



## **AERC 302**

# **Accepted Calculation Entity/Accepted Simulator Program Requirements**

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## 1. Scope

The *AERC 302 Accepted Calculation Entity/Accepted Simulator Program Requirements* defines all requirements for organizations and individuals seeking AERC acceptance as an *Accepted Calculation Entity* or *Accepted Simulator*. An *Accepted Calculation Entity* employs *Accepted Simulators*, who perform simulation services for *Program Participants* seeking to qualify products.

## 2. Definitions

All terms referenced in this document are defined in *AERC 400 Policies and Procedures, Appendix A*.

## 3. Application

An AERC *Accepted Simulator* is an individual who works for an AERC *Accepted Calculation Entity* and conducts certified simulations for the purposes of generating data required by AERC for inclusion on the product energy label. An *Accepted Simulator* performs simulations using AERC-approved software tools and in accordance with AERC 1 and AERC 2.

Individuals seeking acceptance as an *Accepted Simulator* and organizations seeking acceptance as an *Accepted Calculation Entity* shall present their qualifications for consideration via an application utilizing the latest program form specified in *AERC 400 Policies and Procedures, Appendix B*.

## 4. Qualifications – Accepted Simulators

An individual seeking acceptance as an *Accepted Simulator* must:

- a. Have completed an approved training course within the past 12 months covering the latest approved versions of software as detailed in *AERC 400, Appendix G*, or possess a current simulator certification from an approved program, and submit a sample *CPD* listing package and a qualification exercise as instructed by the *Administrator*, in conjunction with the application.
- b. The submitted *CPD* listing package will be reviewed and graded for completeness and accuracy by the *Administrator*. A minimum grade of 70% is required to obtain acceptance as an *Accepted Simulator*.
- c. An individual seeking acceptance as an *Accepted Simulator*, who holds a current accepted simulator certificate issued by *NFRC*, may be relieved of the requirement of having completed training in the latest approved version of simulation software listed in *AERC 400, Appendix G*. At the discretion of the *Administrator*, additional measures to establish competence may be required on an individual basis, which might include performing an exercise of simulations or other such measures deemed adequate and prudent.
- d. The *Administrator* shall review all submissions to determine if the evidence establishes conformance to program requirements for accepting the applicant as an *Accepted Simulator*. Upon *Acceptance*, based on the authority granted to the *Administrator* by the *AERC Board*, the *Administrator* shall issue an *Authorization Agreement* to govern the terms of acceptance of the applicant into the program.

- e. Should a review of the applicant's submissions not establish their qualifications for *Acceptance*, the *Administrator* shall either request additional information for further evaluation or issue a written notice informing the applicant of the specific reason(s) why the application is denied.

## 5. Qualifications – Accepted Calculation Entity

Organizations seeking acceptance as an *Accepted Calculation Entity* must demonstrate they have the personnel, equipment, processes, and competence to perform simulation and calculation services to any/all of the applicable protocols as listed in *Appendix A*.

Entities seeking acceptance as an *Accepted Calculation Entity* must directly employ at least one *Accepted Simulator* who is qualified to perform simulation and calculation services in accordance with program requirements, and:

- i. Meet the requirements of ISO 17025 as determined in a review by the Administrator.
- ii. Complete a *CPD* listing package preparation exercise detailed by the *Administrator* as part of the application process. The package will be reviewed and graded as to accuracy and completeness. A minimum score of 70% is required to achieve status as an *Accepted Calculation Entity*.

## 6. Administrator Review of Qualifications

- a. The *Administrator* shall review all applications to determine if the evidence establishes conformance to the requirements of the *Program Requirements* for accepting the applicant as an *Accepted Calculation Entity*. Based on the authority granted the *Administrator* by the *AERC Board*, the *Administrator* shall issue an *Authorization Agreement* to govern the terms of acceptance of the applicant into the program.
  - i. If, in the considered judgement of the *Administrator*, the review of the applicant's submissions does not establish its qualifications for acceptance under the program, the *Administrator* shall:
    - (1) Request additional information for further evaluation, or
    - (2) Issue a written notice informing the applicant that its request for acceptance as an *Accepted Calculation Entity* is denied, delineating the specific reason(s) why the request is denied.

## 7. Term of Acceptance

The term of acceptance for participants in this category is for a period of four years from the date of acceptance of the *Authorization Agreement* issued to govern the activities of the participant, subject to annual renewals and compliance with all program documents.

## 8. Continued Qualification

To maintain acceptance under the program, both *Accepted Simulators* and *Accepted Calculation Entities* must:

- a. Participate in the *Inter-Calculation Entity Comparison* process as delineated by the *Administrator*.
- b. Pay all required program fees.
- c. In the case of *Accepted Calculation Entities*, successfully complete an annual inspection by the *Administrator* or an *AERC Accepted Independent Inspection Agency*.
- d. An *Accepted Calculation Entity* must continue to maintain compliance with all the provisions of ISO 17025.

## 9. Responsibilities of an Accepted Calculation Entity

- a. Initiate service requests from client companies only on a written form. Such service requests should list the scope of each requested service, sufficient details of the required submittals, each sample to be submitted for simulation or optional physical testing, and the proposed dates by which simulations and determination of the baseline should be completed.
- b. Conduct all services contracted for in adherence to the processes and procedures delineated in the program requirements.
- c. Report required information, in accordance with *AERC Program Requirements*, and the standards and/or protocol documents as to format and precision.
- d. Submit required documentation to the *Administrator* for services as agreed to and paid for by its clients in a timely manner.
- e. Participate in *Inter-Calculation Entity Comparison* exercises designed and conducted in accordance with any of the following - ISO/IEC 17011, ISO 5725-2, ISO Guide 35, and ISO 13528 for proficiency testing, a minimum of once every four years, or as directed by the *Administrator*.
- f. Comply with all provisions of the minimum quality control system standards outlined in the *AERC Program Requirements* regarding the establishment of quality control management systems.
- g. Comply with all the requirements as agreed to in the *Authorization Agreement*.

## 10. Suspension and Revocation of Acceptance

- a. An *Accepted Simulator* or *Accepted Calculation Entity* is subject to suspension or revocation of its accepted status under the following conditions:
  - i. Failure to submit reports at the direction of a client.
  - ii. Failure to provide documentation in accordance with the directions of the *Administrator* for evaluation under the *Inter-Calculation Entity Comparison* evaluation process.

- iii. Failure to comply with all program requirements or maintain any of the required accreditations.
  - iv. Failure to pay the fees required for program participation as specified in program documents.
  - v. The filing of an application for bankruptcy under any chapter of Federal law by the approved entity.
  - vi. Failure to submit to or cooperate with the *Administrator* in performing inspections required by the program requirements.
  - vii. Failure to meet the standards defined as "satisfactory" or "questionable" as defined by the Z Score analysis and correction as performed and reported by the entity charged with conducting the *Inter-Calculation Entity Comparison* studies. Additionally, any participant whose Z score places it in the "questionable" category may be required to perform an additional comparison to allow for consideration of anomalies in the *Inter-Calculation Entity Comparison*. Any participant whose score falls below the "satisfactory" category in two consecutive *Inter-Calculation Entity Comparison* studies is subject to further examination of its acceptance by the *Administrator* and may be required to enter into additional exercises aimed at evaluating its competence and continued participation in the program as specified by the *Administrator*.
  - viii. Commission of any action that, in the judgement of the *Administrator*, poses a threat to the credibility or good name of the *AERC*, the *AERC Certification Program*, or its status as a *certification* body.
  - ix. Any violation of the *Authorization Agreement*, determined by the *Administrator* to be an intentional act by the accepted entity, its principals, employees, or agents, that violates the use of the marks and other representations of the *AERC* in the act of labeling or certification, either written or oral.
- b. All actions in regard to suspension or revocation under *AERC Program Requirements* may be appealed per the provisions within *AERC 400*.

## 11. Reinstatement after Suspension

- a. A participant whose authority has been suspended for a violation of *AERC Program Requirements* may apply for re-instatement of its authority, subject to the procedures established by the *Administrator* for re-instatement, and the payment of all fees specified by the *Administrator* incurred as a result of the suspension.

## Appendix A – List of Applicable Standards

Item #	Standard or Protocol
1	AERC 1-2017 - Procedures for Determining Energy Performance Properties of Fenestration Attachments
2	AERC 1.1-2017 - Procedures for Determining the Optical and Thermal Properties of Window Attachment Materials
3	<i>Placeholder for AERC 2 – Procedures for Determining Annual Energy Performance Ratings of Fenestration Attachments in Residential Homes</i>
4	THERM 7 / WINDOW 7 AERC Simulation Manual
5	IEEE/ASTM SI 10-2010, American National Standard for Metric Practice
6	NFRC 101-2014, Procedure for Determining Thermophysical Properties of Materials for Use in NFRC-Approved Software

## Appendix B – Non-Restricted List of Accepted Accreditation Entities

<b>Accreditation Agency</b>	<b>Address</b>
A2LA – American Association for Laboratory Acceptance	5202 Presidents Ct Suite 220, Frederick, MD 21703
ANAB – ANSI-ASQ National Accreditation Board	600 N. Plankinton Ave., Suite 300 Milwaukee, WI 53203
ANSI – American National Standards Institute	1899 L Street, NW, 11th Floor Washington, DC 20036
IAS – International Acceptance Service	3060 Saturn Street, Suite 100 Brea, CA 92821-1732 U.S.A.
LAB – Laboratory Acceptance Bureau	11617 Coldwater Rd. Ste 101, Fort Wayne, IN 46845
NFRC – National Fenestration Rating Council	6305 Ivy Lane, Suite 140 Greenbelt, MD 20770