



NATIONAL ENERGY MANAGEMENT INSTITUTE COMMITTEE

CERTIFICATION MANUAL

FOR NONRESIDENTIAL MECHANICAL ACCEPTANCE TEST TECHNICIAN
AND EMPLOYERS UNDER CALIFORNIA CODE OF REGULATIONS 2013
TITLE 24, PART 1, SECTIONS 10-102 AND 10-103-B, AS WELL AS
PART 6, SECTIONS 120.5

VERSION 150401

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1 Introduction

1.1 Definitions, Abbreviations and Acronyms

Certain terms, abbreviations and acronyms are defined in this section and are applicable to all sections of this manual.

ANSI American National Standards Institute

ATE..... Acceptance Test Employer

ATT..... Acceptance Test Technician

ATTCP Acceptance Test Technician Certification Provider, here NEMIC

Board..... ATTCP Review Board

Certificate of Completion Certificates of attendance or participation are provided to individuals, here Acceptance Test Employer or Acceptance Test Technician, who have attended or participated in classes, courses, or other education/ training programs or events.

Certification..... In the context of this manual it always refers to the NEMIC Acceptance Test Employer or Acceptance Test Technician certification

CCR..... California Code of Regulations

Employer In the context of this manual it always refers to an NEMIC certified Acceptance Test Employer

HVAC Heating, ventilating and air-conditioning

ICB International Certification Board, a function of NEMIC

ISO International Standards Organizations

NEMIC International Training Institute

JATC Joint Apprenticeship Training Center

Manual In the context of this document this refers to this document in its entirety.

NEMI National Energy Management Institute

NEMIC National Energy Management Institute Committee

Registry Web service with a user interface and database maintained by a Registration Provider that complies with the applicable requirements in Reference Joint Appendix JA 7 and provides for registration of residential or nonresidential compliance documentation used for demonstrating compliance with California Code of Regulations Part 6.

SMACNA Sheet Metal and Air Conditioning Contractors' National Association

SMART International Association of Sheet Metal, Air, Rail Transportation Workers (formerly Sheet Metal Workers' International Association, SMWIA)

SME Subject matter expert

Standards California Building Energy Efficiency Standards

TAB..... Testing, adjusting and balancing

Introduction

TABB.....Testing, Adjusting and Balancing Bureau, a function of NEMIC

Technician.....In the context of this manual it always refers to a NEMIC certified
Acceptance Test Technician

1.2 Purpose and Overview

NEMIC is joint labor management trust, which is tax exempt under Code Section 501(c)(6). The NEMIC trustees are appointed half by SMACNA and half by SMART. NEMIC operates as a mechanical acceptance test certification provider under California Code of Regulations 2013 Title 24, Part 1, Sections 10-102 and 10-103-B, As Well As Part 6, Sections 120.5.

This manual describes the process how one can become a certified technician or employer under said regulations. Certified technician status is available to technicians who qualify per [Section 2](#) of this manual. Certified employer status is available to employers who qualify per Section 3 of this manual. Any questions regarding the certification process should be directed to NEMIC. Contact information is provided in [Section 1.5](#).

1.3 Amendments and Interpretation

NEMIC may at any time amend any part of this Manual and standards, procedures, proficiency requirements, application forms, lists and other items to which this Manual refers. An amendment may change certification requirements, and may affect current certifications, renewals and/or new applications for certification.

NEMIC alone will interpret and administer its standards and procedures, including those set forth in this Manual. NEMIC may waive or modify any requirement at any time. NEMIC's decisions are not subject to review. NEMIC will notify existing certification holders of any and all modifications to the certification requirements made.

NEMIC may at any time adopt, change or discard rules and guidelines for the NEMIC's internal processes with respect to various certification-related activities, and/or set standards for the certification process.

1.4 The Meaning of Certification

Certification is a statement that the technician or the employer has met NEMIC's standards of certification. The purpose of NEMIC's certification is to demonstrate that NEMIC certified technicians are knowledgeable and skilled professionals able to execute mechanical acceptance tests as mandated by the California Building Energy Efficiency Standards ("Standards").

1.5 Contact Information

ATTCP Administrator
National Energy Management Institute Committee
8403 Arlington Blvd, Suite 100
Fairfax, VA 22031
Tel.: (703) 739-7100
Fax: (703) 683-7651

2 General Rules

2.1 Testing and Certification Fees

The NEMIC ATTCP sets a schedule of testing and certification fees. For an up-to-date fee schedule, visit the ATTCP website at www.attcp.org.

2.2 Duration of Certification

The NEMIC ATT and ATE Certifications do not have an expiration date. Unless there are changes to the Standards, the Certifications remain valid until the Certification holder has been notified by the ATTCP that the Certification must be renewed.

2.3 Renewal of Certification

The ATTCP will issue a renewal notice to all Certification holders, i.e., ATTs and ATEs, after the California Energy Commission has revised pertinent sections of the Standards, i.e., mandates that deal with mechanical acceptance tests. Once being notified of the renewal request, the current Certification holders have 90 days to take the updated certification exam.

At time of renewal the applicant must meet all qualifications and requirements as for initial certification.

2.4 Suspension or Withdrawal of Certification

The ATTCP reserves the right to suspend or withdraw the certification for any of the following reasons:

- Violation per [Section 2.7](#).
- A false or incomplete statement in the application for certification or renewal of certification, or otherwise in the application or renewal process.
- Failure to meet eligibility requirements.

If the ATTCP has reason to believe that any of the circumstances enumerated above existed when considering an application for renewal of certification, ATTCP will deny the renewal of certification.

2.5 Certification-Related Objections Procedures

2.5.1 Definitions

ATTCP Review **Board**.....(Board) is a committee set up by the ATTCP Administrator to investigate a Complaint or an Objection in detail. The Board consists of four (4) members: two ICB/TABB-certified supervisors and two ICB/TABB-certified contractors (employers). None of the Board members works or has a business in California. Findings of the Board on a Complaint or an Objection are final.

Claimantis the person making an **Objection**

Decisionis the written decision of the ATTCP on any or all parts of any **Objection** or an appeal.

HearingA meeting of the ATTCP with the party to the **Objection** to render a decision on the **Objection**.

Objectionsare either Test-Related Objections or General Objections

.....**Test-Related Objections** are objections by an applicant (including an applicant for renewal who is required to take any ATTCP test) that are in any manner related to the test itself, such as objections to physical or other arrangements at the test location, the manner in which the test was delivered and/or conducted, any test question, or any other matter which can be corrected or addressed at the time of the test, if known to the test proctor. Any objection to the manner in which a test is scored is not a **Test-Related Objection**.

.....**General Objections** are any objections by any applicant or technician other than a **Test-Related Objection**. **General Objections** may include, for example, objections about the conduct of any ATTCP representative or objections to an ATTCP decision (a decision as to certification, or otherwise). Thus, an **Objection** is made by someone who seeks or holds an ATTCP certification concerning ATTCP actions or omissions.

Party to a **Complaint**refers to the Claimant

Reportis the written document resulting from an investigation conducted in response to an **Objection** or **Complaint**.

2.5.2 Exclusivity

By submitting an application for ATTCP certification each applicant agrees that any **Objection** will be resolved solely in accordance with the procedures as stated in this manual.

2.5.3 General Rules on Required Deliveries and Time Limits for the Same

In the following rules, certain items, such as an **Objection**, must be in writing, i.e., they must be typed, printed or legibly handwritten.

Whenever a delivery time limit is given, i.e., the time period within which a document must have been physically delivered to the ATTCP, the requirement of the time limit will be met by any of the following conditions:

- The document has been delivered in person or by a courier service, such United Parcel Service (UPS) before the given time period expired; or
- The document has been delivered by the U.S. Postal Service using certified mail and it is postmarked within the given time period

Electronic submission of an **Objection** or any other document requested by the ATTCP is not permitted.

2.5.4 Time Limits on Objections

Objections that are not made within the following time limits will not be considered and will be dismissed categorically:

- A **Test-Related Objection** must be made to the test proctor or any other ATTCP personnel or representative at the test site. If an applicant makes a **Test-Related Objection** at the test site and it is not addressed and resolved there, the applicant must submit the **Test-Related Objection** in writing to the ATTCP within ten days after the test date. Proctors are allowed to only resolve issues which are not related to the content of the test, e.g., room conditions, missing test items, etc.
- A **General Objection** must be asserted in writing within ten days after the Claimant first knows of the **Objection**.
- The **General Objection** must state in writing, in reasonable detail, the pertinent circumstances of and reasons for the **Objection**, and must be signed by the Claimant.

2.5.5 ATTCP Procedures for Resolution of Test-Related or General Objections

The ATTCP will resolve any **Objection** in accordance with the following procedures. ATTCP reserves the right to modify any particular procedure at any instance. The ATTCP will notify any materially affected party of such a modification in a timely manner but no later than ten (10) working days.

The ATTCP Administrator or his or her representative will act for ATTCP on all matters concerning Objections, including the conduct of a hearing, unless the ATTCP Review Board determines otherwise.

2.5.5.1 Test-Related Objections

The proctor who oversees a test is authorized to resolve any Test-Related Objection.

2.5.5.2 General Objections

Figure 1 on the following page outlines the basic procedure.

1. **Initial Submittal of Objection:** The Claimant must submit the General Objection in writing to the ATTCP Administrator within ten (10) days after the Claimant first knows of the Objection (see [Section 2.5.4](#). The written claim must be mailed to the ATTCP Administrator at the address stated [Section 1.5](#) of this Manual. Do not submit a claim electronically. The written claim should be labeled “NOTICE OF CLAIM.”
2. **Initial Review of Objection:** The ATTCP Administrator will review the Objection to determine if it merits investigation or further action. An ATTCP representative may contact the Claimant to clarify any aspects of the written Objection or to obtain further information. The ATTCP Administrator will review the Objection within 14 days after its receipt.
3. **Administrative Hearing.** If an Objection is not dismissed after the initial review, ATTCP Administrator may call an informal (administrative) hearing with the Claimant.
4. **Decision.** If the Administrator determines that no further review is warranted, the decision will be report back to the Claimant in writing.
5. **Reconsideration.** The Claimant may submit his or her Objection for reconsideration by the Board.
6. **Submittal of Objection for Reconsideration.** The Claimant must submit her or his Objection within ten (10) after the Claimant was notified by the ATTCP Administrator of the ATTCP decision that no further review was warranted in the ATTCP’s opinion.
7. **Review by the ATTCP Board.** The ATTCP Board will review the Objection within thirty (30) days after receiving the Objection from the ATTCP Administrator
8. **Board Hearing.** A hearing may be called by the Board to resolve questions of fact. The hearing may be held in a face-to-face meeting with the Claimant or electronically as a teleconference. The meeting date, time and the format of the hearing are solely determined by the Board.
9. **Board Decision.** The Board will report its decision in writing to the Claimant no later than 45 days after receiving the Objection from the ATTCP Administrator. The decisions of the ATTCP Review Board are final.

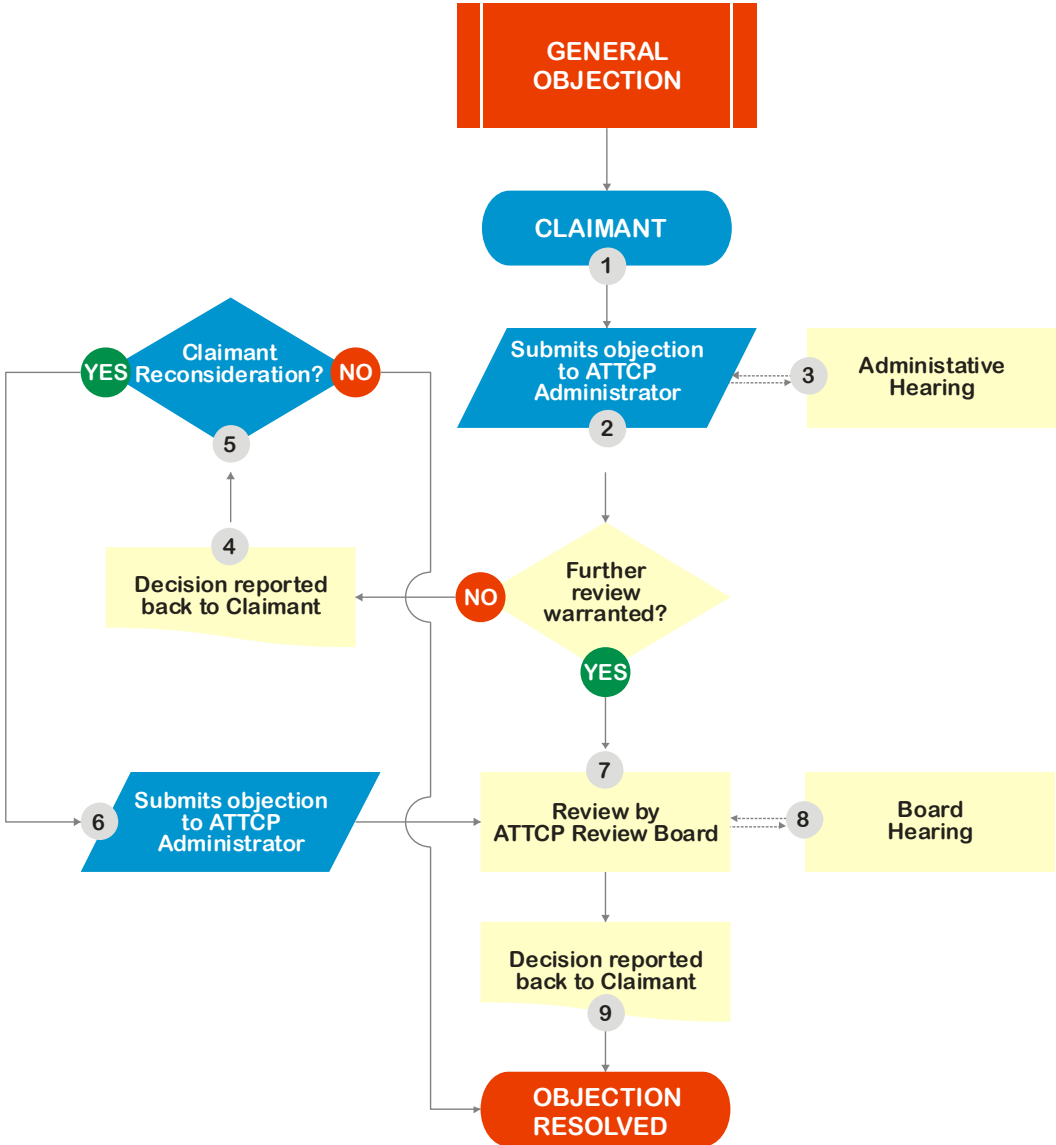


Figure 1. The basic process of resolving a General Objection by the ATTCP

2.6 ATTCP Procedures for Resolution of Complaints

The ATTCP will resolve any **Complaint** in accordance with the following procedures. ATTCP reserves the right to modify any particular procedure at any instance. The ATTCP Administrator will notify any materially affected party of such a modification in a timely manner but no later than ten (10) working days.

The ATTCP Administrator or his or her representative will act for ATTCP on all matters concerning **Complaints**, including the conduct of a hearing, unless the ATTCP Review Board determines otherwise.

2.6.1 Definitions

ATTCP Review **Board**.....(Board) is a committee set up by the ATTCP Administrator to investigate a Complaint or an Objection in detail. The Board consists of four (4) members: two ICB/TABB-certified supervisors and two ICB/TABB-certified contractors (employers). None of the Board members works or has a business in California. Findings of the Board on a Complaint or an Objection are final.

Claimantis the person making a **Complaint**.

Complaint(s)include any complaint concerning work or conduct of an ATE or an ATT.

Decisionis the written decision of the ATTCP on any or all parts of any Complaint or an appeal.

HearingA meeting of the ATTCP with the parties to Complaint to render a decision on the Complaint.

InvestigationA fact finding mission by a representative aka investigator of the ATTCP to the physical place where the Complaint occurred.

Party to a Complaintrefer to the Claimant and any Subject.

Registry.....is a web service with a user interface and database maintained by a Registration Provider that complies with the applicable requirements in Reference Joint Appendix JA 7, with guidance from the Data Registry Requirements Manual, and provides for registration of residential or nonresidential compliance documentation used for demonstrating compliance with Part 6. The Registration Provider is a third party not associated with the Registry.

Reportis the written document resulting from an investigation conducted in response to a Complaint.

Subject.....is the person or entity whose work, conduct or other action or omission is the subject of a Complaint. Here, the Subject is either an ATE or an ATT or may be both if named so by the Claimant.

2.6.2 Exclusivity

By submitting an application for ATTCP certification each applicant agrees that any **Complaint** will be resolved solely in accordance with the procedures as stated in this manual.

2.6.3 General Rules on Required Deliveries and Time Limits for the Same

In the following rules, certain items, such as a Complaint, must be in writing, i.e., they must be typed, printed or legibly handwritten.

Whenever a delivery time limit is given, i.e., the time period within which a document must have been physically delivered to the ATTCP, the requirement of the time limit will be met by any of the following conditions:

- The document has been delivered in person or by a courier service, such United Parcel Service (UPS) before the given time period expired; or
- The document has been delivered by the U.S. Postal Service and it is postmarked within the given time period

Electronic submission of a Complaint or any other document requested by the ATTCP is not permitted.

2.6.4 Time Limits on Complaints

Complaints that are not made within the following time limits will not be considered and will be dismissed categorically:

- A Complaint must be asserted in writing within ten (10) days after the Claimant first knows of the complaint.
- The Complaint must state in writing, in reasonable detail, the pertinent circumstances of and reasons for the Complaint, all the subjects to the Complaint, and must be signed by the Claimant.

2.6.5 ATTCP Procedures for Resolution of Complaints

The ATTCP will resolve any Complaint in accordance with the following procedures. ATTCP reserves the right to modify any particular procedure at any instance. The ATTCP will notify any materially affected party of such a modification in a timely manner but no later than ten (10) working days.

The ATTCP Administrator or his or her representative will act for ATTCP on all matters concerning Complaints, including the conduct of a hearing, unless the ATTCP Review Board determines otherwise.

Figure 2 on the following page outlines the basic process.

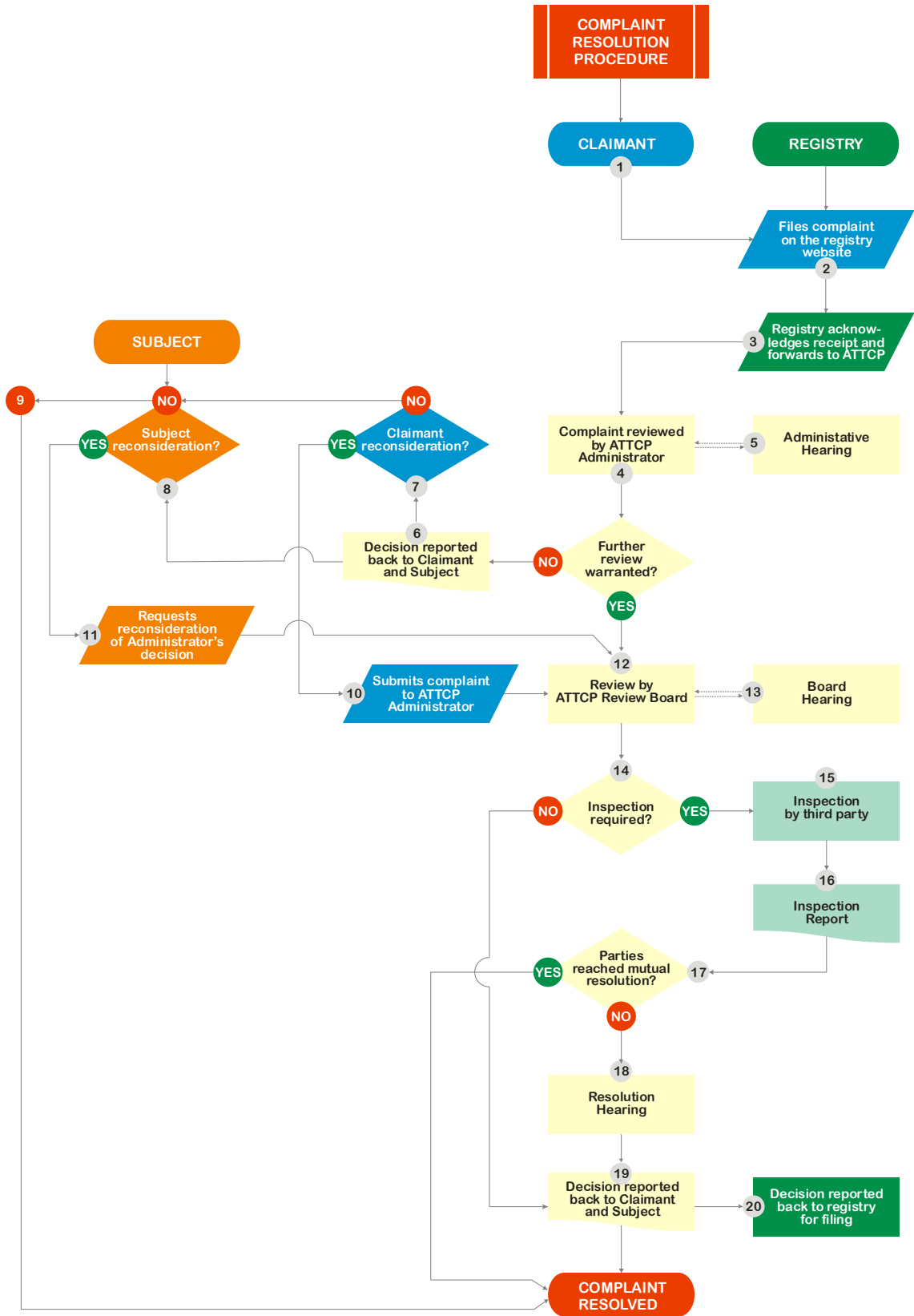


Figure 2. The basic process of resolving a Complaint by the ATTCP

1. **Initial Submittal of Complaint:** The Claimant must file the Complaint on the Registry website within ten (10) days after the Claimant first knows of the Complaint (see Section 2.6.4 above). Should the Registry website at the time of filing of the Complaint not be fully operational, the Claimant shall file the Complaint in writing with the NEMIC ATTCP Administrator. The written claim must be mailed to the ATTCP Administrator at the address stated [Section 1.5](#) of this Manual. Do not submit a claim electronically. The written claim should be labeled "NOTICE OF COMPLAINT."
2. **Registry Receipt Acknowledgement.** The Registry notifies the Claimant of the receipt of the Complaint and makes a record of it. Should the Registry at the time of filing of the Complaint not be fully operational, and the Claimant has submitted the Complaint in writing per Step 1 above, the NEMCI ATTCP Administrator will acknowledge the receipt of the Complaint in writing with five (5) days of receiving the Complaint.
3. **Complaint Forwarded to ATTCP.** The Registry forwards the Complaint to the ATTCP Administrator.
4. **Initial Review of Complaint:** The ATTCP Administrator will review the Complaint to determine if it merits investigation or further action. An ATTCP representative may contact the Claimant to clarify any aspects of the written Complaint or to obtain further information. The ATTCP Administrator will review the Complaint within ten (10) business days after its receipt.
5. **Administrative Hearing.** If a Complaint is not dismissed after the initial review, the ATTCP Administrator may call an informal (administrative) hearing with the Claimant and/or Subject.
6. **Decision.** If the Administrator determines that no further review is warranted, the decision will be reported back to the Claimant and the Subject in writing.
7. **Reconsideration by Claimant.** The Claimant may submit his or her Complaint for reconsideration by the Board.
8. **Reconsideration by Subject.** The Subject may request a reconsideration of the ATTCP Administrator's decision by the Board.
9. If neither party requests a reconsideration of the ATTCP's Administrator's findings, then the Complaint is considered resolved and the Administrator's decision is considered final.
10. **Submittal of Complaint for Reconsideration by the Claimant.** The Claimant must submit her or his Complaint within ten (10) after the Claimant was notified by the ATTCP Administrator of the ATTCP decision that no further review was warranted in the ATTCP's opinion.
11. **Request for Reconsideration by the Subject.** The Subject must submit her or his request for reconsideration of the Administrator's decision within ten (10) after the Subject was notified by the ATTCP Administrator of the ATTCP decision that no further review was warranted in the ATTCP's opinion.
12. **Review by the ATTCP Board.** The ATTCP Board will review the Complaint within thirty (30) days after receiving the Complaint from the ATTCP Administrator
13. **Board Hearing.** A hearing may be called by the Board to resolve questions of fact. The hearing may be held in a face-to-face meeting with the Claimant and/or

General Rules

Subject or electronically as a teleconference. A hearing may be called for any of the following purposes:

- To determine if any part or all of the Complaint can be resolved to the satisfaction of the Claimant and the Subject without need for an investigation and hearing;
 - To determine if questions of fact can be resolved without need for investigation and/or hearing;
 - To determine if the scope of the investigation can be agreed upon; and/or
 - If a hearing is to occur, to determine the place, date and time of the hearing; set the amount of time allotted for the hearing; set the number of witnesses and/or exhibits that will be permitted at the hearing; determine what evidence must be submitted in advance of the hearing (and set the time limit for doing so); determine if written statements of position should be submitted in advance of the hearing (and to determine the time limit for doing so); and determine specific procedures and rules for a fair and efficient conduct of the hearing.
 - To determine any other matters that may expedite the resolution of the Complaint.
- 14. Determination of Inspection.** The Board will determine if an inspection is warranted.
- 15. Inspection by Third Party.** If there will be an inspection, ATTCP will designate one or more inspectors. The investigators shall contact the Claimant and any Subject. The investigator may inspect (or have inspected by a designated representative) the work to which the Complaint pertains. Reasonable notice of the date and time of any work site inspection shall be given both to the Claimant and any Subject. Both shall have an opportunity to be present. The inspector(s) can terminate the inspection if either the Claimant or any Subject interferes in any detrimental manner with the inspection. The inspector will prepare and submit a report of the investigation to the ATTCP, including any and all reasons should the inspection have been terminated due to interference by the Claimant and/or any Subject.
- 16. Inspection Report.** ATTCP reserves the right not to release any or all parts of the Report to the Claimant and/or to the Subject. Generally, ATTCP will release to those persons all pertinent provisions of the Report. However, the ATTCP may not release any or all portions of the report if, for example, the ATTCP believes that such a release may jeopardize confidential information or trade secrets or may constitute publication of possibly defamatory statements.
- 17. Mutual Resolution.** Following receipt of the Report, ATTCP shall give the Claimant and the Subject an opportunity to agree on a resolution. If a resolution is reached, the agreement shall be documented in writing and signed by both parties. With their respective signature both parties acknowledge that the Complaint has been resolved and no further action must be taken by the Claimant.
- 18. Resolution Hearing:** Absent an agreement, ATTCP shall conduct a hearing on the Complaint(s).
- The hearing will be held at a place of ATTCP's determination.
 - At the hearing, the Claimant and the Subject will be given an opportunity to state their respective positions and to present evidence, all within the framework as set by the pre-hearing conference as described above.

General Rules

- A party and any witness shall be allowed to be present by telephonic or video conference, if requested, and if ATTCP determines that practical arrangements can be made for telephonic or video conferencing.
- ATTCP may make a recording of the hearing.
- ATTCP shall determine who may attend a hearing.
- ATTCP shall determine all questions of procedure at the hearing. It may require witnesses to testify under oath administered by any duly qualified person. ATTCP shall determine the order of proceeding. ATTCP may limit the time anyone is allowed to speak or give evidence at a hearing, and may limit the number of persons who may testify at a hearing.

Evidence: ATTCP reserves the right to solely determine which evidence to be relevant and material to the Complaint. ATTCP may accept evidentiary statements by affidavit. To that end, ATTCP may require that any evidence submitted by affidavit be provided in advance of any hearing.

Waiver of Rules: A party who participates in any conference or attends a hearing and fails to object at the time of an action or omission, such party shall have waived any and all objection to the action or omission in question.

General Principles: ATTCP shall seek to ensure that investigations and hearings are conducted fairly and impartially, and in a manner that gives the Claimant and the Subject a reasonable opportunity to state their positions and to present relevant and material evidence in support of their positions. All proceedings (informal interviews or questions, conferences, investigations, hearings and any other proceedings) are to proceed in a civil and respectful manner, within time limitations and constraints as specified by the ATTCP. A person who is disruptive, defamatory or insulting, or who hinders any such proceeding, may be excluded from further participation in the proceedings. ATTCP may set time limits for a party to submit written statements of position, evidence or other material prior to or after a hearing, may require one or more pre-hearing conferences to settle procedural or other questions in advance of a hearing, and may reopen a hearing to consider further evidence or other information. Any decision by ATTCP on procedural questions with respect to an investigation, hearing or any other proceeding shall be final, conclusive and binding to all parties participating in the matter which is under investigation.

19. Board Decision. The Board will report its decision in writing to the Claimant no later than 45 days after receiving the Objection from the ATTCP Administrator. The decisions of the ATTCP Review Board are final.

20. Filing with the Registry. A copy of the final findings by the Board is forwarded to the Registry for record.

The ATTCP reserves the right of final determination with respect to any of the above matters.

2.7 ATTCP Decisions and Sanctions

A Decision on the Objection or Complaint will be rendered following a hearing. The goal will be to render a Decision within 60 days following the date of the hearing.

General Rules

ATTCP may assess reasonable costs and expenses in connection with proceedings on any Objection or Complaint (including a reasonable allocation of general overhead costs of ATTCP), as follows:

- Against the Subject of a Complaint if the ATTCP finds the Subject to have been at fault or to have acted in a manner inconsistent with ATTCP standards, or
- Against any person who ATTCP determines made or pursued an Objection, Complaint without merit and in bad faith.

Any assessment under the preceding provisions may be made without regard to whether ATTCP takes any other action, or imposes any sanction, against or with respect to any person against whom costs and expenses are assessed. Any such assessment shall be paid on demand by the person against whom it is made. That person shall also pay all costs of collection of any such assessment, including reasonable attorney's fees. ATTCP shall have the right to recover any such assessment and all such costs of collection in an action in any court of competent jurisdiction, and ATTCP's costs in connection with any such action, including ATTCP's reasonable attorney's fees, also shall be paid by the person, as additional costs of collection.

Sanctions which the ATTCP may impose (in addition to an assessment of costs and expenses as stated above) may include one or more of the following:

- Written (formal) reprimand or warning;
- Withdrawal of the Subject's ATTCP certification ("decertification") with the right to re-apply for certification after a period of time as set forth by the ATTCP.
- Permanent decertification.

By applying for ATTCP certification each applicant agrees to pay any assessment of costs and expenses in the event of an Objection or Complaint. The applicant further acknowledges that he or she may be subject to possible sanctions as stated above.

A decision on any Objection or Complaint by the ATTCP shall be final, conclusive and binding to all interested parties.

3 The Certification Process and Requirements for Technicians

A Certified Acceptance Testing Technician is one who has:

- Met the qualifications and completed the general application requirements as described in this Manual.
- Passed the Written Test as set forth in this Manual.

3.1 Eligibility

To be eligible for the ATT certification, the applicant must be

- An individual with respect to whom contributions are payable to the NEMIC; or an instructor with a JATC in the Sheet Metal Industry; or other individual who qualifies as an NEMIC Participant.
- ICB/TABB-certified in testing, adjusting and balancing
- Holds an ITI certificate of completion of having received training on mechanical acceptance testing mandates and procedures as specified by the latest version of the California Building Energy Efficiency Standards.

3.2 Application

1. Applicant completes the ATT application online.
2. Upon submission the ATTCP will verify the eligibility of the applicant to be certified.
3. The applicant is notified of ATTCP action, including any request for additional documentation.
 - a. If approved, the applicant will be notified in writing or by electronic communications.
 - b. If not approved, the applicant will be notified in writing or by electronic communications. The applicant may appeal this decision as specified in [Section 2.5.5.2](#) of this Manual.

3.3 Certification Test

The certification test consists of a written test. The test encompasses 80 question. The ATT candidate is given 4 hours to answer the questions.

An applicant may not test until he or she has been notified that he or she is eligible to be certified per Section 3.2.

1. Upon receiving written notification by ATTCP that the applicant has met the eligibility requirements, the applicant submits the eligibility notice to the local JATC coordinator.

The Certification Process and Requirements for Technicians

2. The local JATC coordinator will designate a proctor.
3. The proctor requests a test which the ATTCP mails to the designated proctor along with proctor guidelines. The tests and proctor information are in a sealed envelope.
4. The test proctor administers the test according to the instructions.
 - ✓ The seal on the test must be opened by applicant only.
 - ✓ The test must be completed in one sitting in a designated room and within the specified time limit.

The applicant may use:

- ✓ Any reference books or notebooks deemed appropriate by the ATTCP.

The test proctor will time the test to the specified time allowed.

- a. The test proctor will record time started.
- b. At end of time allocated for test
 1. The applicant is stopped.
 2. Time ended entered by the test proctor.
- c. The test proctor mails all testing materials in a sealed return envelope back to the ATTCP.

3.3.1 Scoring the Certification Test

The ATTCP scores the test and determines whether the score is passing.

- If the applicant passes the certification test, the ATTCP will issue certification documents as described in Section 3.4 of this Manual; or
- If the applicant fails the certification test, the ATTCP will notify the applicant. The applicant may retest in accordance with Section 3.3.2 of this Manual.

3.3.2 Time Limits on Testing and Re-Testing

The certification test must be passed within one year from ATTCP approval of the application, or the applicant must re-apply.

An applicant who fails the certification test may apply to re-test in a manner specified by ATTCP, but may re-test only after a waiting period of at least thirty (30) calendar days.

3.4 Certification Documents

On certification ATTCP will issue the following:

A certificate including:

- Date of certification
- The name of the Technician

- The Technician’s individualized certification number

3.5 Decertification

The ATTCP may withdraw the certification of any ATT for one or more of the following reasons:

- Falsification of data and reports.
- Failure to maintain eligibility.
- Failure to meet the Code of Conduct
- Failure to meet certification obligations
- Leaves an employer who is signatory to a collective bargaining agreement that provides for contributions on behalf of its members directly to NEMIC and hires with an employer who is NOT signatory to a collective bargaining agreement that provides for contributions on behalf of its members directly to NEMIC.
- Failure to pass the quality assurance audit per [Section 5](#).
- Other cause as determined by the ATTCP.

3.6 Technician Certification Obligations and Code of Conduct

A NEMIC-certified Acceptance Testing Technician must comply with the following obligations and [Code of Conduct](#) as a requirement for maintaining certification. Violations of the [Code of Conduct](#) or failure to meet any of the following obligations are grounds for suspension, withdrawal or non-renewal of certification.

To maintain NEMIC ATTCP certification the NEMIC-certified Acceptance Testing Technician shall

- a) Adhere to the NEMIC ATTCP [Code of Conduct](#) for Technicians,
- b) Adhere to any and all NEMIC ATTCP protocols and regulations.
- c) Adhere to all mandates of the California Code of Regulations Title 24, particularly as they pertain to mechanical acceptance testing
- d) Meet all applicable registration, insurance, licensing, and bonding State or local mandates and regulations
- e) Maintain proof of registration, insurance, licensing, and bonding that meet any and all State or local mandates and regulations.
- f) Be employed by an employer who is signatory to a collective bargaining agreement that provides for contributions on behalf of its members directly to NEMIC.

3.7 Claims

An applicant (“claimant”) who believes he or she has been improperly considered ineligible; has an objection to any ATTCP testing or certification decision; or ATTCP withdrawal of his or her certification may make a claim as stated in [Section 2.5.5](#) of this Manual.

3.8 Renewal of Certification

The following documents are required to renew the ATT certification:

- Completed online renewal application
- Holds a current ICB/TABB certification in testing, adjusting and balancing
- Holds an ITI certificate of completion of having received training on mechanical acceptance testing mandates and procedures as specified by the latest version of the Standards.

3.9 Standards of Proficiency for Acceptance Testing Technicians

An NEMIC Certified ATT must be proficient in all of the categories of the *Knowledge Base for California 2013 Title 24 Acceptance Testing Technicians*, as demonstrated by passing the certification test. The *Knowledge Base for California 2013 Title 24 Acceptance Testing Technicians* is found in [Section 6](#) of this manual.

4 The Certification Process and Requirements for Employers

A Certified Acceptance Testing Employer is one who has:

- Met the qualifications and completed the general application requirements as described in this Manual.
- Passed the Written Test as set forth in this Manual.

4.1 Eligibility

To be eligible for the ATE certification, the applicant must be

- Signatory to a collective bargaining agreement that provides for contributions on behalf of its members directly to NEMIC, and is current with all financial obligations under that collective bargaining agreement.
- Holds a NEMI certificate of completion of having received training on mechanical acceptance testing mandates and procedures as specified by the latest version of the California Building Energy Efficiency Standards.

4.2 Application

1. Applicant completes the ATE application online.
2. Upon submission the ATTCP will verify the eligibility of the applicant to be certified.
3. The applicant is notified of ATTCP action, including any request for additional documentation.
 - a. If approved, the applicant will be notified in writing or by electronic communications.
 - b. If not approved, the applicant will be notified in writing or by electronic communications. The applicant may appeal this decision as specified in Section 2.5.5.2 of this Manual.

4.3 Certification Test

The certification test consists of a written test. The test encompasses 25 question. The ATE candidate is given 2 hours to answer the questions.

An applicant may not test until he or she has been notified that he or she is eligible to be certified per Section 4.2.

1. Upon receiving written notification by ATTCP that the applicant has met the eligibility requirements, the applicant submits the eligibility notice to the local JATC coordinator.
2. The local JATC coordinator will designate a proctor.

The Certification Process and Requirements for Employers

3. The proctor requests a test which the ATTCP mails to the designated proctor along with proctor guidelines. The tests and proctor information are in a sealed envelope.
4. The test proctor administers the test according to the instructions.
 - The seal on the test must be opened by applicant only.
 - The test must be completed in one sitting in a designated room and within the specified time limit.

The applicant may use:

- Any reference books or notebooks deemed appropriate by the ATTCP.

The test proctor will time the test to the specified time allowed.

- a. The test proctor will record time started.
- b. At end of time allocated for test
 1. The applicant is stopped.
 2. Time ended entered by the test proctor.
- c. The test proctor mails all testing materials in a sealed return envelope back to the ATTCP.

4.3.1 Scoring the Certification Test

The ATTCP scores the test and determines whether the score is passing.

- If the applicant passes the certification test, the ATTCP will issue certification documents as described in Section 4.4 of this Manual; or
- If the applicant fails the certification test, the ATTCP will notify the applicant. The applicant may retest in accordance with Section 4.3.2 of this Manual.

4.3.2 Time Limits on Testing and Re-Testing

The certification test must be passed within one year from ATTCP approval of the application, or the applicant must re-apply.

An applicant who fails the certification test may apply to re-test in a manner specified by ATTCP, but may re-test only after a waiting period of at least thirty (30) calendar days.

4.4 Certification Documents

On certification ATTCP will issue the following:

A certificate including:

- Date of certification
- The name and business address of the Employer
- The Employer's individualized certification number

4.5 Employer Certification Obligations and Code of Conduct

A NEMIC-certified Acceptance Testing Employer must comply with the following obligations and [Code of Conduct](#) as a requirement for maintaining certification. Violations of the [Code of Conduct](#) or failure to meet any of the following obligations are grounds for suspension, withdrawal or non-renewal of certification.

To maintain NEMIC ATTCP certification the NEMIC-certified Acceptance Testing Employer shall

- a) Adhere to the NEMIC ATTCP [Code of Conduct](#) for Employers,
- b) Adhere to any and all NEMIC ATTCP protocols and regulations.
- c) Adhere to all mandates of the California Code of Regulations Title 24, particularly as they pertain to mechanical acceptance testing
- d) Meet all applicable registration, insurance, licensing, and bonding mandates and regulations
- e) Maintain proof of registration, insurance, licensing, and bonding that meet any and all mandates and regulations
- f) Warrant that at least one company executive has completed the National Energy Management Institute Mechanical Acceptance Testing Employer course and has passed the NEMIC Mechanical Acceptance Testing Certification Exam. Should there be change in employment resulting in loss of the said executive, the Employer shall have another company executive completed the National Energy Management Institute Mechanical Acceptance Testing Employer course and have passed the NEMIC Mechanical Acceptance Testing Certification Exam within 90 days of change of employment.
- g) Submit copies of all mechanical acceptance tests performed by its Mechanical Acceptance Testing Technicians to the NEMIC ATTCP within ten (10) business days upon completion of said tests. Starting in 2015, the NEMIC-certified Acceptance Testing Employer shall submit these documents to the mandated Registry. Copies of the said documents shall be maintained for a minimum of five (5) years.
- h) Submit records or financial data that substantiate ATTCP-related work to NEMIC upon request.
- i) Notify NEMIC within 48 hours if its contractor's license or business license has been revoked or suspended
- j) Notify NEMIC within 48 hours if the employer or any official or executive of the employer has been found guilty of a felony in the court of law or has been found liable in a civil litigation.

Code of Conduct of the National Energy Management Institute Committee Operating as the Mechanical Acceptance Test Technician and Employer Certification Provider

Each technician and employer certified by National Energy Management Institute Committee under California Code of Regulations Title 24 Part 1, Sections 10-102 and 10-103-B is expected to practice his or her profession consistent with the standards and procedures applicable to the certification, and the highest quality workmanship.

NEMI-certified Mechanical Acceptance Testing Technicians

- Will perform their work in an orderly, systematic, well-documented and repeatable manner.
- Will document all findings in an accurate and professional manner so that building code officials can review a comprehensive and chronological history of the procedures followed.
- Will not make any statements that cannot be substantiated and verified by field measurements or observations.
- Must meet standards and procedures as set by the NEMIC as the Acceptance Test Technician and Employer Certification Provider, and adhere to all rules, regulations and obligations of the NEMIC certification program.
- Will work in a professional manner so as to ensure their own safety and the safety of their fellow workers while being respectful to the property of the employers, building owner and his representatives.
- Will observe proper protocol when noting contract or installation deficiencies, errors or omissions by others.
- NEMI-certified Mechanical Acceptance Testing Employers:
 - Must employ enough Certified Mechanical Acceptance Testing Technicians to meet the scope of its business operations.
 - Must perform any and all mechanical acceptance tests only by Certified Mechanical Acceptance Testing Technicians.
 - Shall only certify projects where the work was performed by Certified Mechanical Acceptance Testing Technicians employed by their own firm.
 - Will ensure that any and all projects involving work in the area of this certification are performed in accordance with standards and procedures as mandated by the California Code of Regulations Title 24 and, if applicable, as adopted by local Authorities Having Jurisdiction.
 - Will maintain valid calibrations of all diagnostic equipment and instruments in accordance with manufacturers' specification while meeting the mandates of the California Building Energy Efficiency Standards with respect to the said diagnostic equipment and instruments.

4.6 Decertification

The ATTCP may withdraw the certification of any ATE for one or more of the following reasons:

- Falsification of data and reports.
- Failure to maintain eligibility.
- Failure to meet the Code of Conduct
- Failure to meet certification obligations
- Ceases to be signatory to a collective bargaining agreement that provides for contributions on behalf of its members directly to NEMIC
- Failure to pass the quality assurance audit per [Section 5](#).
- Other cause as determined by the ATTCP.

4.7 Claims

An applicant (“claimant”) who believes he or she has been improperly considered ineligible; has an objection to any ATTCP testing or certification decision; or ATTCP withdrawal of his or her certification may make a claim as stated in [Section 2.5.5](#) of this Manual.

4.8 Renewal of the Certification

The following documents are required to renew the ATE certification:

- Completed online renewal application
- Holds a NEMI certificate of completion of having received training on mechanical acceptance testing mandates and procedures as specified by the latest version of the Standards.

4.9 Standards of Proficiency for Acceptance Testing Employers

An NEMIC Certified ATE must be proficient in all of the categories of the Knowledge Base for California 2013 Title 24 Acceptance Testing Employers, as demonstrated by passing the certification test. The *Knowledge Base for California 2013 Title 24 Acceptance Testing Employers* is found in [Section 7](#) of this manual.

5 NEMIC ATTCP Quality Assurance Program

The California code of Regulations Title 24 Part 1 Section 10-103-B(c)3F, i.e., requires the NEMIC certification business practices to include quality assurance (QA), including the performance of the ATTs in the field.

At this time, the NEMIC ATTCP QA program will be a paper-only audit, i.e., the audit will consist of reviewing a random number of mechanical acceptance forms completed by the respective ATT.

The NEMIC ATTCP QA process elements are:

1. Every audit will review five (5) percent of each type of completed mechanical acceptance forms with a minimum of five (5) forms per each type and not to exceed ten (10) forms per each type.
2. The following table that shows the number of forms per type of mechanical tests performed to be audited.

Number of Mechanical Acceptance Forms Completed of Each Type	Number of Forms to be Audited
1 - 109	5
110 - 129	6
130 – 149	7
150 – 169	8
170 – 199	9
200 and greater	10

3. The forms to be audited will be generated randomly by the Registry.
4. The first audit of a certified ATT will be performed within 12 months after the ATT’s initial certification date.
5. After the first audit, each ATT will be audited once within a code cycle, i.e., every three years. The audit will include only those mechanical acceptance forms that have been completed after the date of the previous audit.
6. If the ATT fails an audit, he or she will be decertified. He or she can reapply for certification upon completing the required mechanical ATT training classes.
7. If the ATE, who employed the “failed” ATT has more than one ATT working for the firm, an audit will be performed on another ATT working for the same ATE. If that ATT fails the audit as well, he or she will be decertified along with the ATE. The audit will follow the format as described under point 1). The ATE can reapply for certification upon completing the required mechanical ATE training classes.

An example of how this audit process would work. Let us assume that the ATT has completed the following mechanical acceptance tests since his last audit and they included the following forms:

Mechanical Acceptance Form	Number Completed Since Last Audit	Number of Forms to be Audited
NRCA-MCH-02-A – Outdoor Air Acceptance	112	6
NRCA-MCH-03-A – Constant Volume, Single Zone, Unitary Air Conditioner and Heat Pump Systems	52	5
NRCA-MCH-04-A – Air Distribution Systems Acceptance	0	0
NRCA-MCH-05-A – Air Economizer Controls Acceptance	112	6
NRCA-MCH-06-A – Demand Control Ventilation Systems Acceptance	0	0
NRCA-MCH-07-A – Supply Fan VFD Acceptance	70	5
NRCA-MCH-08-A – Valve Leakage Test	54	5
NRCA-MCH-09-A – Supply Water Temperature Reset Controls Acceptance	54	5
NRCA-MCH-10-A – Hydronic System Variable Flow Control Acceptance	54	5
NRCA-MCH-11-A – Automatic Demand Shed Control Acceptance	28	5
NRCA-MCH-12-A – Fault Detection & Diagnostics (FDD) for Packaged Direct Expansion Units	26	5
NRCA-MCH-13-A – Automatic Fault Detection & Diagnostics (FDD) for Air Handling Units & Zone Terminal Units Acceptance	0	0
NRCA-MCH-14-A – Distributed Energy Storage DX AC Systems Acceptance	0	0
NRCA-MCH-15-A – Thermal Energy Storage (TES) System Acceptance	0	0
NRCA-MCH-16-A – Supply Air Temperature Reset Controls Acceptance	13	5
NRCA-MCH-17-A – Condenser Water Supply Temperature Reset Controls Acceptance	13	5
NRCA-MCH-18-A – Energy Management Control System Acceptance	13	5
Totals	601	62

The audit would include 62 of 601 forms the ATT completed, i.e., a total of over 10% of the mechanical acceptance forms the ATT had completed since his or her last audit.

6 Knowledge Base for California 2013 Title 24 Acceptance Testing Technicians

6.1 Reference Materials

- SMACNA HVAC Systems Application
- SMACNA HVAC Systems Testing, Adjusting and Balancing
- SMACNA TAB Procedural Guide
- TABB TAB Procedural Guide
- SMACNA HVAC Air Duct Leakage Test Manual
- SMACNA HVAC Systems Duct Design
- California Code of Regulation Title 24 Part 1 Section 10-102, 10-103 and 10-103B as well as well as Part 6 section 120.5
- 2013 California Energy Code
- 2013 Nonresidential Appendix NA 7 – Installation and Acceptance Requirements for Nonresidential Buildings and Covered Processes including Mechanical Systems Compliance Forms and Mechanical Systems Acceptance Forms
- 2013 Nonresidential Compliance Manual Section 13. Acceptance Requirements

6.2 California Code of Regulations Title 24

The Acceptance Testing Technician must be knowledgeable about

- California Code of Regulation Title 24 Part 1 Section 10-102 and 10-103B as well as well as Part 6 section 120.5
- 2013 California Energy Code
- 2013 Nonresidential Appendix NA 7 – Installation and Acceptance Requirements for Nonresidential Buildings and Covered Processes including Mechanical Systems Compliance Forms and Mechanical Systems Acceptance Forms

6.3 NA7.5.1 Outdoor Air: Variable Air and Constant Volume Systems

The Acceptance Testing Technician must be knowledgeable about the purpose of these tests, the use of proper instrumentation to execute them, the conditions under which these test need to be performed, the acceptance criteria and potential issues when doing these tests. In particular, the Acceptance Testing Technician must be knowledgeable about how to do:

- Construction inspection for both CAV and VAV systems
- Identify the proper dynamic control method:
 - ✓ Dual Minimum Setpoint Design
 - ✓ Energy Balance Method

- ✓ Return Fan Tracking
- ✓ Airflow Measurement of the Entire Outdoor Air Inlet
- ✓ Injection Fan Method
- ✓ Dedicated Minimum Ventilation Damper with Pressure Control
- Functional testing for both CAV and VAV systems
- Complete the pertinent Certificate of Acceptance

6.4 NA7.5.2 Constant Volume, Single-zone, Unitary Air Conditioner and Heat Pump Systems Acceptance

The Acceptance Testing Technician must be knowledgeable about the purpose of this test, the conditions under which this test needs to be performed, and the acceptance criteria and potential issues when doing this test. In particular, the Acceptance Testing Technician must be knowledgeable about how to do:

- Construction inspection
- Complete the pertinent Certificate of Acceptance

6.5 NA7.5.3 Air Distribution Systems Acceptance

The Acceptance Testing Technician must be knowledgeable about the purpose of this test, the use of proper instrumentation to execute it, the conditions under which this test needs to be performed, the acceptance criteria and potential issues when doing this test. In particular, the Acceptance Testing Technician must be knowledgeable about:

- The qualifications the technician must have to perform these tests
- The scope of the requirements when these tests must be performed
- How to do the construction inspection
- How to conduct the functional testing
- How to complete the pertinent Certificate of Acceptance

6.6 NA7.5.4 Air Economizer Controls Acceptance

The Acceptance Testing Technician must be knowledgeable about the purpose of this test, the use of proper instrumentation to execute it, the conditions under which this test needs to be performed, the acceptance criteria and potential issues when doing this test. In particular, the Acceptance Testing Technician must be knowledgeable about:

- How to do the construction inspection based upon the pertinent section of the California Energy Code
- How to conduct the functional testing for the most common type of packaged unitary air conditioners, controllers and DDC systems
- How to complete the pertinent Certificate of Acceptance

6.7 NA7.5.5 Demand Control Ventilation (DCV) Systems Acceptance

The Acceptance Testing Technician must be knowledgeable about the purpose of this test, the use of proper instrumentation to execute it, the conditions under which this test needs to be performed, the acceptance criteria and potential issues when doing this test. In particular, the Acceptance Testing Technician must be knowledgeable about:

- The applicability of the test
- How to do the construction inspection
- How to conduct the functional testing
- How to complete the pertinent Certificate of Acceptance

6.8 NA7.5.6 Supply Fan Variable Flow Controls Acceptance

The Acceptance Testing Technician must be knowledgeable about the purpose of this test, the use of proper instrumentation to execute it, the conditions under which this test needs to be performed, the acceptance criteria and potential issues when doing this test. In particular, the Acceptance Testing Technician must be knowledgeable about:

- How to do the construction inspection
- How to conduct the functional testing
- How to complete the pertinent Certificate of Acceptance

6.9 NA7.5.7 Valve Leakage Acceptance

The Acceptance Testing Technician must be knowledgeable about the purpose of this test, the use of proper instrumentation to execute it, the conditions under which this test needs to be performed, the acceptance criteria and potential issues when doing this test. In particular, the Acceptance Testing Technician must be knowledgeable about:

- The applicability of the test
- How to do the construction inspection
- How to conduct the functional testing
- How to complete the pertinent Certificate of Acceptance

6.10 NA7.5.8 Supply Water Temperature Reset Controls Acceptance

The Acceptance Testing Technician must be knowledgeable about the purpose of this test, the use of proper instrumentation to execute it, the conditions under which this test needs to be performed, the acceptance criteria and potential issues when doing this test. In particular, the Acceptance Testing Technician must be knowledgeable about:

- The applicability of the test
- How to do the construction inspection
- How to conduct the functional testing

- How to complete the pertinent Certificate of Acceptance

6.11 NA7.5.9 Hydronic System Variable Flow Control Acceptance

The Acceptance Testing Technician must be knowledgeable about the purpose of this test, the use of proper instrumentation to execute it, the conditions under which this test needs to be performed, the acceptance criteria and potential issues when doing this test. In particular, the Acceptance Testing Technician must be knowledgeable about:

- How to do the construction inspection
- How to conduct the functional testing
- How to complete the pertinent Certificate of Acceptance

6.12 NA7.5.10 Automatic Demand Shed Control Acceptance

The Acceptance Testing Technician must be knowledgeable about the purpose of this test, the use of proper instrumentation to execute it, the conditions under which this test needs to be performed, the acceptance criteria and potential issues when doing this test. In particular, the Acceptance Testing Technician must be knowledgeable about:

- How to do the construction inspection
- How to conduct the functional testing
- How to complete the pertinent Certificate of Acceptance

6.13 NA7.5.11 Fault Detection & Diagnostics (FDD) for Packaged Direct Expansion Units

The Acceptance Testing Technician must be knowledgeable about the purpose of this test, the conditions under which this test needs to be performed, the acceptance criteria and potential issues when doing this test. In particular, the Acceptance Testing Technician must be knowledgeable about:

- How to conduct the functional testing of air handlings units
- How to conduct the functional testing of zone terminal units
- How to complete the pertinent Certificate of Acceptance

6.14 NA7.5.12 FDD for Air Handling Units and Zone Terminal Units Acceptance

The Acceptance Testing Technician must be knowledgeable about the purpose of this test, the conditions under which this test needs to be performed, the acceptance criteria and potential issues when doing this test. In particular, the Acceptance Testing Technician must be knowledgeable about:

- How to conduct the functional testing of air handlings units
- How to conduct the functional testing of zone terminal units

- How to complete the pertinent Certificate of Acceptance

6.15 NA7.5.13 Distributed Energy Storage DX AC System Acceptance

The Acceptance Testing Technician must be knowledgeable about the purpose of this test, the conditions under which this test needs to be performed, the acceptance criteria and potential issues when doing this test. In particular, the Acceptance Testing Technician must be knowledgeable about:

- How to do the construction inspection
- How to conduct the functional testing
- How to complete the pertinent Certificate of Acceptance

6.16 NA7.5.14 Thermal Energy Storage (TES) System Acceptance

The Acceptance Testing Technician must be knowledgeable about the purpose of this test, the conditions under which this test needs to be performed, the acceptance criteria and potential issues when doing this test. In particular, the Acceptance Testing Technician must be knowledgeable about:

- How to do the construction inspection on various types of TES systems, including but not limited to:
 - ✓ Chilled Water Storage
 - ✓ Ice-on-Coil
 - ✓ CHS
 - ✓ Ice Harvester
 - ✓ Brine
 - ✓ Ice-Slurry
 - ✓ Eutectic Salt
- How to conduct the functional testing
- How to complete the pertinent Certificate of Acceptance

6.17 NA7.5.15 Supply Air Temperature Reset Controls Acceptance

The Acceptance Testing Technician must be knowledgeable about the purpose of this test, the use of proper instrumentation to execute it, the conditions under which this test needs to be performed, the acceptance criteria and potential issues when doing this test. In particular, the Acceptance Testing Technician must be knowledgeable about:

- How to do the construction inspection

- How to conduct the functional testing
- How to complete the pertinent Certificate of Acceptance

6.18 NA7.5.16 Condenser Water Temperature Reset Controls Acceptance

The Acceptance Testing Technician must be knowledgeable about the purpose of this test, the use of proper instrumentation to execute it, the conditions under which this test needs to be performed, the acceptance criteria and potential issues when doing this test. In particular, the Acceptance Testing Technician must be knowledgeable about:

- How to do the construction inspection
- How to conduct the functional testing
- How to complete the pertinent Certificate of Acceptance

6.19 NA7.5.17 Energy Management Control System Acceptance

The Acceptance Testing Technician must be knowledgeable about the purpose of this test, the conditions under which this test needs to be performed, the acceptance criteria and potential issues when doing this test. In particular, the Acceptance Testing Technician must be knowledgeable about:

- How to do the construction inspection
- How to conduct the functional testing
- How to complete the pertinent Certificate of Acceptance

7 Knowledge Base for California 2013 Title 24 Acceptance Testing Employers

7.1 Reference Materials

- SMACNA HVAC Systems Application
- SMACNA HVAC Systems Testing, Adjusting and Balancing
- SMACNA TAB Procedural Guide
- TABB TAB Procedural Guide
- SMACNA HVAC Air Duct Leakage Test Manual
- SMACNA HVAC Systems Duct Design
- California Code of Regulation Title 24 Part 1 Section 10-102, 10-103 and 10-103B as well as well as Part 6 section 120.5
- 2013 California Energy Code
- 2013 Nonresidential Appendix NA 7 – Installation and Acceptance Requirements for Nonresidential Buildings and Covered Processes including Mechanical Systems Compliance Forms and Mechanical Systems Acceptance Forms
- 2013 Nonresidential Compliance Manual Section 13. Acceptance Requirements

7.2 California Code of Regulations Title 24

The Acceptance Testing Employer must be knowledgeable about

- California Code of Regulation Title 24 Part 1 Section 10-102 and 10-103B as well as well as Part 6 section 120.5
- 2013 California Energy Code
- 2013 Nonresidential Appendix NA 7 – Installation and Acceptance Requirements for Nonresidential Buildings and Covered Processes including Mechanical Systems Compliance Forms and Mechanical Systems Acceptance Forms

7.3 2013 Nonresidential Appendix NA 7.5 - Mechanical Systems Acceptance Tests

The Acceptance Testing Employer must be knowledgeable about the construction inspection, functional testing and acceptance criteria of the mechanical systems acceptance tests according to the 2013 Nonresidential Appendix NA 7.5.