

DEALER COUNCIL  
APPROVED

REAL PERFORMANCE  
FOR THE  
REAL WORLD



| Reference | Feature   | Benefit   | Deeper Dive  |
|-----------|---|---|--|
| 1         | It's Good for Your Business   | Efficient, quiet comfort in an attractive package homeowners love                 | It's designed to meet your real-world, on-the-job, rigorous standards.   |
| 2         | 34" height  | Fits into tight spaces with large coils   | 34" furnace plus 30" 5 ton Hi-E coil only 64" height   |
| 3         | 34" height  | Easier to move transport, carry and install                                       | Lighter weight design; a B80 weighs 127 pounds, including carton! That's 25% lighter! (Legacy is 168 pounds)                   |
| 4         | 34" height  | Simplifies replacement of an existing short furnace                               | Fits in where taller furnaces cannot   |
| 5         | 3 way poise, plus dedicated downflow models.                                    | Easier to specify   | One model for up, left, or right applications  |
| 6         | Single piece door with two view windows   | See the burners and IFC digital readout without opening furnace                   | Two smoked acrylic windows, one is placed directly in front of the burners, the other directly in front of the Digital Display |
| 7         | Door lips, seals, and latches designed for easy on/ easy off in any orientation | Full functionality regardless of poise  | On the floor of a basement or horizontal in a tight attic, the door is easy to remove and replace.                             |
| 8         | Open Vestibule design   | Provides a full 34" high x (furnace width) open vestibule                         | Huge compartment provides room for hands and tools   |
| 9         | Open Vestibule design   | Increases stiffness and ruggedness of cabinet                                     | Durable and reliable cabinet   |
| 10        | Open Vestibule design   | Prevents racking in horizontal positions  | No racking or twisting of the cabinet, even in horizontal installs   |
| 11        | Open Vestibule design   | Eliminates need for specialized downflow internal venting                         | You can vent out the side of the cabinet easily, and not block access to the blower.   |
| 12        | Open Vestibule design   | Improves sealing of airside compartment   | Bottom vestibule panel is airtight seal between combustion and return air.   |
| 13        | Open Vestibule design   | wire harnesses do not go through blower deck, eliminating sealing and pinch point | Wire harnesses are not choked or pinched and no additional air sealing is required   |
| 14        | 1/4" hex head screws used throughout (except J-box and pressure switches)       | Minimizes the number of tools needed  | Common screw sizes simplifies service  |
| 15        | Easily accessible burners   | Simplifies inspection and service   | Burners can be removed without removing the manifold   |
| 16        | Simplifies service  | Easily accessible orifices  | When burners are removed for cleaning, the orifices can be removed as well....without pulling the manifold                     |
| 17        | Easily accessible flame sensor  | Simplifies inspection and service   | Forward facing screw   |

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| 18        | Easily accessible igniter  | Simplifies inspection and service   | Forward facing screw   |
| 19        | Easily accessible roll out switches  | Simplifies inspection and service   | Not forward facing screws, but still easily accessible   |
| 20        | Easily accessible high- limit switch   | Simplifies inspection and service   | Forward facing screw   |
| 21        | Easily accessible pressure switches  | Simplifies inspection and service   | Forward facing screw   |
| 22        | Easily accessible cold header / condensate collection box  | Simplifies inspection and service   | Forward facing screw   |
| 23        | Easily accessible condensate trap  | Simplifies inspection and service   | Forward facing screw   |
| 24        | Easily accessible integrated furnace control and wire harnesses  | Simplifies inspection and service   | Forward facing screw   |
| 25        | Easily accessible blower assembly: rails   | Simplifies inspection and service   | Rails extend to front of deck, making it easier to get the blower back into place, regardless of poise.  |
| 26        | Easily accessible blower assembly: motor mount   | Simplifies inspection and service   | Single-piece motor mount assembly  |
| 27        | Easily accessible heat exchanger assembly  | Simplifies inspection and service   | Primary and secondary heat exchanger assembly is on rails and can be slid out of the cabinet without moving the installed furnace or removing coil or plenum |
| 28        | J-Box can be installed on either side of the cabinet   | Application friendly design simplifies installation                                 | electrical entry from either side of the cabinet   |
| 29        | Gas can enter either side of the cabinet   | Application friendly design simplifies installation                                 | gas connections always made with straight pipe and coupling...not elbows or nipples inside the cabinet   |
| 30        | Condensate system can exit either side of the cabinet in Upflow orientation  | Application friendly design simplifies installation                                 | drain left or right with the same formed hose.   |
| 31        | Condensate system connections are 3/4"   | Simplifies installation by using more common sizes of pipe                          | Compatible with most local codes   |
| 32        | Easier to set up and install   | Condensate system uses (1) pre-formed hose; not two                                 | Can often be installed without cutting the hose at all.  |
| 33        | Tested to the extreme  | Meets or exceeds all environmental and regulatory requirements                      |  |
| 34        | Condensate system does not require CPVC pipe in downflow models  | Application friendly design simplifies installation                                 | Always use the preformed hose provided   |
| 35        | Condensate system trap is fully internal in Upflow and downflow positions  | Application friendly design simplifies installation                                 | space saver  |
| 36        | Condensate Management System: Barbed fittings on trap at hose connection and on cabinet transition for hose has barbed fitting and clamps at both ends | leak resistance   | Barbs AND clamps - like wearing a belt and suspenders!   |
| 37        | Trap is attached directly to the cold header   | eliminates a potential leak source  | one less hose means one less opportunity for leaks.  |
| 38        | Multiple venting options: Every model, every size will offer at least (2) options for venting direction  | Application friendly design simplifies installation                                 | If preference or application requirements mean you need to vent out the side of the cabinet instead of the top, you now have that flexibility                |
| 39        | Long vent lengths; 2" pipe can be used up to 100K  | Application friendly design simplifies installation and reduces installation costs. | 2" PVC vent pipe is now approved for all 40K, 60K, 80K and 100K models   |
| 40        | Inducer has locating tabs to make rotation for venting options easier  | Rotation for venting options easier   | Rotating the inducer for alternate venting options or for poise changes is easier with hard stops that ensure the inducer is mounted correctly.              |

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| 41        | New Integrated Furnace Control with digital configuration, status, and fault codes | state-of-the-art intelligence for easiest configuration and diagnostics         | Industry first digital display and interface for set up, service, and diagnosis   |
| 42        | 2S-3D™ (Status-Setup-Diagnostic-Digital-Display)                                   | Digital readout provides improved diagnostics                                   | No more counting flashes. Easy to read alpha-numeric codes provide more specific information to the technician.   |
| 43        | IFC is more robust to grounding issues   | Improved performance reliability  | More durable circuitry  |
| 44        | IFC is less susceptible to RFI issues  | Improved performance reliability  | Less interference with other electronic equipment.  |
| 45        | IFC: No dipswitches  | push button setup is easier to see and set than tiny dipswitches                | Set up all delays, airflows, and outdoor sizes with alpha numeric characters, not dipswitches   |
| 46        | IFC: Improved diagnostic codes   | More specific information provided means improved diagnostic capability         | As an example, different codes for pressure switch 1 and 2, and for pressure open and pressure switch shorted. Currently the code is a simple 3-flash. Another example is different fault codes for serial communications motor error and serial communications board error |
| 47        | IFC: Multiple airflow settings available for a given outdoor size                  | System configurations can be optimized for maximum efficiency                   | More airflow options available  |
| 48        | IFC: Dry contact EAC and HUM connections   | Accessory connections only energized when proper call is received.              | capable of matching with 24v or 120v accessories  |
| 49        | IFC: Adjustable blower off delay for heating and cooling                           | Customizable for maximum comfort and efficiency                                 | extract the maximum amount of heat or most amount of latent removal with adjustable blower off delays   |
| 50        | IFC: Last six fault codes are stored (even with power loss)                        | Improved diagnostics even with loss of electrical.                              | last six faults are stored until deleted by the technician, even of there is a power loss to the unit.  |
| 51        | IFC: Solder pads for flame sense check   | Easier diagnosis  | Flame sense can be checked on the IFC   |
| 52        | Rain shield over IFC   | keeps condensate off the control  | designed to channel any condensate away from the IFC in any poise position  |
| 53        | Rain shield attached to blower door with screws                                    | easy to take off and put back on; no plastic clips to break                     | More durable design than plastic standoffs  |
| 54        | Rain shield over IFC   | protects the board during service; the IFC does not need to be handled directly | The rain shield housing can be removed with three screws, and protects the board while being serviced   |
| 55        | Cabinet has no knockouts - rubber and plastic plugs provided                       | easier to install   | No more difficult to remove knockouts.  |
| 56        | Flange for coil connection is flat; bend up for Upflow, or down for downflow       | simplifies installation for both downflow and horizontal right coil connections | Flange is perforated for easy bending   |
| 57        | Flange for coil connection is flat; bend up for Upflow, or down for downflow       | reduces risk of shipping damage   | Flanges won't be subject to the abuse they get when shipped bent up.  |
| 58        | Up to 1600 CFM can be supplied through a single side return opening                | Simplified duct connections   | Most systems can be installed with a single side or bottom return   |
| 59        | Compatible with existing ductwork  | no need to transition   | Easy drop-in replacement  |
| 60        | Square vacuum tubes  | square hoses reduce or eliminate kinking  | helps to reduce or eliminate nuisance pressure switch errors  |
| 61        | Rigid structural steel cabinet   | maintains structural integrity in all four poise positions.                     | Structural steel is a stronger, tougher, more rigid material than cold rolled steel used by others.   |
| 62        | Top and bottom caps wrap around the outside of the cabinet                         | Adds rigidity   | Caps act as braces, keeping the overall furnace cabinet aligned   |

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| 63        | Picture frame and inner door design   | provides additional column of rigidity  | Structural and functional design keeps cabinet from racking, bowing or twisting.  |
| 64        | Stainless steel secondary AND primary heat exchanger tubes                                      | Durable, long-lasting, corrosion resistant  | We've upgraded our primary heat exchangers from aluminized steel to stainless steel, which is more durable.   |
| 65        | Stainless steel secondary AND primary heat exchanger tubes                                      | Less affected by heat and large temperature swings  | Stainless steel can withstand higher temperatures for longer period of time than aluminized steel.  |
| 66        | Stainless steel primary heat exchanger tubes  | Reduces or eliminates the need for baffles in the heat exchanger compartment, improving blower efficiency | Baffles in the heat exchanger compartment can be eliminated if the tubes are stainless steel. This decreases the watts/CFM of the furnace and can improve overall system efficiency                                   |
| 67        | Longer wire harnesses   | have drip-loop to keep condensate off the control.  | Condensate can drip onto wire harnesses, and may reach the IFC if the harness is too short.   |
| 68        | Longer wire harnesses   | Allows the inner blower door to be removed without disconnecting harnesses                                | Long enough to be able to remove the inner blower door and set it aside without fumbling with disconnecting multiple harnesses.   |
| 69        | 120v Silicone Nitride igniter   | More durable  | All S-Series furnaces will have 120v Silicone Nitride igniters for improved reliability   |
| 70        | Basaloid-style carton design  | ease of handling  | Cartons can be  |
| 71        | Blower deck rails extend all the way to the front of the deck                                   | Easier to slide blower in and out   |   |
| 72        | Foil faced insulation is captured by cabinet, rails and side supports                           | holds insulation in place better than glue alone  |   |
| 73        | Attractive, appliance-like styling  | Appeals to homeowners   | Formed steel door with metallic look bezel, surrounding two smoked acrylic view windows. Industrial design influenced by modern appliances such as washers and dryers that are frequently installed near the furnace. |
| 74        | Rotatable badge   | Brand is properly presented regardless of poise installed   |   |
| 75        | Extremely quiet sound levels  | Comfort for homeowner   |   |
| 76        | The most electrically efficient furnace we've ever made...the best CFM/watt ratio in it's class | Lowers utility bills and contributes to overall system efficiency   |   |
| 77        | Comfort R® variable speed airflow for maximum comfort in cooling and dual fuel heating.         | Gradual blower speed changes enhance comfort  | Slower speeds are quieter and lower humidity better.  |
| 78        | One of the most gas efficient furnaces in its class: AFUE of 96%                                | Lowers utility bills  |   |
| 79        | Filter box will be installed outside the furnace  | no need for homeowner to get inside the furnace   |   |
| 80        | Compatible with one or two stage outdoor units  | System design flexibility   |   |
| 81        | IFC: Low voltage connections labeled on top and front   | Easy to see labels regardless of poise and location   |   |
| 82        | Hemmed edges on cabinet   | Safer for installers and technicians  |   |
| 83        | Tooled entry - front latches require a tool to open   | No door switch is required. Unit can continue to operate with door removed.                               | There is no reason for the consumer to open the furnace door  |
| 84        | Door is symmetrical   | Cannot be installed "upside down"   |   |
| 85        | All condensate and pressure switch hoses will be marked with a part number                      | simplifies and improves accuracy of ordering replacement parts  |   |

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| 86        | IFC - all harnesses for standard setup are Molex plugs, not spade connectors | Easier to set up and install   |                                    |
| 87        | Venting elbows have band clamp connections to vent pipe.                     | no gluing or RTV inside cabinet  |                                    |
| 88        | Outlet adaptor has band clamp connection to vent pipe                        | Easier to remove vent pipe for service   |                                    |
| 89        | Venting elbows have band clamp connections to vent pipe.                     | Compatible with multiple vent pipe materials (i.e. PVC, CPVC, polypropelene, etc.)   |                                    |
| 90        | Shipping Top Cap   | Protects heat exchangers and strengthens cabinet, reducing risk of handling and freight damage   |                                    |
| 91        | Carton has "Cut Here" line on box  | Clearly shows how to open the carton to prevent damage   |                                    |
| 92        | Carton has "Cut Here" line on box  | allows carton to be used as trash container.   |                                    |
| 93        | No screws on the top or bottom of the cabinet                                | No screws to damage floors.  |                                    |
| 94        | Blunt screws used wherever possible  | reduces installer risk   |                                    |
| 95        | Wire management clip   | Dresses wires for neatness   |                                    |
| 96        | Transformer spade connections front facing                                   | Easier to access   |                                    |
| 97        | U-pipe for left side gas entry   | allows installer to run gas straight in for left side entry, or remove the u-pipe and run straight in for right side gas entry. No nipples or elbows required. |                                    |
| 98        | Inner Blower door separates the controls from the airside compartment        | IFC is protected from coil drain pan overflows   |                                    |
| 99        | All field installable screws have locating dimples feature for replacement   | The cabinet has features that simply locating and installing screws  |                                    |
| 100       | Locating triangles for side return cut outs                                  | simplify and improve accuracy of cutting cabinet for side returns.   |                                    |
| 101       | No door switch   | Power is not lost when the front door is removed   | Easier to check system operations. |

## Contact Us

Curious about how the S9V2 Furnace can be a winner for you this season? We're here to answer your questions – just complete the form below and click Send Message!