

Single Package R-410A Air Conditioner

Project Name: BRICKYAARD EAST FIT UP Unit Model #: ZJ120S20V2KZZ70004

Quantity: 2 Tag #: HVAC-1A,AB

Cooling Performance			
Total capacity	124.0	MBH	
Sensible capacity	84.3	MBH	
Refrigerant type	R-410A		
Efficiency (at ARI)	12.00	EER	
Integrated eff. (at ARI)	12.80	IEER	
Ambient DB temp.	95.0	°F	
Entering DB temp.	83.7	°F	
Entering WB temp.	68.6	-	
Leaving DB temp.	57.7	-	
Leaving WB temp.	55.6	-	
Part load efficiency		IPLV	
Power input (w/o blower)	8.93		
Sound power	90	dB(A)	
Gas Hoating Porformance			

Gas Heating Performance	
Entering DB temp.	62.5 °F
Heating output capacity (Max)	192 MBH
Supply air	3005 CFM
Heating input capacity (Max)	240 MBH
Leaving DB temp.	121.7 °F
Air temp. rise	59.2 °F
SSE	80.0 %
Stages	2

Supply Air Blower Performan	ce
Supply air	3005 CFM
Ext. static pressure	0.75 IWG
Addl. Unit Losses (Options/Accessories)	0.02 IWG
Blower speed	917 RPM
Max BHP of Motor (including service factor)	3.45 HP
Duct location	Bottom
Motor rating	3.00 HP
Actual required BHP	1.54 HP
Power input	1.43 kW
Elevation	0 ft.
Drive type	BELT

Outside/Mixed Air

Outside Air Cfm 1649 CFM

Electrical Data	
Power supply	230-3-60
Unit min circuit ampacity	51.7 Amps
Unit max over-current protection	60 Amps
D: : 0.14//	

		Dimensi	ons & Weig	ght	
Hgt	51 in.	Len	89 in.	Wth	59 in.
Weight w	51 in. rith factory i	nstalled op	otions		1275 lbs.

Clearances					
Right	12 in.	Front	36 in.	Back	36 in.
Тор	72 in.	Bottom	0 in.	Left	36 in.

Note: Please refer to the tech guide for listed maximum static pressures











System: ZJ120S20V2KZZ70004 (2), VP020A12H2AM11 (2)

10 Ton

• York Predator units are manufactured at an ISO 9001 registered facility and each rooftop is completely computer-run tested prior to shipment.

Unit Features

- Through-the-Curb and Through-the-Base Utility Connections
- Full perimeter base rails with built in rigging capabilities
- **Hinged Access Panels**
- Slide-Out Stainless Steel Drain Pan
- Scroll Compressors
- Two Stage Cooling
- Solid Core Liquid Line Filter Driers
- Microchannel Condenser Coil
- 192 MBH Output Stainless Steel, Two Stage Gas Heat
- Unit Ships with 2" Throwaway Filters with a Standard Filter Rack that will Accept up to 4" Filters
- Replacement Filters: 4 (24" x 20"). Unit accepts 2" or 4" wide filters.
- Single Point Power Connection
- HACR Circuit Breaker/Disconnect (Sized for 208 Volts)
- Non-Powered Convenience Outlet
- · Phase Monitor
- · Return Air Smoke Detector
- Dry Bulb Low Leak Economizer w/Barometric Relief and Hoods (Bottom or Horizontal End Return Only)
- Short Circuit Current: 5kA RMS Symmetrical

Standard Unit Controller: Simplicity Control Board

Safety Monitoring - Monitors the high and low-pressure switches, the freezestats, the gas valve, if applicable, and the temperature limit switch on gas and electric heat units. The unit control board will alarm on ignition failures, safety lockouts and repeated limit switch trips.

BAS Controller

- Simplicity SE Controller with Discharge Air, Return Air, and Outside Air
- IntelliSpeed control of the VFD based on stages of cooling. Provides Single Zone VAV Fan Operation as defined by ASHRAE 90.1 section 6.4.3.10.

Warrantv

- One (1) Year Limited Warranty on the Complete Unit
- Five (5) Year Warranty Compressors
- · Fifteen (15) Year Warranty on Stainless Steel Heat Exchanger

Energy Recovery Ventilator

VP020A12H2AM11

Project Name: BRICKYAARD EAST FIT UP Unit Model #: ZJ120S20V2KZZ70004

Quantity: 2 Tag #: HVAC-1A,AB System: ZJ120S20V2KZZ70004 (2), VP020A12H2AM11 (2)

Net Outside Air

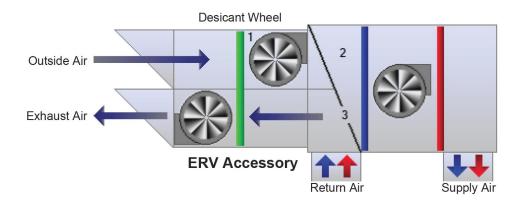
1 - Outside Air + Exhaust Air Transfer

2 - Mixed Air

1500 CFM CFM 1649 CFM 3005 Cooling DB (°F) 95.00 Cooling DB (°F) 86.47 Cooling DB (°F) 83.66 Cooling Wetbulb (°F) 75.00 Cooling Wetbulb (°F) 70.40 Cooling Wetbulb (°F) 68.59 -10.00 Heating Drybulb (°F) Heating Drybulb (°F) 37.67 Heating Drybulb (°F) 52.26

Altitude (ft) 0 3 - Balancing Damper

Net Exhaust Air (CFM) 1000 CFM 1356



Load Reduction

 Summer (Tons)
 2.11

 Winter (MBH)
 85.32

Return Air

CFM 2505
Cooling Drybulb (°F) 80.57
Cooling Wetbulb (°F) 66.51
Heating Drybulb (°F) 70.00

Electrical Data

Voltage --Max. Fuse or Breaker Size (Amps) 15
Ampacity (Amps) 11.40



Single Package R-410A Air Conditioner

Project Name: BRICKYAARD EAST FIT UP Unit Model #: ZJ120S20V2KZZ70004

Quantity: 2 Tag #: HVAC-1A,AB System: ZJ120S20V2KZZ70004 (2), VP020A12H2AM11 (2)

Factory Installed Options

ZJ120S20V2KZZ70004

Product Category:	Z	York Predator Single Packaged R-410A Air Conditioner
Product Identifier:	J	12.0 EER / 12.8 IEER
Nominal Cooling Capacity:	120	10 Ton Two Stage Cooling
Heat Type and Nominal Heat Capacity:	S20	192 MBH Output Stainless Steel, Two Stage Gas Heat
Airflow:	V	3 HP High Static Belt Drive Blower Dry Bulb Low Leak Economizer w/Barometric Relief and Hoods (Bottom or Horizontal End Return Only)
Voltage:	2	208/230-3-60
Installation Options:	К	HACR Circuit Breaker/Disconnect (Sized for 208 Volts) Return Air Smoke Detector (Bottom return only) Non Powered Convenience Outlet
Additional Options:	ZZ	2" Throwaway Filters Microchannel Condenser Coil Phase Monitor Simplicity® SE Controller with Discharge Air, Return Air, and Outside Air Sensor Stainless Steel Drain Pan IntelliSpeed control of the VFD based on stages of cooling (Provides Single Zone VAV Fan Operation as defined by ASHRAE 90.1 section 6.4.3.10)
Product Generation:	7	

Field Installed Accessories

- 1ES0402 Equipment Support 48" Long x 8" Tall (30.0 lbs)
- 1RC0476 Roof Curb 24" High, Flat, Uninsulated, Full Perimeter (Shipped Knocked Down) (135.0 lbs)
- 2EC0402 Kit, Dual Enthalpy Field Installed (Includes both an Outdoor Air Enthalpy Sensor and a Return Air Enthalpy/Humidity Sensor) (1.0 lbs)
- \$1-02815208000 Blower Sheave for 8.5 and 10 Ton High Static Field Installed Drive (3.0 lbs)
- S1-A52 Belt for 8.5 and 10 Ton High Static Field Installed Drive (0.4 lbs)

Single Package R-410A Air Conditioner

Project Name: BRICKYAARD EAST FIT UP Unit Model #: ZJ120S20V2KZZ70004

Quantity: 2 Tag #: HVAC-1A,AB System: ZJ120S20V2KZZ70004 (2), VP020A12H2AM11 (2) Consolidated Drawing OPERATING CENTER OF GRAVITY 4 POINT CORNER LOADS (LBS) (BASE UNIT) 1. FOR OUTDOOR USE ONLY. LOCATION (BASE UNIT) TONNAGE WEIGHT (LBS (BASE UNIT) UNIT 2. WEIGHTS SHOWN ARE FOR 3. MIN. CLEARANCES TO BE: COOLING ONLY UNITS. 1007 [458] 38 [965] 38 [965] 235 [107] 24 [610] RIGHT SIDE: 12 [305] 192 871 279 127 375 170 10 ZF 1103 [501] 24 [610] 257 [117] LEFT SIDE: 36 915 38 965 8.5 24 [610] 240 109 179 81 261 1030 467 36 [915] 36 [915] 254 115 10 1090 [494] 38 965 24 [610] 189 [86] 276 125 371 168 REAR: 25 [635] 25 [635] 191 [87] 195 [89] 6.5 ZJ 1030 467 39 [991] 245 1111 260 118 333 1151 TOP: 72 [1830] 39 991 250 113 1050 476 120 265 BOTTOM: 0 0 1 4. TO REMOVE THE SLIDE-OUT DRAIN PAN, A REAR CLEARANCE OF 24 [610] 8.5 1060 481 38 965 247 112 184 [84] 268 [122] 32.67 [830] 10 ZJ 1070 [485] 39 [991] 24 [610] 245 [111] 191 [87] 60 in (1525 mm) IS REQUIRED. IF SPACE IS UNAVAILABLE, THE 38 [965] 25.5 [648] 297 [135] 221 [100] 291 [132] 390 [177] 38 [965] 25 [635] 262 [119] 195 [89] 266 [121] 357 [162] 6.83 8.5 & 10 ZR 1200 [544] DRAIN PAN CAN BE REMOVED THROUGH THE FRONT BY SEPARATING [173] 1080 [490] THE CORNER WALL. 6.5 XΡ 5. FOR SMALLER SERVICE AND OPERATIONAL CLEARANCES
CONTACT YOUR APPLICATION ENGINEERING DEPARTMENT.
6. DOWNHOLOW DUCTS DESIGNED TO BE ATTACHED TO ACCESSORY
ROOF CURB ONLY. IF UNIT IS MOUNTED SIDE SUPPLY, IT 38 [965] 25 [584] 243 [10] 181 [82] 38 [965] 25.5 [648] 282 [128] 210 [95] 38 [965] 25.5 [648] 281 [127] 209 [95] ΧP 1090 [494] 284 [129] 381 [173] 24.38 XΡ 1137 [516] 276 [125] 370 [168] [619] [515] IS RECOMMENDED THAT THE DUCTS ARE SUPPORTED BY CROSS BRACES, AS DONE ON ACCESSORY ROOF CURBS.

7. SIDE DUCT FLANGES ARE 0.75" HIGH.
BOTTOM DUCTS DO NOT HAVE FLANGES.

8. MINIMUM CONDENSATION TRAP HEIGHT SHALL BE 1.5 TIMES 7.84 18.00 [457] [199] [814] [173] THE LOWEST NEGATIVE STATIC. DIMENSIONS IN [] ARE IN MILLIMETERS OR KILOGRAMS.
OPTIONAL COIL GUARDS, POWER EXHAUST, GAS HEAT,
ECONOMIZER, DISCONNECT SWITCH, CONVÉNIENCE OUTLET,
AND BAROMETRIC RELIEF AND FRESH AIR HOODS SHOWN. 10.50 18.25 ALTERNATE CONDENSATION DRAIN-[267] [464] 24.24 S U P [616] 1 EXCEPT XP (HEAT PUMP) UNITS. (FROM MTB. 24.00 FLANGE) 27.50 DIRECTION OF AIRFLOW [610] [699] RIGHT 28.2 18.25 CENTER OF GRAVITY LEFT [718] [464] 3/4" FPT 21.00-20.39 19.14 [533] [518] 17.14 20.14 [486] 18.06 SUPPLY [435] [512] [459] 5.32 14.47 FRONT 2.88 -BOTTOM GAS 16.39 [135] [368] [73] 31.63 SUPPLY ENTRY ϕ 2.00 [51] BOTTOM ENTRY: [131] [416] [718] [803] POWER 2.50 [64] 18.89 [459] CONTROL 3X φ0.875 [22] REAR (PARTIAL VIEW) DETAIL A [480] (INTAKE HOOD NOT SHOWN IN THIS VIEW) OUTSIDE AIR TOP VIEW INTAKE HOOD DISCONNECT SWITCH COVER 58.09 89.00 (OPTIONAL) (OPTIONAL) [1475] [2261] POWER ENTRY ϕ 2.50 [64] ė GAS INLET FRESH AIR HOOD/—— ECONOMIZER(OPTIONAL) **BLOWER ACCESS** FILTER/ [653] CTL PANEL COMPRESSOR COMPRESSOR CONTROL ENTRY ϕ 0.875 [22] 50.75 ACCESS ACCESS [1289] POWER ENTRY ϕ 2.50 [64] BAROMETRIC RELIEF HOOD/ POWER EXHAUST (OPTIONAL) **\$00** CONVENIENCE OUTLET COVER-21.19 ^{_}11.38 (OPTIONAL) [538] SEE DETAIL A FOR [289] [694] 59.00 DRAIN LOCATION **EXHAUST** <u>/1}</u> CONVENIENCE OUTLET [1499] -COIL GUARD LEFT VIEW FLUE POWER ENTRY ϕ 0.875 [22] 89.00 [2261] (OPTIONAL) FRONT VIEW RIGHT VIEW

(OPTIONAL FRONT COIL GUARD NOT SHOWN IN THIS VIEW)



Project Name: BRICKYAARD EAST FIT UP

Predator Simplicity SE

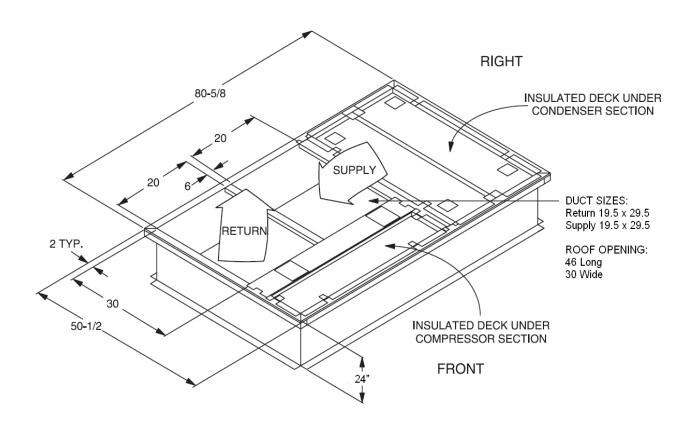
Single Package R-410A Air Conditioner

Unit Model #: **ZJ120S20V2KZZ70004**

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Quantity: 2 Tag #: HVAC-1A,AB System: ZJ120S20V2KZZ70004 (2), VP020A12H2AM11 (2)

1RC0476 Roof Curb



1RC0476 ROOF CURB DIMENSIONS

^{*} Supply and Return Air (Including duct support rails) as shown, are typical for bottom duct applications.

For location of horizontal duct applications (On rear of unit), refer to Unit Dimensions details.



Single Package R-410A Air Conditioner

Project Name: BRICKYARD EAST Unit Model #: ZJ120S20V2MZZ7

Quantity: 2 Tag #: HVAC-2A, 2B

Cooling Performance	
Total capacity	132.8 MBH
Sensible capacity	96.6 MBH
Refrigerant type	R-410A
Efficiency (at ARI)	12.00 EER
Integrated eff. (at ARI)	12.80 IEER
Ambient DB temp.	95.0 °F
Entering DB temp.	81.3 °F
Entering WB temp.	68.0 °F
Leaving DB temp.	59.4 °F
Leaving WB temp.	58.0 °F
Part load efficiency	13.4 IPLV
Power input (w/o blower)	9.00 kW
Sound power	90 dB(A)
Gas Heating Performance	

Gas Heating Performance		
Entering DB temp.	59.3	°F
Heating output capacity (Max)	192	MBH
Supply air	4100	CFM
Heating input capacity (Max)	240	MBH
Leaving DB temp.	102.7	°F
Air temp. rise	43.4	°F
SSE	80.0	%
Stages	2	
Comply Air Diagram Danfarmana		

nce
4100 CFM
0.75 IWG
0.43 IWG
1201 RPM
3.45 HP
Bottom
3.00 HP
3.08 HP
2.87 kW
0 ft.
BELT
true

	Outside/Mixed Air	
Outside Air Cfm		1675 CFM

Electrical Data	
Power supply	230-3-60
Unit min circuit ampacity	51.7 Amps
Unit max over-current protection	60 Amps
Dimensions & Weight	

	Dimensions & Weight					
Hgt	51 in.	Len	89 in.	Wth	59 in.	
Weight	Hgt 51 in. Len 89 in. Wth 59 in. Weight with factory installed options 1275 lbs.					
	•	Clo	earances	•		

36 in.

Back

36 in.

Тор	72 in.	Bottom	0 in.	Left	36 in.
Note:	Please refer to	the tech guide	for listed ma	ximum sta	tic pressures



12 in.

Right



Front



ZJ120S20V2MZZ7 (2), VP028A12M2AM41 (2)

10 Ton

• York Predator units are manufactured at an ISO 9001 registered facility and each rooftop is completely computer-run tested prior to shipment.

Unit Features

- Through-the-Curb and Through-the-Base Utility Connections
- Full perimeter base rails with built in rigging capabilities
- · Hinged Access Panels
- Slide-Out Stainless Steel Drain Pan
- Scroll Compressors
- Two Stage Cooling
- · Solid Core Liquid Line Filter Driers
- · Microchannel Condenser Coil
- 192 MBH Output Stainless Steel, Two Stage Gas Heat
- Unit Ships with 4" Pleated Filters (MERV 13)
- Replacement Filters: 4 (24" x 20"). Unit accepts 2" or 4" wide filters.
- Single Point Power Connection
- HACR Circuit Breaker/Disconnect (Sized for 208 Volts)
- Non-Powered Convenience Outlet
- **Phase Monitor**
- Phase Monitor
- Return & Supply Air Smoke Detectors
- Dry Bulb Low Leak Economizer w/Barometric Relief and Hoods (Bottom or Horizontal End Return Only)
- Short Circuit Current: 5kA RMS Symmetrical

Standard Unit Controller: Simplicity Control Board

Safety Monitoring - Monitors the high and low-pressure switches, the freezestats, the gas valve, if applicable, and the temperature limit switch on gas and electric heat units. The unit control board will alarm on ignition failures, safety lockouts and repeated limit switch trips.

BAS Controller

- IntelliSpeed control of the VFD based on stages of cooling. Provides Single Zone VAV Fan Operation as defined by ASHRAE 90.1 section 6.4.3.10.
- Simplicity SE Controller with Discharge Air, Return Air, and Outside Air Sensor

Warranty

- One (1) Year Limited Warranty on the Complete Unit
- Five (5) Year Warranty Compressors
- · Fifteen (15) Year Warranty on Stainless Steel Heat Exchanger

Energy Recovery Ventilator

VP028A12M2AM41

Unit Model #: ZJ120S20V2MZZ7

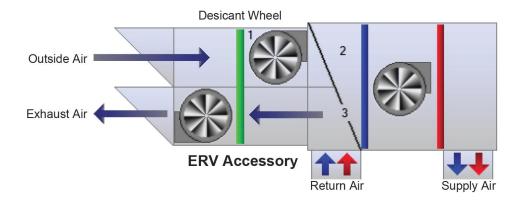
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Quantity: 2 Tag #: HVAC-2A, 2B System: ZJ120S20V2MZZ7 (2), VP028A12M2AM41 (2)

Net Outside Air 1 - Outside Air + Exhaust Air Transfer 2 - Mixed Air CFM 1525 CFM 1675 CFM 4100 Cooling DB (°F) 95.00 Cooling DB (°F) 83.66 Cooling DB (°F) 81.26 Cooling Wetbulb (°F) 75.00 Cooling Wetbulb (°F) 69.46 Cooling Wetbulb (°F) 68.02 -10.00 Heating Drybulb (°F) Heating Drybulb (°F) 46.77 Heating Drybulb (°F) 59.33

Altitude (ft) 0 <u>3 - Balancing Damper</u>

Net Exhaust Air (CFM) 1300 CFM 2425



Load Reduction

Summer (Tons) 2.63 Winter (MBH) 108.98

Return Air

CFM 3875
Cooling Drybulb (°F) 79.60
Cooling Wetbulb (°F) 67.00
Heating Drybulb (°F) 68.00

Electrical Data

Voltage -Max. Fuse or Breaker Size (Amps) 25
Ampacity (Amps) 18.00

Predator Simplicity SE

Single Package R-410A Air Conditioner

Unit Model #: ZJ120S20V2MZZ7

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Quantity: 2 Tag #: HVAC-2A, 2B System: ZJ120S20V2MZZ7 (2), VP028A12M2AM41 (2)

Factory Installed Options

ZJ120S20V2MZZ7

Product Category:	Z	York Predator Single Packaged R-410A Air Conditioner
Product Identifier:	J	12.0 EER / 12.8 IEER
Nominal Cooling Capacity:	120	10 Ton Two Stage Cooling
Heat Type and Nominal Heat Capacity:	S20	192 MBH Output Stainless Steel, Two Stage Gas Heat
Airflow:	V	3 HP High Static Belt Drive Blower Dry Bulb Low Leak Economizer w/Barometric Relief and Hoods (Bottom or Horizontal End Return Only)
Voltage:	2	208/230-3-60
Installation Options:	M	HACR Circuit Breaker/Disconnect (Sized for 208 Volts) Return & Supply Air Smoke Detectors (Bottom return only) Non Powered Convenience Outlet
Additional Options:	ZZ	4" Pleated Filters (MERV 13) Microchannel Condenser Coil Phase Monitor Simplicity® SE Controller with Discharge Air, Return Air, and Outside Air Sensor Stainless Steel Drain Pan IntelliSpeed control of the VFD based on stages of cooling (Provides Single Zone VAV Fan Operation as defined by ASHRAE 90.1 section 6.4.3.10)
Product Generation:	7	

Field Installed Accessories

- 1ES0402 Equipment Support 48"
 Long x 8" Tall (30.0 lbs)
- Long x 8" Tall (30.0 lbs)

 1RC0476 Roof Curb 24" High, Flat, Uninsulated, Full Perimeter (Shipped Knocked Down) (135.0 lbs)
- S1-02815208000 Blower Sheave for 8.5 and 10 Ton High Static Field Installed Drive (3.0 lbs)
- S1-A52 Belt for 8.5 and 10 Ton High Static Field Installed Drive (0.4 lbs)



Single Package R-410A Air Conditioner

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Quantity: 2 Tag #: HVAC-2A, 2B System: ZJ120S20V2MZZ7 (2), VP028A12M2AM41 (2) Consolidated Drawing OPERATING CENTER OF GRAVITY 4 POINT CORNER LOADS (LBS) (BASE UNIT) 1. FOR OUTDOOR USE ONLY. LOCATION (BASE UNIT) TONNAGE WEIGHT (LBS (BASE UNIT) UNIT 2. WEIGHTS SHOWN ARE FOR 3. MIN. CLEARANCES TO BE: COOLING ONLY UNITS. 1007 [458] 38 [965] 38 [965] 235 [107] 24 [610] RIGHT SIDE: 12 [305] 192 871 279 127 375 170 10 ZF 1103 [501] 24 [610] 257 [117] LEFT SIDE: 36 915 38 965 8.5 24 [610] 240 109 179 81 261 1030 467 36 [915] 36 [915] 254 115 10 1090 [494] 38 965 24 [610] 189 [86] 276 125 371 168 REAR: 25 [635] 25 [635] 191 [87] 195 [89] 6.5 ZJ 1030 467 39 [991] 245 1111 260 118 333 1151 TOP: 72 [1830] 39 991 250 113 1050 476 120 265 BOTTOM: 0 0 1 4. TO REMOVE THE SLIDE-OUT DRAIN PAN, A REAR CLEARANCE OF 24 [610] 8.5 1060 481 38 965 247 112 184 [84] 268 [122] 32.67 [830] 10 ZJ 1070 [485] 39 [991] 24 [610] 245 [111] 191 [87] 60 in (1525 mm) IS REQUIRED. IF SPACE IS UNAVAILABLE, THE 38 [965] 25.5 [648] 297 [135] 221 [100] 38 [965] 25 [635] 262 [119] 195 [89] 6.83 8.5 & 10 ZR 1200 [544] 221 [100] 291 [132] 390 [177] DRAIN PAN CAN BE REMOVED THROUGH THE FRONT BY SEPARATING [173] 1080 [490] THE CORNER WALL. 6.5 XΡ 5. FOR SMALLER SERVICE AND OPERATIONAL CLEARANCES
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(OPTIONAL FRONT COIL GUARD NOT SHOWN IN THIS VIEW)



Predator Simplicity SE

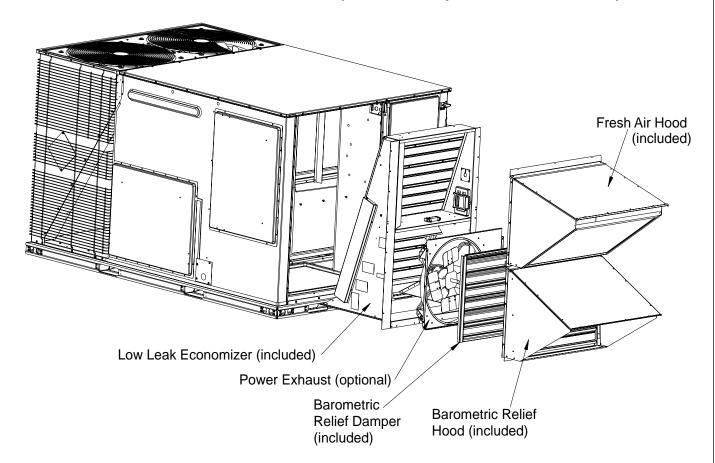
Single Package R-410A Air Conditioner

Unit Model #: ZJ120S20V2MZZ7

Quantity: 2 Tag #: HVAC-2A, 2B System: ZJ120S20V2MZZ7 (2), VP028A12M2AM41 (2)

Low Leak Downflow Economizer

Low Leak Downflow Economizer (shown with optional Power Exhaust)



Low leak economizers are capable achieving low leakage rates of 3 cfm/sq. ft at 1" of static pressure, meeting or exceeding the following standards:

ASHRAE 90.1-2010 ASHRAE 62 AMCA 511 (licensed as Class 1A damper) International Energy Conservation Code (IECC) California Title 24

The outdoor intake opening shall be covered with a rain hood that matches the exterior of the unit. Water eliminator/filters shall be provided.

Simultaneous economizer/compressor operation is also possible. Dampers shall fully close on power loss.



Single Package R-410A Air Conditioner

Project Name: BRICKYAARD EAST FIT UP Unit Model #: ZJ061S13J2MZZ7

Quantity: 2 Tag #: HVAC-3A,3B System: ZJ061S13J2MZZ7 (2)

Cooling Performance				
Total capacity	57.8 MBH			
Sensible capacity	37.0 MBH			
Refrigerant type	R-410A			
Seasonal Efficiency (at ARI)	15.00 SEER			
Efficiency (at ARI)	12.20 EER			
Ambient DB temp.	95.0 °F			
Entering DB temp.	79.0 °F			
Entering WB temp.	67.0 °F 56.2 °F			
Leaving DB temp. Leaving WB temp.	56.2 F 54.5 °F			
Power input (w/o blower)	4.05 kW			
Sound power	84 dB(A)			
Gas Heating Performance	0+ db(/t)			
Entering DB temp.	60 °F			
Heating output capacity (Max)	129 MBH			
Supply air	1500 CFM			
Heating input capacity (Max)	160 MBH			
Leaving DB temp.	139.6 °F			
Air temp. rise	79.6 °F			
SSE	80.5 %			
Stages	2			
Supply Air Blower Performance				
Supply air	1500 CFM			
Ext. static pressure	0.75 IWG			
Addl. Unit Losses (Options/Accessories)	0.17 IWG			
Blower speed May PUD of Mater (including conting factor)	888 RPM 1.73 HP			
Max BHP of Motor (including service factor) Duct location	Bottom			
Motor rating	1.50 HP			
Actual required BHP	0.78 HP			
Power input	0.73 kW			
Elevation	0 ft.			
Drive type	BELT			
Outside/Mixed Air				
Outside Air Cfm	450 CFM			
Electrical Data				
	230-3-60			
Unit min circuit ampacity	32.5 Amps			
Unit max over-current protection	45 Amps			
Dimensions & Weight				
Hgt 42 in. Len 89 in. Wth	59 in.			
Weight with factory installed options	1035 lbs.			
Clearances				
Digital 10 in Front 20 in Dool	, 26 in			
Right 12 in. Front 36 in. Back	< 36 in.			
Right 12 in. Front 36 in. Back Top 72 in. Bottom 0 in. Left	36 in.			





5 Ton

 York Predator units are manufactured at an ISO 9001 registered facility and each rooftop is completely computer-run tested prior to shipment.

Unit Features

- Unit Cabinet Constructed of Powder Painted Steel, Certified At 1000 Hours Salt Spray Test (ASTM B-117 Standards)
- Through-the-Curb and Through-the-Base Utility Connections
- Supply can be field converted from vertical to horizontal configuration without cutting panels
- · Full perimeter base rails with built in rigging capabilities
- · Hinged Access Panels
- · Slide-Out Stainless Steel Drain Pan
- Reciprocating Compressor
- · Single Stage Cooling
- Solid Core Liquid Line Filter Driers
- · Microchannel Condenser Coil
- 129 MBH Output Stainless Steel, Two Stage Gas Heat
- 1.5 HP Standard Static Belt Drive Blower
- Unit Ships with 4" Pleated Filters (MERV 13)
- Replacement Filters: 4 (24" x 16"). Unit accepts 2" or 4" wide filters.
- Single Point Power Connection
- HACR Circuit Breaker/Disconnect (Sized for 208 Volts)
- Non-Powered Convenience Outlet
- Return & Supply Air Smoke Detectors
- Dry Bulb Low Leak Economizer w/Barometric Relief and Power Exhaust and Hoods (Bottom or Horizontal End Return Only)
- Short Circuit Current: 5kA RMS Symmetrical

Standard Unit Controller: Simplicity Control Board

 Safety Monitoring - Monitors the high and low-pressure switches, the freezestats, the gas valve, if applicable, and the temperature limit switch on gas and electric heat units. The unit control board will alarm on ignition failures, safety lockouts and repeated limit switch trips.

BAS Controller

 Simplicity SE Controller with Discharge Air, Return Air, and Outside Air Sensor

Warranty

- One (1) Year Limited Warranty on the Complete Unit
- Five (5) Year Warranty Compressors
- Fifteen (15) Year Warranty on Stainless Steel Heat Exchanger

Project Name: BRICKYAARD EAST FIT UP

Predator Simplicity SE

Single Package R-410A Air Conditioner

Unit Model #: ZJ061S13J2MZZ7

Quantity: 2 Tag #: HVAC-3A,3B System: ZJ061S13J2MZZ7 (2)

Factory Installed Options

ZJ061S13J2MZZ7

Product Category:	Z	York Predator Single Packaged R-410A Air Conditioner
Product Identifier:	J	15.0 SEER / 12.2 EER
Nominal Cooling Capacity:	061	5 Ton Single Stage Cooling
Heat Type and Nominal Heat Capacity:	S13	129 MBH Output Stainless Steel, Two Stage Gas Heat
Airflow:	J	1.5 HP Standard Static Belt Drive Blower Dry Bulb Low Leak Economizer w/Barometric Relief and Power Exhaust and Hoods (Bottom or Horizontal End Return Only)
Voltage:	2	208/230-3-60
Installation Options:	M	HACR Circuit Breaker/Disconnect (Sized for 208 Volts) Return & Supply Air Smoke Detectors (Bottom return only) Non Powered Convenience Outlet
Additional Options:	ZZ	4" Pleated Filters (MERV 13) Microchannel Condenser Coil Simplicity® SE Controller with Discharge Air, Return Air, and Outside Air Sensor Stainless Steel Drain Pan
Product Generation:	7	

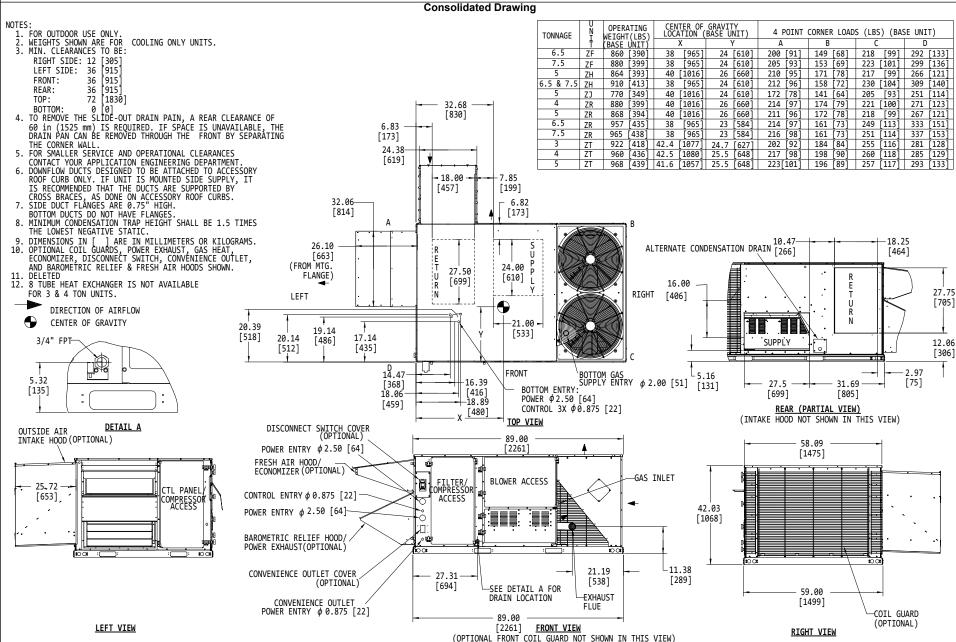
Field Installed Accessories

- 1RC0471 Roof Curb 14" High, Flat, Uninsulated, Full Perimeter (Shipped Knocked Down) (135.0 lbs)
- S1-TBSU32P7Y York Branded LX Series, Up to 4 Heat / 2 Cool, Electronic 7 Day Programmable (1.0 lbs)

Single Package R-410A Air Conditioner

Project Name: BRICKYAARD EAST FIT UP Unit Model #: ZJ061S13J2MZZ7

Quantity: 2 Tag #: HVAC-3A,3B System: ZJ061S13J2MZZ7 (2)





Project Name: BRICKYAARD EAST FIT UP

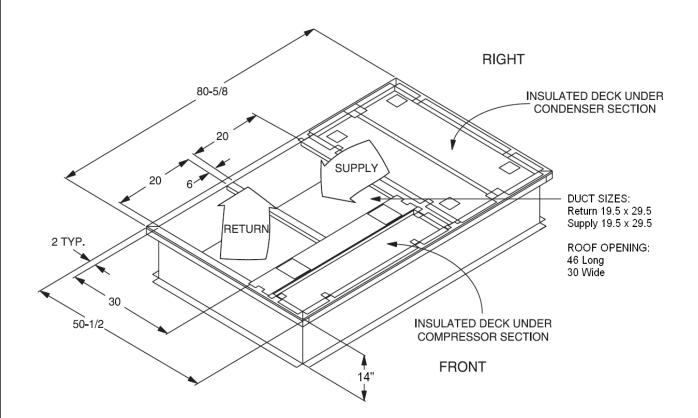
Predator Simplicity SE

Single Package R-410A Air Conditioner

Unit Model #: ZJ061S13J2MZZ7

Quantity: 2 Tag #: HVAC-3A,3B System: ZJ061S13J2MZZ7 (2)

1RC0471 Roof Curb



1RC0471 Roof Curb Dimensions

^{*} Supply and Return Air (Including duct support rails) as shown, are typical for bottom duct applications.

For location of horizontal duct applications (On rear of unit), refer to Unit Dimensions details.



Single Package R-410A Air Conditioner

Unit Model #: ZJ120S15V2MZZ70001 Project Name: BRICKYARD EAST

1 Tag #: HVAC-4

ZJ120S15V2MZZ70001, VP020A12H2AM41

Quantity: 1 Tag #: HVAC-4	
Cooling Performance	
Total capacity	134.2 MBH
Sensible capacity	92.7 MBH
Refrigerant type	R-410A
Efficiency (at ARI)	12.00 EER
Integrated eff. (at ARI)	12.80 IEER
Ambient DB temp.	95.0 °F
Entering DB temp.	81.6 °F
Entering WB temp.	68.8 °F
Leaving DB temp.	60.2 °F
Leaving WB temp.	58.6 °F
Part load efficiency	13.4 IPLV
Power input (w/o blower)	9.00 kW
Sound power	90 dB(A)
Gas Heating Performanc	е
Entering DB temp.	57.5 °F
Heating output capacity (Max)	144 MBH
Supply air	4000 CFM
Heating input capacity (Max)	180 MBH
Leaving DB temp.	90.9 °F
Air temp. rise	33.3 °F
SSE	80.0 %
Stages	2
Supply Air Blower Performa	nce
Supply air	4000 CFM
Ext. static pressure	0.75 IWG
Unit static resistance	0.39 IWG
Blower speed	1171 RPM
Max BHP of Motor (including service factor)	3.45 HP
Duct location	Bottom
Motor rating	3.00 HP
Actual required BHP	2.91 HP

Outside/Mixed	Air
---------------	-----

Outside Air Cfm 1640 CFM

Electrical Data				
Power supply	230-3-60			
Unit min circuit ampacity	51.7 Amps			
Unit max over-current protection	60 Amps			

OTHE THE	AN OVC	curre	in proteotio	• • • • • • • • • • • • • • • • • • • •			00 / tillp
			Dimensi	ons &	Wei	ght	
Hgt	51	l in.	Len	89	in.	Wth	59 in.

Weight with factory installed options				1265 lbs.			
	Clearances						
Right	12 in.	Front	36 in.	Back	36 in.		
Right Top	72 in.	Bottom	0 in.	Left	36 in.		

Note: Please refer to the tech guide for listed maximum static pressures



Power input

Requires field-supplied drive

Elevation

Drive type





10 Ton

271 kW

BELT

true

0 ft.

• York Predator units are manufactured at an ISO 9001 registered facility and each rooftop is completely computer-run tested prior to shipment.

Unit Features

- Through-the-Curb and Through-the-Base Utility Connections
- Full perimeter base rails with built in rigging capabilities
- **Hinged Access Panels**
- Slide-Out Stainless Steel Drain Pan
- Scroll Compressors
- Two Stage Cooling
- Solid Core Liquid Line Filter Driers
- Microchannel Condenser Coil
- 144 MBH Output Stainless Steel, Two Stage Gas Heat
- Unit Ships with 4" Pleated Filters (MERV 13)
- Replacement Filters: 4 (24" x 20"). Unit accepts 2" or 4" wide filters.
- Dirty Filter Switch
- Single Point Power Connection
- HACR Circuit Breaker/Disconnect (Sized for 208 Volts)
- Non-Powered Convenience Outlet
- Phase Monitor
- · Phase Monitor
- Return & Supply Air Smoke Detectors
- Dry Bulb Low Leak Economizer w/Barometric Relief and Hoods (Bottom or Horizontal End Return Only)
- Short Circuit Current: 5kA RMS Symmetrical

Standard Unit Controller: Simplicity Control Board

Safety Monitoring - Monitors the high and low-pressure switches, the freezestats, the gas valve, if applicable, and the temperature limit switch on gas and electric heat units. The unit control board will alarm on ignition failures, safety lockouts and repeated limit switch trips.

BAS Controller

- IntelliSpeed control of the VFD based on stages of cooling. Provides Single Zone VAV Fan Operation as defined by ASHRAE 90.1 section 6.4.3.10.
- Simplicity SE Controller with Discharge Air, Return Air, and Outside Air Sensor

Warrantv

- One (1) Year Limited Warranty on the Complete Unit
- Five (5) Year Warranty Compressors
- · Fifteen (15) Year Warranty on Stainless Steel Heat Exchanger

0

1263

Project Name: BRICKYARD EAST

Altitude (ft)

Net Exhaust Air (CFM)

Energy Recovery Ventilator

VP020A12H2AM41

Unit Model #: ZJ120S15V2MZZ70001

3 - Balancing Damper

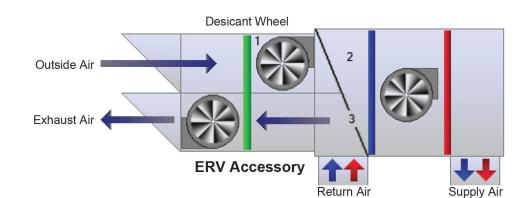
2360

CFM

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Quantity: 1 Tag #: HVAC-4 System: ZJ120S15V2MZZ70001, VP020A12H2AM41

Net Outside Air 1 - Outside Air + Exhaust Air Transfer 2 - Mixed Air CFM 1475 CFM 1640 CFM 4000 Cooling DB (°F) 95.00 Cooling DB (°F) 84.53 Cooling DB (°F) 81.62 Cooling Wetbulb (°F) 78.00 Cooling Wetbulb (°F) 71.21 Cooling Wetbulb (°F) 68.77 -10.00 Heating Drybulb (°F) Heating Drybulb (°F) 42.45 Heating Drybulb (°F) 57.53



Load Reduction

Summer (Tons) 3.24 Winter (MBH) 95.19

Electrical Data

Voltage -Max. Fuse or Breaker Size (Amps) 15
Ampacity (Amps) 11.40

Return Air

CFM 3788
Cooling Drybulb (°F) 79.60
Cooling Wetbulb (°F) 67.00
Heating Drybulb (°F) 68.00

Predator Simplicity SE

Single Package R-410A Air Conditioner

Unit Model #: **ZJ120S15V2MZZ70001**

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Quantity: 1 Tag #: HVAC-4 System: ZJ120S15V2MZZ70001, VP020A12H2AM41

Factory Installed Options

ZJ120S15V2MZZ70001

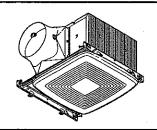
Product Category:	Z	York Predator Single Packaged R-410A Air Conditioner
Product Identifier:	J	12.0 EER / 12.8 IEER
Nominal Cooling Capacity:	120	10 Ton Two Stage Cooling
Heat Type and Nominal Heat Capacity:	S15	144 MBH Output Stainless Steel, Two Stage Gas Heat
Airflow:	V	3 HP High Static Belt Drive Blower Dry Bulb Low Leak Economizer w/Barometric Relief and Hoods (Bottom or Horizontal End Return Only)
Voltage:	2	208/230-3-60
Installation Options:	M	HACR Circuit Breaker/Disconnect (Sized for 208 Volts) Return & Supply Air Smoke Detectors (Bottom return only) Non Powered Convenience Outlet
Additional Options:	ZZ	4" Pleated Filters (MERV 13) Microchannel Condenser Coil Phase Monitor Simplicity® SE Controller with Discharge Air, Return Air, and Outside Air Sensor Dirty Filter Switch Stainless Steel Drain Pan IntelliSpeed control of the VFD based on stages of cooling (Provides Single Zone VAV Fan Operation as defined by ASHRAE 90.1 section 6.4.3.10)
Product Generation:	7	

Field Installed Accessories

- 1ES0402 Equipment Support 48" Long x 8" Tall (30.0 lbs)
- 1RC0476 Roof Curb 24" High, Flat, Uninsulated, Full Perimeter (Shipped Knocked Down) (135.0 lbs)
- 2EC0402 Kit, Dual Enthalpy Field Installed (Includes both an Outdoor Air Enthalpy Sensor and a Return Air Enthalpy/Humidity Sensor) (1.0 lbs)
- S1-02815208000 Blower Sheave for 8.5 and 10 Ton High Static Field Installed Drive (3.0 lbs)
- S1-A52 Belt for 8.5 and 10 Ton High Static Field Installed Drive (0.4 lbs)



MODEL ZB80 VENTILATION FAN



FEATURES

ULTRASMART™ DC Motor and Control Technology

- DC motor for efficiency well beyond ENERGY STAR® requirements.
- Multi-speed capability ideal for meeting ASHRAE 62.2, LEED and ENERGY STAR® for Homes requirements. Can be used to comply with CA Title 24, as well as local/spot ventilation needs.
- Powerful operation maintained over a wide range of real-world installations (CFM ratings maintained through at least 0.25" static pressure).
- Infinitely adjustable low ofm setting allows precise adjustment to prevent over-ventilating and maximize efficiency.
- Adjustable time delay sets how long fan will run on high speed before returning to a continuous lower speed.
- · Rated for Continuous Operation.

ULTRASILENT™ Sound Technology

- HVI certified, best-achievable <0.3 Sone level provides nearly silent operation for a relaxing environment.
- State-of-the-art blower and duct outlet design smooths airflow.
- · High tech DC motor designed for nearly silent operation.

ULTRAQUICK™ Installation Technology

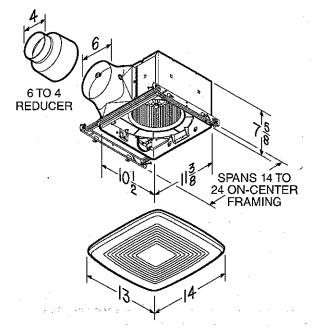
- Unique telescoping mounting frame fits through retrofit drywall opening to allow easy installation from the room side. No attic access needed!
- · Captive screws allow for easy new construction installation.
- Mounting frame positioning tabs provide easy vertical positioning for new construction.
- Easy to insert and remove snap-in housing. No screws required!
- · Easy to insert and remove snap-in blower.
- Inside or outside duct connector and knockout plate mounting provides flexibility for new construction or retrofit.

U.L. Listed for use over bathtubs and showers when connected to a GFCI protected branch circuit (ceiling mount only).

Use only ON/OFF switch, mechanical timer or relay-switched control.

3-year warranty.

DIMENSIONS (Inches)







Broan-NuTone LLC Hartford, Wisconsin www.broan.com 800-558-1711

REFERENCE	QTY.	REMARKS	Project BRICK NORTH EAST
			Location
	W	ZB80	Architect
	17	1000	Engineer
			contractor Jim's METAL FAB
		·	Submitted by Rolands Date 11/4/1



PERFORMANCE SPECIFICATIONS MODEL ZB80 VENTILATION FAN

AMCA LICENSED PERFORMANCE

Airflow Rate Setting	Duct Size	Performance @ Static Pressure (Ps) - Inches Water Gage															
		0.100" Ps			0.125" Ps		0.250" Ps		0.375" Ps		0.500" Ps		0.625" Ps		Volts	Hz.	Nominal BPM
(CFM)		CFM	Sones	Watts	CFM	Sones			GF MI								
80	4" Round	80	< 0.3	7.8	80	0.3	80	1.0	78	1.8	64	2.4	37	3.0	120	60	985
80	6" Round	80	< 0.3	6.1	80	< 0.3	80	0.6	78	1.4	66	2.2	38	3.0	120	60	935



Performance ratings include the effects of inlet grille and backdraft damper. Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings are loudness values in fan sones at 5' (1.5m) in a spherical free field calculated per AMCA Std. 301. Values shown are for Installation Type B; free inlet hemispherical sone levels. Performance certified is for Installation Type B; Free Inlet, Ducted outlet.

HVI PERFORMANCE

Airflow			6" Duct			4" Duct						
Rate	0.11	Ps - Static F	ressure (ir	H2O)	0.25 Ps	0.1 F	nH2O)	0.25 Ps				
Setting (CFM)	Airflow (CFM)	Sound (Sones)	Power (Watts)	Efficacy (CFM/Watt)	Airflow (CFM)	Airflow (CFM)	Sound (Sones)	Power (Watts)	Efficacy (CFM/Watt)	Airflow (CFM)		
80	80	< 0.3	5.8	13.7	79	80	0.3	7.6	10.5	80		
70	70	< 0.3	5.1	13.7	71	70	< 0.3	6.5	10.7	70		
60	60	< 0.3	4,4	13,6	61	60	< 0.3	5.5	. 10.9	60		
50	50	< 0.3	4.0	12.7	49	50	< 0.3	5.1	10.3	. 47		
40	40	< 0.3	3.7	12.1	36	40	< 0.3	4.3	10.9	34		
30	30	< 0.3	3.4	11.4	23	30	< 0.3	3.9	10.2	22		



HVI-2100 CERTIFIED RATINGS comply with new testing technologies and procedures prescribed by the Home Ventilating Institute, for off-the-shelf products, as they are available to consumers. Product performance is rated at 0.1 in. static pressure, based on tests conducted in a state-of-the-art test laboratory. Sones are a measure of humanly-perceived loudness, based on laboratory measurements.

ELECTRICAL & WEIGHT

Volts	Hz	Amps	Shipping Weight (lbs.)
120	60	0.1	12.5





FAN CAPABILITY

