



SUBMITTAL DATA

For: Approval

Order #:

Date: 09/17/2013

Project:

443 CONGRESS ST

Project #:

Location:

Purchaser: GRANITE CORP

Date

09/17/2013

Project Name

Congress St - Revised

Project Number**Client / Purchaser****443 CONGRESS STREET**

Submittal Summary Page

| Qty | Tag # | Model # | Description |
|-----|-------|----------|---|
| 4 | | ZF036N08 | 3 Ton, York Sunline Single Packaged R-410A Air Conditioner, 13.0 SEER / 11.0 EER, Single Stage Cooling, 80 MBH Output Aluminized Steel, Single Stage Gas Heat, 1/2 HP Direct Drive Blower, 1" Throwing Filters, Single Enthalpy Economizer and Hood (No Barometric Relief Damper), 208/230-3-60, Microchannel Condenser Coil, Galvanized Steel Drain Pan • Return Air Smoke Detector |
| 4 | | 1RD0410 | Barometric Relief Damper with Hood Kit (Downflow Unit or Duct Mounted) |
| 5 | | ZF060N10 | 5 Ton, York Sunline Single Packaged R-410A Air Conditioner, 13.0 SEER / 10.8 EER, Single Stage Cooling, 100 MBH Output Aluminized Steel, Single Stage Gas Heat, 1 HP Direct Drive Blower, 1" Throwing Filters, Single Enthalpy Economizer and Hood (No Barometric Relief Damper), 208/230-3-60, Microchannel Condenser Coil, Galvanized Steel Drain Pan • Return Air Smoke Detector |
| | | 1RD0410 | Barometric Relief Damper with Hood Kit (Downflow Unit or Duct Mounted) |

Equipment start-up and commissioning by a factory trained technician is recommended.
Contact your supplying distributor or sales representative for additional information & guidance.

Project Name: **Congress St**

Unit Model #: **ZF036N08**

Quantity: **3**

System: **ZF036N08**

Cooling Performance

| | |
|------------------------------|------------|
| Total capacity | 39.2 MBH |
| Sensible capacity | 27.9 MBH |
| Refrigerant type | R-410A |
| Seasonal Efficiency (at ARI) | 13.00 SEER |
| Efficiency (at ARI) | 11.00 EER |
| Ambient DB temp. | 86.8 °F |
| Entering DB temp. | 80.0 °F |
| Entering WB temp. | 67.0 °F |
| Leaving DB temp. | 59.4 °F |
| Leaving WB temp. | 57.1 °F |
| Power input (w/o blower) | 2.50 kW |
| Sound power | 81 dB(A) |

Gas Heating Performance

| | |
|-------------------------------|----------|
| Entering DB temp. | 60 °F |
| Heating output capacity (Max) | 79 MBH |
| Supply air | 1255.6 |
| Heating input capacity (Max) | 100 MBH |
| Leaving DB temp. | 118.3 °F |
| Air temp. rise | 58.3 °F |
| SSE | 80.8 % |
| AFUE | 80.5 % |
| Stages | 1 |

Supply Air Blower Performance

| | |
|------------------------|------------|
| Supply air | 1255.6 CFM |
| Ext. static pressure | 0.8 IWG |
| Unit static resistance | 0.08 IWG |
| Blower speed | 977 RPM |
| Duct location | Bottom |
| Motor rating | 0.50 HP |
| Actual required BHP | 0.45 HP |
| Power input | 0.41 kW |
| Elevation | 62 ft. |
| Drive type | DIRECT |
| Speed tap | 5 |

Electrical Data

| | |
|----------------------------------|-----------|
| Power supply | 230-3-60 |
| Unit min circuit ampacity | 19.7 Amps |
| Unit max over-current protection | 25 Amps |

Dimensions & Weight

| | | | | | |
|---------------------------------------|--------|-----|--------|-----|----------|
| Hgt | 33 in. | Len | 83 in. | Wth | 45 in. |
| Weight with factory installed options | | | | | 583 lbs. |

Clearances

| | | | | | |
|-------|--------|--------|--------|------|--------|
| Right | 24 in. | Front | 32 in. | Back | 36 in. |
| Top | 72 in. | Bottom | 0 in. | Left | 36 in. |

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



3 Ton

- York 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
- Either Supply and/or Return can be Field Converted from Vertical to Horizontal Configuration without Cutting Panels.
- Full Perimeter Base Rails with Built in Rigging Capabilities
- Galvanized Steel Drain Pan
- Reciprocating Compressor
- Single Stage Cooling
- Solid Core Liquid Line Filter Driers
- Microchannel Condenser Coil
- 80 MBH Output Aluminized Steel, Single Stage Gas Nominal Heat
- 1/2 HP Direct Drive Blower
- Unit Ships with 1" Throwaway Filters with a Standard Filter Rack That Will Accept up to 2" Filters
- Single Point Power Connection
- Return Air Smoke Detector
- Single Enthalpy Economizer and Hood (No Barometric Relief Damper)
- Short Circuit Current: 5kA RMS Symmetrical

Standard Unit Controller: Simplicity Control Board

- An Integrated Low-Ambient Control, Anti-Short Cycle Protection, Lead-Lag, Fan On and Fan off Delays, Low Voltage Protection, On-Board Diagnostic and Fault Code Display.
- 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.

Warranty

- One (1) Year Limited Warranty on the Complete Unit
- Five (5) Year Warranty - Compressors and Electric Heater Elements
- Ten (10) Year Warranty - Aluminized Steel Tubular Heat Exchangers

Project Name: **Congress St**

Unit Model #: **ZF036N08**

Quantity: **3**

System: **ZF036N08**

Factory Installed Options

ZF036N08

| | | |
|---|------------|---|
| Product Category: | Z | York Sunline Single Packaged R-410A Air Conditioner |
| Product Identifier: | F | 13.0 SEER / 11.0 EER |
| Nominal Cooling Capacity: | 036 | 3 Ton Single Stage Cooling |
| Heat Type and Nominal Heat Capacity: | N08 | 80 MBH Output Aluminized Steel, Single Stage Gas Heat |
| Airflow: | B | 1/2 HP Direct Drive Blower 1" Throwaway Filters Single Enthalpy Economizer and Hood (No Barometric Relief Damper) |
| Voltage: | 2 | 208/230-3-60 |
| Installation Options: | F | Return Air Smoke Detector |
| Additional Options: | AA | Microchannel Condenser Coil Galvanized Steel Drain Pan |
| Product Generation: | 2 | |

Field Installed Accessories

- 1RD0410 - Barometric Relief Damper with Hood Kit (Downflow Unit or Duct Mounted) (6.0 lbs)

Project Name: **Congress St -**

 Unit Model #: **ZF036N08**

 Quantity: **3**

 System: **ZF036N08**

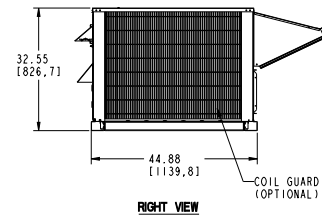
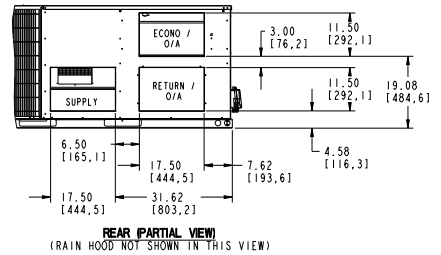
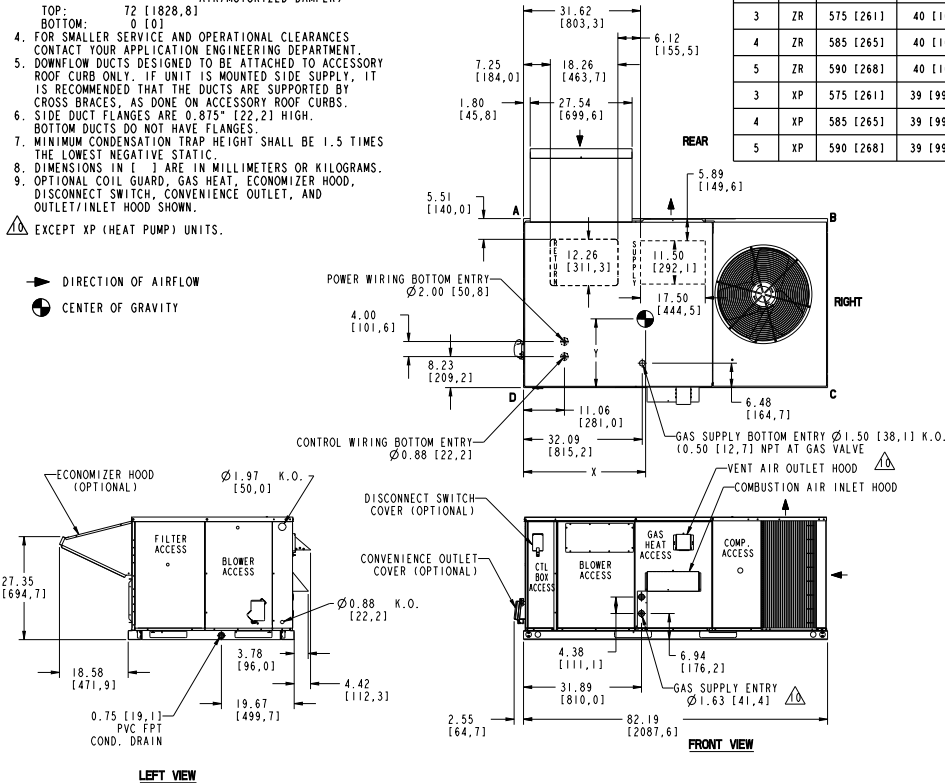
Consolidated Drawing

- NOTES:**
- FOR OUTDOOR USE ONLY.
 - WEIGHTS SHOWN ARE FOR COOLING ONLY UNITS.
 - MIN. CLEARANCES TO BE:
 RIGHT SIDE: 24 [609,6]
 LEFT SIDE: 24 [609,6] (LESS ECONOMIZER)
 36 [914,4] (WITH ECONOMIZER)
 FRONT: 24 [609,6] (COOLING/ELECTRIC HEAT)
 32 [812,8] (GAS HEAT)
 REAR: 12 [304,8] (LESS ECONOMIZER)
 36 [914,4] (WITH ECONOMIZER OR FIXED AIR/MOTORIZED DAMPER)
 TOP: 72 [1828,8]
 BOTTOM: 0 [0]
 - FOR SMALLER SERVICE AND OPERATIONAL CLEARANCES CONTACT YOUR APPLICATION ENGINEERING DEPARTMENT.
 - DOWNFLOW DUCTS DESIGNED TO BE ATTACHED TO ACCESSORY ROOF CURB ONLY. IF UNIT IS MOUNTED SIDE SUPPLY, IT IS RECOMMENDED THAT THE DUCTS ARE SUPPORTED BY CROSS BRACES, AS DONE ON ACCESSORY ROOF CURBS. SIDE DUCT FLANGES ARE 0.875" [22,2] HIGH. BOTTOM DUCTS DO NOT HAVE FLANGES.
 - MINIMUM CONDENSATION TRAP HEIGHT SHALL BE 1.5 TIMES THE LOWEST NEGATIVE STATIC.
 - DIMENSIONS IN [] ARE IN MILLIMETERS OR KILOGRAMS.
 - OPTIONAL COIL GUARD, GAS HEAT, ECONOMIZER HOOD, DISCONNECT SWITCH, CONVENIENCE OUTLET, AND OUTLET/INLET HOOD SHOWN.

▲ EXCEPT XP (HEAT PUMP) UNITS.

- ➔ DIRECTION OF AIRFLOW
- ⊙ CENTER OF GRAVITY

| TONNAGE | UNIT | OPERATING WEIGHT (LBS) | CENTER OF GRAVITY LOCATION (BASE UNIT) | | 4 POINT CORNER LOADS (LBS) (BASE UNIT) | | | |
|---------|------|------------------------|--|---------------|--|----------|----------|-----------|
| | | | X | Y | A | B | C | D |
| 3 | ZF | 468 [212] | 33 [838,2] | 18.25 [463,6] | 114 [52] | 76 [35] | 111 [50] | 167 [76] |
| 4 | ZF | 541 [245] | 31.50 [800,1] | 18.50 [469,9] | 138 [63] | 85 [39] | 122 [55] | 196 [89] |
| 5 | ZF | 569 [258] | 37 [939,8] | 15 [381] | 105 [48] | 86 [39] | 170 [77] | 208 [94] |
| 6 | ZF | 640 [290] | 37 [939,8] | 15 [381] | 118 [54] | 96 [44] | 192 [87] | 234 [106] |
| 3 | ZR | 575 [261] | 40 [1016] | 20 [508] | 132 [60] | 125 [57] | 155 [70] | 164 [74] |
| 4 | ZR | 585 [265] | 40 [1016] | 20 [508] | 134 [61] | 127 [58] | 158 [72] | 167 [76] |
| 5 | ZR | 590 [268] | 40 [1016] | 20 [508] | 135 [61] | 128 [58] | 159 [72] | 168 [76] |
| 3 | XP | 575 [261] | 39 [990,6] | 20 [508] | 135 [61] | 121 [55] | 151 [69] | 168 [76] |
| 4 | XP | 585 [265] | 39 [990,6] | 20 [508] | 137 [62] | 124 [56] | 154 [70] | 171 [78] |
| 5 | XP | 590 [268] | 39 [990,6] | 20 [508] | 138 [63] | 125 [57] | 155 [70] | 172 [78] |



Project Name: **Congress**

Unit Model #: **ZF060N10**

Quantity: **1**

System: **ZF060N10**

Cooling Performance

| | |
|------------------------------|------------|
| Total capacity | 63.5 MBH |
| Sensible capacity | 46.8 MBH |
| Refrigerant type | R-410A |
| Seasonal Efficiency (at ARI) | 13.00 SEER |
| Efficiency (at ARI) | 10.80 EER |
| Ambient DB temp. | 86.8 °F |
| Entering DB temp. | 80.0 °F |
| Entering WB temp. | 67.0 °F |
| Leaving DB temp. | 58.3 °F |
| Leaving WB temp. | 57.0 °F |
| Power input (w/o blower) | 4.27 kW |
| Sound power | 82 dB(A) |

Gas Heating Performance

| | |
|-------------------------------|---------|
| Entering DB temp. | 40 °F |
| Heating output capacity (Max) | 100 MBH |
| Supply air | 2000 |
| Heating input capacity (Max) | 125 MBH |
| Leaving DB temp. | 86.3 °F |
| Air temp. rise | 46.3 °F |
| SSE | 80.6 % |
| AFUE | 80.3 % |
| Stages | 1 |

Supply Air Blower Performance

| | |
|------------------------|----------|
| Supply air | 2000 CFM |
| Ext. static pressure | 0.6 IWG |
| Unit static resistance | 0.15 IWG |
| Blower speed | 1103 RPM |
| Duct location | Bottom |
| Motor rating | 1.00 HP |
| Actual required BHP | 1.02 HP |
| Power input | 0.95 kW |
| Elevation | 62 ft. |
| Drive type | DIRECT |
| Speed tap | 5 |

Electrical Data

| | |
|----------------------------------|-----------|
| Power supply | 230-3-60 |
| Unit min circuit ampacity | 27.5 Amps |
| Unit max over-current protection | 35 Amps |

Dimensions & Weight

| | | | | | |
|---------------------------------------|--------|----------|--------|-----|--------|
| Hgt | 33 in. | Len | 83 in. | Wth | 45 in. |
| Weight with factory installed options | | 694 lbs. | | | |

Clearances

| | | | | | |
|-------|--------|--------|--------|------|--------|
| Right | 24 in. | Front | 32 in. | Back | 36 in. |
| Top | 72 in. | Bottom | 0 in. | Left | 36 in. |

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



5 Ton

- York 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
- Either Supply and/or Return can be Field Converted from Vertical to Horizontal Configuration without Cutting Panels.
- Full Perimeter Base Rails with Built in Rigging Capabilities
- Galvanized Steel Drain Pan
- Reciprocating Compressor
- Single Stage Cooling
- Solid Core Liquid Line Filter Driers
- Microchannel Condenser Coil
- 100 MBH Output Aluminized Steel, Single Stage Gas Nominal Heat
- 1 HP Direct Drive Blower
- Unit Ships with 1" Throwaway Filters with a Standard Filter Rack That Will Accept up to 2" Filters
- Single Point Power Connection
- Return Air Smoke Detector
- Single Enthalpy Economizer and Hood (No Barometric Relief Damper)
- Short Circuit Current: 5kA RMS Symmetrical

Standard Unit Controller: Simplicity Control Board

- An Integrated Low-Ambient Control, Anti-Short Cycle Protection, Lead-Lag, Fan On and Fan off Delays, Low Voltage Protection, On-Board Diagnostic and Fault Code Display.
- 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.

Warranty

- One (1) Year Limited Warranty on the Complete Unit
- Five (5) Year Warranty - Compressors and Electric Heater Elements
- Ten (10) Year Warranty - Aluminized Steel Tubular Heat Exchangers

Project Name: **Congress St**

Unit Model #: **ZF060N10**

Quantity: **1**

System: **ZF060N10I**

Factory Installed Options

ZF060N10

| | | |
|---|------------|---|
| Product Category: | Z | York Sunline Single Packaged R-410A Air Conditioner |
| Product Identifier: | F | 13.0 SEER / 10.8 EER |
| Nominal Cooling Capacity: | 060 | 5 Ton Single Stage Cooling |
| Heat Type and Nominal Heat Capacity: | N10 | 100 MBH Output Aluminized Steel, Single Stage Gas Heat |
| Airflow: | B | 1 HP Direct Drive Blower 1" Throwaway Filters Single Enthalpy Economizer and Hood (No Barometric Relief Damper) |
| Voltage: | 2 | 208/230-3-60 |
| Installation Options: | F | Return Air Smoke Detector |
| Additional Options: | AA | Microchannel Condenser Coil Galvanized Steel Drain Pan |
| Product Generation: | 2 | |

Field Installed Accessories

- 1RD0410 - Barometric Relief Damper with Hood Kit (Downflow Unit or Duct Mounted) (6.0 lbs)



Small Sunline

Single Package R-410A Air Conditioner

Project Name: **Congress St**

Unit Model #: **ZF060N10**

Quantity: **1**

System: **ZF060N10**

Consolidated Drawing

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 RIGHT SIDE: 24 [609,6]
 LEFT SIDE: 24 [609,6] (LESS ECONOMIZER)
 36 [914,4] (WITH ECONOMIZER)
 FRONT: 24 [609,6] (COOLING/ELECTRIC HEAT)
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| TONNAGE | UNIT | OPERATING WEIGHT (LBS) | CENTER OF GRAVITY LOCATION (BASE UNIT) | | 4 POINT CORNER LOADS (LBS) (BASE UNIT) | | | |
|---------|------|------------------------|--|---------------|--|----------|----------|-----------|
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EXCEPT XP (HEAT PUMP) UNITS.

- DIRECTION OF AIRFLOW
- CENTER OF GRAVITY

