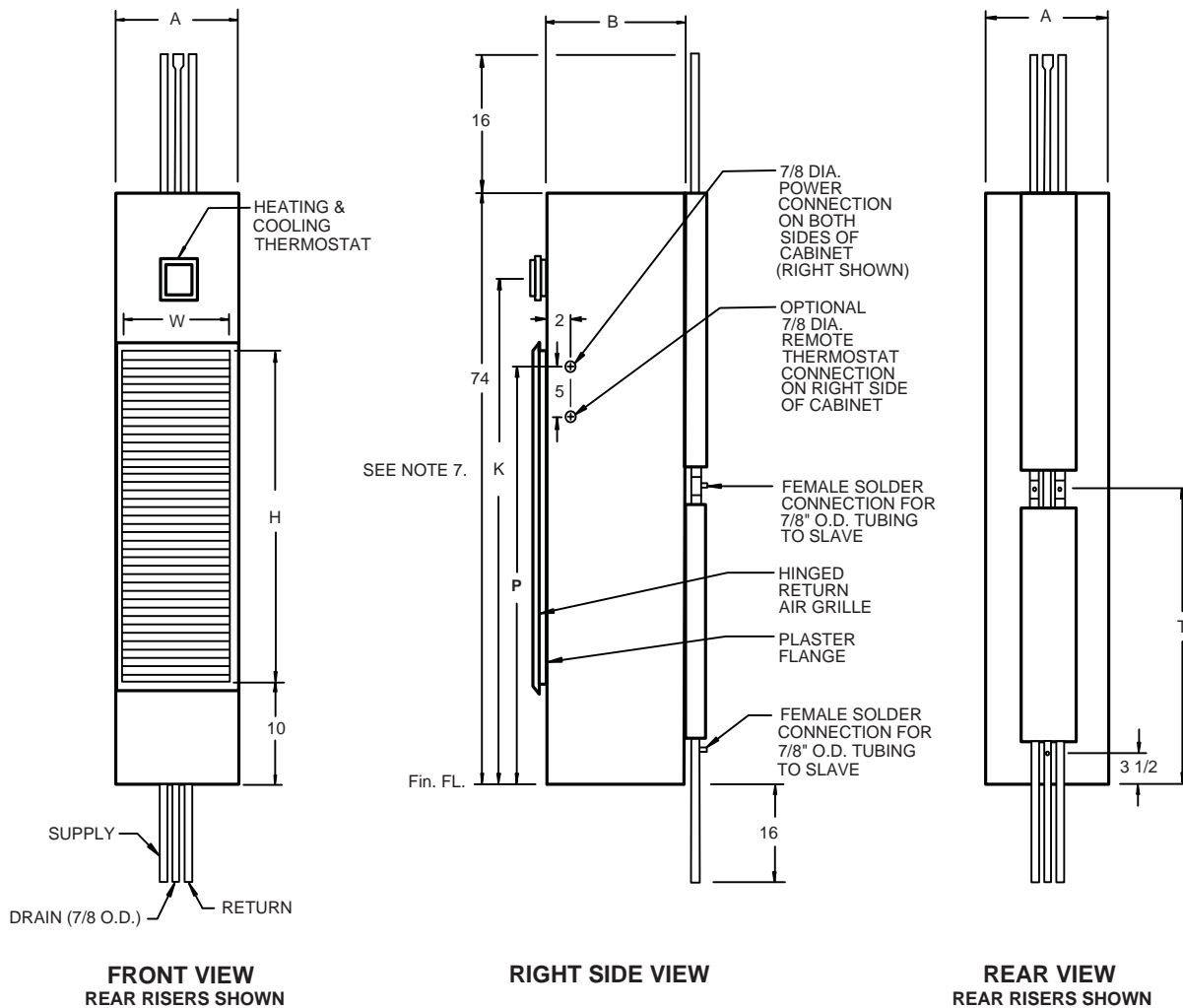
**HI-RISE VERTICAL FAN-COIL UNITS**

**THE WHALEN COMPANY**  
EASTON, MARYLAND

**FAN COIL UNITS – 2PIPE  
AND OPTIONAL ELECTRIC HEAT  
3 OR 4 ROW COOLING COILS  
w/ INTERNAL DRAIN PAN – MASTER UNITS – REAR RISERS**

DRAWING NUMBER 422D-PT-R-MS

MAY 2013



**FRONT VIEW**  
REAR RISERS SHOWN

**RIGHT SIDE VIEW**

**REAR VIEW**  
REAR RISERS SHOWN

**NOTES:**

1. See drawing number 411-V-K for top discharge dimensions. The return air grille is always on the front of the unit.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is clear anodized aluminum.
4. Supply, return and drain risers are type M copper, standard or type L, optional. Riser assemblies include two ball valves inside the cabinet.
5. Unless otherwise noted, the fan motor runs continuously on either high or low speed.
6. Remote thermostat connection is located on the right hand side of cabinet for rear riser units.
7. Remote thermostat is required on units for 48" thermostat height.
8. See drawing 428-PT for detailed riser dimensions and plan views.

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P	T
WF*-1000-##	1000	24	24	20	48	62	51	36
WF*-1200-##	1200	24	24	20	56	70	59	44

\* C = 3 ROW  
D = 4 ROW  
## = 2P, ET, AT

All dimensions in inches.

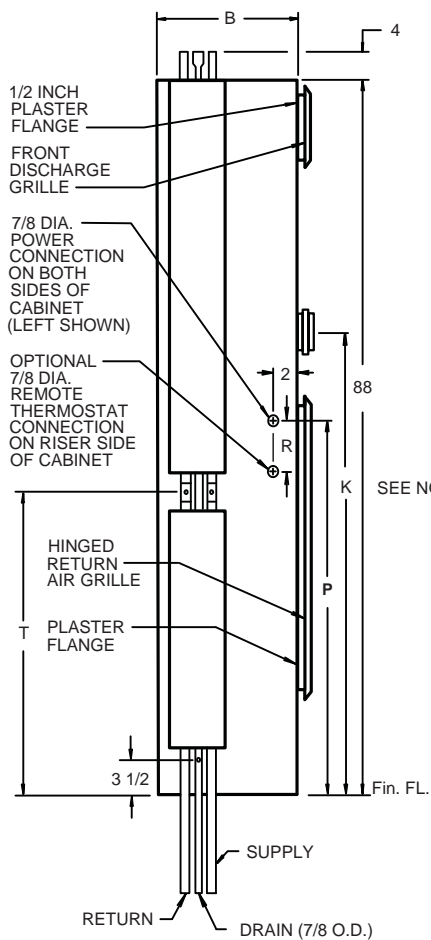
**HI-RISE VERTICAL FAN-COIL UNITS**

**THE WHALEN COMPANY**  
EASTON, MARYLAND

**FAN COIL UNITS – 2 PIPE & OPTIONAL ELECTRIC HEAT  
3 OR 4 ROW COOLING COILS  
w/ INTERNAL DRAIN PAN  
1000-1200 CFM – MASTER UNITS – REAR RISERS**

DRAWING NUMBER 422-PT-R-K-MS

MAY 2013

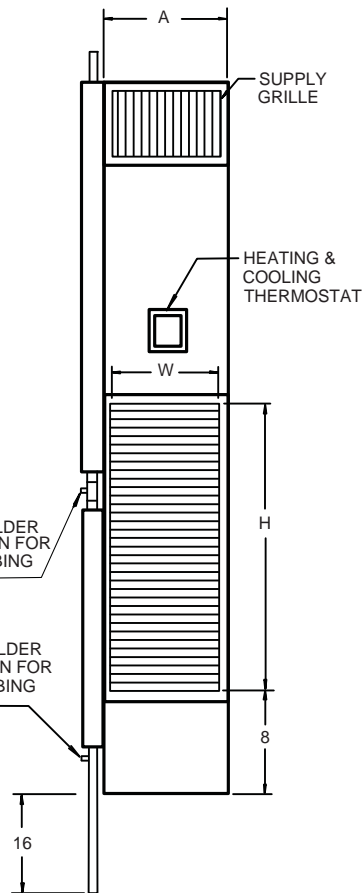


**LEFT SIDE VIEW**  
 LH SIDE RISERS SHOWN  
 RH SIDE RISERS OPPOSITE

SEE NOTE 7.

FEMALE SOLDER CONNECTION FOR 5/8" O.D. TUBING TO SLAVE

FEMALE SOLDER CONNECTION FOR 7/8" O.D. TUBING TO SLAVE



**FRONT VIEW**  
 LH SIDE RISERS SHOWN  
 RH SIDE RISERS OPPOSITE

**NOTES:**

1. See drawing number 411 for supply grille or register options.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is clear anodized aluminum.
4. Supply, return and drain risers are type M copper, standard or type L, optional. Riser assemblies include two ball valves inside the cabinet.
5. Unless otherwise noted, the fan motor runs continuously on either high or low speed.
6. Remote thermostat is located on riser side of cabinet for left or right side riser units.
7. 48" thermostat height is standard on WF\* 300-400 units. Remote thermostat is required on WF\* 600 - 800 units for 48" thermostat height.
8. See drawing 428-PT for detailed riser dimensions and plan views.

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P	R	T
WF*-300-##	300	16	16	14	32	48	34	5	22
WF*-400-##	400	16	16	14	36	48	38	5	26
WF*-600-##	600	18	16	14	40	52	41	5	29
WF*-800-##	800	18	16	14	44	56	45	9	33

\* C = 3 ROW  
 D = 4 ROW  
 ## = 2P, ET, AT

All dimensions in inches.

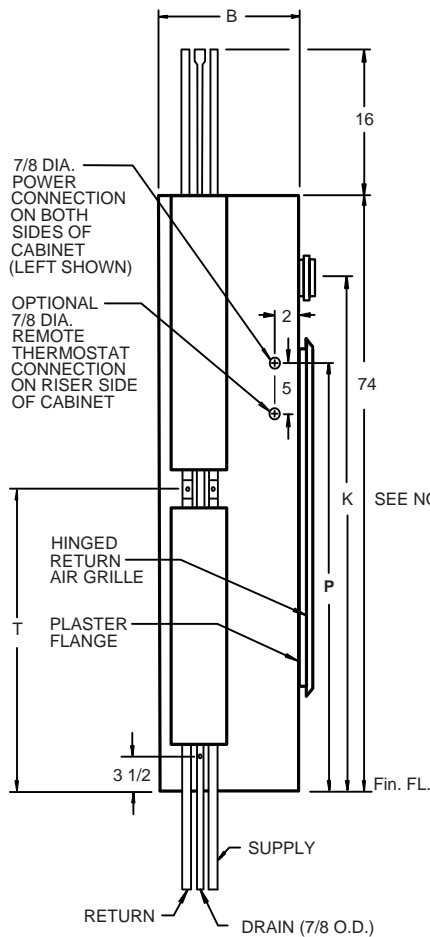
**HI-RISE VERTICAL FAN-COIL UNITS**

**THE WHALEN COMPANY**  
 EASTON, MARYLAND

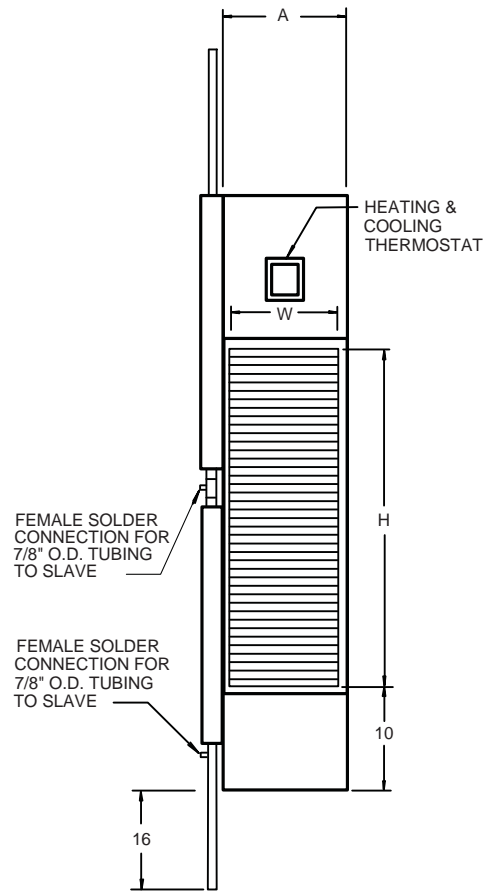
**FAN COIL UNITS – 2PIPE  
 AND OPTIONAL ELECTRIC HEAT  
 3 OR 4 ROW COOLING COILS  
 w/ INTERNAL DRAIN PAN – MASTER UNITS – SIDE RISERS**

DRAWING NUMBER 422D-PT-S-MS

MAY 2013



**LEFT SIDE VIEW**  
LH SIDE RISERS SHOWN  
RH SIDE RISERS OPPOSITE



**FRONT VIEW**  
LH SIDE RISERS SHOWN  
RH SIDE RISERS OPPOSITE

**NOTES:**

1. See drawing number 411-V-K for top discharge dimensions. The return air grille is always on the front of the unit.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is clear anodized aluminum.
4. Supply, return and drain risers are type M copper, standard or type L, optional. Riser assemblies include two ball valves inside the cabinet.
5. Unless otherwise noted, the fan motor runs continuously on either high or low speed.
6. Remote thermostat is located on riser side of cabinet for left or right side riser units.
7. Remote thermostat is required on units for 48" thermostat height.
8. See drawing 428-PT for detailed riser dimensions and plan views.

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P	T
WF*-1000-##	1000	24	24	20	48	62	51	36
WF*-1200-##	1200	24	24	20	56	70	59	44

\* C = 3 ROW  
D = 4 ROW  
## = 2P, ET, AT

All dimensions in inches.

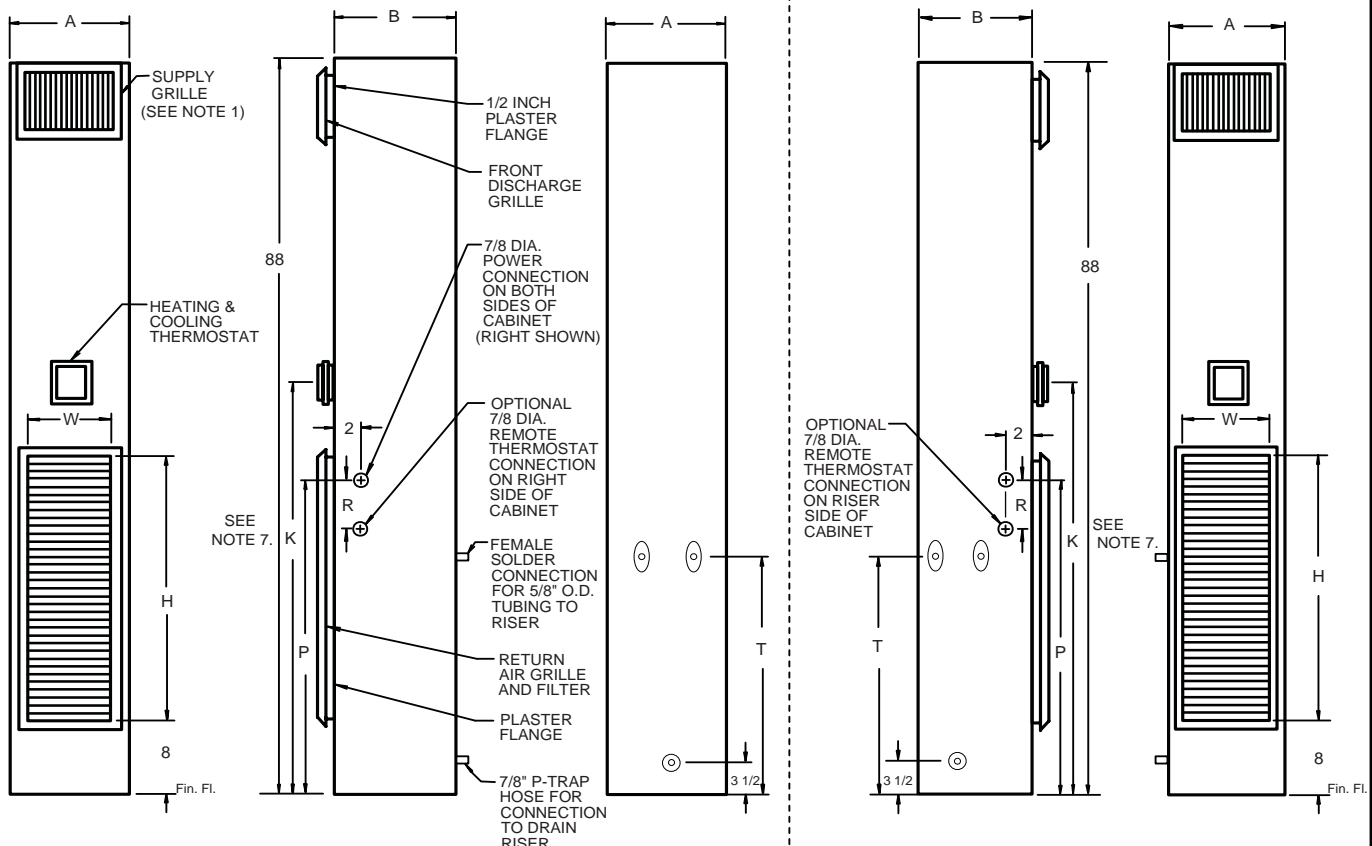
**HI-RISE VERTICAL FAN-COIL UNITS**

**THE WHALEN COMPANY**  
EASTON, MARYLAND

**FAN COIL UNITS – 2 PIPE & OPTIONAL ELECTRIC HEAT  
3 OR 4 ROW COOLING COILS  
w/ INTERNAL DRAIN PAN  
1000-1200 CFM – MASTER UNITS – SIDE RISERS**

DRAWING NUMBER 422-PT-S-K-MS

APRIL 2013



**FRONT VIEW**                      **RIGHT SIDE VIEW**                      **REAR VIEW**                      **LEFT SIDE VIEW**                      **FRONT VIEW**  
**REAR RISERS SHOWN**                      **REAR RISERS SHOWN**                      **LH SIDE RISERS SHOWN**                      **LH SIDE RISERS SHOWN**  
**RH SIDE RISERS OPPOSITE**                      **RH SIDE RISERS OPPOSITE**

**NOTES:**

1. See drawing number 411 for supply grille or register options. The return air grille is always on the front of the unit.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is clear anodize aluminum.
4. No supply, return and drain risers.
5. See drawing number 428-PT for detailed riser port dimensions and plan views.
6. Remote thermostat is located on riser side of cabinet for left or right side riser units. For rear risers, connection will be on the right hand side of unit.
7. 48" thermostat height is standard on WF\* 300-400 units. Remote thermostat is required on WF\* 600 - 800 units for 48" thermostat height.

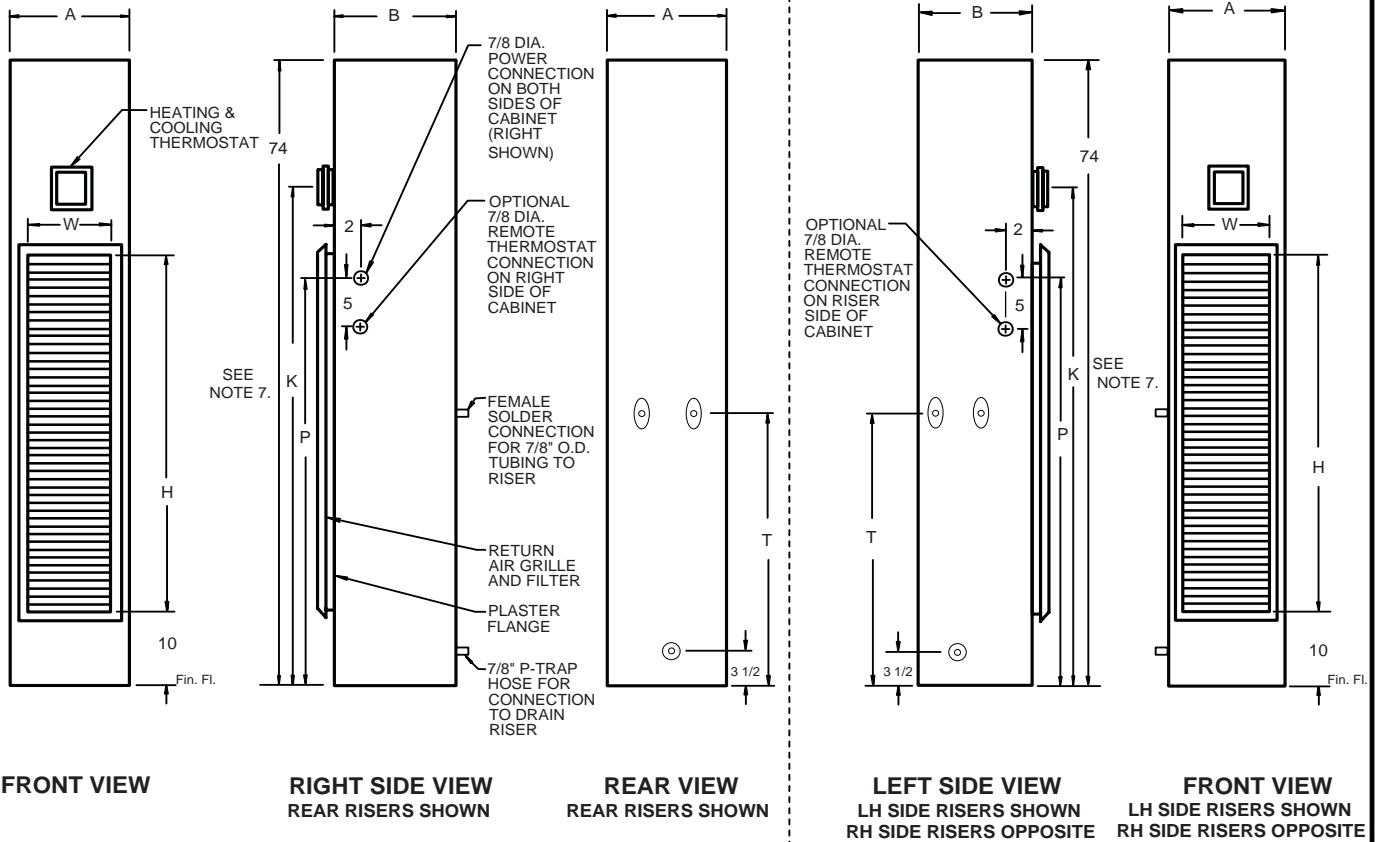
UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P	R	T
WF*-300-##	300	16	16	14	32	48	34	5	22
WF*-400-##	400	16	16	14	36	48	38	5	26
WF*-600-##	600	18	16	14	40	52	41	5	29
WF*-800-##	800	18	16	14	44	56	45	9	33

\* C = 3 ROW  
D = 4 ROW  
## = 2P, ET or AE

All dimensions in inches.

**VERTICAL FAN-COIL UNITS**  
**THE WHALEN COMPANY**  
EASTON, MARYLAND

**FAN COIL UNITS – 2 PIPE AND OPTIONAL ELECTRIC HEAT WITH INTERNAL DRAIN PAN – SLAVE UNITS**  
DRAWING NUMBER 422C-PT-C



**NOTES:**

1. See drawing number 411-V-K for top discharge dimensions. The return air grille is always on front of the unit.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is clear anodize aluminum.
4. No supply, return and drain risers.
5. See drawing number 428-PT for detailed riser port dimensions and plan views.
6. Remote thermostat is located on riser side of cabinet for left or right side riser units. For rear risers, connection will be on the right hand side of unit.
7. Remote thermostat is required on units for 48" thermostat height.

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P	T
WF*-1000-##	1000	24	24	20	48	62	51	36
WF*-1200-##	1200	24	24	20	56	70	59	44

\* C = 3 ROW  
 D = 4 ROW  
 ## = 2P, ET or AE

All dimensions in inches.

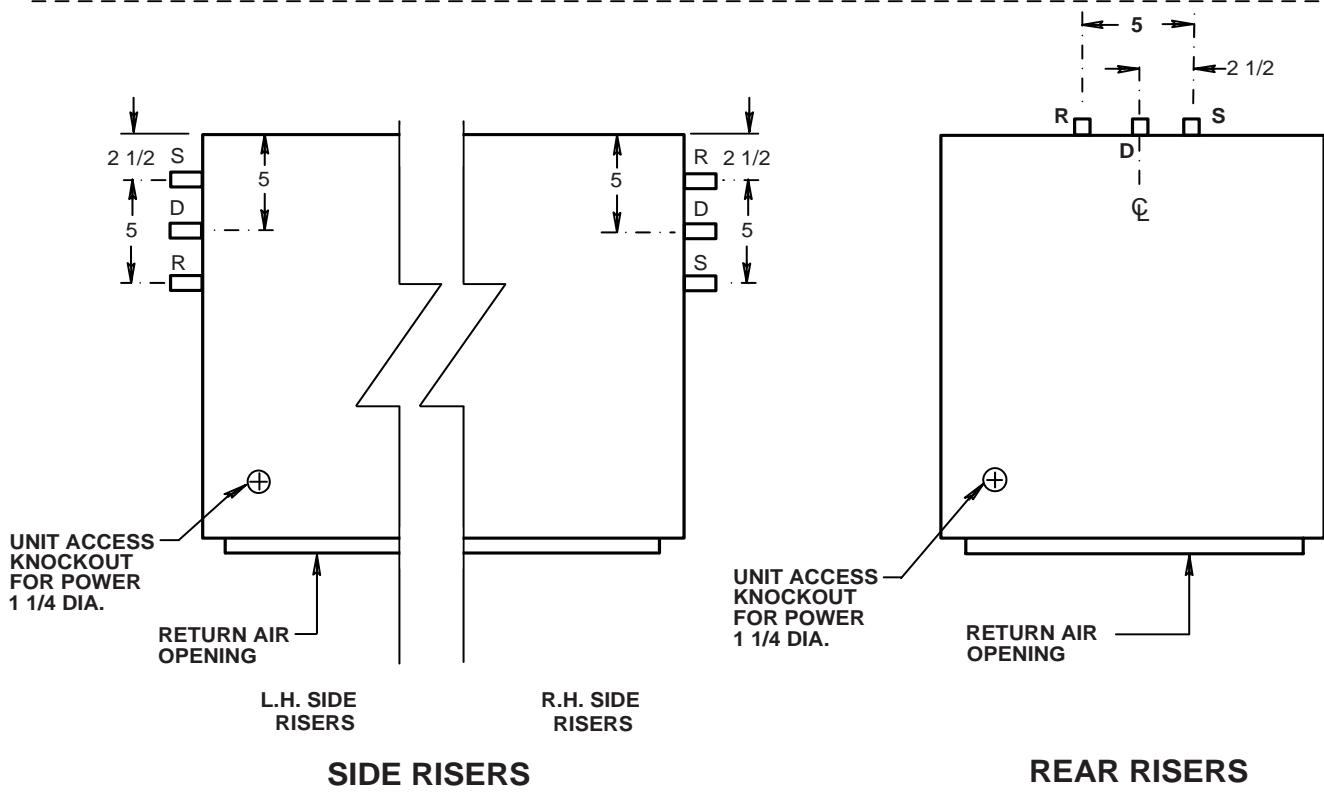
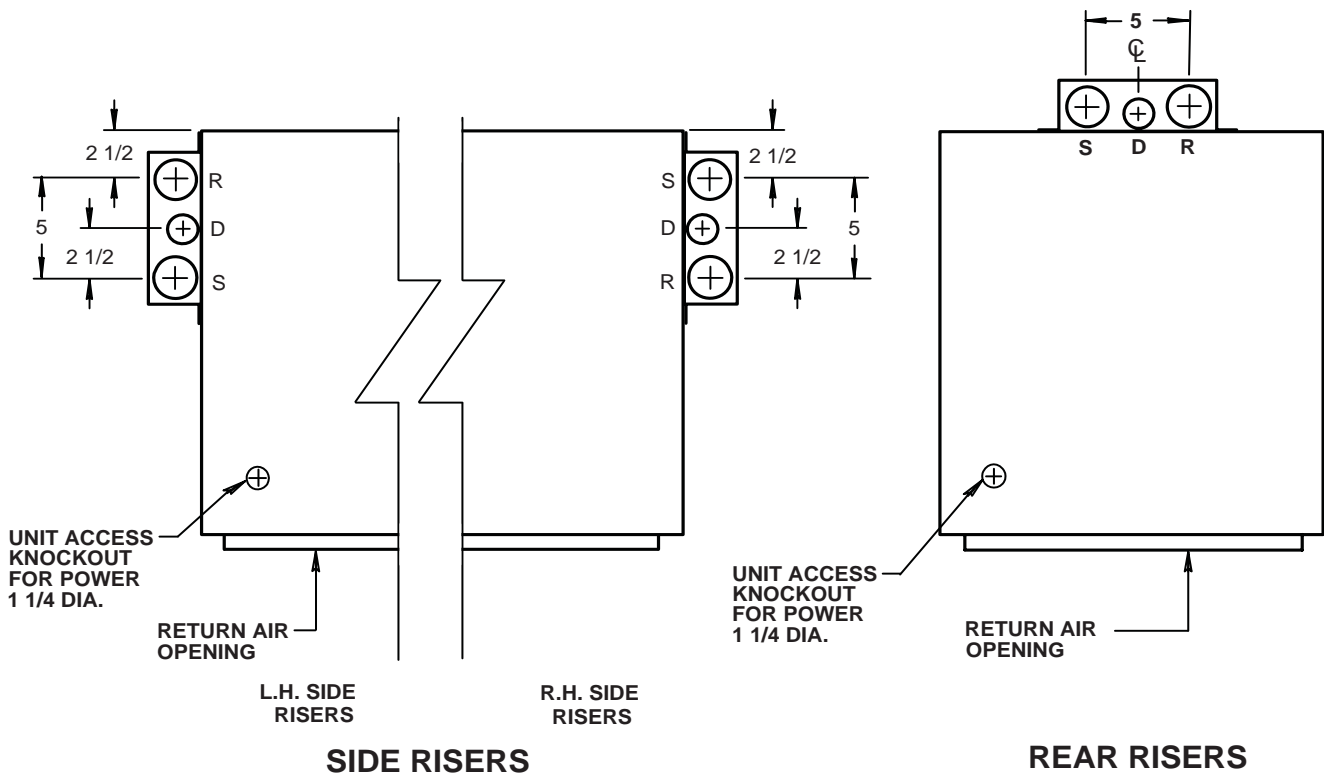
**VERTICAL FAN-COIL UNITS**

**THE WHALEN COMPANY**  
 EASTON, MARYLAND

**FAN COIL UNITS – 2 PIPE  
 AND OPTIONAL ELECTRIC HEAT  
 WITH INTERNAL DRAIN PAN  
 1000-1200 CFM SLAVE UNITS**

DRAWING NUMBER 422-K-PT-C

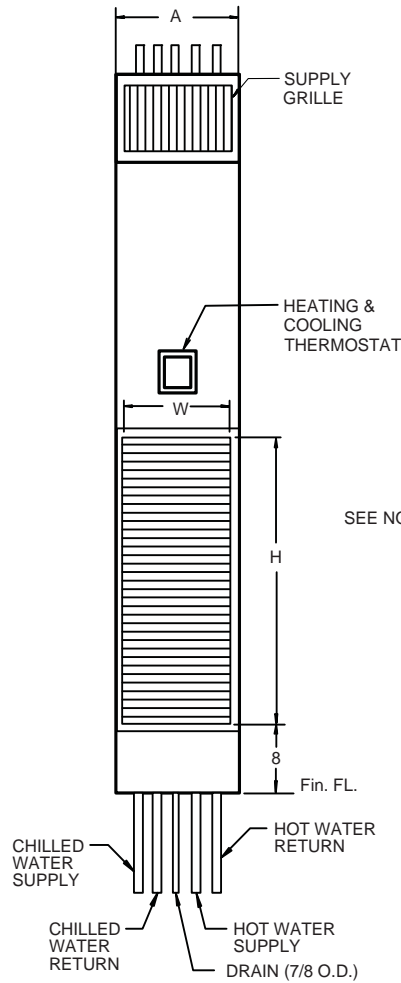
MAY 2013



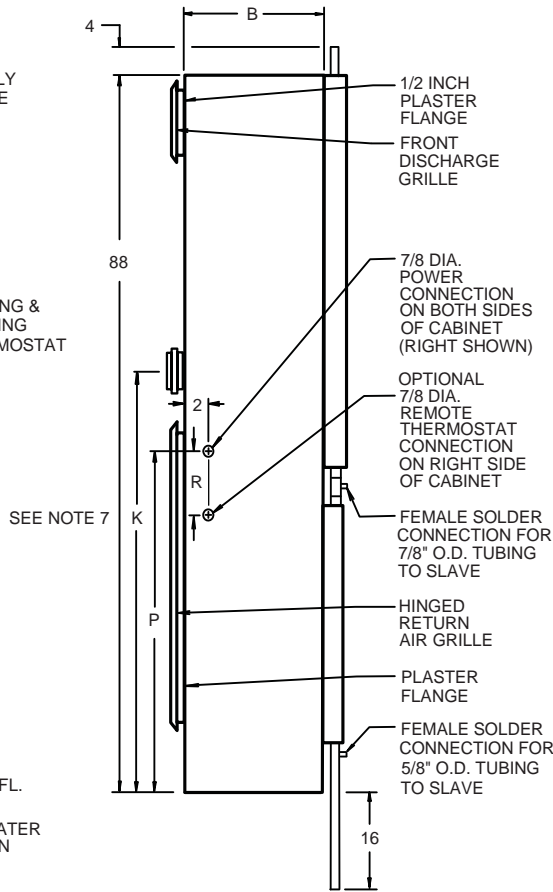
**VERTICAL FAN COIL UNITS**

**THE WHALEN COMPANY**  
EASTON, MARYLAND

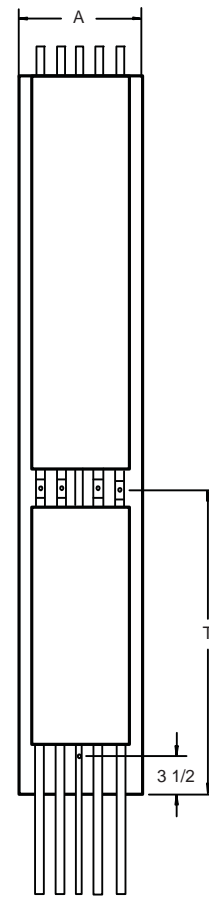
**RISER DETAILS**  
**2 PIPE MASTER & SLAVE UNITS**  
**WITH INTERNAL DRAIN PAN**  
DRAWING NUMBER 428C-PT



**FRONT VIEW**



**RIGHT SIDE VIEW  
REAR RISERS SHOWN**



**REAR VIEW  
REAR RISERS SHOWN**

**NOTES:**

1. See drawing number 411 for supply grille or register options.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is clear anodized aluminum.
4. Supply, return and drain risers are type M copper, standard or type L, optional. Riser assemblies include four ball valves inside the cabinet.
5. Recommended sleeve hole size is 6" x 15".
6. Remote thermostat connection is located on the right hand side of cabinet for rear riser units.
7. 48" thermostat height is standard on WF\*-300 units. Remote thermostat is required on WF\*-400 -800 units for 48" thermostat height.
8. See drawing 409-PT for detailed riser dimensions and plan view.

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P	R	T
WF*-300-4P	300	16	18	14	36	48	38	5	26
WF*-400-4P	400	16	18	14	40	52	42	5	29
WF*-600-4P	600	18	18	14	44	56	45	5	32
WF*-800-4P	800	18	18	14	48	60	49	9	36

\* C = 3 ROW  
D = 4 ROW

All dimensions in inches.

**HI-RISE VERTICAL FAN-COIL UNITS**

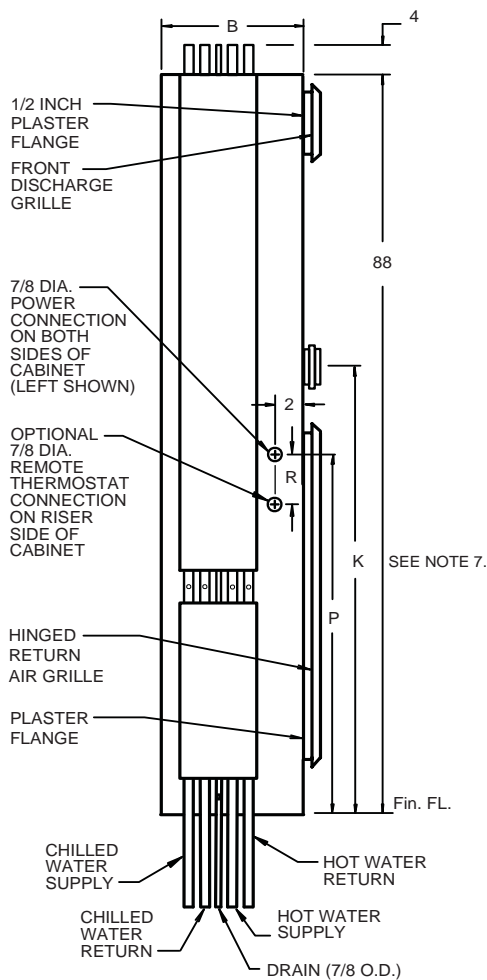
**THE WHALEN COMPANY**  
EASTON, MARYLAND

**FAN COIL UNITS - 4 PIPE WITH VALVE CONTROL & INTERNAL DRAIN PAN (MASTER UNIT REAR RISER CONFIGURATION)**

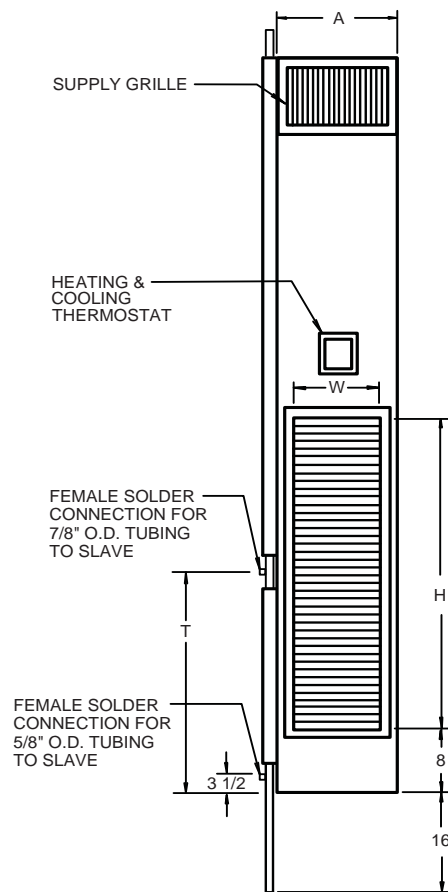
DRAWING NUMBER 429C-PT-MR

MAY 2013





**LEFT SIDE VIEW**  
LH SIDE RISERS SHOWN  
RH SIDE RISERS OPPOSITE



**FRONT VIEW**  
LH SIDE RISERS SHOWN  
RH SIDE RISERS OPPOSITE

**NOTES:**

1. See drawing number 411 for supply grille or register options.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is clear anodized aluminum.
4. Supply, return and drain risers are type M copper, standard or type L, optional. Riser assemblies include two ball valves inside the cabinet.
5. Recommended sleeve hole size is 6" x 16".
6. Remote thermostat is located on riser side of cabinet for left or right side riser units.
7. 48" thermostat height is standard on WF\* 300 units. Remote thermostat is required on WF\*-400-800 for 48" thermostat height.
8. See drawing 409-PT for detailed riser dimensions and plan views.

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P	R	T
WF*-300-4P	300	16	18	14	36	48	38	5	26
WF*-400-4P	400	16	18	14	40	52	42	5	29
WF*-600-4P	600	18	18	14	44	56	45	5	32
WF*-800-4P	800	18	18	14	48	60	49	9	36

\* C = 3 ROW  
D = 4 ROW

All dimensions in inches.

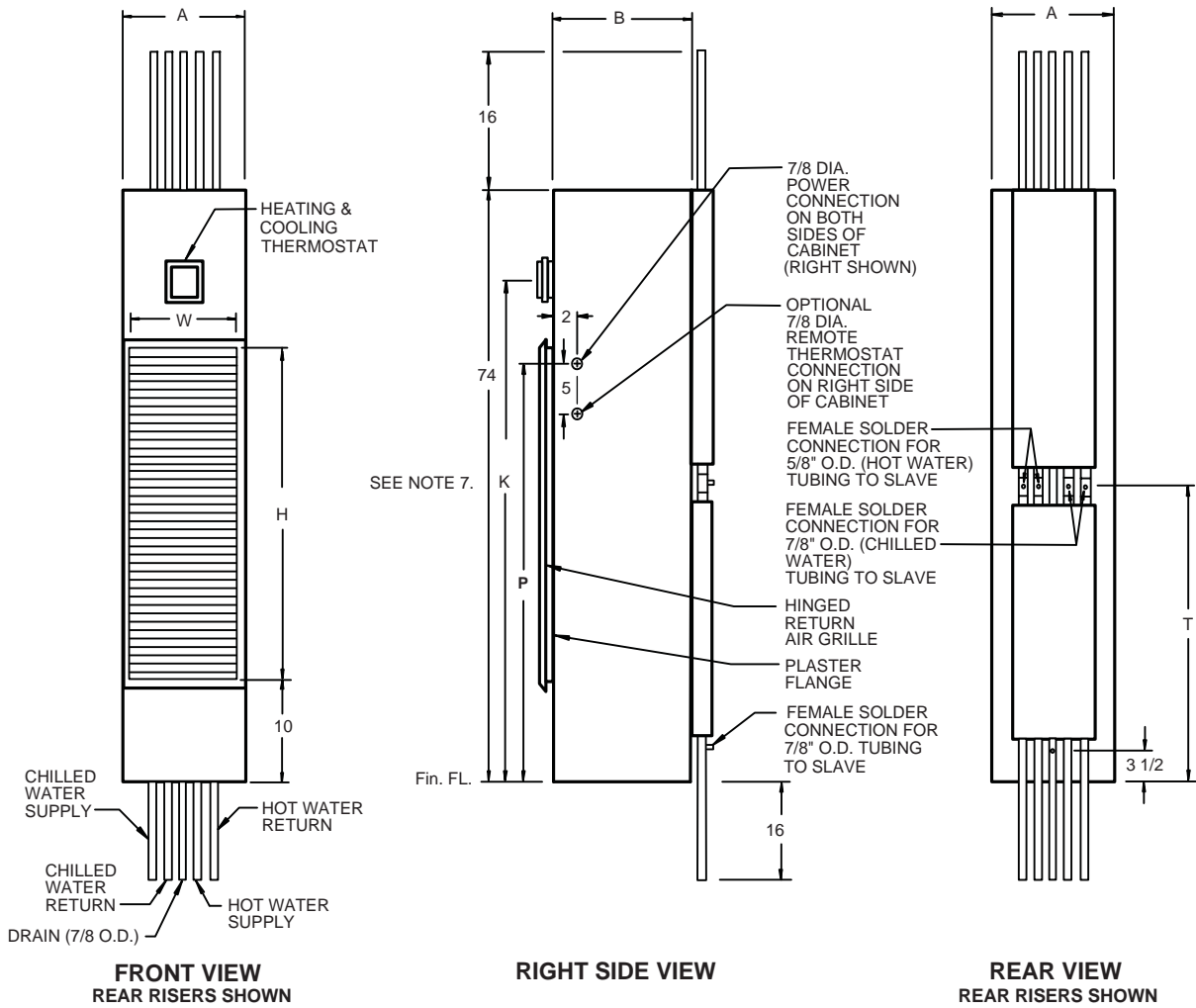
**HI-RISE VERTICAL FAN-COIL UNITS**

**THE WHALEN COMPANY**  
EASTON, MARYLAND

**FAN COIL UNITS - 4 PIPE WITH VALVE CONTROL AND INTERNAL DRAIN PAN (MASTER UNIT SIDE RISER CONFIGURATION)**

DRAWING NUMBER 429E-PT-MS

MAY 2013



**NOTES:**

1. See drawing number 411-V-K for top discharge dimensions. The return air grille is always on the front of the unit.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is clear anodized aluminum.
4. Supply, return and drain risers are type M copper, standard or type L, optional. Riser assemblies include two ball valves inside the cabinet.
5. Unless otherwise noted, the fan motor runs continuously on either high or low speed.
6. Remote thermostat connection is located on the right hand side of cabinet for rear riser units.
7. Remote thermostat is required on units for 48" thermostat height.
8. See drawing 409-PT for detailed riser dimensions and plan views.

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P	T
WF*-1000-4P	1000	24	24	20	48	62	51	36
WF*-1200-4P	1200	24	24	20	56	70	59	44

\* C = 3 ROW  
D = 4 ROW

All dimensions in inches.

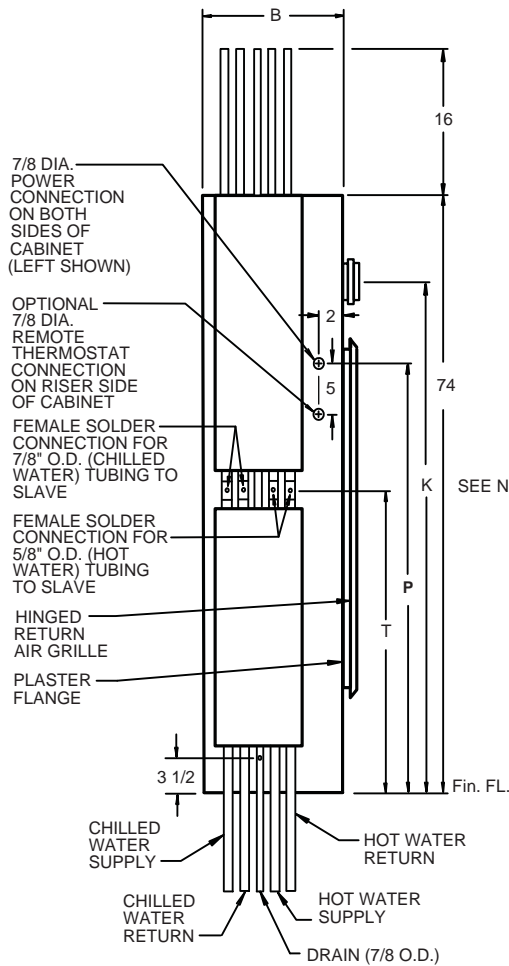
**HI-RISE VERTICAL FAN-COIL UNITS**

**THE WHALEN COMPANY**  
EASTON, MARYLAND

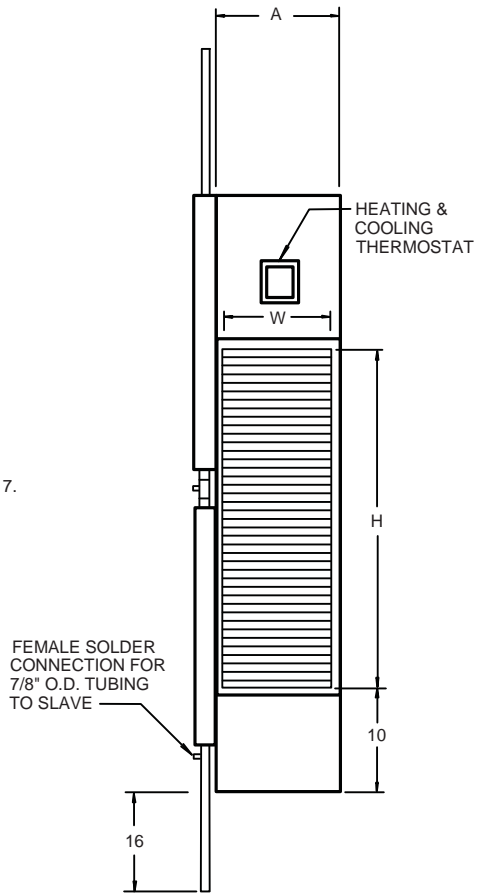
**FAN COIL UNITS - 4 PIPE WITH VALUE CONTROL & INTERNAL DRAIN PAN**  
**1000-1200 CFM**  
**(MASTER UNIT REAR RISER CONFIGURATION)**

DRAWING NUMBER 429A-K-PT-MR

AUGUST 2013



**LEFT SIDE VIEW**  
LH SIDE RISERS SHOWN  
RH SIDE RISERS OPPOSITE



**FRONT VIEW**  
LH SIDE RISERS SHOWN  
RH SIDE RISERS OPPOSITE

**NOTES:**

1. See drawing number 411-V-K for top discharge dimensions. The return air grille is always on the front of the unit.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is clear anodized aluminum.
4. Supply, return and drain risers are type M copper, standard or type L, optional. Riser assemblies include two ball valves inside the cabinet.
5. Unless otherwise noted, the fan motor runs continuously on either high or low speed.
6. Remote thermostat is located on riser side of cabinet for left or right side riser units.
7. Remote thermostat is required on units for 48" thermostat height.
8. See drawing 409-PT for detailed riser dimensions and plan views.

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P	T
WF*-1000-4P	1000	24	24	20	48	62	51	36
WF*-1200-4P	1200	24	24	20	56	70	59	44

\* C = 3 ROW  
D = 4 ROW

All dimensions in inches.

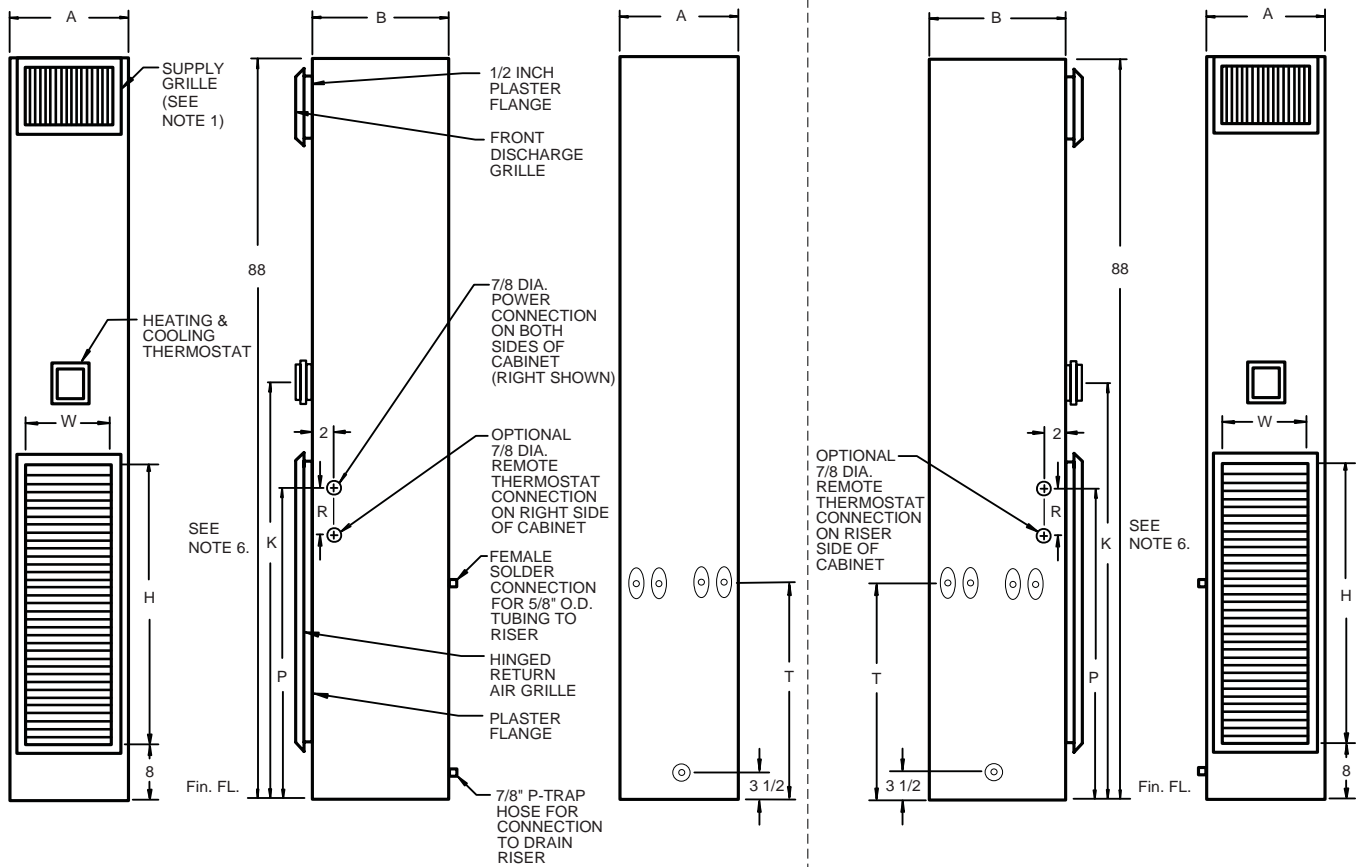
**HI-RISE VERTICAL FAN-COIL UNITS**

**THE WHALEN COMPANY**  
EASTON, MARYLAND

**FAN COIL UNITS - 4 PIPE WITH VALVE CONTROL AND INTERNAL DRAIN PAN**  
**1000-1200 CFM**  
**(MASTER UNIT SIDE RISER CONFIGURATION)**

DRAWING NUMBER 429A-K-PT-MS

AUGUST 2013



**FRONT VIEW**

**RIGHT SIDE VIEW  
REAR RISERS SHOWN**

**REAR VIEW  
REAR RISERS SHOWN**

**LEFT SIDE VIEW  
LH SIDE RISERS SHOWN  
RH SIDE RISERS OPPOSITE**

**FRONT VIEW  
LH SIDE RISERS SHOWN  
RH SIDE RISERS OPPOSITE**

**NOTES:**

1. See drawing number 411 for supply grille or register options.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is clear anodized aluminum.
4. Coil piping includes (4) ball shutoff valves with 1/2" nipples for connection to field piping. Nipples extend 1" nom. Thru ports on rear or side of cabinet.
5. Remote thermostat is located on riser side of cabinet for left or right side riser units. For rear risers, connection will be on the right hand side of unit.
6. 48" thermostat height is standard of WF\*-300 units. Remote thermostat is required on WF\*400-800 units for 48" thermostat height.
7. See drawing 419-PT for detailed riser port dimensions and plan views.

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P	R	T
WF*-300-4P	300	16	18	14	36	48	38	5	26
WF*-400-4P	400	16	18	14	40	52	42	5	29
WF*-600-4P	600	18	18	14	44	56	45	5	32
WF*-800-4P	800	18	18	14	48	60	49	9	36

\* C = 3 ROW  
\* D = 4 ROW

All dimensions in inches.

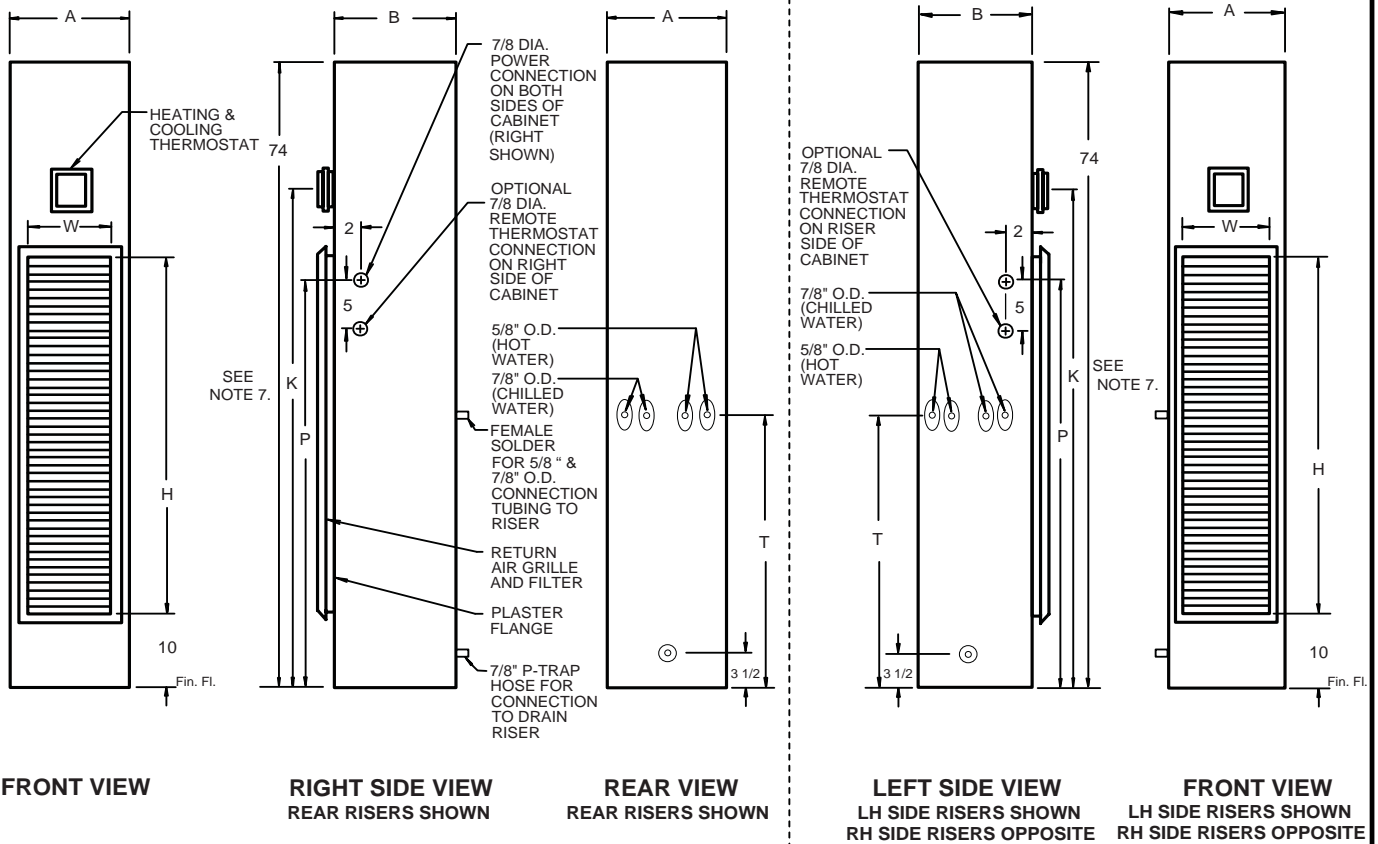
**HI-RISE VERTICAL FAN-COIL UNITS**

**THE WHALEN COMPANY**  
EASTON, MARYLAND

**FAN COIL UNITS - 4 PIPE WITH VALVE CONTROL AND INTERNAL DRAIN PAN SLAVE UNITS**

DRAWING NUMBER 429E-PT-S

MARCH 2013



**FRONT VIEW**

**RIGHT SIDE VIEW  
REAR RISERS SHOWN**

**REAR VIEW  
REAR RISERS SHOWN**

**LEFT SIDE VIEW  
LH SIDE RISERS SHOWN  
RH SIDE RISERS OPPOSITE**

**FRONT VIEW  
LH SIDE RISERS SHOWN  
RH SIDE RISERS OPPOSITE**

**NOTES:**

1. See drawing number 411-V-K for top discharge dimensions. The return air grille is always on front of the unit.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is clear anodized aluminum.
4. Coil piping includes (4) ball shutoff valves with 1/2" nipples for connection to field piping. Nipples extend 1" nom. Thru ports on rear or side of cabinet.
5. Remote thermostat is located on riser side of cabinet for left or right side riser units. For rear risers, connection will be on the right hand side of unit.
6. Remote thermostat is required on units for 48" thermostat height.
7. See drawing 419-PT for detailed riser port dimensions and plan views.

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P	T
WF*-1000-##	1000	24	24	20	48	62	51	36
WF*-1200-##	1200	24	24	20	56	70	59	44

\* C = 3 ROW  
 D = 4 ROW  
 ## = 2P, ET or AE

All dimensions in inches.

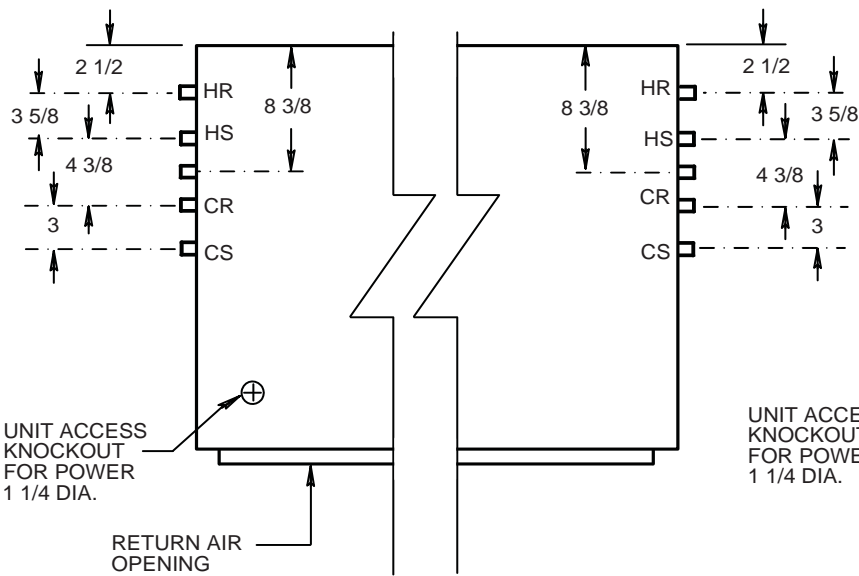
**VERTICAL FAN-COIL UNITS**

**THE WHALEN COMPANY**  
 EASTON, MARYLAND

**FAN COIL UNITS – 4 PIPE WITH VALVE CONTROL AND INTERNAL DRAIN PAN  
 1000-1200 CFM SLAVE UNITS**

DRAWING NUMBER 429A-K-PT-S

AUGUST 2013

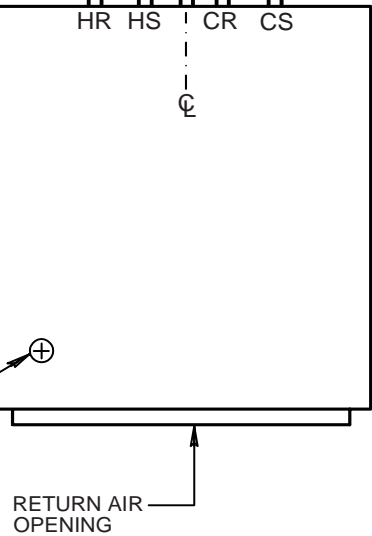
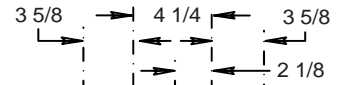


L.H. SIDE  
SLAVE UNIT

R.H. SIDE  
SLAVE UNIT

**SIDE PIPING PORTS**

NOTE: PIPING CONNECTIONS ON SIDE RISER UNITS ARE SHOWN FOR MASTER/SLAVE COMBINATIONS WITH RETURN AIR GRILLES FACING IN OPPOSITE DIRECTIONS. CONSULT FACTORY FOR OTHER CONFIGURATIONS.



REAR  
SLAVE UNIT

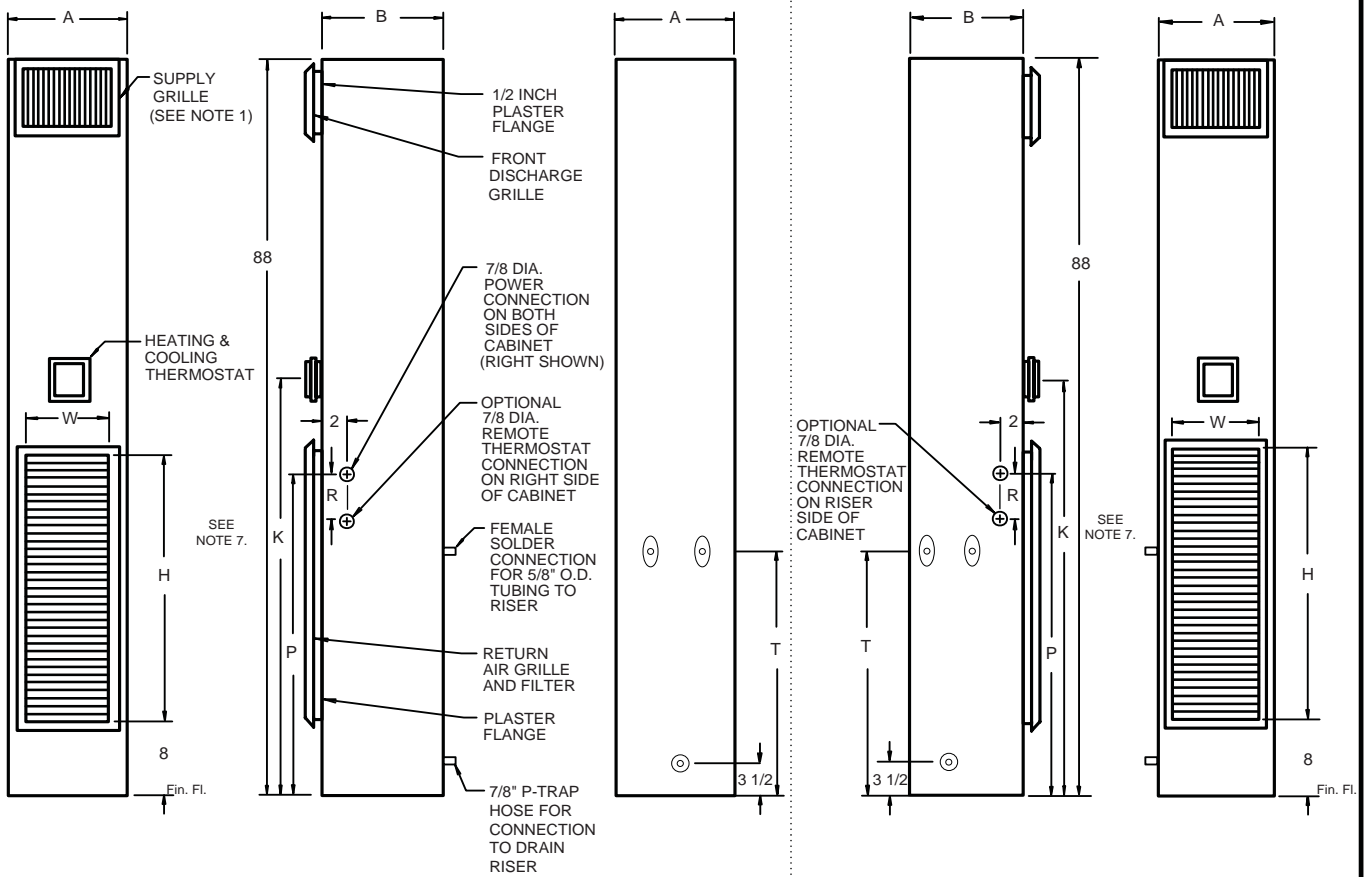
**REAR PIPING PORTS**

VERTICAL FAN COIL UNITS

THE WHALEN COMPANY  
EASTON, MARYLAND

PIPING PORT DETAILS  
4 PIPE SLAVE UNITS WITH  
INTERNAL DRAIN PAN

DRAWING NUMBER 419D-PT  
DECEMBER 2014



**FRONT VIEW**

**RIGHT SIDE VIEW  
REAR RISERS SHOWN**

**REAR VIEW  
REAR RISERS SHOWN**

**LEFT SIDE VIEW  
LH SIDE RISER SHOWN  
RH SIDE RISER OPPOSITE**

**FRONT VIEW  
LH SIDE RISER SHOWN  
RH SIDE RISER OPPOSITE**

**NOTES:**

1. See drawing number 411 for supply grille or register options. The return air grille is always on the front of the unit.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is clear anodize aluminum.
4. No supply, return and drain risers.
5. See drawing number 408-PT-NR for detailed riser port dimensions and plan views.
6. Remote thermostat is located on riser side of cabinet for left or right side riser units. For rear risers, connection will be on the right hand side of unit.
7. 48" thermostat height is standard on WF\* 300-400 units. Remote thermostat is required on WF\* 600 - 800 units for 48" thermostat height.

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P	R	T
WF*-300-##	300	16	16	14	32	48	34	5	22
WF*-400-##	400	16	16	14	36	48	38	5	26
WF*-600-##	600	18	16	14	40	52	41	5	29
WF*-800-##	800	18	16	14	44	56	45	9	33

\* C = 3 ROW  
 D = 4 ROW  
 ## = 2P, ET or AE

All dimensions in inches.

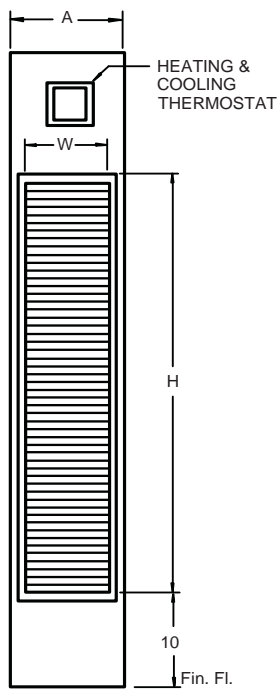
**VERTICAL FAN-COIL UNITS**

**THE WHALEN COMPANY**  
 EASTON, MARYLAND

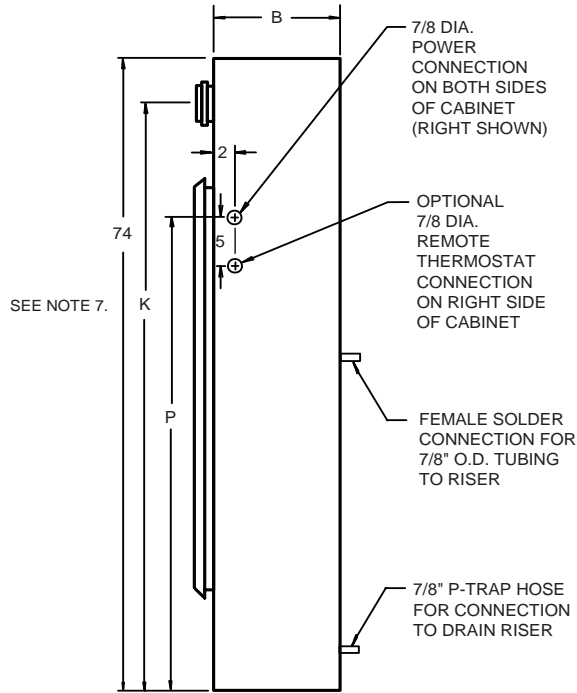
**FAN COIL UNITS – 2 PIPE  
 AND OPTIONAL ELECTRIC HEAT UNITS  
 WITH INTERNAL DRAIN PAN – RISERS BY OTHER**

DRAWING NUMBER 432D-PT-NR

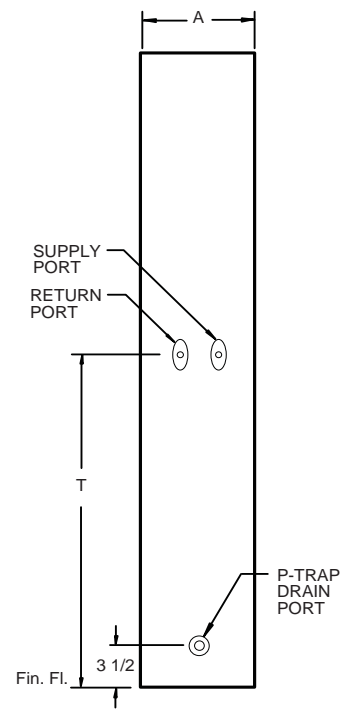
MARCH 2013



**FRONT VIEW**



**RIGHT SIDE VIEW  
REAR RISERS SHOWN**



**REAR VIEW  
REAR RISERS SHOWN**

**NOTES:**

1. See drawing number 411-V-K for top discharge dimensions. The return air grille is always on the front of the unit.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is extruded aluminum.
4. No supply, return and drain risers.
5. See drawing number 408-PT-NR for detailed riser dimensions and plan views.
6. Remote thermostat connection is located on the right hand side of cabinet for rear riser units.
7. Remote thermostat is required for 48" thermostat height.

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P	T
WF*-1000-##	1000	24	24	20	48	62	51	36
WF*-1200-##	1200	24	24	20	56	70	59	44

\* C = 3 ROW  
 \* D = 4 ROW  
 ## = 2P, ET or AE  
 All dimensions in inches.

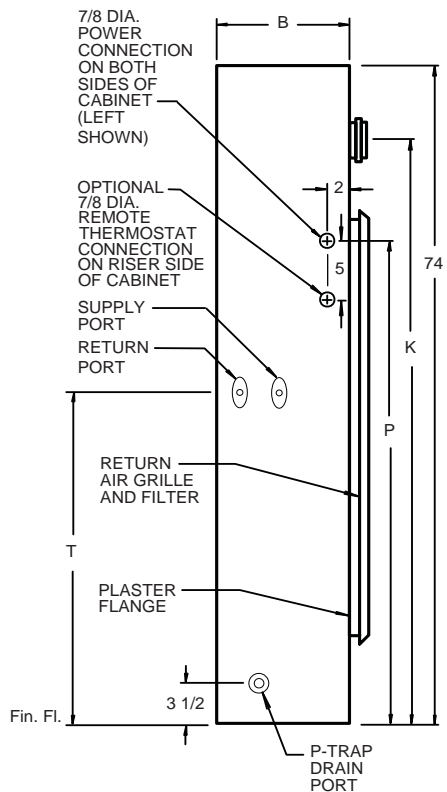
**VERTICAL FAN-COIL UNITS**

**THE WHALEN COMPANY**  
 EASTON, MARYLAND

**FAN COIL UNITS - 2 PIPE AND OPTIONAL  
 ELECTRIC HEAT - 1000 AND 1200 CFM UNITS  
 WITH INTERNAL DRAIN PAN AND  
 RISERS BY OTHERS - REAR RISERS**

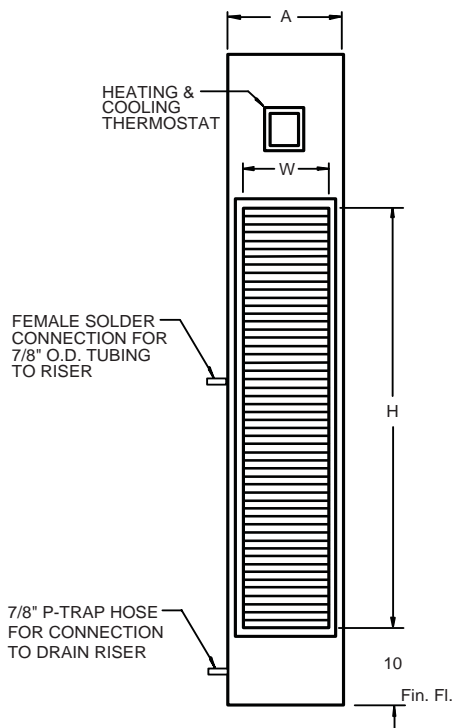
DRAWING NUMBER 401D-K-PTR-NR





**LEFT SIDE VIEW**  
LH SIDE RISERS SHOWN  
RH SIDE RISERS OPPOSITE

SEE NOTE 7.



**FRONT VIEW**  
LH SIDE RISERS SHOWN  
RH SIDE RISERS OPPOSITE

**NOTES:**

1. See drawing number 411-V-K for top discharge dimensions. The return air grille is always on the front of the unit.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is extruded aluminum.
4. No supply, return or drain risers.
5. See drawing number 408-PT-NR for detailed riser dimensions and plan views.
6. Remote thermostat is located on riser side of cabinet for left or right side riser units.
7. Remote thermostat is required on units for 48" thermostat height.

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P	T
WF*-1000-##	1000	24	24	20	48	62	51	36
WF*-1200-##	1200	24	24	20	56	70	59	44

\* C = 3 ROW  
\* D = 4 ROW  
## = 2P, ET or AE

All dimensions in inches.

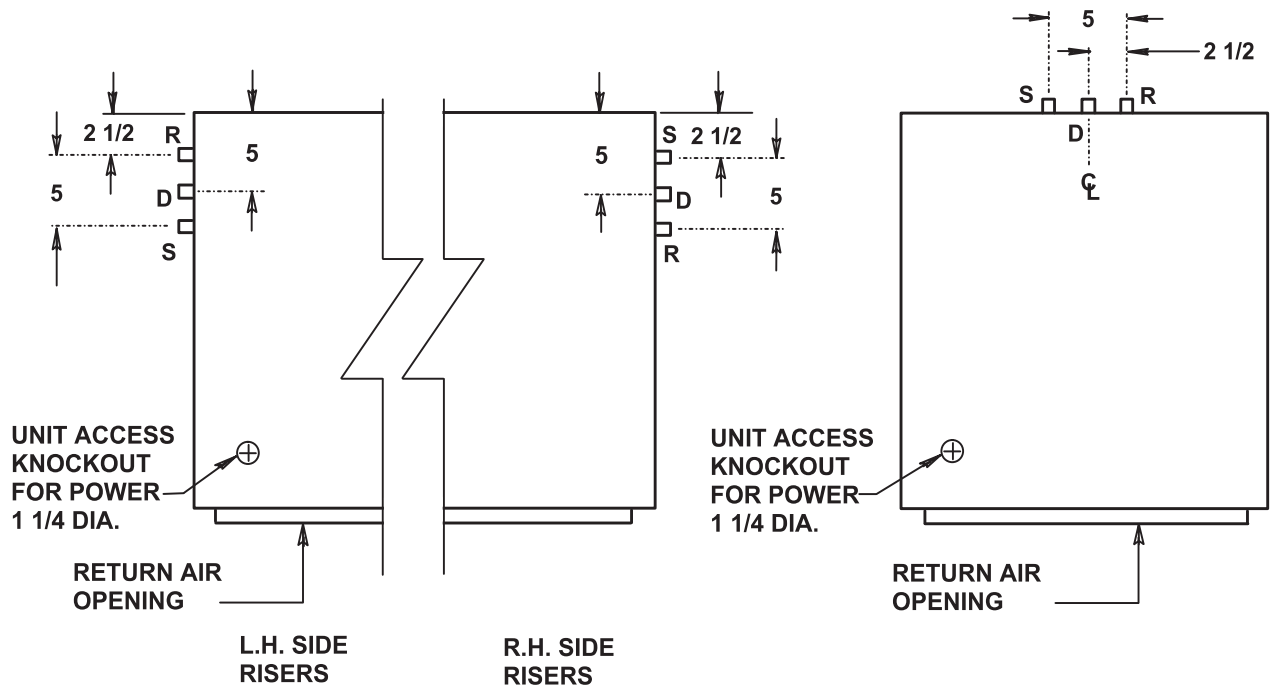
**HI-RISE VERTICAL FAN-COIL UNITS**

**THE WHALEN COMPANY**  
EASTON, MARYLAND

**FAN COIL UNITS - 2 PIPE AND OPTIONAL ELECTRIC HEAT - 1000 AND 1200 CFM UNITS WITH INTERNAL DRAIN PANS AND RISERS BY OTHERS - SIDE RISERS**

DRAWING NUMBER 401D-K-PTS-NR

MAY 2013



**SIDE RISERS**

**REAR RISERS**

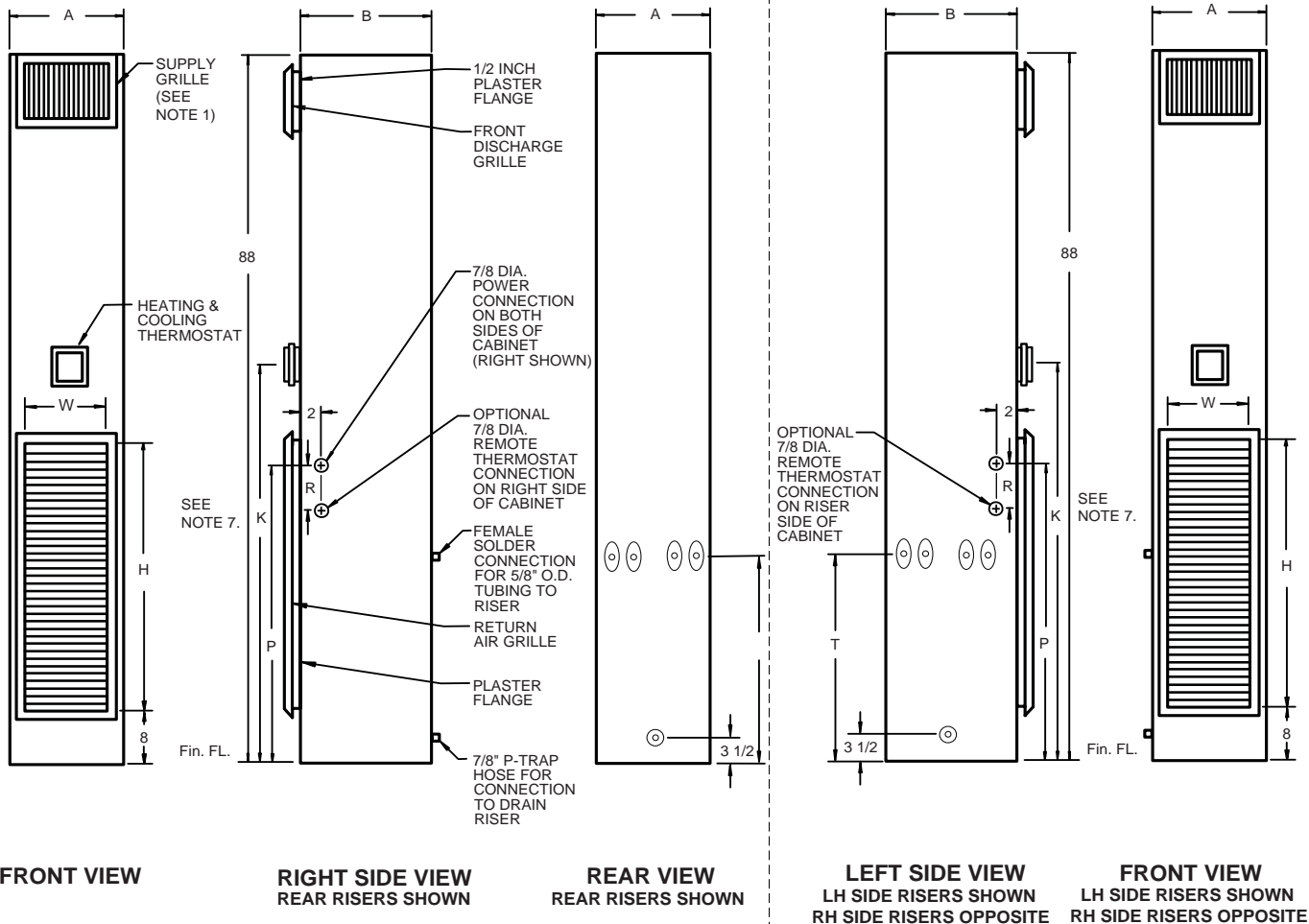
**VERTICAL FAN COIL UNITS**

**THE WHALEN COMPANY**  
EASTON, MARYLAND

**RISER DETAILS**  
**2 PIPE w/ INTERNAL DRAIN PAN**  
**RISERS BY OTHERS**

DRAWING NUMBER 408B-PT-NR

JANUARY 2002



**NOTES:**

1. See drawing number 411 for supply grille or register options.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is clear anodized aluminum.
4. Coil piping includes (4) ball shutoff valves with 5/8" nipples for connection to field piping. Nipples extend 1" nom. thru ports on rear or side of cabinet.
5. See drawing number 409-PT-NR for detailed riser dimensions and plan views.
6. Remote thermostat is located on riser side of cabinet for left or right side riser units. For rear risers, connection will be on right hand side of unit.
7. 48" thermostat height is standard of WF\*-300 units. Remote thermostat is required on WF\*400-800 units for 48" thermostat height.

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P	R	T
WF*-300-4P	300	16	18	14	36	48	38	5	26
WF*-400-4P	400	16	18	14	40	52	42	5	29
WF*-600-4P	600	18	18	14	44	56	45	5	32
WF*-800-4P	800	18	18	14	48	60	49	9	36

\* C = 3 ROW  
D = 4 ROW

All dimensions in inches.

HI-RISE VERTICAL FAN-COIL UNITS

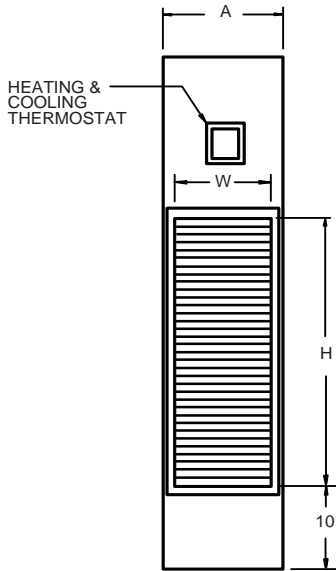
**THE WHALEN COMPANY**

EASTON, MARYLAND

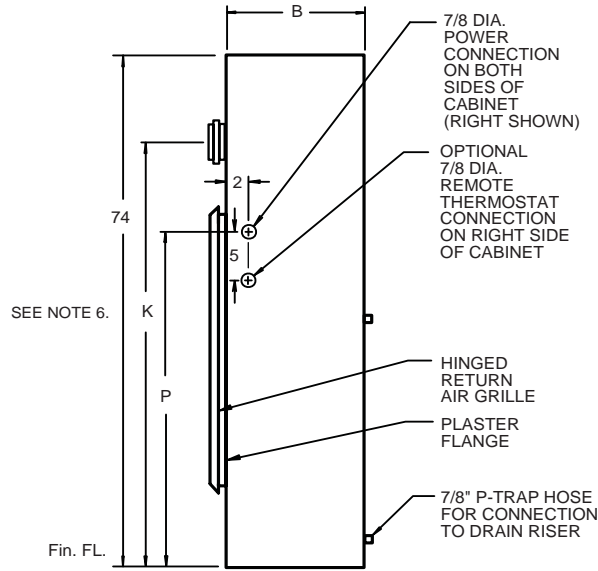
**FAN COIL UNITS - 4 PIPE WITH VALVE CONTROL AND INTERNAL DRAIN PAN (RISERS BY OTHERS)**

DRAWING NUMBER 413F-PT-NR

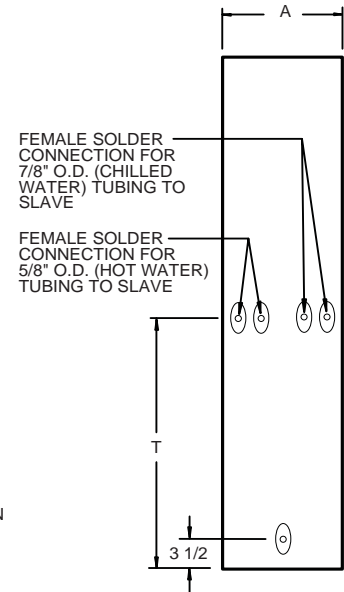
MAY 2013



**FRONT VIEW**



**RIGHT SIDE VIEW  
REAR RISER SHOWN**



**REAR VIEW  
REAR RISER SHOWN**

**NOTES:**

1. See drawing number 411-V-K for supply grille or register options.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is clear anodized aluminum.
4. Coil piping includes (4) ball shutoff valves with 7/8" nipples for connection to field piping. Nipples extend 1" nom. thru ports on rear or side of cabinet.
5. Remote thermostat connection is located on the right hand side of cabinet for rear riser units.
6. Remote thermostat is required on units for 48" thermostat height.
7. See drawing 409-PT-NR for plan view.

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P	T
WF*-1000-4P	1000	24	24	20	48	62	51	35
WF*-1200-4P	1200	24	24	20	56	70	59	44

\* C = 3 ROW  
D = 4 ROW

All dimensions in inches.

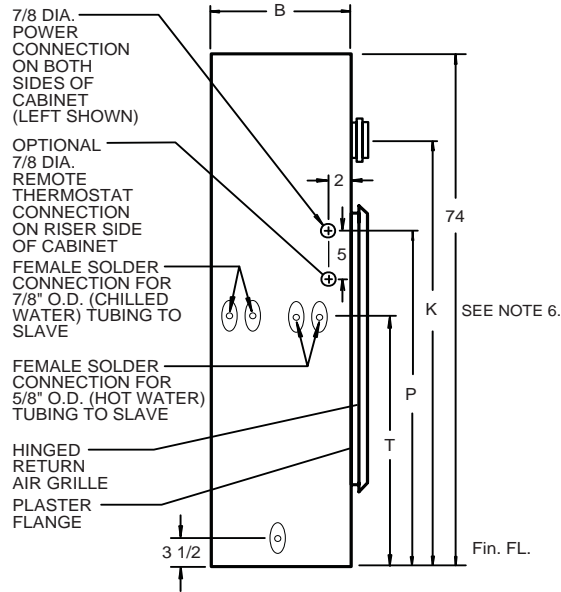
**HI-RISE VERTICAL FAN-COIL UNITS**

**THE WHALEN COMPANY**  
EASTON, MARYLAND

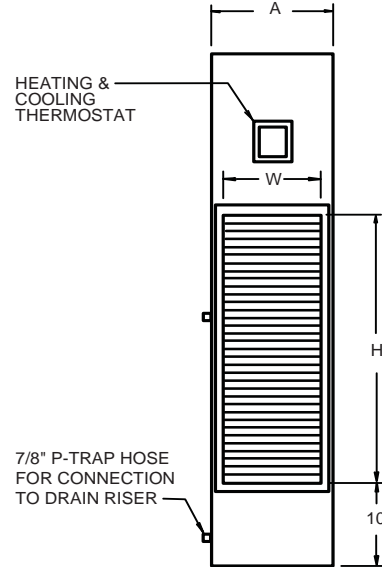
**FAN COIL UNITS - 4 PIPE 1000 AND 1200 CFM UNITS w/ INTERNAL DRAIN PAN RISERS BY OTHERS - REAR RISERS**

DRAWING NUMBER 413E-PT-NR-R-K

AUGUST 2013



**LEFT SIDE VIEW**  
LH SIDE RISER SHOWN  
RH SIDE RISER OPPOSITE



**FRONT VIEW**  
LH SIDE RISER SHOWN  
RH SIDE RISER OPPOSITE

**NOTES:**

1. See drawing number 411-V-K for supply grille or register options.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is clear anodized aluminum.
4. Coil piping includes (4) ball shutoff valves with 7/8" nipples for connection to field piping. Nipples extend 1" nom. thru ports on rear or side of cabinet.
5. Remote thermostat is located on riser side of cabinet for left or right side riser units.
6. Remote thermostat is required on units for 48" thermostat height.
7. See drawing 409-PT-NR for plan view.

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P	T
WFC-1000-4P	1000	24	24	20	48	62	51	35
WFC-1200-4P	1200	24	24	20	56	70	59	44

\* C = 3 ROW  
D = 4 ROW

All dimensions in inches.

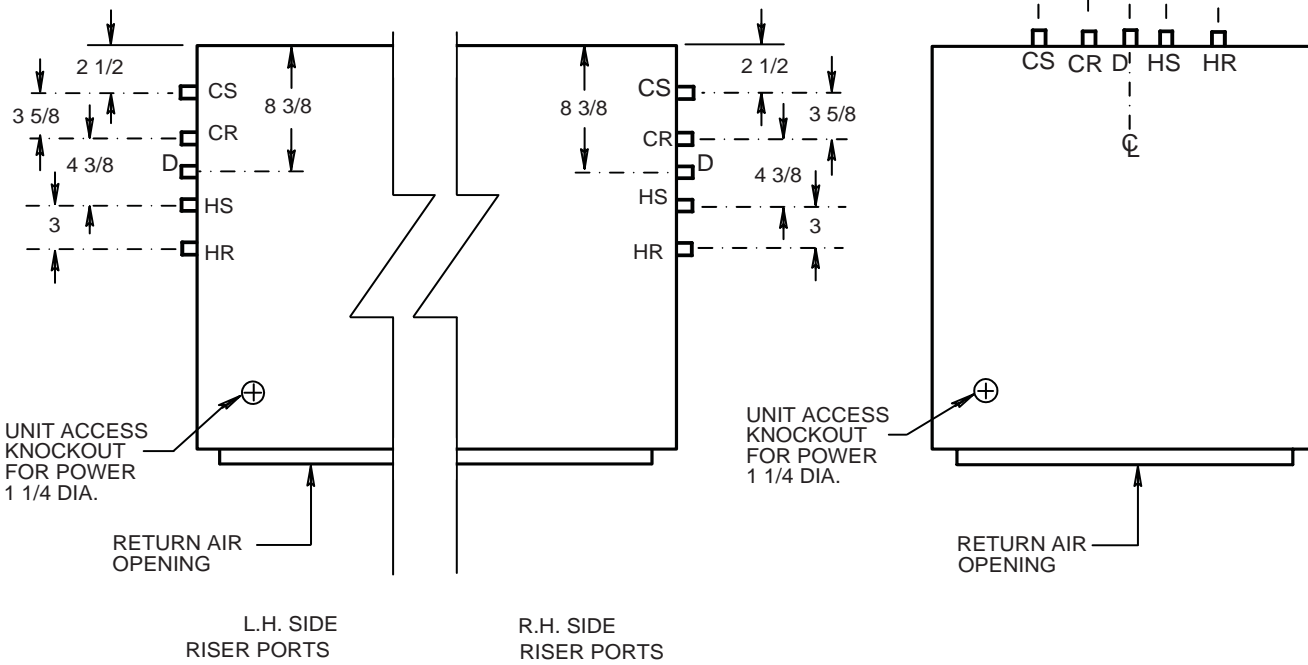
**HI-RISE VERTICAL FAN-COIL UNITS**

**THE WHALEN COMPANY**  
EASTON, MARYLAND

**FAN COIL UNITS - 4 PIPE 1000 AND 1200 CFM UNITS w/ INTERNAL DRAIN PAN RISERS BY OTHERS – SIDE RISERS**

DRAWING NUMBER 413E-PT-NR-S-K

AUGUST 2013



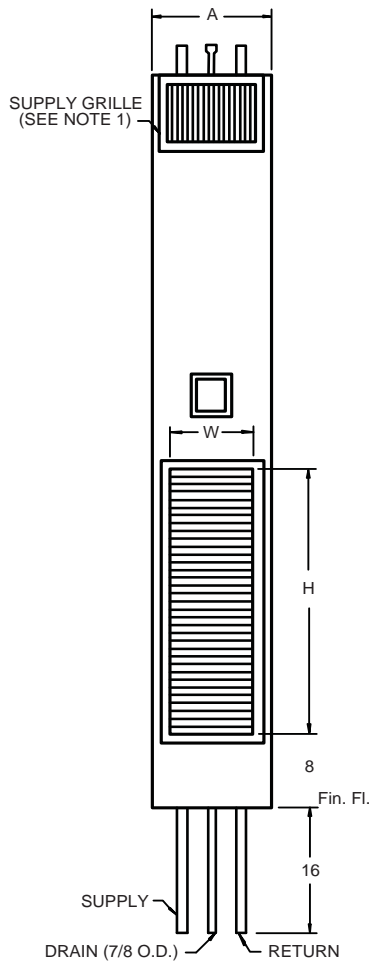
SIDE RISER PORTS

REAR RISER PORTS

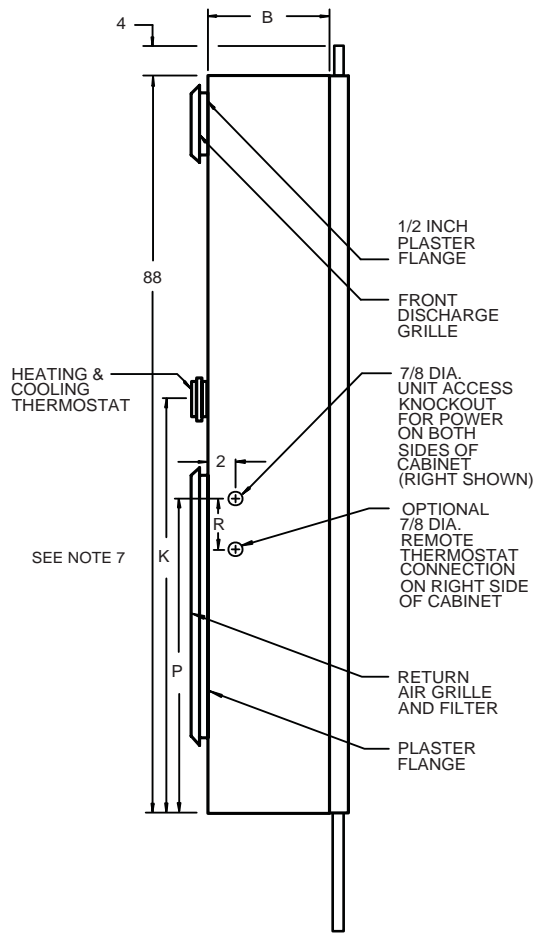
VERTICAL FAN COIL UNITS  
 THE WHALEN COMPANY  
 EASTON, MARYLAND

RISER DETAILS - 4 PIPE UNITS  
 WITH INTERNAL DRAIN PAN  
 RISERS BY OTHERS

DRAWING NUMBER 409E-PT-NR  
 DECEMBER 2014



FRONT VIEW  
REAR RISERS SHOWN



RIGHT SIDE VIEW  
REAR RISERS SHOWN

NOTES:

1. See drawing number 411 for supply grille or register options. The return air grille is always on the front of the unit.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is clear anodized aluminum.
4. Supply, return and drain risers are type M copper, standard or type L, optional. Riser assemblies include two ball valves inside the cabinet.
5. See drawing number 408-PT-VIC for detailed riser dimensions and plan views.
6. Remote thermostat connection is located on the right hand side of cabinet for rear riser units.
7. 48" thermostat height is standard on WF\* 300-400 units. Remote thermostat is required on WF\* 600 - 800 units for 48" thermostat height.

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P	R
WF*-300-##	300	16	16	14	32	48	34	5
WF*-400-##	400	16	16	14	36	48	38	5
WF*-600-##	600	18	16	14	40	52	41	5
WF*-800-##	800	18	16	14	44	56	45	9

All dimensions in inches.

\* C = 3 ROW  
D = 4 ROW  
## = 2P, ET or AE

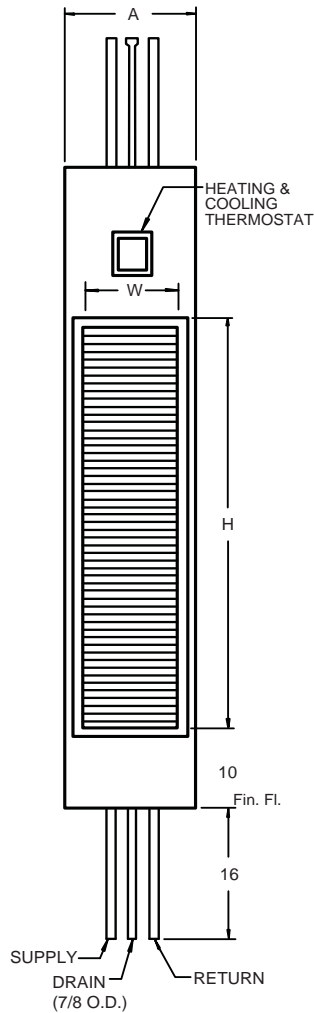
HI-RISE VERTICAL FAN-COIL UNITS

THE WHALEN COMPANY  
EASTON, MARYLAND

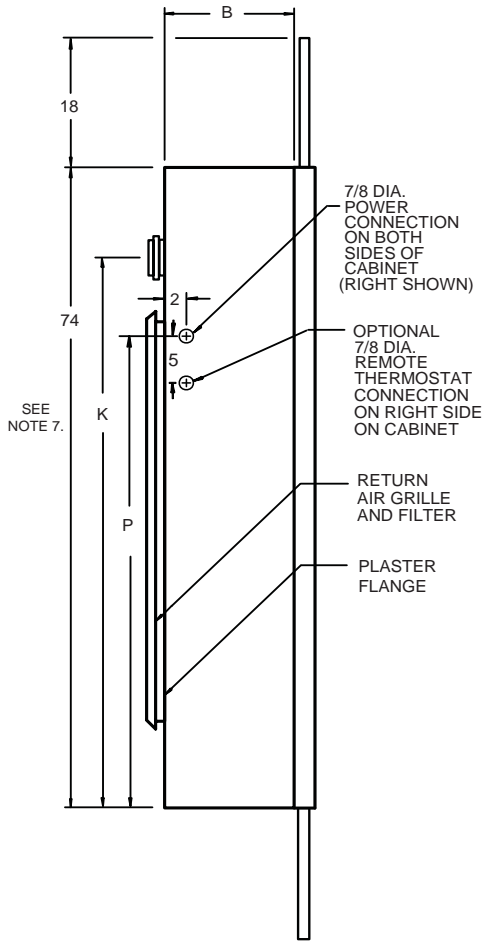
FAN COIL UNITS-2 PIPE AND OPTIONAL ELECTRIC HEAT  
3 OR 4 ROW COOLING COILS  
WITH INTERNAL DRAIN PAN  
REAR SPLIT RISER LOCATIONS

DRAWING NUMBER 401D-PT-R-VIC

MAY 2013



**FRONT VIEW  
REAR RISERS**



**RIGHT SIDE VIEW  
REAR RISERS**

**NOTES:**

1. See drawing number 411-V-K for top discharge dimensions. The return air grille is always on the front of the unit.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is clear anodized aluminum.
4. Supply, return and drain risers are type M copper, standard or type L, optional. Riser assemblies include four ball valves inside the cabinet.
5. See drawing number 408-PT-VIC for detailed riser dimensions and plan views.
6. Remote thermostat connection is located on the right hand side of cabinet for rear riser units.
7. Remote thermostat is required on units for 48" thermostat height.

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P
WF*-1000-##	1000	24	24	20	48	62	51
WF*-1200-##	1200	24	24	20	56	70	59

All dimensions in inches.  
 \* C = 3 ROW  
 \* D = 4 ROW  
 ## = 2P, ET or AE

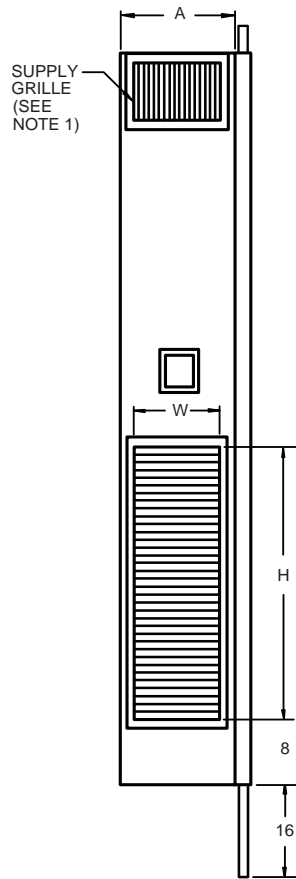
HI-RISE VERTICAL FAN-COIL UNITS

**THE WHALEN COMPANY**  
 EASTON, MARYLAND

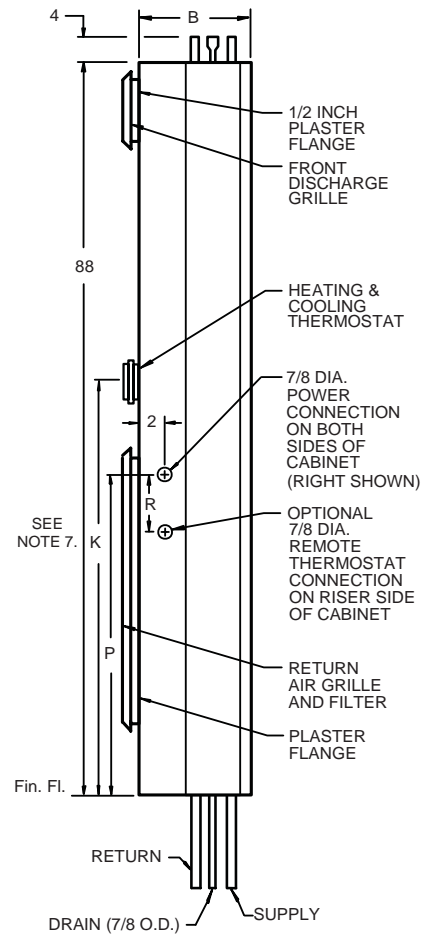
FAN COIL UNITS - 2 PIPE AND OPTIONAL ELECTRIC HEAT  
 3 OR 4 ROW COOLING COILS w/ INTERNAL  
 DRAIN PAN - 1000 & 1200 CFM  
 REAR SPLIT RISER LOCATIONS

DRAWING NUMBER 401-K-PT-R-VIC





**FRONT VIEW**  
RH SIDE RISERS SHOWN  
LH SIDE RISERS OPPOSITE



**RIGHT SIDE VIEW**  
RH SIDE RISERS SHOWN  
LH SIDE RISERS OPPOSITE

**NOTES:**

1. See drawing number 411 for supply grille or register options. The return air grille is always on the front of the unit.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is clear anodized aluminum.
4. Supply, return and drain risers are type M copper, standard or type L, optional. Riser assemblies include two ball valves inside the cabinet.
5. See drawing number 408-PT-VIC for detailed riser dimensions and plan views.
6. Remote thermostat is located on riser side for left or right side riser units.
7. 48" thermostat height is standard on WF\* 300-400 units. Remote thermostat is required on WF\* 600 - 800 units for 48" thermostat height.

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P	R
WF*-300-##	300	16	16	14	32	48	34	5
WF*-400-##	400	16	16	14	36	48	38	5
WF*-600-##	600	18	16	14	40	52	41	5
WF*-800-##	800	18	16	14	44	56	45	9

All dimensions in inches.

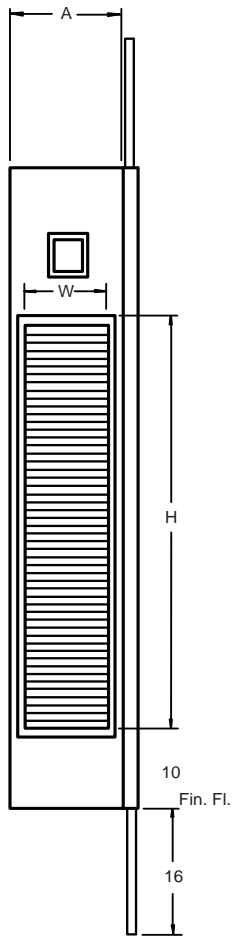
\* C = 3 ROW  
D = 4 ROW  
## = 2P, ET or AE

HI-RISE VERTICAL FAN-COIL UNITS

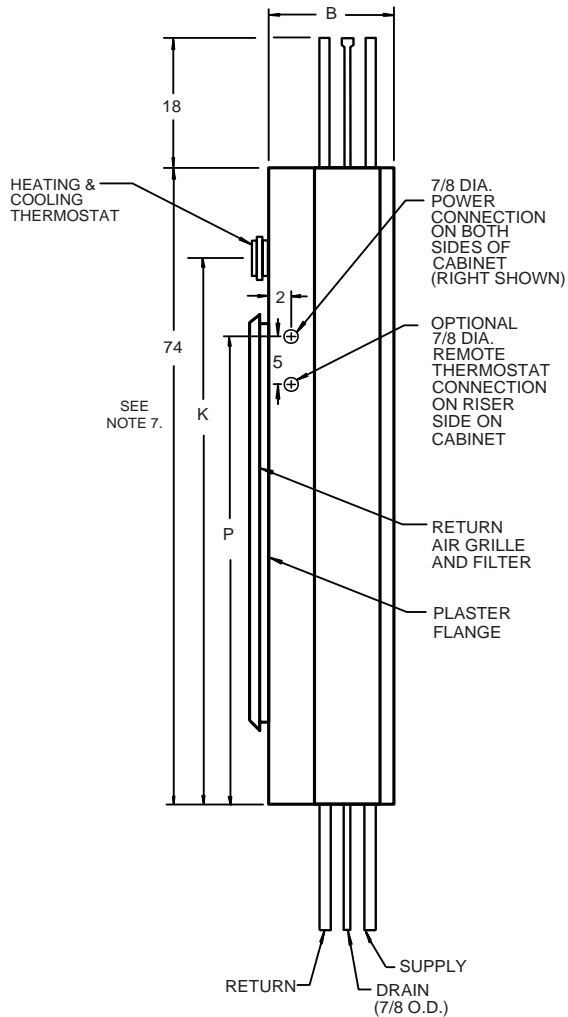
**THE WHALEN COMPANY**  
EASTON, MARYLAND

FAN COIL UNITS-2 PIPE AND OPTIONAL ELECTRIC HEAT  
3 OR 4 ROW COOLING COILS  
WITH INTERNAL DRAIN PAN  
SIDE SPLIT RISER LOCATIONS

DRAWING NUMBER 401-PT-S-VIC



**FRONT VIEW**  
RH SIDE RISERS SHOWN  
LH SIDE RISERS OPPOSITE



**RIGHT SIDE VIEW**  
RH SIDE RISERS SHOWN  
LH SIDE RISERS OPPOSITE

**NOTES:**

1. See drawing number 411-V-K for top discharge dimensions. The return air grille is always on the front of the unit.
2. Cabinet is continuous galvanized steel, suitable for direct application of "drywall" plaster board.
3. Return air grille is clear anodized aluminum.
4. Supply, return and drain risers are type M copper, standard or type L, optional. Riser assemblies include four ball valves inside the cabinet.
5. See drawing number 408-PT-VIC for detailed riser dimensions and plan views.
6. Remote thermostat is located on riser side for left or right side riser units.
7. Remote thermostat is required on units for 48" thermostat height.

UNIT MODEL	NOMINAL CFM	A	B	W	H	K	P
WF*-1000-##	1000	24	24	20	48	62	51
WF*-1200-##	1200	24	24	20	56	70	59

All dimensions in inches.

\* C = 3 ROW  
\* D = 4 ROW  
## = 2P, ET or AE

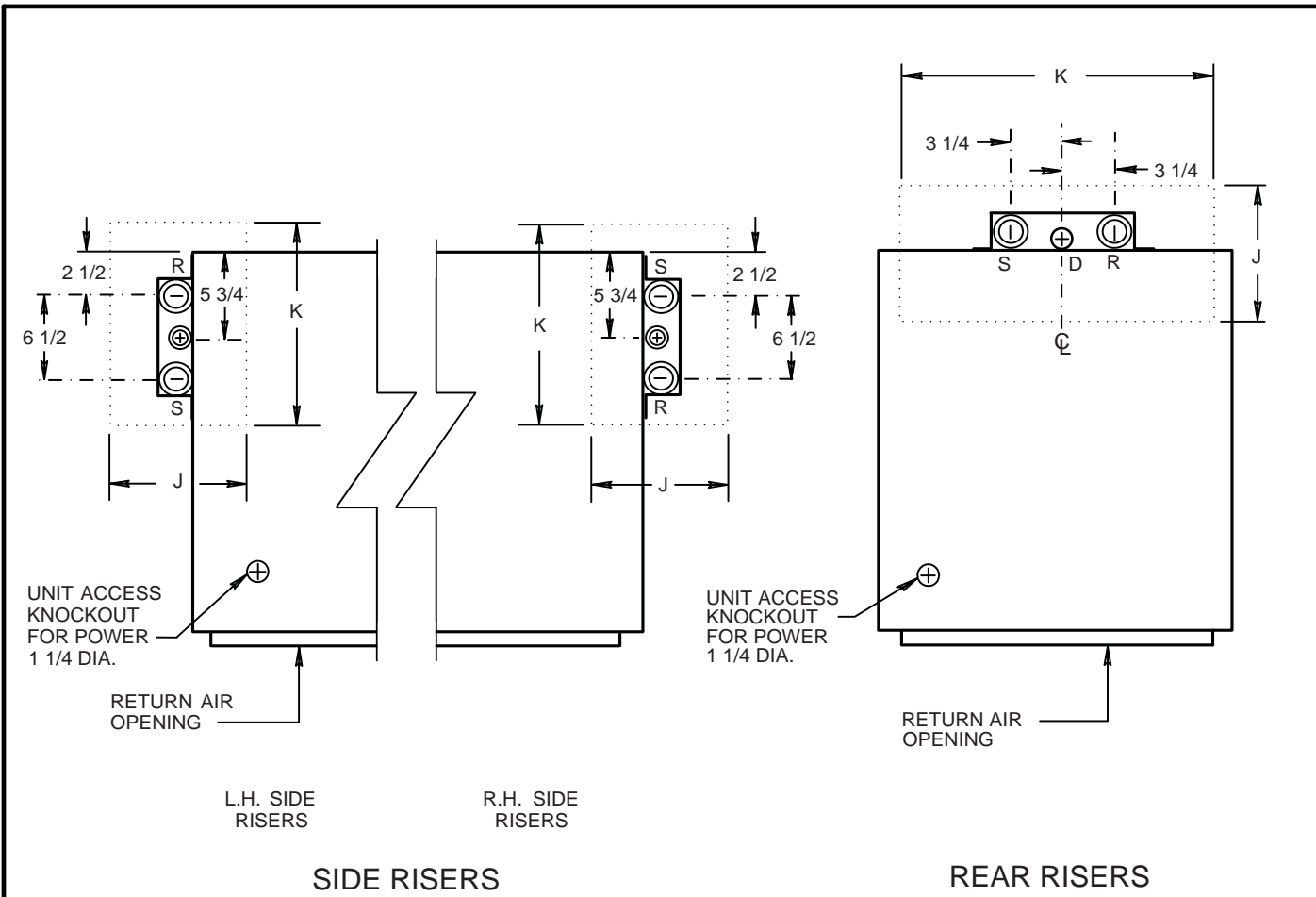
HI-RISE VERTICAL FAN-COIL UNITS

**THE WHALEN COMPANY**  
EASTON, MARYLAND

FAN COIL UNITS - 2 PIPE AND OPTIONAL ELECTRIC HEAT  
3 OR 4 ROW COOLING COILS w/ INTERNAL  
DRAIN PAN - 1000 & 1200 CFM  
SIDE SPLIT RISER LOCATION

DRAWING NUMBER 401-K-PT-S-VIC

MAY 2013



Notes:

1. "Riser size" refers to the larger of the supply and return risers on each unit.
2. Risers are protected by a steel riser cover extending the height of the cabinet. Risers are clamped to help prevent movement during shipment and jobsite handling.

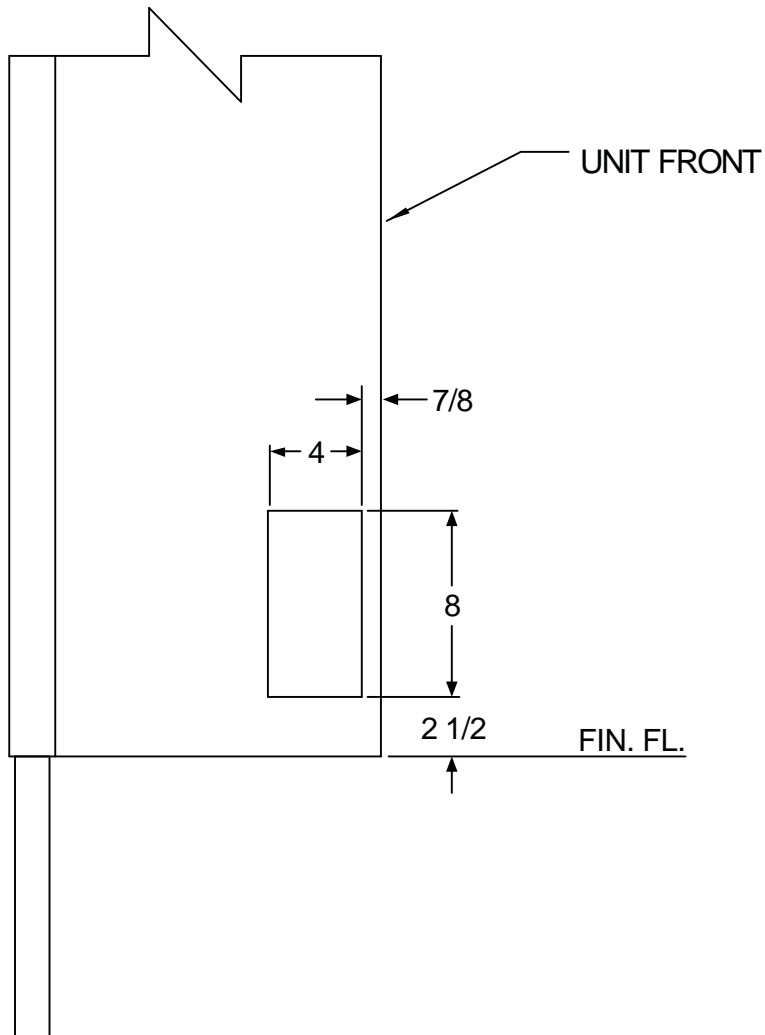
RISER SIZE	MINIMUM J	MINIMUM K
3/4	6	16
1	6	16
1 1/4	6	16
1 1/2	6	16
2	6	16
2 1/2	8	17

All dimensions in inches.

<p><b>VERTICAL FAN COIL UNITS</b></p> <p><b>THE WHALEN COMPANY</b></p> <p>EASTON, MARYLAND</p>	<p><b>RISER DETAILS</b></p> <p><b>2 PIPE UNITS WITH INTERNAL DRAIN PAN</b></p> <p><b>SPLIT RISER LOCATION</b></p> <p>DRAWING NUMBER 408D-PT-VIC</p>
--	---

# OUTSIDE AIR DRAWINGS

- Outdoor Air Opening Location
  - 4" x 8" Side Opening
- Motorized Outdoor Air Option Available



**NOTE:**

1. The outdoor air opening can be located on either the right or left side of the cabinet, with the exception of 4 pipe side riser units. On 4 pipe side riser units, the outdoor air opening is only available on the side opposite risers. See unit schedule for the designated locations.
2. The outdoor air opening on the unit has a 1/2 inch deep duct collar.
3. Units with outdoor air opening include a two position block-off damper, accessible through the unit return air grille. Unless otherwise noted, damper is manually opened or closed. (Care must be exercised to set manual damper in closed position to prevent possible freeze-up of coil if unit remains "Off" for an extended period of time during heating season.)

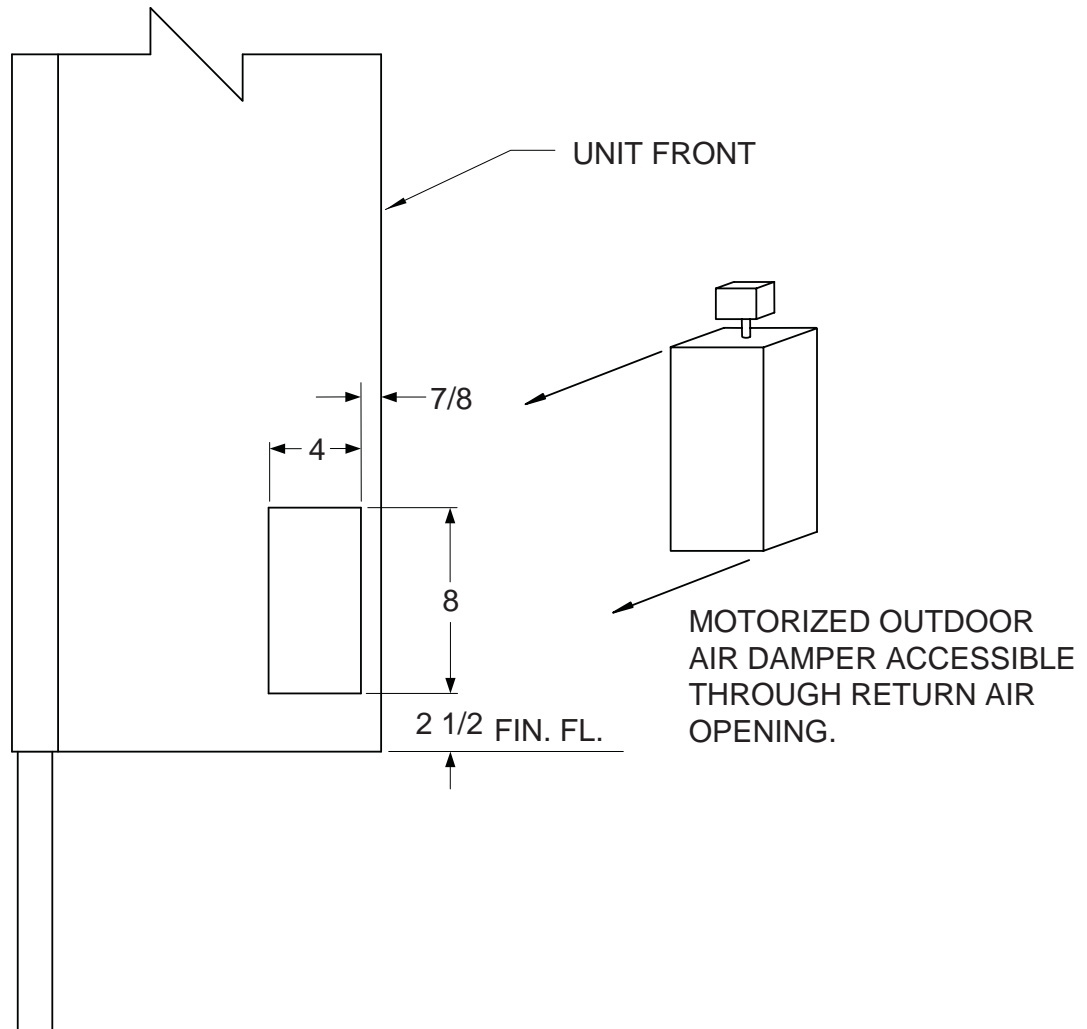
**VERTICAL FAN-COIL UNITS**

**THE WHALEN COMPANY**  
EASTON, MARYLAND

**OPTIONAL OUTDOOR AIR OPENING**  
WF\*-CFM w/ INTERNAL DRAIN PAN

DRAWING NO. 414B-0A-PT

MAY 2001



**NOTE:**

1. The outdoor air opening can be located on either the right or left side of the cabinet, with the exception of 4 pipe side riser units. On 4 pipe side riser units, the outdoor air opening is only available on the side opposite risers. See unit schedule for the designated locations.
2. The outdoor air opening on the unit has a 1/2 inch deep duct collar.
3. Units with outdoor air opening include a two position block-off damper, accessible through the unit return air grille. Unless otherwise noted, damper is manually opened or closed. (Care must be exercised to set manual damper in closed position to prevent possible freeze-up of coil if unit remains "Off" for an extended period of time during heating season.)

**VERTICAL FAN-COIL UNITS**

**THE WHALEN COMPANY  
EASTON, MARYLAND**

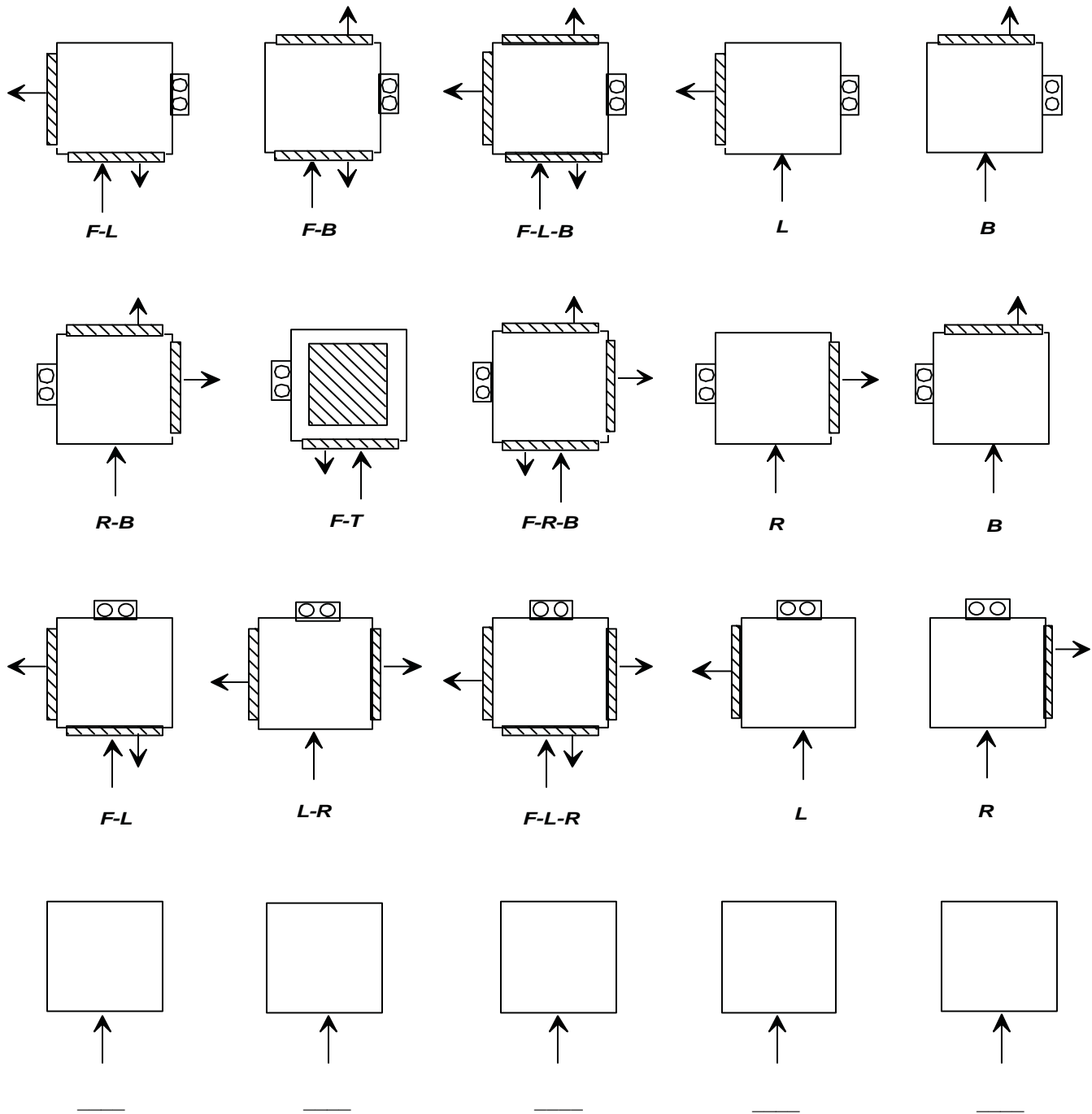
**OPTIONAL OUTDOOR AIR OPENING WITH  
OPTIONAL MOTORIZED DAMPER  
WF\*-CFM w/ INTERNAL DRAIN PAN**

DRAWING NO. 414-MZD2

MAY 2013

# SUPPLY DRAWINGS

- Supply Grille Sizing
- Supply Grille Locations



LARGE ARROW REPRESENTS RETURN AIR LOCATION AND SMALL ARROWS REPRESENT DISCHARGE LOCATION.

B = BACK OR REAR    L = LEFT    R = RIGHT    F = FRONT    T = TOP

HI-RISE VERTICAL FAN COIL UNITS

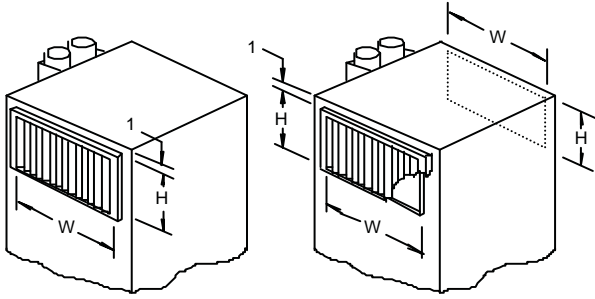
**THE WHALEN COMPANY**  
EASTON, MARYLAND

**DISCHARGE ARRANGEMENTS**  
**PLAN VIEW**

DRAWING NUMBER 411PV

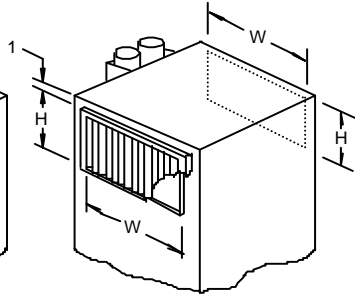
DECEMBER 1998





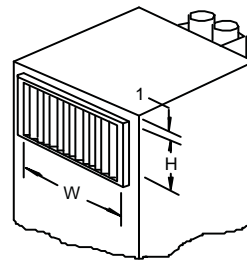
TYPE F  
(FRONT)

SINGLE DEFLECTION  
DOUBLE DEFLECTION



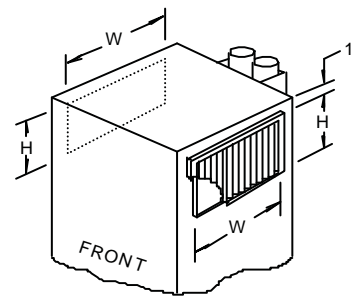
TYPE F-B  
(FRONT & BACK)

SINGLE DEFLECTION  
DOUBLE DEFLECTION



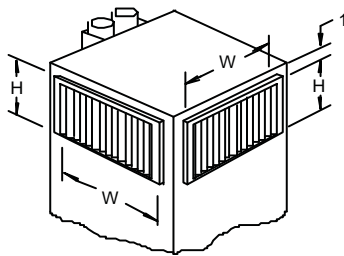
TYPE F  
(FRONT)

SINGLE DEFLECTION  
DOUBLE DEFLECTION



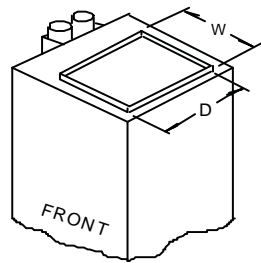
TYPE L-R  
(LEFT & RIGHT)

SINGLE DEFLECTION  
DOUBLE DEFLECTION



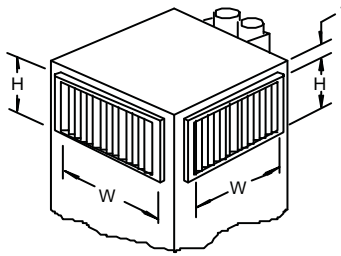
TYPE F-R  
(FRONT & RIGHT)

SINGLE DEFLECTION  
DOUBLE DEFLECTION



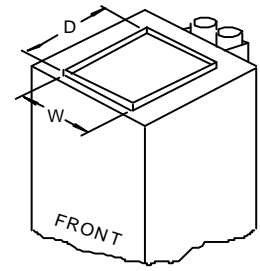
TYPE T  
(TOP DUCTED)

CONSULT FACTORY FOR  
DIMENSIONS NOT SHOWN



TYPE F-R  
(FRONT & RIGHT)

SINGLE DEFLECTION  
DOUBLE DEFLECTION



TYPE T  
(TOP DUCTED)

CONSULT FACTORY FOR  
DIMENSIONS NOT SHOWN

LH SIDE RISER UNITS SHOWN ABOVE  
See Drawing No. 411PV for plan views.

REAR RISER UNITS SHOWN ABOVE  
See Drawing No. 411PV for plan views.

Notes:

1. All standard Whalen supply grilles and registers are fabricated of clear anodized aluminum.
2. See unit schedule for discharge types. Optional supply registers are available with either parallel or opposed blade dampers at extra cost.
3. Supply and return air grilles are shipped loose, for installation after drywall installation is complete.
4. Listed grille and register dimensions are for the grille opening size. All grilles are centered.
5. Unless otherwise noted, the front grille blades will be vertical, as drawn.
6. Avoid combining ducted (Type T) discharge with unit mounted registers. This combination can increase the noise level at the unit.
7. Where Type T is combined with Type F, B, L or R, grille height will be that of a two-grille discharge.

UNIT SIZE	1 Grille Type (F,B,L,R)		2 Grille Type (F-B, F-L, F-R, L-R, B-L, B-R)		3 Grille Type (F-L-R, F-BR, F-B-L)		Top Ducted Type (T)	
	W	H	W	H	W	H	W	D
300	14	8	14	6	14	6	12	10
400	14	10	14	6	14	6	12	12
600	14	14	14	8	14	8	14	14
800	14	18	14	10	14	10	16	14
1000	NOT RECOMMENDED						16	16
1200	NOT RECOMMENDED						16	16

All dimensions in inches.

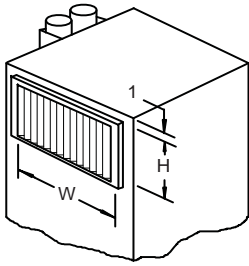
HI-RISE VERTICAL FAN COIL UNITS

THE WHALEN COMPANY  
EASTON, MARYLAND

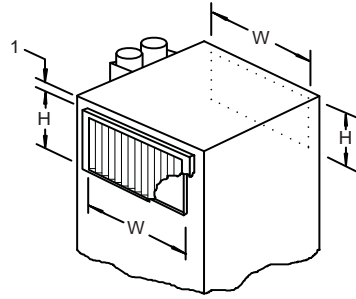
SUPPLY GRILLE DISCHARGE OPTIONS  
ISOMETRIC VIEW

DRAWING NUMBER 411D

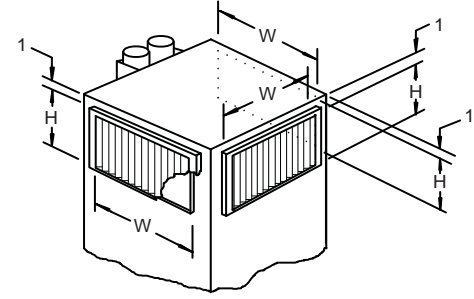
AUGUST 1999



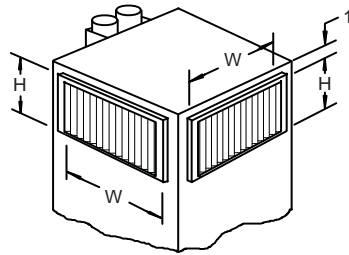
TYPE F  
(FRONT)  
SINGLE DEFLECTION  
DOUBLE DEFLECTION



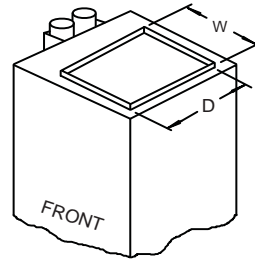
TYPE F-B  
(FRONT & BACK)  
SINGLE DEFLECTION  
DOUBLE DEFLECTION



TYPE F-B-R  
(FRONT, BACK & RIGHT)  
SINGLE DEFLECTION  
DOUBLE DEFLECTION



TYPE F-R  
(FRONT & RIGHT)  
SINGLE DEFLECTION  
DOUBLE DEFLECTION



TYPE T  
(TOP DUCTED)  
CONSULT FACTORY FOR  
DIMENSIONS NOT SHOWN

LH SIDE RISER UNITS SHOWN ABOVE  
See Drawing No. 411PV for plan views.

**\*NOTE - 1200 CFM UNITS ARE NOT AVAILABLE WITH TYPE I DISCHARGE  
TYPE T IS AVAILABLE ON STANDARD 74" UNITS  
ALL OTHER DISCHARGE TYPES REQUIRE 88" CABINET HEIGHT**

Notes:

1. All standard Whalen supply grilles and registers are fabricated of clear anodized aluminum.
2. See unit schedule for discharge types. Optional supply registers are available with either parallel or opposed blade dampers at extra cost.
3. Supply and return air grilles are shipped loose, for installation after drywall installation is complete.
4. Listed grille and register dimensions are for the grille opening size. All grilles are centered.
5. Unless otherwise noted, the front grille blades will be vertical, as drawn.
6. Avoid combining ducted (Type T) discharge with unit mounted registers. This combination can increase the noise level at the unit.
7. Where Type T is combined with Type F, B, L or R, grille height will be that of a two-grille discharge.

UNIT SIZE	1 Grille Type (F,B,L,R)		2 Grille Type (F-B, F-L, F-R, L-R, B-L, B-R)		3 Grille Type (F-L-R, F-B-R, F-B-L)		Top Ducted Type (T)	
	W	H	W	H	W	H	W	D
1000	20	18	20	10	20	6	16	16
1200	20	20	20	10	20	6	16	16

All dimensions in inches.

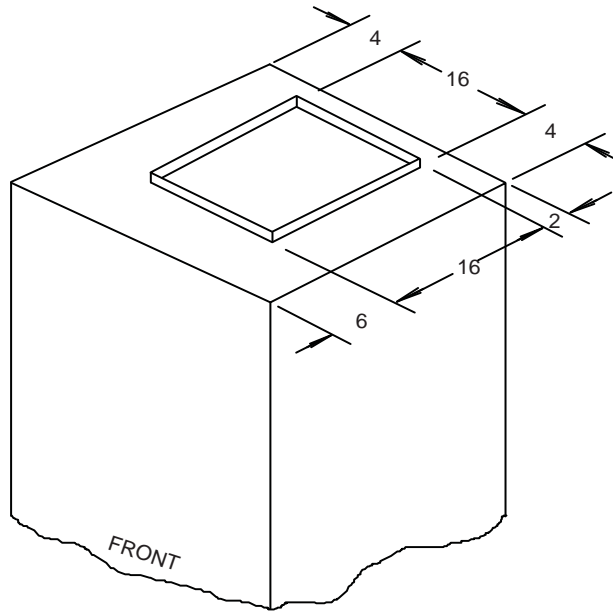
HI-RISE VERTICAL FAN COIL UNITS

THE WHALEN COMPANY  
EASTON, MARYLAND

SUPPLY GRILLE DISCHARGE OPTIONS  
ISOMETRIC VIEW - 1000/1200 CFM UNITS

DRAWING NUMBER 411E-K

JUNE 2006



TYPE T  
(TOP DUCTED)

HI-RISE VERTICAL FAN COIL UNITS

THE WHALEN COMPANY  
EASTON, MARYLAND

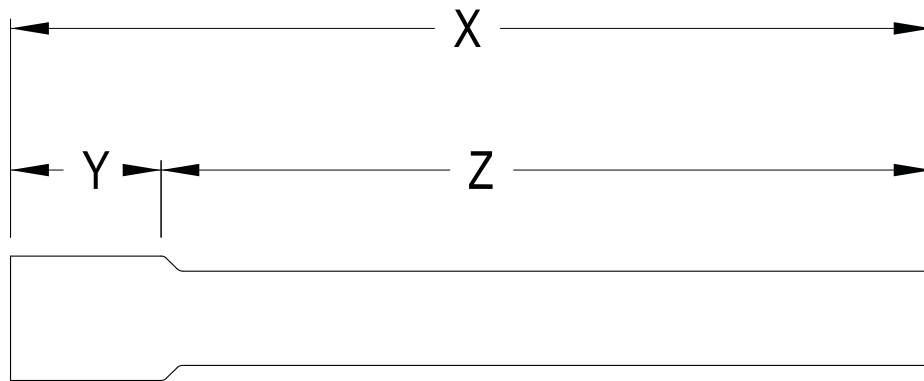
1000 & 1200 CFM TOP DISCHARGE DETAIL  
ISOMETRIC VIEW

DRAWING NUMBER 411-V-K

MAY 2013

# RISER & PIPING DRAWINGS

- Riser Extension Details
- Riser Configuration Details



PIPE SIZE	X	Y	Z
3/4", 1" & 1 1/4"		2	
1 1/2", 2", 2 1/2" & 3"		3	

ALL DIMENSIONS IN INCHES.

NOTE: 1. Allow a minimum of 1" insertion depth for the risers. It is not necessary to have piping inserted to the bottom of any swaged joint on connections.

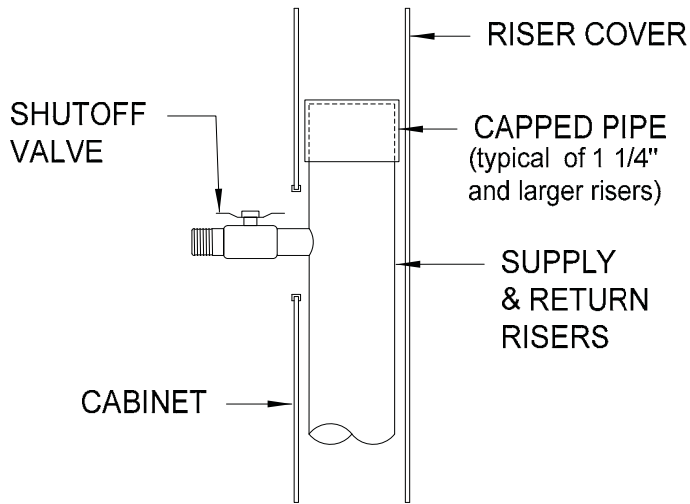
THE WHALEN COMPANY  
EASTON, MARYLAND

RISER EXTENSION DETAIL

DRAWING NO. 161A-BLANK

OCTOBER 2007

## TOP TERMINATED RISER (TTR)



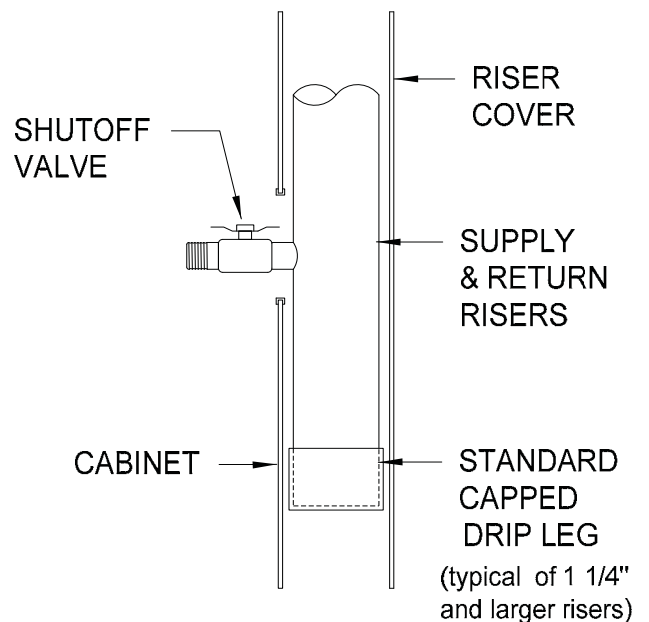
### NOTES:

1. Supply and return risers terminate inside the riser cover of the top unit on each upfeed riser. Joints (except on the valves) are brazed with high temperature silver solder.
2. The air vent is located on the coil piping and is accessible through the return air opening.
3. A 2-pipe unit is supplied with one air vent and a 4-pipe unit is supplied with an air vent on each coil.
4. Ball-type shutoff valves are standard.
5. Top terminated riser units will have **NO INTERNAL CONDENSATE DRAIN RISER** extending through the cabinet top.

## BOTTOM TERMINATED RISER (BTR)

### NOTES:

1. Supply and return risers terminate inside the riser cover of the bottom unit on each downfeed riser. Joints (except on the valves) are brazed with high temperature silver solder.
2. The shutoff valves are accessible through the return air opening.
3. Ball-type shutoff valves are standard.
4. Bottom terminated riser units will be furnished a full length condensate drain riser extending 8" beneath the bottom of the cabinet.
5. Care must be exercised to prevent freezing of water trapped in the drip leg if the system is filled and then drained during construction.



WATER SOURCE HEAT PUMPS

THE WHALEN COMPANY  
EASTON, MARYLAND

TOP AND BOTTOM TERMINATED RISERS  
WF VERTICAL FAN COIL UNITS

DRAWING NO. 442B

OCTOBER 2010

# COOLING / HEATING PERFORMANCE

- Cooling Performance Tables
- Heating Performance Tables

# Fan Coil Performance Data

The Whalen Company

## Model WFC-300

### Cooling Capacity

Entering Water°F	Entering air Water Rise°F	75.0 db°F / 63.0 wb°F				78.0 db°F 65.0 wb°F				80.0 db°F 67.0 wb°F			
		10	12	14	16	10	12	14	16	10	12	14	16
		42	Cool kBTU Sens. kBTU GPM dp FT	8.9 6.7 1.8 4.2	8.0 6.3 1.3 2.3	7.2 5.9 1.0 1.4	6.4 5.6 0.8 0.8	10.0 7.3 2.0 5.3	9.2 6.9 1.5 3.1	8.3 6.5 1.2 1.9	7.5 6.2 0.9 1.2	11.5 7.7 2.3 6.9	10.6 7.3 1.8 4.1
43	Cool kBTU Sens. kBTU GPM dp FT	8.2 6.4 1.6 3.5	7.3 6.0 1.2 2.0	6.5 5.7 0.9 1.1	5.7 5.4 0.7 0.7	9.3 7.0 1.9 4.6	8.5 6.6 1.4 2.6	7.6 6.3 1.1 1.6	6.8 6.0 0.9 1.0	10.7 7.4 2.1 6.1	9.8 7.0 1.6 3.6	9.0 6.7 1.3 2.2	8.1 6.4 1.0 1.4
44	Cool kBTU Sens. kBTU GPM dp FT	7.5 6.1 1.5 3.0	6.6 5.7 1.1 1.6	5.9 5.4 0.8 0.9	5.1 5.1 0.6 0.5	8.6 6.7 1.7 3.9	7.8 6.3 1.3 2.2	7.0 6.0 1.0 1.3	6.2 5.7 0.8 0.8	10.0 7.1 2.0 5.3	9.1 6.7 1.5 3.1	8.3 6.4 1.2 1.9	7.5 6.1 0.9 1.2
45	Cool kBTU Sens. kBTU GPM dp FT	6.8 5.8 1.4 2.5	6.0 5.5 1.0 1.3	5.2 5.2 0.8 0.7	4.6 4.6 0.6 0.4	8.0 6.4 1.6 3.3	7.1 6.1 1.2 1.9	6.3 5.8 0.9 1.1	5.6 5.5 0.7 0.7	9.3 6.8 1.9 4.6	8.4 6.5 1.4 2.6	7.6 6.2 1.1 1.6	6.8 5.9 0.9 1.0
46	Cool kBTU Sens. kBTU GPM dp FT	6.2 5.5 1.2 2.0	5.4 5.2 0.9 1.1	4.7 4.7 0.7 0.6	4.0 4.0 0.5 0.3	7.3 6.2 1.5 2.8	6.5 5.8 1.1 1.5	5.7 5.6 0.8 0.9	5.0 5.0 0.6 0.5	8.6 6.5 1.7 3.9	7.8 6.2 1.3 2.2	7.0 5.9 1.0 1.3	6.2 5.6 0.8 0.8
47	Cool kBTU Sens. kBTU GPM dp FT	5.5 5.3 1.1 1.6	4.8 4.8 0.8 0.8	4.1 4.1 0.6 0.5	3.5 3.5 0.4 0.3	6.7 5.9 1.3 2.3	5.9 5.6 1.0 1.3	5.2 5.2 0.7 0.7	4.5 4.5 0.6 0.4	7.9 6.3 1.6 3.3	7.1 6.0 1.2 1.9	6.3 5.7 0.9 1.1	5.6 5.4 0.7 0.7
48	Cool kBTU Sens. kBTU GPM dp FT	4.9 4.9 1.0 1.3	4.2 4.2 0.7 0.7	3.6 3.6 0.5 0.4	3.1 3.1 0.4 0.2	6.0 5.7 1.2 1.9	5.3 5.3 0.9 1.0	4.6 4.6 0.7 0.6	4.0 4.0 0.5 0.3	7.3 6.0 1.5 2.8	6.5 5.7 1.1 1.5	5.7 5.5 0.8 0.9	5.1 5.1 0.6 0.5

### Heating Capacity - 2Pipe configuration

Entering Water°F	Entering air Water Rise°F	65.0 db°F				70.0 db°F				75.0 db°F			
		15	20	25	30	15	20	25	30	15	20	25	30
		120	Heat kBTU GPM dp FT	14.1 1.9 4.7	12.9 1.3 2.2	11.7 0.9 1.2	10.6 0.7 0.7	12.5 1.7 3.7	11.3 1.1 1.7	10.1 0.8 0.9	9.1 0.6 0.5	10.9 1.4 2.8	9.7 1.0 1.2
130	Heat kBTU GPM dp FT	17.4 2.3 7.1	16.1 1.6 3.4	14.9 1.2 1.9	13.7 0.9 1.1	15.7 2.1 5.8	14.5 1.4 2.8	13.3 1.1 1.5	12.2 0.8 0.9	14.1 1.9 4.7	12.9 1.3 2.2	11.7 0.9 1.2	10.6 0.7 0.7
140	Heat kBTU GPM dp FT	20.6 2.8 10.0	19.4 1.9 5.0	18.1 1.4 2.8	16.9 1.1 1.7	19.0 2.5 8.5	17.7 1.8 4.2	16.5 1.3 2.3	15.3 1.0 1.4	17.4 2.3 7.1	16.1 1.6 3.4	14.9 1.2 1.9	13.7 0.9 1.1
150	Heat kBTU GPM dp FT	23.9 3.2 13.4	22.6 2.3 6.8	21.4 1.7 3.9	20.1 1.3 2.4	22.3 3.0 11.7	21.0 2.1 5.8	19.7 1.6 3.3	18.5 1.2 2.0	20.6 2.8 10.0	19.4 1.9 5.0	18.1 1.4 2.8	16.9 1.1 1.7

### Heating Capacity - 4Pipe configuration (Standard coils- other coils available)

Entering Water°F	Entering air Water Rise°F	65.0 db°F				70.0 db°F				75.0 db°F			
		30	40	50	60	30	40	50	60	30	40	50	60
		160	Heat kBTU GPM dp FT	11.3 0.8 2.1	10.1 0.5 0.9	8.9 0.4 0.5	7.8 0.3 0.3	10.5 0.7 1.8	9.3 0.5 0.8	8.1 0.3 0.4	7.1 0.2 0.2	9.7 0.6 1.6	8.5 0.4 0.7
180	Heat kBTU GPM dp FT	14.4 1.0 3.5	13.2 0.7 1.6	12.0 0.5 0.9	10.8 0.4 0.5	13.6 0.9 3.1	12.4 0.6 1.4	11.2 0.4 0.8	10.1 0.3 0.4	12.8 0.9 2.7	11.6 0.6 1.3	10.4 0.4 0.7	9.3 0.3 0.4



# Fan Coil Performance Data

The Whalen Company

## Model WFD-300

### Cooling Capacity

Entering Water°F	Entering air Water Rise°F	75.0 db°F / 63.0 wb°F				78.0 db°F 65.0 wb°F				80.0 db°F 67.0 wb°F			
		10	12	14	16	10	12	14	16	10	12	14	16
		42	Cool kBTU Sens. kBTU GPM dp FT	11.0 7.6 2.2 13.6	10.1 7.2 1.7 8.0	9.2 6.8 1.3 4.9	8.4 6.5 1.0 3.1	12.4 8.3 2.5 17.2	11.5 7.9 1.9 10.3	10.6 7.5 1.5 6.4	9.7 7.2 1.2 4.2	14.0 8.8 2.8 22.1	13.1 8.4 2.2 13.4
43	Cool kBTU Sens. kBTU GPM dp FT	10.2 7.3 2.0 11.7	9.3 6.9 1.5 6.8	8.4 6.5 1.2 4.1	7.6 6.1 0.9 2.5	11.5 7.9 2.3 15.0	10.7 7.5 1.8 8.9	9.8 7.2 1.4 5.5	8.9 6.8 1.1 3.5	13.1 8.4 2.6 19.5	12.3 8.0 2.0 11.8	11.4 7.7 1.6 7.4	10.5 7.3 1.3 4.9
44	Cool kBTU Sens. kBTU GPM dp FT	9.4 6.9 1.9 9.9	8.5 6.5 1.4 5.7	7.7 6.2 1.1 3.4	6.8 5.8 0.9 2.1	10.7 7.6 2.1 12.9	9.9 7.2 1.6 7.6	9.0 6.9 1.3 4.7	8.2 6.5 1.0 2.9	12.3 8.1 2.5 17.1	11.4 7.7 1.9 10.2	10.6 7.3 1.5 6.4	9.7 7.0 1.2 4.2
45	Cool kBTU Sens. kBTU GPM dp FT	8.6 6.6 1.7 8.3	7.8 6.2 1.3 4.7	6.9 5.9 1.0 2.8	6.1 5.5 0.8 1.6	9.9 7.2 2.0 11.1	9.1 6.9 1.5 6.5	8.3 6.6 1.2 3.9	7.4 6.2 0.9 2.4	11.5 7.7 2.3 14.9	10.6 7.4 1.8 8.8	9.8 7.0 1.4 5.5	8.9 6.7 1.1 3.5
46	Cool kBTU Sens. kBTU GPM dp FT	7.8 6.2 1.6 6.9	7.0 5.9 1.2 3.8	6.2 5.6 0.9 2.2	5.4 5.3 0.7 1.3	9.2 6.9 1.8 9.5	8.3 6.6 1.4 5.4	7.5 6.3 1.1 3.3	6.7 6.0 0.8 2.0	10.7 7.4 2.1 12.9	9.8 7.0 1.6 7.6	9.0 6.7 1.3 4.7	8.2 6.4 1.0 3.0
47	Cool kBTU Sens. kBTU GPM dp FT	7.1 5.9 1.4 5.7	6.3 5.6 1.0 3.1	5.5 5.3 0.8 1.7	4.7 4.7 0.6 1.0	8.4 6.6 1.7 8.0	7.6 6.3 1.3 4.5	6.8 6.0 1.0 2.7	6.0 5.7 0.8 1.6	9.9 7.1 2.0 11.1	9.1 6.7 1.5 6.5	8.3 6.4 1.2 3.9	7.5 6.1 0.9 2.4
48	Cool kBTU Sens. kBTU GPM dp FT	6.4 5.7 1.3 4.6	5.6 5.3 0.9 2.4	4.8 4.8 0.7 1.3	4.1 4.1 0.5 0.7	7.7 6.3 1.5 6.7	6.9 6.0 1.2 3.7	6.1 5.7 0.9 2.1	5.4 5.4 0.7 1.3	9.2 6.8 1.8 9.5	8.3 6.5 1.4 5.4	7.5 6.1 1.1 3.3	6.7 5.9 0.8 2.0

### Heating Capacity - 2Pipe configuration

Entering Water°F	Entering air Water Rise°F	65.0 db°F				70.0 db°F				75.0 db°F			
		15	20	25	30	15	20	25	30	15	20	25	30
		120	Heat kBTU GPM dp FT	14.5 1.9 10.5	13.4 1.3 5.1	12.3 1.0 2.7	11.3 0.8 1.6	12.9 1.7 8.3	11.8 1.2 3.9	10.7 0.9 2.1	9.7 0.6 1.2	11.3 1.5 6.4	10.2 1.0 2.9
130	Heat kBTU GPM dp FT	17.8 2.4 15.8	16.6 1.7 7.8	15.5 1.2 4.4	14.5 1.0 2.6	16.1 2.2 13.0	15.0 1.5 6.4	13.9 1.1 3.5	12.9 0.9 2.1	14.5 1.9 10.5	13.4 1.3 5.1	12.3 1.0 2.7	11.3 0.8 1.6
140	Heat kBTU GPM dp FT	21.0 2.8 22.1	19.9 2.0 11.1	18.8 1.5 6.4	17.7 1.2 3.9	19.4 2.6 18.8	18.3 1.8 9.4	17.2 1.4 5.3	16.1 1.1 3.2	17.8 2.4 15.8	16.6 1.7 7.8	15.6 1.2 4.4	14.5 1.0 2.6
150	Heat kBTU GPM dp FT	24.3 3.2 29.5	23.1 2.3 15.1	22.0 1.8 8.7	20.9 1.4 5.5	22.6 3.0 25.7	21.5 2.2 13.0	20.4 1.6 7.5	19.3 1.3 4.7	21.0 2.8 22.1	19.9 2.0 11.1	18.8 1.5 6.4	17.7 1.2 3.9

### Heating Capacity - 4Pipe configuration (Standard coils- other coils available)

Entering Water°F	Entering air Water Rise°F	65.0 db°F				70.0 db°F				75.0 db°F			
		30	40	50	60	30	40	50	60	30	40	50	60
		160	Heat kBTU GPM dp FT	11.1 0.7 2.0	9.9 0.5 0.9	8.7 0.3 0.5	7.7 0.3 0.2	10.3 0.7 1.8	9.1 0.5 0.8	8.0 0.3 0.4	7.0 0.2 0.2	9.5 0.6 1.5	8.4 0.4 0.7
180	Heat kBTU GPM dp FT	14.1 0.9 3.3	12.9 0.6 1.6	11.8 0.5 0.8	10.6 0.4 0.5	13.4 0.9 3.0	12.2 0.6 1.4	11.0 0.4 0.7	9.9 0.3 0.4	12.6 0.8 2.6	11.4 0.6 1.2	10.2 0.4 0.6	9.2 0.3 0.3

Last Updated 9/05

# Fan Coil Performance Data

# The Whalen Company

## Model WFC-400

### Cooling Capacity

Entering Water°F	Entering air Water Rise°F	75.0 db°F / 63.0 wb°F				78.0 db°F 65.0 wb°F				80.0 db°F 67.0 wb°F			
		10	12	14	16	10	12	14	16	10	12	14	16
		42	Cool kBTU Sens. kBTU GPM dp FT	12.2 9.0 2.4 10.8	11.1 8.6 1.9 6.2	10.1 8.1 1.4 3.7	9.0 7.7 1.1 2.3	13.8 9.8 2.8 13.7	12.7 9.4 2.1 8.0	11.6 8.9 1.7 5.0	10.6 8.5 1.3 3.2	15.7 10.4 3.1 17.7	14.6 9.9 2.4 10.6
43	Cool kBTU Sens. kBTU GPM dp FT	11.3 8.6 2.3 9.2	10.2 8.2 1.7 5.2	9.2 7.8 1.3 3.1	8.2 7.4 1.0 1.9	12.8 9.4 2.6 11.8	11.8 9.0 2.0 6.9	10.7 8.6 1.5 4.2	9.7 8.2 1.2 2.6	14.7 10.0 2.9 15.5	13.6 9.5 2.3 9.2	12.5 9.1 1.8 5.8	11.5 8.7 1.4 3.7
44	Cool kBTU Sens. kBTU GPM dp FT	10.4 8.3 2.1 7.7	9.3 7.8 1.6 4.3	8.3 7.4 1.2 2.5	7.3 7.0 0.9 1.5	11.9 9.1 2.4 10.2	10.9 8.6 1.8 5.9	9.8 8.2 1.4 3.5	8.8 7.8 1.1 2.2	13.7 9.6 2.7 13.6	12.7 9.2 2.1 8.0	11.6 8.7 1.7 4.9	10.6 8.4 1.3 3.1
45	Cool kBTU Sens. kBTU GPM dp FT	9.5 7.9 1.9 6.5	8.4 7.5 1.4 3.6	7.5 7.1 1.1 2.0	6.5 6.5 0.8 1.2	11.0 8.7 2.2 8.7	10.0 8.3 1.7 5.0	9.0 7.9 1.3 3.0	8.0 7.5 1.0 1.8	12.8 9.2 2.6 11.8	11.7 8.8 2.0 6.9	10.7 8.4 1.5 4.2	9.7 8.0 1.2 2.6
46	Cool kBTU Sens. kBTU GPM dp FT	8.6 7.5 1.7 5.3	7.6 7.1 1.3 2.9	6.6 6.6 0.9 1.6	5.7 5.7 0.7 0.9	10.1 8.4 2.0 7.4	9.1 8.0 1.5 4.2	8.1 7.6 1.2 2.4	7.2 7.2 0.9 1.5	11.9 8.9 2.4 10.2	10.8 8.5 1.8 5.9	9.8 8.1 1.4 3.5	8.8 7.7 1.1 2.2
47	Cool kBTU Sens. kBTU GPM dp FT	7.8 7.2 1.6 4.3	6.8 6.8 1.1 2.3	5.9 5.9 0.8 1.3	5.0 5.0 0.6 0.7	9.3 8.0 1.9 6.2	8.3 7.6 1.4 3.4	7.3 7.3 1.0 2.0	6.4 6.4 0.8 1.2	11.0 8.5 2.2 8.7	10.0 8.1 1.7 5.0	9.0 7.8 1.3 3.0	8.0 7.4 1.0 1.8
48	Cool kBTU Sens. kBTU GPM dp FT	7.0 6.9 1.4 3.5	6.0 6.0 1.0 1.8	5.1 5.1 0.7 1.0	4.3 4.3 0.5 0.5	8.5 7.7 1.7 5.1	7.5 7.3 1.2 2.8	6.6 6.6 0.9 1.6	5.7 5.7 0.7 0.9	10.1 8.2 2.0 7.4	9.1 7.8 1.5 4.2	8.1 7.5 1.2 2.4	7.2 7.1 0.9 1.5

### Heating Capacity - 2Pipe configuration

Entering Water°F	Entering air Water Rise°F	65.0 db°F				70.0 db°F				75.0 db°F			
		15	20	25	30	15	20	25	30	15	20	25	30
		120	Heat kBTU GPM dp FT	17.4 2.3 9.7	16.0 1.6 4.6	14.6 1.2 2.4	13.2 0.9 1.4	15.4 2.1 7.6	14.0 1.4 3.5	12.6 1.0 1.8	11.3 0.8 1.0	13.5 1.8 5.8	12.1 1.2 2.6
130	Heat kBTU GPM dp FT	21.4 2.9 14.6	19.9 2.0 7.1	18.5 1.5 3.9	17.1 1.1 2.3	19.4 2.6 12.0	17.9 1.8 5.8	16.5 1.3 3.1	15.2 1.0 1.8	17.4 2.3 9.7	16.0 1.6 4.6	14.6 1.2 2.4	13.2 0.9 1.4
140	Heat kBTU GPM dp FT	25.4 3.4 20.6	23.9 2.4 10.3	22.4 1.8 5.8	21.0 1.4 3.5	23.4 3.1 17.5	21.9 2.2 8.6	20.5 1.6 4.8	19.1 1.3 2.9	21.4 2.9 14.6	19.9 2.0 7.1	18.5 1.5 3.9	17.1 1.1 2.3
150	Heat kBTU GPM dp FT	29.3 3.9 27.5	27.8 2.8 14.0	26.4 2.1 8.0	24.9 1.7 5.0	27.3 3.6 23.9	25.9 2.6 12.0	24.4 2.0 6.9	23.0 1.5 4.2	25.4 3.4 20.6	23.9 2.4 10.3	22.4 1.8 5.8	21.0 1.4 3.5

### Heating Capacity - 4Pipe configuration (Standard coils- other coils available)

Entering Water°F	Entering air Water Rise°F	65.0 db°F				70.0 db°F				75.0 db°F			
		30	40	50	60	30	40	50	60	30	40	50	60
		160	Heat kBTU GPM dp FT	13.3 0.9 4.6	11.9 0.6 2.1	10.6 0.4 1.1	9.4 0.3 0.6	12.4 0.8 4.0	11.0 0.6 1.8	9.7 0.4 0.9	8.5 0.3 0.5	11.5 0.8 3.4	10.1 0.5 1.5
180	Heat kBTU GPM dp FT	17.0 1.1 7.5	15.6 0.8 3.5	14.2 0.6 1.9	12.9 0.4 1.1	16.1 1.1 6.7	14.7 0.7 3.1	13.3 0.5 1.7	12.0 0.4 0.9	15.1 1.0 5.9	13.8 0.7 2.8	12.4 0.5 1.4	11.1 0.4 0.8

# Fan Coil Performance Data

The Whalen Company

## Model WFD-400

### Cooling Capacity

Entering Water°F	Entering air Water Rise°F	75.0 db°F / 63.0 wb°F				78.0 db°F 65.0 wb°F				80.0 db°F 67.0 wb°F			
		10	12	14	16	10	12	14	16	10	12	14	16
		42	Cool kBTU Sens. kBTU GPM dp FT	14.5 9.7 2.9 8.1	13.2 9.1 2.2 4.6	11.9 8.5 1.7 2.8	10.6 8.0 1.3 1.7	16.4 10.6 3.3 10.3	15.0 10.0 2.5 6.0	13.7 9.4 2.0 3.7	12.5 8.9 1.6 2.3	18.6 11.4 3.7 13.3	17.3 10.7 2.9 7.9
43	Cool kBTU Sens. kBTU GPM dp FT	13.4 9.2 2.7 6.9	12.1 8.6 2.0 3.9	10.8 8.0 1.5 2.3	9.6 7.5 1.2 1.4	15.2 10.1 3.0 8.9	13.9 9.5 2.3 5.1	12.6 8.9 1.8 3.1	11.4 8.4 1.4 1.9	17.5 10.8 3.5 11.7	16.1 10.2 2.7 6.9	14.8 9.6 2.1 4.3	13.5 8.6 1.7 2.7
44	Cool kBTU Sens. kBTU GPM dp FT	12.3 8.7 2.5 5.8	11.0 8.1 1.8 3.2	9.8 7.6 1.4 1.9	8.6 7.1 1.1 1.1	14.1 9.6 2.8 7.6	12.8 9.0 2.1 4.4	11.6 8.5 1.7 2.6	10.4 8.0 1.3 1.6	16.3 10.3 3.3 10.2	15.0 9.7 2.5 6.0	13.7 9.2 2.0 3.7	12.5 8.6 1.6 2.3
45	Cool kBTU Sens. kBTU GPM dp FT	11.2 8.2 2.2 4.8	10.0 7.7 1.7 2.6	8.8 7.2 1.3 1.5	7.7 6.7 1.0 0.9	13.1 9.1 2.6 6.5	11.8 8.6 2.0 3.7	10.6 8.1 1.5 2.2	9.4 7.6 1.2 1.3	15.2 9.8 3.0 8.8	13.9 9.2 2.3 5.1	12.6 8.7 1.8 3.1	11.4 8.2 1.4 1.9
46	Cool kBTU Sens. kBTU GPM dp FT	10.2 7.8 2.0 4.0	9.0 7.2 1.5 2.1	7.8 6.8 1.1 1.2	6.8 6.4 0.8 0.7	12.0 8.7 2.4 5.5	10.8 8.1 1.8 3.1	9.6 7.7 1.4 1.8	8.5 7.2 1.1 1.1	14.1 9.3 2.8 7.6	12.8 8.8 2.1 4.4	11.6 8.3 1.7 2.6	10.4 7.8 1.3 1.6
47	Cool kBTU Sens. kBTU GPM dp FT	9.2 7.3 1.8 3.2	8.0 6.9 1.3 1.7	6.9 6.4 1.0 0.9	5.9 5.9 0.7 0.5	11.0 8.2 2.2 4.6	9.8 7.7 1.6 2.5	8.6 7.3 1.2 1.5	7.6 6.9 0.9 0.9	13.0 8.9 2.6 6.5	11.8 8.4 2.0 3.7	10.6 7.9 1.5 2.2	9.4 7.5 1.2 1.3
48	Cool kBTU Sens. kBTU GPM dp FT	8.2 6.9 1.6 2.6	7.1 6.5 1.2 1.3	6.0 6.0 0.9 0.7	5.1 5.1 0.6 0.4	10.0 7.8 2.0 3.8	8.8 7.4 1.5 2.1	7.7 6.9 1.1 1.2	6.7 6.6 0.8 0.7	12.0 8.5 2.4 5.5	10.8 8.0 1.8 3.1	9.6 7.5 1.4 1.8	8.5 7.1 1.1 1.1

### Heating Capacity - 2Pipe configuration

Entering Water°F	Entering air Water Rise°F	65.0 db°F				70.0 db°F				75.0 db°F			
		15	20	25	30	15	20	25	30	15	20	25	30
		120	Heat kBTU GPM dp FT	18.2 2.4 5.7	16.7 1.7 2.7	15.2 1.2 1.4	13.8 0.9 0.8	16.1 2.2 4.4	14.6 1.5 2.0	13.2 1.1 1.1	11.8 0.8 0.6	14.1 1.9 3.4	12.6 1.3 1.5
130	Heat kBTU GPM dp FT	22.4 3.0 8.6	20.8 2.1 4.2	19.3 1.5 2.3	17.8 1.2 1.4	20.3 2.7 7.0	18.8 1.9 3.4	17.2 1.4 1.8	15.8 1.1 1.1	18.2 2.4 5.7	16.7 1.7 2.7	15.2 1.2 1.4	13.8 0.9 0.8
140	Heat kBTU GPM dp FT	26.6 3.5 12.1	25.0 2.5 6.0	23.4 1.9 3.4	21.9 1.5 2.0	24.5 3.3 10.2	22.9 2.3 5.0	21.4 1.7 2.8	19.9 1.3 1.7	22.4 3.0 8.6	20.8 2.1 4.2	19.3 1.5 2.3	17.8 1.2 1.3
150	Heat kBTU GPM dp FT	30.8 4.1 16.2	29.2 2.9 8.2	27.6 2.2 4.7	26.0 1.7 2.9	28.7 3.8 14.0	27.1 2.7 7.0	25.5 2.0 4.0	24.0 1.6 2.4	26.6 3.5 12.1	25.0 2.5 6.0	23.4 1.9 3.4	21.9 1.5 2.0

### Heating Capacity - 4Pipe configuration (Standard coils- other coils available)

Entering Water°F	Entering air Water Rise°F	65.0 db°F				70.0 db°F				75.0 db°F			
		30	40	50	60	30	40	50	60	30	40	50	60
		160	Heat kBTU GPM dp FT	13.1 0.9 4.4	11.8 0.6 2.0	10.5 0.4 1.0	9.2 0.3 0.6	12.2 0.8 3.8	10.9 0.5 1.7	9.6 0.4 0.9	8.4 0.3 0.5	11.3 0.8 3.3	10.0 0.5 1.4
180	Heat kBTU GPM dp FT	16.7 1.1 7.2	15.4 0.8 3.4	14.0 0.6 1.8	12.7 0.4 1.0	15.8 1.1 6.5	14.5 0.7 3.0	13.1 0.5 1.6	11.9 0.4 0.9	14.9 1.0 5.8	13.6 0.7 2.7	12.2 0.5 1.4	11.0 0.4 0.8

Last Updated 9/05

# Fan Coil Performance Data

The Whalen Company

## Model WFC-600

### Cooling Capacity

Entering Water°F	Entering air Water Rise°F	75.0 db°F / 63.0 wb°F				78.0 db°F 65.0 wb°F				80.0 db°F 67.0 wb°F			
		10	12	14	16	10	12	14	16	10	12	14	16
		42	Cool kBTU Sens. kBTU GPM dp FT	18.0 13.3 3.6 14.6	16.5 12.7 2.8 8.6	15.1 12.1 2.2 5.2	13.6 11.5 1.7 3.3	20.2 14.5 4.0 18.4	18.7 13.9 3.1 11.0	17.3 13.3 2.5 6.9	15.9 12.7 2.0 4.4	22.9 15.3 4.6 23.7	21.4 14.6 3.6 14.4
43	Cool kBTU Sens. kBTU GPM dp FT	16.6 12.8 3.3 12.5	15.2 12.2 2.5 7.2	13.8 11.6 2.0 4.4	12.4 11.0 1.5 2.7	18.8 13.9 3.8 16.0	17.4 13.3 2.9 9.5	16.0 12.8 2.3 5.9	14.6 12.2 1.8 3.8	21.5 14.7 4.3 20.9	20.0 14.1 3.3 12.6	18.6 13.5 2.7 8.0	17.2 13.0 2.1 5.2
44	Cool kBTU Sens. kBTU GPM dp FT	15.3 12.2 3.1 10.6	13.9 11.6 2.3 6.1	12.5 11.1 1.8 3.6	11.1 10.5 1.4 2.2	17.5 13.4 3.5 13.9	16.1 12.8 2.7 8.1	14.7 12.3 2.1 5.0	13.3 11.7 1.7 3.1	20.1 14.1 4.0 18.3	18.7 13.5 3.1 11.0	17.3 13.0 2.5 6.9	15.8 12.5 2.0 4.4
45	Cool kBTU Sens. kBTU GPM dp FT	14.1 11.7 2.8 8.9	12.6 11.1 2.1 5.0	11.3 10.6 1.6 2.9	9.9 9.9 1.2 1.7	16.2 12.9 3.2 11.9	14.8 12.3 2.5 6.9	13.5 11.8 1.9 4.2	12.1 11.3 1.5 2.6	18.8 13.6 3.8 16.0	17.4 13.0 2.9 9.5	16.0 12.5 2.3 5.9	14.6 12.0 1.8 3.8
46	Cool kBTU Sens. kBTU GPM dp FT	12.8 11.2 2.6 7.4	11.4 10.6 1.9 4.1	10.1 10.1 1.4 2.3	8.8 8.8 1.1 1.4	15.0 12.4 3.0 10.2	13.6 11.8 2.3 5.8	12.2 11.3 1.8 3.5	10.9 10.8 1.4 2.1	17.5 13.1 3.5 13.8	16.1 12.5 2.7 8.1	14.7 12.0 2.1 5.0	13.3 11.5 1.7 3.1
47	Cool kBTU Sens. kBTU GPM dp FT	11.6 10.7 2.3 6.1	10.2 10.2 1.7 3.3	8.9 8.9 1.3 1.8	7.6 7.6 1.0 1.0	13.8 11.9 2.8 8.6	12.4 11.4 2.1 4.8	11.1 10.9 1.6 2.8	9.8 9.8 1.2 1.7	16.2 12.6 3.2 11.9	14.8 12.1 2.5 6.9	13.5 11.6 1.9 4.2	12.1 11.1 1.5 2.6
48	Cool kBTU Sens. kBTU GPM dp FT	10.4 10.3 2.1 4.9	9.1 9.1 1.5 2.6	7.8 7.8 1.1 1.4	6.6 6.6 0.8 0.8	12.6 11.4 2.5 7.2	11.2 10.9 1.9 4.0	9.9 9.9 1.4 2.3	8.7 8.7 1.1 1.3	15.0 12.1 3.0 10.1	13.6 11.6 2.3 5.8	12.3 11.1 1.8 3.5	11.0 10.7 1.4 2.1

### Heating Capacity - 2Pipe configuration

Entering Water°F	Entering air Water Rise°F	65.0 db°F				70.0 db°F				75.0 db°F			
		15	20	25	30	15	20	25	30	15	20	25	30
		120	Heat kBTU GPM dp FT	27.8 3.7 15.5	25.8 2.6 7.5	23.7 1.9 4.1	21.7 1.4 2.4	24.7 3.3 12.3	22.7 2.3 5.8	20.6 1.7 3.1	18.7 1.2 1.8	21.6 2.9 9.4	19.6 2.0 4.3
130	Heat kBTU GPM dp FT	34.0 4.5 23.2	31.9 3.2 11.5	29.9 2.4 6.5	27.8 1.9 3.9	30.9 4.1 19.2	28.8 2.9 9.4	26.8 2.1 5.2	24.8 1.7 3.1	27.8 3.7 15.5	25.8 2.6 7.5	23.7 1.9 4.1	21.7 1.4 2.4
140	Heat kBTU GPM dp FT	40.2 5.4 32.5	38.1 3.8 16.4	36.1 2.9 9.4	34.0 2.3 5.8	37.1 4.9 27.6	35.0 3.5 13.9	33.0 2.6 7.9	30.9 2.1 4.8	22.5 3.0 10.2	31.9 3.2 11.5	29.9 2.4 6.5	27.9 1.9 3.9
150	Heat kBTU GPM dp FT	46.4 6.2 43.2	44.3 4.4 22.2	42.2 3.4 12.9	40.2 2.7 8.1	43.3 5.8 37.6	41.2 4.1 19.2	39.1 3.1 11.1	37.1 2.5 6.9	40.2 5.4 32.4	38.1 3.8 16.4	36.0 2.9 9.4	34.0 2.3 5.8

### Heating Capacity - 4Pipe configuration (Standard coils- other coils available)

Entering Water°F	Entering air Water Rise°F	65.0 db°F				70.0 db°F				75.0 db°F			
		30	40	50	60	30	40	50	60	30	40	50	60
		160	Heat kBTU GPM dp FT	20.4 1.4 11.1	18.5 0.9 5.2	16.7 0.7 2.7	14.8 0.5 1.5	19.1 1.3 9.7	17.2 0.9 4.4	15.3 0.6 2.3	13.5 0.5 1.2	17.7 1.2 8.3	15.8 0.8 3.7
180	Heat kBTU GPM dp FT	25.9 1.7 17.9	24.0 1.2 8.7	22.1 0.9 4.7	20.3 0.7 2.7	24.6 1.6 16.1	22.7 1.1 7.7	20.8 0.8 4.1	18.9 0.6 2.4	23.2 1.5 14.3	21.3 1.1 6.8	19.4 0.8 3.6	17.6 0.6 2.1

Last Updated 9/05

# Fan Coil Performance Data

The Whalen Company

## Model WFD-600

### Cooling Capacity

Entering Water°F	Entering air Water Rise°F	75.0 db°F / 63.0 wb°F				78.0 db°F 65.0 wb°F				80.0 db°F 67.0 wb°F			
		10	12	14	16	10	12	14	16	10	12	14	16
		42	Cool kBTU Sens. kBTU GPM dp FT	22.0 14.8 4.4 9.5	20.2 14.0 3.4 5.5	18.3 13.1 2.6 3.4	16.6 12.4 2.1 2.1	24.7 16.2 4.9 11.9	22.9 15.3 3.8 7.1	21.1 14.5 3.0 4.4	19.3 13.7 2.4 2.8	28.1 17.2 5.6 15.4	26.2 16.4 4.4 9.3
43	Cool kBTU Sens. kBTU GPM dp FT	20.3 14.1 4.1 8.1	18.5 13.2 3.1 4.7	16.7 12.4 2.4 2.8	15.0 11.7 1.9 1.7	23.1 15.4 4.6 10.4	21.3 14.6 3.5 6.1	19.5 13.8 2.8 3.8	17.7 13.1 2.2 2.4	26.3 16.4 5.3 13.6	24.5 15.6 4.1 8.1	22.7 14.8 3.2 5.1	20.9 14.1 2.6 3.3
44	Cool kBTU Sens. kBTU GPM dp FT	18.7 13.3 3.7 6.9	16.9 12.5 2.8 3.9	15.2 11.8 2.2 2.3	13.5 11.1 1.7 1.4	21.4 14.7 4.3 9.0	19.7 13.9 3.3 5.2	17.9 13.1 2.6 3.2	16.2 12.4 2.0 2.0	24.6 15.7 4.9 11.9	22.8 14.9 3.8 7.1	21.0 14.1 3.0 4.4	19.3 13.4 2.4 2.8
45	Cool kBTU Sens. kBTU GPM dp FT	17.2 12.6 3.4 5.8	15.4 11.9 2.6 3.2	13.7 11.2 2.0 1.9	12.0 10.5 1.5 1.1	19.9 14.0 4.0 7.7	18.1 13.2 3.0 4.4	16.4 12.5 2.3 2.7	14.7 11.8 1.8 1.6	23.0 15.0 4.6 10.3	21.2 14.2 3.5 6.1	19.4 13.5 2.8 3.8	17.7 12.8 2.2 2.4
46	Cool kBTU Sens. kBTU GPM dp FT	15.6 12.0 3.1 4.8	13.9 11.2 2.3 2.6	12.2 10.6 1.7 1.5	10.6 9.9 1.3 0.9	18.3 13.3 3.7 6.6	16.6 12.6 2.8 3.7	14.9 11.9 2.1 2.2	13.2 11.3 1.7 1.3	21.4 14.3 4.3 8.9	19.6 13.5 3.3 5.2	17.9 12.8 2.6 3.2	16.2 12.2 2.0 2.0
47	Cool kBTU Sens. kBTU GPM dp FT	14.1 11.3 2.8 3.9	12.4 10.6 2.1 2.1	10.8 10.0 1.5 1.2	9.2 9.2 1.2 0.7	16.8 12.7 3.4 5.5	15.1 12.0 2.5 3.1	13.4 11.3 1.9 1.8	11.8 10.7 1.5 1.1	19.8 13.6 4.0 7.7	18.1 12.9 3.0 4.4	16.4 12.2 2.3 2.7	14.7 11.6 1.8 1.7
48	Cool kBTU Sens. kBTU GPM dp FT	12.7 10.8 2.5 3.2	11.0 10.1 1.8 1.7	9.4 9.4 1.3 0.9	8.0 8.0 1.0 0.5	15.3 12.1 3.1 4.6	13.7 11.4 2.3 2.5	12.0 10.8 1.7 1.4	10.5 10.2 1.3 0.8	18.3 13.0 3.7 6.5	16.6 12.3 2.8 3.7	14.9 11.7 2.1 2.2	13.3 11.1 1.7 1.3

### Heating Capacity - 2Pipe configuration

Entering Water°F	Entering air Water Rise°F	65.0 db°F				70.0 db°F				75.0 db°F			
		15	20	25	30	15	20	25	30	15	20	25	30
		120	Heat kBTU GPM dp FT	27.3 3.6 6.5	25.2 2.5 3.1	23.0 1.8 1.7	21.0 1.4 1.0	24.2 3.2 5.1	22.1 2.2 2.4	20.0 1.6 1.2	18.0 1.2 0.7	21.2 2.8 3.9	19.0 1.9 1.8
130	Heat kBTU GPM dp FT	33.5 4.5 9.8	31.3 3.1 4.8	29.1 2.3 2.7	27.0 1.8 1.6	30.4 4.1 8.0	28.2 2.8 3.9	26.1 2.1 2.1	24.0 1.6 1.2	27.3 3.6 6.5	25.2 2.5 3.1	23.0 1.8 1.7	21.0 1.4 1.0
140	Heat kBTU GPM dp FT	39.7 5.3 13.7	37.5 3.7 6.9	35.3 2.8 3.9	33.1 2.2 2.4	36.6 4.9 11.6	34.4 3.4 5.8	32.2 2.6 3.2	30.1 2.0 2.0	33.5 4.5 9.8	31.3 3.1 4.8	29.1 2.3 2.7	27.0 1.8 1.6
150	Heat kBTU GPM dp FT	45.9 6.1 18.3	43.6 4.4 9.3	41.4 3.3 5.4	39.3 2.6 3.3	42.8 5.7 15.9	40.6 4.1 8.0	38.4 3.1 4.6	36.2 2.4 2.8	39.7 5.3 13.7	37.5 3.7 6.9	35.3 2.8 3.9	33.1 2.2 2.4

### Heating Capacity - 4Pipe configuration (Standard coils- other coils available)

Entering Water°F	Entering air Water Rise°F	65.0 db°F				70.0 db°F				75.0 db°F			
		30	40	50	60	30	40	50	60	30	40	50	60
		160	Heat kBTU GPM dp FT	20.2 1.3 10.9	18.3 0.9 5.0	16.5 0.7 2.6	14.7 0.5 1.4	18.9 1.3 9.5	17.0 0.8 4.3	15.2 0.6 2.2	13.4 0.4 1.2	17.5 1.2 8.2	15.6 0.8 3.7
180	Heat kBTU GPM dp FT	25.7 1.7 17.6	23.8 1.2 8.5	21.9 0.9 4.6	20.1 0.7 2.7	24.3 1.6 15.7	22.4 1.1 7.5	20.6 0.8 4.1	18.7 0.6 2.3	22.9 1.5 14.0	21.1 1.1 6.7	19.2 0.8 3.5	17.4 0.6 2.0

Last Updated 9/05

# Fan Coil Performance Data

# The Whalen Company

## Model 800

### Cooling Capacity

Entering Water°F	Entering air Water Rise°F	75.0 db°F / 63.0 wb°F				78.0 db°F 65.0 wb°F				80.0 db°F 67.0 wb°F			
		10	12	14	16	10	12	14	16	10	12	14	16
		42	Cool kBTU Sens. kBTU GPM dp FT	22.2 16.7 4.4 9.5	20.1 15.7 3.3 5.4	17.9 14.9 2.6 3.2	15.9 14.1 2.0 1.9	25.1 18.2 5.0 12.1	22.9 17.3 3.8 7.0	20.8 16.4 3.0 4.2	18.8 15.6 2.3 2.6	28.7 19.2 5.7 15.8	26.5 18.3 4.4 9.3
43	Cool kBTU Sens. kBTU GPM dp FT	20.5 15.9 4.1 8.0	18.3 15.0 3.1 4.5	16.3 14.2 2.3 2.6	14.3 13.4 1.8 1.5	23.4 17.4 4.7 10.5	21.2 16.6 3.5 6.0	19.1 15.7 2.7 3.6	17.1 14.9 2.1 2.2	26.9 18.4 5.4 13.8	24.7 17.6 4.1 8.1	22.5 16.7 3.2 5.0	20.4 15.9 2.6 3.1
44	Cool kBTU Sens. kBTU GPM dp FT	18.8 15.2 3.8 6.8	16.7 14.4 2.8 3.7	14.6 13.6 2.1 2.1	12.8 12.8 1.6 1.2	21.6 16.7 4.3 9.0	19.5 15.9 3.3 5.1	17.5 15.1 2.5 3.0	15.5 14.3 1.9 1.8	25.1 17.7 5.0 12.0	22.9 16.9 3.8 7.0	20.8 16.0 3.0 4.2	18.7 15.3 2.3 2.6
45	Cool kBTU Sens. kBTU GPM dp FT	17.1 14.5 3.4 5.6	15.0 13.7 2.5 3.0	13.1 13.0 1.9 1.7	11.3 11.3 1.4 1.0	19.9 16.1 4.0 7.6	17.9 15.2 3.0 4.3	15.9 14.5 2.3 2.5	14.0 13.8 1.7 1.5	23.3 17.0 4.7 10.4	21.2 16.2 3.5 6.0	19.1 15.4 2.7 3.6	17.1 14.7 2.1 2.2
46	Cool kBTU Sens. kBTU GPM dp FT	15.5 13.9 3.1 4.6	13.5 13.1 2.2 2.4	11.6 11.6 1.7 1.3	9.9 9.9 1.2 0.7	18.3 15.4 3.7 6.4	16.3 14.6 2.7 3.5	14.3 13.9 2.0 2.0	12.5 12.5 1.6 1.2	21.6 16.4 4.3 8.9	19.5 15.6 3.2 5.1	17.5 14.8 2.5 3.0	15.5 14.1 1.9 1.8
47	Cool kBTU Sens. kBTU GPM dp FT	13.9 13.3 2.8 3.7	12.0 12.0 2.0 1.9	10.2 10.2 1.5 1.0	8.6 8.6 1.1 0.6	16.7 14.8 3.3 5.4	14.7 14.0 2.5 2.9	12.8 12.8 1.8 1.6	11.1 11.1 1.4 0.9	19.9 15.7 4.0 7.6	17.9 15.0 3.0 4.3	15.9 14.2 2.3 2.5	14.0 13.6 1.8 1.5
48	Cool kBTU Sens. kBTU GPM dp FT	12.4 12.4 2.5 2.9	10.5 10.5 1.8 1.5	8.8 8.8 1.3 0.8	7.4 7.4 0.9 0.4	15.2 14.2 3.0 4.4	13.2 13.2 2.2 2.3	11.4 11.4 1.6 1.3	9.8 9.8 1.2 0.7	18.3 15.1 3.7 6.4	16.3 14.4 2.7 3.5	14.4 13.7 2.1 2.0	12.6 12.6 1.6 1.2

### Heating Capacity - 2Pipe configuration

Entering Water°F	Entering air Water Rise°F	65.0 db°F				70.0 db°F				75.0 db°F			
		15	20	25	30	15	20	25	30	15	20	25	30
		120	Heat kBTU GPM dp FT	31.1 4.1 8.2	28.2 2.8 3.8	25.4 2.0 2.0	22.8 1.5 1.1	27.4 3.7 6.4	24.6 2.5 2.9	21.9 1.8 1.5	19.4 1.3 0.8	23.8 3.2 4.8	21.0 2.1 2.1
130	Heat kBTU GPM dp FT	38.3 5.1 12.5	35.4 3.5 6.0	32.5 2.6 3.2	29.8 2.0 1.9	34.7 4.6 10.3	31.8 3.2 4.8	28.9 2.3 2.6	26.3 1.8 1.5	31.1 4.1 8.2	28.2 2.8 3.8	25.4 2.0 2.0	22.8 1.5 1.1
140	Heat kBTU GPM dp FT	45.6 6.1 17.8	42.6 4.3 8.7	39.7 3.2 4.8	36.9 2.5 2.9	42.0 5.6 15.0	39.0 3.9 7.3	36.1 2.9 4.0	33.3 2.2 2.4	38.3 5.1 12.5	35.4 3.5 6.0	32.5 2.6 3.2	29.8 2.0 1.9
150	Heat kBTU GPM dp FT	52.9 7.1 23.9	49.9 5.0 12.0	46.9 3.8 6.8	44.1 2.9 4.1	49.3 6.6 20.7	46.3 4.6 10.3	43.3 3.5 5.8	40.5 2.7 3.5	45.6 6.1 17.8	42.6 4.3 8.7	39.7 3.2 4.8	36.9 2.5 2.9

### Heating Capacity - 4Pipe configuration (Standard coils- other coils available)

Entering Water°F	Entering air Water Rise°F	65.0 db°F				70.0 db°F				75.0 db°F			
		30	40	50	60	30	40	50	60	30	40	50	60
		160	Heat kBTU GPM dp FT	25.9 1.7 22.6	23.6 1.2 10.6	21.3 0.9 5.5	19.1 0.6 3.1	24.2 1.6 19.7	21.9 1.1 9.1	19.6 0.8 4.7	17.4 0.6 2.5	22.4 1.5 17.0	20.1 1.0 7.7
180	Heat kBTU GPM dp FT	32.8 2.2 36.4	30.5 1.5 17.7	28.2 1.1 9.7	25.9 0.9 5.7	31.1 2.1 32.6	28.8 1.4 15.7	26.5 1.1 8.5	24.2 0.8 5.0	29.3 2.0 29.1	27.0 1.4 13.9	24.8 1.0 7.5	22.5 0.7 4.3

# Fan Coil Performance Data

The Whalen Company

## Model WFD-800

### Cooling Capacity

Entering Water°F	Entering air Water Rise°F	75.0 db°F / 63.0 wb°F				78.0 db°F 65.0 wb°F				80.0 db°F 67.0 wb°F			
		10	12	14	16	10	12	14	16	10	12	14	16
		42	Cool kBTU Sens. kBTU GPM dp FT	26.3 19.0 5.3 13.1	23.8 17.9 4.0 7.5	21.5 16.9 3.1 4.5	19.2 16.0 2.4 2.7	29.6 20.7 5.9 16.7	27.2 19.6 4.5 9.8	24.8 18.6 3.5 6.0	22.5 17.7 2.8 3.8	33.7 21.9 6.7 21.6	31.3 20.8 5.2 12.9
43	Cool kBTU Sens. kBTU GPM dp FT	24.2 18.1 4.8 11.2	21.8 17.1 3.6 6.3	19.5 16.1 2.8 3.7	17.3 15.2 2.2 2.2	27.6 19.8 5.5 14.4	25.2 18.8 4.2 8.4	22.8 17.8 3.3 5.1	20.6 16.9 2.6 3.1	31.6 21.0 6.3 19.0	29.2 20.0 4.9 11.2	26.8 19.0 3.8 7.0	24.5 18.1 3.1 4.4
44	Cool kBTU Sens. kBTU GPM dp FT	22.2 17.2 4.4 9.4	19.9 16.2 3.3 5.2	17.6 15.3 2.5 3.0	15.4 14.5 1.9 1.8	25.6 18.9 5.1 12.4	23.2 18.0 3.9 7.1	20.9 17.1 3.0 4.2	18.7 16.2 2.3 2.6	29.5 20.1 5.9 16.6	27.1 19.1 4.5 9.7	24.8 18.2 3.5 6.0	22.5 17.3 2.8 3.8
45	Cool kBTU Sens. kBTU GPM dp FT	20.3 16.4 4.1 7.8	18.0 15.5 3.0 4.3	15.8 14.6 2.3 2.4	13.7 13.7 1.7 1.4	23.6 18.1 4.7 10.6	21.3 17.2 3.6 6.0	19.1 16.3 2.7 3.5	16.9 15.5 2.1 2.1	27.5 19.3 5.5 14.4	25.1 18.3 4.2 8.3	22.8 17.4 3.3 5.0	20.6 16.6 2.6 3.1
46	Cool kBTU Sens. kBTU GPM dp FT	18.4 15.6 3.7 6.4	16.2 14.8 2.7 3.5	14.0 13.9 2.0 1.9	12.0 12.0 1.5 1.1	21.7 17.4 4.3 9.0	19.4 16.5 3.2 5.0	17.3 15.6 2.5 2.9	15.2 14.9 1.9 1.7	25.5 18.5 5.1 12.4	23.2 17.6 3.9 7.1	20.9 16.7 3.0 4.2	18.7 15.9 2.3 2.6
47	Cool kBTU Sens. kBTU GPM dp FT	16.6 14.9 3.3 5.2	14.4 14.1 2.4 2.7	12.3 12.3 1.8 1.5	10.4 10.4 1.3 0.8	19.9 16.7 4.0 7.5	17.6 15.8 2.9 4.1	15.5 15.0 2.2 2.3	13.5 13.5 1.7 1.4	23.6 17.7 4.7 10.6	21.3 16.9 3.5 6.0	19.1 16.0 2.7 3.5	16.9 15.3 2.1 2.1
48	Cool kBTU Sens. kBTU GPM dp FT	14.8 14.2 3.0 4.2	12.7 12.7 2.1 2.1	10.7 10.7 1.5 1.1	8.9 8.9 1.1 0.6	18.1 16.0 3.6 6.2	15.9 15.1 2.7 3.3	13.8 13.8 2.0 1.9	11.9 11.9 1.5 1.0	21.7 17.0 4.3 9.0	19.5 16.2 3.2 5.0	17.3 15.4 2.5 2.9	15.2 14.6 1.9 1.7

### Heating Capacity - 2Pipe configuration

Entering Water°F	Entering air Water Rise°F	65.0 db°F				70.0 db°F				75.0 db°F			
		15	20	25	30	15	20	25	30	15	20	25	30
		120	Heat kBTU GPM dp FT	35.6 4.7 10.7	32.6 3.3 5.0	29.6 2.4 2.7	26.8 1.8 1.5	31.5 4.2 8.4	28.5 2.9 3.9	25.6 2.0 2.0	22.9 1.5 1.1	27.5 3.7 6.4	24.5 2.4 2.8
130	Heat kBTU GPM dp FT	43.8 5.8 16.2	40.7 4.1 7.9	37.7 3.0 4.3	34.7 2.3 2.5	39.7 5.3 13.3	36.6 3.7 6.4	33.6 2.7 3.4	30.7 2.0 2.0	35.6 4.7 10.7	32.6 3.3 5.0	29.6 2.4 2.7	26.8 1.8 1.5
140	Heat kBTU GPM dp FT	51.9 6.9 22.8	48.8 4.9 11.3	45.8 3.7 6.4	42.8 2.9 3.9	47.9 6.4 19.3	44.8 4.5 9.5	41.7 3.3 5.3	38.7 2.6 3.2	43.8 5.8 16.2	40.7 4.1 7.9	37.7 3.0 4.3	34.7 2.3 2.5
150	Heat kBTU GPM dp FT	60.1 8.0 30.5	57.0 5.7 15.4	53.9 4.3 8.8	50.9 3.4 5.5	56.0 7.5 26.5	52.9 5.3 13.3	49.8 4.0 7.6	46.8 3.1 4.6	52.0 6.9 22.8	48.8 4.9 11.3	45.8 3.7 6.4	42.8 2.9 3.9

### Heating Capacity - 4Pipe configuration (Standard coils- other coils available)

Entering Water°F	Entering air Water Rise°F	65.0 db°F				70.0 db°F				75.0 db°F			
		30	40	50	60	30	40	50	60	30	40	50	60
		160	Heat kBTU GPM dp FT	25.7 1.7 22.3	23.4 1.2 10.4	21.2 0.8 5.4	18.9 0.6 3.0	24.0 1.6 19.4	21.7 1.1 8.9	19.5 0.8 4.6	17.2 0.6 2.5	22.3 1.5 16.7	20.0 1.0 7.6
180	Heat kBTU GPM dp FT	32.5 2.2 35.8	30.3 1.5 17.4	28.0 1.1 9.5	25.7 0.9 5.6	30.8 2.1 32.1	28.5 1.4 15.5	26.3 1.1 8.4	24.0 0.8 4.9	29.1 1.9 28.6	26.8 1.3 13.7	24.6 1.0 7.3	22.3 0.7 4.2

Last Updated 9/05

# Fan Coil Performance Data

The Whalen Company

## Model WFC-1000

### Cooling Capacity

Entering Water°F	Entering air Water Rise°F	75.0 db°F / 63.0 wb°F				78.0 db°F 65.0 wb°F				80.0 db°F 67.0 wb°F			
		10	12	14	16	10	12	14	16	10	12	14	16
		42	Cool kBTU Sens. kBTU GPM dp FT	34.4 24.4 6.9 11.8	31.5 23.1 5.3 6.9	28.7 21.8 4.1 4.2	25.9 20.6 3.2 2.6	38.7 26.5 7.7 14.9	35.8 25.2 6.0 8.9	32.9 24.0 4.7 5.5	30.1 22.9 3.8 3.5	43.9 28.1 8.8 19.2	41.0 26.8 6.8 11.6
43	Cool kBTU Sens. kBTU GPM dp FT	31.8 23.2 6.4 10.1	29.0 21.9 4.8 5.8	26.1 20.8 3.7 3.5	23.4 19.6 2.9 2.1	36.1 25.4 7.2 13.0	33.2 24.1 5.5 7.6	30.4 23.0 4.3 4.7	27.7 21.8 3.5 3.0	41.2 26.9 8.2 16.9	38.3 25.7 6.4 10.2	35.5 24.5 5.1 6.4	32.6 23.3 4.1 4.1
44	Cool kBTU Sens. kBTU GPM dp FT	29.3 22.1 5.9 8.5	26.5 20.9 4.4 4.8	23.7 19.8 3.4 2.9	21.0 18.7 2.6 1.7	33.5 24.3 6.7 11.2	30.7 23.1 5.1 6.5	28.0 22.0 4.0 4.0	25.3 20.9 3.2 2.5	38.6 25.8 7.7 14.8	35.7 24.6 6.0 8.8	32.9 23.4 4.7 5.5	30.1 22.3 3.8 3.5
45	Cool kBTU Sens. kBTU GPM dp FT	26.8 21.0 5.4 7.2	24.0 19.9 4.0 4.0	21.3 18.8 3.0 2.3	18.8 17.8 2.3 1.4	31.1 23.2 6.2 9.6	28.3 22.1 4.7 5.5	25.6 21.0 3.7 3.3	22.9 20.0 2.9 2.0	36.0 24.7 7.2 12.9	33.2 23.5 5.5 7.6	30.4 22.4 4.3 4.7	27.7 21.4 3.5 3.0
46	Cool kBTU Sens. kBTU GPM dp FT	24.4 20.0 4.9 5.9	21.7 18.9 3.6 3.3	19.1 17.9 2.7 1.8	16.6 16.6 2.1 1.1	28.6 22.2 5.7 8.2	25.9 21.1 4.3 4.6	23.2 20.1 3.3 2.7	20.7 19.1 2.6 1.7	33.5 23.7 6.7 11.2	30.7 22.6 5.1 6.5	27.9 21.5 4.0 4.0	25.3 20.5 3.2 2.5
47	Cool kBTU Sens. kBTU GPM dp FT	22.1 19.1 4.4 4.9	19.4 18.0 3.2 2.6	16.9 16.9 2.4 1.4	14.5 14.5 1.8 0.8	26.3 21.3 5.3 6.9	23.6 20.2 3.9 3.8	21.0 19.2 3.0 2.2	18.5 18.3 2.3 1.3	31.0 22.7 6.2 9.6	28.3 21.6 4.7 5.5	25.6 20.6 3.7 3.3	23.0 19.6 2.9 2.1
48	Cool kBTU Sens. kBTU GPM dp FT	19.8 18.2 4.0 3.9	17.2 17.2 2.9 2.1	14.7 14.7 2.1 1.1	12.5 12.5 1.6 0.6	24.0 20.4 4.8 5.7	21.3 19.4 3.6 3.2	18.8 18.4 2.7 1.8	16.4 16.4 2.0 1.0	28.6 21.8 5.7 8.2	25.9 20.7 4.3 4.6	23.3 19.8 3.3 2.8	20.7 18.8 2.6 1.7

### Heating Capacity - 2Pipe configuration

Entering Water°F	Entering air Water Rise°F	65.0 db°F				70.0 db°F				75.0 db°F			
		15	20	25	30	15	20	25	30	15	20	25	30
		120	Heat kBTU GPM dp FT	42.5 5.7 8.0	39.0 3.9 3.8	35.6 2.8 2.0	32.4 2.2 1.2	37.7 5.0 6.3	34.2 3.4 2.9	30.9 2.5 1.5	27.7 1.8 0.8	32.9 4.4 4.8	29.4 2.9 2.2
130	Heat kBTU GPM dp FT	52.2 7.0 12.1	48.6 4.9 5.9	45.2 3.6 3.3	41.8 2.8 1.9	47.4 6.3 9.9	43.8 4.4 4.8	40.4 3.2 2.6	37.0 2.5 1.5	42.5 5.7 8.0	39.0 3.9 3.8	35.6 2.8 2.0	32.3 2.2 1.2
140	Heat kBTU GPM dp FT	61.9 8.3 17.0	58.3 5.8 8.5	54.8 4.4 4.8	51.3 3.4 2.9	57.1 7.6 14.4	53.5 5.3 7.1	50.0 4.0 4.0	46.6 3.1 2.4	52.2 7.0 12.1	48.7 4.9 5.9	45.2 3.6 3.3	41.8 2.8 1.9
150	Heat kBTU GPM dp FT	71.6 9.5 22.7	68.0 6.8 11.5	64.4 5.2 6.6	60.9 4.1 4.1	66.8 8.9 19.7	63.2 6.3 9.9	59.6 4.8 5.7	56.1 3.7 3.5	61.9 8.3 17.0	58.3 5.8 8.5	54.8 4.4 4.8	51.3 3.4 2.9

### Heating Capacity - 4Pipe configuration (Standard coils- other coils available)

Entering Water°F	Entering air Water Rise°F	65.0 db°F				70.0 db°F				75.0 db°F			
		30	40	50	60	30	40	50	60	30	40	50	60
		160	Heat kBTU GPM dp FT	38.0 2.5 15.7	35.0 1.8 7.5	32.1 1.3 4.0	29.1 1.0 2.3	35.5 2.4 13.7	32.6 1.6 6.5	29.6 1.2 3.4	26.7 0.9 1.9	33.0 2.2 11.9	30.1 1.5 5.5
180	Heat kBTU GPM dp FT	47.9 3.2 24.9	44.9 2.2 12.3	41.9 1.7 6.9	39.0 1.3 4.1	45.4 3.0 22.4	42.4 2.1 11.0	39.5 1.6 6.1	36.5 1.2 3.6	42.9 2.9 20.1	40.0 2.0 9.8	37.0 1.5 5.4	34.1 1.1 3.2



# Fan Coil Performance Data

The Whalen Company

## Model WFD-1000

### Cooling Capacity

Entering Water°F	Entering air Water Rise°F	75.0 db°F / 63.0 wb°F				78.0 db°F 65.0 wb°F				80.0 db°F 67.0 wb°F			
		10	12	14	16	10	12	14	16	10	12	14	16
		42	Cool kBTU Sens. kBTU GPM dp FT	38.3 26.4 7.7 13.7	35.1 25.0 5.9 8.0	32.1 23.6 4.6 4.9	29.0 22.3 3.6 3.1	43.0 28.8 8.6 17.3	39.9 27.3 6.6 10.3	36.8 26.0 5.3 6.5	33.8 24.7 4.2 4.2	48.7 30.5 9.7 22.3	45.6 29.1 7.6 13.5
43	Cool kBTU Sens. kBTU GPM dp FT	35.4 25.1 7.1 11.8	32.3 23.7 5.4 6.8	29.3 22.4 4.2 4.1	26.3 21.2 3.3 2.5	40.1 27.5 8.0 15.1	37.0 26.1 6.2 8.9	34.0 24.8 4.9 5.5	31.0 23.6 3.9 3.5	45.8 29.2 9.1 19.6	42.6 27.8 7.1 11.8	39.6 26.5 5.7 7.5	36.5 25.2 4.6 4.9
44	Cool kBTU Sens. kBTU GPM dp FT	32.6 23.9 6.5 10.0	29.6 22.5 4.9 5.7	26.6 21.3 3.8 3.4	23.7 20.1 3.0 2.1	37.3 26.2 7.5 13.0	34.3 24.9 5.7 7.6	31.3 23.7 4.5 4.7	28.4 22.5 3.5 2.9	42.8 27.9 8.6 17.2	39.8 26.6 6.6 10.3	36.7 25.3 5.2 6.5	33.7 24.1 4.2 4.2
45	Cool kBTU Sens. kBTU GPM dp FT	29.9 22.7 6.0 8.4	26.9 21.4 4.5 4.7	24.0 20.2 3.4 2.8	21.2 19.1 2.6 1.6	34.6 25.0 6.9 11.2	31.6 23.8 5.3 6.5	28.6 22.6 4.1 3.9	25.8 21.5 3.2 2.4	40.0 26.7 8.0 15.0	37.0 25.4 6.2 8.9	34.0 24.2 4.9 5.5	31.0 23.1 3.9 3.5
46	Cool kBTU Sens. kBTU GPM dp FT	27.3 21.6 5.5 7.0	24.3 20.4 4.1 3.9	21.5 19.2 3.1 2.2	18.7 18.1 2.3 1.3	31.9 23.9 6.4 9.5	29.0 22.7 4.8 5.5	26.1 21.6 3.7 3.3	23.3 20.5 2.9 2.0	37.2 25.5 7.4 13.0	34.2 24.3 5.7 7.6	31.3 23.2 4.5 4.7	28.4 22.0 3.6 3.0
47	Cool kBTU Sens. kBTU GPM dp FT	24.7 20.5 4.9 5.7	21.8 19.3 3.6 3.1	19.0 18.3 2.7 1.7	16.4 16.4 2.0 1.0	29.3 22.9 5.9 8.0	26.4 21.7 4.4 4.5	23.6 20.6 3.4 2.7	20.9 19.6 2.6 1.6	34.5 24.4 6.9 11.2	31.6 23.3 5.3 6.5	28.7 22.2 4.1 3.9	25.8 21.1 3.2 2.4
48	Cool kBTU Sens. kBTU GPM dp FT	22.2 19.5 4.4 4.6	19.4 18.4 3.2 2.4	16.7 16.7 2.4 1.3	14.1 14.1 1.8 0.7	26.8 21.9 5.4 6.7	23.9 20.8 4.0 3.7	21.2 19.7 3.0 2.1	18.5 18.5 2.3 1.3	31.9 23.4 6.4 9.5	29.0 22.3 4.8 5.5	26.1 21.2 3.7 3.3	23.4 20.2 2.9 2.0

### Heating Capacity - 2Pipe configuration

Entering Water°F	Entering air Water Rise°F	65.0 db°F				70.0 db°F				75.0 db°F			
		15	20	25	30	15	20	25	30	15	20	25	30
		120	Heat kBTU GPM dp FT	46.7 6.2 9.1	43.0 4.3 4.3	39.5 3.2 2.3	36.0 2.4 1.4	41.4 5.5 7.2	37.8 3.8 3.4	34.3 2.7 1.8	31.0 2.1 1.0	36.2 4.8 5.5	32.6 3.3 2.5
130	Heat kBTU GPM dp FT	57.2 7.6 13.6	53.5 5.4 6.7	49.9 4.0 3.7	46.4 3.1 2.2	51.9 6.9 11.2	48.3 4.8 5.5	44.7 3.6 3.0	41.2 2.7 1.8	46.7 6.2 9.1	43.0 4.3 4.3	39.5 3.2 2.3	36.1 2.4 1.4
140	Heat kBTU GPM dp FT	67.7 9.0 19.1	64.0 6.4 9.6	60.3 4.8 5.5	56.7 3.8 3.4	62.4 8.3 16.2	58.7 5.9 8.1	55.1 4.4 4.6	51.5 3.4 2.8	57.2 7.6 13.6	53.5 5.4 6.7	49.9 4.0 3.7	46.3 3.1 2.2
150	Heat kBTU GPM dp FT	78.2 10.4 25.5	74.5 7.4 13.0	70.8 5.7 7.5	67.2 4.5 4.7	73.0 9.7 22.2	69.2 6.9 11.2	65.6 5.2 6.5	62.0 4.1 4.0	67.7 9.0 19.1	64.0 6.4 9.6	60.3 4.8 5.5	56.7 3.8 3.4

### Heating Capacity - 4Pipe configuration (Standard coils- other coils available)

Entering Water°F	Entering air Water Rise°F	65.0 db°F				70.0 db°F				75.0 db°F			
		30	40	50	60	30	40	50	60	30	40	50	60
		160	Heat kBTU GPM dp FT	37.6 2.5 15.4	34.7 1.7 7.4	31.8 1.3 4.0	28.9 1.0 2.3	35.2 2.3 13.5	32.3 1.6 6.4	29.3 1.2 3.4	26.4 0.9 1.9	32.8 2.2 11.7	29.8 1.5 5.4
180	Heat kBTU GPM dp FT	47.4 3.2 24.5	44.5 2.2 12.1	41.6 1.7 6.8	38.6 1.3 4.1	45.0 3.0 22.0	42.0 2.1 10.8	39.1 1.6 6.0	36.2 1.2 3.6	42.5 2.8 19.7	39.6 2.0 9.6	36.7 1.5 5.3	33.8 1.1 3.1

Last Updated 9/05

# Fan Coil Performance Data

The Whalen Company

Model WFC-1200

## Cooling Capacity

Entering Water°F	Entering air Water Rise°F	75.0 db°F / 63.0 wb°F				78.0 db°F 65.0 wb°F				80.0 db°F 67.0 wb°F			
		10	12	14	16	10	12	14	16	10	12	14	16
		42	Cool kBTU Sens. kBTU GPM dp FT	39.8 29.0 8.0 12.5	36.4 27.5 6.1 7.3	33.0 26.1 4.7 4.4	29.7 24.8 3.7 2.7	44.7 31.6 8.9 15.9	41.3 30.1 6.9 9.4	38.0 28.7 5.4 5.8	34.7 27.4 4.3 3.7	50.8 33.3 10.2 20.5	47.4 31.9 7.9 12.3
43	Cool kBTU Sens. kBTU GPM dp FT	36.8 27.7 7.4 10.7	33.4 26.3 5.6 6.1	30.1 24.9 4.3 3.7	26.9 23.6 3.4 2.2	41.7 30.3 8.3 13.8	38.3 28.9 6.4 8.1	35.0 27.5 5.0 5.0	31.8 26.3 4.0 3.1	47.7 32.0 9.5 18.0	44.3 30.6 7.4 10.8	40.9 29.2 5.8 6.8	37.6 27.9 4.7 4.4
44	Cool kBTU Sens. kBTU GPM dp FT	33.8 26.5 6.8 9.1	30.5 25.1 5.1 5.1	27.3 23.8 3.9 3.0	24.2 22.6 3.0 1.8	38.7 29.0 7.7 11.9	35.4 27.7 5.9 6.9	32.2 26.4 4.6 4.2	29.1 25.2 3.6 2.6	44.6 30.7 8.9 15.8	41.2 29.4 6.9 9.4	37.9 28.1 5.4 5.8	34.7 26.8 4.3 3.7
45	Cool kBTU Sens. kBTU GPM dp FT	30.9 25.3 6.2 7.6	27.7 23.9 4.6 4.2	24.5 22.7 3.5 2.4	21.6 21.5 2.7 1.4	35.9 27.9 7.2 10.2	32.6 26.6 5.4 5.8	29.4 25.3 4.2 3.5	26.4 24.1 3.3 2.2	41.6 29.5 8.3 13.7	38.3 28.2 6.4 8.1	35.0 26.9 5.0 5.0	31.8 25.7 4.0 3.1
46	Cool kBTU Sens. kBTU GPM dp FT	28.2 24.1 5.6 6.3	25.0 22.9 4.2 3.4	21.9 21.7 3.1 1.9	19.0 19.0 2.4 1.1	33.0 26.7 6.6 8.7	29.8 25.5 5.0 4.9	26.7 24.3 3.8 2.9	23.8 23.2 3.0 1.7	38.7 28.4 7.7 11.9	35.4 27.1 5.9 6.9	32.2 25.9 4.6 4.2	29.1 24.7 3.6 2.6
47	Cool kBTU Sens. kBTU GPM dp FT	25.4 23.1 5.1 5.1	22.3 21.8 3.7 2.7	19.4 19.4 2.8 1.5	16.7 16.7 2.1 0.9	30.3 25.7 6.1 7.3	27.2 24.4 4.5 4.1	24.1 23.3 3.4 2.4	21.2 21.2 2.7 1.4	35.8 27.2 7.2 10.2	32.6 26.0 5.4 5.8	29.4 24.9 4.2 3.5	26.4 23.8 3.3 2.2
48	Cool kBTU Sens. kBTU GPM dp FT	22.8 22.0 4.6 4.1	19.8 19.8 3.3 2.2	17.0 17.0 2.4 1.2	14.4 14.4 1.8 0.6	27.6 24.6 5.5 6.1	24.6 23.5 4.1 3.3	21.6 21.6 3.1 1.9	18.9 18.9 2.4 1.1	33.0 26.2 6.6 8.6	29.9 25.0 5.0 4.9	26.8 23.9 3.8 2.9	23.8 22.8 3.0 1.8

## Heating Capacity - 2Pipe configuration

Entering Water°F	Entering air Water Rise°F	65.0 db°F				70.0 db°F				75.0 db°F			
		15	20	25	30	15	20	25	30	15	20	25	30
		120	Heat kBTU GPM dp FT	51.8 6.9 9.4	47.5 4.8 4.5	43.4 3.5 2.4	39.5 2.6 1.4	45.9 6.1 7.4	41.7 4.2 3.4	37.7 3.0 1.8	33.9 2.3 1.0	40.0 5.3 5.6	35.9 3.6 2.6
130	Heat kBTU GPM dp FT	63.6 8.5 14.2	59.2 5.9 7.0	55.0 4.4 3.8	50.9 3.4 2.3	57.7 7.7 11.7	53.4 5.3 5.6	49.2 3.9 3.1	45.2 3.0 1.8	51.8 6.9 9.4	47.5 4.8 4.5	43.4 3.5 2.4	39.5 2.6 1.4
140	Heat kBTU GPM dp FT	75.4 10.1 20.0	71.0 7.1 10.0	66.7 5.3 5.6	62.5 4.2 3.4	69.5 9.3 17.0	65.1 6.5 8.4	60.9 4.9 4.7	56.7 3.8 2.8	63.6 8.5 14.2	59.3 5.9 7.0	55.0 4.4 3.8	50.9 3.4 2.3
150	Heat kBTU GPM dp FT	87.2 11.6 26.8	82.8 8.3 13.6	78.5 6.3 7.8	74.2 4.9 4.9	81.3 10.8 23.3	76.9 7.7 11.7	72.6 5.8 6.7	68.4 4.6 4.1	75.4 10.1 20.0	71.0 7.1 10.0	66.7 5.3 5.6	62.5 4.2 3.4

## Heating Capacity - 4Pipe configuration (Standard coils- other coils available)

Entering Water°F	Entering air Water Rise°F	65.0 db°F				70.0 db°F				75.0 db°F			
		30	40	50	60	30	40	50	60	30	40	50	60
		160	Heat kBTU GPM dp FT	43.0 2.9 25.4	39.7 2.0 12.2	36.4 1.5 6.6	33.2 1.1 3.8	40.2 2.7 22.3	36.9 1.8 10.6	33.7 1.3 5.6	30.4 1.0 3.2	37.4 2.5 19.3	34.1 1.7 9.0
180	Heat kBTU GPM dp FT	54.1 3.6 40.3	50.8 2.5 20.0	47.5 1.9 11.2	44.3 1.5 6.8	51.3 3.4 36.3	48.0 2.4 17.9	44.8 1.8 9.9	41.5 1.4 5.9	48.5 3.2 32.4	45.2 2.3 15.9	42.0 1.7 8.7	38.7 1.3 5.2

# Fan Coil Performance Data

The Whalen Company

Model WFD-1200

## Cooling Capacity

Entering Water°F	Entering air Water Rise°F	75.0 db°F / 63.0 wb°F				78.0 db°F 65.0 wb°F				80.0 db°F 67.0 wb°F			
		10	12	14	16	10	12	14	16	10	12	14	16
		42	Cool kBTU Sens. kBTU GPM dp FT	46.9 33.0 9.4 16.1	43.1 31.3 7.2 9.4	39.3 29.7 5.6 5.8	35.6 28.1 4.4 3.6	52.6 35.9 10.5 20.3	48.8 34.2 8.1 12.1	45.1 32.6 6.4 7.6	41.4 31.1 5.2 4.9	59.7 38.0 11.9 26.1	55.8 36.3 9.3 15.8
43	Cool kBTU Sens. kBTU GPM dp FT	43.4 31.5 8.7 13.8	39.6 29.8 6.6 8.0	35.9 28.2 5.1 4.8	32.3 26.7 4.0 3.0	49.1 34.4 9.8 17.6	45.4 32.8 7.6 10.5	41.7 31.2 6.0 6.5	38.0 29.7 4.8 4.1	56.0 36.4 11.2 23.0	52.2 34.8 8.7 13.9	48.5 33.2 6.9 8.8	44.7 31.7 5.6 5.7
44	Cool kBTU Sens. kBTU GPM dp FT	40.0 30.0 8.0 11.7	36.2 28.4 6.0 6.7	32.6 26.9 4.7 4.0	29.1 25.4 3.6 2.4	45.7 32.9 9.1 15.3	42.0 31.3 7.0 9.0	38.3 29.8 5.5 5.5	34.8 28.4 4.3 3.5	52.5 34.9 10.5 20.1	48.7 33.3 8.1 12.1	45.0 31.8 6.4 7.6	41.3 30.4 5.2 4.9
45	Cool kBTU Sens. kBTU GPM dp FT	36.6 28.5 7.3 9.8	33.0 27.0 5.5 5.5	29.4 25.6 4.2 3.2	26.0 24.2 3.2 1.9	42.3 31.5 8.5 13.1	38.7 30.0 6.4 7.6	35.1 28.6 5.0 4.6	31.6 27.2 4.0 2.9	49.0 33.5 9.8 17.6	45.3 31.9 7.5 10.4	41.6 30.5 5.9 6.5	38.0 29.1 4.8 4.1
46	Cool kBTU Sens. kBTU GPM dp FT	33.4 27.2 6.7 8.2	29.8 25.7 5.0 4.5	26.3 24.4 3.8 2.6	23.0 23.0 2.9 1.5	39.1 30.1 7.8 11.2	35.5 28.7 5.9 6.4	32.0 27.3 4.6 3.8	28.6 26.0 3.6 2.3	45.6 32.1 9.1 15.2	41.9 30.6 7.0 8.9	38.3 29.2 5.5 5.5	34.8 27.9 4.4 3.5
47	Cool kBTU Sens. kBTU GPM dp FT	30.2 25.9 6.0 6.7	26.7 24.5 4.5 3.6	23.3 23.2 3.3 2.0	20.1 20.1 2.5 1.2	35.9 28.9 7.2 9.4	32.4 27.5 5.4 5.3	28.9 26.2 4.1 3.1	25.6 24.9 3.2 1.9	42.3 30.7 8.5 13.1	38.7 29.3 6.4 7.6	35.1 28.0 5.0 4.6	31.7 26.7 4.0 2.9
48	Cool kBTU Sens. kBTU GPM dp FT	27.2 24.7 5.4 5.4	23.7 23.4 4.0 2.9	20.5 20.5 2.9 1.6	17.4 17.4 2.2 0.9	32.8 27.6 6.6 7.9	29.3 26.3 4.9 4.4	26.0 25.0 3.7 2.5	22.7 22.7 2.8 1.5	39.0 29.5 7.8 11.2	35.5 28.1 5.9 6.4	32.0 26.8 4.6 3.8	28.6 25.6 3.6 2.3

## Heating Capacity - 2Pipe configuration

Entering Water°F	Entering air Water Rise°F	65.0 db°F				70.0 db°F				75.0 db°F			
		15	20	25	30	15	20	25	30	15	20	25	30
		120	Heat kBTU GPM dp FT	56.9 7.6 10.5	52.5 5.2 5.0	48.2 3.9 2.7	44.0 2.9 1.6	50.5 6.7 8.3	46.1 4.6 3.9	41.9 3.4 2.1	37.8 2.5 1.2	44.1 5.9 6.3	39.8 4.0 2.9
130	Heat kBTU GPM dp FT	69.6 9.3 15.8	65.2 6.5 7.8	60.8 4.9 4.3	56.5 3.8 2.6	63.2 8.4 13.0	58.8 5.9 6.3	54.5 4.4 3.5	50.2 3.3 2.1	56.9 7.6 10.5	52.5 5.2 5.0	48.2 3.9 2.7	44.0 2.9 1.6
140	Heat kBTU GPM dp FT	82.4 11.0 22.1	77.9 7.8 11.1	73.5 5.9 6.3	69.2 4.6 3.9	76.0 10.1 18.8	71.6 7.2 9.4	67.1 5.4 5.3	62.8 4.2 3.2	69.6 9.3 15.8	65.2 6.5 7.8	60.8 4.9 4.3	56.5 3.8 2.6
150	Heat kBTU GPM dp FT	95.2 12.7 29.5	90.7 9.1 15.1	86.3 6.9 8.7	81.9 5.5 5.4	88.8 11.8 25.7	84.3 8.4 13.0	79.9 6.4 7.5	75.5 5.0 4.6	82.4 11.0 22.1	77.9 7.8 11.1	73.5 5.9 6.3	69.2 4.6 3.9

## Heating Capacity - 4Pipe configuration (Standard coils- other coils available)

Entering Water°F	Entering air Water Rise°F	65.0 db°F				70.0 db°F				75.0 db°F			
		30	40	50	60	30	40	50	60	30	40	50	60
		160	Heat kBTU GPM dp FT	42.5 2.8 24.9	39.3 2.0 12.0	36.1 1.4 6.5	32.9 1.1 3.7	39.8 2.7 21.8	36.6 1.8 10.4	33.3 1.3 5.5	30.1 1.0 3.1	37.0 2.5 18.9	33.8 1.7 8.9
180	Heat kBTU GPM dp FT	53.5 3.6 39.5	50.3 2.5 19.6	47.1 1.9 11.0	43.8 1.5 6.6	50.8 3.4 35.5	47.5 2.4 17.5	44.3 1.8 9.7	41.1 1.4 5.8	48.0 3.2 31.8	44.8 2.2 15.6	41.6 1.7 8.6	38.4 1.3 5.1

Last Updated 9/05

# AIRSIDE PERFORMANCE

- Fan Performance Tables
- Filter Initial Pressure Loss Table

**Blower Performance Table: Fixed VS Valve Series**  
PSC Motor

Unit		Fan Speed	Airflow (CFM)	External Static Pressure (in wg.)													
				0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50	0.60	0.70		
300	3 Row	HI	300	334	319	305	294	283									
		MED		296	282	270	260										
		LO		211	200												
	4 Row	HI		319	305	293	283	275									
		MED		284	272	261	253										
		LO		206	196												
300 HS	3 Row	HI		300	438	423	408	393	378	362							
		MED			347	335	323	311	299	287							
		LO			253	243	235	229	224								
	4 Row	HI			414	399	383	368	352	337							
		MED			334	323	311	298	286	274							
		LO			247	238	231	225	222								
400	3 Row	HI			400	467	456	444	433	421	410	399					
		MED				351	345	339	334	330	326						
		LO				273	266	259									
	4 Row	HI				454	443	431	420	408	397	386					
		MED				347	341	336	331	327							
		LO				270	263	256									
400 HS	3 Row	HI	400			582	571	555	536	514	488	459					
		MED				479	462	444	425	405	384	362					
		LO				323	305	287	269	250							
	4 Row	HI				561	543	522	497	469	438	402					
		MED				459	441	422	401	380	358	335					
		LO				312	294	276	257	239							
600	3 Row	HI		600		618	606	591	572	549	524	494					
		MED				512	495	477	458	438	417						
		LO				341	323	305	287	268							
	4 Row	HI				605	589	570	548	521	492	459					
		MED				499	481	462	442	421	399						
		LO				333	315	297	279	261							
600 HS	3 Row	HI			600	758	723	685	644	600	553	504	451	395	337		
		MED				616	593	567	537	504	468	428	385				
		LO				430	412	393	374	354							
	4 Row	HI				700	661	618	572	524	472	418	361	300	237		
		MED				591	564	534	501	464	424	381	334				
		LO				419	401	382	362	342							
800	3 Row	HI	800			805	774	740	703	664	621	576	528				
		MED				636	617	594	568	539	506	470	430				
		LO				440	422	404	385	365	345						
	4 Row	HI				769	734	697	657	614	569	520	468				
		MED				622	600	575	546	514	479	440	398				
		LO				433	415	396	377	357	337						
800 HS	3 Row	HI		800		898	870	840	808	773	736	696	655	610	564		
		MED				799	779	758	734	709	681	651	620	586			
		LO				545	536	526	514	500	484						
	4 Row	HI				860	829	796	760	722	682	639	594	546	496		
		MED				777	756	732	706	678	648	616	582	546			
		LO				541	531	519	506	491	475						
1000	3 Row	HI			1000	962	941	918	892	864	834	801	766				
		MED				834	819	803	784	763	740						
		LO				553	546	537	527								
	4 Row	HI				949	927	902	875	845	813	779	742				
		MED				825	810	792	772	750	725						
		LO				551	544	534	524								
1000 HS	3 Row	HI	1000			1199	1183	1165	1146	1125	1102	1078	1052	1025	996	933	864
		MED				994	981	967	952	935	917	898	878	857			
		LO				834	813	791	769	746	723	699					
	4 Row	HI				1183	1165	1146	1125	1102	1078	1052	1025	996	965	899	827
		MED				985	971	956	939	922	903	883	862	840			
		LO				822	800	778	755	732	709	685					
1200	3 Row	HI		1200		1162	1151	1138	1122	1105	1085	1063	1039	1012	984		
		MED				1008	995	981	965	948	930	911	890				
		LO				835	825	813	800	785							
	4 Row	HI				1155	1143	1129	1112	1093	1072	1048	1023	995	966		
		MED				1002	988	974	958	940	921	901	880				
		LO				832	821	809	795	780							
1200 HS	3 Row	HI			1200	N/A											
		MED				N/A											
		LO				N/A											
	4 Row	HI				N/A											
		MED				N/A											
		LO				N/A											

# Valve Control ECM Blower Performance

Unit	Fan Speed	Airflow (CFM)	External Static Pressure (in wg.)														
			0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50	0.60	0.70			
300	HI		310	276	242	208	174										
	MED	300	270	232	193												
	LO		207	154													
400	HI		459	444	429	413	398	383	368	352							
	MED	400	338	303	269	235	201										
	LO		274	239	202												
600	HI		680	654	631	609	587	565	543	522	500						
	MED	600	486	454	424	395	367	341	316	293							
	LO		363	318	279	245	216	193									
800	HI		789	771	753	733	714	694	673	652	630	607					
	MED	800	609	584	559	535	511	489	467	446							
	LO		462	431	401	373	347	322									
1000	HI		1034	1017	999	982	965	949	933	917	902	887	844	817			
	MED	1000	873	853	833	814	795	777	760	744	728	713					
	LO		704	679	656	633	611	590	570	551							
1200	HI		1212	1196	1181	1166	1151	1136	1122	1108	1095	1082	1044	1021			
	MED	1200	1027	1010	992	975	959	943	927	911	896	881					
	LO		798	777	756	736	716	697	679	662							

Unit	Speed	Airflow (CFM)	Initial Pressure Drop (in. H2O)				
			MERV 4 (Fiberglass)	MERV 4 (Poly)	MERV 8	MERV 11*	MERV 13*
200	High	260	0.01	0.02	0.07	0.07	0.07
	Low		0.01	0.02	0.05	0.05	0.05
300	High	330	0.01	0.03	0.07	0.07	0.07
	Low		0.01	0.02	0.05	0.05	0.06
400	High	420	0.01	0.04	0.09	0.09	0.1
	Low		0.01	0.02	0.06	0.06	0.07
600	High	640	0.04	0.06	0.09	0.1	0.12
	Low		0.02	0.04	0.05	0.05	0.06
800	High	870	0.06	0.08	0.19	0.21	0.24
	Low		0.05	0.06	0.15	0.15	0.19
1000	High	1000	0.03	0.05	0.10	0.14	0.16
	Low		0.02	0.04	0.08	0.1	0.12
1200	High	1200	0.04	0.06	0.13	0.18	0.21
	Low		0.01	0.04	0.10	0.14	0.16

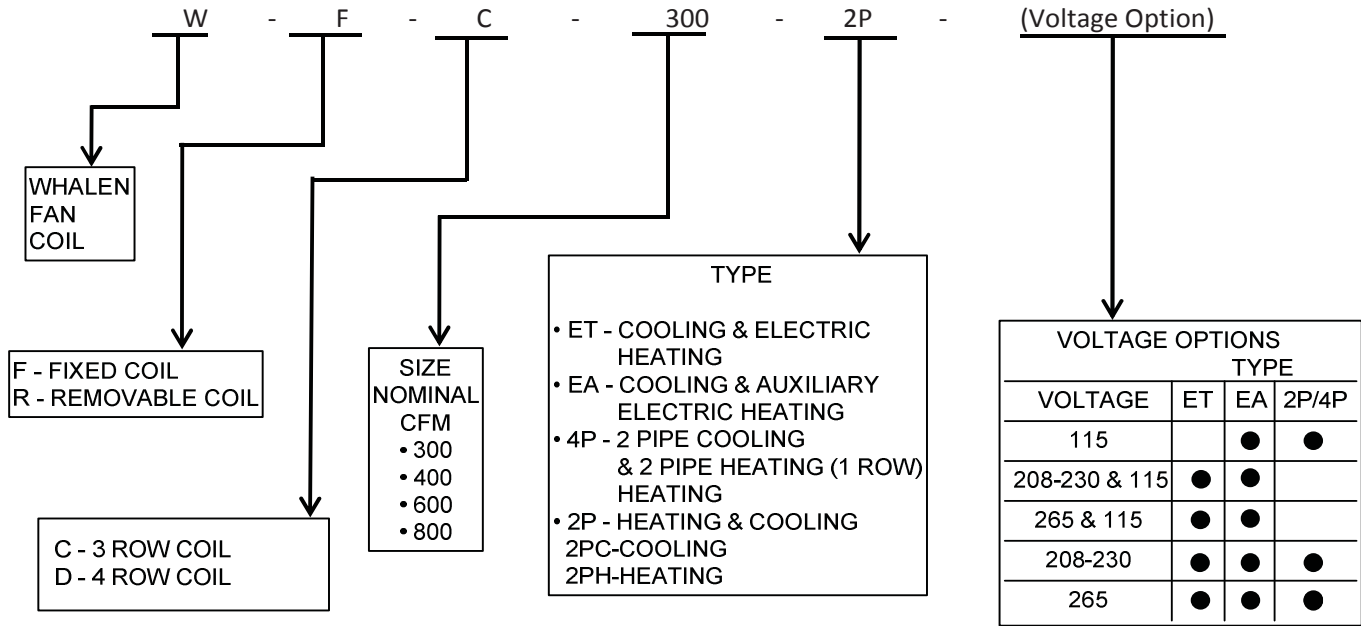
\* Factory recommends use P-Trap condensate drain pan

# ELECTRICAL DATA & DIAGRAMS

- Electrical Nameplate Data
- Wiring Diagrams



# WHALEN ROOM FAN COIL NOMENCLATURE



## ELECTRICAL RATINGS

Unit Size	Unit Voltage	Fan			Electric Heat		MCA
		Volt	FLA	HP	Max KW	Volt	
300	115/60/1	115	1.0	1/20	3.0	115	33.9
	208 & 115/60/1	115	1.0	1/20	3.0	208	19.3
	230 & 115/60/1	115	1.0	1/20	3.0	230	17.6
	265 & 115/60/1	115	1.0	1/20	3.0	265	15.4
	208-230/60/1	208-230	0.6	1/15	3.0	208 - 230	18.8 - 17.1
	265/60/1	265	0.6	1/20	3.0	265	14.9
400	115/60/1	115	1.2	1/12	4.0	115	45.0
	208 & 115/60/1	115	1.2	1/12	4.0	208	25.5
	230 & 115/60/1	115	1.2	1/12	4.0	230	23.2
	265 & 115/60/1	115	1.2	1/12	4.0	265	20.4
	208-230/60/1	208-230	0.6	1/15	4.0	208 - 230	24.8 - 22.5
	265/60/1	265	0.7	1/15	4.0	265	19.7
600	115/60/1	115	1.7	1/12	4.0	115	45.6
	208 & 115/60/1	115	1.7	1/12	6.0	208	38.2
	230 & 115/60/1	115	1.7	1/12	6.0	230	34.7
	265 & 115/60/1	115	1.7	1/12	6.0	265	30.4
	208-230/60/1	208-230	0.9	1/12	6.0	208 - 230	37.2 - 33.7
	265/60/1	265	0.8	1/10	6.0	265	29.3
800	115/60/1	115	2.3	1/6	4.0	115	46.4
	208 & 115/60/1	115	2.3	1/6	6.0	208	38.9
	230 & 115/60/1	115	2.3	1/6	6.0	230	35.5
	265 & 115/60/1	115	2.3	1/6	8.0	265	40.6
	208-230/60/1	208-230	1.5	1/5	6.0	208 - 230	37.9 - 34.5
	265/60/1	265	0.9	1/7	8.0	265	38.9

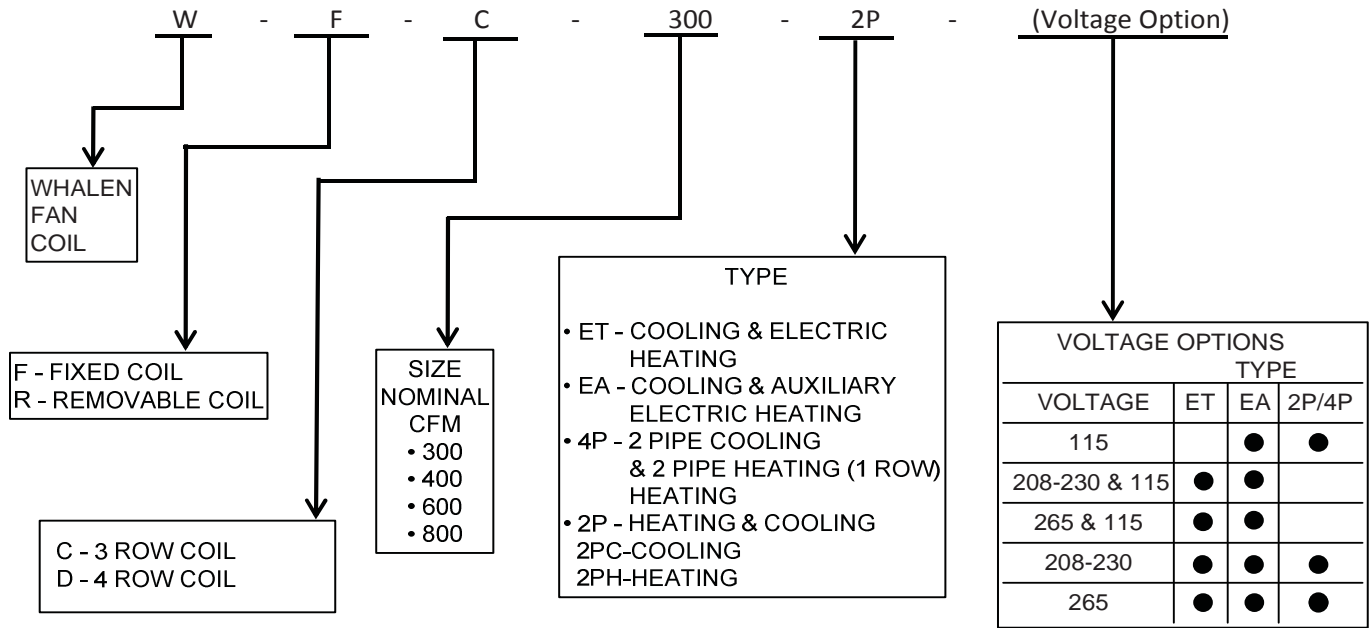
\* Not all Electric Heat KW options available in Single Point Power Configuration.

Consult factory for Dual Point Power Configuration Requirements.

Drawing Number 431SI

12/13/2011

# WHALEN ROOM FAN COIL NOMENCLATURE



## ELECTRICAL RATINGS

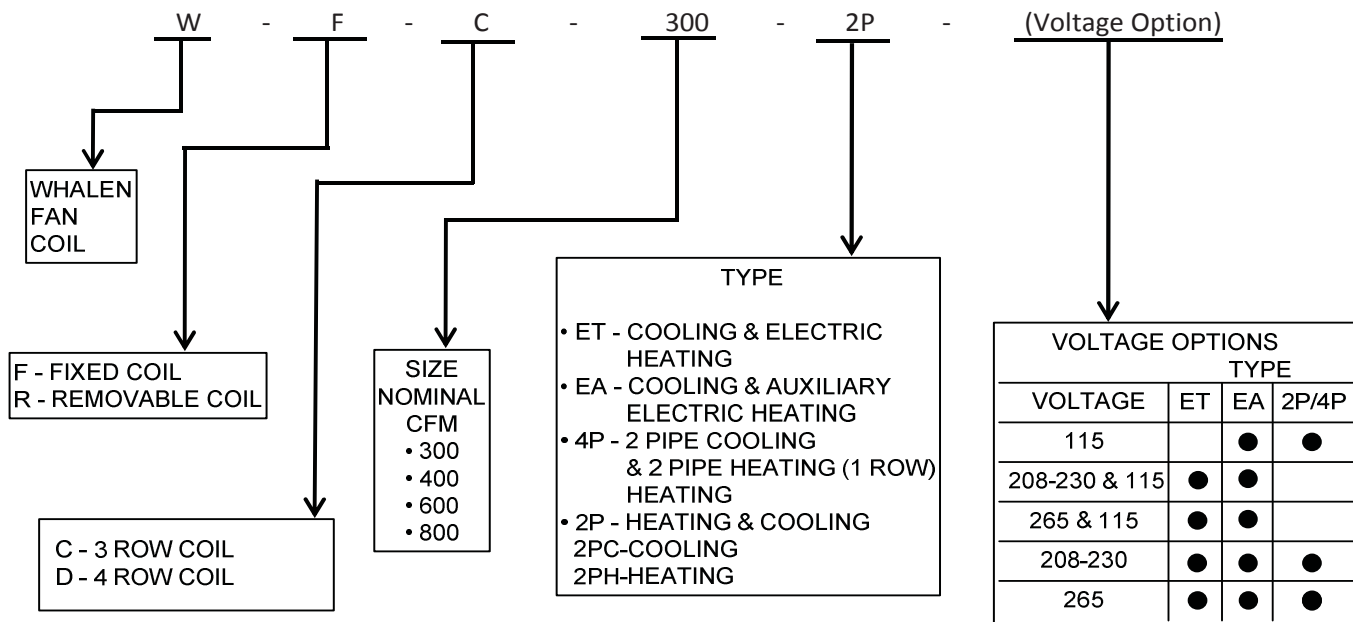
Unit Size	Unit Voltage	Fan			Electric Heat		MCA
		Volt	FLA	HP	Max KW	Volt	
1000	115/60/1	115	3.6	1/6	4.0	115	48.0
	208 & 115/60/1	115	3.6	1/6	6.0	208	40.6
	230 & 115/60/1	115	3.6	1/6	6.0	230	37.1
	265 & 115/60/1	115	3.6	1/6	9.0	265	47.0
	208-230/60/1	208-230	1.5	1/5	6.0	208 - 230	37.9 - 34.5
	265/60/1	265	1.2	1/5	9.0	265	44.0
1200	115/60/1	115	4.9	1/3	3.0	115	38.7
	208 & 115/60/1	115	4.9	1/3	6.0	208	42.2
	230 & 115/60/1	115	4.9	1/3	6.0	230	38.7
	265 & 115/60/1	115	4.9	1/3	8.0	265	43.9
	208-230/60/1	208-230	2.7	1/2	6.0	208 - 230	39.4 - 36.0
	265/60/1	265	2.1	0.42	9.0	265	45.1

\* Not all Electric Heat KW options available in Single Point Power Configuration.

Consult factory for Dual Point Power Configuration Requirements.

Drawing Number 431SI

# WHALEN ROOM FAN COIL NOMENCLATURE



## ELECTRICAL RATINGS

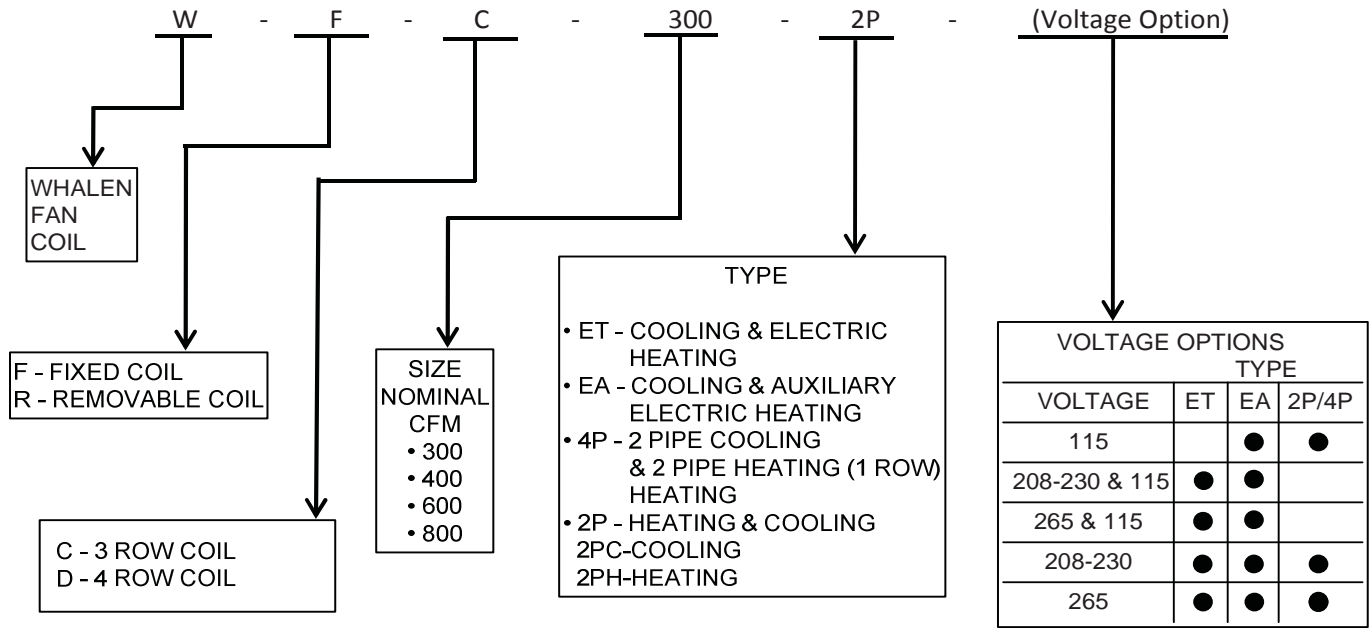
Unit Size	Unit Voltage	Fan			Electric Heat		MCA
		Volt	FLA	HP	Max KW	Volt	
300-ECM (Type D)	115/60/1	115	6.4	1/2	3.0	115	40.6
	208 & 115/60/1	115	6.4	1/2	3.0	208	26.0
	230 & 115/60/1	115	6.4	1/2	3.0	230	24.3
	265 & 115/60/1	115	6.4	1/2	3.0	265	22.2
	208-230/60/1	208-230	4.6	1/2	3.0	208 - 230	23.8 - 22.1
	265/60/1	265	3.2	1/2	3.0	265	18.2
400-ECM (Type D)	115/60/1	115	6.4	1/2	3.0	115	40.6
	208 & 115/60/1	115	6.4	1/2	4.0	208	32.0
	230 & 115/60/1	115	6.4	1/2	4.0	230	29.7
	265 & 115/60/1	115	6.4	1/2	4.0	265	26.9
	208-230/60/1	208-230	4.6	1/2	4.0	208 - 230	29.8 - 27.5
	265/60/1	265	3.2	1/2	4.0	265	22.9
600-ECM (Type D)	115/60/1	115	6.4	1/2	3.0	115	40.6
	208 & 115/60/1	115	6.4	1/2	6.0	208	44.1
	230 & 115/60/1	115	6.4	1/2	6.0	230	40.6
	265 & 115/60/1	115	6.4	1/2	6.0	265	36.3
	208-230/60/1	208-230	4.6	1/2	6.0	208 - 230	41.8 - 38.4
	265/60/1	265	3.2	1/2	6.0	265	32.3
800-ECM (Type D)	115/60/1	115	6.4	1/2	3.0	115	40.6
	208 & 115/60/1	115	6.4	1/2	6.0	208	44.1
	230 & 115/60/1	115	6.4	1/2	6.0	230	40.6
	265 & 115/60/1	115	6.4	1/2	8.0	265	45.7
	208-230/60/1	208-230	4.6	1/2	6.0	208 - 230	41.8 - 38.4
	265/60/1	265	3.2	1/2	8.0	265	41.7

\* Not all Electric Heat KW options available in Single Point Power Configuration.

Consult factory for Dual Point Power Configuration Requirements.

Drawing Number 431DI

# WHALEN ROOM FAN COIL NOMENCLATURE



## ELECTRICAL RATINGS

Unit Size	Unit Voltage	Fan			Electric Heat		MCA
		Volt	FLA	HP	Max KW	Volt	
1000-ECM (Type D)	115/60/1	115	6.4	1/2	3.0	115	40.6
	208 & 115/60/1	115	6.4	1/2	6.0	208	44.1
	230 & 115/60/1	115	6.4	1/2	6.0	230	40.6
	265 & 115/60/1	115	6.4	1/2	8.0	265	45.7
	208-230/60/1	208-230	4.6	1/2	6.0	208 - 230	41.8 - 38.4
	265/60/1	265	3.2	1/2	9.0	265	46.5
1200-ECM (Type D)	115/60/1	115	6.4	1/2	3.0	115	40.6
	208 & 115/60/1	115	6.4	1/2	6.0	208	44.1
	230 & 115/60/1	115	6.4	1/2	6.0	230	40.6
	265 & 115/60/1	115	6.4	1/2	8.0	265	45.7
	208-230/60/1	208-230	4.6	1/2	6.0	208 - 230	41.8 - 38.4
	265/60/1	265	3.2	1/2	9.0	265	46.5

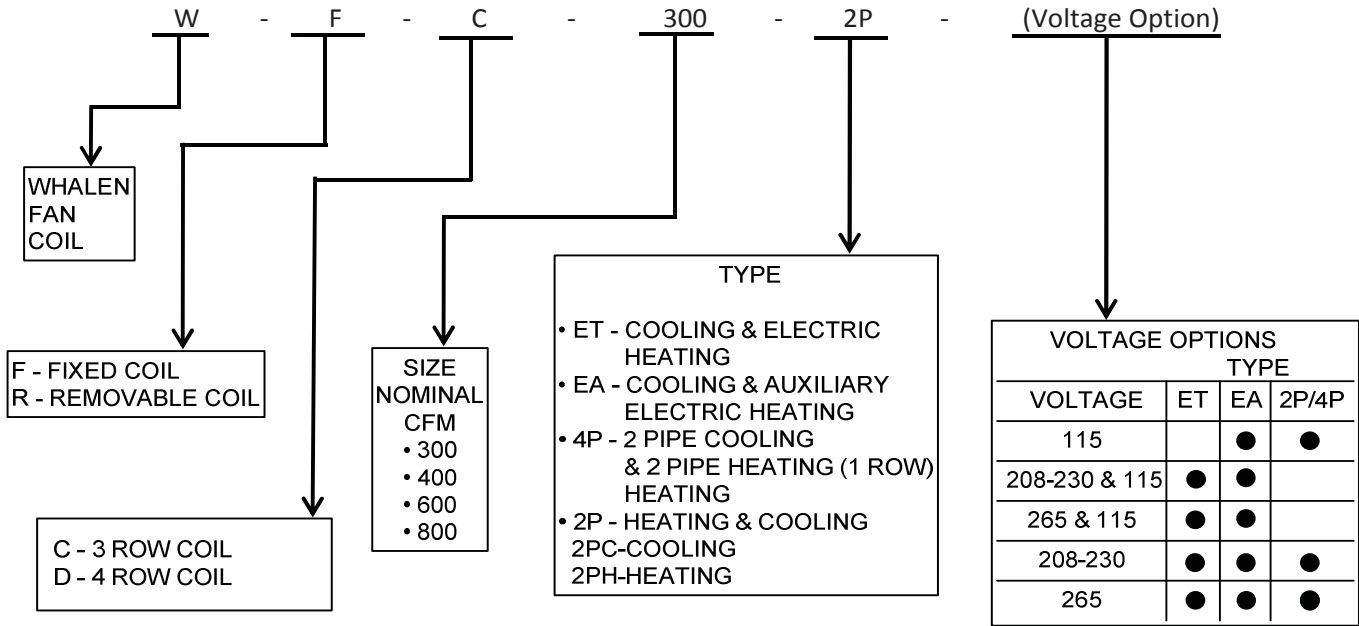
\* Not all Electric Heat KW options available in Single Point Power Configuration.

Consult factory for Dual Point Power Configuration Requirements.

Drawing Number 431DI

12/13/2011

# WHALEN ROOM FAN COIL NOMENCLATURE



## ELECTRICAL RATINGS

Unit Size	Unit Voltage	Fan			Electric Heat		MCA
		Volt	FLA	HP	Max KW	Volt	
300-ECM (Type E)	115/60/1	115	4.2	1/3	3.0	115	37.9
	208 & 115/60/1	115	4.2	1/3	3.0	208	23.3
	230 & 115/60/1	115	4.2	1/3	3.0	230	21.6
	265 & 115/60/1	115	4.2	1/3	3.0	265	19.4
	208-230/60/1	208-230	2.7	1/3	3.0	208 - 230	21.4 - 19.7
	265/60/1	265	3.2	1/2	3.0	265	18.2
400-ECM (Type E)	115/60/1	115	4.2	1/3	3.0	115	37.9
	208 & 115/60/1	115	4.2	1/3	4.0	208	29.3
	230 & 115/60/1	115	4.2	1/3	4.0	230	27.0
	265 & 115/60/1	115	4.2	1/3	4.0	265	24.1
	208-230/60/1	208-230	2.7	1/3	4.0	208 - 230	27.4 - 25.1
	265/60/1	265	3.2	1/2	4.0	265	22.9
600-ECM (Type E)	115/60/1	115	4.2	1/3	3.0	115	37.9
	208 & 115/60/1	115	4.2	1/3	6.0	208	41.3
	230 & 115/60/1	115	4.2	1/3	6.0	230	37.9
	265 & 115/60/1	115	4.2	1/3	6.0	265	33.6
	208-230/60/1	208-230	2.7	1/3	6.0	208 - 230	39.4 - 36.0
	265/60/1	265	3.2	1/2	6.0	265	32.3
800-ECM (Type E)	115/60/1	115	6.2	1/2	3.0	115	40.4
	208 & 115/60/1	115	6.2	1/2	6.0	208	43.8
	230 & 115/60/1	115	6.2	1/2	6.0	230	40.4
	265 & 115/60/1	115	6.2	1/2	8.0	265	45.5
	208-230/60/1	208-230	3.9	1/2	6.0	208 - 230	40.9 - 37.5
	265/60/1	265	3.2	1/2	8.0	265	41.7

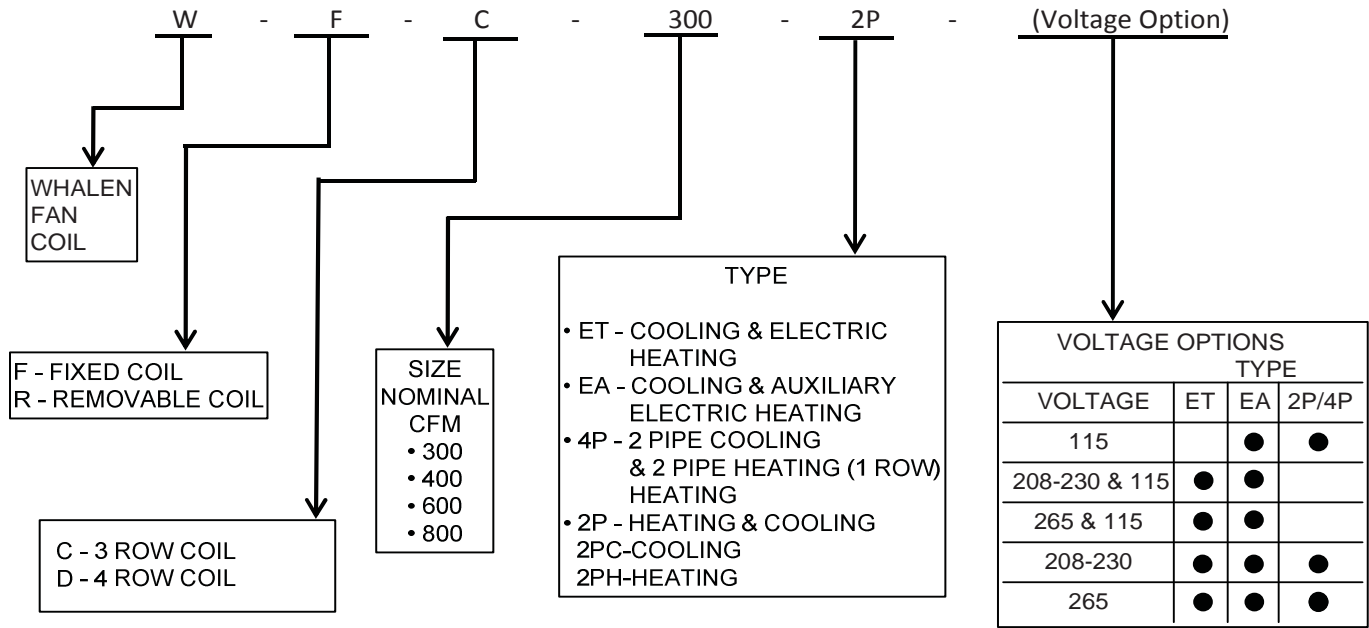
\* Not all Electric Heat KW options available in Single Point Power Configuration.

Consult factory for Dual Point Power Configuration Requirements.

Drawing Number 431EI

12/13/2011

# WHALEN ROOM FAN COIL NOMENCLATURE



## ELECTRICAL RATINGS

Unit Size	Unit Voltage	Fan			Electric Heat		MCA
		Volt	FLA	HP	Max KW	Volt	
1000-ECM (Type E)	115/60/1	115	6.2	1/2	3.0	115	40.4
	208 & 115/60/1	115	6.2	1/2	6.0	208	43.8
	230 & 115/60/1	115	6.2	1/2	6.0	230	40.4
	265 & 115/60/1	115	6.2	1/2	8.0	265	45.5
	208-230/60/1	208-230	3.9	1/2	6.0	208 - 230	40.9 - 37.5
	265/60/1	265	3.2	1/2	9.0	265	46.5
1200-ECM (Type E)	115/60/1	115	6.2	1/2	3.0	115	40.4
	208 & 115/60/1	115	6.2	1/2	6.0	208	43.8
	230 & 115/60/1	115	6.2	1/2	6.0	230	40.4
	265 & 115/60/1	115	6.2	1/2	8.0	265	45.5
	208-230/60/1	208-230	3.9	1/2	6.0	208 - 230	40.9 - 37.5
	265/60/1	265	3.2	1/2	9.0	265	46.5

\* Not all Electric Heat KW options available in Single Point Power Configuration.

Consult factory for Dual Point Power Configuration Requirements.

Drawing Number 431EI

12/13/2011

# Wiring Document Nomenclature

**W 1 2P 0 1 - - -**

**Identifier**  
 “ - Wiring Diagram  
 P - Point to Point Diagram  
 W - Wire List

**Model**  
 1 - RHE  
 4F - WFX  
 4R - WRX  
 6 - Series VI  
 7 - Chassis

**Configuration**

WVC & RHE

2P - 2 Pipe  
 4P - 4 Pipe  
 AE - Aux Elec.  
 ET - Total Elec.  
 HO - Heat Only  
 CO - Cooling Only  
 FB - Face & Bypass  
 FC - Face & Bypass Cooling Only  
 FH - Face & Bypass Heat Only  
 55 - 50/50 4 Pipe

WSHP

\_A - Heat Pump  
 A1 - HP w/ Electric Heat  
 \_B - AC w/ Electric Heat  
 \_C - AC w/ Hydronic Heat  
 \_D - Air Conditioner  
 2S - 2 Stage Heat Pump  
 WG - Fail to Heat (Chassis)  
 WA - Fail to Cool (Chassis)  
 WC - Innkeeper (Chassis)  
 WB - Cooling Only (Chassis)

**24 V Control**  
 0 - No  
 1 - Yes

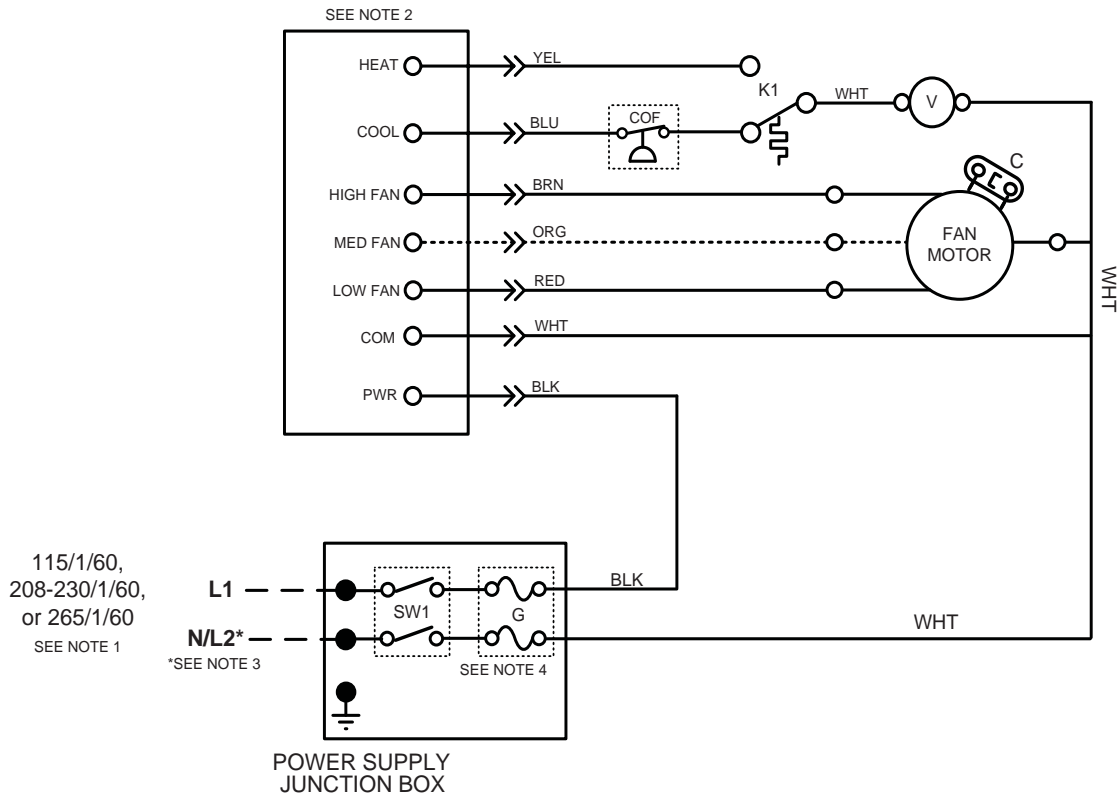
**# of Power Supplies**  
 1 - 1 P.S.  
 2 - 2 P.S.  
 3 - 3 Wire (208/115)

**Controls**  
 “-“ - STD  
 “+” - Enhanced Control (12P only)  
 S - Solid State (6 Only)

**Motor Options**  
 “-“ - PSC (STD/HS)  
 E - ECM - PerfectSpeed  
 M - ECM Modulated Air  
 D - ECM - SelectTech/X-13  
 F - ECM - EcoTech  
 T - ECM - Telco ~~BMN42~~

**VI ONLY Options  
 (may be Combined)**  
 1 - 1 Speed T-Stat  
 2 - 2 Speed T-Stat

# UNIT WIRING



**LEGEND:**

- K1 - AQUASTAT
- V - MOTORIZED VALVE
- C - CAPACITOR
- SW1 - DISCONNECT SWITCH
- G - NON-RENEWABLE FUSE
- COF - CONDENSATE OVERFLOW SWITCH
- - —

- >>— - QUICK CONNECT PLUGS
- - - - - INDICATES FIELD WIRING
- · - · - · - INDICATES OPTIONAL WIRING/COMPONENT
- - INDICATES FACTORY CONNECTION
- - INDICATES FIELD CONNECTION

**NOTES:**

1. Use copper conductors only.
2. Thermostat is field installed and may be remote mounted.
3. For 208V applications, white wire is replaced with red wire to indicate L2.
4. DPST switch for 208 applications only.

## SEQUENCE OF OPERATIONS

The room thermostat and the water temperature sensor (aquastat) act together to maintain the room temperature selected.

- On a call for heating
  - If the riser water temperature goes above 85 F, the water valve opens.
- On a call for cooling
  - If the riser water temperature goes below 65 F, the water valve opens.

Room FAN COIL

**THE WHALEN COMPANY**  
EASTON, MARYLAND

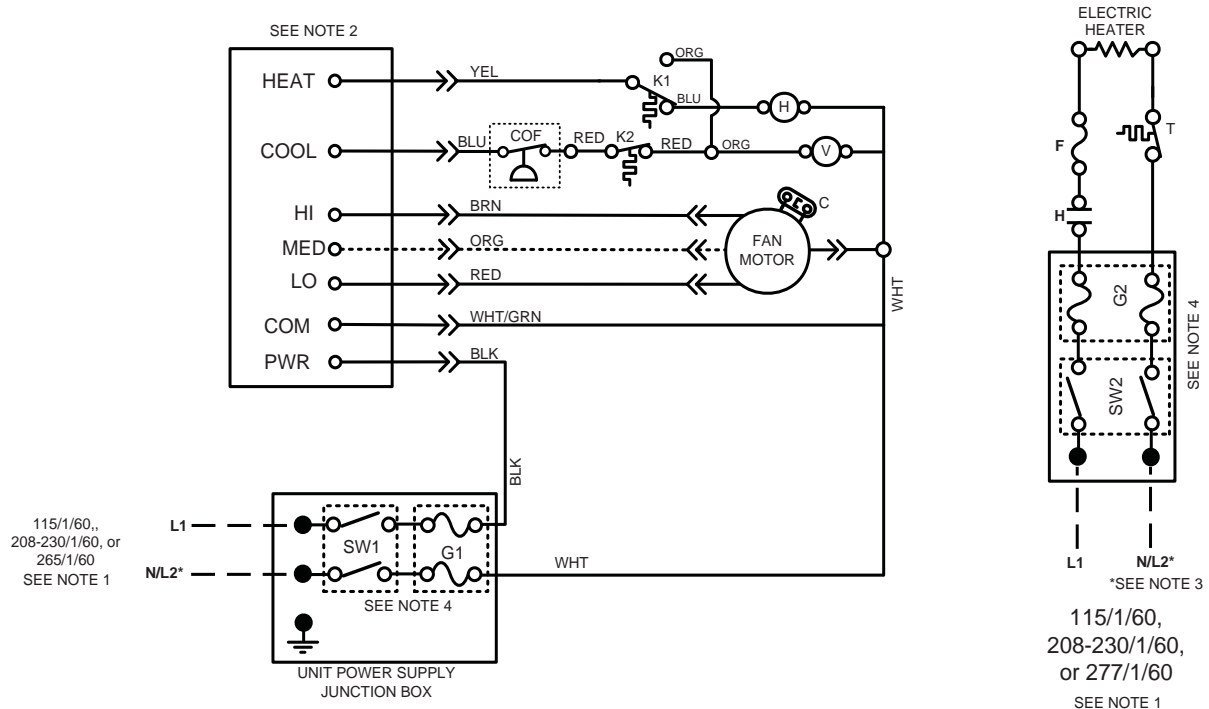
WIRING DIAGRAM

MODEL NO.: WFX-302, WFX-402, WFX-602,  
WFX-802, WFX-1002, WFX-1202





## UNIT WIRING



**LEGEND:**

- |  |  |
|--|--|
| <input type="checkbox"/> K2 - TEMPERATURE SENSOR FOR COOLING | <input type="checkbox"/> K1 - TEMPERATURE SENSOR FOR ELECTRIC HEAT OR HOT WATER    |
| <input type="checkbox"/> H - ELECTRIC HEAT RELAY             | <input type="checkbox"/> T - TEMPERATURE LIMIT                                     |
| <input type="checkbox"/> V - WATER VALVE                     | <input type="checkbox"/> ———> ———> - QUICK CONNECT PLUGS                           |
| <input type="checkbox"/> C - CAPACITOR                       | <input type="checkbox"/> - - - - - INDICATES FIELD WIRING                          |
| <input type="checkbox"/> F - THERMAL CUTOFF                  | <input type="checkbox"/> - - - - - INDICATES OPTIONAL WIRING/COMPONENT             |
| <input type="checkbox"/> G1 - NON-RENEWABLE FUSE             | <input type="checkbox"/> ○ - INDICATES FACTORY CONNECTION                          |
| <input type="checkbox"/> G2 - NON-RENEWABLE FUSE             | <input type="checkbox"/> ● - INDICATES FIELD CONNECTION                            |
| <input type="checkbox"/> SW1 - DISCONNECT SWITCH             | <input type="checkbox"/> <input type="checkbox"/> COF - CONDENSATE OVERFLOW SWITCH |
| <input type="checkbox"/> SW2 - DISCONNECT SWITCH             | <input type="checkbox"/> _____ - _____   |

**NOTES:**

1. Use copper conductors only.
2. Thermostat is field installed and may be remote mounted.
3. For 208V applications, white wire is replaced with red wire to indicate L2.
4. DPST switch for 208 applications only.

### SEQUENCE OF OPERATIONS

The room thermostat and water temperature sensor (aquastat) work together to maintain the room temperature selected.

Upon a call for heating:

- If the water temperature goes above 100°F, the water valve opens.
- If the water temperature goes below 75°F, the water valve closes and the electric heat relay is activated allowing the electric heat coil to be active.

Upon a call for cooling:

- If the water temperature goes below 65°F, the water valve opens.
- If the water temperature goes above 85°F, the water valve closes and the electric heat relay remains deactivated.

Fan Operation (thermostat defined)

- On (Constant Fan)
  - Fan will run continuously
- Auto (Fan Cycle)
  - Fan will only run in conjunction with a call for heat or cool

2-PIPE-AUXILIARY ELECTRIC HEAT VERTICAL FAN COIL

THE WHALEN COMPANY

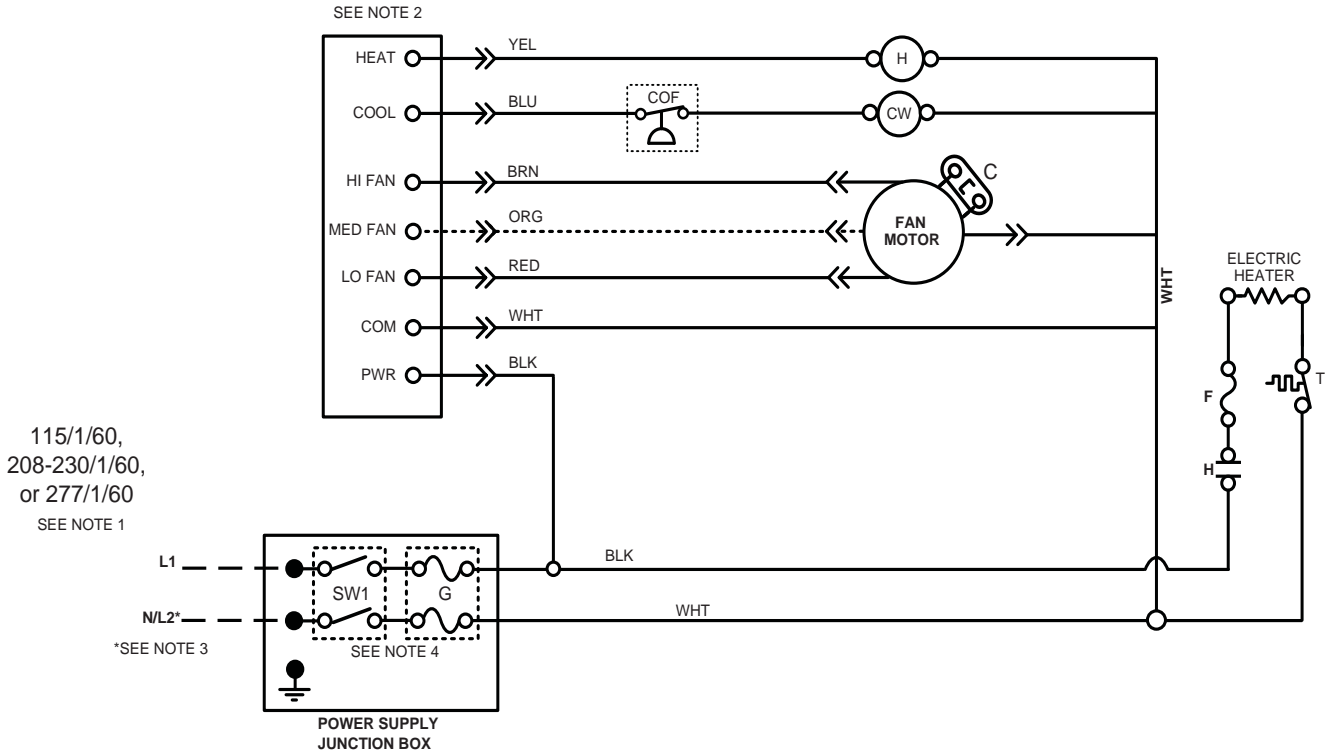
EASTON, MARYLAND

WIRING DIAGRAM

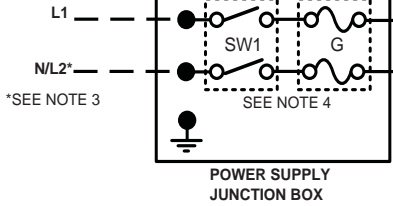
MODELS: WFX-302AE, WFX- 402AE,  
WFX-602AE, WFX-802AE, WFX-1002AE,  
WFX-1202AE



# UNIT WIRING



115/1/60,  
208-230/1/60,  
or 277/1/60  
SEE NOTE 1



**LEGEND:**

- H - ELECTRIC HEAT RELAY
- CW - CHILLED WATER VALVE
- C - CAPACITOR
- F - THERMAL CUTOFF
- T - TEMPERATURE LIMIT
- SW1 - DISCONNECT SWITCH

- QUICK CONNECT PLUGS
- INDICATES FIELD WIRING
- INDICATES OPTIONAL WIRING/COMPONENT
- INDICATES FACTORY CONNECTION
- INDICATES FIELD CONNECTION
- G - NON-RENEWABLE FUSE
- COF - CONDENSATE OVERFLOW SWITCH

**NOTES:**

1. Use copper conductors only.
2. Thermostat is field installed and may be remote mounted.
3. For 208V applications, white wire is replaced with red wire to indicate L2.
4. DPST switch for 208 applications only.

## SEQUENCE OF OPERATIONS

- Upon a call for heat:
  - Cold Water Valve will be closed
  - Electric Heat relay will be activated allowing Electric Heat Coil to be active
- Upon a call for cooling:
  - Cold Water Valve will open to allow for cooling
  - Electric Heat relay will be inactive
- Upon no call for heat or cool:
  - Cold Water Valve will be closed
  - Electric Heat relay will be inactive
- Fan Operation (thermostat defined)
  - On (Constant Fan)
    - Fan will run continuously
  - Auto (Fan Cycle)
    - Fan will only run in conjunction with a call for heat or cool

**2 PIPE W/ TOTAL ELECTRIC - FAN COIL**

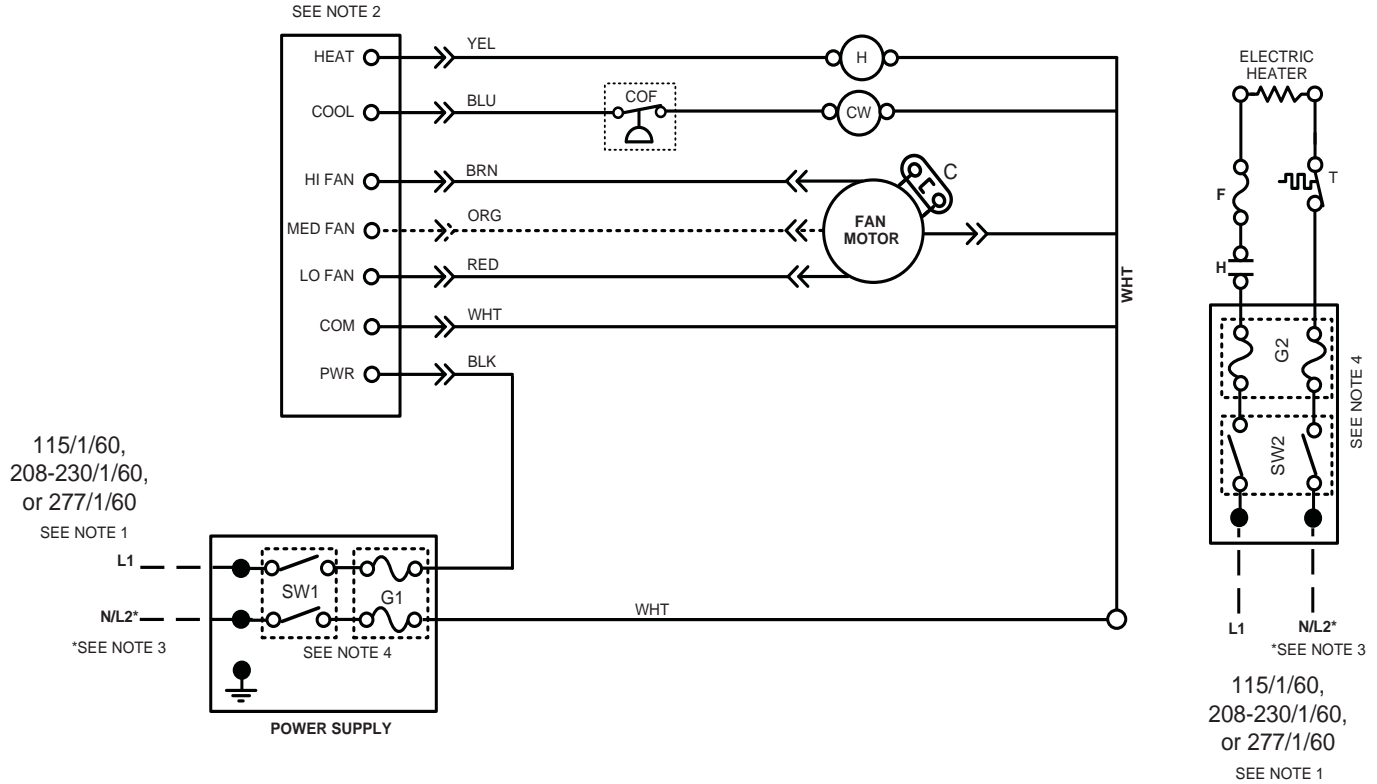
**THE WHALEN COMPANY**

EASTON, MARYLAND

WIRING DIAGRAM

MODELS: WFX-302ET, WFX- 402ET,  
WFX-602ET, WFX-802ET, WFX-1002ET,  
WFX-1202ET

# UNIT WIRING



## LEGEND:

- |                           |   |
|---------------------------|---|
| H - ELECTRIC HEAT RELAY   | →→ - QUICK CONNECT PLUGS                |
| CW - CHILLED WATER VALVE  | - - - - - INDICATES FIELD WIRING        |
| C - CAPACITOR             | ⋯⋯⋯ INDICATES OPTIONAL WIRING/COMPONENT |
| F - THERMAL CUTOFF        | ○ - INDICATES FACTORY CONNECTION        |
| T - TEMPERATURE LIMIT     | ● - INDICATES FIELD CONNECTION          |
| □ SW1 - DISCONNECT SWITCH | □ G1 - NON-RENEWABLE FUSE               |
| □ SW2 - DISCONNECT SWITCH | □ G2 - NON-RENEWABLE FUSE               |
|                           | □ COF - CONDENSATE OVERFLOW SWITCH      |
|                           | □ _____ - _____                         |

## NOTES:

1. Use copper conductors only.
2. Thermostat is field installed and may be remote mounted.
3. For 208V applications, white wire is replaced with red wire to indicate L2.
4. DPST switch for 208 applications only.

## SEQUENCE OF OPERATIONS

- Upon a call for heat:
- Cold Water Valve will be closed
  - Electric Heat relay will be activated allowing Electric Heat Coil to be active
- Upon a call for cooling:
- Cold Water Valve will open to allow for cooling
  - Electric Heat relay will be inactive
- Upon no call for heat or cool:
- Cold Water Valve will be closed
  - Electric Heat relay will be inactive
- Fan Operation (thermostat defined)
- On (Constant Fan)
    - Fan will run continuously
  - Auto (Fan Cycle)
    - Fan will only run in conjunction with a call for heat or cool

**2 PIPE W/ TOTAL ELECTRIC - FAN COIL**

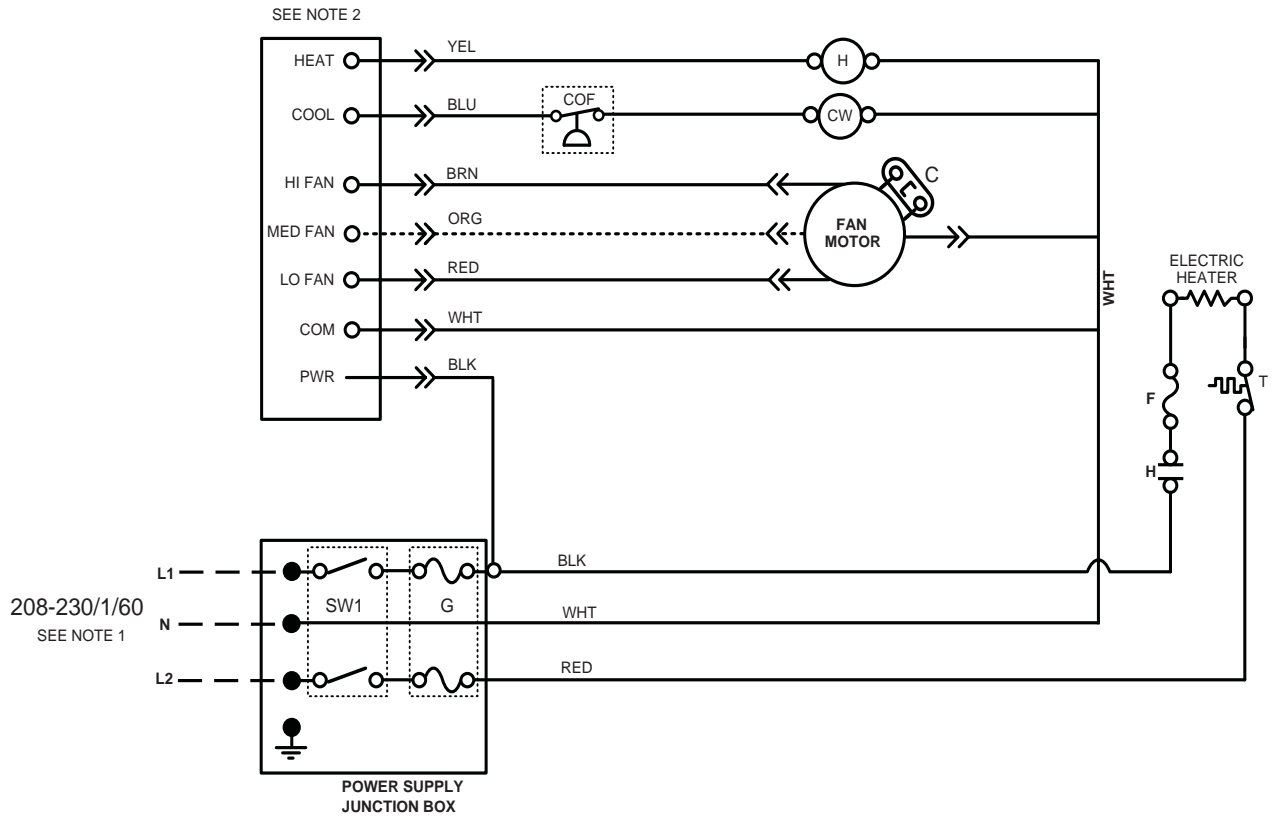
**THE WHALEN COMPANY**

EASTON, MARYLAND

WIRING DIAGRAM

MODELS: WFX-302ET, WFX- 402ET,  
WFX-602ET, WFX-802ET, WFX-1002ET,  
WFX-1202ET

# UNIT WIRING



**LEGEND:**

- |                           |   |
|---------------------------|---|
| H - ELECTRIC HEAT RELAY   | →→ - QUICK CONNECT PLUGS                |
| CW - CHILLED WATER VALVE  | - - - - INDICATES FIELD WIRING          |
| C - CAPACITOR             | ⋯⋯⋯ INDICATES OPTIONAL WIRING/COMPONENT |
| F - THERMAL CUTOFF        | ○ - INDICATES FACTORY CONNECTION        |
| T - TEMPERATURE LIMIT     | ● - INDICATES FIELD CONNECTION          |
| □ SW1 - DISCONNECT SWITCH | □ G - NON-RENEWABLE FUSE                |
|                           | □ COF - CONDENSATE OVERFLOW SWITCH      |
|                           | □ - - - - -                             |

**NOTES:**

1. Use copper conductors only.
2. Thermostat is field installed and may be remote mounted.
3. For 208V applications, white wire is replaced with red wire to indicate L2.
4. DPST switch for 208 applications only.

## SEQUENCE OF OPERATIONS

- Upon a call for heat:
  - Cold Water Valve will be closed
  - Electric Heat relay will be activated allowing Electric Heat Coil to be active
- Upon a call for cooling:
  - Cold Water Valve will open to allow for cooling
  - Electric Heat relay will be inactive
- Upon no call for heat or cool:
  - Cold Water Valve will be closed
  - Electric Heat relay will be inactive
- Fan Operation (thermostat defined)
  - On (Constant Fan)
    - Fan will run continuously
  - Auto (Fan Cycle)
    - Fan will only run in conjunction with a call for heat or cool

**2 PIPE W/ TOTAL ELECTRIC - FAN COIL**

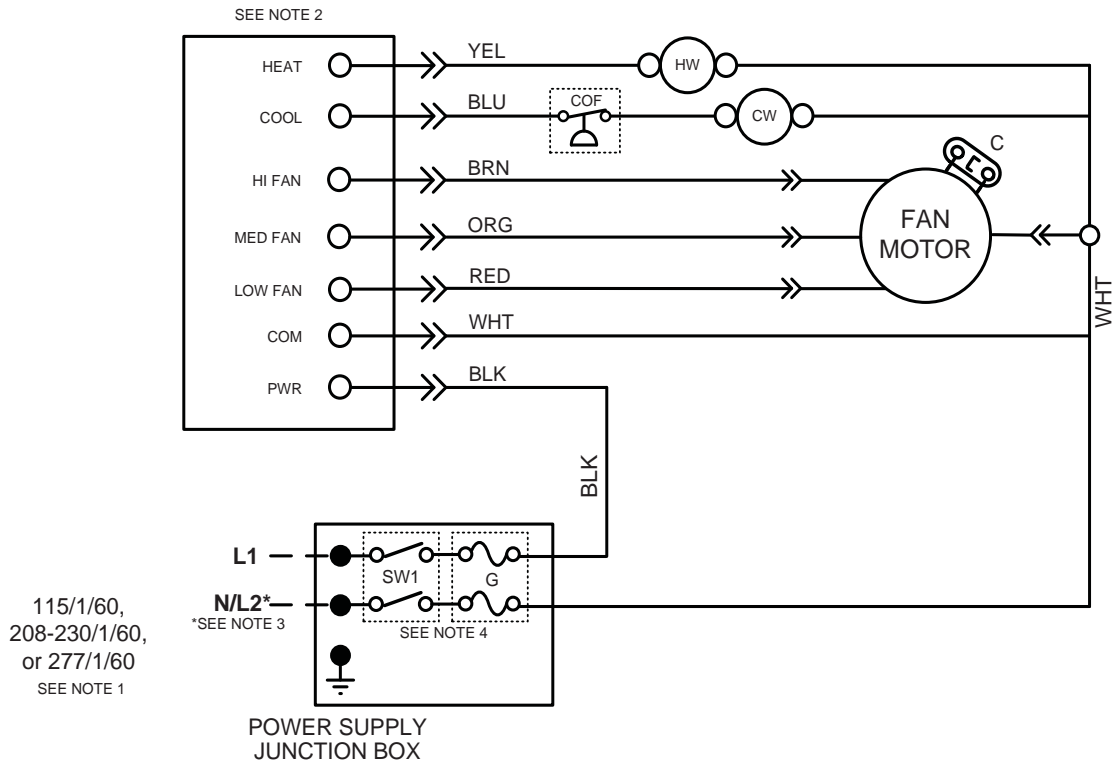
**THE WHALEN COMPANY**

EASTON, MARYLAND

WIRING DIAGRAM

MODELS: WFX-302ET, WFX- 402ET,  
WFX-602ET, WFX-802ET, WFX-1002ET,  
WFX-1202ET

# UNIT WIRING



**LEGEND:**

- HW - HOT WATER VALVE
- CW - CHILLED WATER VALVE
- C - CAPACITOR
- SW1 - DISCONNECT SWITCH
- G - NON-RENEWABLE FUSE
- COF - CONDENSATE OVERFLOW SWITCH

- - QUICK CONNECT PLUGS
- - - - - INDICATES FIELD WIRING
- ..... INDICATES OPTIONAL WIRING/COMPONENT
- - INDICATES FACTORY CONNECTION
- - INDICATES FIELD CONNECTION

**NOTES:**

1. Use copper conductors only.
2. Thermostat is field installed and may be remote mounted.
3. For 208V applications, white wire is replaced with red wire to indicate L2.
4. DPST switch for 208 applications only.

## SEQUENCE OF OPERATIONS

Upon a call for heat:  
 -Hot Water Valve will open to allow for heating

Upon a call for cooling:  
 -Cold Water Valve will open to allow for cooling

Upon no call for heat or cool:  
 Both Hot and Cold Water Valves will remain closed

Fan Operation (thermostat defined)

- On (Constant Fan)
  - Fan will run continuously
- Auto (Fan Cycle)
  - Fan will only run in conjunction with a call for heat or cool

4-PIPE - FAN COIL

WIRING DIAGRAM

**THE WHALEN COMPANY**

EASTON, MARYLAND

MODEL NO.: WFX-304, WFX-404, WFX-604,  
 WFX-804, WFX-1004, WFX-1204