F3500B-1 Freestanding Woodstove

Model	F3500B-1
Crib wood BTU's	88000 BTU's
Emissions (grams/hr) EPA Certified	1.1 gram/hr
Efficiency (EPA HHV)*	76%
Efficiency (EPA LHV)	82%
Flue Size	6" (152mm)
US Biomass Tax Rebate Eligible	Yes
Maximum Log Size	20″ (508mm)
Firebox Size	3.0 cu.ft.

*US Biomass Tax Rebate eligibility is based on the HHV value being greater than or equal to 75%.

UNIT DIMENSIONS





REGENC



WOOD STOVE OUTSIDE AIR DIMENSIONS





MINIMUM CLEARANCE TO COMBUSTIBLE MATERIALS

Please read the section below carefully as clearances depend on whether the Airmate or the Rear Heat Deflector is installed on the stove. Measurements "From Unit" are from the top plate of the stove to a side wall or to a corner, and from the rear heat shield to a back wall.

Clearances may only be reduced by means approved by the regulatory authority.

Note: Minimum ceiling height - 83" (2108mm)

NOTE: This clearance is also required for air space between the appliance and wall/ceiling.



Residential Installation "C" Vent (Single Wall Pipe)								
F3500B-1	with Airmate or	А	В	С	D	E	F	
	Rear Deflector	11" 279mm	9-1/2" 241mm	8" 203mm	24" 610mm	16" 406mm	20-1/2" 521mm	

Residential Close Clearance (To be installed with required pipe components) Listed Double Wall Pipe

When the stove is installed as a close clearance residential unit, a listed double wall connector is required from the stove collar to the ceiling level.

F3500B-1	with Airmate or	А	В	С	D	E	F
	Rear Deflector	11" 279mm	9-1/2" 241mm	8" 203mm	24" 610mm	16" 406mm	20-1/2" 521mm

Mobile Home Close Clearance (To be installed with required pipe components) Listed Double Wall Pipe

When the stove is installed as a close clearance residential unit, a listed double wall connector is required from the stove collar to the ceiling level.

Refer to Mobile Home Installation in this manual.

F3500B-1	with Airmate or	А	В	С	D	E	F
	Rear Deflector	11" 279mm	9-1/2" 241mm	8" 203mm	24" 610mm	16" 406mm	20-1/2" 521mm

Minimum Alcove Clearance to Combustible Materials

The Regency Freestanding models have been alcove approved and must be installed with a listed double wall connector to the ceiling level.

Note: Minimum alcove ceiling height - 83" (2108 mm) Vertical Termination}

H = Maximum depth of alcove - 48" (1219mm)

G= Minimum width of alcove - 60" (1524mm)





FLOOR PROTECTION (Ember Protection Only Required)

A combustible floor must be protected by a non-combustible material (like tile, concrete board, or certified to UL-1618 Type 1 or as defined by local codes). Type 1 Hearth Pads typically provide protection from embers only, but won't provide thermal protection from the heat of the appliance. <u>Canada</u>: Beneath the heater and extending to at least 18" (457 mm) on the fuel loading side and at least 8" (203 mm) on the sides and back.

<u>USA</u>: Beneath the heater and extending to at least 16" (406 mm) beyond the fuel loading side and ash removal opening and at least 8" (203 mm) on the sides and back and under the chimney connector extending 2" (51 mm) beyond each side for horizontal applications.

Note: The measurements for floor protection for front are taken from fuel door opening & sides are taken from the unit heat shield. Where the appliance is installed less than 8" (203 mm) from a rear wall, the ember pad only needs to extend to the base of the wall based on the clearances noted in this manual.

Minimum Overall Width (X) of Floor Protector for all installations:

Stove F3500B-1 41-5/8"(1057mm)

Note: Side & Rear measurements are taken from unit heat shield.

*Front measurement is taken from fuel door opening.

NOTE: USA clearances shown above.

NOTE: In Canada, floor protection must extend 18" (450mm) to the front and 8" (203mm) to each side and back of the stove.

Minimum Overall Depth (Y) of Floor Protector								
Unit	Residential Mobile Home Close Clearance Close Clearance			Alcove				
F3500B-1	Y	Z	Y	Z	Y	Z		
USA	46-1/2"	8"	46-1/2	8"	46-1/2	8"		
Canada	48-1/2"	8"	48-1/2"	8"	48-1/2"	8"		

The rear clearance to combustibles is less than 6" (for corner installations the rear corners may be angled to take advantage of the closer clearances.

Minimum Overall Depth (Y) of Floor Protector - Corner Hearth Reference only when hearth pad is installed to rear wall at minimum pipe clearances.								
	Hearth Depth							
F3500B-1	L	м	N	0				
Residential	Residential Installation "C" Vent (Single Wall)							
Canada	41-5/8" (1057mm)	65" (1651mm)	55" (1397mm)	25-5/8" (650mm)				
USA	41-5/8" (1057mm)	63" (1600mm)	53-5/8" (1362mm)	24-3/16" (614mm)				
Residential	Residential Close Clearance (To be installed with required pipe components)							
Canada	41-5/8" (1057mm)	65" (1651mm)	55" (1397mm)	25-5/8" (650mm)				
USA	41-5/8" (1057mm)	63" (1600mm)	53-5/8" (1362mm)	24-3/16" (614mm)				





MOBILE HOME INSTALLATION (US ONLY)

Once you have properly marked the position of your unit and the floor protection as outlined in the Residential Installation items #1 through #8, a supply of fresh air has to be supplied to your unit.

See Optional Outside Air Kit instructions in this manual.

Place your unit in position and secure it to the floor using two lag bolts $3/8"(10mm) \times 3-1/2"(89mm)$ through the two holes inside the pedestal base. It is important to maintain the structural integrity of the Mobile Home floor, walls and roof when installing your unit.

For Mobile Home units installed in the U.S. the unit must be grounded using a #8 ground wire with approved termination and star washer.

CAUTION: At no time use unlabelled parts, or substitute parts made for another chimney system.

Install as per chimney manufacturer's installation instructions.



WARNING: Operate only with door fully closed - open feed door to feed fire only.

- **1.** Identify the position of the outside air damper by the orientation of the metal handle that rests outside the galvanized pipe. The metal handle and the damper disc are in line with each other. This means that if the metal handle is in a horizontal position, the damper is flat and fully open.
- **2.** Open the damper fully whenever you start a fire. This will allow the outside air to be drawn in the pedestal base eliminating any potential smoke escaping the stove and entering the room. (Negative air pressure)

In addition to standard installation instructions the following requirements are mandatory for installation in a mobile home.

- **1.** Thestovemustbepermanentlyboltedto the floor of the Mobile Home using the floor screws provided.
- **2.** The stove must have a permanent outside air source for combustion.
- **3.** The stove must be electrically grounded to the steel chassis of the Mobile Home.
- A listed double-wall connector chimney system, roof thimble, spark arrestor and roof flashing kit suitable for use in Mobile Homes must be used.
- 5. If the chimney exits the Mobile Home at a location other than through the roof, and exits at a point 7ft. (2130mm) or less above the ground level on which the Mobile Home is positioned a guard or method of enclosing the chimney shall be fitted at the point of exit for a height up to 7ft. (2130mm).
- 6. The chimney shall be attached directly to the room heater and shall extend at least 3 ft. (914mm) above the part of the roof through which it passes. The top of the chimney should project at least 2ft. (610mm) above the highest elevation of any part of the Mobile Home within 10 ft. (3048mm) of the chimney.
- 7. The chimney system shall comply with Local Requirements.
- **8.** Any openings in a chimney guard where required must not permit the entrance of 3/4" (19mm) diameter rod.
- 9. CAUTION: THE STRUCTURAL INTEGRITY OF THE MOBILE HOMEROOF, FLOOR, WALLSAND CEILING MUST BE MAINTAINED.
- **10.**Check any other local building code as other local codes may apply.

11. WARNING: DO NOT INSTALL IN A SLEEPING ROOM OF A MOBILE HOME.

12. Use silicone to create an effective vapour barrier at the location where the chimney or other component penetrates to the exterior of the structure.

WALL EXIT CLEARANCE FACTORY BUILT CHIMNEY

When a metal prefabricated chimney is used, the manufacturer's installation instructions must be followed. You must also purchase and install the ceiling support package or wall pass-through and "T" section package, firestops (where needed), insulation shield, roof flashing, chimney cap, etc. Maintain proper clearance to the structure as recommended by the manufacturer. The chimney must be the required height above the roof or other obstructions for safety and proper draft operation.

Minimum vertical of 36" before any offset. Horizontal Maximum of 36" with 1/4" rise per foot.

NOTE: Recommend using 2-45° instead of 90° to improve draft and performance.

Note: Minimum ceiling height roof - 83" (2108mm)



MASONRY FIREPLACE

There are listed kits available to connect a stove to a masonry fireplace. The kit is an adapter that is installed at the location of the fireplace damper. The existing damper may have to be removed to allow installation.

Minimum vertical of 36" before any offset. Horizontal Maximum of 36" with 1/4" rise per foot.

NOTE: Recommend using 2-45° instead of 90° to improve draft and performance.

NOTE: Only a 6" and or 5.5" liner may be used when relining the masonry chimney. Do not increase/decrease size of the liner as this could result in poor performance, over firing and or dangerous operating conditions which may void your warranty.

Do not use or add a pipe damper as this will result in poor performance, over firing and or dangerous operating conditions which may void your warranty. This appliance already has a bypass damper in place.

A minimum vertical rise of 36 inches is required from top of stove collar prior to having any offset. It is recommended that 45° elbows be used instead of a 90° elbow to improve draft and performance. If not adhered to this, it will result in poor performance overfiring and or dangerous operating conditions which may void your warranty.



COMBUSTIBLE WALL CHIMNEY CONNECTOR PASS-THROUGHS

Method A: 12" (304.8 mm) Clearance to Combustible Wall Member:

Using a minimum thickness 3.5" (89 mm) brick and a 5/8" (15.9 mm) minimum wall thickness clay liner, construct a wall pass-through. The clay liner must conform to ASTM C315 (Standard Specification for Clay Fire Linings) or its equivalent. Keep a minimum of 12" (304.8 mm) of brick masonry between the clay liner and wall combustibles. The clay liner shall run from the brick masonry outer surface to the inner surface of the chimney flue liner but not past the inner surface. Firmly grout or cement the clay liner in place to the chimney flue liner.

Method B: 9" (228.6 mm) Clearance to Combustible Wall Member:

Using a 6" (152.4 mm) inside diameter, listed, factory-built Solid-Pak chimney section with insulation of 1" (25.4 mm) or more, build a wall pass-through with a minimum 9" (228.6 mm) air space between the outer wall of the chimney length and wall combustibles. Use sheet metal supports fastened securely to wall surfaces on all sides, to maintain the 9" (228.6 mm) air space. When fastening supports to chimney length, do not penetrate the chimney liner (the inside wall of the Solid-Pak chimney). The inner end of the Solid-Pak chimney section shall be flush with the inside of the masonry chimney flue, and sealed with a non-water soluble refractory cement. Use this cement to also seal to the brick masonry penetration.

Method C: 6" (152.4 mm) Clearance to Combustible Wall Member:

Starting with a minimum 24 gage (.024" [.61 mm]) 6" (152.4 mm) metal chimney connector, and a minimum 24 gage ventilated wall thimble which has two air channels of 1" (25.4 mm) each, construct a wall pass-through. There shall be a minimum 6" (152.4) mm separation area containing fiberglass insulation, from the outer surface of the wall thimble to wall combustibles. Support the wall thimble, and cover its opening with a 24-gage minimum sheet metal support. Maintain the 6" (152.4 mm) space. There should also be a support sized to fit and hold the metal chimney connector. See that the supports are fastened securely to wall surfaces on all sides. Make sure fasteners used to secure the metal chimney connector do not penetrate chimney flue liner.

Method D: 2" (50.8 mm) Clearance to Combustible Wall Member:

Start with a solid-pak listed factory built chimney section at least 12" (304 mm) long, with insulation of 1" (25.4 mm) or more, and an inside diameter of 6" (2 inches [51 mm] larger than the 6" [152.4 mm] chimney connector). Use this as a pass-through for a minimum 24-gage single wall steel chimney connector. Keep solid-pak section concentric with and spaced 1" (25.4 mm) off the chimney connector by way of sheet metal support plates at both ends of chimney section. Cover opening with and support chimney section on both sides with 24 gage minimum sheet metal supports. See that the supports are fastened securely to wall surfaces on all sides. Make sure fasteners used to secure chimney flue liner.





STEP-BY-STEP CHIMNEY AND CONNECTOR INSTALLATION

Notes: These are a generic set of chimney installation instructions. Always follow the manufacturers own instructions explicitly. Verify the Minimum Recommended Heights for Woodstove Flue (Table 1 in the Installation section).

> Do not install the chimney directly at the outlet of the appliance. A chimney connector (flue pipe) is required unless the appliance is specifically approved for that type of installation.

- 1. With your location already established, cut and frame the roof hole. It is recommended that no ceiling support member be cut for chimney and support box installation. If it is necessary to cut them, the members must be made structurally sound.
- 2. Install radiant shield and support from above.
- **3.** Stack the insulated pipe onto your finish support to a minimum height of 3 feet above the roof penetration, or 2 feet above any point within 10 feet measured horizontally. There must be at least 3 feet of chimney above the roof level.
- **NOTE:** Ensure each section of chimney is positively attached and secured.



- Note: Increasing the chimney height above this minimum level will sometimes help your unit to "breathe" better by allowing a greater draft to be created. This greater draft can decrease problems such as, difficult start-ups, back-smoking when door is open, and dirty glass. It might be sufficient to initially try with the minimum required height, and then if problems do arise add additional height at a later date.
- **4.** Slide the roof flashing over your chimney and seal the flashing to the roof with roofing compound. Secure the flashing to your roof with nails or screws.
- **5.** Place the storm collar over the flashing, sealing the joints with a silicone caulking.
- **6.** Fasten the raincap with spark screens (if required) to the top of your chimney.

- **7.** To complete your chimney installation, install the single wall or double wall connector pipe from the stove's flue collar to the chimney support device.
- **NOTE**: When attaching the chimney to the appliance, ensure a minimum of two (2) screws are used to establish a snug fit.
- If you are using a horizontal connector, the chimney connector should be as high as possible while still maintaining the 18" (457mm) minimum distance from the horizontal connector to the ceiling.
- NOTE: Residential Close Clearance and Alcove installations require a listed double wall connector from the stove collar to the ceiling level.

The diagrams below illustrate one way to install your unit into a standard ceiling or with a horizontal connector. Check with your dealer or installer for information on other options available to you.



Standard Ceiling Installation



Horizontal Installation

RECOMMENDED HEIGHTS FOR WOODSTOVE FLUE

Simple rules on draft (refer to Table 1).

3) Add 4% overall for each 1000' above sea level.

2)	Add the following vertical height to compensate for:
	45 deg. elbow = 1 ft.
	90 deg. elbow = 2 ft. "T" = 3 ft.
	Each foot of horizontal run = 2 ft.

1) At sea level minimum height is 12' straight.

Example: a)		
1-1/2 ft. of horizontal run	= 3 ft.	
one "T"	= 3 ft.	
Total Addition (at sea level)	= 6 ft.	
Example: b)		
One 90 deg. elbow	= 2 ft.	
2 ft. of horizontal run	= 4 ft.	
one "T"	= 3 ft.	
Total Addition (at sea level)	= 9 ft.	
. ,		

Recommend	Recommended Flue Height									
Elevation	Example a)	Example b)								
0'	18'	21'								
1000'	18.72'	21.84'								
2000'	19.44'	22.68'								
5000'	21.60'	25.20'								
8000'	23.76'	27.72'								

MINIMUM RECOMMENDED FLUE HEIGHTS IN FEET (Measured from the top of the unit)							
ELEVATION (FT) ABOVE SEA LEVEL	NUMBER OF ELBOWS For listed double wall pipe.						
	0	2 x 15°	2 x 30°	2 x 45°			
0-1000	12.0	13.0	15.0	16.0			
1000-2000	12.5	13.5	15.5	16.5			
2000-3000	13.0	14.0	16.0	17.0			
3000-4000	13.5	14.5	17.0	18.0			
4000-5000	14.0	15.0	17.5	18.5			
5000-6000	14.5	15.5	18.0	19.0			
6000-7000	15.0	16.0	18.5	20.0			
7000-8000	15.5	16.5	19.0	20.5			
8000-9000	16.0	17.0	20.0	21.0			
9000-10000	16.5	17.5	20.5	22.0			
NOTE: No more that elbows equal one			ws) allowe	d. Two 45°			

Table 1

IMPORTANT

Minimum vertical of 36" before any offset.

Horizontal Maximum of 36" with 1/4" rise per foot. **NOTE:** Recommend using 2-45° instead of 90° to improve draft and performance.