

Why does my total heat loss not equal the sum total of the room heat loss?

If you are using one of the **BS EN 12831-1:2017 methods**, the ventilation losses for a building are not a simple sum of the ventilation losses for each room. Instead ventilation losses are calculated both at a room level and then separately on a building (or zone) level.

On the building level, there's an additional factor (f_{i-z}), typically assumed to be 0.5, which makes the building ventilation losses smaller. This is to account for the fact that rooms facing the wind may have cold outside air pushed into them, but then the warm air from those rooms will flow into other internal rooms. This ensures your radiators are large enough for worst-case conditions, while preventing your heat pump from being oversized, which would limit its efficiency.

Read more about this [here](#).

Revision #2

Created 1 June 2026 09:25:18 by Daisy

Updated 1 June 2026 09:34:56 by Daisy