

	American Association for Laboratory Accreditation	
	C105 – General Checklist: A2LA Policy on Measurement Traceability	
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Accredited laboratories are required to meet the following additional requirements as contained in *P102 - A2LA Policy on Measurement Traceability*.

A2LA Assessor Instructions: Please note that for all N/A indications, you must document the reason why this requirement is N/A in the comments section.

To the best of my knowledge, all laboratory document references below as well as actual laboratory practice have been assessed for compliance with the relevant clauses of *P102 – A2LA Policy on Measurement Traceability*. I hereby attest that all ‘Yes’ marked compliance clauses, whether initialed or not, meet the aforementioned requirements. Any areas of noncompliance have been fully described in the Assessor Deficiency Report.

CAB Name:			
Address:			
Contact:			
Phone:		Email:	
Master Code:		Assessment ID:	
Certificate(s):		Conformity Standard:	
Assessment Dates:		Assessment Type:	
Assessor(s):		Assessor Signature(s):	
AcO:			



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Requirement	{RESERVED FOR A2LA ASSESSORS ONLY}			Comments
	Compliance			
	Y	N	NA	
<p>T1. A2LA requires that:</p> <p>(a) All calibrations and verifications of measuring and test equipment and reference standards, be conducted by:</p> <ul style="list-style-type: none"> • A calibration laboratory accredited to ISO/IEC 17025 by a mutually recognized Accreditation Body; or, 				
<ul style="list-style-type: none"> • A recognized National Metrology Institute (NMI) including designated institutes. Recognition of the NMI is based on the Institute or designated institute being a signatory to the CIPM (Comité International des Poids et Mesures) MRA (Mutual Recognition Arrangement) and supporting the measurement comparison activities of the CIPM. A listing of these recognized Institutes can be found at http://www.bipm.org/en/cipm-mra/participation/signatories.html; or, 				
<ul style="list-style-type: none"> • <i>A testing laboratory accredited by A2LA to ISO/IEC 17025 for dimensional testing and found to meet R205: Specific Requirements: Calibration Laboratory Accreditation Program and R205c: Annex - Specific Requirements: Dimensional Testing Parameters. An accredited test report that meets R205, R205c and P101- Reference to A2LA Accredited Status – A2LA Advertising Policy can be considered to satisfy traceability requirements; or,</i> 				
<ul style="list-style-type: none"> • A laboratory accredited by A2LA to ISO/IEC 17025 and found to meet the T9 requirements of this document for their in-house calibrations; or, 				



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Requirement	{RESERVED FOR A2LA ASSESSORS ONLY}			
	Compliance			Comments
	Y	N	NA	
<ul style="list-style-type: none"> • A State Weights and Measures facility with a current certificate of measurement traceability. Please see http://ts.nist.gov/WeightsAndMeasures/statelabcontact.cfm for a copy of current certificates. 				
<p>(b) When possible, all reference materials shall be obtained from:</p> <ul style="list-style-type: none"> • A reference material producer accredited to ISO Guide 34 in combination with ISO/IEC 17025 by a recognized Asia Pacific Laboratory Accreditation Cooperation (APLAC) signatory recognized for accrediting reference material producers; or, 				
<ul style="list-style-type: none"> • A recognized National Metrology Institute (NMI) or designated institute. 				
<p>T2. A2LA Requires that:</p> <p>(a) For those external calibrations and verifications performed by an A2LA Accredited calibration laboratory or a calibration laboratory accredited by an MRA partner, these must be recorded in a calibration certificate or report and must include:</p>				
<ol style="list-style-type: none"> 1. An endorsement by the recognized Accreditation Body’s symbol (or otherwise makes reference to accredited status by a specific, recognized accreditation body); 				



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	Compliance			Comments
	Y	N	NA	
2. An indication of the type of entity that is accredited (e.g., via an accreditation certificate number, inclusion of “calibration laboratory” with the symbol, etc.); and,				
3. The measurement Uncertainty.				
(b) For those external calibrations and verifications performed by an NMI, these must be recorded in a calibration certificate or report and must include:				
1. An endorsement by the National Metrology Institute (NMI); and,				
2. The measurement uncertainty.				
(c) For internal calibrations and verifications, those requirements outlined in requirement T9 of this document apply.				
(d) For reference materials, these must be recorded in a certificate meeting the requirements of ISO Guide 31 and must also include:				
1. an endorsement by the recognized Accreditation Body’s symbol (or otherwise makes reference to accredited status by a specific, recognized accreditation body); and				
2. an indication of the type of entity that is accredited or endorsed by the recognized NMI.				



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	Compliance			Comments
	Y	N	NA	
T3. All A2LA-Accredited and enrolled organizations must define their policy for achieving measurement traceability and also for achieving traceability for reference materials if applicable. The policy shall ensure compliance with this policy document.				
T4. Where measurement uncertainty analysis is applicable, A2LA requires laboratories to calculate measurement uncertainty in accordance with the ISO “Guide to the Expression of Uncertainty in Measurement.” These uncertainties shall be reported as the expanded uncertainty with a defined coverage factor, k (typically k = 2) and the confidence interval (typically to approximate the 95% confidence level).				*
T5. If a calibration certificate or test report contains a statement of the measurement result and the associated uncertainty, then the uncertainty statement shall be accompanied by an explanation of the meaning of the uncertainty statement. (For example, “This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.”)				
T6. TURs shall be calculated using the expanded uncertainty of the measurement, not the “collective uncertainty of the measurement standards”.				
T7. Implicit uncertainty statements must be accompanied by words to the effect that the uncertainty ratio was calculated using the expanded measurement uncertainty. In addition the coverage factor and confidence level must be stated.				
T8. Calibration reports and certificates issued by A2LA-accredited calibration laboratories shall contain a traceability statement.				



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	Compliance			Comments
	Y	N	NA	
T9. All in-house calibrations shall be supported by the following minimal set of elements:				
a) The in-house laboratory shall maintain documented procedures for the in-house calibrations;				
b) The in-house calibrations must be evidenced by a calibration report, certificate, or sticker, or other suitable method;				*
c) Calibration records must be retained for an appropriate, prescribed time;				*
d) The in-house laboratory must maintain training records for calibration personnel and these records must demonstrate the technical competence of the personnel performing the calibrations. Evidence of competence includes, for example, documented training and the results of measurement audits;				*
e) The in-house laboratory shall be able to demonstrate traceability to national or international standards of measurement by procuring calibration services from appropriately accredited calibration labs or an NMI and/or purchasing reference materials from appropriately accredited reference material producers or an NMI;				
f) The in-house laboratory must have and apply procedures for evaluating measurement uncertainty. Measurement uncertainty shall be calculated for each type of calibration and records of these calculations shall be maintained. Measurement uncertainty must be taken into account when statements of compliance with specifications are made;				*

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	Compliance			
	Y	N	NA	
g) Reference standards must be recalibrated at appropriate intervals to ensure that the reference value is reliable. Policy and procedures for establishing and changing calibration intervals must be based on the historical behavior of the reference standard.				

DOCUMENT REVISION HISTORY

DATE	DESCRIPTION
7/20/11	T9 (a) – (g) revised to match the requirements in P102.
12/19/2011	Added CAB Information Block
3/7/2012	Updated T2 to match revised P102.