

Brunel Engraving Company

Specialist Commercial Engravers



RiG!D
L A M I N A T E

Rigid is a high quality, phenolic pressure laminate (HPL) which can be engraved mechanically or using laser. It is a 3 ply material that features an easy to engrave cap and a rich colour core. The consistent cap thickness means that the product engraves well even on a small text. CSI Rigid comes in a high gloss finish and offered in 8 of the most popular colour combinations. The product can be colour matched to Pantone shades and is available in an exterior grade version.

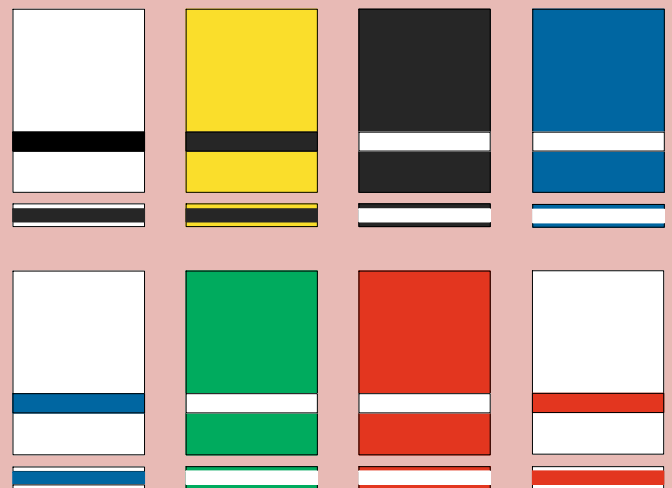
Material Specification

Sheet Size: 610 x 1200mm

Finish: Gloss

Thickness: 1.5mm & 3.00mm

Cutter: Laser or Rotating Carbide



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Technical Data

Parameter nit	U	Standard	Requirements	
			CGS	CFG
Thickness	[mm]	438-2.5	2.0+25.0 ± (0.2+0.8)	
Length	[mm]	438-2.6	+10/-0	
Width	[mm]	438-2.6	+10/-0	
Flatness	[mm/m]	438-2.9	≤ (3.0+8.0)	
Resistance to surface abrasion	IP [rpm]	438-2.10	≥ 150	
	Value [rpm]		≥ 350	
Resistance to impact	Drop height [mm]	438-2.21	t=(2.0+6.0); ≥ 1400	
			t ≥ 6.0; ≥ 1800	
Scratch resistance	Appearance grade	438-2.25	≥ 3	
Dry heat resistance	Appearance grade	438-2.16	≥ 4	
Light fastness (Xenon Arc)	Grey scale rating	438-2.27	4+5	
Resistance to immersion in boiling water	Mass gain [%]	438-2.12	t=(2.0+5.0); ≤ 5	t=(2.0+5.0); ≤ 7
	Thickness gain [%]		t ≥ 5.0; ≤ 2	t ≥ 5.0; ≤ 3
			Appearance grade	t=(2.0+5.0); ≤ 6
Resistance to staining	Group 1 & 2 grade	438-2.26	t ≥ 4; ≤ 4	
	Group 3 grade		≥ 4*	
Resistance to water vapour	Appearance grade	438-2.14	≥ 4*	
Resistance to cracking	Appearance grade	438-2.24	≥ 4*	
Flexural modulus	Stress [MPa]	EN ISO 178:2003	≥ 9000	
Flexural strength	Stress [MPa]	EN ISO 178:2003	≥ 80	
Tensile strength	Stress [MPa]	EN ISO 527-2:1996	≥ 60	
Density	[g/cm ³]	EN ISO 1183-1:2004	≥ 1.35	
Fire reaction classification		EN ISO 13501-1	t=(2+19): C-s1, d0	B-s2, d0
			t=(20+42): B-s1, d0	