

REDUCING RADON LEVELS BELOW 2.0 pCi/L,
WHEN VIBRATION AND SOUND NOISES ARE IMPORTANT
AND PIPES ARE NOT OPTIMALLY INSTALLED IN
NEW RESIDENCES

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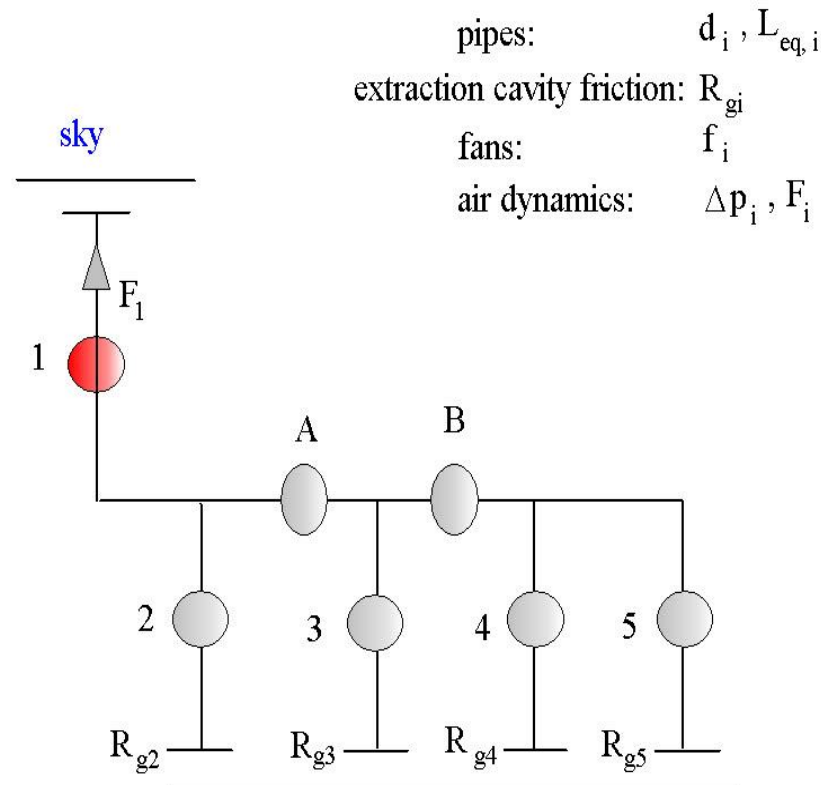
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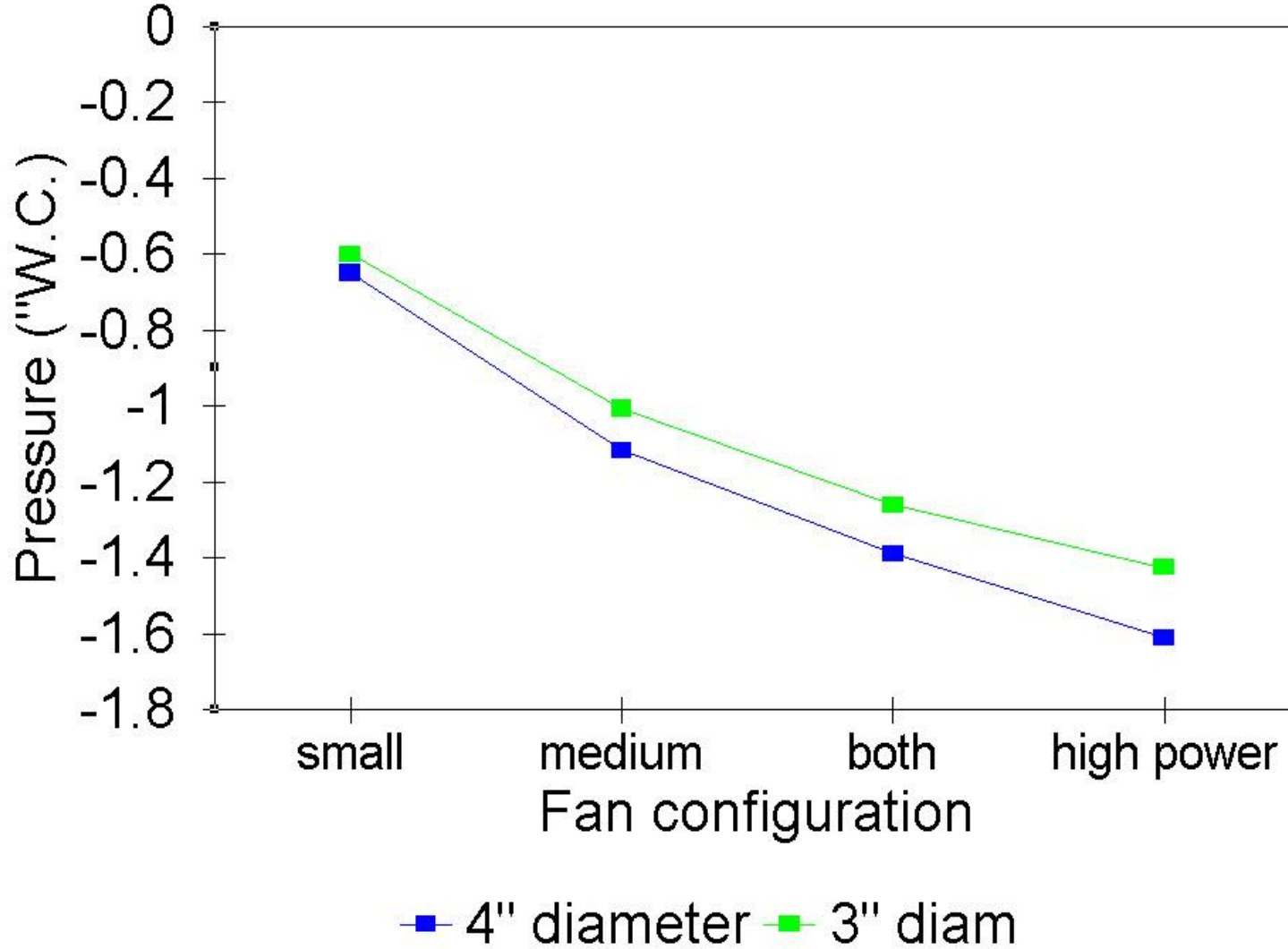


Air Pipescape

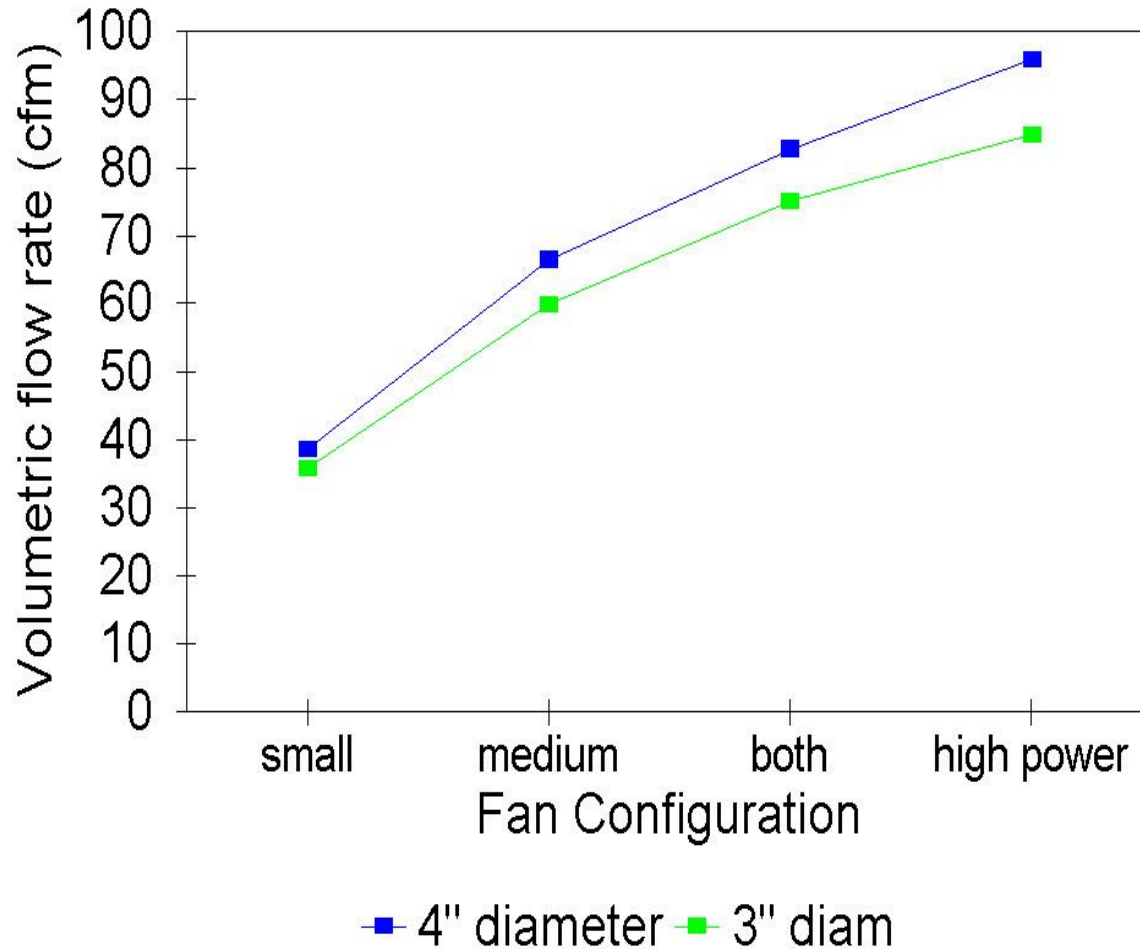


subslab, submembrane, crawlspace

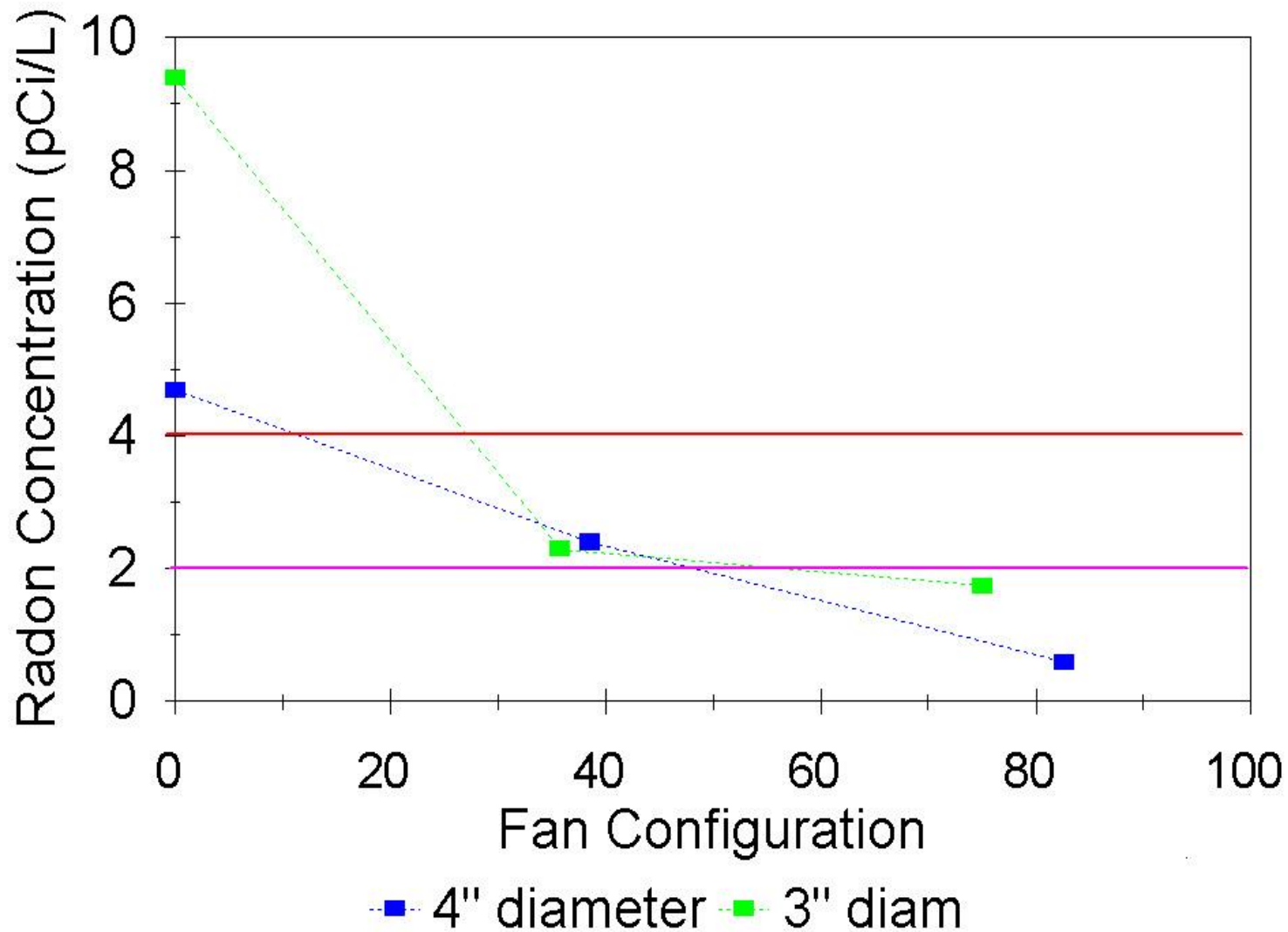
Vacuum in Cavity Comparison

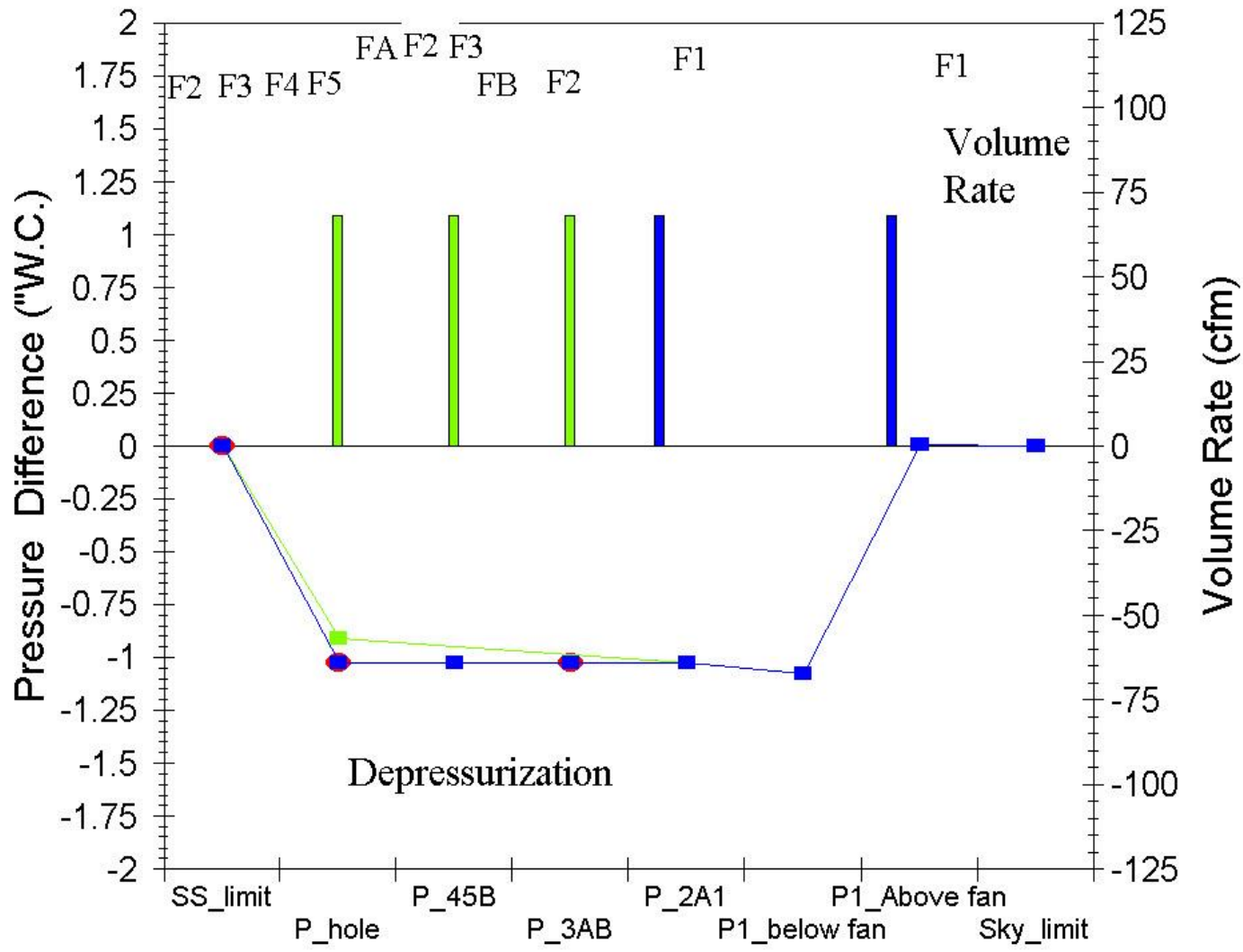


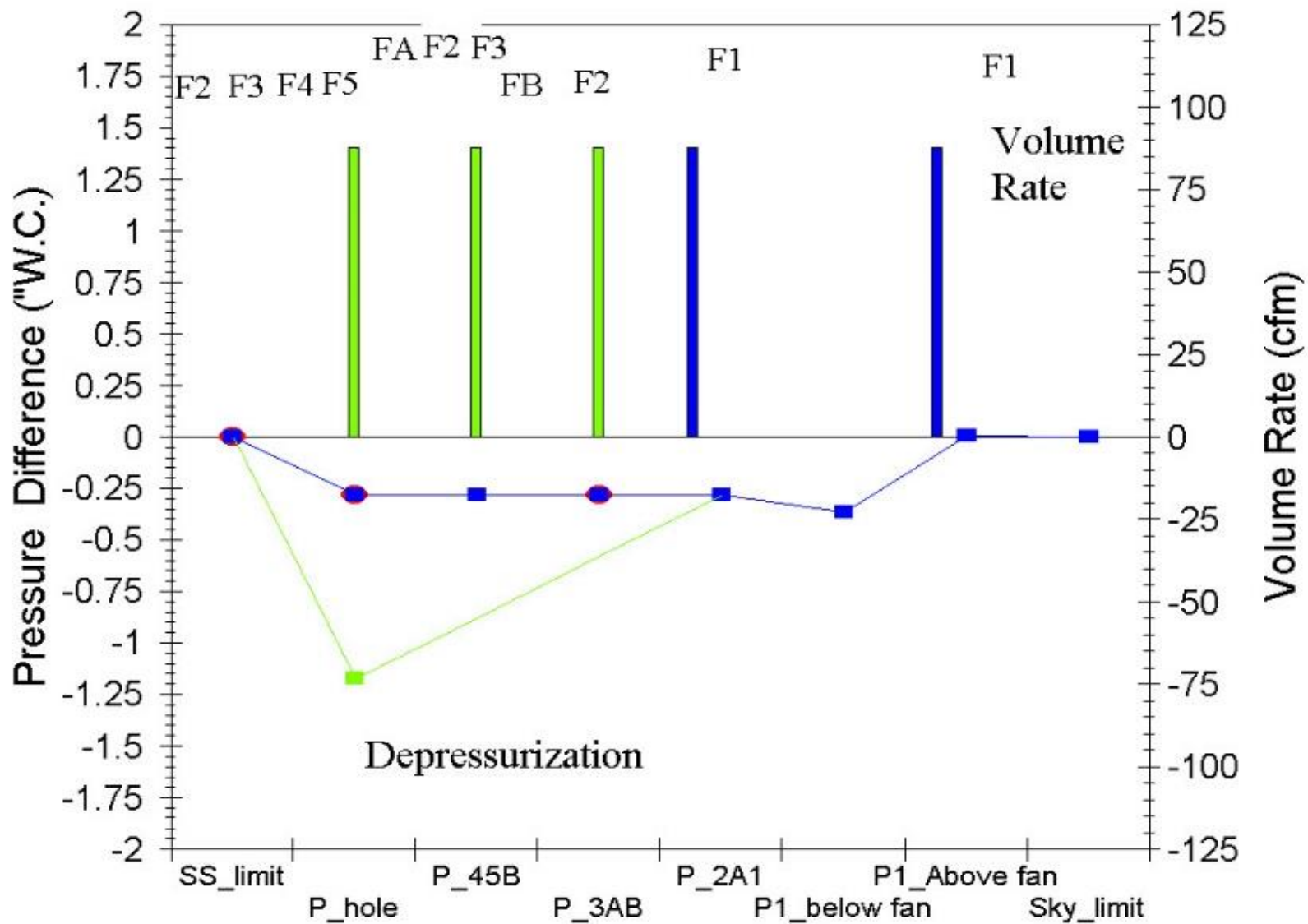
Flow Comparison



Rn conc. Comparison







Conclusions

- Comparing air dynamics for RMS using Air Pipescape calculations allows us to make predictions that we tested.
- Proposing two unequal fans in series can work to
 - lower radon,
 - maintain vacuum everywhere in the pipe system, and
 - solve a noise problem in 4” diameter pipe systems.
- One foot above the fan in basement
 - Install a permanent manometer, and
 - must show a vacuum all the time.
- Install a permanent Radon Monitor with alarm in ‘green’ buildings with insulation against roofing
 - upstairs when only a single fan is installed,
 - for both fans when two fans are installed.

Credits

Thanks to many homeowners over the years that let me experiment to deliver to them a better system to their satisfaction, and that of future clients.

