

# York 3-6 Ton Packaged Unit Overview

	Model	Cooling Capacity MBH	SEER/IEER Range	EER	Heating Efficiency
AC Units	ZF 036-072	36-72 MBH	13 SEER	10.8-11.0 EER	80% SSE
	ZE 036-60	36-60 MBH	14 SEER	11.8-12.0 EER	81% AFUE
	ZR 036-060 MagnaDry	36-60 MBH	13 SEER	11.0 EER	80% AFUE
HP Units	XP 036-060	36-60 MBH	13 SEER	10.8-11.0 EER	7.7 HSPF
	XN 036-060	36-60 MBH	14 SEER	11.8-12.0 EER	8.0 HSPF

## Standard Limited Warranties

Compressor: 5 Years  
 Aluminized Heat Exchanger: 10 Years  
 Stainless Steel Heat Exchanger: 15  
 Electric Heat Element: 5 Years  
 Other Parts: 1 Year

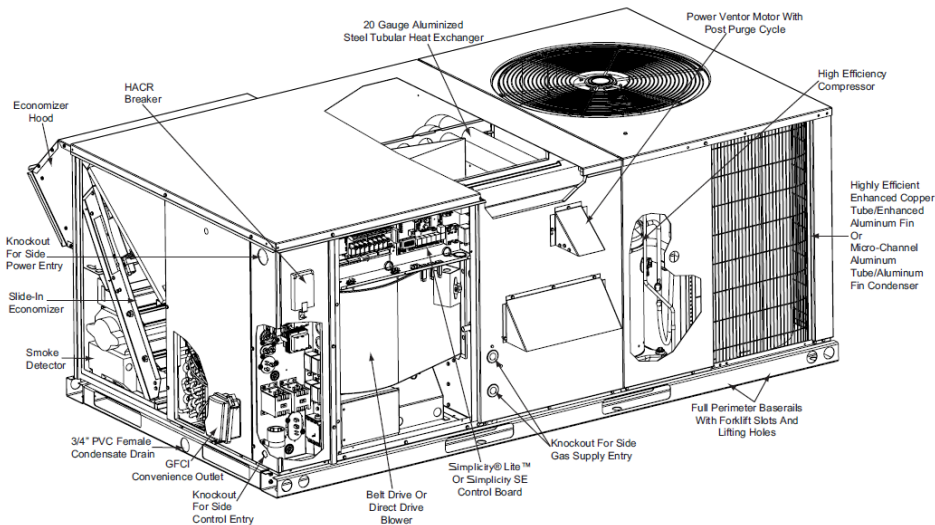
## Product in compliance with:

ZE/XN units ENERGY STAR  
 ASHRAE 90.1  
 CSA, U.L.1995  
 All products are OSHPD Seismic certified

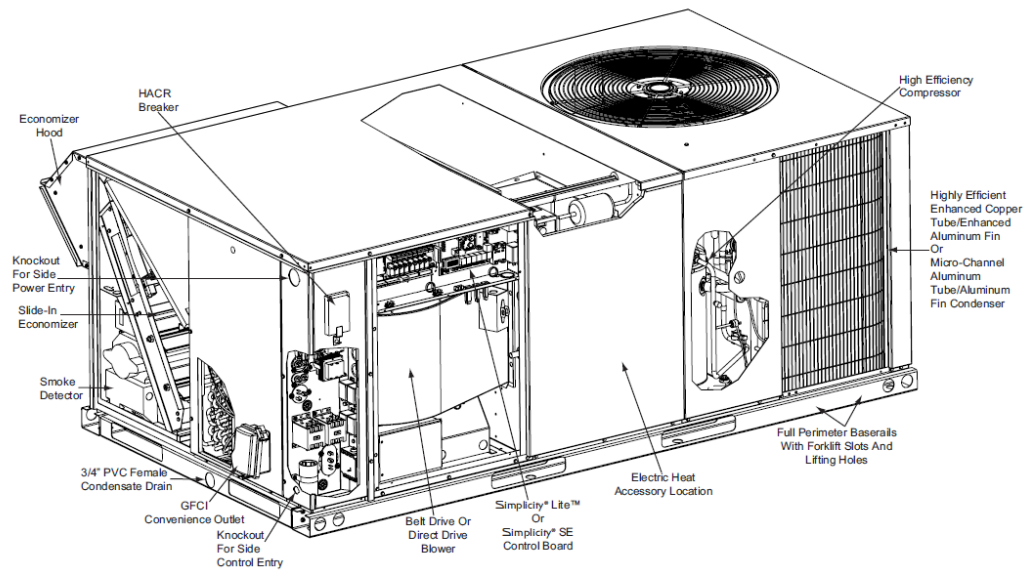
## Key Talking Points:

- Smallest commercial RTU footprint available in industry
- Common Footprint/Roof Curb on all tonnages
- Large replacement population- manufactured since 1985
- Built in the USA

### Gas/Electric

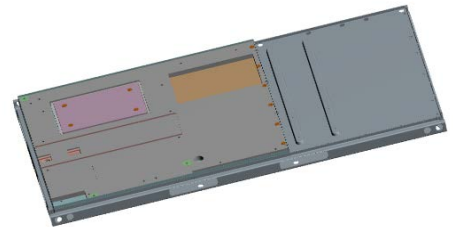


## Electric/Electric and Heat Pump



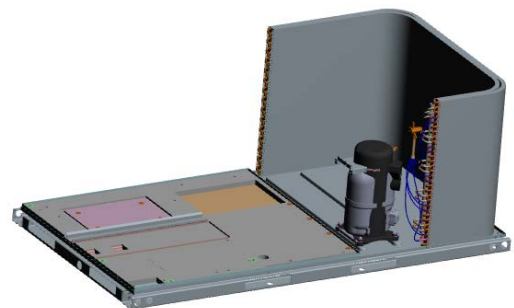
## Foundation

- Solid, one piece base rails. Fork truck accessible on 3 sides, provisioned for crane rigging
- Vertical/horizontal convertible duct configuration
- Reinforced & embossed condenser section- reduced vibration, increased strength
- Galvanized steel drain pan standard with stainless steel drain pan available as a factory option



## Condenser Section

- Microchannel All-Aluminum Condenser standard on ZF/ZE models- provides enhanced heat transfer, more durable, lower refrigerant charge required vs. traditional copper tube/alum fin
- Fin tube coils on ZR/XP/XN models due to increase of condensation and drainage requirements.
- Compressor access thru side access panels or top
- E-Coat (epoxy) option on both condenser and evaporator coils to extend component life in corrosive environments
- Compressors mounted on raised rails and rubber isolators to minimize vibration and noise

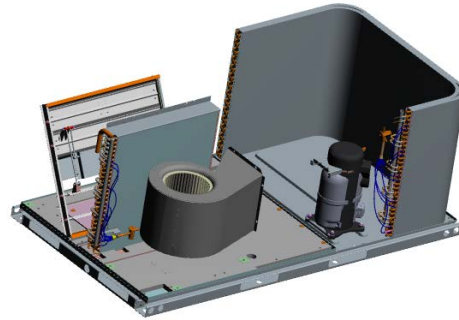


## **Blower Section**

- Isolated, centrifugal supply fan
  - Direct drive and belt drive options

## **Return Air/Exhaust Section**

- Modulating Economizer option
  - Low Leak Economizer Dampers- exceeds ASHRAE 90.1 2010/2013 & Title 24 requirements
  - AMCA 511 Certified – 3 cfm/sq ft leakage at 1"WC
  - Dry bulb standard with optional single and dual enthalpy sensor kits for field installation
  - Demand Control Ventilation/CO2 sensing available for field installation



## **Control Section**

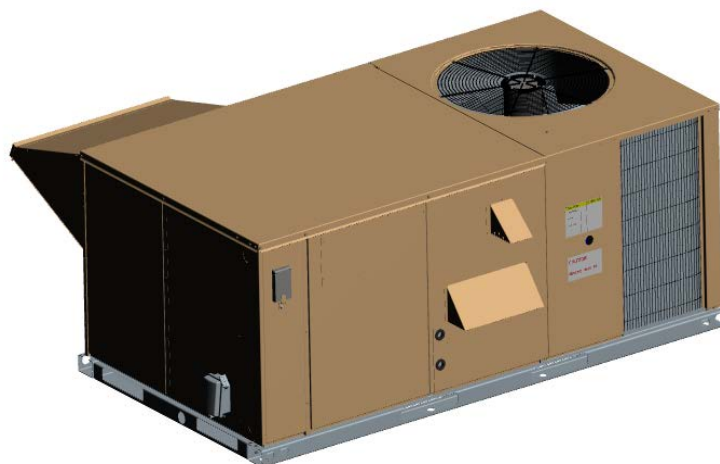
- Product features the Simplicity Smart Equipment Control (SSE), a digital control systems that makes system setup, optimization and maintenance easy. Optional remote unit data access is available via the Mobile Access Portal device (MAP) providing wireless or internet connectivity to the equipment.
- Fault Detection and Diagnosis (FDD) available to monitor refrigerant line pressures and temperatures to help identify system trends before a potential failure.

## **Supply Air and Heating Section**

- ZF/ZE/ZR: Units available in cooling only, cooling with electric heat, cooling with one or two stage gas heat
  - Electric Heat is factory or field installed accessory
- XP/XN- Units available in cooling and heating only and cooling with electric heat
- Aluminized steel heat exchanger with optional Stainless Steel Heat Exchanger

## **Cabinet**

Galvanized Steel Cabinet with 1000 hour salt spray certified powder paint finish. Optional hinged and tool-less filter, motor and electrical access panels.



# York Competitive Direct Replacement (CDR) Overview

	Model	Cooling Capacity MBH	SEER/IEER Range	EER	Heating Efficiency
<b>AC Units</b>	ZX04-06	35-59 MBH	13 SEER	11.0 EER	80% SSE
	ZY04-06	36- 58 MBH	15-15.4 SEER	12.0 EER	80% SSE
	ZX07-14	69- 135 MBH	11. 5-11.9 IEER 12.75- 14.8 IEER IntelliSpeed (ZX08-14)	10.8-11.2 EER	80% SSE
	ZY07-12	72- 116 MBH	11.6- 12.6 IEER 14.4 IEER IntelliSpeed (ZY08-12)	11.5-12.2 EER	80% SSE
<b>HP Units</b>	XY04-06	36-58 MBH	15 SEER	12.5 EER	8.0-8.2 HSPF
	XY07-09	71-98 MBH	13.2-13.5 IEER 14.7-15.0 IEER IntelliSpeed	11.8-12.0 EER	3.3-3.4 COP

## Standard Limited Warranties

Compressor: 5 Years  
 Aluminized Heat Exchanger: 10 Years  
 Stainless Steel Heat Exchanger: 15 Years  
 Electric Heat Element: 5 Years  
 Other Parts: 1 Year

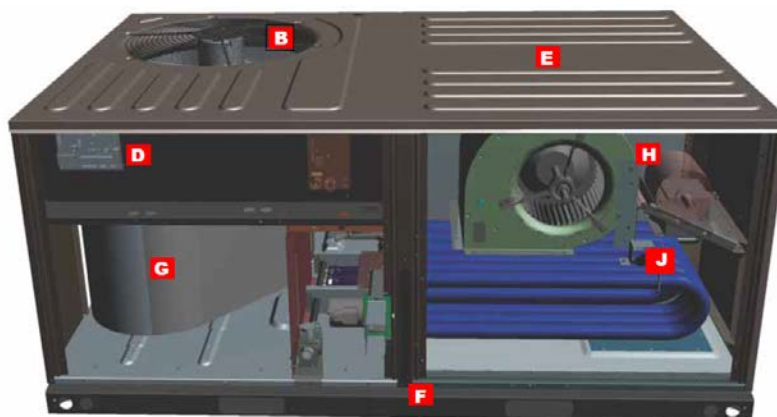
## Product in compliance with:

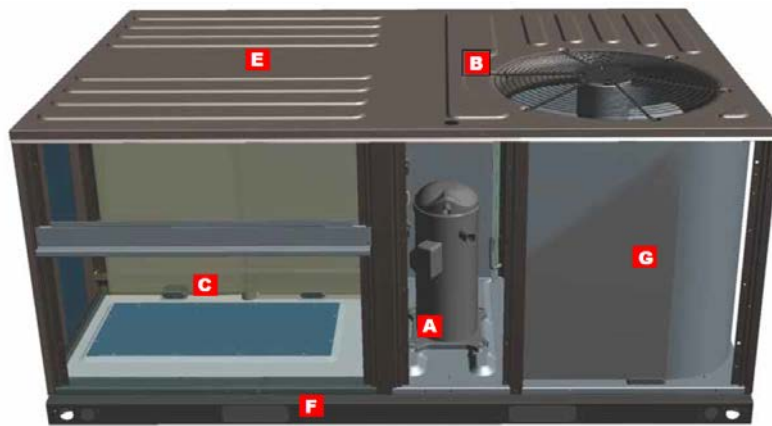
ZY/XY units ENERGY STAR  
 ZY/XY units reach CEE Tier 1/Tier 2 with IntelliSpeed  
 ASHRAE 90.1, CSA, UL 1995  
 All products are OSHPD Seismic certified

## Key Talking Points:

- Direct replacement unit for popular competitor units without need of an adaptor curb and direct utility lineup
- Two footprints/two cabinet heights per footprint
- Embossed tops, solid one piece base rail
- Simplicity Smart Equipment Control

Cooling With Gas Heat (3 Through 5 Ton)





### **Foundation (F)**

- Full perimeter base rails- heavy gauge and design prevents transportation and rigging damage

### **Condenser Section (A, G, B)**

- MicroChannel All-Aluminum Condenser coils standard on ZX/ZY units: provides enhanced heat transfer, more durable, lower refrigerant charge vs. traditional copper tube/alum fin
- Fin/tube on XY HP units due to increase of condensation and drainage requirements.
- E-Coat (epoxy) option on both condenser and evaporator coils to extend component life in corrosive environments
- Scroll Compressor standard with internal compressor protection
- Balanced outdoor fan for better performance and reliability

### **Blower Section (H)**

- Dynamically balanced indoor fans for better performance and reliability
- Easy access for service and maintenance
- Direct drive and belt drive options available on 3-5 ton product
- Belt drive standard 6-12.5 ton product
- VFD IntelliSpeed option on 7.5-12.5 ton product

### **Return Air/Exhaust Section (C)**

- Low Leak Economizer Dampers- meets ASHRAE 90.1 2010/2013 & Title 24 (less than 3% leak at nominal CFM)
- Convertible filter rack- tool-less field conversion from 2" to 4" filters

### **Control Section (D)**

- Product features the Simplicity Smart Equipment Control (SSE), a digital control systems that makes system setup, optimization and maintenance easy. Optional remote unit data access is available via the Mobile Access Portal device (MAP) providing wireless or internet connectivity to the equipment.

- Fault Detection and Diagnosis (FDD) available to monitor refrigerant line pressures and temperatures to help identify system trends before a potential failure.

### **Supply Air and Heating Section (J)**

- Single (3-5 Ton only) and two stage gas heating available
- Aluminized steel heat exchanger with optional stainless steel heat exchanger
- Gas heat exchanger installed at slight angle to facilitate condensate drainage in cooling mode
- Electric heat available as a field installed accessory

### **Cabinet (E)**

- Galvanized steel cabinet with 1000 hour salt spray certified powder paint finish
- Embossed cabinet top to increase structural support and rigidity
- Optional hinged cabinet doors for easy servicing of blower components, filters and controls



# York 3-12.5 Ton Non-CDR Overview

	Model	Gross Capacity	EER Range	IEER Range <sup>1,2</sup>	SEER Range <sup>3</sup>	Heating Efficiency
<b>AC Units</b>	ZR MagnaDry	36.5 – 157 MBH	11.2-12.2	11.4-14.0	14.7-15	80.5-81.5%
	ZF	81 – 156 MBH	11.0-11.2	12.1-14.0	-	80%
	ZH	37 – 156 MBH	11.5-11.8	12.0-14.0	14	80.5-81.5%
	ZT	39 – 66 MBH	13.85-14.35	-	17.5-18.1	80.5-81.5%
	ZJ	37 – 154 MBH	12.0-12.2	12.8-14.5	15	80.5-81.5%
<b>HP Units</b>	XP	80 – 158 MBH	11.0-11.5	10.8-13.5	-	3.2-3.4 COP

- Higher IEER values utilize optional VFDs
- IEER used for 6.5 – 12.5 Ton units
- SEER used for 3 – 5 Ton units

## Standard Limited Warranties

Compressor: 5 Years  
 Aluminized Heat Exchanger: 10 Years  
 Stainless Steel Heat Exchanger: 15 Years  
 Electric Heat Element: 5 Years  
 Other Parts: 1 Year

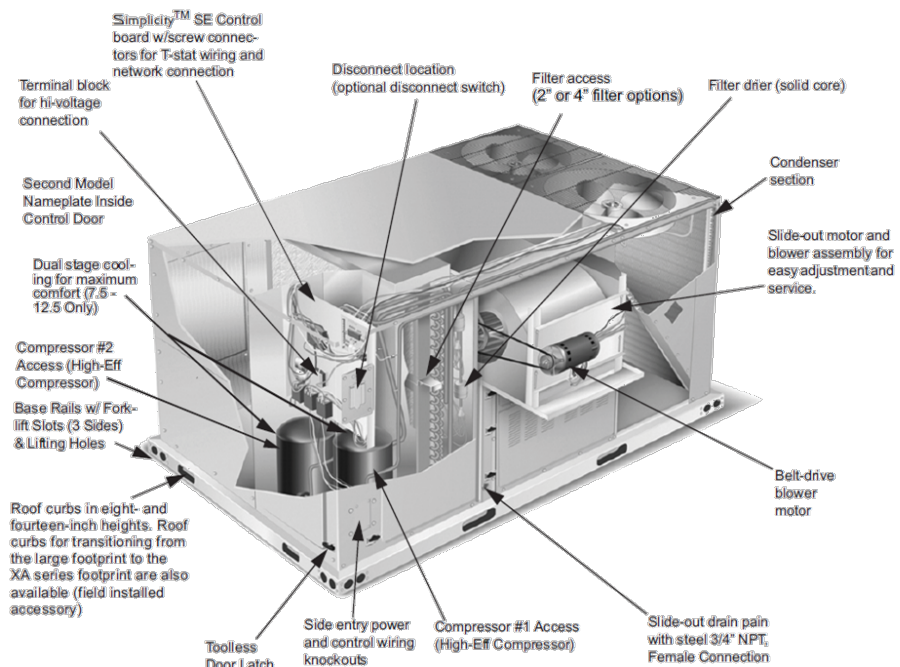
## Certifications

All ZH/ZT/ZJ units are ENERGY STAR compliant  
 ZH units w/ IntelliSpeed meet CEE Tier 1  
 ZJ units 2/ IntelliSpeed meet CEE Tier 2  
 ZT units meet CEE Advanced Tier  
 All models are ASHRAE 90.1 compliant  
 All products are OSHPD Seismic Certified  
 All products are CSA listed and tested per U.L. 1995

## Key Talking Points:

- “18 SEER” ZT models are industry leading
- Multiple cabinet styles/heights, but single footprint
- Featured service options are standard (hinged and tool-less access panels and slide out blower section)
- Built in the USA

## Cabinet Structure



General Unit Layout, will change marginally based on tonnage and options

- 1 footprint, 2 heights, 3 cabinet styles (12.5T AC and 12.5T HP each have different coil configuration)
- Standard hinged and tool-less access panels



3 – 10 Ton AC/HP



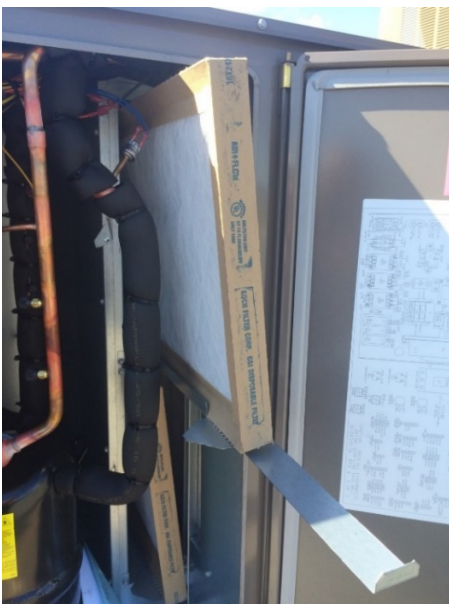
12.5 Ton AC



12.5 Ton HP

### **Air Filter Racks**

Air filters are easily removed by rotating the locking clip and then pulling the handle outward.

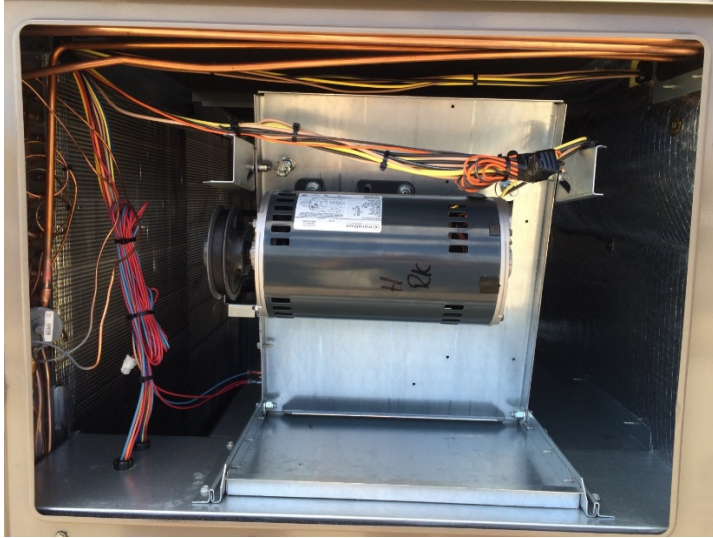




## **Blower Assembly**

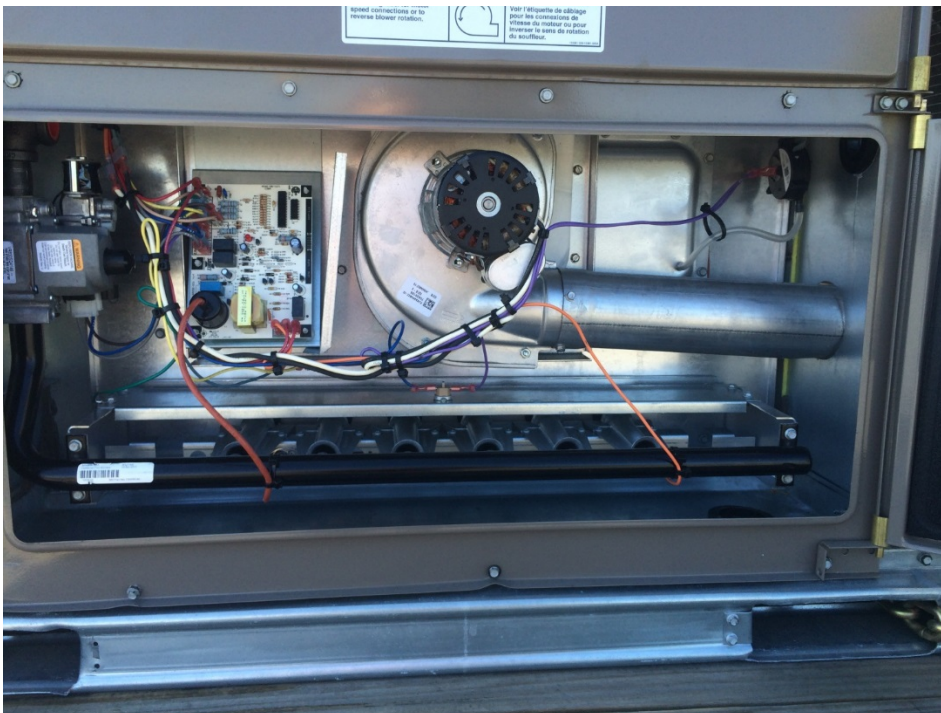
- Belt drive motors with standard and high static motor options
- VFDs standard for ZT units, available on 6.5-12.5 ton units as either VAV or IntelliSpeed
- IntelliSpeed is multi-speed offering with supply fan RPM based on number of compressors or heating stages energized

For ease of maintenance, the entire blower assembly slides outward in the track on the base. On VFD units the supply fan VFD is located in the blower compartment.



## **Gas Heat**

- 3 – 5 Ton offers option of 1 or 2 stages of gas heat
- 6.5 – 12.5 Ton all gas heat units have 2 heating stages
- Gas heat exchanger and burner controls located below the blower section
- Stainless Steel gas heat option



## **Refrigeration System**

- 3 – 5 ton units utilize 1 stage of cooling
- All 6.5 -12.5 ton units have 2 cooling stages with independent refrigeration circuits



Compressor access

## **Low Leak Economizer**

- All factory installed economizers contain low leak damper
  - Our low leak dampers are AMCA 511 certified
  - Low leak damper requirement is maximum leakage of 10 cfm/ft<sup>2</sup>, our dampers are rated at 3 cfm/ft<sup>2</sup>

## **Control Section**

### **Control Section**

- Product features the Simplicity Smart Equipment Control (SSE), a digital control systems that makes system setup, optimization and maintenance easy. Optional remote unit data access is available via the Mobile Access Portal device (MAP) providing wireless or internet connectivity to the equipment.
- Fault Detection and Diagnosis (FDD) available to monitor refrigerant line pressures and temperatures to help identify system trends before a potential failure.

## **Convertible Supply/Return Openings**

- Unit ships for down flow ducting
- Units can be easily converted in the field for horizontal supply and/or return connections
- Conversion is accomplished by removing side panel and fastening into bottom panel to block opening
- Some models require different economizer configuration for horizontal return opening



Panels to remove for horizontal supply and return openings

## Condenser Section

Microchannel condenser coils are utilized on 3-12.5 Ton non-CDR units except for Heat Pump and 6.5, 8.5, and 12.5 ton Reheat units. Heat pump and reheat units do not utilize microchannel condenser coils due to the increase on condensation and drainage.

Microchannel coils offer many advantages over the traditional copper tube/aluminum fin design:

- Enhanced heat transfer for higher efficiency
- Low air pressure drop
- One piece, all aluminum construction minimizes galvanic corrosion (no copper to aluminum contact points)
- Zinc coating provides further protection
- Optional epoxy coating is available for harsh environments
- Maintenance benefits – microchannel coils are more durable than traditional tube/fin design and can handle higher water pressures during cleaning. Coils are not nearly as deep as traditional tube/fin design (roughly one inch deep), so debris clears easily during cleaning - restoring performance lost to dust, dirt, and pollen accumulation.
- Lower refrigerant charge - microchannel coils require much less refrigerant.

Number of condenser fans per unit are as follows:

ZF	6.5-10 Ton	2 fans
	12.5 Ton	4 fans
ZH/ZJ	3-4 Ton	1 fan
	5-10 Ton	2 fans
	12.5 Ton	4 fans
ZR	3 Ton	1 fan
	4-10 Ton	2 fans
	12.5 Ton	4 fans
ZT	3-5 Ton	2 fans
XP	6.5-10 Ton	2 fans
	12.5 Ton	4 fans

# York 15-25 Ton Packaged Unit Overview

	Model	Nominal Tonnage	Gross Capacity	EER Range	IEER Range <sup>1</sup>	Heating Efficiency
AC Units	ZR MagnaDry	15 – 25 T	189 – 303 MBH	10.0-11.3	10.3-13.2	80%
	ZF	15 – 25 T	170 – 279 MBH	10.0-11.0	10.5-13.2	80%
	ZJ	15 – 25 T	181 – 290 MBH	10.6-12.2	11.0-14.0	80%
HP Units	XP	15 – 25 T	181 - 261 MBH	9.5-10.6	9.9-13.2	3.2 COP

1. Higher IEER values utilize optional VFDs

## Standard Limited Warranties

Compressor: 5 Years

Aluminized Heat Exchanger: 10 Years

Stainless Steel Heat Exchanger: 15 Years

Electric Heat Element: 5 Years

Other Parts: 1 Year

## Product in compliance with:

All models ASHRAE 90.1

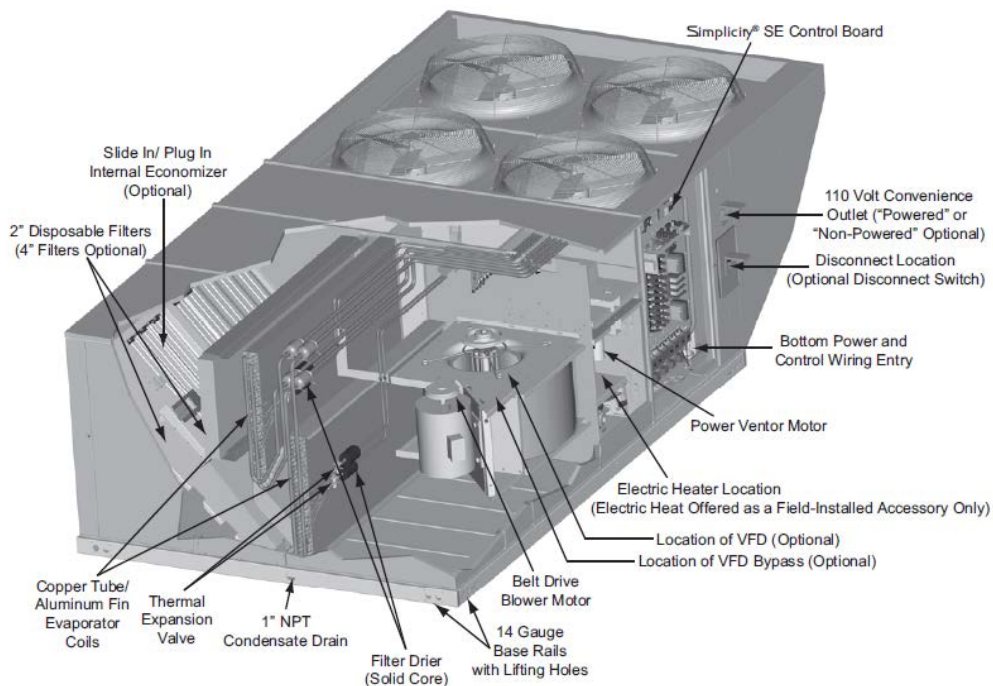
All products are OSHPD Seismic certified

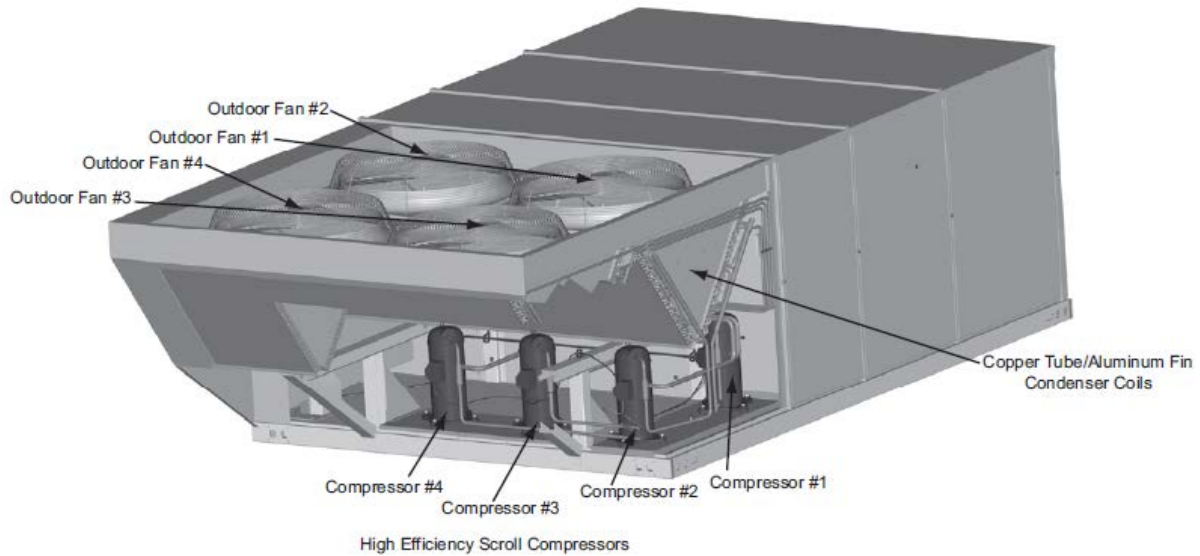
CSA, U.L. 1995

## Key Talking Points:

- Easy connection field installed electric heat (no factory installed option)
- Optional hinged and tool-less access panels
- ZJ units have 4 cooling stages with independent refrigeration circuits

## Cabinet Structure





General Unit Layout, will change based on unit type

- 2 footprints, 2 cabinet styles (All units have same footprint except 15T ZF)
- Optional hinged and tool-less access panels
- Optional Doublewall for ZR and ZJ models



ZF, XP (15 ton) Cabinet



ZR, ZJ, XP(20 ton) "Magnum" Cabinet

**Air Filter Racks**

Air filters are easily removed through access panel. Filter racks accommodate either 2" or 4" filters.



**Blower Assembly**

- Belt drive motors with standard, low static, and high static motor options
- VFDs available as an option on all 15-25T product as either VAV or "Intellispeed"
  - Intellispeed is multi-speed offering with supply fan RPM based on number of compressors or heating stages energized

## **Gas Heat**

- All gas heat units have 2 heating stages
- Stainless Steel gas heat option

## **Electric Heat**

- Electric heat is offered only as a field installed kit to be installed in a “Cooling Only” factory unit

## **Refrigeration System**

- ZR, ZF, XP units have 2 cooling stages with independent refrigeration circuits
- ZJ units have 4 cooling stages with independent refrigeration circuits
  - This increases efficiency through part load operation and provides maximum comfort control



Compressor access for “Magnum” style units

## **Low Leak Economizer**

- All factory installed economizers contain low leak dampers
- Our low leak dampers are AMCA 511 certified
- Low leak damper requirement is maximum leakage of 10 cfm/ft<sup>2</sup>, our dampers are rated at 3 cfm/ft<sup>2</sup>

## **Control Section**

- Product features the Simplicity Smart Equipment Control (SSE), a digital control systems that makes system setup, optimization and maintenance easy. Optional remote unit data access is available via the Mobile Access Portal device (MAP) providing wireless or internet connectivity to the equipment.
- Fault Detection and Diagnosis (FDD) available to monitor refrigerant line pressures and temperatures to help identify system trends before a potential failure.

## **Convertible Supply/Return Openings**

Units are shipped with the bottom duct openings covered.

- For bottom duct application remove the supply and return air access panels (shown below) to access and remove the duct covers, then replace the access panels for operation
- For side duct application remove the supply and return air access panels (shown below) and replace with the accessory flange panel kit



## **Condenser Section**

All condenser coils on 15-25T units are copper tube and aluminum fin

Number of condenser fans per unit are as follows:

ZF	All	2 fans
ZR/ZJ	All	4 fan
XP	15 Ton	2 fan
	20 Ton	4 fans

# York Large Commercial Rooftops Overview

	Model	Gross Cooling Capacity MBH	EER	IEER	Heating Efficiency
AC Units	Z52	309.7 MBH	10.5	11.5	80% SSE
	Z53	389.5 MBH	10.1	11.1	80% SSE
	Z54	502.0 MBH	10.0	10.5	80% SSE

## Standard Warranty

Compressor - 1 Year  
Aluminized Heat Exchanger - 10 Years  
Stainless Steel Heat Exchanger – 15 Years  
Other parts - 1 Year

## Product in compliance with:

ASHRAE 90.1  
CSA, U.L.1995  
ETL



## Key Talking Points

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- Highly customizable
- Longevity- Replacement opportunities- Same platform since 1996
- Unique to the industry with four independent cooling stages
- Staged (Up to 3), modulating, electric heat, hot water and steam heating options
- Hinged, tool-less access panels- Electrical, blower, filters, economizer/power exhaust sections
- Double-walled cabinet, Merv 7 and 14 air filters and painted or stainless steel condensate pan options for superior IAQ.
- Simplicity Smart Equipment (SSE) control standard with onboard BAS communication of BACnet MSTP, N2 or ModBUS RTU

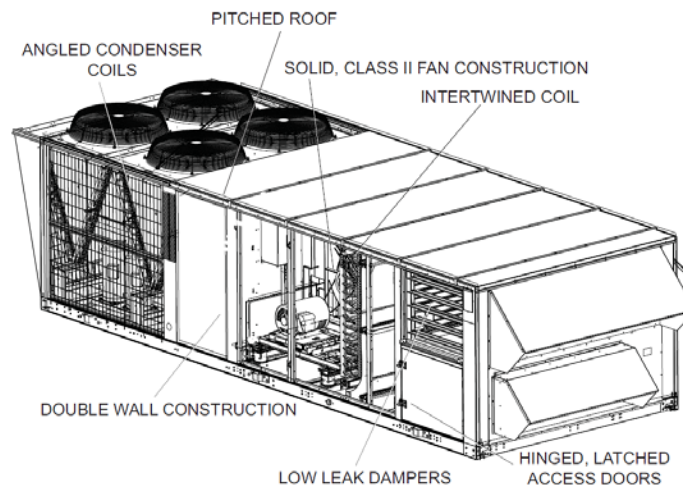
## General Cabinet Layout

- **Single common footprint-** One roof curb fits all
- **25-30 Ton units are in identical cabinets.** 40 Ton cabinet has a 14" extended condenser coil section
- **Three crane lifting lugs** on each end and midpoint of the cabinet assures a safe and quality lift.
- **Hinged Tool-less access panels-** Blower, electrical, filter, fresh air sections accessible without tools.



## Construction Features

- **Double Wall Construction** - Each unit has both an exterior and an interior wall, which make for a more rigid design with panels and doors that are solid, not flimsy. The unit features a fully framed construction for even greater stability.
- **Powder Paint** - Industry leading 1000 salt spray hour paint keeps the unit in great condition for years to come.
- **Low Profile** - Millennium units stand only 64" above their curb, minimizing potential aesthetic conflicts.
- **Extended flue connection** - Each gas unit ships with a field mounted external flue. The flue lifts all products of furnace combustion far above the unit - eliminating the possibility of corrosion in the furnace heat exchanger from recirculating flue gases.
- **Protective Covering** - Special polyurethane sleeves which cover the distributor tubing keep distributor tubes from contacting each other causing a potential leak, something other manufacturers neglect to provide.

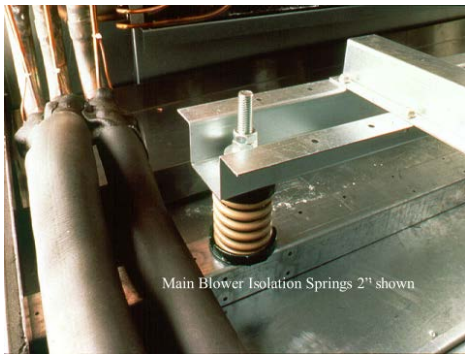


## Features and Benefits

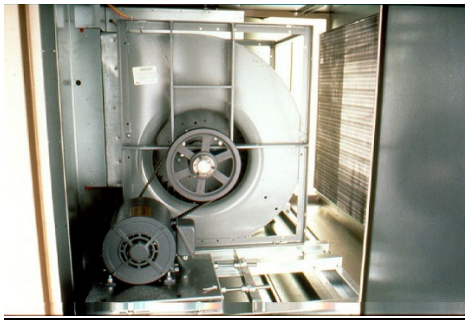
- **Constant, IntelliSpeed (Multi-Speed) and variable air volume options available.** The onboard Simplicity SE control allows multiple airflow configurations including factory and customer installed variable frequency drive options.
- **Simplicity Smart Equipment** controls featuring onboard two line LCD display, navigational joystick, standard supply, return and outdoor temperature sensors, Optional humidity and enthalpy sensors. BACnet MSTP, N2 or ModBUS RTU communication protocols.
- **Simplicity Smart Equipment** controls can be controlled with a simple 4-stage cool, 3-stage heat thermostat, stand-alone controlled by return air temperature or space sensor. BAS/EMS ready with the field configurable BACnet MSTP, N2 or ModBUS RTU communication protocols.
- **Efficient, Durable Scroll Compressors** - The Millennium design uses industrial grade hermetic scroll compressors for peak efficiency and low noise operation.
- **Four compressors, four independent refrigerant circuits** provide excellent capacity and turndown control. Unlike many competitors with products having single refrigerant circuits should there be an issue with a refrigerant circuit only 25% of the Millennium's capacity is impacted. Competitors may lose 100% capacity if a refrigerant issue occurs.



**Tool-Less, Hinged Access** - Access to key unit components are easily accessed through tool-less, hinged access doors. Choose the factory option of electrical, filter and blower access or electrical, filter, blower, heat section and exhaust/fresh air.



**Vibration Isolation** - The Millennium's neoprene mounts are typically sufficient for most applications but when sound and vibration transmission are a major concern, UPG 1\"/>The Millennium's neoprene mounts are typically sufficient for most applications but when sound and vibration transmission are a major concern, UPG 1\"/>



**Flexible Motor Options-** The choices of 7.5, 10, 15, 20 and 25 horsepower supply fan motors and 5, 7.5, 10 and 15 horsepower power exhaust motors provide flexibility and correct motor sizing to assure proper airflow and maximum energy savings.



**Indoor Air Quality (IAQ) options-** Offered from simple 2\"/>Offered from simple 2\"/>



**Outdoor Air Options-** All fresh air and exhaust hoods ship mounted and ready. Aluminum mesh filters and barometric relief dampers included on all product ordered with a motorized damper or economizer.



**Outdoor Air Options Continued-** Millennium packaged products equipped with "Tilt-Out" side fresh air hoods. Simply tilt the hoods out and secure with two screws and Done!

With the combination of both side and end return hoods 100% economizer operation is possible. Many competitors cannot achieve 100% economizer operation due to insufficient fresh air intake points.



**Modulating, Multi-Stage Gas Heat Options-** Choose from single, dual or three stage gas heat (3 stages 40 ton only). Modulating gas heat is available on all 25-40 ton units that achieves up to an 8:1 turn-down.

Hot water, steam and electric heat is also available.



### **Heavy Steel Lifting Lugs-**

Positioned at each end and the middle of the packaged units crane lifts are quick and easily rigged and prevent any possible unit damage as long as proper rigging is done. Some competitors punch holes in the base rails for rigging, thus providing the potential for unit and unit base rail damage.