Below are the formulas we used to condense 10 building vintages into old (1975–2020) and new (2023) by calculating weighted parameter values, accounting for vintage-climate dependencies. Weights for building types/climate zones were aggregated to merge dimensions, distinguishing climate-vintage and vintage-only parameters.

* If the parameter is climate and vintage dependent (e.g. U-values)
* If the parameter is vintage dependent only (e.g. LPD)

Where:

is the weight of vintage , building type and climate zone .

is a parameter describing one property (e.g. R-value) of a building in DEER code files belonging to vintage and climate zone .