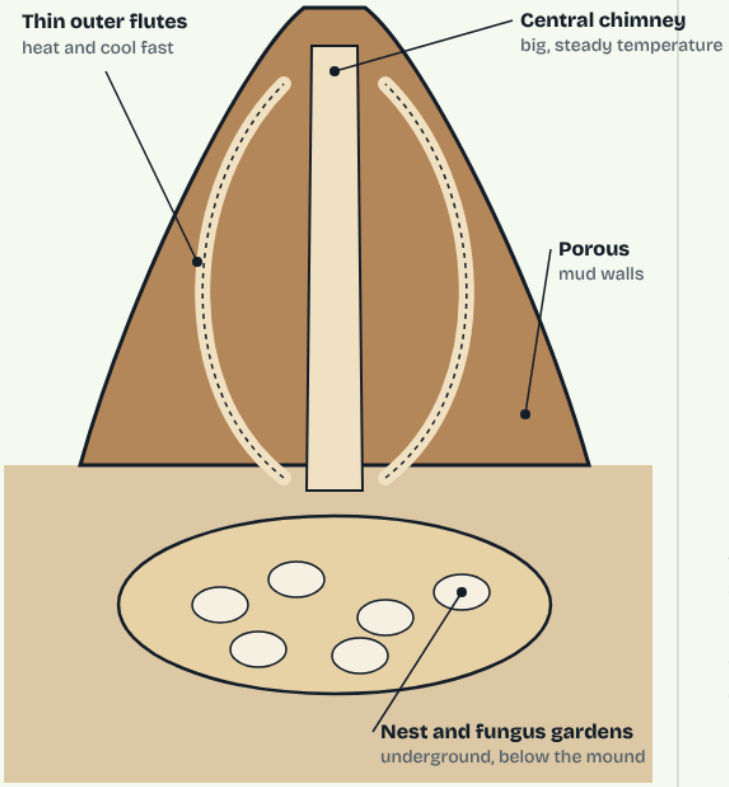
That is why

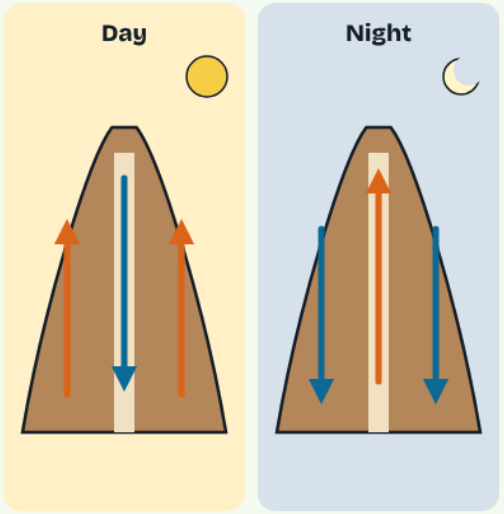
How does a termite mound breathe?

Daily temperature swings push air up and down its channels like a lung, flushing stale air from the nest below.

A Inside the mound



B Day and night



Day: the sun heats the thin flutes faster than the thick centre, so air rises in the flutes and sinks down the chimney.

Night: the flutes cool first and the flow flips. Warm, stale air from the nest rises up the chimney and leaks out through the walls.

C Why it matters

1 A fungus farm

Termites grow a fungus that breaks down plant food for them. It needs a steady, humid climate.

2 Fresh air for the colony

The colony would suffocate in its own carbon dioxide without this daily "breath".

3 Copied by architects

The Eastgate Centre in Zimbabwe uses passive cooling inspired by termite mounds.

No fans, no power: the sun makes the mound breathe.

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