


AIR-BOX radon detector: setup and pack-up checklist

| Action | Comments | Complete | |
|--|----------|----------|----|
| | | Yes | No |
| 1. Setting up in new location | | | |
| Inspect the radon detector in the container after transport and check the straps securing it to the floor | | | |
| Inspect the pump and calibration box in the pump enclosure and check the straps securing them to the shelf | | | |
| Remove the end-cap from the radon exhaust port on the outside of the container (front, top-left of door) & attach short exhaust line | | | |
| Retrieve the 2 blue barrels from stowage, and make sure they are securely attached to the roof of the container | | | |
| Remove the end-caps from the 3 inlet lines outside the container (at the rear, top right) | | | |
| Attach the radon inlet to the dedicated inlet mast, and connect it to the line running inside the container to the pump (stack blower) | | | |
| From the inlet, the sampling line should follow the path: inlet line going inside to the pump, pump going back outside to the blue barrels, from the barrels back inside to the radon detector. | | | |
| Power up the pump and the calibration box in the pump enclosure | | | |
| Power up the radon detector | | | |
| Power up the radon PC, and then start the radon software (RDM) | | | |
| 2. Normal operation | | | |
| Check the radon PC at least once a day. The logged parameters should be within specs: ExFlow ~ 80 L/min and TP > 100Pa | | | |
| Inspect the desiccant container in the calibration box. If the silica gel inside is saturated (pink colour), replace it or re-activate it by heating in an oven at ~110 °C until all the gel has turned blue. | | | |
| Notify ANSTO staff if any problems are suspected with the radon system or if data quality appears to be compromised in any way | | | |
| 3. Packing up | | | |
| A day before shutting down, manually run an instrumental background check by clicking on C&B icon on the main screen and selecting second tab (Background) and click the "background now" button. This will initiate a 24-hour background check. | | | |
| Power off the radon detector, pump, and the calibration box | | | |
| Shut down RDM program, backup the data files from the computer, and power down the computer. | | | |
| Disconnect the inlet line, and remove it from the inlet mast. Disconnect blue barrels & close any open pipes with end-caps. | | | |
| Remove the barrels from the roof and stow for transport | | | |
| Remove short exhaust line from outside the front door of the container and cap the line | | | |
| Ensure that the radon detector, pump and calibration box are secured for transport | | | |

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