



Joint Comments of the International Association of Sheet Metal, Air, Rail and Transportation Workers (SMART) and the Sheet Metal and Air Conditioning Contractors' National Association (SMACNA) on Requirements in the Inflation Reduction Act of 2022

Notice 2022-48

The International Association of Sheet Metal, Air, Rail and Transportation Workers (SMART) and the Sheet Metal and Air Conditioning Contractors' National Association (SMACNA) submit these comments in response to questions raised by the Department of the Treasury and the Internal Revenue Service (IRS) on the incentive provisions for improving energy efficiency of residential and commercial buildings in the Inflation Reduction Act of 2022 (IRA).¹

SMART has approximately 203,000 members in diverse occupations, with more than 136,000 members employed in the sheet metal trade. SMACNA is a national employer association representing 3,500 contributing unionized sheet metal contractors. SMART and SMACNA jointly sponsor a national training fund, the International Training Institute for the Sheet Metal and Air Conditioning Industry (ITI),² which works in conjunction with 148 SMART local joint apprenticeship and training committees (JATCs) to provide training to apprentices and journeypersons throughout the country. We also jointly fund and manage the National Energy Management Institute Committee (NEMIC),³ which has as its key mission affording trainees – apprentices and journeypersons – the opportunity to obtain third-party certification of their skills through the International Certification Board/Testing, Adjusting and Balancing Bureau (ICB and TABB). An independent assessment of their skills safeguards the welfare of apprentices and other SMART members by increasing their marketability.

¹ <https://www.irs.gov/pub/irs-drop/n-22-51.pdf>

² The ITI protects the interests of apprentices in JATCs during the term of their apprenticeship and throughout their careers in a variety of ways: by almost 50 years of curriculum development that anticipates the need for training and re-training as technology evolves; journeyperson upgrades for graduates so that their skills do not become obsolete as technology changes; diverse on-the-job training; a nationally-recognized, portable credential; college credit; an opportunity for expedited progression; multi-modal options for related instruction; portable health insurance and pensions, and progressively-increasing wages that are commensurate with skills acquired.

³ NEMIC was established in 1981 for the purpose of identifying and developing educational opportunities that reflect current needs in the sheet metal industry and to create and expand employment for apprentices and journeypersons employed by SMACNA contractors.

To assist the Treasury Department in implementing these provisions, below are responses to some of the categories and questions posed in notice 2022-48.

.01 Energy Efficient Home Improvement Credit (§ 25C):

(1) Section 25C(e)(2) directs the Secretary to prescribe “certification or other requirements” for home energy auditors for credit eligibility. What criteria should the Treasury Department and the IRS consider requiring for certification or other requirements for home energy auditors?

To implement this section of the IRA, the Treasury Department should utilize independent third-party certification as one criterion that it considers when determining certifications that are eligible for credit. Independent third-party accreditation is an accountability mechanism to ensure the quality and legitimacy of organizations offering personnel credentials and is a key component of an effective standardization system. It assures the consuming public and regulatory bodies that credentialing organizations, such as ICB/TABB, are competent and their results can be trusted. Accreditation focuses upon the fairness, validity, and reliability of the examination; completion of the scientific analysis of valid competencies that are needed to be successful on a particular job; examiner qualifications; security measures in place to ensure the confidentiality of testing materials; the independence of the certification process; and recertification.⁴ Training and certification are distinct activities. Certification is an assessment of the quality of the training and work experience of the candidate. The goal of certification is to “stimulate training,” not to “provide training.”

We recommend that the Treasury Department require that home energy auditors hold the following certifications accredited by the ICB in order to receive credit: Total Building Energy Audit Technician, Indoor Air Quality (IAQ)/Ventilation Verification Technician, Indoor Air

⁴ See testimony of Dr. Roy Swift, formerly with ANSI, at a March 20, 2009 hearing (OSHA-2007-0066-0344) at 340, and hearing exhibit submitted by Roy Swift (OSHA-2007-0066-0345.9) designated as “Hearing Exhibit QQ”

Quality/Ventilation Verification Contractor and Indoor Air Quality/Ventilation Verification Supervisor. These certifications hold third-party accreditation status, have strong standards, and play a critical role in auditing and assessing the energy performance of buildings. The ICB is a recognized leader in providing certifications for the heating, ventilation and air conditioning (HVAC) industry. ICB certification is assurance to customers that ICB-certified professionals are the most competent, reliable and qualified in the HVAC industry. Maintaining ICB certification requires continued compliance with the ICB Code of Conduct.⁵ The ICB has partnered with SMACNA/SMART Joint Apprentice Training Centers to administer the testing and have over 140 testing centers in the United States and Canada.

To earn these certifications, candidates must meet certain requirements regarding employment eligibility, comply with a Code of Conduct, complete relevant OSHA safety training and pass a certification exam. The Total Building Energy Audit Technician knows the purpose and scope of measures for expressing and comparing building energy performance and takes measurements to determine the energy performance of HVAC systems. The IAQ Contractor/Ventilation Verification has a documented record of experience and a confirmed reputation for integrity and reliable performance. The IAQ Contractor/Ventilation Verification complies with the conditions outlined in the ICB Code of Conduct and employs ICB-certified technicians and supervisors who are required to complete continuing education units on a regular basis, ensuring their skills meet the latest industry trends. The IAQ Supervisor/Ventilation Verification oversees and coordinates the work of the IAQ Technician/Ventilation Verification, interprets observations to determine a response to IAQ issues, communicates with the customer to recommend a solution or suggest that additional

⁵ https://www.icbcertified.org/wp-content/uploads/2021/06/ICB-Code-of-Conduct-v210504_Approved.pdf

IAQ experts be brought onto the team, ensures all testing and measurements are performed according to industry standards, and remains current with codes and ordinances in the jurisdiction where they are working. The IAQ Technician/Ventilation Verification inspects the HVAC system and the building; takes measurements using specialized equipment; writes and submits a report for analysis and recommendations; and may make repairs when the cause of the IAQ issue is within their specialty. A detailed review of these certifications are provided in the ICB certification Manual.⁶

.04 Energy Efficient Commercial Buildings Deduction (§ 179D):

(1) Section 179D(d)(3)(A) provides that in the case of EECBP installed on or in property owned by a specified tax-exempt entity, the Secretary is to promulgate regulations or guidance to allow the allocation of the deduction “to the person primarily responsible for designing the property in lieu of the owner of such property.” What criteria should the Treasury Department and the IRS consider in providing rules to determine the person that is “primarily responsible for designing the property” under § 179D(3)(A)?

We recommend following the definition of “Design Professional” as it is defined by UC Davis, “A licensed mechanical engineer, certified industrial hygienist (CIH), or mechanical design professional as defined by state or provincial guidelines.”⁷

(3) Section 179D(f)(2) provides detail on a “qualified retrofit plan.” Is guidance providing additional definitions or other guidance regarding qualified retrofit plans needed?

To improve building energy efficiency and achieve desired climate goals, we recommend that the Treasury Department requires building owners to follow the steps detailed in the UC Davis Ventilation Verification Program.⁸ This program outlines the steps that must be taken to make sure HVAC systems are operating properly and comply with CDC guidelines and other applicable national standards such as the ASHRAE 62.1 – 2019 edition. A key to the success of

⁶ https://www.icbcertified.org/wp-content/uploads/2022/05/ICB-Certification-Manual-v220426_Approved.pdf

⁷ <https://ucdavis.app.box.com/v/ProposedVentilationProgram>

⁸ <https://ucdavis.app.box.com/v/ProposedVentilationProgram>

the program is utilizing skilled, trained and certified personnel to perform the work. We define qualified personnel as outlined on page 11 of the Ventilation Verification Program. Skillful execution of ventilation and energy efficiency verification improves indoor air quality (IAQ) and decreases carbon emissions from buildings.

Several states including California,⁹ Nevada,¹⁰ New Jersey,¹¹ and Connecticut¹² have adopted legislation for schools and/or businesses to improve indoor air quality. The legislation requires that skilled, trained and certified personnel perform the work. All four bills define this as outlined in the UC Davis report. This is defined as:

- **Certified Testing, Adjusting and Balancing (TAB) Technician.** A technician certified to perform testing, adjusting, and balancing of HVAC systems by the Associated Air Balance Council (AABC), the National Environmental Balancing Bureau (NEBB), or the Testing, Adjusting and Balancing Bureau (TABB).
- **Design Professional.** A licensed mechanical engineer, certified industrial hygienist (CIH), or mechanical design professional as defined by state or provincial guidelines.
- **Qualified Adjusting Personnel.** Qualified Adjusting Personnel shall either be: (1) a Certified TAB technician; or (2) a skilled and trained workforce under the supervision of a certified TAB Technician.
- **Qualified Testing Personnel.** Qualified Testing Personnel shall either be: (1) a certified TAB technician.; or (2) a person certified to perform ventilation assessments of heating, ventilation, and air conditioning system as a technician through a program accredited by ANSI under the ISO/IEC 17024 standard.
- **Skilled and Trained Workforce.** A skilled and trained workforce is a workforce in which at least sixty percent of the workers are graduates of a registered apprenticeship program, in state or province for which the work is being performed, for the applicable construction occupation.

Additionally, we recommend that duct sealing/leakage testing, per SMACNA HVAC Air Duct Leakage Manual – 2nd Edition 2012, be required when HVAC duct systems (both supply and return/exhaust) alterations are included in retrofit plans.¹³ Fire Smoke Dampers

⁹ <https://legiscan.com/CA/bill/AB841/2019>

¹⁰ <https://www.leg.state.nv.us/App/NELIS/REL/81st2021/Bill/7721/Overview>

¹¹ <https://www.nj.gov/governor/news/news/562021/20210824e.shtml>

¹² <https://www.cga.ct.gov/2022/TOB/H/PDF/2022HB-05506-R00-HB.PDF>

¹³ <https://store.smacna.org/hvac-air-duct-leakage-test-manual>

and Smoke Control Systems should also be included in the testing, maintenance and retrofit plan of a building and this testing should be performed by specialty technicians that are certified by American National Standards Institute (ANSI), a nationally recognized accrediting agency. This will ensure higher-quality work and improve public safety.¹⁴ ANSI accreditation is the gold standard in the field of accreditation of entities that issue credentials to personnel based on valid and reliable assessments. ICB/TABB offers certification to workers in the following specialties, all of which are essential to the well-being of occupants of buildings: 1) ICB Smoke Control Systems Technician, 2) ICB Smoke Control Systems Supervisor; 3) ICB Fire and Smoke Damper Technician; 4) ICB Fire and Smoke Damper Supervisor; 5) ICB/TABB Technician; and 6) ICB/TABB Supervisor. ICB/TABB certification is the first and only ANSI-accredited, third-party certifier of technicians and supervisors to perform inspection of HVAC fire life safety, fire and smoke dampers, and smoke control systems. Contractors who employ ICB-certified technicians and supervisors are recognized nationwide as the most competent, reliable, and qualified in the industry.

Fire and smoke dampers play a crucial role in a building's fire safety system. Testing of these components is already required by code at regular intervals (dampers 4 or 6 years - smoke control systems every 6 months or 1 year) but are often not tested at all. Fire dampers are used in heating, ventilation, and air conditioning ducts to prevent the spread of fire inside the ductwork through fire-resistance rated walls and floors. If these systems do not operate as designed, fire can spread with rapid, lethal results for building occupants, visitors, and

¹⁴ OSHA recognizes ANSI as a nationally recognized accrediting agency in 29 C.F.R. §1926.1401 ("Nationally recognized accrediting agency is an organization that, due to its independence and expertise, is widely recognized as competent to accredit testing organizations. Examples of such accrediting agencies include, but are not limited to, the National Commission for Certifying Agencies and the American National Standards Institute.") See 29 C.F.R. § 1926.1427(d), Certification by an accredited crane operator testing organization.

firefighters. When a fire or another emergency occurs, air from ductwork can act as a “freeway,” by fueling the fire and circulating smoke and toxins throughout a structure, even to offices far away from the flashpoint. Well-functioning smoke and fire dampers can prevent this from happening. The best method of compartmentalization of fire and smoke is through use of the combination fire/smoke damper.¹⁵ Smoke control systems that function properly allow building occupants a safe means of egress and provide first responders a smoke free stairwell to safely enter a building and combat a fire emergency.

A 2009 Surgeon General’s report states that “most fire victims do not die from burns, but from smoke or toxic gases.”¹⁶ Adequate fire protection involves multiple forms/means of protection that include both active and passive elements. “Passive” protection, such as dampers in duct systems, does not suppress fire or notify residents of the need to evacuate; rather, such protections contain fire and smoke within a compartment to prevent death from inhalation of toxins and smoke. The need for well-functioning dampers is critical when a sprinkler system or other active protection (e.g., a fire extinguisher) malfunctions or is unable to control the fire.

Fire dampers are installed in or near the wall or floor, at the point of duct penetration, to retain the integrity and fire rating of a wall or floor. Their primary functions are to interrupt migratory airflow, resist the passage of flame from one side of a fire-rated separation to the other, and maintain the integrity of the fire-rated separation. A fire damper closes once the duct temperature reaches a level high enough to melt a fusible link. Smoke dampers are installed in ducts and air transfer operating of an air distribution or smoke control system.

¹⁵ What Engineers Need to Know About Fire & Smoke Dampers: A Collection of Technical Articles and the AMCA Guide for Commissioning and Periodic Performance Testing (2015).
<https://www.amca.org/assets/resources/public/userfiles/file/FireSmokeDamperCompendiumRevised62215.p>

¹⁶ The Surgeon General’s Report (2009), citing Hall, J.R. (2001). Burns, toxic gases, and other hazards associated with fires: deaths and injuries in fire and non-fire situations. Quincy, MA: National Fire Protection Association.

The primary function of a smoke detector is to prevent the passage of smoke through the heating, ventilation, and air conditioning system, or from one side of a fire-rated separation to the other. A smoke damper closes automatically upon the detection of smoke.

ANSI accredits personnel certification bodies in accordance with the international standard, ANSI/ISO/IEC 17024: Conformity assessment requirements for bodies operating certification of persons. ICB/TABB assesses and issues a separate certification to successful candidates in each classification. To obtain and maintain ANSI accreditation for each classification, the ICB/TABB submits its processes for rigorous review by ANSI's Personnel Certification Accreditation Committee.¹⁷ ICB TABB protects the integrity of the certifications that it issues by limiting the period of certification to two years from the last day of the quarter in which the candidate obtained the certification and by requiring that holders of certifications complete a minimum number of continuing education units (CEUs) deemed "acceptable" to ICB in courses pertaining to their certifications. A holder's CEU are recorded on-line using a "TotalTrack" system, which record all training and re-training received by apprentices and journeypersons. The ICB reserves the right to suspend or withdraw its certification based upon a violation of the ICB Code of Conduct. We recommend that the Treasury Department requires that all fire life safety testing/maintenance be performed by ANSI accredited individuals.

Section 179D(f)(7)(B) provides that the term "qualified professional" means an individual who is a licensed architect or a licensed engineer and meets such other requirements as the Secretary provides. Is any guidance providing other requirements that licensed architects or licensed engineers must satisfy needed?

¹⁷ This process is described in detail in NEMIC's August 26, 2019 comments (attached) to the Office of Apprenticeship in response to the Notice of Proposed Rulemaking seeking to amend the regulations implementing the National Apprenticeship Act of 1937 (NAA), 29 U.S.C. 50. 84 Fed. Reg. 29970, 29981 (June 25, 2019).

We recommend following the definition of “Qualified Professional” as it is defined by UC Davis and detailed above.¹⁸ We also recommend that state/local license requirements be applied.

In conclusion, SMART and SMACNA appreciate the efforts of the Treasury Department to implement these provisions of IRA. We recommend that guidance be issued that makes it clear skilled, trained, and certified professionals that hold the certifications detailed above perform energy efficiency upgrades. These certifications will ensure higher quality work, help achieve energy efficiency goals and improve the safety and health of building occupants.

Submitted on November 4, 2022

¹⁸ <https://ucdavis.app.box.com/v/ProposedVentilationProgram>