ASTERITE® Metal
Technical Data Sheet

Aesthetics
The metallic effect in ASTERITE® Metal is made with special pigments that align in the sheet to give the novel sparkle and frostiness.

The sheet has a visual 'nap' like velvet and this means that it looks different from different directions. If a piece is cut from a sheet and is then rotated through 90 degrees, the two pieces will look very different. This also means that pieces from the same sheet or from batch to batch will look slightly dissimilar to each other.

In the centre of each sheet there is a dark 'eye'. This is not a defect but a visual effect caused by the alignment of particles. The sheet also looks different in different lights. The effect is good in daylight and under fluorescent lights. However, under halogen bulbs it truly comes alive. The colour of the sheet changes slightly under the different light sources i.e. it is metameric.

Masking
The frosted surface of ASTERITE® Metal cast acrylic sheet is protected by a non-thermoformable grade of masking.

Thermoforming
The pigmentation used in ASTERITE® Metal is relatively large compared to standard products and thus additional care may be required during thermoforming. The recommended forming temperature is in the range 150-170°C and ovens should be run 10-15°C above this. Evacuation of the mould should be done at a moderate and steady speed.

Reinforcement
ASTERITE® Metal sheet can be reinforced with the same resins used for standard ASTERITE® Acrylic Sheet but we would recommend careful control of the resin : glass ratio between 2 and 2.5 : 1 and that the laminate is well consolidated by firm rolling. Should adhesion problems be encountered then some abrasion of the surface may be necessary prior to reinforcement, but in our experience this is rarely needed.

External Specifications
ASTERITE® Metal complies with ISO 7823-1 and EN 263.
ASTERITE® Metal is approved by the French AFNOR "NF" quality mark.
Perspex International Ltd is registered to ISO 9001 and ISO 14001.

Table of Properties
Values quoted for properties of ASTERITE® Metal are the results of tests on representative samples and do not constitute a specification.

Property	Test Method	Unit	Value
General			
Density	ISO 1183/A	g cm^{-3}	1.2
Water Absorption	ISO 62/1 (50mm^2 Sample)	mg	26
UV Resistance		Grey Scale	5
Colour Fastness		Grey Scale	5
Thermal Properties			
Vicat Softening Point	BS2782 : 120 C	°C	107
Shaping Temperature (Optimum)		°C	150 - 170
Coefficient of Thermal Expansion - Linear	Din 5372 (0-50 °C)	Mm K^{-1}	7.7 x 10^{-5}
Mechanical Properties			
Tensile Strength	ISO R527 (5 mm/min)	MPa	> 70
Tensile Modulus	ISO R527 (5mm/min)	MPa	3100