THE AVIATION POINT · THEAVIATIONPOINT.COM · THE AVIATION POINT · THEAVIATIONPOINT.COM

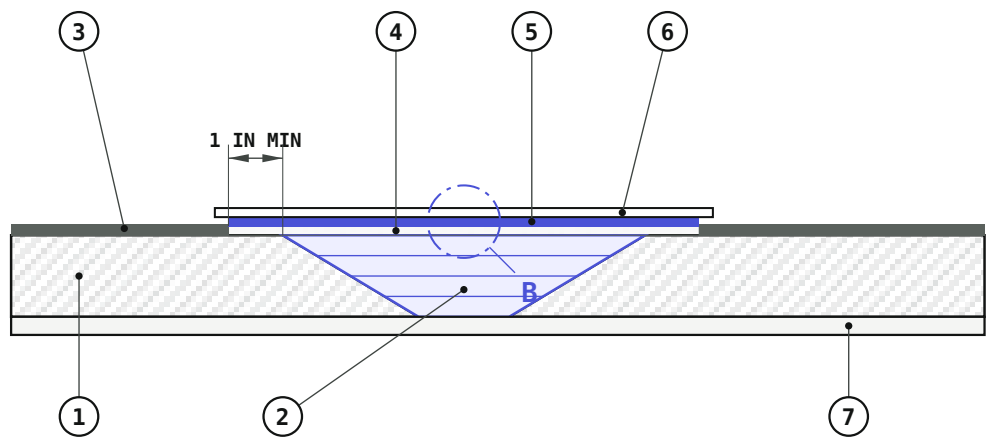
Finishing and Painting a Composite Repair

Strip · sand · seal · prime · conductive coat · topcoat

REFERENCE DRAWING — NOT APPROVED DATA · THE SRM ALWAYS GOVERNS

SECTION A–A

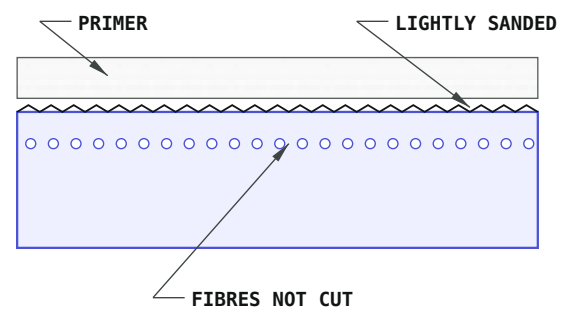
FINISH OVER A SCARF REPAIR · LAYERS NOT TO SCALE



FINISH AND CONDUCTIVE COATING REMOVED 1 IN BEYOND THE TAPER

DETAIL B · PATCH SURFACE

SCALE 8:1



EPOXY SANDING PRIMER: 320 GRIT, DUAL ACTION ORBITAL SANDER (FAA 8–9)

PRIMERS OVER COMPOSITE

PRIMER	USE	SOURCE
Epoxy sanding primer	Base over composites; sands to 320 grit	FAA 8-9
Gray enamel undercoat	Non-sanding; good on composite substrates	FAA 8-3
UV primers and paints	Protect the resin from UV light	FAA 7-15

STRIPPING OLD PAINT

METHOD	NOTE	SOURCE
Plastic media blasting	Less visual damage than sanding on composite	FAA 8-20
Laser stripping	Developed to remove coatings from composites	FAA 8-20
Sanding	Lightly, without damaging the fibres	FAA 7-37

PARTS LIST

#	ITEM	NOTE
1	Parent laminate	Cut on the taper
2	Repair plies	Smooth, no pits
3	Old finish	Removed near the repair
4	Primer	Per the SRM
5	Conductive coat	Lightning protection
6	Topcoat	UV protection
7	Inner face	Undisturbed

Finish system, layer order and thickness: the SRM or the paint maker.

Restore the conductive coating.

NOTES

1. Dimensions in inches. Do not scale: the SRM sets the values.
2. For reference. The applicable manual always governs.
3. Based on FAA-H-8083-31B ch. 7, 8.

REVISIONS

REV	DESCRIPTION	YEAR
A	First issue	2026

The Aviation Point.			Structural repair reference
TITLE Finishing composites			
DRAWING NO. TAP-DWG-125	REV A · 2026	SCALE NTS	SHEET 1 OF 1
APPLIES TO Composite parts			
DO NOT SCALE DRAWING			

Section, detail of the patch surface, primers, stripping methods and parts list, after FAA-H-8083-31B chapters 7 and 8.

Primers over composite

Primer	Use	Source
Epoxy sanding primer	Excellent base over composites; finish sanded with 320 grit on a dual action orbital sander; compatible with two-part epoxy primers and polyurethane topcoats	H 8-9
Gray enamel undercoat	Single-component, non-sanding; a good primer for composite substrates	H 8-3
UV primers and paints	Protect composite structure from UV light	H 7-15

What to check when the finish is done

Check	How	Source
Patch surface smooth, fibres intact	Visual, before primer	H 7-37
Conductive coating restored over the whole stripped area	Visual against the SRM; electrical check if the SRM asks	H 7-35, 7-37
No sanding scratches, fisheyes or blushing	Visual, in good light	H 8-12 to 8-14
Repair inspected after finishing	Visual, tap and/or ultrasonic	H 7-37

Key points

- **Remove the finish** and conductive coating at least 1 in beyond the taper.
- **Sand the patch lightly;** never cut the fibres.
- **Sand and seal** composite before paint, or scratches show.
- **Epoxy sanding primer** or gray enamel undercoat over composite.
- **Restore the conductive coating** and the UV topcoat.
- **System, order and thickness** from the SRM or the paint maker.

Step by step

1. Remove the finish 1 in beyond the taper.
2. Strip with a method the SRM allows.
3. Sand the cured patch lightly; keep the fibres.
4. Seal, clean and prime.
5. Restore the conductive coating; topcoat.
6. Inspect the repair and the finish.

SOURCES · FAA-H-8083-31B, Aviation Maintenance Technician Handbook: Airframe, Chapters 7 and 8

SCAN · OPEN THIS GUIDE
theaviationpoint.com/composites/finishing/

Educational reference only, not approved data. Always consult the applicable SRM, AMM, or AC 43.13-1B and your certifying authority.