

AIRDEC-WS LHR

AIRDEC-WS LHR is a decorated thermoplastic sheet laminate that can be thermoformed into aircraft interior parts that require decoration on both sides, such as window shades. AIRDEC-WS LHR meets the ¹FAA heat release and smoke emission requirements for passenger aircraft cabin interior parts.

THICKNESS	AIRDEC-WS LHR is available in thicknesses from 0.020" to 0.060" thick, to provide the optimum balance of part depth and stiffness.
COLOR	AIRDEC-WS LHR is available in an unlimited number of colors and patterns on both sides.
TEXTURE	AIRDEC-WS LHR is available in a wide range of textures on both sides, and it will also accurately reproduce textured mold detail.
GLOSS	AIRDEC-WS LHR is available in both high and medium gloss variations.
CLEANING	Because of its ² Kynar [®] surfaces, AIRDEC-WS LHR possesses exceptional resistance to staining, ³ solvents, chemicals, and abrasion, and is very easy to clean with common cleaners.
QUALITY	Founded on years of experience, high quality materials, and a very controlled process, the color, texture, and integrity of this product is guaranteed.
PROPERTIES	AIRDEC-WS LHR is a thermoplastic sheet laminate, which exhibits excellent part stiffness and impact resistance, and accurate reproduction of mold detail in conventional thermoforming operations at forming temperatures of 335°F to 365°F (168°C to 185°C).
TYPICAL APPLICATIONS	Window Shades
FORMAT	AIRDEC-WS LHR is available in sheets nominally 48 inches (1219 mm) wide, by 96 inches (2438 mm) long. Other sizes are available upon request.

¹ FAR 25.853 Paragraph (d) and FAR 25 Appendix F

² Kynar[®] is the registered trademark of ATOFINA Chemicals Inc.

³ The use of Ketone solvents is not recommended.

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CHARACTERISTIC	TEST METHOD	UNIT	TYPICAL VALUES
THICKNESS	Micrometer before texturing	inch / mm	0.020 / 0.50 ² 0.040 / 1.0 ³
WEIGHT	ASTM D 461 (11)	oz/yd ² / g/m ²	25 / 848 ² 48 / 1630 ³
ADHESION OF LAYERS	DMS 2290 4.5.4 and 3.4.4	Pass / Fail	Pass ^{2,3}
COLORFASTNESS TO LIGHT	DMS 2292 4.5.2 and 3.4.2 FTMS No. 191 Method 5660	Pass / Fail	Pass (no change after 50 hours)
TENSILE STRENGTH	ASTM D-638	psi / MPa	6400 / 44.1 ¹
FLEXURAL STRENGTH	ASTM D-790	psi / MPa	10200 / 70.3 ¹
FLEXURAL MODULUS	ASTM D-790	psi / MPa	440000 / 3034 ¹
HARDNESS	ASTM D-785	Rockwell R	110 ¹
HEAT DEFLECTION TEMPERATURE	ASTM D-648	°F / °C at 264 psi	168 / 75.5 ¹
HEAT RELEASE	FAR 25.853 (d) / FAR 25 App. F Pt. IV Amdt. 83	Pass / Fail	Pass ^{2,3}
SMOKE DENSITY	FAR 25.853 (d) / FAR 25 App. F Pt. V Amdt. 83 ASTM E-662	Pass / Fail	Pass ^{2,3}
FLAMMABILITY (60 Second Vertical)	FAR 25.853 (d) / FAR 25 App. F Pt. IV Amdt. 83	Pass / Fail	Pass ^{2,3}
DRYING TIME	Experiment	Hours	1 hour at 250°F (121°C) per 0.040 inches (1 mm) of thickness
FORMING TEMPERATURE	Experiment	°F / °C	335°F - 365°F / 168°C - 185°C
MOLD SHRINKAGE	Experiment	in / in mm / mm	0.005 - 0.007 ¹ 0.005 - 0.007 ¹

¹ Tests performed on 0.125-inch thick material

² Tests performed on 0.020-inch thick material