

ABS

Acrylonitrile Butadiene Styrene



Due to its impact resistance and ease of thermoforming, the use of ABS has grown to cover a multitude of applications ranging from automotive trim panels to industrial casings.

Benefits

- Good impact resistance
- Easily thermoformed
- High rigidity

Applications

- Automotive, boat, and truck panels
- Poker machine faces
- Suitcases
- Power box casing
- Decorative panels
- Packaging

Dimensions

Standard stock sheet range is 1350mm x 2540mm.
Custom sizes can be supplied to a maximum width of 1550mm x any length subject to handling, transport, and quantity.
Thickness range from 1.0 - 6mm.



Finishes & Colors

- Haircell black and white
- Smooth black and white
- Stipple
- Sandblast
- Leathergrain

All other colors are available on application.



ABS is used in the entertainment / pokies and auto industries.

Product Data

The following values are typical for 3mm coloured ABS sheets at nominal 24°C temperature. Tests were conducted in the extrusion direction.

Physical Properties	Test Method & Units	ABS
Specific Gravity	ASTM D-792	1.06
Rockwell Hardness	ASTM D-785	102
Mechanical Properties		
Tensile Strength	ASTM D-638, kg/cm ²	400
Elongation at Break	ASTM D-638, %	40
Flexural Strength	ASTM D-790 kg/cm ²	640
Flexural Modulus	ASTM D-790, 104 kg/cm ²	2.3
Notched Izod Impact Strength	ASTM D-256	
	1/8" kg-cm-cm	25
	1/4" kg-cm-cm	20
Thermal Properties		
Deflection Temperature Under Load, Annealed	ASTM D-648, °C	98
Vicat Softening Point	ASTM D-1525, °C	105
Continuous Service Temperature Range °C	(Dependent on part "molded-in" stresses)	71-82
Longitudinal Orientation Shrinkage		
150 °C/20min)	K-LRT1, %	6

Tolerances

All dimensions are measured at 22 - 24°C.

Physical Properties	Length	Width	Thickness
Sheet length up to 1.5m	+3/-1.5mm	+1.5/-1.5mm	35%
Sheet length 1.5m to 4m	+10/-0mm	+5/-0mm	35%
Special sizes over 4m	+20/-0mm	+5/-0mm	35%

These figures report reliable and accurate information to the best of our knowledge, however, guarantees cannot be given due to the conditions of use being beyond our control. Sheeting applications should be considered on their merits and, if in doubt, contact YPP.