



Ceramic Textiles & Composites

3M™ Nextel™ Flame Shield AL-1

3M introduces Nextel™ Flame Shield AL-1, an innovative, lightweight, cost effective flame barrier. The easy to fabricate and install flame shield is composed of Nextel Ceramic Fiber Paper encapsulated in a polyimide film. The result is a versatile, abrasion resistant and water resistant laminate.

Responding to reports of in-flight and ground fires on certain airplanes, the United States Federal Aviation Administration (FAA) issued Airworthiness Directive (AD) 2000-11-01 and 02, May 26, 2000, mandating replacement of all metallized polyethyleneterephthalate (MPET) insulation in McDonnell Douglas aircraft. Nextel Flame Shield, approved as a solution to this important safety issue, passes all required FAA burn tests and can be applied directly over existing insulation, wiring and ductwork, thus providing a safe, cost, and time-effective solution.

Typical Properties

Weight per Unit Area	4.4-5.3 oz/sq.yd. (150-180 g/sq.m.)
Thickness	12-20 mils (0,3-0,5 mm)
Moisture Permeability (maximum)	1.25 perms
Burst Strength (minimum)	106 psi
Puncture Resistance (minimum)	23 pounds (10,4 kg)



MPET Insulation *before* installation of 3M™ Nextel™ Flame Shield AL-1.



MPET insulation *after* installation of 3M™ Nextel™ Flame Shield AL-1.

Specified by
 Delta Air Lines

Important Notice to Purchaser:

All statements, technical information and recommendations contained herein are based on tests 3M believes to be reliable, but the accuracy or completeness thereof is not guaranteed, and THE FOLLOWING IS MADE IN LIEU OF ALL WARRANTIES EXPRESSED OR IMPLIED:

SELLERS'S OR MANUFACTURER'S ONLY OBLIGATION SHALL BE TO REPLACE SUCH QUANTITY OF THE 3M PRODUCT PROVED TO BE DEFECTIVE. NEITHER SELLER NOR MANUFACTURER SHALL BE LIABLE FOR ANY LOSS OR DAMAGE, DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL, REGARDLESS OF THE LEGAL THEORY ASSERTED, INCLUDING CONTRACT, WARRANTY, NEGLIGENCE OR STRICT LIABILITY ARISING OUT OF THE USE OR THE INABILITY TO USE THE PRODUCT. BEFORE USING, USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR THE INTENDED USE, AND USER ASSUMES ALL RISK AND LIABILITY WHATSOEVER IN CONNECTION THEREWITH.

The foregoing may not be changed except by an agreement signed by officers of seller and manufacturer.



Ceramic Textiles and Composites

3M Center, Building 207-1S-23
St. Paul, MN 55144-1000

Toll Free within the USA: (877) 992-7749
From outside the USA: (651) 575-6192
FAX (651) 736-5860
www.3M.com/ceramics

3M Canada

300 Tartan Drive
London, Ontario, Canada
N5V 4M9

(800) 265-1840 Ext. 6003
FAX (519) 452-6103

3M Deutschland GmbH

**Ceramic Textiles &
Composites, Europe**

Carl-Schurz-Str. 1
41453 Neuss, Germany

49-2131-142911
FAX: 49-2131-143898

98-0400-6704-7

09/02