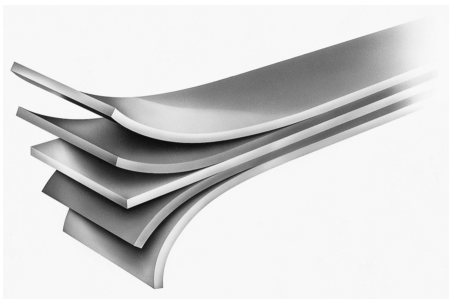




Aerospace Market  
**GLARE®** Laminate with  
**S-2 Glass®** Fiber



A380 Airbus Using *GLARE* Laminate with *S-2 Glass* Yarns for Aircraft Skins, Floor Panels and Fire Walls



*GLARE* Laminate; Alternating Layers of *S-2 Glass*  
UD Tape and Aluminum

### Product

GLARE® Laminate

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### Process

UD Prepreg in Fibre Metal  
Laminates (FML)

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### Provider

Fokker Aerostructures BV. (NL)  
Aviation Equipment Inc. (USA)

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## GLARE® Laminate with S-2 Glass® Fiber

Aircraft manufacturers worldwide are exploring new materials that can save weight. One of the most promising materials under evaluation for primary and secondary aircraft components is *GLARE* laminate, a member of the fiber metal laminates family developed by Delft University of Technology, technically supported by the Fibre Metal Laminate Centre of Competence (FMLC) (<http://www.fmlc.nl/>) and by Aviation Equipment Inc. in the US. The technology is owned by Structural Laminates Company.

*GLARE* laminate with *S-2 Glass* reinforcement from Advanced Glassfiber Yarns offers significant weight savings (15-25 percent) compared to conventional aluminum alloys. Corrosion resistance is enhanced as the laminate's structure acts as a barrier to the penetration of moisture.

All major airframe manufacturers including Airbus Industrie, Boeing and Fokker Aerostructures are evaluating and qualifying *GLARE* laminate for applications, ranging from aircraft skins to floor panels and fire walls.

Outstanding fatigue resistance and impact properties, impressive mechanical properties and solid fire resistance are some of *GLARE* laminate's many desirable attributes.



S-2 Glass® Conventional Roving Package

### Features

*GLARE* laminate is produced using autoclave technology.

Continuous *S-2 Glass* fibers bridge the aluminum splices.

Crack growth rates 10 to 100 times slower than aluminum.

High temperature performance of *S-2 Glass* fiber is 150°C greater than E Glass.

### Benefits

Allows existing manufacturing technology and investments to be used.

Allows tailor-made skins of any size, not limited by the width of aluminum rolls.

Provides outstanding fatigue resistance.

Provides excellent fire resistance, enhancing safety.



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For more information, visit our Web site at [www.agy.com](http://www.agy.com)

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