

# TECHNICAL/SPECIFICATIONS

Astron High-Pressure Designer Panel is the ultimate elegant, long-lasting, and low-maintenance decorative panel suitable for the most demanding environments.

## KEY/FEATURES

- **Extremely tough and durable.**
- **Extensive style range**
- **Available in 3mm and 5mm substrate**
- **Completely impervious to water and moisture.**
- **Outstanding stain and wear resistance.**

Thickness	EN 438-2 section 5	According to the required thickness	02.0 < t < 03.0 = ± 0.20 mm 03.0 < t < 05.0 = ± 0.30 mm 05.0 < t < 08.0 = ± 0.40 mm 08.0 < t < 12.0 = ± 0.50 mm 12.0 < t < 16.0 = ± 0.60 mm 16.0 < t < 20.0 = ± 0.70 mm 20.0 < t < 25.0 = ± 0.80 mm
Density	ISO 1183-1	1.4	Min. 1.35GR/CM3
Wear Resistance	EN 438-2 section 10 CGS	IP = 185 Rev. Wear Value = 485 Rev.	Initial Point > 150 Rev. Wear Value > 350 Rev.
Scratch Resistance	EN 438-2 section 25 CGS	JN 4N	Flat Surface Min. 2 N Textured Surface Min. 3 N
Impact Resistance	EN 438-2 Big Ball section 21 CGS: 2.0 < 6.0 mm 1>6.0mm	No Crack. 4.5mm No Crack. 3.5mm	1400mm height no crack.. 50mm Max. 1800mm height no crack.. 50mm Max.
Resistance to Grazing (20 Hours @ 80°C)	EN 438-2 section 24 CGS	Level 4	Min. Level 4
Resistance to Dry Heat at 180°C	EN 438-2 section 16 CGS Glossy Surface Finish Other Surface Finish	Level 4 Level 5	Min. Level 3 Min. Level 4
Resistance to Water Vapour	EN 438-2 section 14 CGS Glossy Surface Finish Other Surface Finish	Level 4 Level 5	Min. Level 3 Min. Level 4
Resistance to Boiling Water	EN 438-2 section 11 CGS 2.0<t<5.0mm > 5.0mm  Glossy Surface Finish Other Surface Finish	2.2% 3.1% 0.55% 0.65% Level 4 Level 5	Max. 6% in weight Max. 6% in thickness Max. 2% in weight Max. 2% in thickness Min. Levels Min. Level 4
Resistance to Cigarette Burn	EN 438-2 section 30 CGS	Level 4	Min. Levels
Resistance to Staining	EN 438-2 section 26 CGS Group 1 + 2 Group 3	Level 5 Level 5	Min. Levels Min. Level 4
Flatness	EN 438-2 section 9 CGS 2.0 << 6.0 mm 6.0 << 10.0 mm t> 10.0 mm	1.23 mm 11.46 mm 1.87 mm	Max. 8 mm / 1 M Lengt Max. 5 mm / 1 M Lengt Max. 3 mm / 1 M Length
Light Fastness	EN 438-2 section 27 CGS Grey Scale	Level 5	Min. Level 4
High Temp. stability 70°C	EN 438-2 section 17 CGS 2.0<<5.0 mm > 5.0 mm	Level : W : L : W :	0.22 mm 0.35 mm 0.18 mm 0.23 mm L : Max. 0.4 mm W : Max. 0.8 mm L : Max. 0.3 mm W : Max. 0.6 mm
Tensile Strength	EN ISO 527-2 CGS	35 Mpa	Min. 60 Mpa
Flexural Strength	EN ISO 178 EDS, EOF	114 Mpa	Min. 80 Mpa
Flexural Modulus	EN ISO 178 EDS, EOF	16,522 Mpa	Min. 9000 Mpa
Coefficient of Linear Thermal Expansion (COTE)	ASTN O686-08	6. OX 10	rnm-rnmc

PERFORMANCE	CHEMICAL
No visible effect	Water, coffee, tea, milk, acetic acid, alcohol 96%, isopropanol, petrol, amyl acetate, acetone, household soap, ammonium hydrate 10%, detergents for dishwashing by hand, ketchup, cooking oil, trisodium phosphate 1%, caustic soda (>10%), citric acid 10%, wine, lipstick, grapefruit juice, wax, shoe polish, ink ballpoint pen, spirit dye pen, marking ink, hand cream.
Slight effect / no effect if completely removed within 10-15 minutes.	Hair dye, hydrogen peroxide 30%, mercury chromate 2%, hypochloric bleach, iodine 0.1%, hydrochloric acid (<10%), caustic soda (>10%).
Surface attack / requires instant removal	Hydrochloric acid (>10%), nitric acid (>10%), sulphuric acid (>10%).

## ENVIRONMENTAL AND SAFETY

Astron Designer Panel is a product produced through a strong commitment to ensuring that manufacturing, transportation, storage, usage, disposal and recycling are all done with a high regard for safety, health and protection of the environment. We support the safe handling of all our products.