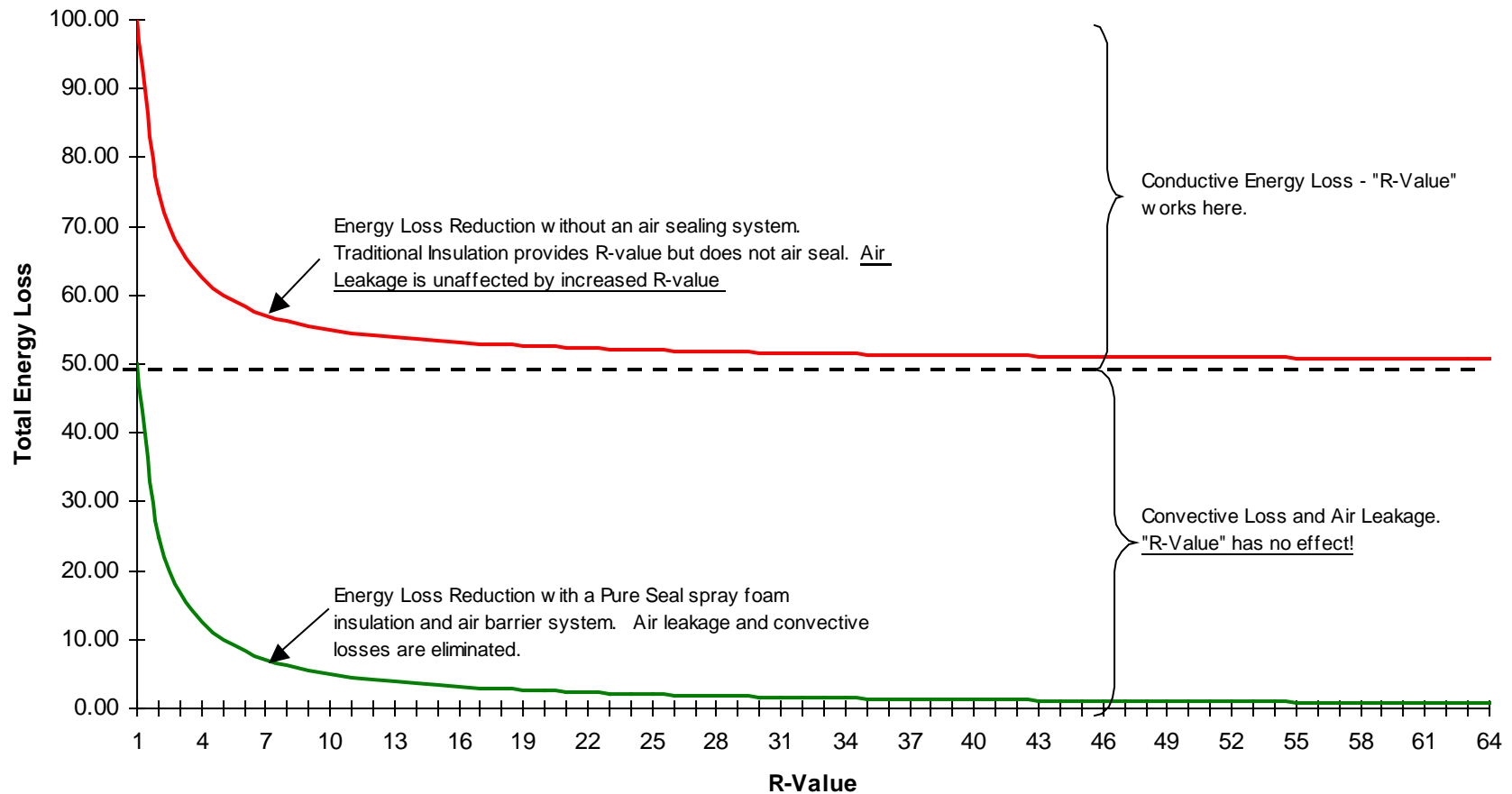


Effect of R-Value and Air Sealing in a Typical Building



Conductive loss is the energy that travels through a material.
Convective loss is the energy that is moved by air from a warm surface to a cold one.

Research has shown that Air Leakage and Convective losses account for as much as 50 percent of the total loss in a typical building.

A wall has a boundary layer of relatively still air, which has some insulating effect (R-1). Using this as our worst-case scenario and equating that total energy loss to 100, the graph shows the effect of

increasing R-value, with and with-out air sealing. Every time the R-value is doubled, the remaining energy loss caused by conductive transfer is cut in half.

Increasing the R-value has no effect on convective loss and air leakage! Spray foam seals the building and stops air infiltration. It is a complete system, not just a means to achieve R-value.