

## EUROPLEX® F for aircraft applications

### Highly impact-resistant, flame-retardant polycarbonate sheets

EUROPLEX® F3, F7 and F6 are flame-retardant grades of polycarbonate sheet (PC) whose flame-retardant properties have been further improved beyond those of standard polycarbonate sheet. The EUROPLEX® F series meets the fire standard requirements for many applications in public transportation and also offers excellent impact resistance and strength. It is easy to fabricate and can be formed into complex shapes using standard thermoforming equipment.

#### EUROPLEX® F3

EUROPLEX® F3 is a series of opaque PC sheets available in over 100 different colors; virtually any custom color can be provided upon request. The sheets are manufactured with a matte texture (hair cell) on one side and are ideally suited for a wide range of applications such as interior panels, seat shells, and other components in public transport, computer housing, electronic and electrical equipment, as well as seat lining, tables, trays and carts in aircraft.

#### EUROPLEX® F7

EUROPLEX® F7 is a transparent, UV stabilized PC sheet with especially low smoke emissions intended for interior applications. It is used for dust covers, lighting covers, emergency lighting systems and other similar applications in aircraft, and is ideally suited wherever lightweight, transparent and flame-retardant materials are required.

#### EUROPLEX® F6

EUROPLEX® F6 is a translucent white polycarbonate sheet with a light transmittance of 44 % (3.0 mm). The material was specially developed and is used for lighting covers in aircraft, busses and rail cars.



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### Requirements, approvals

Method	EUROPLEX® F3	EUROPLEX® F7	EUROPLEX® F6
FAR 25.853 (a) (1) (i) AITM 2.0002; 60 s vertical burn	pass	pass*	pass*
FAR 25.853 (a) (1) (ii) AITM 2.0002; 12 s vertical burn	pass	pass	pass
FAR 25.853 (c) AITM 2.0007 Smoke density	pass	pass	pass
AITM 3.0005; Toxicity	pass	pass	pass
UL 94 Flammability rating		V0*	V0**

\* Upon and including 2.0 mm / \*\* upon and including 3.0 mm

## Physical properties

Property	Test method	Unit	EUROPLEX® F3 / F7 / F6
Density	ISO 1183	g/cm <sup>3</sup>	1.2
Vicat	ISO 306	°C	145
Max. service temperature		°C	115
Tensile strength	ISO 527	MPa	60
Tensile elongation	ISO 527	%	80
Modulus of elasticity	ISO 527	MPa	2,100
CHARPY impact strength	ISO 179	KJ/m <sup>2</sup>	No failure

## Sales range

Grade	Thickness mm	Width mm	Length mm	Texture, surface
EUROPLEX® F3	0.8 - 4.0	1,250 or 1,400	up to 6,000	hair cell H
EUROPLEX® F7	1.5 - 5.0	1,250 or 1,400	up to 6,000	smooth or prismatic
EUROPLEX® F6	2.0 - 3.0	1,250 or 1,400	up to 6,000	smooth

For more information, please contact

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