

SURFACE COEFFICIENTS FOR GLAZING SYSTEMS IN CONSTRUCTION.

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Abstract.

The sustainability of building in New Zealand is affected by its thermal performance. This is influenced by the way that we choose to measure thermal performance of building materials, particularly glazing systems which typically have lower thermal performance than opaque materials. In turn, the thermal performance of glazing systems is significantly affected by the surface coefficients used for their design values. Three different sets of surface coefficients have been used historically in New Zealand, all producing different results. There has not been any robust guidance on which coefficients should be used to represent design values for the thermal performance of glazing systems. The work reported here recommends the choice of European surface coefficients for measuring the thermal resistance of glazing systems, on the basis of these being a better match to the conditions experienced in New Zealand. This allows comparison between glazing systems to be undertaken with the same reference, and eliminates confusion in the industry over the choice of coefficients.

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