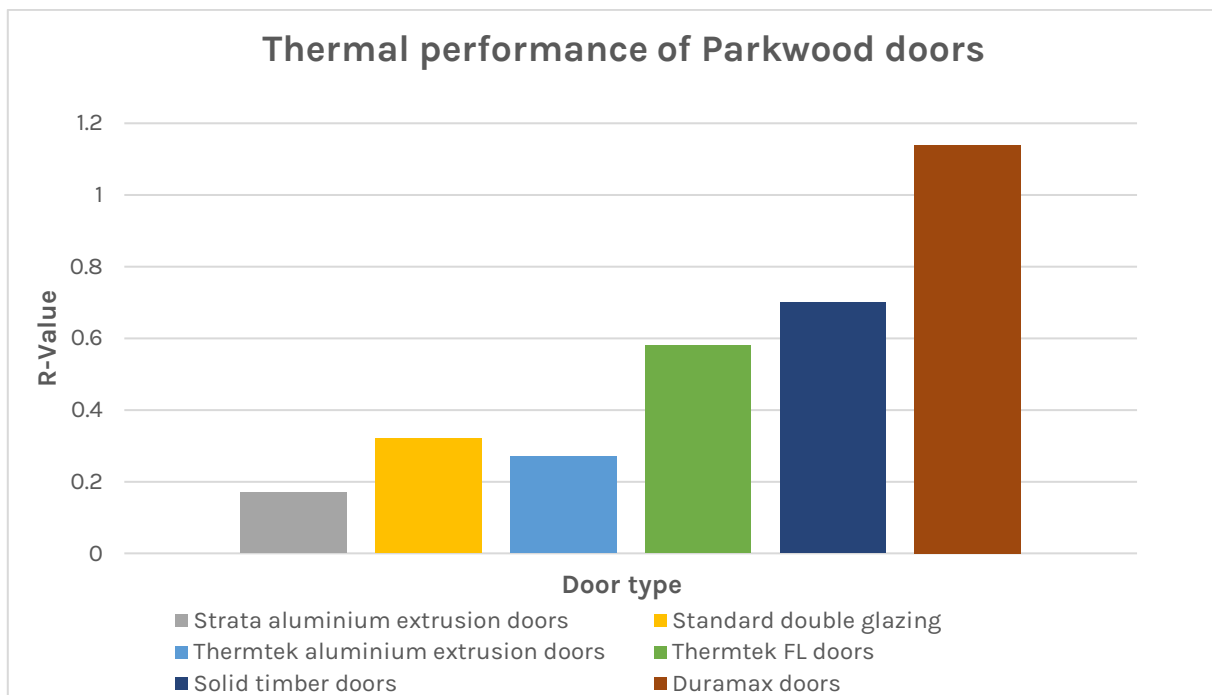


# PARKWOOD DOORS THERMAL PERFORMANCE

The R-values shown for each door are intended to give the user a comparison of thermal performance between different door styles. They are all for doors 1980mm high x 860mm wide and standard thickness. R-values can vary up or down with the size of the door, depending on the structure, and the area of glazing and panels because of this variation, the R-value for a particular door may be somewhat different from that shown when all the variables are taken into account.

- Glazing in aluminium doors is based on 18mm clear standard double glazing with an R-value of 0.32 m<sup>2</sup>K/W.
- Glazing in timber doors is based on 6mm clear single glazing with an R-value of 0.17m<sup>2</sup>K/W.

The graph below shows the maximum R-values that can be expected from each type of door construction. It is intended to give a general comparison between different construction materials and methods. Not all doors in each category will reach these R-values.



R-values of the door structures are calculated as per ISO 10077-2:2012 Thermal performance of windows, doors, and shutters - Calculation of thermal transmittance - Part2: Numerical method for frames.

R-values of panels are calculated as per ISO 6946:2007 Building components and building elements - Thermal resistance and thermal transmittance - Calculation method.

R-values of door assemblies are calculated as per ISO 10077-1:2017 Thermal performance of windows, doors and shutters - Calculation of thermal transmittance - Part1: General.

Material values as per NZS 4214 Table E.

No allowance has been made for:

- Door frames.
- Heat loss due to air leakage around the edges of the door.
- Hardware that could cause thermal bridging.
- Special elements such as cat doors, lead-lights, multi-point locking systems for example which could alter the R-value.

December 2021



NEW ZEALAND | 0800 10 10 28  
sales@parkwooddoors.co.nz  
parkwooddoors.co.nz

AUSTRALIA | 1800 681 586  
sales@parkwooddoors.com.au  
parkwooddoors.com.au