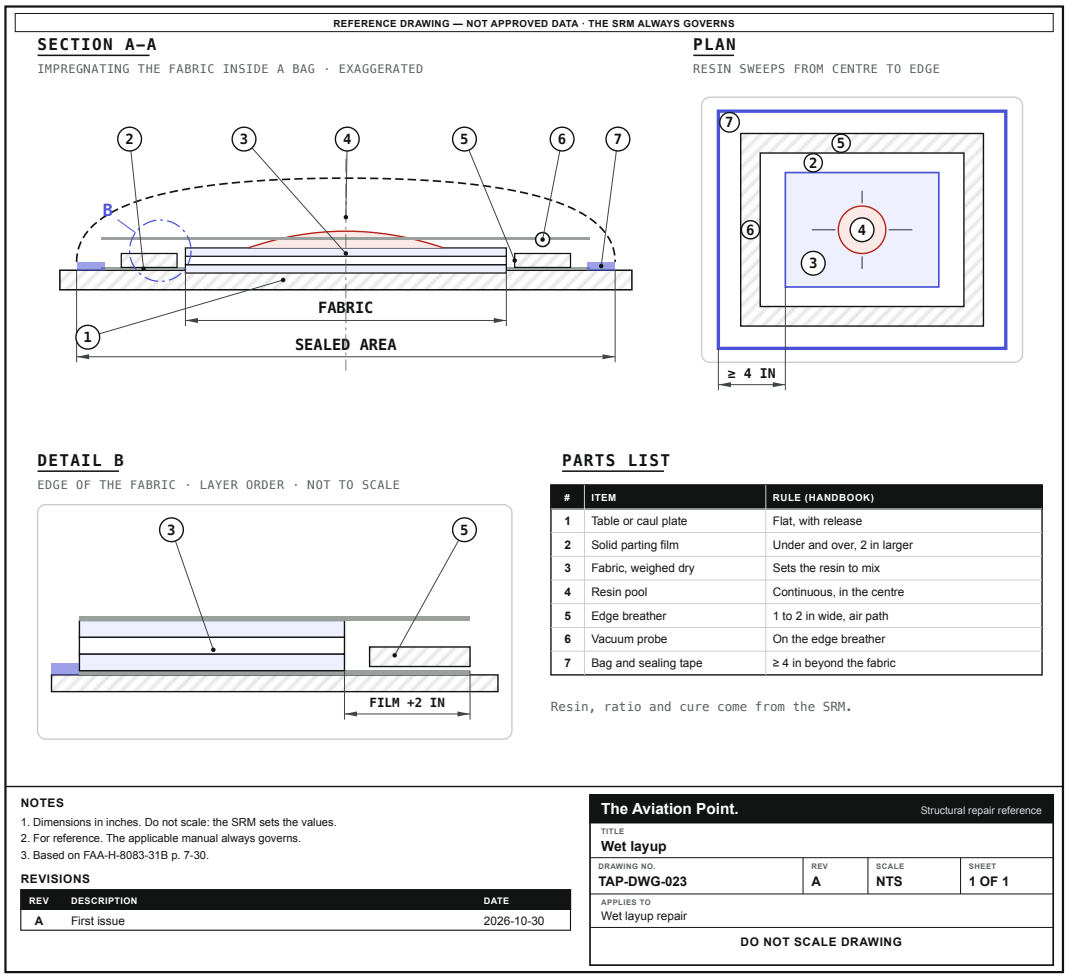
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Wet Layup and Impregnation

Weigh · mix · impregnate · bag · cure



Section, plan, detail of the fabric edge and parts list, after FAA-H-8083-31B pp. 7-29 to 7-31.

How much resin

Source	What it says	Use
Handbook p. 7-12	A 60:40 fibre-to-resin ratio is considered optimum. Fibres showing at the surface mean resin starved; too much resin adds weight	Judge the finished part
AC 43.13-1B para. 3-3a(2)	A weight of resin equal to the weight of the glass patch gives a 50 percent ratio	Glass patches of the AC repairs
Handbook p. 7-29	The right amount matters: too much or too little affects the strength of the repair	Weigh, do not eyeball

Key points

- **Mix slowly, three minutes;** scrape the cup; do not mix large batches of fast resin.
- **Weigh the dry fabric** to find the resin mix.
- **Ratio:** Handbook optimum 60:40 fibre to resin; AC glass patches 50 percent resin by weight.
- **Vacuum-assisted:** tape 4 in beyond, edge breather 1 to 2 in, films 2 in larger, 2 minutes under vacuum, sweep centre to edge.
- **Room-temperature cure** does not restore a 250 or 350 °F original.
- **Test specimen** cured with the repair.

Step by step

1. Clean, dry and abrade the surface.
2. Weigh the fabric; work out the resin.
3. Mix slowly for three minutes; scrape the cup.
4. Impregnate; add plies in the SRM order.
5. Bag; vacuum; sweep out air and excess resin.
6. Cure to the sheet; tap test; keep the specimen.

SOURCES · FAA-H-8083-31B, AMT Handbook — Airframe, Volume 1, Chapter 7 · AC 43.13-1B, Change 1, Chapter 3, Fiberglass and Plastics

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

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