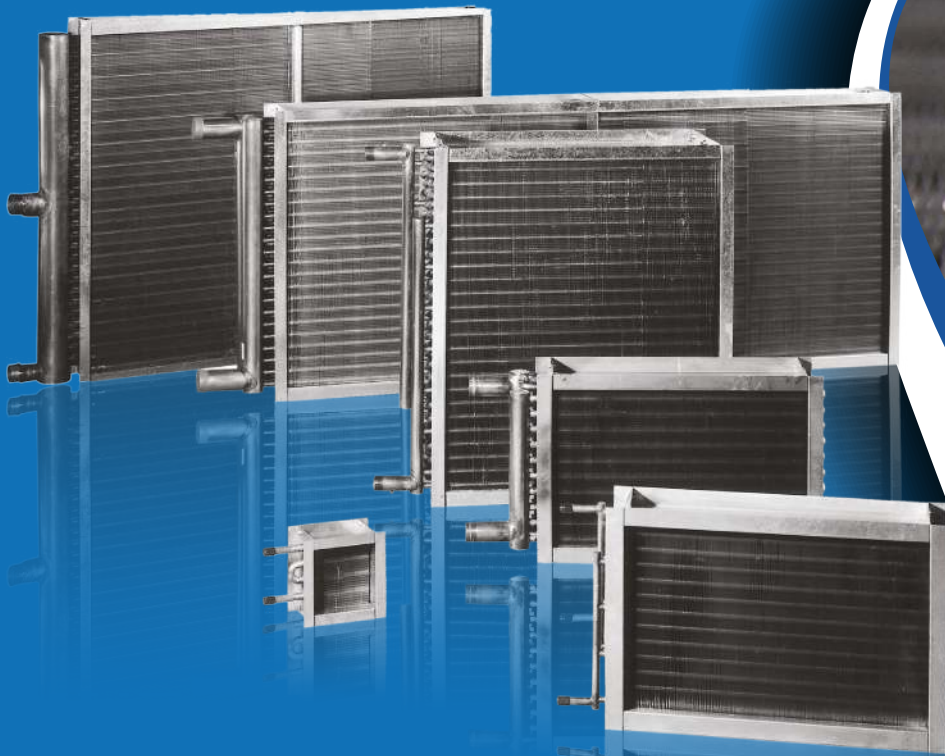
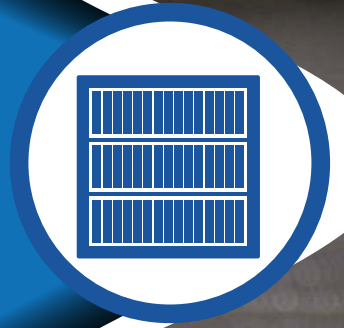


# REF PLUS



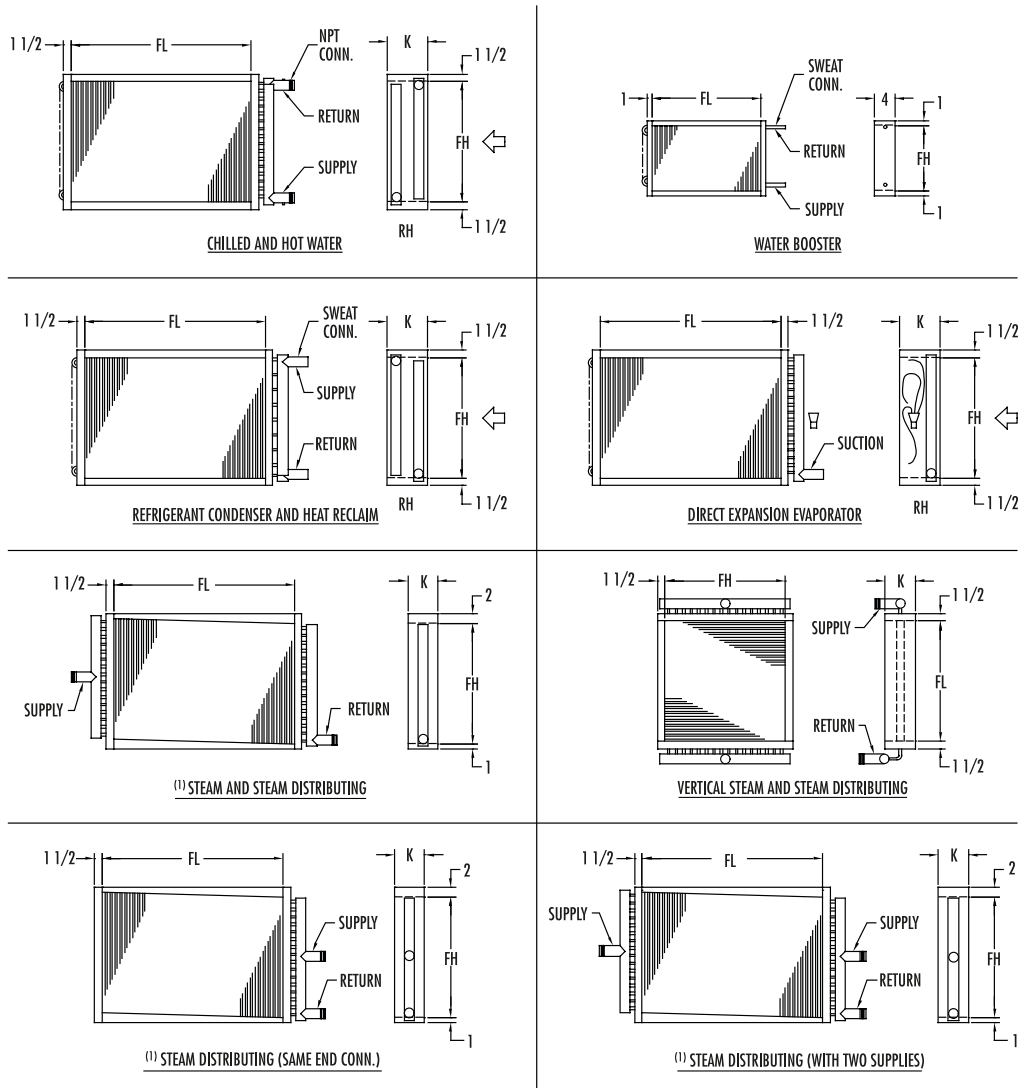
- Standard and custom construction
- Direct expansion evaporator coils (dx)
- Refrigerant condenser and heat reclaim coils
- Chilled and hot water coils
- Booster coils
- Steam and steam distributing coils

**COMMERCIAL AND INDUSTRIAL FREE STANDING COILS**



Certified ISO-9001

# COIL DIMENSIONS



(1) For steam distributing coils, RefPlus engineering reserves the right to select the supply type according to coil performance.

## NOMENCLATURE

### COIL TYPE

- W = Chilled & hot water
- B = Water booster
- C = Refrigerant condenser or heat reclaim
- D = Direct expansion evaporator
- S = Steam
- N = Steam distributing

### FIN PATTERN

### FIN SHAPE

- C = sine
- F = flat
- L = lanced
- X = corrugated
- D = diamond

**D      F      C      - 12      - 04      - 08      - 36**

**FINNED LENGTH (FL)**

**NUMBER OF FINS PER INCH**

**NUMBER OF ROWS**

**NUMBER OF FACE TUBES**

FIN PATTERN		C	H	D	E	F	G	P
Tube Diameter		3/8	3/8	3/8	1/2	1/2	5/8	1 1/8
Tube	Face	1	1	1 1/4	1 1/4	1 1/2	1 1/2	3
	c/c (inches)	0.75	0.866	1.083	1.083	1.299	1.299	2.165
Number of Row(s)		Frame Width (K) (inches)						
1		n/a	6	6	6	6	6	6
2		6	6	6	6	6	6	8
3		6	6	6	6	6	6	10
4		6	6	8	8	8	8	14
5		6	8	8	8	10	10	16
6		6	8	10	10	10	10	18
7		8	8	10	10	12	12	n/a
8		8	10	12	12	14	14	n/a
10		10	12	14	14	16	16	n/a
12		12	14	16	16	18	18	n/a

### COIL DATA FORM

- |                                    |  |   |
|------------------------------------|--|---|
| <input type="checkbox"/> DX        | <input type="checkbox"/> HEAT RECLAIM  | <input type="checkbox"/> WATER BOOSTER      |
| <input type="checkbox"/> HEAT PUMP | <input type="checkbox"/> WATER HEATING | <input type="checkbox"/> STEAM              |
| <input type="checkbox"/> CONDENSER | <input type="checkbox"/> WATER COOLING | <input type="checkbox"/> STEAM DISTRIBUTING |

#### GENERAL INFORMATION REQUIRED:

CFM: \_\_\_\_\_ Maximum APD: \_\_\_\_\_ " WG Face Velocity: \_\_\_\_\_ FPM  
Dimensions: \_\_\_\_\_ " FH X \_\_\_\_\_ " FL X \_\_\_\_\_ " Depth Max. (K) Fin Material: \_\_\_\_\_  
EDB: \_\_\_\_\_ °F EWB: \_\_\_\_\_ °F Altitude:  Sea Level Other \_\_\_\_\_ FT  
LDB: \_\_\_\_\_ °F LWB: \_\_\_\_\_ °F Dew Point: \_\_\_\_\_ °F (Optional)  
Required Capacity: \_\_\_\_\_ BTU/HR (Total): \_\_\_\_\_ BTU/HR (Sensible)  
Header position:  Right Hand (RH)  Left Hand (LH)

#### ADDITIONAL INFORMATION FOR WATER COILS:

EWT: \_\_\_\_\_ °F LWT: \_\_\_\_\_ °F GPM: \_\_\_\_\_ Max. FPD: \_\_\_\_\_  
Fluid:  Water  Propylene Glycol  Ethylene Glycol If Different, Specify: \_\_\_\_\_  
Mixture Concentration %:  50 % If Different, Specify: \_\_\_\_\_

#### ADDITIONAL INFORMATION FOR DX, CONDENSER & HEAT PUMP COILS:

Refrigerant Type: \_\_\_\_\_ SST: \_\_\_\_\_ °F SCT: \_\_\_\_\_ °F Liquid Temperature: \_\_\_\_\_ °F

#### ADDITIONAL INFORMATION FOR HEAT RECLAIM COILS:

Piped:  In Series with Condenser  In Parallel with Condenser  
Total Capacity of the System: \_\_\_\_\_ BTU/HR % of Recuperation: \_\_\_\_\_

#### ADDITIONAL INFORMATION FOR STEAM & STEAM DISTRIBUTING COILS:

Steam Pressure: \_\_\_\_\_ PSIG Steam Temperature: \_\_\_\_\_ °F Condensate: \_\_\_\_\_ Lb./Hr

- Note:
- Right & Left header position is determined by facing air stream.
  - Steam coils and 1-row hot water coils are not air flow directional.

# SPECIFICATIONS

## APPLICATIONS

- Air Conditioning, Dehumidifying and Heating
- Heat Reclaim
- Heat Recovery
- Fluid Cooling
- Low Temperature Refrigeration Coils

## SPECIFICATIONS

RefPlus coils are individually designed for a high heat transfer performance, low initial cost and long life durability. The staggered tube provides a turbulent air flow through the coil.

Tubes are smooth, seamless copper, manufactured to ASME specifications. Tubes are mechanically expanded into fin collars for permanent bond.

Optional material: Heavy wall copper, cupronickel or stainless steel.

Fins are aluminum, die formed plate type. They are flat or sine waved to match any application. Fin configuration promotes maximum heat transfer effectiveness with minimum air friction. Full fin collars provide accurate fin spacing and full coverage over the tubes. Optional fin material: Copper, thicker aluminum, polyester, polyester coated aluminum or stainless steel.

Headers are heavy wall (type L or K) seamless copper with non-ferrous connections. Headers are generously sized for promoting uniform flow distribution as well as low overall pressure drop. Vent and drain fittings are provided on all water coils.

Optional material: Red brass pipe or stainless steel

Return bends are heavy wall seamless copper manufactured to ASME specifications. Return bends are sized to provide smooth fluid flow with minimum pressure drop. Optional material: Cupronickel or stainless steel.

Frames are heavy-gauge galvanized steel. Top and bottom plates have double bends for more rigidity. Tube sheets have die formed extruded tube holes for maximum tube support. Intermediate tube sheets are provided for additional strength. On larger coils, stacking flanges provide additional rigidity and facilitate installation in coil banks.

Optional material: Extra heavy-gauge galvanized steel, aluminum, stainless steel, brass or copper.

Brazing alloys are manufactured to AWS specifications. All coil joints are hand brazed with high temperature brazing filler metal.

Coil Coating: Modified polyurethane (Blygold®PoluAL), Phenolic or Epoxy dipped and baked are optional.

Testing: All coils are tested with 400 psig -40°F dew points dry air under warm water.

Operating Conditions: Standard coils are suitable for use up to 400 psig at 150°F or 120 psig at 350°F.

Optional construction: 300 psig at 350°F.

Coil Rating: Coils are rated using a computer program that is designed in accordance with ARI standard 410.



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