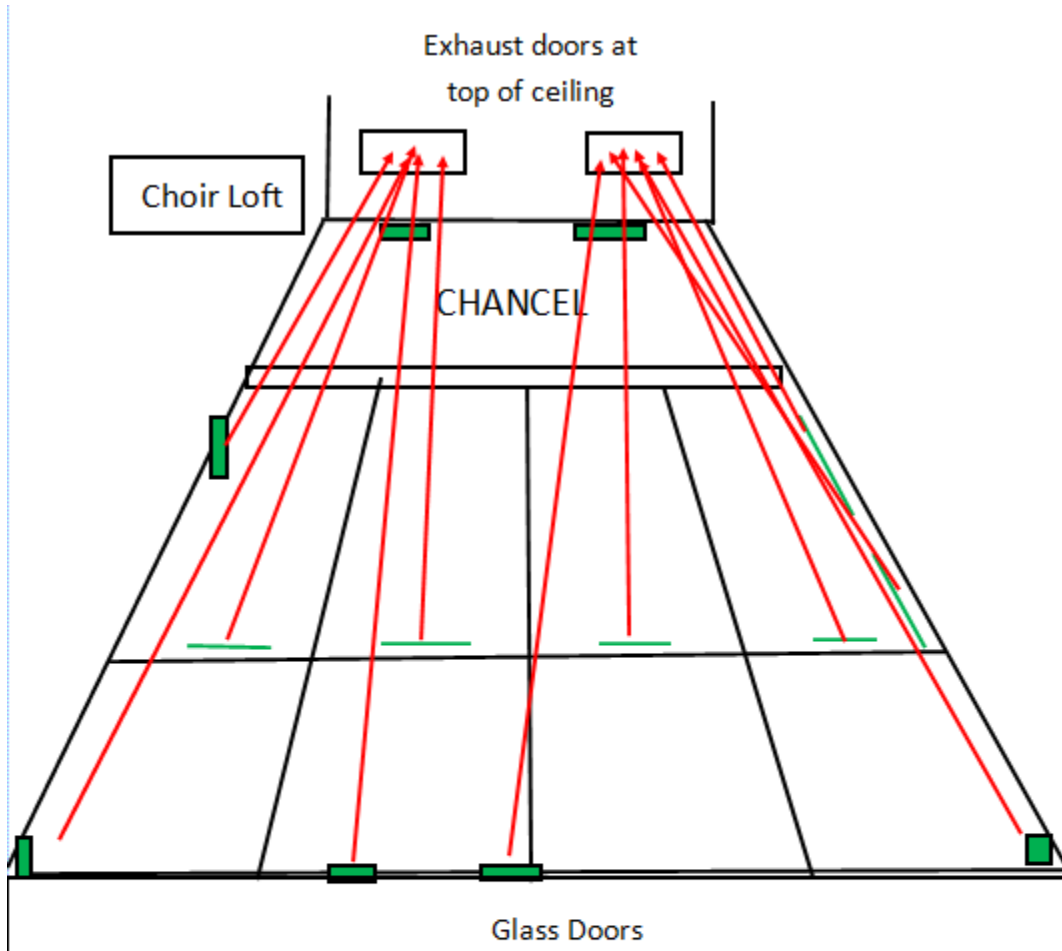


Meeting House Ventilation System



Green—Income fresh air ducts pulled from canyon outside

Red—Airflow exhaled which is warmer and will rise to the exhaust doors.

If Meeting House doors are opened, it will degrade ventilation system.

(see next page for further explanation)

- Green - Incoming air ducts. Currently all air is pulled from the canyon outside pushed into the building through ducts at the front sides back and across the middle of the Meeting House. This air is under pressure and will take the easiest path to get out of the building.
- Black - Exhaust/Return vents are at the roof line (top of ceiling) in the middle of the chancel. Exhaust is passive. In order to exhaust the used air that should be rising after breathing, all doors need to be closed so the pressure will push the rising air out of the 5' x 8' vent on west side of MH near upper choir loft door.
- Red - Airflow exhaled air is warmer and will be rising. With doors closed most of the time air flow will gather and move toward the exhaust. If doors are propped open the organized circulation of air will get muddled and "bad air" will sweep back over the seating area to get to the doors. The side door by the chapel does not change airflow much but it makes it easier for "bad air" to travel to choir loft. And opening the upper choir door allows more of the "bad air" to sweep across choir loft or with a change of wind direction, blow the exhausted air back into the building.

Next Steps: Investigate adding a fan to change passive exhaust to active. This would allow for random door positions to not interfere with flow. It is possible to split incoming air between canyon and doors.

This set-up will work till we need heat. Some heat is possible, but with no Re-circulation the amount of heating will be limited. In the interest of safety at this point the recommendation may be to dress warmly rather than start recirculating at this time.

Ray Evans will be adding little ribbons (tattle tails) to air vents in the back (4), some in the middle and sides. This will allow at a glance verification that air is flowing, since the Meeting House fan is on a timer system.

"Bad Air" is not necessarily bad but for safety purposes air that has been breathed should be treated as if it is infected and everything possible shall be done to exhaust it and replace it with outside air.

