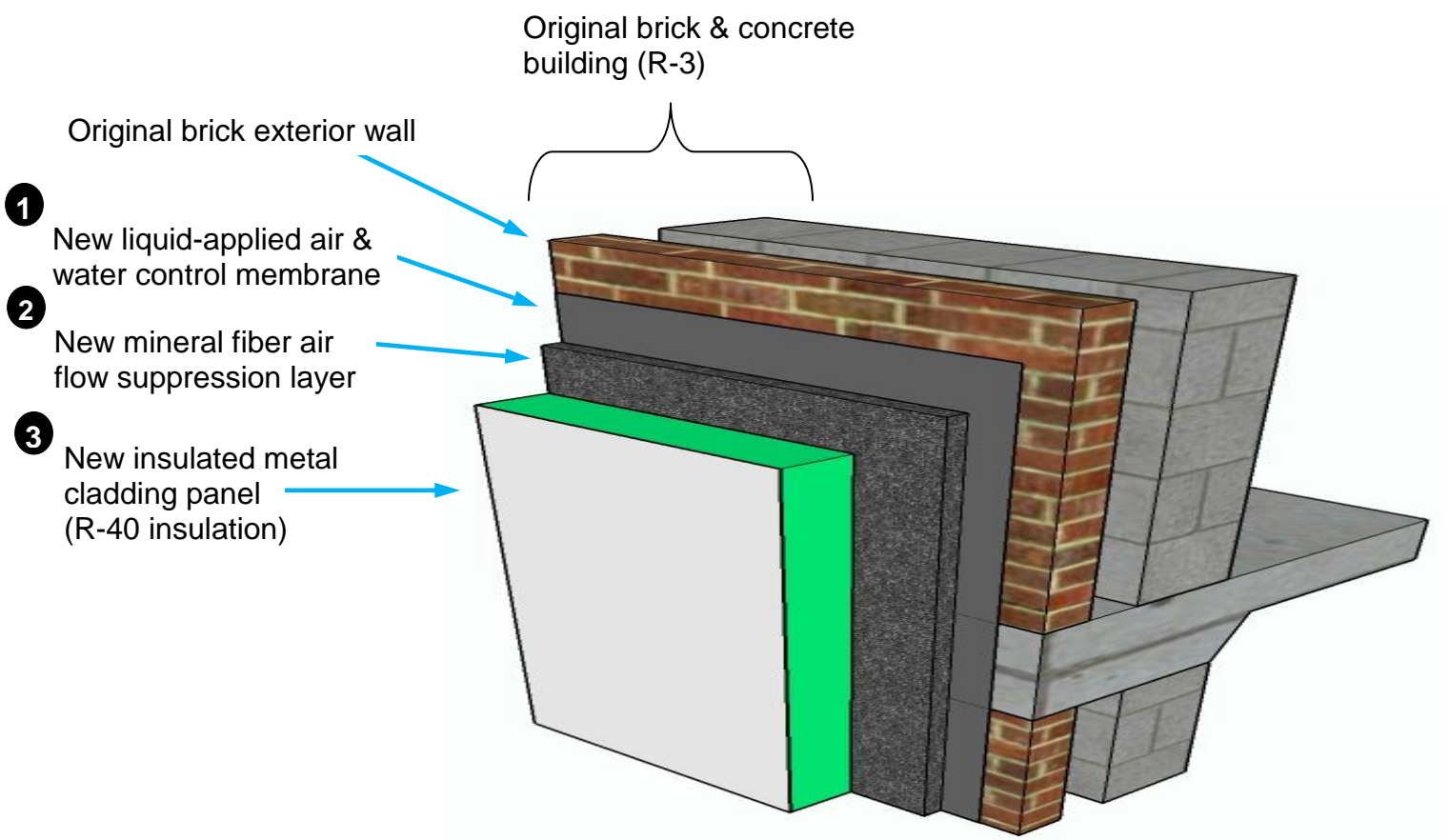


## Deep Energy Retrofit Insulated Wall System

Part of a Deep Energy Retrofit is a new super insulated exterior shell. At Castle Square, this new shell will be installed on the outside of the building. A new super insulated shell (which visually transforms the dated property), combined with a super insulated reflective roof, high efficiency windows, and extensive air sealing, will increase the insulation value of the building by a factor of ten.

The building originally had no wall insulation with an R-3 wall assembly. After the renovation, the walls were increased to R-40. The roof went from R-20 to R-40. The R-1.3 aluminum clad slider windows were replaced with R-5 fiberglass casement windows. *R-value is the insulation value of an object (i.e., the thermal resistance of an assembly). The higher the R-value, the better the insulation.*



Building Science Corporation, [www.buildingscience.com](http://www.buildingscience.com)

Castle Square Insulated Exterior Wall System