



**ACCREDITATION COMMISSION FOR CONFORMITY ASSESSMENT BODIES**

**CAB Accreditation Policy Document**

**Document Title:                    Accreditation of Certification Bodies for Fastener Quality Assurance System and Laboratories for Fastener Testing**

**Document Number:                ACCAB-CAB-10.0**

**CONTROLLED COPY**

| <b>Revision Number</b> | <b>Revision Date</b> | <b>Paragraph Number</b> | <b>Description of Revision</b> | <b>Revision Author</b> |
|------------------------|----------------------|-------------------------|--------------------------------|------------------------|
|                        |                      |                         |                                |                        |
|                        |                      |                         |                                |                        |
|                        |                      |                         |                                |                        |
|                        |                      |                         |                                |                        |
|                        |                      |                         |                                |                        |
|                        |                      |                         |                                |                        |
|                        |                      |                         |                                |                        |
|                        |                      |                         |                                |                        |
|                        |                      |                         |                                |                        |

|            |  |
|------------|--|
| <b>1.1</b> | <b>Purpose:</b>  |
| 1.1.1      | <p>The Fastener Quality Act (FQA) , Public Law 101-592 (as amended in 1999) of the United States Of America protects public safety by:</p> <ol style="list-style-type: none"> <li>1. Requiring that certain fasteners sold in commerce conform to the specifications to which they are represented to be manufactured;</li> <li>2. Providing for accreditation of laboratories engaged in fastener testing;</li> <li>3. Requiring inspection, testing, and certification, in accordance with standardized methods.</li> </ol>  |
| 1.1.2      | <p>ACCAB has affirmed to the National Institute of Standards and Technology of the United States of America that it meets, and will continue to meet the requirement of ISO/IEC 17011:2004 while providing voluntary accreditation services to:</p> <ol style="list-style-type: none"> <li>1. Bodies providing the audit and the certification of the Fastener Quality Assurance System covered by the latest Fastener Quality Act (FQA) Public Law 101-592 as amended 1999 of the United States of America as per the requirements of ISO/IEC 17021:2011;</li> <li>2. Laboratories that conduct Tests and Measurements of Fasteners covered by the latest Fastener Quality Act (FQA) Public Law 101-592 as amended 1999 of the United States of America as per the Consensus Standard or Standards meeting the requirements of ISO/IEC 17025:2005.</li> </ol> |
| <b>1.2</b> | <b>Scope:</b>  |
| 1.2.1      | <p>This policy is applicable to ACCAB Accreditation Applicant &amp; Accredited Conformity Assessment Bodies (Certification Bodies and Testing Laboratories) providing Certification and Testing &amp; Measurement Services supporting the fastener industry and commerce in compliance with the Fastener Quality Act (FQA), Public Law 101-592 (as amended in 1999) of the United States Of America (ACCAB FQA CABs).</p>  |
| 1.2.2      | <p>ACCAB Certification Body Accreditation Program of the Fastener Quality Assurance System covered by the Act is as per the requirements of ISO/IEC 17021:2011.</p>  |
| 1.2.3      | <p>The ACCAB Testing Laboratory Accreditation Program is as per the requirements of ISO/IEC 17025:2005, includes test methods that are required by fastener specifications or standards covered by the Act. Since fastener testing involves a wide range of expertise, accreditation is offered in the areas of mechanical and physical testing and inspection, metallography, non-destructive inspection, dimensional inspection, and chemical analysis.</p>  |
| <b>1.3</b> | <b>Definitions:</b>  |
| 1.3.1      | <p>Please refer:</p> <ol style="list-style-type: none"> <li>1. Section 3 of the Fastener Quality Act (FQA) , Public Law 101-592 (as amended in 1999) of the United States Of America;</li> <li>2. ISO 9000:2005 Quality management Systems- Fundamental &amp; Vocabulary;</li> <li>3. ISO/IEC 17000: 2004 Conformity Assessment – Vocabulary and General Principles;</li> <li>4. VIM - International Vocabulary of Metrology – Basic and General Concepts and Associated Terms.</li> </ol>   |
| <b>1.4</b> | <b>Details:</b>  |

|              |   |
|--------------|---|
| <b>1.4.1</b> | <b>General:</b>   |
| 1.4.1.1      | <p>ACCAB FQA CABs while conducting their conformity assessment activities must:</p> <ol style="list-style-type: none"> <li>1. Ensure that they have the capability and resources to meet the requirements;</li> <li>2. Carefully consider the safety, health, and welfare of the public;</li> <li>3. Issue conformity assessment results/reports/certificates in writing and consistent with the best interests of the public;</li> <li>4. Notify the public authorities as appropriate if they have knowledge that the conformity assessment results/reports/certificates issued by them have been overruled or ignored or altered under circumstances that endanger life or property;</li> <li>5. Cooperate with the appropriate public authorities in furnishing such information or assistance as may be required in case of any alleged violation of FQA;</li> <li>6. Guarantee right of access to their facilities and quality related data to Regulatory Authorities and ACCAB;</li> <li>7. Not participate in any matter involving a conflict of interest if it could influence or appear to influence their integrity or the quality of their services.</li> </ol> |
| 1.4.1.2      | <p>ACCAB FQA CABs shall ensure that all measurement standards, measurement instruments and measurement equipment used which have a direct significance and impact on the quality of measurement results are calibrated by the National Metrology Institutes (NMI) / National Measurement Standards Laboratories or by an ISO/IEC 17025 Accredited Laboratories or by other Laboratories that assure traceability with the internationally recognized Primary Measurement Standards (SI Units).</p>  |
| <b>1.4.2</b> | <b>Certification Bodies Certifying Fastener Quality Assurance System (CB-FQAS):</b>   |
| 1.4.2.1      | <p>ACCAB Accreditation requires that CB-FQAS conforms to the most recent versions of the following International Standards:</p> <ol style="list-style-type: none"> <li>a. ISO/IEC 17021:2011- Conformity Assessment - Requirements for Bodies Providing Audit and Certification of Management Systems;</li> <li>b. ISO 19011:2011- Guidelines for Auditing Management Systems;</li> <li>c. Certification Body applying for the Fastener Quality Assurance System accreditation must be accredited by ACCAB for ISO 9001 Quality Management Systems or be an applicant for accreditation with ACCAB for ISO 9001 Quality Management Systems;</li> <li>d. ACCAB Accreditation Scheme Manual;</li> <li>e. ACCAB Policy on Accreditation of Certification Bodies for Fastener Quality Assurance System and Laboratories for Fastener Testing.</li> </ol>  |
| 1.4.2.2      | <p>The CB-FQAS must have documented audit criteria to ensure that:</p> <ol style="list-style-type: none"> <li>1. The certified organization establishes and implements the documented quality management system as per ISO 9001:2008 using the consensus standard ISO 16426:2002 as a consistent pair while the requirements of both these standards being auditable.</li> <li>2. The certified organization establishes and implements the documented procure to create and control “Records of Conformance” as defined in the FQA, section 3 Definitions, Part (13) for a minimum of ten years;</li> <li>3. The certified organization establishes and implements documented procedures for traceability, product recall and attending the customer complaints;</li> <li>4. The certified organization guarantees right of access to their facilities and quality related</li> </ol>  |

|              |  |
|--------------|--|
|              | data to ACCAB and Regulatory Authorities.  |
| <b>1.4.3</b> | <b>Fastener Testing Laboratories:</b>  |
| 1.4.3.1      | <p>ACCAB accreditation requires that the laboratories that conduct Tests and Measurements of Fasteners covered by the latest Fastener Quality Act (FQA) Public Law 101-592 as amended 1999 of the United States of America as per the consensus standard or standards must conform to the most recent version of the following standards:</p> <ul style="list-style-type: none"> <li>a. ISO/IEC 17025:2005 - General requirements for the competence of testing and calibration laboratories;</li> <li>b. Demonstrated Technical Competence specific to the field in which Testing /Measurement is performed;</li> <li>f. ACCAB Accreditation Scheme Manual;</li> <li>g. ACCAB Policy on Accreditation of Certification Bodies for Fastener Quality Assurance System and Laboratories for Fastener Testing.</li> </ul> |
| 1.4.3.2      | The laboratory must retain records as per ISO 17025 for a minimum of three years.  |
| 1.4.3.3      | The laboratory must retain “Records of Conformance” as defined in the FQA; section 3 Definitions, Part (13) for a minimum of ten years, if the laboratory is part of a fastener manufacturing business.  |
| 1.4.3.4      | <p>If the laboratory subcontracts the performance of any test or portion of any test to another laboratory then the laboratory shall ensure that:</p> <ul style="list-style-type: none"> <li>1. The subcontracted laboratory meet the requirement of accreditation as per the Fastener Quality Act;</li> <li>2. The customer is informed before subcontracting the work;</li> <li>3. The records/reports clearly identify to the customer which test(s) were specifically performed by the accredited laboratory, and which were performed by the subcontracted laboratory.</li> </ul>   |
| 1.4.3.5      | The laboratory must ensure that the raw material chemical and physical testing is traceable to the heat/lot number provided by the Fastener Manufacture.   |
| 1.4.3.6      | The laboratory must participate in proficiency testing twice a year conducted by an accredited (by an ILAC or Equivalent Member) Third Party Proficiency Testing Provider meeting requirements of ISO/IEC 17043:2010 for test methods under Rockwell hardness of fasteners (externally threaded), axial tensile strength of full threaded fasteners, wedge tensile strength of full-size threaded fasteners, tensile strength test of machined aluminium and steel, fastener double shear, case depth, round dimensional, and chemical analysis.   |
| 1.4.3.7      | The other tests shall be subject to the normal ACCAB requirements for proficiency testing.   |
| 1.4.3.8      | The Inter Laboratory Comparisons are acceptable where proficiency testing service is not available.  |
| 1.4.3.9      | The laboratory must identify all the significant components of measurement uncertainty irrespective of the type of testing.  |
| 1.4.3.10     | The laboratory must use Certified Reference Materials (CRMs), where possible.  |

| <b>1.5</b>   |   | <b>References:</b>     |
|--------------|---|------------------------|
| <b>1.5.1</b> | <b>Details</b>  | <b>Document Number</b> |
| 1.5.1.1      | The Fastener Quality Act (FQA) , Public Law 101-592 (as amended in 1999)  |                        |
| 1.5.1.2      | ISO 9000:2005 Quality management Systems- Fundamental & Vocabulary;   |                        |
| 1.5.1.3      | ISO/IEC 17000: 2004 Conformity Assessment – Vocabulary and General Principles;  |                        |
| 1.5.1.4      | VIM - International Vocabulary of Metrology – Basic and General Concepts and Associated Terms.                                    |                        |
| 1.5.1.5      | ISO/IEC 17011:2004 Conformity Assessment — General Requirements for Accreditation Bodies Accrediting Conformity Assessment Bodies |                        |
| 1.5.1.6      | ISO/IEC 17021:2011- Conformity Assessment - Requirements for Bodies Providing Audit and Certification of Management Systems       |                        |
| 1.5.1.7      | ISO 19011:2011- Guidelines for Auditing Management Systems  |                        |
| 1.5.1.8      | ISO 9001:2008 - Requirements of a Quality Management System   |                        |
| 1.5.1.9      | ISO 16426:2002 Fasteners – Quality Assurance Systems  |                        |
| 1.5.1.10     | ISO/IEC 17025:2005 - General requirements for the Competence of Testing and Calibration Laboratories                              |                        |
| 1.5.1.11     | ISO/IEC 17043:2010 Conformity Assessment — General Requirements for Proficiency Testing   |                        |
| 1.5.1.12     | Relevant ILAC and ACCAB Polices on Proficiency Testing, Measurement Uncertainty and Traceability of Measurement Results.          |                        |
| 1.5.1.13     | Relevant Consensus Standards as per the Fastener Quality Act.   |                        |