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FORZA DOORS
THERMAL TRANSMITTANCE (U-VALUE W/M2K)

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Thermal Transmittance, the measure of how much heat will pass through one square metre of a structure when air temperatures on either side differ by one degree, is generally applied to door sets. U-values are expressed in units of Watts per square meter per degree of temperature difference (W/m2K).

The thermal transmittance performance of a door set will vary according to the door set design therefore the following details need to be considered:

Door set size and configuration

Frame component materials and dimensions

Operating gap dimensions

Type, size and position of seals Door face material Glass

Glass type and glazed area

BS EN 10077-2-2003 calculations have been determined for Forza 44mm and 54mm flush leaf-based door sets using the following criteria:

Door leaf dimension: 2040 x 926mm incorporating Forza standard hardwood lippings

Facing material: 0.5 veneer Door frame: Forza type DFT104 2P

Door frame operating gaps: head/jamb & threshold 3mm

Acoustic and fire seals: product specific

BS EN 10077-2-2003 Calculated U-value

- Forza 44mm leaf: configuration type SG44.32A30S 2.1W/m2K
- Forza 54mm leaf: configuration type SG54.35A60S 1.8W/m2K

The performance of glass within door set vision panels and glazed screens will vary depending on the type and thickness of glass used. For guidance, typical (U-Value) performance for glazed elements are as follows:

Single Pane: 5.4W/m2K

Double Glazed: 2.6W/m2K