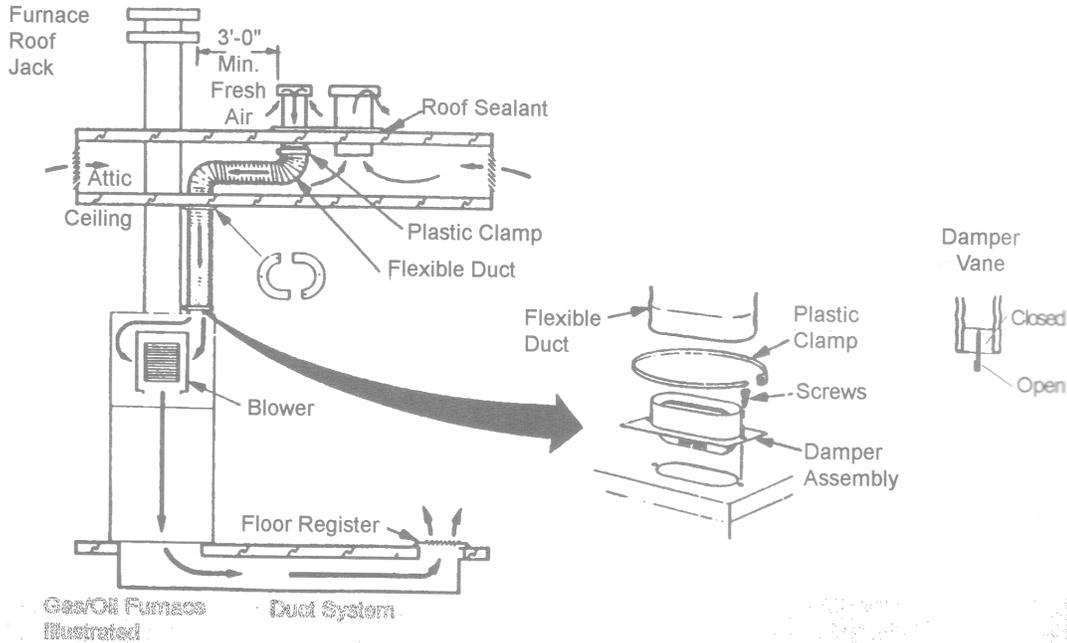


VENTILATION SYSTEMS

Many manufactured homes use a blend air system to blend fresh outside air into the home through the heating and cooling system. Below is a depiction of the system.



VentilAire IV™ Ventilation System

Designed as a low cost ventilation system for the living and attic space of a manufactured home; introduced in 1985.

- improve indoor air quality
- reduce indoor humidity levels
- pre-heat or pre-cool indoor ventilation air and distribute evenly to all living areas of the home
- winter- exhaust moisture laden air from attic space
- summer- exhaust hot air from attic space as required
- provide efficient attic ventilation with low power consumption

Powered ventilation is an alternative to static vents

Ventilate single section homes with metal roofs

Single point mounting- minimize roof penetrations

The under home area must be properly ventilated. Failure to properly vent the structure can lead to high levels of moisture under the home and in extreme cases may lead to serious moisture intrusion, microbial growth such as mold and mildew, health concerns for the occupants, soften the floor structure and cause premature failure of the floor structure.

The vents should be on all 4 sides equally spaced but in no case less than 2 sides. Generally there must be at least 1 square foot of free air ventilation for every 150 square feet of floor space including decking. Some jurisdictions have a variance on the ventilation equation. When a quality vapor barrier such as asphalt, concrete slab or 6 mill

visqueen sheeting is provided the required ventilation may be reduced if acceptable in the manufacturer's instruction, up to 10 fold or to 1 square foot of ventilation for every 1500 square feet of floor space with approved instructions and correct grading for drainage. In non desert areas, I recommend maintaining the higher level of ventilation regardless of ground cover. For homes with foundation sheer blocking, when able to vent all 4 sides, my practice is to start 2' from each corner and place a vent between every 6' of sheer blocking. For framed walls, I place a vent at the second stud bay in from the corner and every fifth stud bay from the corners. For wood skirting, layout similarly and check the math. For aluminum or vinyl skirting, check the approval for vent panel clear air area. Usually the manufactured vinyl vents are rated at 1 square inch for every inch of vent panel, thus a 24" tall panel is valued at 24 square inches. It is up to the installer to ensure adequate ventilation.

If the louvered vents are to be used, note the limited open air rating stamped on the back side. They are good for only a portion of their actual size. I recommend the screen vents and use either 6x14 1/2" or 8x 14 1/2" vents.

This vent is a louvered type with a limited free air flow of 56 square inches in contrast to its actual size of 116 square inches. Also the dust pattern shows the partial cut out behind the vent, further reducing the vent value.



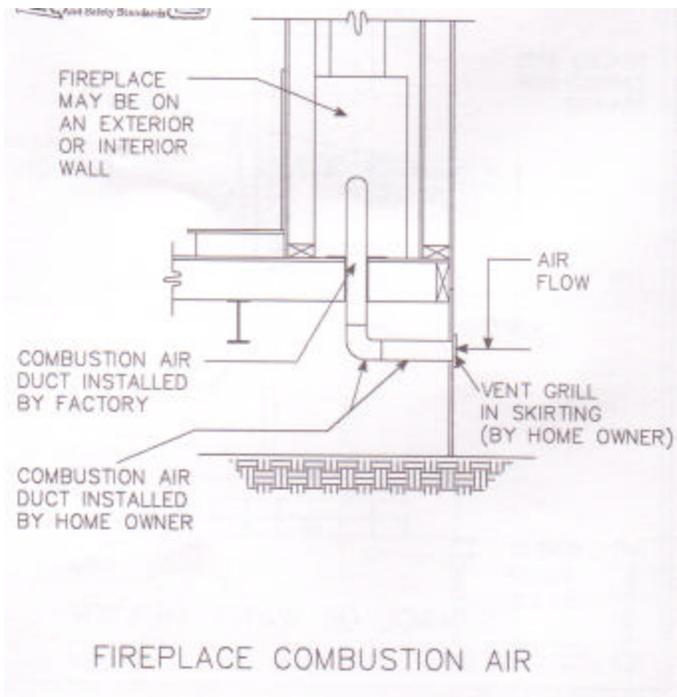
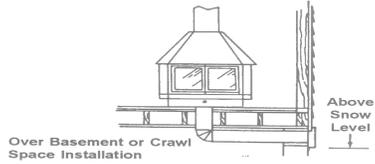
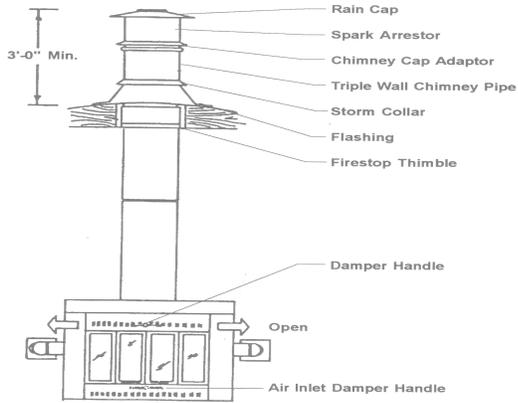
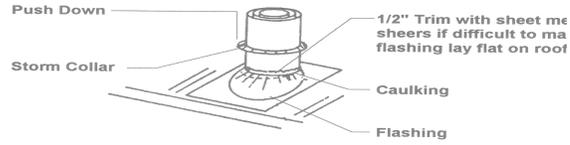
When a lack of ventilation and excessive humidity attack a floor system, it can cause the floor to buckle and become wavy. The deck will expand and take floor joists with it bending them up or down and often one up and the next down. Sometimes it will lift a sheet and bow several up together. It is very important to properly drain and ventilate the under home area.



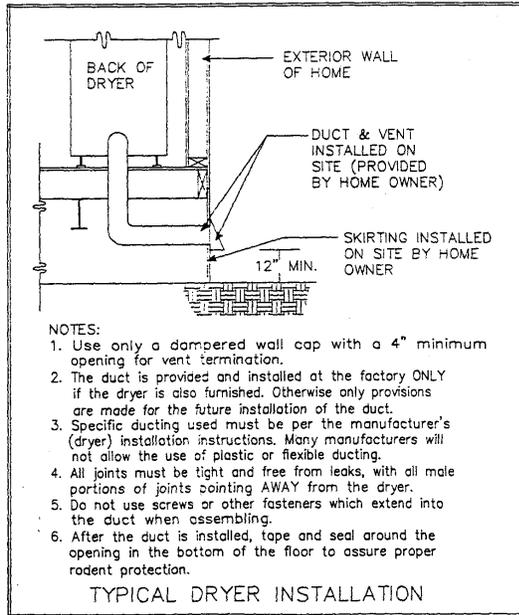
Properly spaced vents fully cut out are important and the screen type vents breath best.



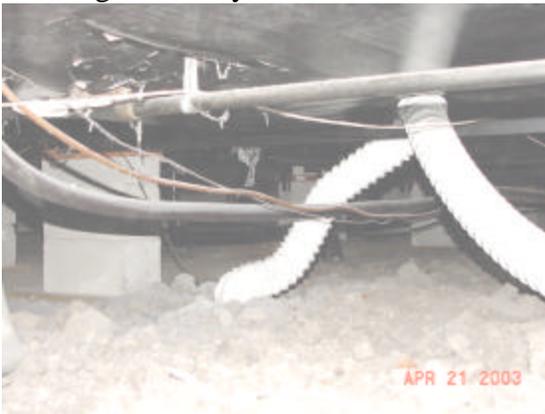
Fire place intake and exhaust



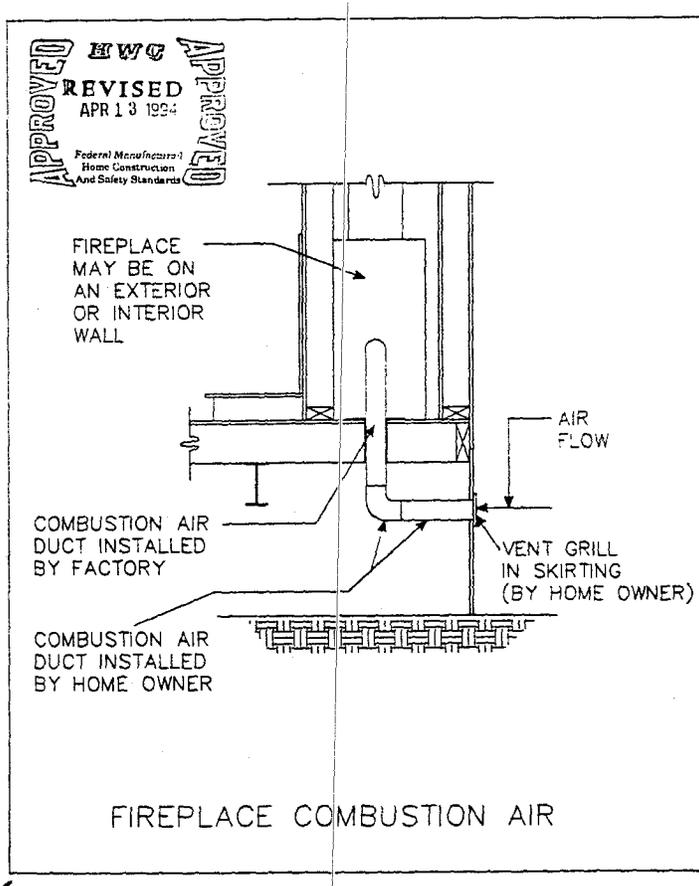
A dryer vent must be properly installed and stubbed out of the home with a vent cap capable of keeping rodents out. The pipe should be smooth wall pipe such as this aluminum pipe sealed with aluminum listed tape. Do not use flexible plastic. Do not use screws to fasten sections or fittings, instead, use a listed aluminum tape. Lint fires are possible and an approved vent installation is important. The outlet should be 12" off the ground.



Failing to professionally install a proper dryer duct may lead to fire hazard and humidity damage to the home. This plastic duct came loose from the outlet and has allowed high levels of humidity to be pumped under the home for some time. Floor damage will result from high humidity.



If a fireplace is provided, you must install a screened intake combustion air inlet pipe per plan.



The fireplace intake was not piped out for proper installation. Chances are it will get plenty of air. As it draws air, adequate amounts of fresh air can enter the siding vents if properly vented.

