

ERMI SAMPLING INSTRUCTIONS

Summary

Collect dust sample by vacuuming approx. 2-meter square in the living room and 2-meter square in a bedroom for 5 minutes each with dust collator device provided fitted to a vacuum machine. 2-meter square is around 22 square feet.

Detailed procedure

1. Remove the top and bottom caps and set aside, retaining for later use. Check to make sure the cassette contains the collection filter.
2. Insert the hose attachment of the vacuum into the broader, wide end of the device.
3. Start the vacuum and start timing the sample collection, place the sampler device in one corner of the marked sampling area, and begin to collect dust from the area by placing the narrow, oval-shaped end of the nuzzle in contact with the sampling surface.
4. Slightly tilt the sampler to one side to allow a slight gap between the sampling surface and the sampler. A sampler that remains flush with the sampling surface will decrease vacuum efficiency by restricting airflow and will prevent sample uptake.
5. Slowly sweep the sampling area from one end to the other using overlapping passes, adjusting the rate until the entire 2 m² is covered over the course of the five-minute sampling period.
6. Turn off the vacuum. To prevent loss of material, tilt the sample device upward before turning off the vacuum.
7. Remove the sampler device from the hose and visually inspect it to verify it contains enough sample. The sampler should include visible dust which is around 30 – 100 mg powder. If more dust needs, repeat steps 3 - 6.
8. Replace the caps onto the sampler device and place same directly into the zip-type bag. Do not tap the sample device as the micro-fine dust is needed for analysis. Label the sample appropriately and record the sample description on the Chain of Custody form.

Reference:

Vesper S, McKinstry C, Haugland R, Wymer L, Bradham K, Ashley P, Cox D, Dewalt G, Friedman W. Development of an Environmental Relative Moldiness Index for US Homes. J Occup Environ Med. 2007 Aug;49(8):829-833.