

Barbara Conrey <bdconrey@gmail.com>

To: Scott Hess

Cc: Judith Hinds, Tina Muncy, Ryan Kane, Executive Team, Rhoda Chickering

Thu., Aug. 13 at 6:35 p.m.

This is the email that I sent to the Property Committee in response to questions.

I think that determining how many people would be using a space is critical in terms of the ventilation required. Joan spoke about having a few (?) worship associates socially distanced in the Sanctuary for Sunday service; I can't see how that would be a problem given the huge volume of that space, even without filtration. It's only if we were talking about having a group in there that I would be concerned.

BTW: the fact that the little ventilation we have in the Sanctuary is supplied and returned near the floor is a plus; that might keep any aerosols low.

Thanks.

Email to Property Committee:

Thanks for your thinking on this, Allen!

Actually, all we're really thinking about right now is making sure that each toilet room has a functioning exhaust fan -- the rooms are so small that the size probably doesn't matter. But to give you a head's up about what information we might need in the future:

1. The fan size on the furnaces (in cfm).
2. Are there filters on the furnaces? If so, I doubt that they are MERV 13 or HEPA, which are the only type that would help us out.
3. Some of the Covid-19 ventilation information recommends a certain number of air changes per hour (AC/H); that is, the number of times that the volume of the space is replaced with fresh (outdoor) air or comparably filtered air.

This is only partially helpful, as the critical part is to replace the air respired by the number of people in the space. Pre-Covid Standards required outdoor or clean air at 20 cfm/person; therefore, say 100 people = 2,000 cfm = 120,000 cf/hour. If the room volume is 25,000 cf, that's close to 5 AC/Hr, which is also close to some current recommendations for Covid.

4. We clearly can't do that with our current furnace -- it can't push that much air, nor can it heat that much outdoor air without a filter. We can address smaller areas (possibly the Vestry) with multiple individual electronic air cleaner units in the space, which would be sized to provide the ventilation levels noted above.

I'm sure this is way more information than you wanted, but it gives you an idea of what future thinking could be.

Thanks.

Barbara