

Spruce Fan Installation Tips

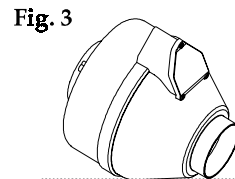
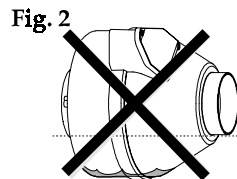
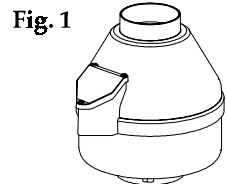
Fan Selection

Fan selection is based on room size and air changes per hour (ACH). The following table presents recommendations base

Model	CFM @ .2" WC	Duct	Bathroom Exhaust Based on 8 ACH	Living or Office Areas	
				Intermittent - 6 ACH	Continuous - 0.35
RV100	100	4"	Up to 95 sq ft	To 125 sq ft	To 2150 sq f
RV125	110	4"	Up to 105 sq ft	To 140 sq ft	To 2360 sq f
RV150	140	4"	Up to 130 sq ft	To 175 sq ft	To 3000 sq f
RV175	160	5"	Up to 150 sq ft	To 200 sq ft	To 3425 sq f
RV200	170	6"	Up to 160 sq ft	To 215 sq ft	To 3650 sq f
RV250	190	6"	Up to 180 sq ft	To 240 sq ft	To 4075 sq f
RB300	290	6"	Up to 270 sq ft	To 365 sq ft	To 6200 sq f
RB400	470	8"	Up to 440 sq ft	To 590 sq ft	To 10000 sq f
RB500	460	10"	Up to 430 sq ft	To 575 sq ft	To 9850 sq f

Fan Mounting

The Spruce Fan may be mounted in any position although the vertical mounting position shown in Fig. 1 is **highly recommended**. If the vertical mounting position is not possible, care should be taken to avoid creating a low spot in the fan/duct system where condensation might accumulate as shown in Fig. 2. In situations where horizontal mounting is desired and condensation is likely to occur, bathroom ventilation in cold climates, this problem might be avoided by mounting the fan 30 degrees beyond horizontal as shown in Fig. 3.



Ducting

- Flexible ducting is recommended for the connection of the fan to one or more intake grille(s) and an appropriate exhaust vent.
- Maximum sound isolation, quietest operation, can be realized with a minimum of 10 ft. of ducting between fan or Y/T of a multi-intake system and intake grille(s).
- Straight smooth runs of ducting will maximize system performance

Backdraft Dampers

- Backdraft dampers allow airflow in only one direction preventing cold/hot drafts from entering the vented area and minimize possible condensation and icing within the system while the fan is not operating.
- The installation of a backdraft damper at each intake grille is recommended with a minimal installation consisting of a backdraft damper at the Y or T of a multi-intake system.

Cold Climate Installation

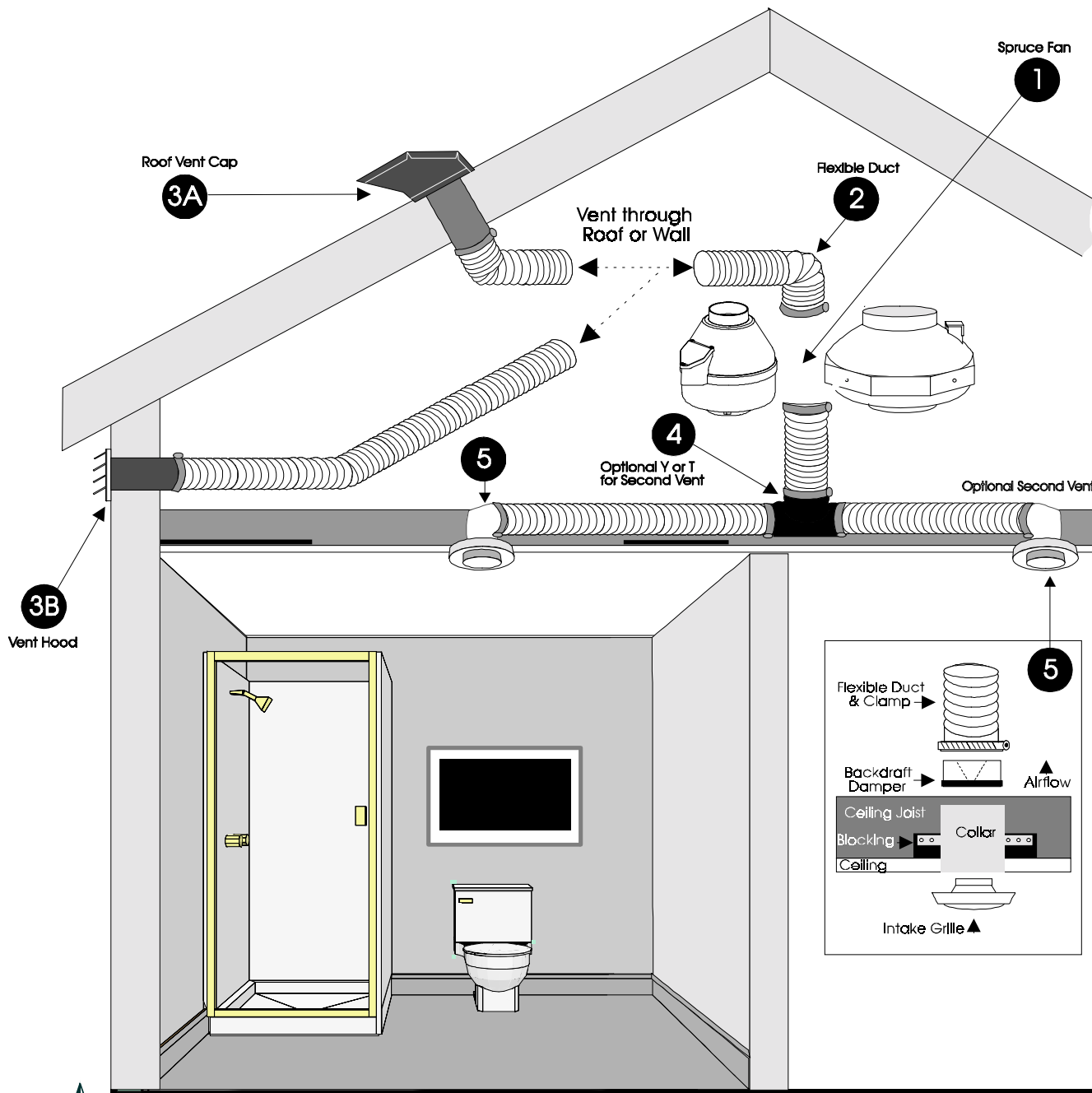
- Insulated flexible ducting is **highly recommended** for bathroom ventilation in all cold climate installations
- Backdraft dampers at each intake grille are **highly recommended** for bathroom ventilation in all cold climate installations

Intake Grilles

- Joist mount recommended for rough-in installations.
- Ceiling mount recommended for finished or drop ceiling installations

Electrical Considerations

- 115 VAC, 60Hz, 2.0 Amps maximum required.
- GFI not required in most installations, check local codes.



- 1 RV Series Fans**
 - RV100 P/N 28040-1
 - RV125 P/N 28042-1
 - RV150 P/N 28041-1
 - RV175 P/N 28048-1
 - RV200 P/N 28049-1
 - RV250 P/N 28050-1
- RB Series Fans**
 - RB300 P/N 28088-1
 - RB400 P/N 28090-1
 - RB500 P/N 28092-1

Mounting Bracket Included
- 2 Flexible Duct**
 - White Vinyl
 - 4" - P/N 78018-1
 - 4" - P/N 78022-1
 - 6" - P/N 78022-2
 - 8" - P/N 78022-3
 - Semi-Rigid Aluminum
 - 4" - P/N 78019-1
 - 6" - P/N 78019-4
 - Insulated Flexible
 - 4" - P/N 78020-1
 - 6" - P/N 78020-2
 - 8" - P/N 78020-3
- 3A Roof Vent Caps**
 - Milled Aluminum
 - 4" - P/N 76017
 - 7" - P/N 76018
 - 10" - P/N 76034
 - Brown Aluminum
 - 4" - P/N 76019
 - 7" - P/N 76028
 - 10" - P/N 76035
 - 4" - P/N 76020
 - Black Plastic
- 3B Vent Hood**
 - Louvered White Plastic
 - 4" - P/N 76014
 - 6" - P/N 76015
 - Wide Mouthed Aluminum
 - 4" - P/N 76016
 - 6" - P/N 76026
- 4 Y or T Connectors**
 - Metal Y Connector
 - 4" - P/N 79044
 - 6" - P/N 79048
 - 8" - P/N 79053
 - Metal T Connector
 - 4" - P/N 79043
 - 6" - P/N 79046
- 5 Intake Grilles and Dampers**
 - Backdraft Damper
 - 4" - P/N 76024-1
 - 5" - P/N 76024-2
 - 6" - P/N 76024-3
 - 8" - P/N 76024-4
 - 10" - P/N 76024-5
 - Joist Mount Grille
 - 4" - P/N 76011-1
 - 6" - P/N 76011-2
 - Ceiling Mount Grille
 - 4" - P/N 76012-1
 - 6" - P/N 76012-2



Typical Fan Installation Guide