

APPENDIX 4

Airflow Schedule for Modified Labs

CFIA Charlottetown
Laboratory Spaces
Airflow Requirements for Modified Laboratory Spaces

Constant Airflow Laboratories with Night Set Back

Lab ID	Constant or Variable volume lab	Desired negative or positive lab	Lab volume (m ³)	Desired daytime ACH	Desired night setback ACH	EA VAV			Desired flow offset (L/s)		Other Airflow device			SA VAV	
						VAV #	Airflow daytime SP (L/s)	Airflow night setback SP (L/s)			Device	Supply or exhaust	airflow (L/s)	VAV #	SA VAV airflow SP (L/s)
M2-01	constant	negative	276	10	4	262	570	115	159	193	BSC	exhaust	193	218	Calculated based on offset equation
M2-05	constant	negative	219	10	4	253	610	240	150	N/A	N/A	N/A	N/A	215	Calculated based on offset equation
M2-13	constant	negative	85	18.5	14	241	440	330	176	104	Transfer duct	supply	104	203	Calculated based on offset equation

Notes:

- Offsets shown above based on as-built airflow data. Actual offsets to be confirmed during Existing Conditions Airflow Survey, and fine tuned during commissioning activities.

Variable Airflow Laboratory

Lab ID	Constant or Variable volume lab	Desired negative or positive lab	Room pressure SP (Pa)	SA VAV		Other Airflow device			SA VAV#	
				VAV #	flow SP (L/s)	Device	Airflow (L/s)	VAV #	Airflow (L/s)	
M2-09 and M2-10	variable	negative	-10	209	71	General exhaust	164	210	Modulates to maintain room pressure. Minimum airflow SP of 90 L/s	
						Fume hood	94 to 472			

Notes:

- Room pressure set point is an assumed value. Actual set point to be fine tuned during commissioning activities.

