



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			

Contact numbers:

Scott Chambers (02 9717 3058 szc@ansto.gov.au); Ot Sisoutham (02 9717 3988 svo@ansto.gov.au);
 Sylvester Werczynski (02 9717 3932 srw@ansto.gov.au); Alastair Williams (02 9717 3694 agw@ansto.gov.au)