

Building Science Institute, Ltd. Co. Policy 11-2022 Resource Requirements for Verification Organizations

This policy applies to Verification Organizations.

Referenced Documents

Building Science Institute, Ltd. Co. Process 002 Building Science Education Training & Certification System

Personnel

The verification organization must document the credentials for all personnel involved in verification activities.

Competence requirements must include knowledge of the verification organization's management system and the ability to implement administrative as well as technical procedures that apply to the activities performed by that function.

Professional judgment must be considered when competence requirements are defined.

The verification organization must employ, or have contracts with, a sufficient number of people with the required competencies (including the ability to make professional judgments) to perform the type, range, and volume of its verification activities. The requirements for personnel apply to both employed and contracted people.

The personnel responsible for verification activities are certified by the Building Science Institute in conformance with Process 002 Building Science Education Training & Certification System, must have the appropriate qualifications, training, experience, and a satisfactory knowledge of the requirements of the verification activities performed. They must also have relevant knowledge of residential construction, operation of processes, and delivery of services; and defects which may occur during the construction of a residential dwelling unit, failures in the operation of a process, and deficiencies in the delivery of services. They must understand the significance of deviations found with regard to residential construction specifications, operation of processes, and the delivery of services.

The verification organization must make clear to each person their duties, responsibilities, and authority.

The verification organization must have documented procedures for selecting, training in conformance with Verifier Competencies, and monitoring verifiers and other personnel involved in verification activities.

The procedure to formally authorize verification personnel must specify the relevant details are documented (for example, the authorized verification activity, the beginning time frame of the authorization, the identity of the person who performed the authorization, and the termination time frame of the authorization).

The documented procedures for training must address an induction period, a mentored working period with experienced verifiers, and continued training to keep pace with developing technology and verification methods. The mentored working period includes activities where verifications are performed.

The training required must depend on the ability, qualifications, and experience of each verifier and other personnel involved in verification activities and on the results of monitoring.

Identification of training needs for each person must take place at regular intervals. The results of the review of training (plans for further training or a statement that no further training is needed) must be documented.

The Building Science Institute's True North Quality Management Services Quality Assessors or verification organization Quality Assessment Designees must monitor all verifiers and other personnel involved in verification activities for satisfactory performance. The results of monitoring must be used as one means to identify training needs. Monitoring may include a combination of techniques such as on-site observations, report reviews, interviews, simulated verifications, and other techniques to assess performance, and will depend on the nature of verification activities.

Monitoring provides the verification organization with a tool to ensure the consistency and reliability of verification outcomes, which includes any professional judgments against general criteria. Monitoring may

result in identification of needs for individual training or needs for review of the verification organization's management system.

Each person involved in verification activities must be observed on-site unless there is sufficient supporting evidence the person continues to perform competently. On-site observations must be performed in a way that minimizes the disturbance of the verifications, particularly from the customer's perspective.

To be considered sufficient, the evidence the person involved in verification activities continues to perform competently must be substantiated by a combination of information such as the satisfactory performance of examinations and determinations; positive outcome of report reviews, interviews, simulated verifications, and other performance assessments; positive outcome of separate evaluations to confirm the outcome of the verifications; positive outcome of mentoring and training; absence of legitimate appeals or complaints; and satisfactory results of witnessing by assessors or designees.

The program designed for on-site observation of personnel involved in verification activities must be designed to consider the risks and complexities of the verifications, results of previous monitoring activities, and technical, procedural, or legislative developments relevant to the verifications. The frequency of on-site observations must be at least annually. Higher frequencies should be considered if the levels of risk, complexity, the results of previous observations, or if technical, procedural, or legislative changes have occurred. The types of verification activities covered by the authorization of the person involved may require more than one observation per person to adequately cover the full range of required competencies. More frequent on-site observations are necessary if there is a lack of evidence of continued satisfactory performance.

Where the verification organization has only one verifier who performs the verification activities, the verification organization must have arrangements in place for a True North Quality Management Services Assessor to perform observations on-site or remotely.

The verification organization must maintain records of monitoring, education, training, technical knowledge, skills, experience, and authorization of each member of its personnel involved in verification activities. Records of authorization must specify the basis on which authorization was granted (the on-site observation of verification activities, for example).

Personnel involved in verification activities must not be remunerated in such a way that it influences the results of verification activities. Remuneration methods that provide incentives to perform verifications quickly have the potential to negatively affect the quality and outcome of verification activities.

All personnel of the verification organization, either internal or external, who could influence the verification activities, must act impartially. Policies and procedures assist the verification organization personnel in identifying and addressing commercial, financial, or other threats or inducements which could affect their impartiality, whether they originate inside or outside the verification organization. Such policies and procedures must address how any conflicts of interest identified by personnel of the verification organization are reported and documented. While expectations for verification personnel integrity can be communicated by policies and procedures, the existence of such documents may not signal the presence of integrity and impartiality that is required.

All personnel of the verification organization, including subcontractors, personnel of external bodies, and individuals who act on the verification organization's behalf, must keep confidential all information obtained or created during the performance of verification activities, except as required by law or contract.

A Quality Assessment Designee must meet the Building Science Institute's Quality Assessor Competencies requirements.

The Verifier must meet the Building Science Institute's Verifier Competencies requirements.

The Software Analyst must meet the Building Science Institute's Software Analyst Competencies requirements.

Facilities and Equipment

The verification organization must have available suitable and adequate facilities and equipment to permit all the activities associated with the verification activities to be carried out in a competent and safe manner.

The equipment required to carry out verification activities in a safe manner includes personal protective equipment.

The verification organization must have documented rules for the access to, and use of, specified facilities and equipment used to perform verifications.

The verification organization must ensure the continued suitability of the facilities and equipment for their intended use.

- Continued suitability must be established by visual verification, functional checks, and/or re-calibration; this is particularly relevant for equipment that has left the direct control of the verification organization.

All equipment that has a significant influence on the results of the verification must be defined and, where appropriate, uniquely identified.

- The definition must include the required accuracy and measurement range.

The verification organization must ensure that all equipment is properly maintained in accordance with documented procedures and instructions.

Where appropriate, measurement equipment that has a significant influence on the results of the verification must be calibrated before being put into service and thereafter according to manufacturer's established calibration cycles.

- The justification for not calibrating equipment that has a significant influence on the outcome of verifications must be recorded.
- Equipment identified as having a significant influence on the outcome of verifications must be traceably calibrated to national standards where possible.

The overall program of calibration of equipment must be designed and operated to ensure that, wherever applicable, measurements made by the verification organization are traceable to national standards of measurement where available.

- Where traceability to national standards of measurement is not applicable, the verification organization must provide satisfactory evidence of correlation or accuracy of verification results.
 - Where traceability to national standards of measurement is not applicable, the participation in relevant comparison programs or proficiency tests are examples of how to obtain evidence of correlation or accuracy of verification results.

Reference standards of measurement help by the verification organization must be used for calibration only and for no other purpose. These reference standards of measurement must be calibrated to provide traceability to a national standard of measurement.

Where relevant, equipment must be subjected to in-service checks between regular re-calibrations. The nature of these in-service checks must be defined by the verification organization.

The verification organization must have procedures for the selection and approval of suppliers, verification of incoming goods and services, and ensure appropriate storage facilities when relevant for the outcome of verification activities. The verification procedure must ensure that incoming goods and services are not used until conformance with specifications have been verified.

The verification organization must, where applicable, assess the condition of stored items at appropriate intervals to detect deterioration.

The verification organization must ensure that computer software used to produce an Energy Rating Index meets the requirements of the Building Science Institute approved software (HouseRater).

The verification organization must establish and implement procedures to protect the integrity and security of data. This includes factors such as backup practices and frequencies, effectiveness in restoring data from backups, virus protection, and password protection.

The verification organization must maintain computer and automated equipment to ensure proper functioning.

The verification organization must have documented procedures to deal with defective equipment.

- Defective equipment must be removed from service by segregation, prominent labeling, or marking.
- The verification organization must examine the effect of defects on previous verifications and, when necessary, take appropriate corrective action.

The verification organization must record relevant information on equipment, including software. This includes identification and, where appropriate, information on calibration and maintenance.

Sub-contracting

The verification organization must normally perform the verification activities which it contracts to perform.

When an verification organization sub-contracts any part of the verification, it must ensure and be able to demonstrate that the sub-contractor is certified by the Building Science Institute to perform the activities in question and, where applicable, complies with the relevant requirements of ENERGY STAR® Certification Protocols, Indoor airPlus program requirements, Zero Energy Ready Home program requirements, and referenced standards and codes.

The verification organization must inform the customer of its intention to sub-contract any part of the verification.

Whenever work which forms part of a verification is carried out by sub-contractors, the responsibility for the determination of conformity of the verified item with the requirements remains with the verification organization.

The verification organization must record and retain details of its investigation of the competence of its sub-contractors and of their conformity with the applicable requirements.

The verification organization must maintain a register of all their sub-contractors.

Approved by the Building Science Institute, Ltd. Co. Quality Council on December 13, 2022.

Approve: Amber Wood, Brian Christensen, Erik Straite, Wes Davis, Kevin Burk

Reject: None

Not Voting: Brett Dillon, Chair

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