

Calibration & Traceability: Certificate Proof Checklist

Use this 1-page gate on every calibration certificate before you release product or sign a report.

Pass rule: Connect the **result** to controlled **standards** with stated **uncertainty**, and confirm the certificate matches your instrument, range, and use case. Mark each row as Pass/Fail and escalate any Fail.

Certificate Item	Quick Check (what to confirm)	Fail Trigger (reject or escalate)
Asset Identity + Date	Asset ID/serial and calibration date match the item used.	Wrong ID/serial, missing date, or unclear identification.
Results + As-Found/As-Left	Measured results are shown. As-found and as-left are stated when adjustment occurred.	Only “pass” language. Missing points. Adjustment not disclosed.
Method / Procedure ID	Procedure or method ID is listed. Issue/revision date is not newer than the calibration date.	No method ID. Method revision timing is inconsistent.
Standards Used	Reference standards are listed by ID and are controlled (valid status on the job date).	Standards not listed. IDs do not match. Status cannot be proven.
Uncertainty (Expanded)	Expanded uncertainty is stated and usable for your tolerance decision (k stated or implied).	Uncertainty missing, unclear, or not comparable to tolerance.
Scope Match (Accredited)	If accredited, the certificate work is inside the lab’s scope for range and CMC.	Out of scope range/parameter, or scope cannot be confirmed.
Authorization + Cert ID	Unique certificate ID and authorized sign-off are present.	No unique ID or missing authorization/signature.

Coverage factor k (fast rule): Expanded uncertainty is commonly reported as $U = k \cdot u_c$. If k is missing, ask what confidence level the uncertainty represents, or treat the result as not decision-ready for tight tolerances.