

SPECIFICATION DATABASE



GCP28 - 8/24 - V1.0

Royale
Collection

Centre Pane 'u' Value - 4/4/4 Toughened (2 x T+)



4 FT (1 4 Argon 90) 4 FT (1 4 Argon 90) 4 FT

Coating: PLANITHERM TOTAL+ FG #3 / PLANITHERM TOTAL+ FG #5

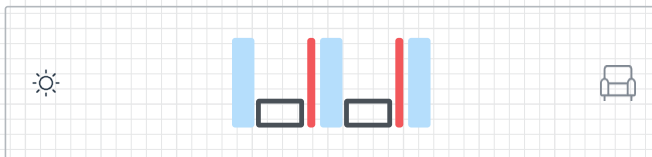
Computed by: Oli Pringle

Computed on: 13/08/2024

Product catalog: United Kingdom

Norms: EN410 (2011-04)

Glazing type



	Glazing 1 PLANICLEAR (4mm) - Tempered
	Cavity 1 Argon 90% 14 mm
	Glazing 2 PLANITHERM TOTAL+ FG PLANICLEAR (4mm) - Tempered
	Cavity 2 Argon 90% 14 mm
	Glazing 3 PLANITHERM TOTAL+ FG PLANICLEAR (4mm) - Tempered

Simulated performance datas

	Luminous Factors	CIE (15-2004)
	Light Transmittance (TL)	69%
	Outdoor Reflectance (RLe)	17%
	Indoor Reflectance (RLi)	17%
	Energy Factors	EN410 (2011-04)
	Transmittance (TE)	49%
	Outdoor Reflectance (Ree)	26%
	Indoor Reflectance (Rei)	26%
	Absorptance A1 (AE1)	6%
	Absorptance A2 (AE2)	12%
	Absorptance A3 (AE3)	7%
	Solar Factors	EN410 (2011-04)
	Solar Factor (g)	0.61
	Shading Coefficient (SC)	0.70
	Thermal Transmission	EN673-2011
	Ug	0.7 W/(m2.K)
	Angle relative to the vertical	0°
	Acoustics	EN 12758
	<i>Acoustic measurement values according to EN 12758 and from notified body</i>	
	Rw (C;Ctr)	32 (-1; -4) dB
	Ra	31 dB
	Ra,tr	28 dB
	STC (ASTM E413)	N/A
	OITC (ASTM E1332)	N/A
	Color Rendering	CIE (15-2004)
	Transmission (Ra)	98.2
	Reflection (Ra)	89.9
	Safety Class	EN 12600
	Pendulum Body Resistance	1 C3/1 C3/1 C3
	Anti-Burglary	EN 356
	Burglar Resistance	NPD
	Manufacturing Sizes	
	Nominal Thickness	40.0 mm
	Weight	30 kg/m²
	Sustainability	
	Carbon footprint	
	<i>The value is calculated regarding the composition computed based on the standard EN 15804+ A2 (2019)</i>	
	Global Warming Potential (GWP) – A1 - A3	EN 15804+ A2 (2019)
	(kg, CO ₂ eq./m ²) European average	64



Calumen® calculates the photometric characteristics and thermal transmission of glass using calculation algorithms which comply with the following standards: the European standards EN 410 and EN 673, the international standard ISO9050, the Japanese standard JIS R 3106/3107 and the Korean standard KS L 2514/2525. The functional output and calculation rules of Calumen® for standards EN 410 and EN 673 have been validated by TÜV Rheinland (report 89212153-01). The technical performances obtained according to these standards are provided for information only and are subject to amendment.

Only the values entered in the performance declaration available on the CE marking site of Saint-Gobain Glass are official. The sound attenuation indices are measured under laboratory conditions according to the standards EN ISO 10140 and EN 12758. The calculated indices are provided for information only. The accuracy for Rw index lies within a range of +1-2dB. The glass thickness calculations comply with the 2012 version of the DTU39-P4 description. The USER is responsible for ensuring that the correct calculation hypotheses are entered and the DTU39 is applied appropriately for the project concerned.