

# Technical Data Sheet

## Aerospace Transparencies



### Boeing F-15 windshield



U.S. Air Force photo/Staff Sgt. T. Tolley

#### Windshield

Features	Benefits
Original-equipment supplier to USAF	<ul style="list-style-type: none"><li>• Proven reliability</li><li>• Latest design and upgrades</li><li>• Worldwide customer and technical support</li></ul>
Service flexibility	<ul style="list-style-type: none"><li>• Transparency interchangeability</li><li>• Quick change-out</li><li>• Worldwide customer support</li></ul>
Acrylic-polycarbonate laminate	<ul style="list-style-type: none"><li>• Superior bird-strike performance</li><li>• Superior optics</li><li>• Superior environmental durability</li></ul>
Aluminum-Inconel® alloy frame	<ul style="list-style-type: none"><li>• Tested to 4-pound bird at 600 knots</li><li>• Superior supportability</li><li>• Superior maintainability</li><li>• Reusable frame for cost savings</li></ul>

PPG's aerospace transparencies business is a leading and experienced manufacturer of windshields, canopies, windows, blast barriers and specialty transparencies for military applications. With a broad range of capabilities, PPG is able to design and produce advanced-technology transparencies to meet the demanding requirements of military air and surface operations.

PPG offers a variety of transparent structural materials to meet specific design and performance requirements. In-house capabilities allow PPG to engineer and produce transparent materials specially tailored to aerospace applications.

PPG's thermally tempered glass offers impact and thermal shock resistance as well as high load-carrying capabilities. PPG's chemically strengthened glass provides superior strength and durability. Special-composition glass affords enhanced optical properties such as high light transmittance especially in the near infrared (IR) range, enabling PPG to produce windshields compatible with today's sophisticated night vision systems.

Plastic substrate materials currently in production include acrylic that is strong and lightweight, and polycarbonate that has superior impact resistance and a high strength-to-weight ratio. In development are exciting, new materials with superior structural properties that have the potential to replace both acrylic and polycarbonate.

PPG interlayers bond the plies together and provide ballistic properties, bird-impact resistance and pressure "fail-safe" capability.

Grids and thin metal films form the basis of PPG AIRCON®, NESA®, NESATRON® and SIERRACOTE™ electrical heating systems for anti-ice and anti-fog capabilities. Other PPG advanced coatings and technologies help protect transparencies and aircrews from operational or environmental threats, and provide a variety of performance enhancements. A few of these are solar heat reduction, laser protection and electromagnetic interference (EMI) shielding. Such technologies are designed to be compatible with night vision systems and other optical requirements.

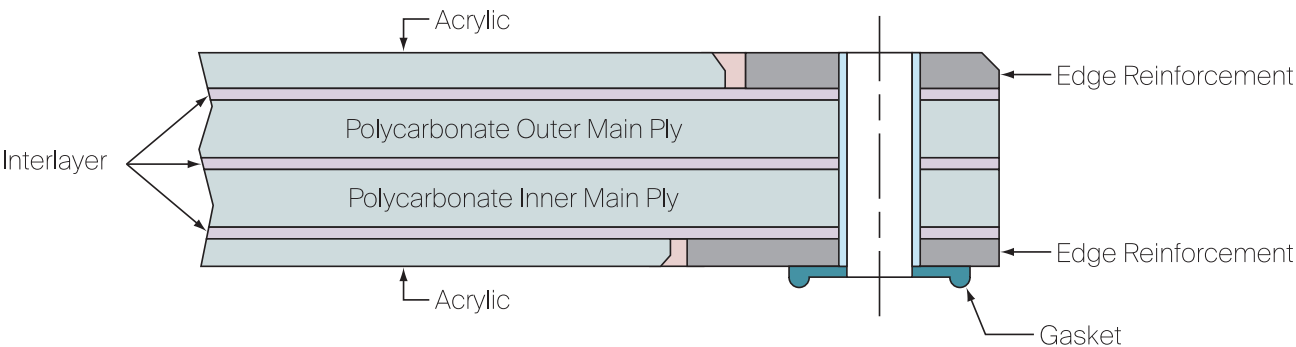
PPG transparencies have flown and participated in numerous air and surface military missions. The company is a leader in its transparency technical capabilities and infrastructure, OEM and operator support, and ability to supply parts worldwide on a timely and affordable basis.

#### Additional information

Details on pricing, warranty and delivery are available by contacting your PPG aerospace transparencies sales representative or customer service representative.

# Boeing F-15 windshield

## Windshield



## Part numbers

Windshield	U.S. national stock number	PPG part number
Windshield	1560-01-381-4941	166700-01
Windshield	1560-01-381-4973	166700-03
Windshield	1560-01-384-3372	166700-05

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