

## HVAC EQUIPMENT GUIDE

---

*Electric Furnaces, 80% Gas Furnaces  
95% Gas Furnaces, Coils and Accessories*

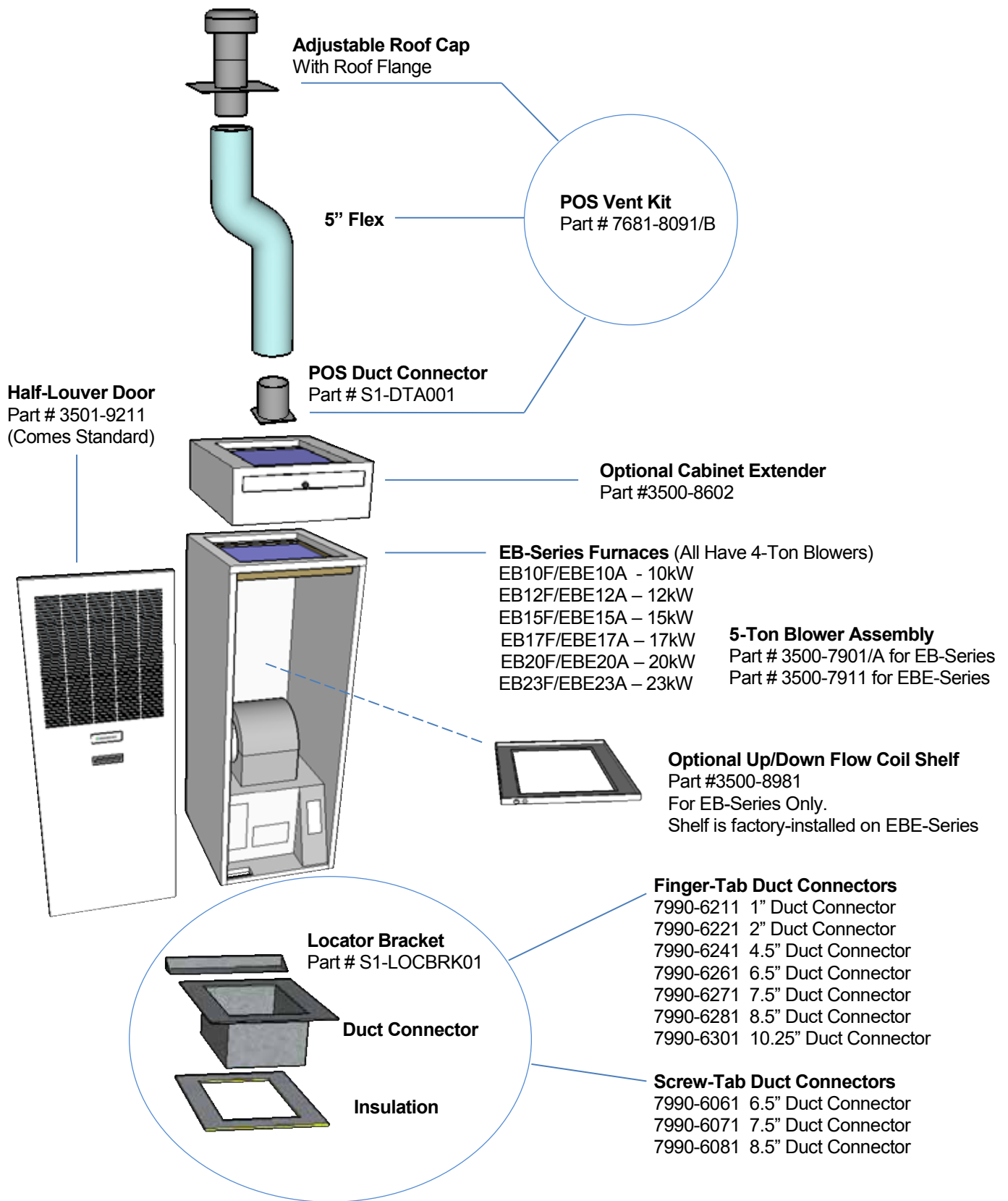


# Manufactured Housing HVAC Equipment Guide

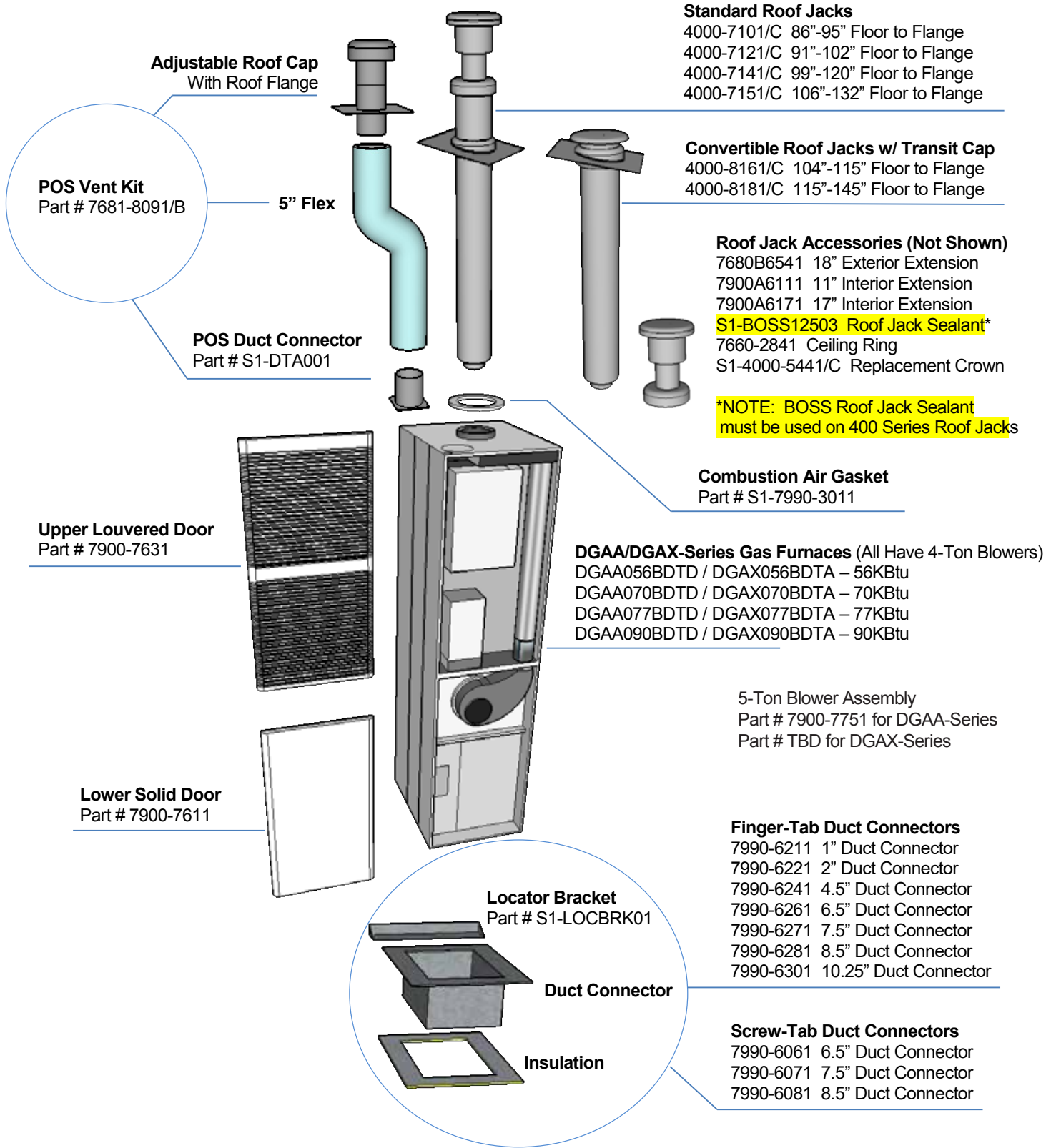
|   |        |
|---|--------|
| EB/EBE-Series Electric Furnace: Down-Flow Configuration.....        | Pg. 2  |
| DGAA/DGAX-Series Gas Furnace: Down-Flow Configuration.....          | Pg. 3  |
| MG9S/MM9E-Series Gas Furnace: Down-Flow Configuration.....          | Pg. 4  |
| MG9S/MM9E-Series Gas Furnace: Up-Flow on Fabricated Shelf.....      | Pg. 5  |
| MG9S/MM9E-Series Gas Furnace: Up-Flow with Side Return.....         | Pg. 6  |
| Duct Connector Installation Detail.....                             | Pg. 7  |
| Duct Connector Dimensions EB/EBE and DGAA/DGAX-Series Furnaces..... | Pg. 8  |
| Duct Connector Dimensions MG9S/MM9E-Series Furnaces.....            | Pg. 9  |
| Roof Jack Details.....  | Pg. 10 |
| Gas Furnace Orifice Details.....                                    | Pg. 11 |
| Manufactured Housing Coils.....                                     | Pg. 12 |



EB/EBE-Series Electric Furnace in default *Down-Flow Configuration*



DGAA/DGAX-Series 80% Gas Furnace, **Down-Flow Only**



**Adjustable Roof Cap**  
With Roof Flange

**POS Vent Kit**  
Part # 7681-8091/B

5" Flex

**POS Duct Connector**  
Part # S1-DTA001

**Upper Louvered Door**  
Part # 7900-7631

**Lower Solid Door**  
Part # 7900-7611

**Locator Bracket**  
Part # S1-LOCBRK01

**Duct Connector**

**Insulation**

**Standard Roof Jacks**

- 4000-7101/C 86"-95" Floor to Flange
- 4000-7121/C 91"-102" Floor to Flange
- 4000-7141/C 99"-120" Floor to Flange
- 4000-7151/C 106"-132" Floor to Flange

**Convertible Roof Jacks w/ Transit Cap**

- 4000-8161/C 104"-115" Floor to Flange
- 4000-8181/C 115"-145" Floor to Flange

**Roof Jack Accessories (Not Shown)**

- 7680B6541 18" Exterior Extension
- 7900A6111 11" Interior Extension
- 7900A6171 17" Interior Extension
- S1-BOSS12503 Roof Jack Sealant\***
- 7660-2841 Ceiling Ring
- S1-4000-5441/C Replacement Crown

**\*NOTE: BOSS Roof Jack Sealant must be used on 400 Series Roof Jacks**

**Combustion Air Gasket**  
Part # S1-7990-3011

**DGAA/DGAX-Series Gas Furnaces (All Have 4-Ton Blowers)**

- DGAA056BDTD / DGAX056BDTA – 56KBtu
- DGAA070BDTD / DGAX070BDTA – 70KBtu
- DGAA077BDTD / DGAX077BDTA – 77KBtu
- DGAA090BDTD / DGAX090BDTA – 90KBtu

5-Ton Blower Assembly  
Part # 7900-7751 for DGAA-Series  
Part # TBD for DGAX-Series

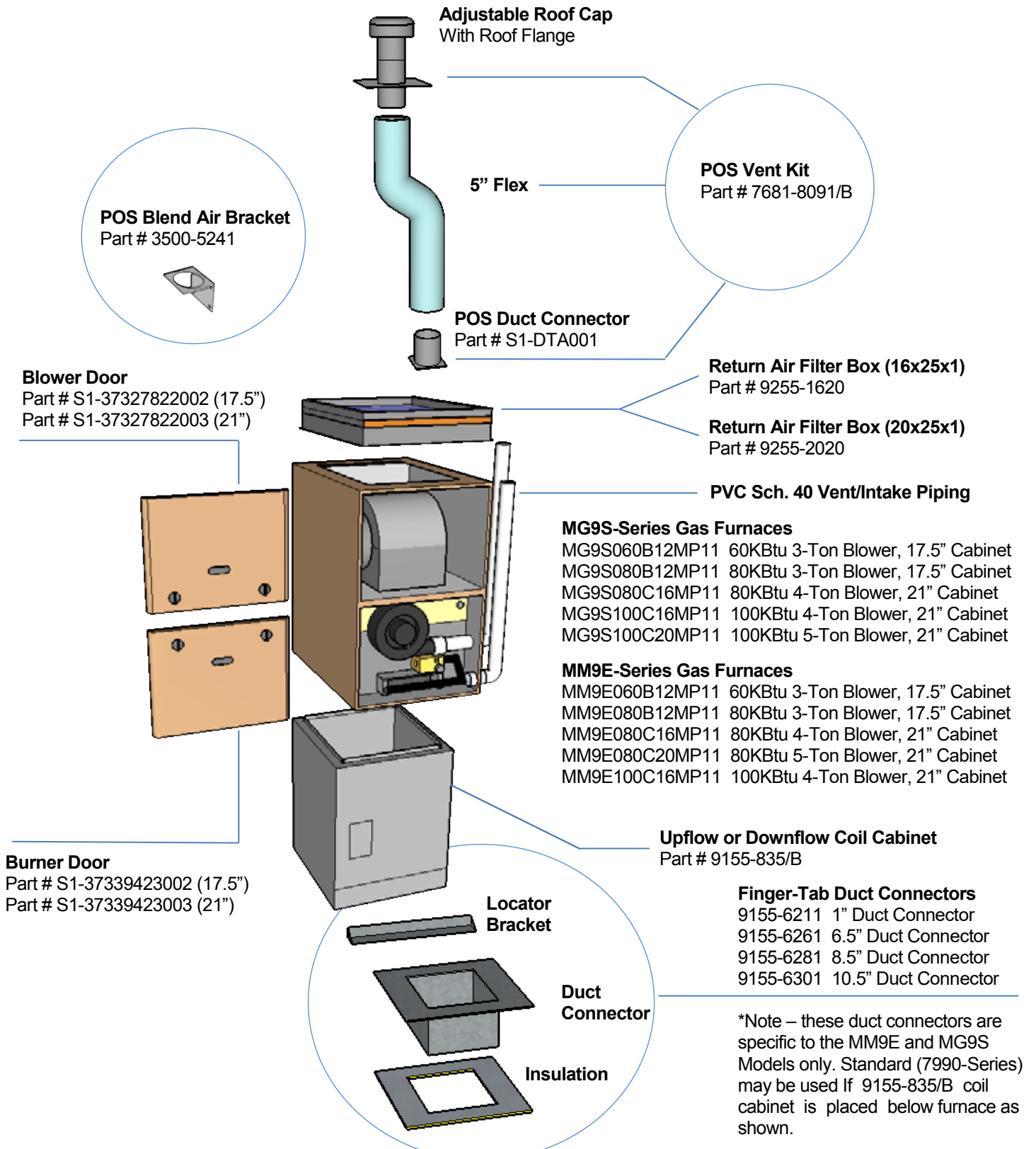
**Finger-Tab Duct Connectors**

- 7990-6211 1" Duct Connector
- 7990-6221 2" Duct Connector
- 7990-6241 4.5" Duct Connector
- 7990-6261 6.5" Duct Connector
- 7990-6271 7.5" Duct Connector
- 7990-6281 8.5" Duct Connector
- 7990-6301 10.25" Duct Connector

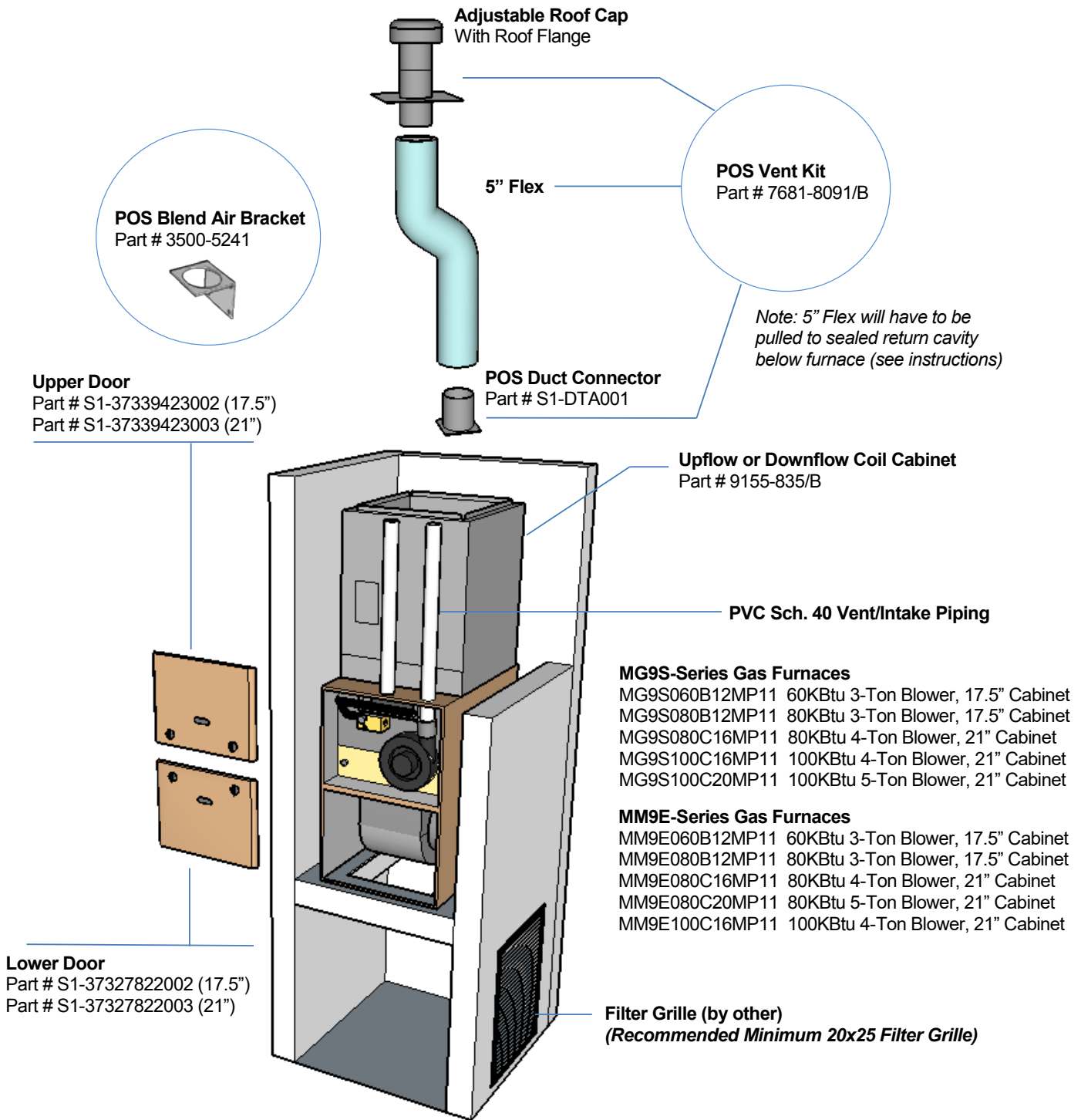
**Screw-Tab Duct Connectors**

- 7990-6061 6.5" Duct Connector
- 7990-6071 7.5" Duct Connector
- 7990-6081 8.5" Duct Connector

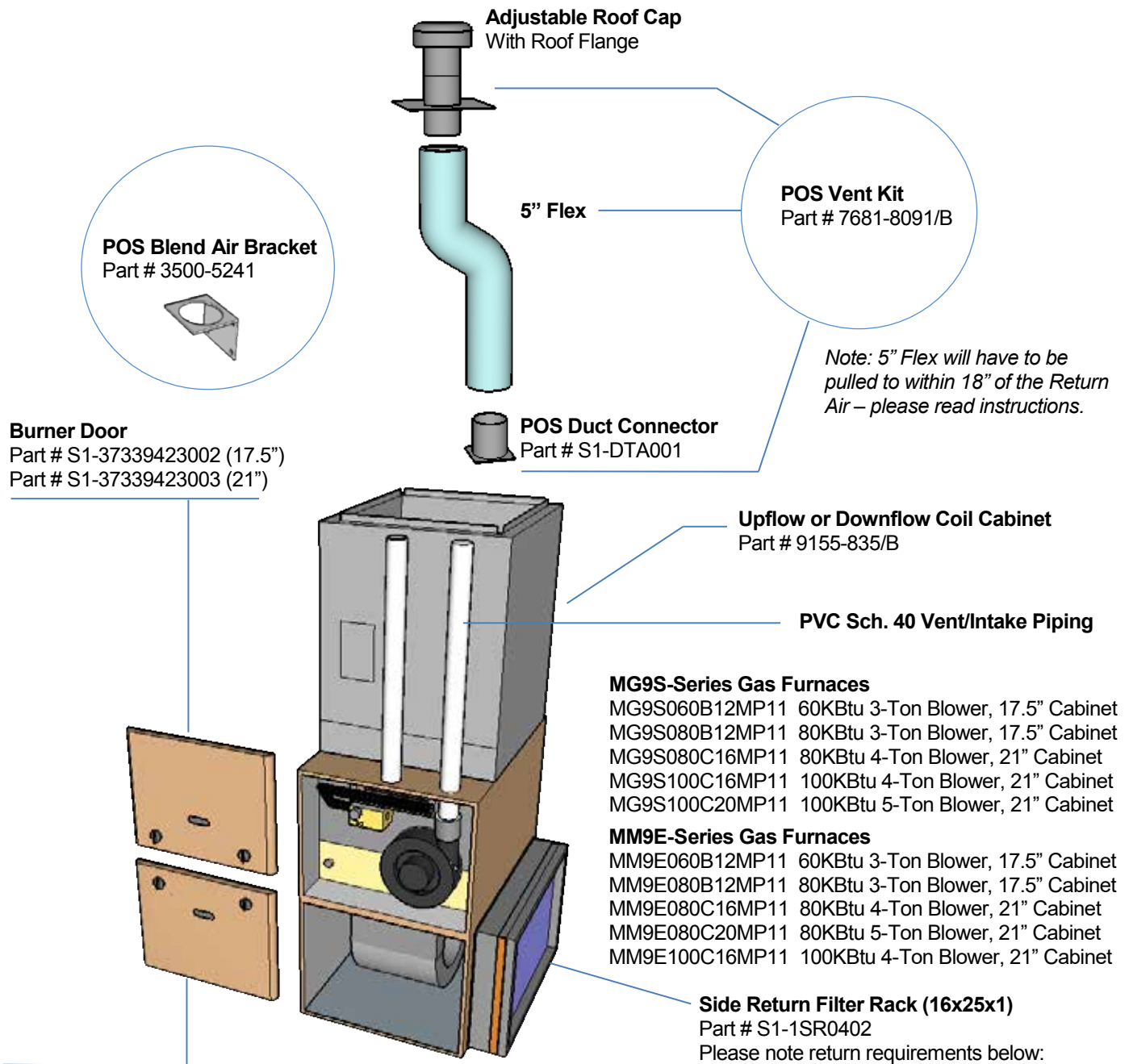
MG9S/MM9E-Series 95% Gas Furnace in default *Down-Flow Configuration*



MG9S/MM9E-Series 95% Gas Furnace, converted to *Up-Flow on Fabricated Shelf*



MG9S-Series 95% Gas Furnace converted to *Up-Flow with Side Return*



**Blower Door**  
 Part # S1-37327822002 (17.5")  
 Part # S1-37327822003 (21")

- MG9S-Series Gas Furnaces**  
 MG9S060B12MP11 60KBtu 3-Ton Blower, 17.5" Cabinet  
 MG9S080B12MP11 80KBtu 3-Ton Blower, 17.5" Cabinet  
 MG9S080C16MP11 80KBtu 4-Ton Blower, 21" Cabinet  
 MG9S100C16MP11 100KBtu 4-Ton Blower, 21" Cabinet  
 MG9S100C20MP11 100KBtu 5-Ton Blower, 21" Cabinet
- MM9E-Series Gas Furnaces**  
 MM9E060B12MP11 60KBtu 3-Ton Blower, 17.5" Cabinet  
 MM9E080B12MP11 80KBtu 3-Ton Blower, 17.5" Cabinet  
 MM9E080C16MP11 80KBtu 4-Ton Blower, 21" Cabinet  
 MM9E080C20MP11 80KBtu 5-Ton Blower, 21" Cabinet  
 MM9E100C16MP11 100KBtu 4-Ton Blower, 21" Cabinet

**Side Return Filter Rack (16x25x1)**  
 Part # S1-1SR0402  
 Please note return requirements below:

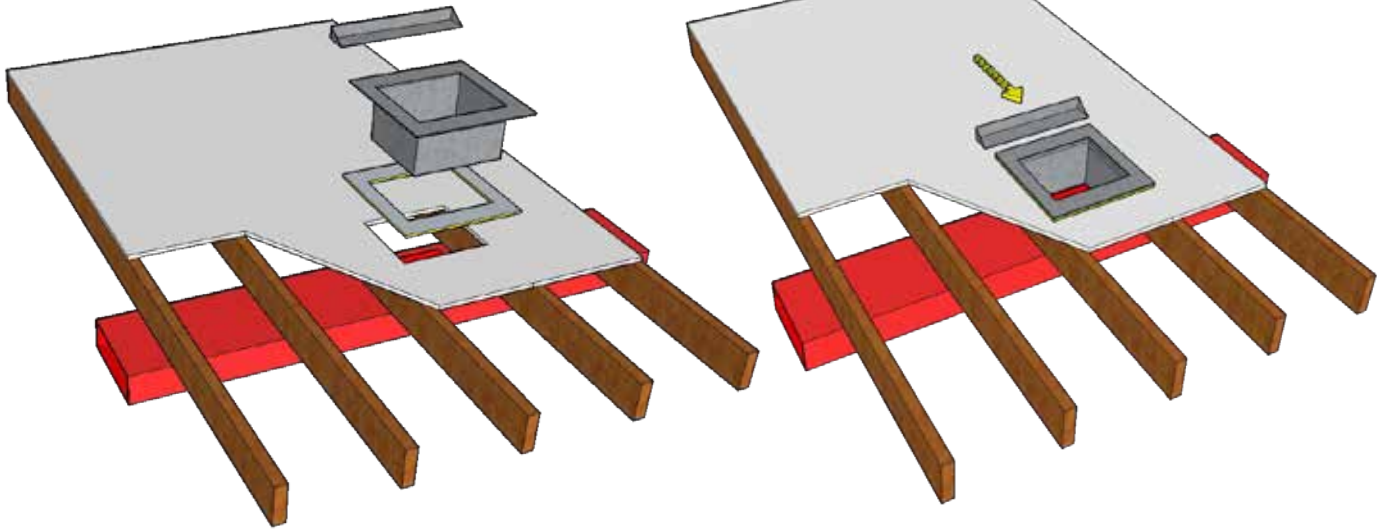
| CFM  | Cabinet Size | Side (in)   | Bottom (in) |
|------|--------------|-------------|-------------|
| 1200 | B            | 16 x 25     | 16 x 25     |
| 1600 | C            | 16 x 25     | 20 x 25     |
| 2000 | C            | (2) 16 x 25 | 20 x 25     |
| 2000 | D            | (2) 16 x 25 | 22 x 25     |

## Typical Duct Connector Installation:

**Step 1:** Rectangular hole is cut in finished floor above existing supply duct. Select duct connector based on distance/depth from finished floor to supply duct. Duct connector is lowered into hole through insulation ring. Corresponding hole is cut in supply duct to match duct connector finger/screw tabs.

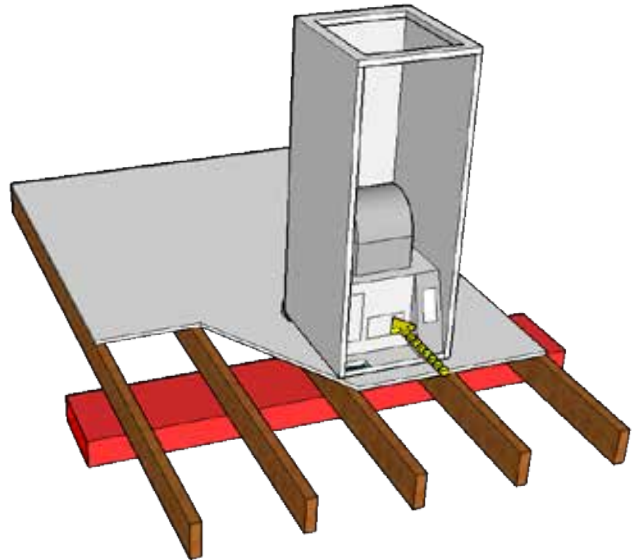
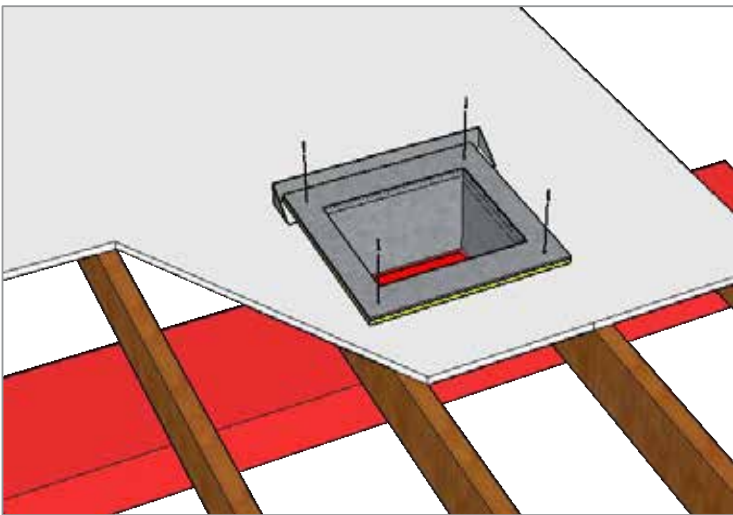
**\*Note:** Duct connector may be rotated in any direction to fit supply duct.

**Step 2:** Duct connector is then attached and sealed to supply duct using industry-approved methods. Locator plate is then slid underneath and centered side-to-side on the flange of duct connector to act as the backstop for the furnace.



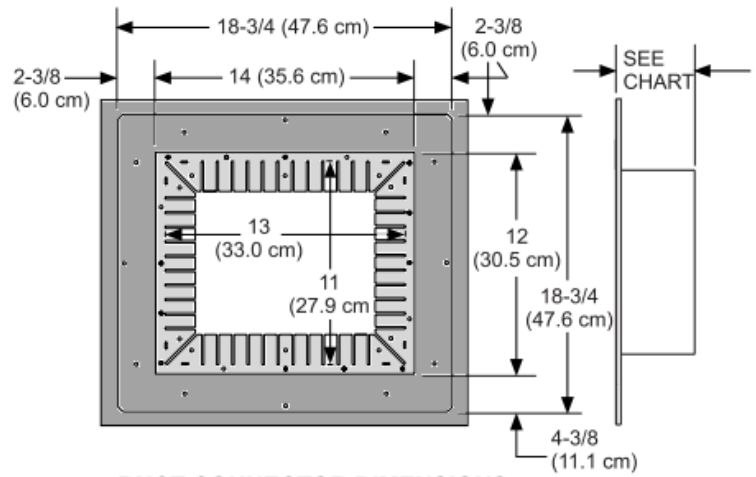
**Step 3:** Duct connector is then attached to the floor using appropriate screws, flat-head nails, or staples.

**Step 4:** Furnace is slid back to against locator plate and secured to floor using methods detailed in install manual.



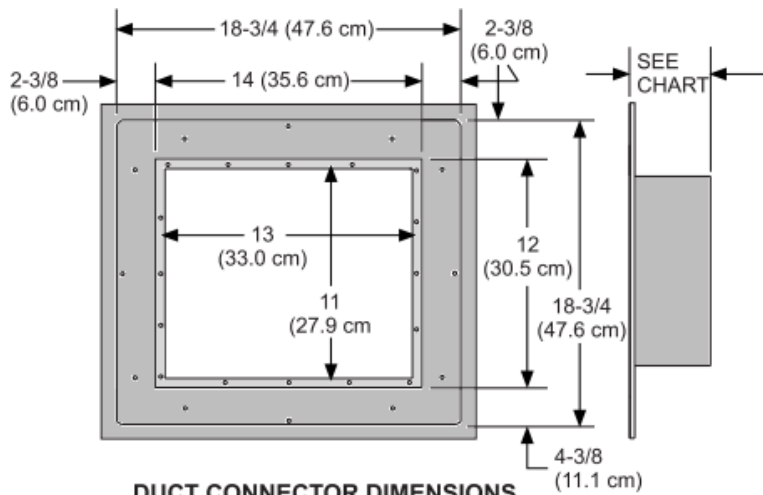
Duct Connector Dimensions for DGAA/DGAX-Series Gas Furnaces and EB/EBE-Series Electric Furnaces:

**Finger-Tab Duct Connector**



**DUCT CONNECTOR DIMENSIONS**

| DUCT CONNECTOR PART NUMBER | DUCT CONNECTOR DEPTH |
|----------------------------|----------------------|
| 7990-6211                  | 1" (2.5 cm)          |
| 7990-6221                  | 2" (5.7 cm)          |
| 7990-6241                  | 4-1/2" (11.4 cm)     |
| 7990-6261                  | 6-1-2" (16.5 cm)     |
| 7990-6271                  | 7-1/2" (19.0 cm)     |
| 7990-6281                  | 8-1/2" (21.6 cm)     |
| 7990-6301                  | 10-1/4" (26.0 cm)    |

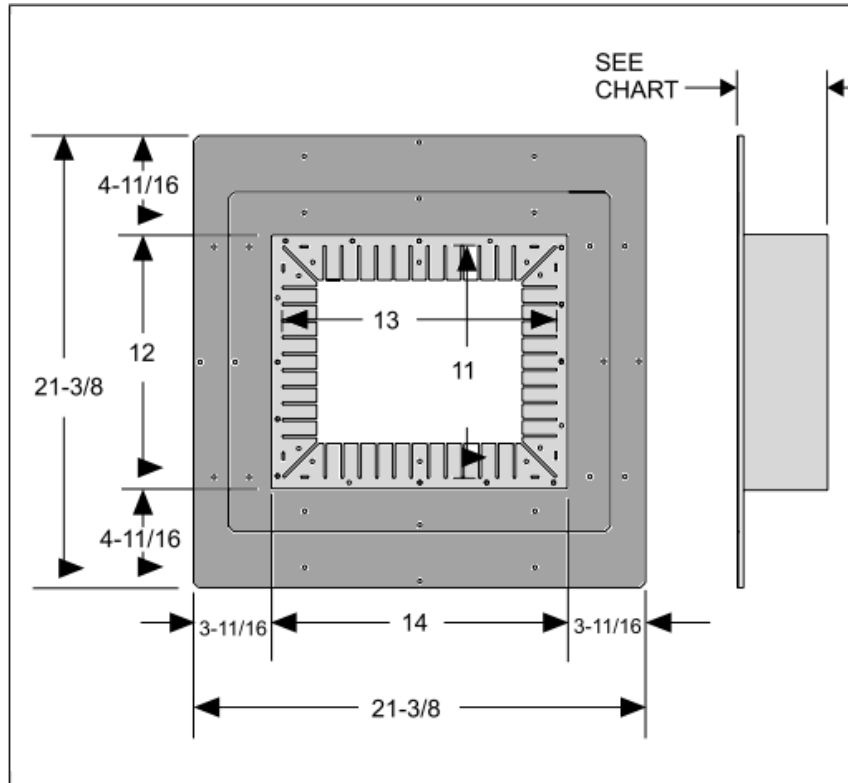


**Screw-Tab Duct Connectors**

**DUCT CONNECTOR DIMENSIONS**

| DUCT CONNECTOR PART NUMBER | DUCT CONNECTOR DEPTH |
|----------------------------|----------------------|
| 7990-6061                  | 6-1-2" (16.5 cm)     |
| 7990-6071                  | 7-1/2" (19.0 cm)     |
| 7990-6081                  | 8-1/2" (21.6 cm)     |

Duct Connector Dimensions for MG9S/MM9E-Series Gas Furnaces:

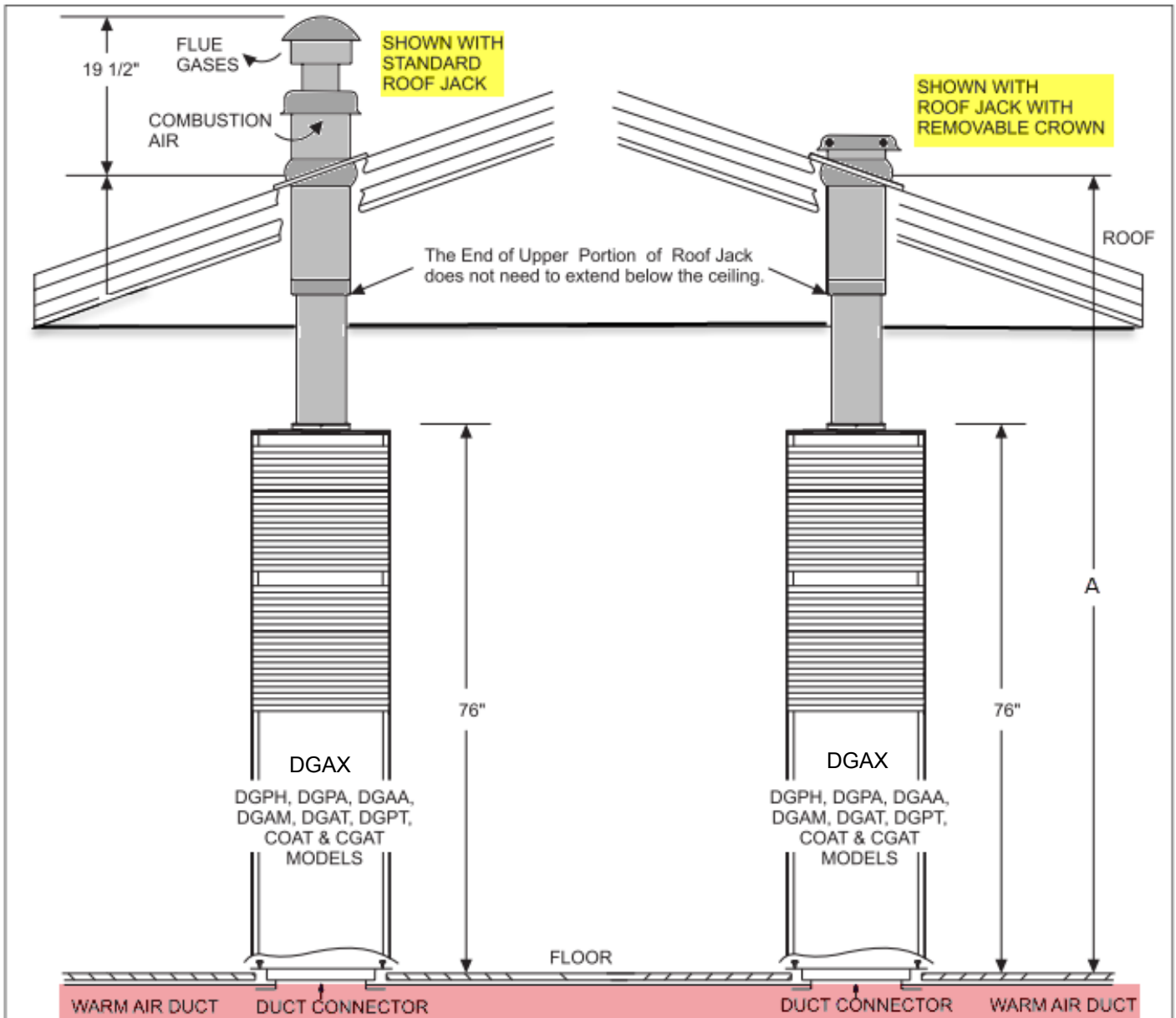


**Finger-Tab Duct Connectors**

| DUCT CONNECTOR PART NUMBER | DUCT CONNECTOR DEPTH |
|----------------------------|----------------------|
| 9155-6211                  | 1"                   |
| 9155-6261                  | 6-1/2"               |
| 9155-6281                  | 8-1/2"               |
| 9155-6301                  | 10-1/2"              |

## Roof Jack Sizes and Styles:

| SWIVEL FLASHING<br>ADJUSTS FROM<br>0/12 TO 5/12 PITCH | INSTALLATION DIMENSIONS               |  |
|---|---------------------------------------|--|
|   |                                       | "A"<br>ADJUSTABLE HEIGHT<br>76" CASING |
|   | <b>STANDARD ROOF JACK</b>             |  |
| 4000-7101/C   |                                       | 86" to 95"                             |
| 4000-7121/C   |                                       | 91" to 102"                            |
| 4000-7141/C   |                                       | 99" to 120"                            |
| 4084-7141*  |                                       |  |
| 4000-7151/C   |                                       | 106" to 132"                           |
| 4084-7151*  |                                       |  |
|   | <b>ROOF JACK WITH REMOVABLE CROWN</b> |  |
| 4000-8161/C   |                                       | 101" to 117"                           |
| 4000-8181/C   |                                       | 115" to 145"                           |



DGAA/DGAX-Series Gas Furnace Orifice Information (one orifice per furnace):

**NOTE:** Part Numbers of orifices will always begin with an "S1-" prefix – for instance: **S1-9951-1361**

| NATURAL GAS    |                |              |            |           |                |            |           |                |            |           |                |            |           |
|----------------|----------------|--------------|------------|-----------|----------------|------------|-----------|----------------|------------|-----------|----------------|------------|-----------|
| Elevation Feet | 56,000 — Input |              |            |           | 70,000 — Input |            |           | 77,000 — Input |            |           | 90,000 — Input |            |           |
|                | Meters         | Orifice Dia. | Drill Size | Part #    | Orifice Dia.   | Drill Size | Part #    | Orifice Dia.   | Drill Size | Part #    | Orifice Dia.   | Drill Size | Part #    |
| Sea Level      |                | 0.136        | 29         | 9951-1361 | 0.154          | 23         | 9951-1541 | 0.161          | 20         | 9951-1611 | 0.180          | 15         | 9951-1801 |
| 2,000          | 618            | 0.136        | 29         | 9951-1361 | 0.149          | 25         | 9951-1491 | 0.157          | 22         | 9951-1571 | 0.177          | 16         | 9951-1771 |
| 3,000          | 914            | 0.128        | 30         | 9951-1281 | 0.149          | 25         | 9951-1491 | 0.157          | 22         | 9951-1571 | 0.173          | 17         | 9951-1731 |
| 4,000          | 1219           | 0.128        | 30         | 9951-1281 | 0.147          | 26         | 9951-1471 | 0.154          | 23         | 9951-1541 | 0.173          | 17         | 9951-1731 |
| 5,000          | 1524           | 0.128        | 30         | 9951-1281 | 0.144          | 27         | 9951-1441 | 0.152          | 24         | 9951-1521 | 0.169          | 18         | 9951-1691 |
| 6,000          | 1829           | 0.128        | 30         | 9951-1281 | 0.144          | 27         | 9951-1441 | 0.149          | 25         | 9951-1491 | 0.166          | 19         | 9951-1661 |
| 7,000          | 2134           | 0.120        | 31         | 9951-1201 | 0.140          | 28         | 9951-1401 | 0.147          | 26         | 9951-1471 | 0.161          | 20         | 9951-1611 |
| 8,000          | 2438           | 0.120        | 31         | 9951-1201 | 0.136          | 29         | 9951-1361 | 0.144          | 27         | 9951-1441 | 0.161          | 20         | 9951-1611 |
| 9,000          | 2743           | 0.120        | 31         | 9951-1201 | 0.136          | 29         | 9951-1361 | 0.140          | 28         | 9951-1401 | 0.157          | 22         | 9951-1571 |
| 10,000         | 3048           | 0.116        | 32         | 9951-1161 | 0.128          | 30         | 9951-1281 | 0.136          | 29         | 9951-1361 | 0.152          | 24         | 9951-1521 |

| PROPANE GAS    |                |              |            |           |                |            |           |                |            |           |                |            |           |
|----------------|----------------|--------------|------------|-----------|----------------|------------|-----------|----------------|------------|-----------|----------------|------------|-----------|
| Elevation Feet | 56,000 — Input |              |            |           | 70,000 — Input |            |           | 77,000 — Input |            |           | 90,000 — Input |            |           |
|                | Meters         | Orifice Dia. | Drill Size | Part #    | Orifice Dia.   | Drill Size | Part #    | Orifice Dia.   | Drill Size | Part #    | Orifice Dia.   | Drill Size | Part #    |
| Sea Level      |                | 0.082        | 45         | 9951-0821 | 0.093          | 42         | 9951-0931 | 0.098          | 40         | 9951-0981 | 0.106          | 36         | 9951-1061 |
| 2,000          | 618            | 0.081        | 46         | 9951-0811 | 0.093          | 42         | 9951-0931 | 0.096          | 41         | 9951-0961 | 0.104          | 37         | 9951-1041 |
| 3,000          | 914            | 0.078        | 47         | 9951-0781 | 0.089          | 43         | 9951-0891 | 0.093          | 42         | 9951-0931 | 0.101          | 38         | 9951-1011 |
| 4,000          | 1219           | 0.078        | 47         | 9951-0781 | 0.089          | 43         | 9951-0891 | 0.093          | 42         | 9951-0931 | 0.101          | 38         | 9951-1011 |
| 5,000          | 1524           | 0.078        | 47         | 9951-0781 | 0.089          | 43         | 9951-0891 | 0.093          | 42         | 9951-0931 | 0.099          | 39         | 9951-0991 |
| 6,000          | 1829           | 0.076        | 48         | 9951-0761 | 0.086          | 44         | 9951-0861 | 0.089          | 43         | 9951-0891 | 0.098          | 40         | 9951-0981 |
| 7,000          | 2134           | 0.076        | 48         | 9951-0761 | 0.086          | 44         | 9951-0861 | 0.089          | 43         | 9951-0891 | 0.096          | 41         | 9951-0961 |
| 8,000          | 2438           | 0.073        | 49         | 9951-0731 | 0.082          | 45         | 9951-0821 | 0.086          | 44         | 9951-0861 | 0.096          | 41         | 9951-0961 |
| 9,000          | 2743           | 0.073        | 49         | 9951-0731 | 0.081          | 46         | 9951-0811 | 0.086          | 44         | 9951-0861 | 0.093          | 42         | 9951-0931 |
| 10,000         | 3048           | 0.070        | 50         | 9951-0700 | 0.078          | 47         | 9951-0781 | 0.082          | 45         | 9951-0821 | 0.089          | 43         | 9951-0891 |

MG9S/MM9E-Series Gas Furnace Orifice Information (multiple orifices per furnace):

| Natural Gas    |              |                |
|----------------|--------------|----------------|
| Furnace Model  | # of Burners | Part Number    |
| MG9S060B12MP11 | 3            | S1-02921182245 |
| MG9S080B12MP11 | 4            | S1-02921182245 |
| MG9S080C16MP11 | 4            | S1-02921182245 |
| MG9S100C16MP11 | 5            | S1-02921182245 |
| MG9S100C20MP11 | 5            | S1-02921182245 |
| MM9E060B12MP11 | 3            | S1-02921182245 |
| MM9E080B12MP11 | 4            | S1-02921182245 |
| MM9E080C16MP11 | 4            | S1-02921182245 |
| MM9E080C20MP11 | 5            | S1-02921182245 |
| MM9E100C16MP11 | 5            | S1-02921182245 |

| Propane Gas    |              |                |
|----------------|--------------|----------------|
| Furnace Model  | # of Burners | Part Number    |
| MG9S060B12MP11 | 3            | S1-02921182255 |
| MG9S080B12MP11 | 4            | S1-02921182255 |
| MG9S080C16MP11 | 4            | S1-02921182255 |
| MG9S100C16MP11 | 5            | S1-02921182255 |
| MG9S100C20MP11 | 5            | S1-02921182255 |
| MM9E060B12MP11 | 3            | S1-02921182255 |
| MM9E080B12MP11 | 4            | S1-02921182255 |
| MM9E080C16MP11 | 4            | S1-02921182255 |
| MM9E080C20MP11 | 5            | S1-02921182255 |
| MM9E100C16MP11 | 5            | S1-02921182255 |

MG9S/MM9E-Series High-Altitude (above 5000' elevation) Pressure Switches:

**MM9E060 = S1-1PS3306      MM9E080 = S1-1PS3307      MM9E100 = S1-1PS3302**