Mechanical Rooftop Custom Capabilities

PRICE

The Science of Comfort™
Construction Capabilities

Price manufactures a wide range of custom gas heat and DX cooled units to meet your new construction and retrofit needs. In addition to multiple unit configurations, we can also offer an extensive assortment of construction details to meet your project’s performance and budget requirements.

The following are the core capabilities Price has for rooftop products. Most of these capabilities are part of our fast custom lead time of 6-8 weeks, so for more details please contact your local Price representative.

Unit Bases
The integrity of the unit starts with the base. A strong base minimizes issues caused by trucking and rigging, and units that ship in sections are easier to field assemble. Price can offer both a welded structural steel base and an engineered steel base. Either base is designed to work for housekeeping pads, sleepers or roof curb applications. Bases used in indoor applications where condensate trapping is an issue can be ordered with extra height.

Flooring Options:
- G90 galvanized in either panel or checker plate
- Stainless steel in either panel or checker plate

Cabinet Construction
Price can provide a great variety of cabinet constructions. We offer both 1” and 2” single and double wall construction. Double wall construction can be extruded polyurethane foam construction which offers higher insulation ($R = 6.5$/inch vs. 4.0/inch for glass fiber) than the equivalent glass fiber construction. In addition, foam panel construction is much stiffer, resulting in less wall deflection and lower air leakage rates.

Price can provide G60, G90, baked enamel and stainless steel construction up to 14 gauge steel. Liners can be G90 or stainless steel up to 18 gauge and wash down liners are also available.
Heating and Cooling Coils

Heating and cooling coils are available to meet your needs.

- Cooling coils include a stainless steel double sloped condensate drain pan as well as stainless steel coil racks with intermediate drain pans. Racks can be designed to allow individual coil removal. Coils can be DX or chilled water and can have fixed face and bypass dampers to improve dehumidification in outdoor applications.

- Heating coils can be hot water, glycol, steam or integral face and bypass steam type. Heating coils can be in the preheat and/or reheat position. Electric heat with staged or SCR (modulating) control is also available.

Gas Heat

The heart of the Price custom rooftop solution is the indirect gas heat exchanger which can be supplied in standard (80%) and high (90%) efficiencies. Price offers both modulating stainless steel convoluted tube type to 1,200 kBTU/h output and modulating stainless steel 3 pass drum and tube type to 8,000 kBTU/h. The new high efficiency burners perform at 90% efficiency which can reduce energy operating costs by 11% and decrease CO₂ emissions. They meet ASHRAE 90.1 and 189.1 requirements, exceed ANSI 83.8/CSA 2.6 requirements and they can help achieve LEED energy credits. All burners can be Factory Mutual (FM) and the standard (80%) furnaces can be GAP (formerly IRI) rated.

Fan Options

Price can provide a wide range of AMCA certified fans to meet your design requirements including scrolled forward curved, backward inclined and airfoil type, direct and belt drive plenum fans and fan arrays. All fan assemblies include a fan base with rubber in shear or spring isolation, adjustable motor base and your choice of high efficiency OPD or TEFC motors.

Other Air Stream Options

In addition to the components listed above, Price can also provide a broad range of filtration from 2 inch MERV 8 to 12 inch MERV 17 filters, humidifiers, air blenders, insulated airfoil dampers and more.
Integral DX Cooling

For many customers cooling is necessary to provide a comfortable environment with good indoor air quality as well as to help minimize possible mold issues and other damage. Price offers a vast array of DX cooling solutions tailor-engineered to meet your needs.
DX Design

The compressor is core to the DX cooling system. Price uses high efficiency HFC-410A scroll compressors in multiple circuits for high performance and reliability. The compressors can be staged on to provide excellent part load energy savings and improved occupant comfort.

For ease of service and improved longevity, the compressors and refrigeration components can be located in a dedicated enclosure with hinged access doors. This has the added advantage of reducing ambient sound levels.

Condenser Arrangements

The condenser section can be arranged to meet your project’s needs locating the condenser on top, on the end of the unit or even remotely (split system). Where space is a challenge, a vertical unit with integral condensing section on top can be provided.

To improve efficiency and reduce ambient sound levels, high efficiency swept blade condenser fans are utilized. The fans have ECM high performance motors to further improve efficiency.
Energy Recovery

Ventilation (outdoor) air is required for improved indoor air quality. For many buildings it is one of the most expensive operating costs of the HVAC system.

Air-to-air energy recovery can be used to reduce operating costs by as much as 70% by leveraging the building exhaust air to treat the incoming outdoor air. Price Mechanical creates a great variety of energy recovery devices in almost any configuration in order to suit your building and cost requirements.

1. 2” foam panel double wall construction
2. Hinged access doors with handles and positive closures
3. Supply fan on spring isolated base with high efficiency motor on adjustable base
4. Exhaust fan on spring isolated base with high efficiency motor on adjustable base
5. High efficiency AHRI certified enthalpy wheel
6. Stacked DX Cooling coils with double sloped stainless steel drain pan and intermediate drain pan
7. Hot water heating coil
8. Humidifier Manifold
9. MERV 8 Filter racks (one in supply and one in exhaust)
10. High performance R-410A scroll compressors in remote service compartment
11. Gas fired humidifier located in remote service compartment
12. Condenser coils located in exhaust air stream for improved refrigeration COP

Available Energy Recovery Technologies

- Heatpipes & Wraparound Coils
- Plate Type Heat Exchangers
- Enthalpy Wheels
Custom Energy Recovery Unit with Integral DX & Enthalpy Wheel
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