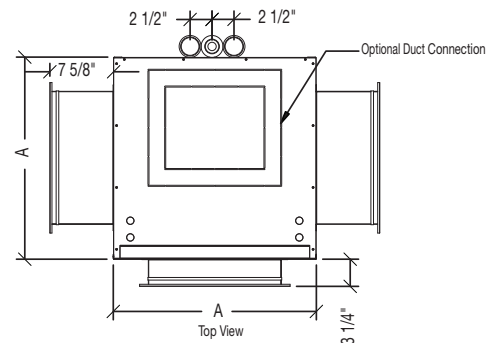


Vertical Stack Water Source Heat Pumps

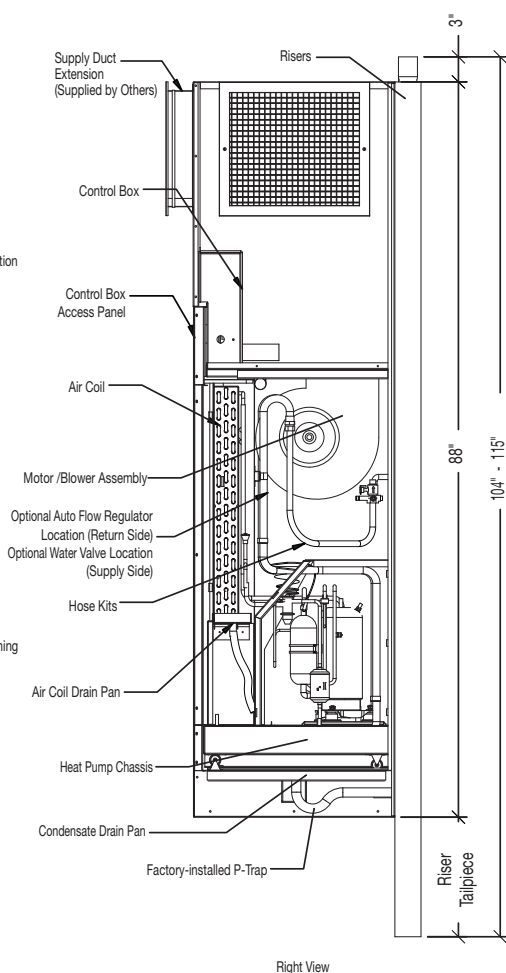
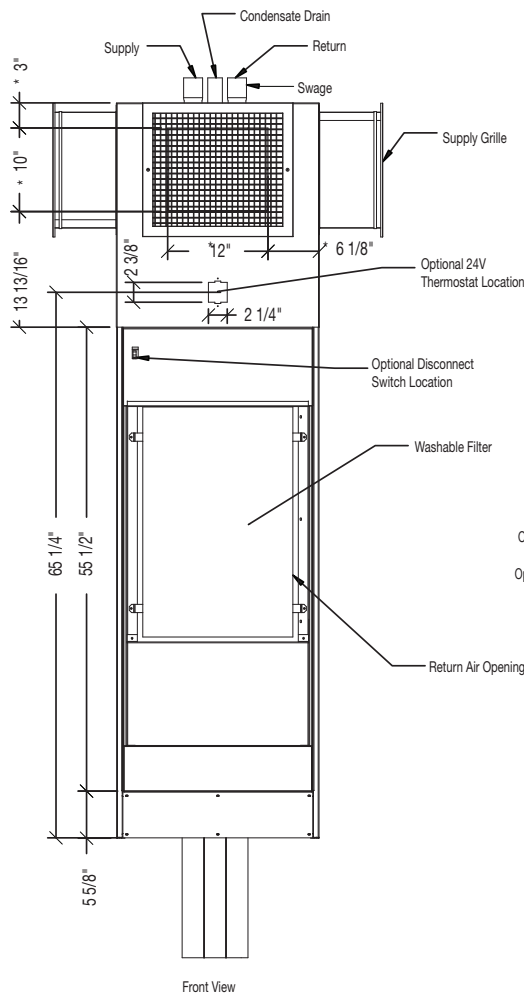
Stand Alone Unit (VSH)



Dimensional Data

Unit Dimensions: 88" Height

Model	A
09-18	18"
24-36	24-1/4"



Contractor _____
 Architect _____
 Engineer _____
 Representative _____
 Location _____

zehnder Rittling

BUFFALO, NY USA

TITLE

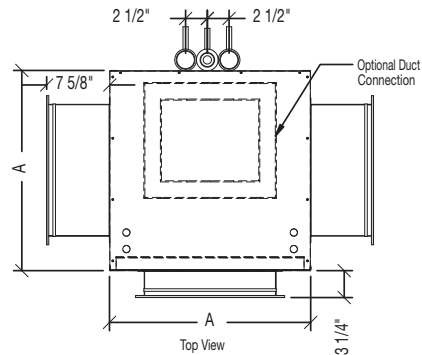
ZR_VSWSHP_StandAlone_VSH

DRAWING NUMBER

April 16, 2012

Vertical Stack Water Source Heat Pumps

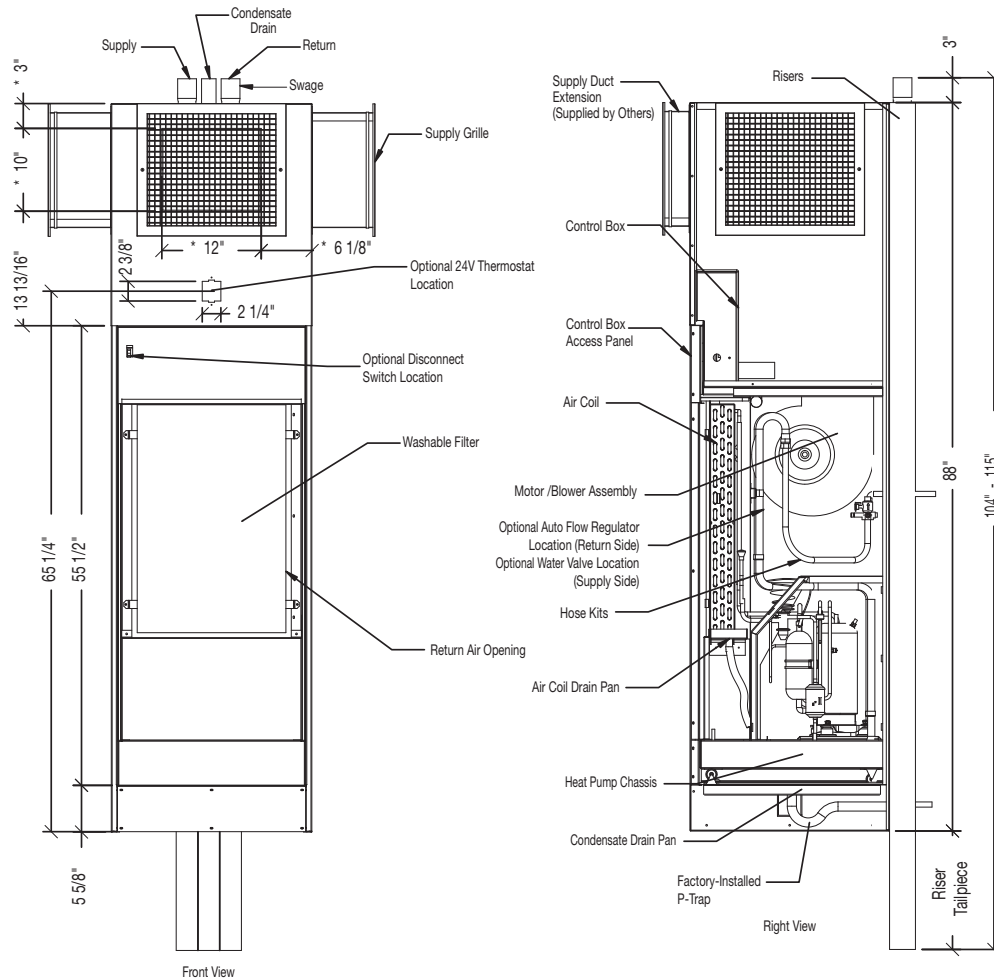
Master Unit (VSM)



Dimensional Data

Unit Dimensions: 88" Height

Model	A
09-18	18"
24-36	24-1/4"



Contractor _____

Architect _____

Engineer _____

Representative _____

Location _____



BUFFALO, NY USA

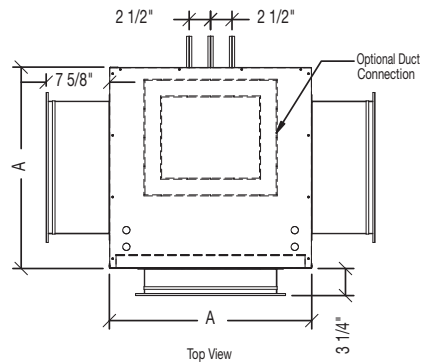
TITLE
ZR_VSWSHP_Master_VSM

DRAWING NUMBER

April 16, 2012

Vertical Stack Water Source Heat Pumps

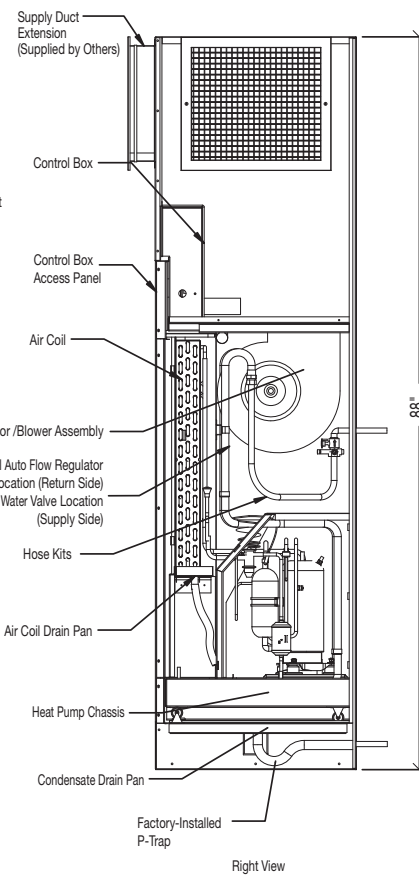
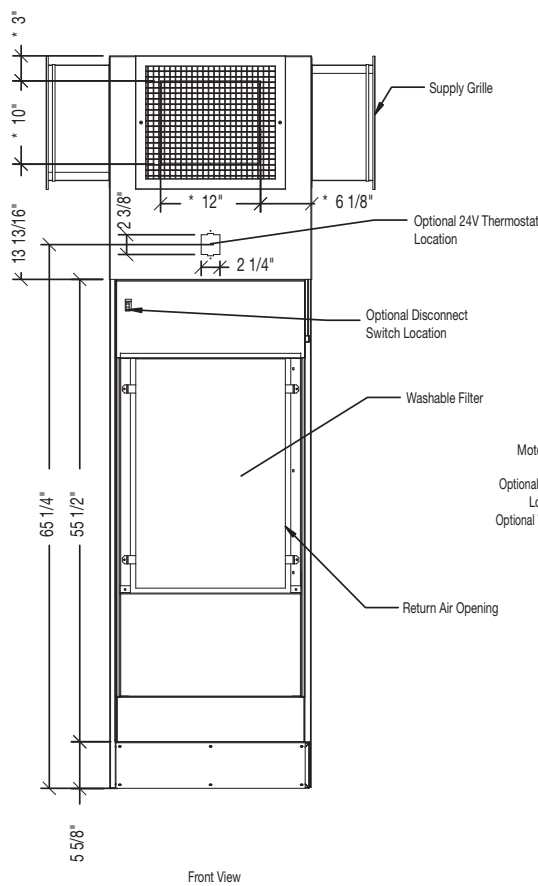
Slave Unit (VSS)



Dimensional Data

Unit Dimensions: 88" Height

Model	A
09-18	18"
24-36	24-1/4"



Contractor _____

Architect _____

Engineer _____

Representative _____

Location _____

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Rittling

BUFFALO, NY USA

TITLE

ZR_VSWSHP_Slave_VSS

DRAWING NUMBER

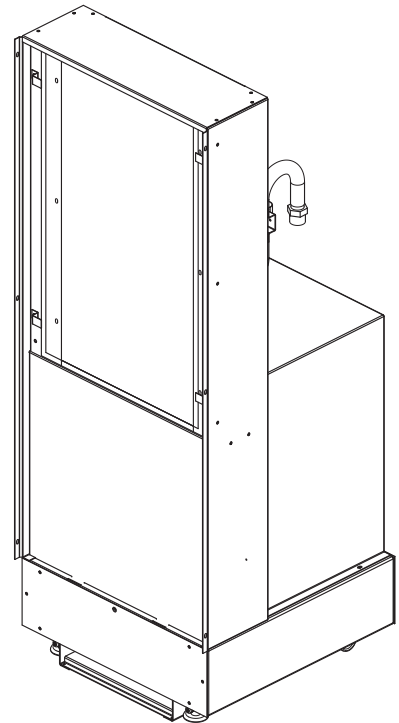
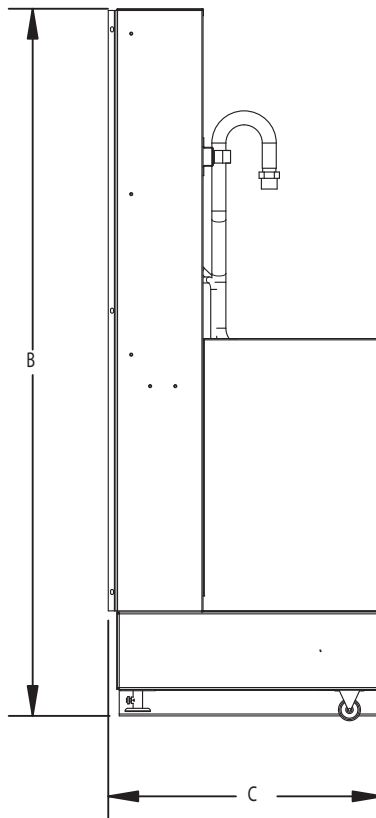
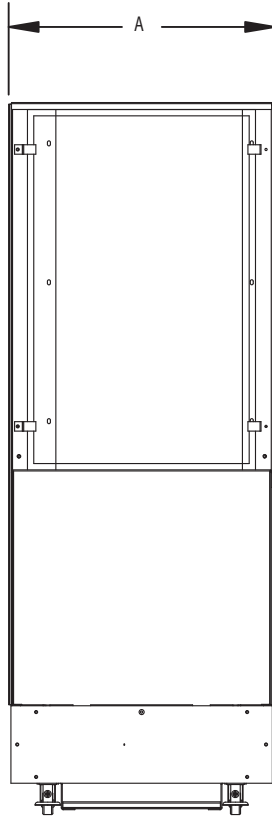
April 16, 2012

Vertical Stack Water Source Heat Pumps

Chassis

Dimensional Data

Unit Size	A	B	C
09-12	16-1/32"	37"	16-3/32"
15-18		44"	
24-36	22-1/32"	46"	23"



Contractor _____

Architect _____

Engineer _____

Representative _____

Location _____

zehnder
Rittling

BUFFALO, NY USA

TITLE

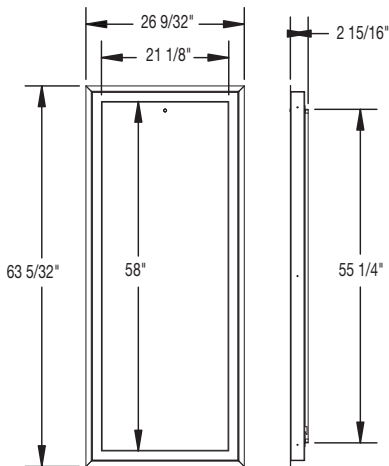
ZR_VSWSHP_Chassis

DRAWING NUMBER

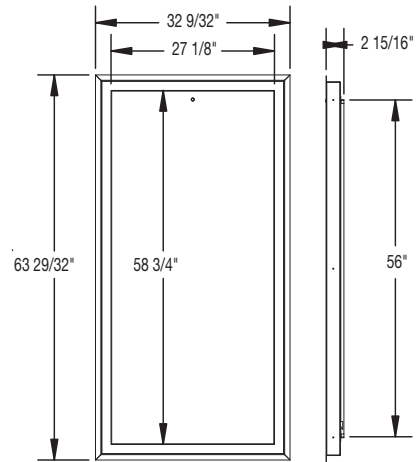
April 16, 2012

Vertical Stack Water Source Heat Pumps

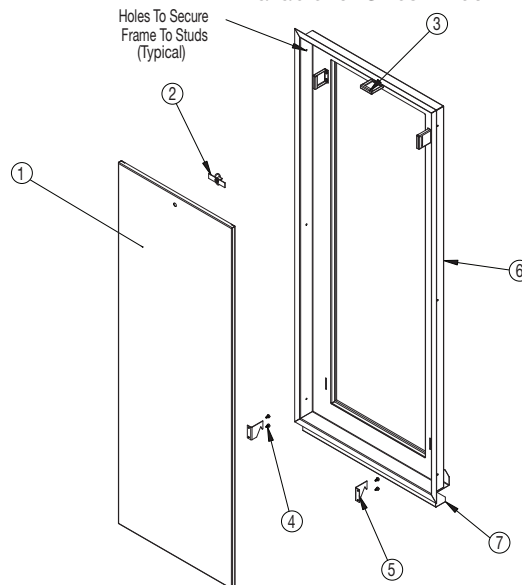
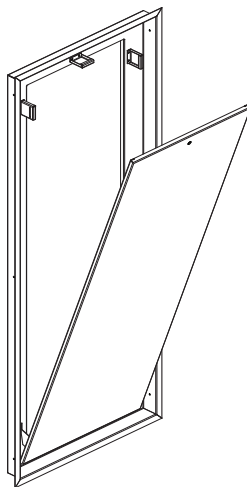
Standard Removable Perimeter Return Air Panel



Available for Sizes 09-18



Available for Sizes 24-36



Allen Lock, Removable

Item Number	Description	Quantity
1	Return Panel	1
2	Quarter Turn Fastener	1
3	Door Stop	3
4	Screw	10
5	Pivot Angle	2
6	Frame	1
7	Frame Support	1

Notes:

- Seal between the frame and cabinet with a weather serial gasket (provided with cabinet) to avoid air from being pulled in from the wall cavity.
- Do not attach frame to cabinet.
- Frame support shipped with cabinet.
- Door assemblies shipped separately.

Contractor _____

Architect _____

Engineer _____

Representative _____

Location _____

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TITLE

ZR_VSWSHP_PerReturnAirPanel

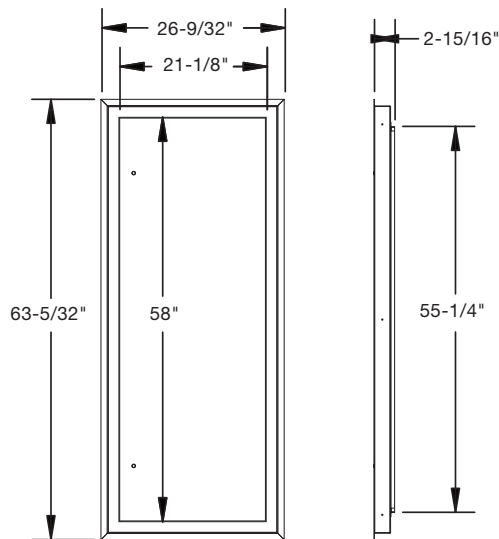
DRAWING NUMBER

Dimensions and Data 37

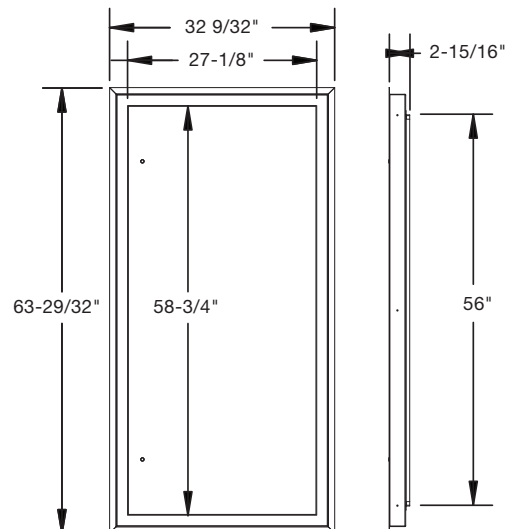
April 16, 2012

Vertical Stack Water Source Heat Pumps

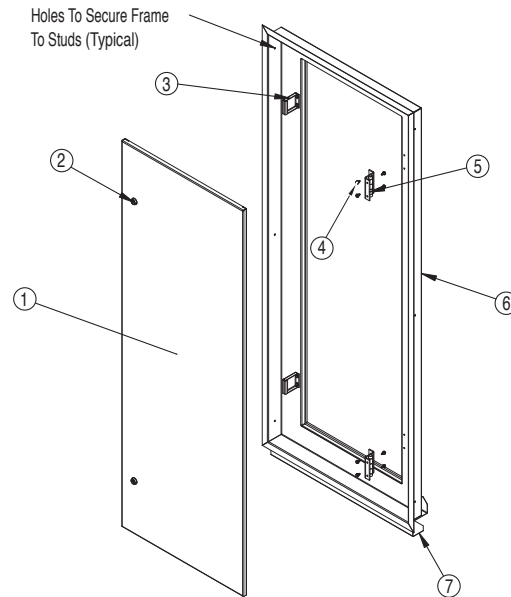
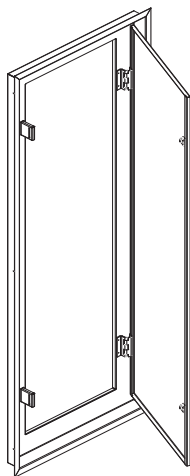
Optional Hinged Perimeter Return Air Panel



Available for Sizes 09-18



Available for Sizes 24-36



Notes:

- Seal between the frame and cabinet with a weather serial gasket (provided with cabinet) to avoid air from being pulled in from the wall cavity.
- Do not attach frame to cabinet.
- Frame support shipped with cabinet.
- Door assemblies shipped separately.

Key Lock or Allen Lock

Item Number	Description	Quantity
1	Return Panel	1
2	Quarter Turn Fastener or Key Lock	2
3	Door Stop	2
4	Screw	12
5	Hinge	2
6	Frame	1
7	Frame Support	1

Contractor _____

Architect _____

Engineer _____

Representative _____

Location _____

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Rittling

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TITLE

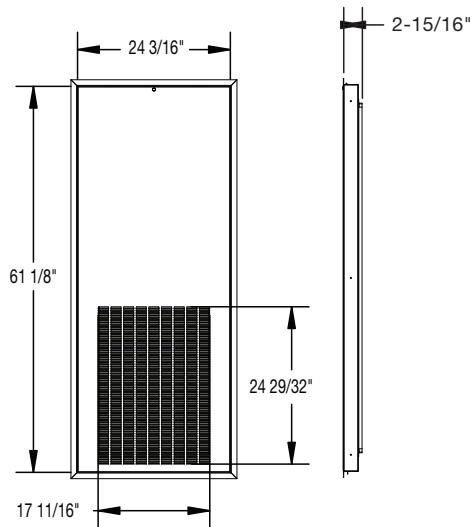
ZR_VSWSHP_HingedReturnAirPanel

DRAWING NUMBER

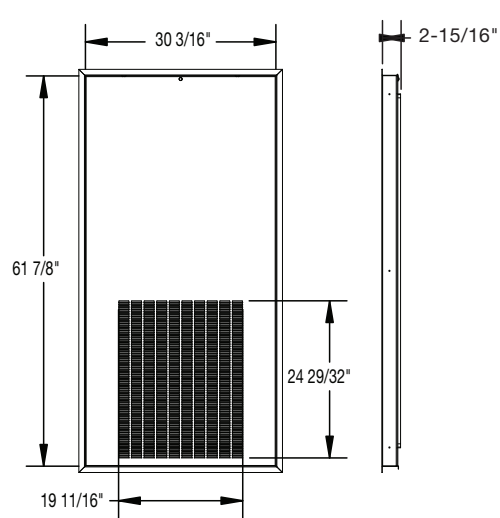
April 16, 2012

Vertical Stack Water Source Heat Pumps

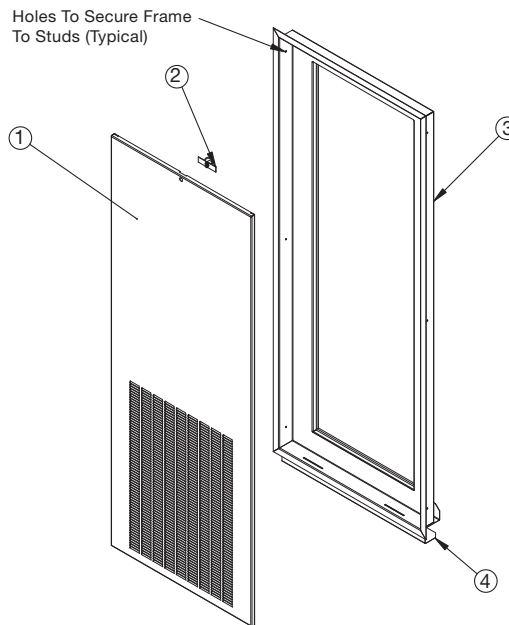
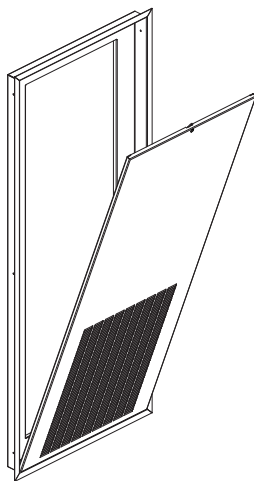
Optional Removable Louvered Return Air Panel



Available for sizes 09-18



Available for sizes 24-36



Allen Lock, Removable

Item Number	Description	Quantity
1	Return Panel	1
2	Quarter Turn Fastener	1
3	Frame	1
4	Frame Support	1

Notes:

- Seal between the frame and cabinet with a weather serial gasket (provided with cabinet) to avoid air from being pulled in from the wall cavity.
- Do not attach frame to cabinet.
- Frame support shipped with cabinet.
- Door assemblies shipped separately.

Contractor _____

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Engineer _____

Representative _____

Location _____

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Rittling

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TITLE

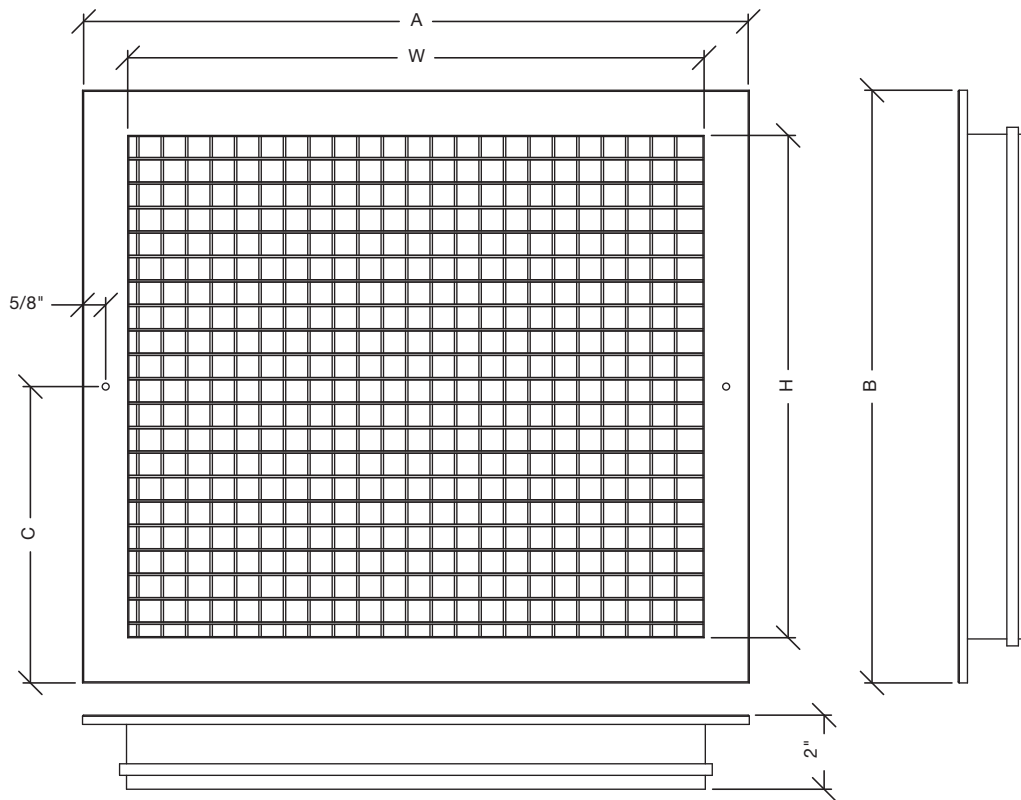
ZR_VSWSHP_LouveredRetAirPanel

DRAWING NUMBER

April 16, 2012

Vertical Stack Water Source Heat Pumps

Aluminum Discharge Grille



Dimensional Data

Grille size	Cabinet height	W	H	A	B	C
16" x 14"	STD	15-7/16"	13-7/16"	18"	16"	8"
14" x 12"	STD	13-3/8"	11-3/8"	16"	14"	7"
12" x 10"	STD	11-7/16"	9-7/16"	14"	12"	6"
10" x 8"	STD	9-7/16"	7-7/16"	12"	10"	5"

Notes:

- Dimensions are in inches.
- All dimensions are +/- 1/4.
- Discharge grilles are shipped loose for field installation.
- Construction is roll formed aluminum frame and blades.
- Standard finish is powder coated and will be the same color as the return grille.
- Mounting hardware included.

All listed dimensions are approximate and are subject to change without notice. Modifications to the product specifications must be accepted by Zehnder Rittling at its base office.

Supply Grille Arrangements

Unit Size	Single discharge (1)	Double discharge (2)	Triple discharge (3)
09	14" x 12"	10" x 8"	10" x 8"
12	14" x 12"	10" x 8"	10" x 8"
15	14" x 12"	10" x 8"	10" x 8"
18	14" x 12"	10" x 8"	10" x 8"
24	16" x 14"	12" x 10"	12" x 10"
30	16" x 14"	12" x 10"	12" x 10"
36	16" x 14"	12" x 10"	12" x 10"

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Engineer _____

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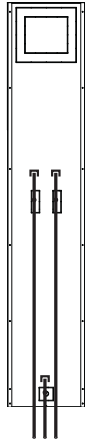
ZR_VSWSHP_DischargeGrille

DRAWING NUMBER

April 16, 2012

Vertical Stack Water Source Heat Pumps

Riser Configurations



All risers capped at cabinet run-outs

- System piping is bottom supply and return.



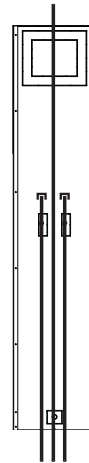
All risers open at top

- Bottom supply and return piping for supplying water to other units.
- Bottom supply and return piping for drain vent to roof, flushing crossover.
- Top supply and return piping.



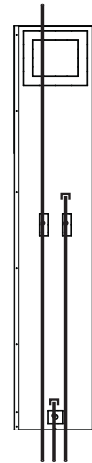
Supply and return open, drain capped at cabinet run-out

- Bottom supply and return piping with open top for venting or flushing crossover.
- Top supply and return.



Capped supply and return, drain open at top

- Bottom supply and return piping with open drain riser for venting to roof or picking up drain from other equipment above.

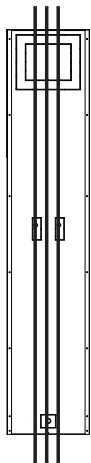


Supply or return open at top, others capped at cabinet run-out

- Bottom supply and top return piping.
- Top supply and bottom return piping.

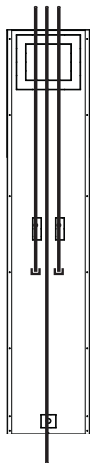
Symbols

- ▮ Riser piping is left open from factory
- ⊥ Riser piping is capped from factory



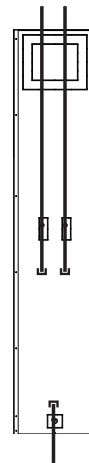
All riser through slab at bottom

- Bottom supply and return.
- Top supply and return feeding other equipment above.



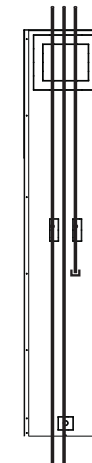
Supply and return capped at cabinet run-out, drain through slab

- Top supply and return
- Supply & return mains above these units on "between-floors" main piping.



All risers capped at cabinet run-out, drain through slab

- Isolated unit top supply and return from adjacent riser with separate drain.
- Check riser venting.



Supply or return capped at cabinet run-out, other risers extend through slab

- Bottom supply, top return piping.
- Bottom return, top supply piping.

Note:

- All configurations shown are rear view with risers on back of cabinet

Contractor _____

Architect _____

Engineer _____

Representative _____

Location _____

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TITLE

ZR_VSWSHP_RiserConfig

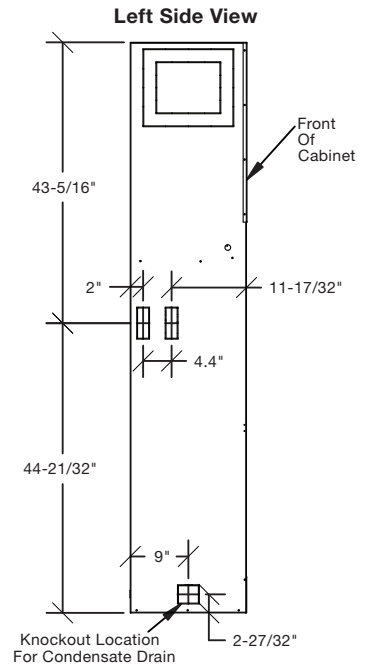
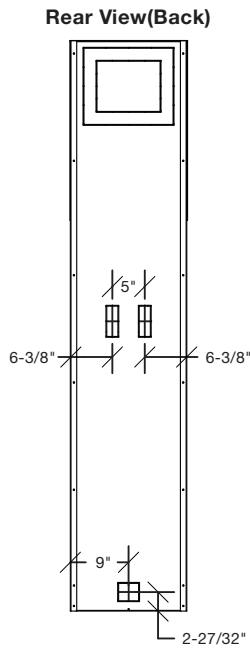
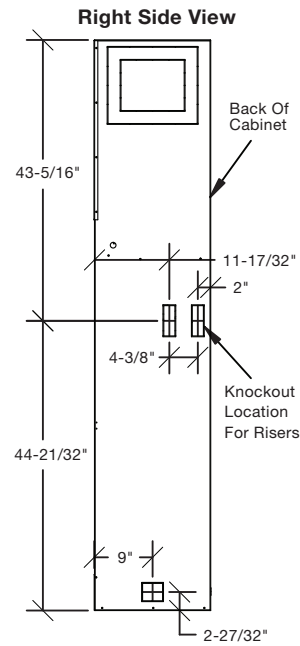
DRAWING NUMBER

April 16, 2012

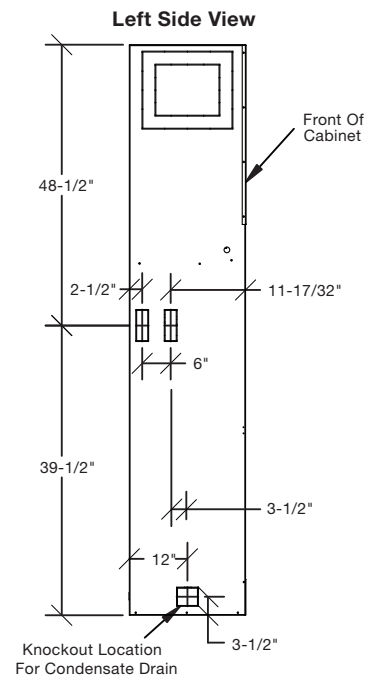
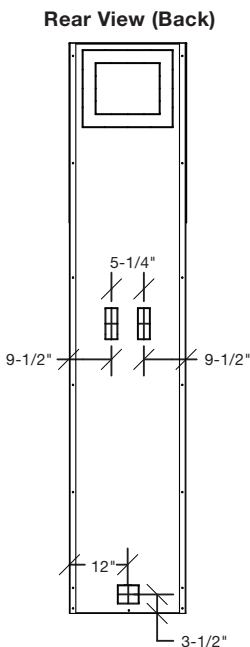
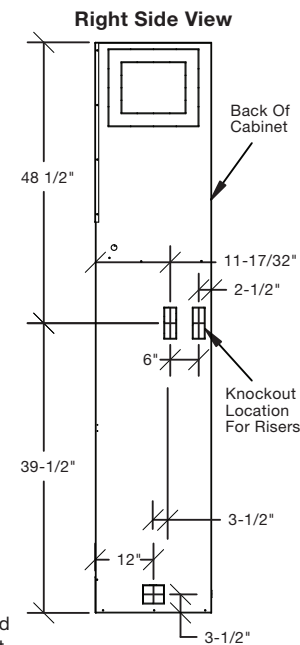
Vertical Stack Water Source Heat Pumps

Riser Slot Arrangements

Sizes 09-18



Sizes 24-36



Note:

- Right and left are determined by facing front of cabinet.

Contractor _____

Architect _____

Engineer _____

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Location _____

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ZR_VSWSHP_RiserSlots

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