

**Report in Accordance with
BS EN ISO 10077-1:2006**

**Thermal Performance of
Windows, Doors & Shutters**

**Calculation of Thermal Transmittance
Part 1: Simplified Method**

CONFIDENTIAL

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1 Introduction

This document details the thermal performance of the Permadoor, Burns GRP Doorset detailed below which was commissioned by Trevor Wild of Permadoor.

The frame profile results detailed below are provided by computer simulation using LBL software program THERM 5.2 and validated against proofs in Annex D (D1 to D10) of BS EN ISO 10077-2:2003 / The frame profile results detailed below are provided from methods contained in BS EN ISO 10077-1:2006.

2 Summary of Results

2.1 Frame thermal transmittance (in accordance with BS EN ISO 10077-1:2006)

Frame Profile	Frame Thermal Transmittance (U_f)
Head	1.4 W/m ² K
Jamb	1.4 W/m ² K
Mullion	2.2 W/m ² K
Cill	4.7 W/m ² K

2.2 Linear thermal transmittance (in accordance with BS EN ISO 10077-1:2006)

Frame Profile	Linear Thermal Transmittance (ψ)
Head	0.047 W/m.K
Jamb	0.140 W/m.K
Mullion	0.044 W/m.K
Cill	0.064 W/m.K

2.3 Centre pane U-Value of glazing calculated in accordance with BS EN 673:1998

Glazing unit	Centre pane U-value (U_g)
Double glazed nominal dimensions 4-18-4, 100% air filled, uncoated float glass with Aluminium box spacer bar with 4.5mm Polyurethane secondary seal.	2.7 W/m ² K

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2.4 U-Value

The thermal performance of the door (U_w) in accordance with EN ISO 10077-1:2006 is:

2.0 W/m²K

All profile and PSI calculations are in accordance with BS EN ISO 10077-2:2003

3 Authorisation

	Issued by:	Checked by:
Signature:		
Name:	Richard Bate	Michael Handley
Title:	Technical Director	Senior Engineer

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