

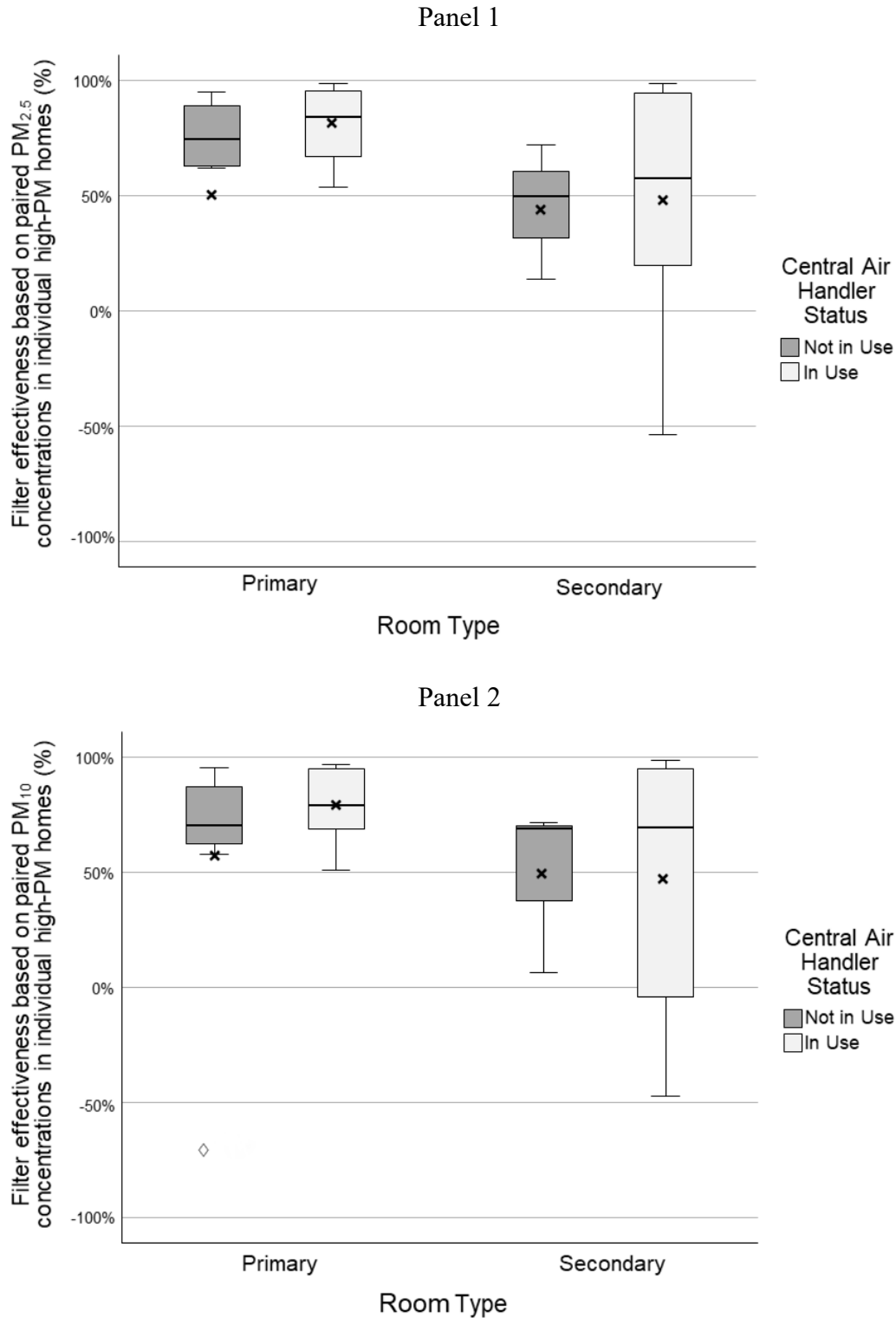
## Appendices

**Table A1.** Median effectiveness (%) of the portable air cleaner (PAC) in the filter state in reducing  $PM_{2.5}$  and  $PM_{10}$  concentrations in individual homes. Baseline concentration =  $1 \mu\text{g}/\text{m}^3$  based on the PM sensor's limit of detection (LOD). WSRT = Wilcoxon signed rank test.  $p < 0.05$  was considered significant (bolded).

		Primary Rooms				Secondary Rooms				
PM Fraction	Time Period	n	Percentiles			n	Percentiles			WSRT p-value
			25 <sup>th</sup>	50 <sup>th</sup>	75 <sup>th</sup>		25 <sup>th</sup>	50 <sup>th</sup>	75 <sup>th</sup>	
PM <sub>2.5</sub>	Overall	23	<0	66.0	90.1	22	<0	26.2	63.3	<b>&lt;0.001</b>
	Day	23	<0	58.3	89.2	22	<0	47.4	73.4	<b>0.002</b>
	Night	23	11.6	83.0	98.0	22	<0	14.2	79.8	<b>0.001</b>
PM <sub>10</sub>	Overall	23	<0	65.5	82.0	22	<0	27.1	69.9	<b>0.003</b>
	Day	23	<0	57.8	83.0	20	<0	45.6	73.9	<b>0.014</b>
	Night	23	<0	73.5	93.9	21	<0	29.4	83.2	<b>0.012</b>

**Table A2.** PAC effectiveness (%) in low-PM homes ( $\leq 5 \mu\text{g}/\text{m}^3$ ) for the individual pairs of filter and sham periods (i.e., paired approach).

		Primary Rooms				Secondary Rooms			
PM Fraction	Time Period	n	Percentiles			n	Percentiles		
			25 <sup>th</sup>	50 <sup>th</sup>	75 <sup>th</sup>		25 <sup>th</sup>	50 <sup>th</sup>	75 <sup>th</sup>
PM <sub>2.5</sub>	Overall	11	-86.3%	-26.1%	66.2%	12	-500.3%	-120.4%	23.9%
	Day	11	-83.1%	-7.8%	87.8%	12	-497.1%	-89.6%	43.9%
	Night	11	-166.7%	26.5%	97.1%	12	-372.1%	-134.3%	45.7%
PM <sub>10</sub>	Overall	11	-56.0%	9.5%	49.6%	12	-549.0%	-132.2%	27.1%
	Day	11	-74.8%	8.2%	69.7%	12	-730.8%	-97.2%	38.1%
	Night	11	-175.3%	34.4%	83.4%	12	-384.8%	-13.3%	77.7%



**Figure A1.** Effect of a central air handler (CAH) on the filtration effectiveness (%) of the PAC in reducing mean concentrations of PM<sub>2.5</sub> (Panel 1) and PM<sub>10</sub> (Panel 2) in the primary and secondary rooms of individual high-PM (>5 μg/m<sup>3</sup>) homes. “In Use” = activation of the CAH for any length of time; “Not in Use” = CAH not activated or not present.