

LUCITE INTERNATIONAL - DARWEN

PERSPEX® CAST ACRYLIC SHEET SPECIFICATION, PX1

1. SCOPE

This specification is applicable to PERSPEX® cast acrylic sheet and block (1-60 mm nominal thickness) for general-purpose use.

It is not applicable to LUCITE® SW, AG or other special grades.

2. THICKNESS TOLERANCE

PERSPEX® SHEET		PERSPEX® BLOCK	
Thickness (mm)	Tolerances (mm)	Thickness (mm)	Tolerances (mm)
1.0	±0.25	30	26.6 to 33.4
1.5	±0.40	40	35.6 to 44.4
2.0	±0.6	50	44.6 to 55.4
2.5	±0.65	60	53.6 to 66.4
3.0	±0.7		
4.0	±0.8		
5.0	±0.9		
6.0	±1.0		
8.0	±1.2		
10.0	±1.4		
12.0	±1.6		
13.0	±1.7		
15.0	±1.9		
20.0	±2.4		
25.0	±2.9		

3. CUTTING TOLERANCES

3.1 Length and Breadth (at 20°C)

PERSPEX [®] SHEET		PERSPEX [®] BLOCK	
Nominal Dimension (mm)	Tolerance (mm)	Nominal Dimension (mm)	Tolerance (mm)
1250 or more	-0/+6	1220 or more	-0/+6
1249 or less	-0/+2	1219 or less	-0/+2

The allowance for sheet temperatures other than 20°C is 0.7 mm per meter per 10°C.

3.2 Straightness of Saw Cut

The maximum deviation from a standard straight edge shall not exceed 0.75 mm.

3.3 Rectangularity

The maximum deviation from squareness shall not exceed 1 mm per 800 mm.

4. VISUAL QUALITY

Defects are classified as in the following table:

CLASSIFICATION	SURFACE DEFECTS	INCLUSION DEFECTS
Unacceptable	>3 mm ²	>3 mm ²
Acceptable	1 to 3 mm ²	1 to 3 mm ²
Negligible	<1 mm ²	<1 mm ²

There shall be no bubbles, cracks or inclusions and surface defects defined as unacceptable.

There shall be no defect defined as acceptable within 500 mm of another acceptable defect anywhere in or on the sheet.

There shall not be a significant amount of fine inclusion defects, each particle of which is defined as negligible, within 1 m² anywhere in the sheet.

5. COLOUR

The colour of the sheet shall be a close visual match to the approved master sample.

6. SOFTENING POINT

Test method: BS2782 Method 120C and ISO 306 Method B50 after drying the samples for a minimum of 24 h at 80°C.

The Vicat softening temperature (VST) shall not be less than 105°C

7. THERMAL STABILITY (NOT APPLICABLE TO BLOCK)

Test method: PERSPEX[®] laboratory test method number B26.

There shall be no surface haze nor loss of transparency and the sheet shall be substantially free from gels and matting. For clear and transparent coloured sheet, there shall be no distortion of a striped panel viewed normally through the sheet.

8. ISO 7823-1

PERSPEX[®] meets the requirements of ISO 7823-1 (2003).

9. PACKAGING

PERSPEX[®] is supplied with the surfaces covered by protective film. For carriage, sheets are packed on pallets. These pallets are not intended for long term storage of sheet.



Paul Littlefield
QI Manager
June 2016