



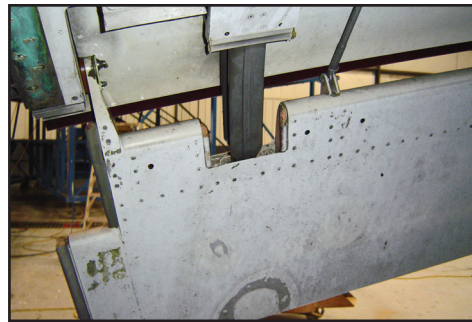
Aircraft Flight Surface Protection Solution


SOLUTION PROFILE - Aircraft Flap and Spoiler Lower Surface Protection

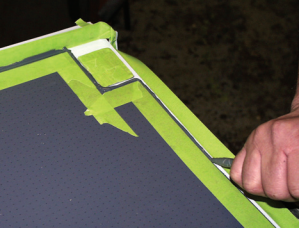
Process/Shop: Airlines that own or operate 737 and DC-9 aircraft.

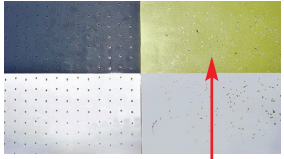
Key Issues: Impact damage

Application Attribute: Installing 3M™ Polyurethane Protective Tape 8641 on inboard flap and spoiler lower surfaces helps prevent dents and delamination caused by foreign object damage (FOD).



|  <p>PRODUCT SOLUTION</p> | | <p>3M ID</p> | <p>3M UPC</p> |
|---|--|---------------------|----------------------|
| | 3M™ Polyurethane Protective Tape 8641 | 70-0001-1490-3 | N/A |
| | 3M™ Adhesion Promoter 86A | 70-0707-4280-7 | 0 00 21200 315923 |
| | 3M™ Scotch-Weld™ Epoxy Adhesive DP-190 | 62-3553-1435-2 | 0 00 21200 226472 |


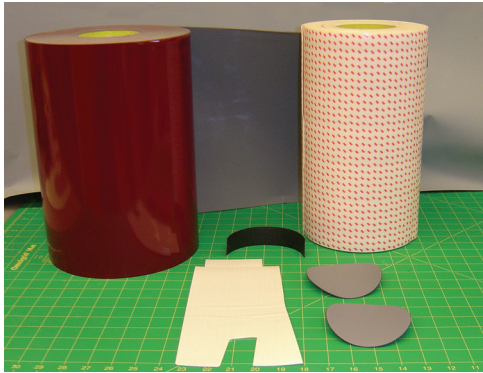
|  <p>KEY BENEFITS</p> | |
|--|--|
| | <p>Excellent Impact Protection: Polyurethane Protective Tape 8641 protects composite structures from dents and delamination caused by FOD.</p> |
| | <p>Fast and Easy Application: Polyurethane Protective Tape 8641 is easy to install. It has strength and body, which allows it to be easily unrolled and handled without tearing. Prepare surface by scuffing with fine abrasive and cleaning with Isopropyl alcohol. Apply Adhesion Promoter 86A to the perimeter of the flight surface. Peel a protective liner from the adhesive side of the tape, and apply the tape directly onto the flap, spoiler or flight surface to be protected. Complete installation by edge sealing the tape with 3M™ Scotch-Weld™ DP-190.</p> |
| | <p>Conformable Product: Polyurethane Protective Tape 8641 conforms to rivets and surfaces to provide a smooth paint like appearance. It readily accepts paint for custom color applications with proper preparation procedures.</p> |

|  <p>KEY ADVANTAGES</p> | |
|--|--|
| | <p>Pressurized Surface Application: Perforated Polyurethane Protective Tape 8641 can be installed on pressurized surfaces for impact protection.</p> |
| | <p>Durable Product: Polyurethane Protective Tape 8641 provides a unique combination of high strength, impact, puncture and abrasion resistance.</p> |
| | <p>Military History: Polyurethane Protective Tape 8641 has been used for several years on U.S. Military transport aircraft under the most demanding conditions. It has provided impact protection while operating on unimproved runways around the world.</p> |
| | <p>Helps Reduce Maintenance Costs: Polyurethane Protective Tape 8641 has been proven to significantly reduce dents and delamination on aircraft flight surfaces.</p> |

80 Grit blast media damaged unprotected side.

3M AIRCRAFT FLAP AND SPOILER LOWER SURFACE PROTECTION

| RELATED GOVERNMENT REGULATORY, INDUSTRY SPECIFICATIONS AND EXPERIENCE | |
|---|---|
| Engineering Approval | 3M™ Polyurethane Protective Tape 8641 is used by global airlines and the U.S. Military to minimize impact damage to flight surfaces. Each airline must approve and incorporate this into their own maintenance manuals until a broader authorization can be obtained. |

| | | |
|---|---|--|
| <p>SOLUTIONS FOR SURFACE PROTECTION</p>  <p>Protect against expensive damage</p> | <p>Reduce Expensive Repairs on composite and metal skin with composite core flight surfaces.</p> <p>Adhesion to Structure: Polyurethane Protective Tape maintains adhesion to flight surfaces.</p> <p>Fast and Easy Application: Polyurethane Protective Tape provides high strength, long service life and impact resistance.</p> <p>Available Colors: Polyurethane Protective Tape 8641 is available in gray, white, and black; and can be painted to match the livery of choice.</p> <p>Standard Inspection Techniques may be performed while film is in place.</p> |  <p>3M™ Polyurethane Protective Tape Rolls</p> |
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For Additional Information

To request additional product information or to arrange for sales assistance, call toll free 1-800-235-AERO (800-235-2376). Address correspondence to: 3M Aerospace and Aircraft Maintenance Division, 3M Center, Building 223-1N-14, St. Paul, MN 55144-1000.

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For Additional Product Safety and Health Info.

See Material Safety Data Sheet.

3M Aerospace and Aircraft Maintenance Division

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