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#### ADAMS BROADWELL JOSEPH & CARDOZO

KEVIN T. CARMICHAEL CHRISTINA M. CARO THOMAS A. ENSLOW KELILAH D. FEDERMAN RICHARD M. FRANCO ANDREW J. GRAF TANYA A. GULESSERIAN RACHAEL E. KOSS AIDAN P. MARSHALL TARA C. RENGIFO

Of Counsel MARC D. JOSEPH DANIEL L. CARDOZO A PROFESSIONAL CORPORATION

#### ATTORNEYS AT LAW

601 GATEWAY BOULEVARD, SUITE 1000 SOUTH SAN FRANCISCO, CA 94080-7037

> TEL: (650) 589-1660 FAX: (650) 589-5062 agraf@adamsbroadwell.com

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California Energy Commission Docket Unit, MS-4 Docket No. 22-BSTD-01 Docket No. 22-BSTD-03 715 P Street Sacramento, California 95814

#### SACRAMENTO OFFICE

520 CAPITOL MALL, SUITE 350 SACRAMENTO, CA 95814-4721 TEL: (916) 444-6201

FAX: (916) 444-6209

## **Comments on the 2025 Energy Code Field Verification & Diagnostic** Re: Testing and Nonresidential HVAC Efficiency Requirements Pre-**Rulemaking Workshop**

Dear Commissioners and Staff:

We write on behalf of the Joint Committee on Energy and Environmental Policy ("JCEEP"), Western States Council of Sheet Metal, Air, Rail and Transportation Workers ("Western States Council"), National Energy Management Institute Committee ("NEMIC"), and California Association of Sheet Metal and Air Conditioning Contractors, National Association ("CAL SMACNA") (collectively, the "Coalition") to comment on the August 29, 2023 workshop discussing proposed amendments to the nonresidential HVAC efficiency requirements and to field verification and diagnostic testing ("FV&DT") regulations as part of the 2025 update to the Building Energy Efficiency Standards ("Energy Code").

The Coalition recommends several minor code changes to eliminate redundancy, unnecessary costs, and unfair burdens placed on certified acceptance test technicians ("ATTs"), but not imposed on Home Energy Rating System ("HERS") Raters. The Coalition proposes to eliminate three HERS field verification requirements that are duplicative of acceptance testing which is first required to be performed by certified ATTs. The Coalition also proposes removing unnecessary, burdensome, and unfair requirements (local enforcement agency pre-approval and prohibition on sampling) imposed on ATTs (but not HERS Raters) for two field verification tests which the Commission has already determined that both certified ATTs and HERS Raters are trained and gualified to perform. Finally, the Coalition 4003-127j

opposes the proposal to change the name of HERS Raters to the Energy Code Compliance ("ECC") Raters because the name change creates unnecessary confusion with the acceptance testing programs, which also perform Energy Code compliance tasks.

#### I. OVERLAP OF FV&DT REQUIREMENTS, ACCEPTANCE TEST REQUIREMENTS, HERS RATERS, AND CERTIFIED ATTS

FV&DT requirements and acceptance test requirements are both intended to support successful implementation of the Energy Code by ensuring that consumers get the energy and monetary savings they expect from their investment in efficiency projects and help reduce the unnecessary consumption of energy.<sup>1</sup> Generally, HERS Raters perform FV&DT in residential and low-rise multifamily buildings; whereas, certified ATTs perform acceptance tests in nonresidential and high-rise multifamily buildings.

However, HERS Raters are required to perform field verification of certain space conditioning systems in nonresidential buildings, as well as field verification of mechanical ventilation airflow, kitchen local exhaust, heat recovery ventilation ("HRV:) or energy recovery ventilation ("ERV") rated performance, and building envelope air leakage in high-rise multifamily dwelling units.<sup>2</sup> Certified ATTs may also perform field verification of these systems but can only do so at the discretion of the local enforcement agency and may not verify through the use of sampling.<sup>3</sup>

In some instances, the field verification performed by HERS Raters is duplicative of acceptance tests performed by certified ATTs, resulting in unnecessary expenses for builders without countervailing benefits or energy efficiency savings. In instances where field verification is not redundant and certified ATTs are allowed to perform the tests, the Energy Code imposes unnecessary, unfair, costly, and burdensome barriers on ATTs which HERS Raters do not face.

https://efiling.energy.ca.gov/GetDocument.aspx?tn=250298&DocumentContentId=85032.

<sup>&</sup>lt;sup>1</sup> California Energy Commission, Revised Draft Staff Report: 2025 Update of the Field Verification and Diagnostic Testing Requirements (May 20223) p. 1 (hereinafter "Revised FV&DT Draft Staff Report"), *available at* 

<sup>&</sup>lt;sup>2</sup> See generally Cal. Code Regs., tit. 24, pt. 6 §§ 120.4(g)1, 141.0(b)2D, 160.2(b)2B. High-rise multifamily refers to multifamily buildings with four or more habitable stories. <sup>3</sup> Reference Nonresidential Appendix NA1 § 1.9.

Given the documented problems with the HERS program and its historic limitation to single family residential occupancies,<sup>4</sup> coupled with the advent of certified ATTs and the expansion of acceptance testing, it makes no sense to keep redundant testing requirements or barriers which prevent the use of certified ATTs to perform field verification in nonresidential and high-rise multifamily buildings where the Commission has already determined that ATTs have the relevant training and competency to also perform those tests.

The Commission should continue to encourage and support the use of certified ATTs. To that end, the Coalition recommends that the Commission make discrete modifications to the Energy Code as part of the 2025 update to eliminate duplicative testing requirements and ensure that ATTs are provided an equal opportunity to perform field verification in high-rise multifamily buildings.

The Coalition also opposes the proposal to rename HERS Raters to ECC Raters. HERS Raters are a known entity in the California construction world. Moreover, HERS Raters are not the only party responsible for ensuring compliance with Energy Code requirements – ATTs also perform this work. Changing the name would cause unnecessary confusion and serves no energy savings purpose.

#### II. DISCUSSION

#### A. The Commission Should Eliminate FV&DT Requirements that Are Duplicative of Mandatory Acceptance Testing Requirements

The Coalition has identified three areas where HERS field verification requirements are duplicative of mandatory acceptance testing requirements. This duplication is unnecessary and increases nonresidential and multi-family construction costs without any corresponding energy savings.

The three mandatory acceptance testing requirements are duct leakage testing for certain space conditioning systems in nonresidential buildings, mechanical ventilation system testing in high-rise multifamily dwelling units, and building envelope air leakage testing in high-rise multifamily dwelling units.

<sup>&</sup>lt;sup>4</sup> Revised FV&DT Draft Staff Report at pp. 13-17. 4003-127j

# 1. Duct leakage testing for certain space conditioning systems in nonresidential buildings.

Certified ATTs are required by Section 120.5(a)3 to perform duct leakage testing in accordance with Reference Nonresidential Appendix NA 7.5.3 on duct systems subject to testing under Section 120.4(g)1, Section 141.0(b)2Di, or Section 141.0(b)2Dii.<sup>5</sup> For the same systems, HERS Raters are required by Section 120.4(g)1 and Section 141.0(b)2Dii to perform duct leakage testing *also* in accordance with Nonresidential Appendix NA7.5.3.<sup>6</sup> NA7.5.3 requires duct leakage tests to be performed in accordance with Reference Nonresidential Appendix NA2.1.<sup>7</sup> In other words, ATTs and HERS Raters are required to perform the same tests on the exact same systems.

#### 2. Mechanical ventilation testing in high-rise multifamily dwelling units.

Certified ATTs are required by Section 160.3(d)2A to perform acceptance testing on dwelling unit ventilation systems in accordance with NA7.18.1.<sup>8</sup> NA7.18.1.1.2 requires certified ATTs to perform the required dwelling unit mechanical ventilation system verification procedure as specified by Reference Nonresidential Appendix NA2.2.<sup>9</sup> NA2.2 contains the procedures for measuring the airflow rate for mechanical ventilation systems and verification of heat recovery efficiency and fan efficiency.<sup>10</sup>

Similarly, HERS Raters are required by Section 160.2(b)2Bi to verify wholedwelling unit ventilation airflow in high-rise multifamily buildings in accordance with Reference Appendix NA2.2.4.1.1 for supply and exhaust systems or NA2.2.4.1.2 for balanced systems.<sup>11</sup> Since these two specific verification procedures are within NA2.2, this HERS Raters testing is duplicative of the requirement for ATTs to perform all the required mechanical ventilation system verification procedure specified in Reference Nonresidential Appendix NA2.2.

 $<sup>^5</sup>$  Cal. Code Regs., tit. 24, pt. 6  $\$  120.5(a)3.

<sup>&</sup>lt;sup>6</sup> *Id.* §§ 120.4(g)1, 141.0(b)2D.

<sup>&</sup>lt;sup>7</sup> Reference Nonresidential Appendix NA7 § 7.5.3.2.

<sup>&</sup>lt;sup>8</sup> Cal. Code Regs., tit. 24, pt. 6 § 160.3(d)2A.

<sup>&</sup>lt;sup>9</sup> Reference Nonresidential Appendix NA7 § 7.18.1.

<sup>&</sup>lt;sup>10</sup> Reference Nonresidential Appendix NA2 § 2.2.1.

<sup>&</sup>lt;sup>11</sup> Cal. Code Regs., tit. 24, pt. 6 § 160.2(b)2Bi. 4003-127j

#### 3. Building envelope air leakage testing for mechanical ventilation systems using supply or exhaust ventilation in high-rise multifamily dwelling units.

Certified ATTs are required by Section 160.3(d)2B to perform dwelling unit enclosure leakage testing in high-rise multifamily buildings in accordance with NA7.18.2 when exhaust or supply ventilation systems are used for compliance with whole-dwelling unit ventilation requirements.<sup>12</sup> NA7.18.2.2 requires certified ATTs to perform dwelling unit envelope air leakage procedure as specified by Reference Nonresidential Appendix NA2.3.<sup>13</sup>

For the same systems, HERS Raters are required by Section 160.2(b)2Aivb2 to perform dwelling unit envelope leakage testing in high-rise multifamily buildings *also* in accordance with Reference Nonresidential Appendix NA2.3 when exhaust or supply ventilation systems are used for compliance with whole-dwelling unit ventilation requirements.<sup>14</sup> In other words, HERS Raters are required to perform the exact same tests that ATTs are already required to perform.

Eliminating redundant testing when the exact same tests are already performed once by certified ATTs would reduce costs by eliminating the need to hire a HERS Rater to perform redundant testing, reducing complexity in the marketplace, and providing a more streamlined compliance strategy with Energy Code.

For example, to complete the Nonresidential Certificate of Acceptance ("NRCA") form NRCA-MCH-04A Duct Leakage,<sup>15</sup> CAL SMACNA estimates it would take HERS Raters approximately 4-6 hours to prepare for the system for duct leakage testing, and another 2-4 hours to complete the functional test. At average rates of \$100 to \$200 per hour to engage a HERS Rater, CAL SMACNA estimates that elimination of redundant HERS field verification for duct leakage would result in a cost saving between \$600 and \$2,000 per system with neutral energy efficiency impacts.

<sup>12</sup> Id. § 160.3(d)2B.

 $<sup>^{13}</sup>$  Reference Nonresidential Appendix NA7 §§ 7.18.2.

<sup>&</sup>lt;sup>14</sup> Cal. Code Regs., tit. 24, pt. 6 § 160.2(b)2Aivb2.

<sup>&</sup>lt;sup>15</sup> California Energy Commission, Duct Leakage: 2022-CEC-NRCA-MCH-04-A (last updated Jan. 1, 2023), available at <u>https://www.energy.ca.gov/filebrowser/download/5072</u>. 4003-127j

To complete NRCA-MCH-21A MF Envelope Leakage,<sup>16</sup> CAL SMACNA estimates it would take HERS Raters approximately 4-6 hours to prepare and perform high-rise multifamily dwelling-unit envelope leakage testing. At average rates of \$100 to \$200 per hour, CAL SMACNA estimates that elimination of redundant HERS field verification for envelope leakage testing would result in a cost saving between \$400 and \$1,200 per unit with neutral energy efficiency impacts.

Removing redundant FV&DT requirements is also appropriate given the Commission's finding that the industry certification threshold conditions for certified ATTs has been met pursuant to Section 10-103.2.<sup>17</sup> Since October 2021, acceptance testing in nonresidential and high-rise multifamily buildings must be performed by certified ATTs. Therefore, there are no longer any concerns that acceptance testing is being performed by untrained field technicians, which could necessitate follow-up verification.

#### B. The Commission Should Allow Certified ATTs to Perform Field Verification in High-Rise Multifamily Dwelling Units Without Pre-Approval by a Local Enforcement Agency and Eliminate Restrictions on Sampling

In addition to the three duplicative FV&DT requirements, there are two tests for high-rise multifamily dwelling units where acceptance testing is not initially performed by certified ATTs, but field verification may be completed by either a HERS Rater or a certified ATT: (1) field verification that vented range hoods comply with local mechanical exhaust requirements; and (2) field verification of HRV or ERV fan systems serving a single dwelling unit.<sup>18</sup> However, current code language imposes unfair, unnecessary and costly barriers to ATTs performing these tests which HERS Raters do not face. Those barriers should be eliminated.

<sup>17</sup> State Energy Resources Conservation and Development Commission, Resolution No: 21-0414-08: Resolution of the California Energy Commission Finding Industry Certification Threshold Conditions Met Pursuant to Section 10-103.2(B) of the Building Energy Efficiency Standards Regarding Acceptance Test Technician Certification to Perform the Mechanical Systems Acceptance Tests (Apr. 14, 2021), available at https://effling.energy.ca.gov/getdocument.aspx?tn=237515.
<sup>18</sup> Cal. Code Regs., tit. 24, pt. 6 § 160.2(b)2Bii-iii. 4003-127j

<sup>&</sup>lt;sup>16</sup> California Energy Commission, Duct Leakage: 2022-CEC-NRCA-MCH-021-A (last updated Jan. 1, 2023), *available at* <u>https://www.energy.ca.gov/filebrowser/download/5092</u>.

When HERS field verification is required to be performed in accordance with procedures set forth in Reference Nonresidential Appendix NA1 and NA2, compliance with HERS field verification may alternatively be satisfied by a certified ATT.<sup>19</sup> This is set forth in Reference Nonresidential Appendix NA1 § 1.9, the "Acceptance Test Technicians Alternative Procedure."

Under this alternative procedure, when the Certificate of Compliance indicates that HERS field verification and diagnostic testing is required as a condition of compliance with Title 24, Part 6, a certified ATT may perform the verification to satisfy the condition of compliance.<sup>20</sup> However, a certified ATT can only do so at the discretion of the enforcement agency.<sup>21</sup> In addition, an ATT is not permitted to verify through sampling even though sampling is permitted if verification is conducted by a HERS Raters.<sup>22</sup>

As discussed above, the Energy Code currently identifies only five circumstances where HERS Raters must perform field verification in accordance with Reference Appendix NA1 and NA2, but that may instead be verified by ATTs under the alternative procedure. Three of those tests are duplicative of acceptance testing and should just be eliminated. Two are not duplicative and thus would continue to fall under the Acceptance Test Technicians Alternative Procedure: (1) field verification that vented range hoods comply with local mechanical exhaust requirements and (2) field verification of HRV or ERV fan systems serving a single dwelling unit.

HERS Raters may perform these tests without any additional local enforcement agency authorization and are allowed to test just a sampling of systems or dwelling units.<sup>23</sup> Because certified ATTs are trained to perform field verification of these systems, the Commission should allow these tests to be performed by ATTs without pre-approval and with the use of sampling.<sup>24</sup> However,

<sup>&</sup>lt;sup>19</sup> Reference Nonresidential Appendix NA1 § 1.9.

<sup>&</sup>lt;sup>20</sup> Id. § 1.9.1.

 $<sup>^{21}</sup>$  Ibid.

 $<sup>^{22}</sup>$  Ibid.

<sup>&</sup>lt;sup>23</sup> Cal. Code Regs., tit. 24, pt. 6 § 160.2(b)2Bii-iii; Reference Nonresidential Appendix NA1 §§ 1.6 (HERS Procedures – Verification, Testing, and Sampling).

<sup>&</sup>lt;sup>24</sup> This differs from the duplicative tests discussed above, where *both* ATTs and HERS Raters are required to test the same systems using the exact same procedures. Here, *either* an ATT or a HERS Rater can perform the FV&DT for these systems – and the test is not required to be duplicated. <sup>4003-127j</sup>

the current code unfairly and unnecessarily limits the ability of ATTs to perform these tests by installing hurdles which greatly increase the cost of using an ATT for this work, but do not apply to HERS Raters.

First, certified ATTs may only complete these tests at the discretion of the local enforcement agency.<sup>25</sup> As a result, contractors must get pre-approval from a local enforcement agency before it can use a certified ATT. Depending on the local enforcement agency, it could take days or weeks to get this approval. Contractors or ATTs must incur the expense of preparing the request, following up with the local enforcement agency may have about exercising their discretion to allow ATTs perform this work. This could easily take several hours of a contractor or ATT's time which would need to be compensated for and cause significant delays. Pre-approval also creates uncertainty for contractors because a contractor could spend a substantial amount of time and money seeking pre-approval, only to have it denied, creating even more delays and costs.

Second, certified ATTs are not permitted to use sampling procedures to verify compliance with Energy Code requirements.<sup>26</sup> By requiring ATTs to test every system or dwelling unit but permitting HERS Raters to just test a sample of the systems or dwelling units, no contractor will choose an ATT over a HERS Rater. There is no reason to treat FV&DT performed by ATTs differently than those performed by HERS Raters.

ATTs have a greater and more comprehensive level of training and expertise than HERS Raters. ATTs are required to have at least three years of professional experience and expertise in mechanical controls and systems as well as classroom and hands-on training regarding the performance of testing, including passing a final written and practical exam. Moreover, ATTs are required to record the results of the acceptance tests with a Commission-approved Acceptance Test Technician Certification Providers ("ATTCPs"), which also provide training, certification, and oversight of ATTs, including random quality control inspections. Therefore, the Commission should allow group sampling when systems are verified by ATTs as it currently allows for HERS Raters.

<sup>&</sup>lt;sup>25</sup> Reference Nonresidential Appendix NA1 § 1.9.1.

<sup>&</sup>lt;sup>26</sup> *Ibid*. 4003-127j

Removing the pre-approval requirement and the prohibition on ATT sampling would not increase costs associated with field verification of these systems. In fact, there would be potential cost savings due to the manhours saved by not having to seek discretionary (and uncertain) approval from the local enforcement agency.

The preapproval requirement and sampling prohibition are also fundamentally unfair. The Commission has already determined that both HERS Raters and ATTs are qualified and competent to perform these tests. Like HERS Raters, ATTs should not be required to demonstrate competence to the enforcement agency to operate within their jurisdiction. ATTs are trained and certified by Commission-approved ATTCPs as set forth in the program regulations, and do not require preapproval of local building officials for any other work they perform under the Code.

Furthermore, the Energy Code already contains requirements to ensure the enforcement agencies remain involved and retain oversight. For example, Reference Nonresidential Appendix NA1.9.2 mandates that when an ATT performs the required FV&DT according to the specified procedures and verifies that the work meets the requirements for compliance as shown in the Certificate of Compliance, the ATT must then sign a copy of the Certification of Acceptance, submit it to the approved ATTCP, and post it at the job site for review with by the enforcement agency, in conjunction with requests for final inspection in accordance with Reference Nonresidential Appendix NA1.3.4.

Finally, training and oversight requirements for ATTs are substantially more robust than for HERS Raters. Imposing more restrictive standards on ATTs simply makes no sense. If anything, the documented problems with the HERS program support imposing more lenient standards on ATTs than on HERS Raters.<sup>27</sup>

#### C. Changing the Name of HERS Raters to ECC Raters Would Create Unnecessary and Unhelpful Confusion

The Coalition opposes the proposal to change the name of HERS Raters to the ECC Raters on the grounds that the change would create unnecessary confusion with the acceptance testing programs, which also perform energy code compliance

<sup>&</sup>lt;sup>27</sup> See FV&DT Draft Staff Report at pp. 13-17.

tasks. Energy Code compliance is not exclusively performed by HERS Raters through the FV&DT program.

For example, acceptance testing for HVAC controls, lighting controls, and other covered processes in nonresidential and certain multifamily buildings must be performed by certified ATTs.<sup>28</sup> Acceptance test requirements specify targeted inspections and functional performance tests that demonstrate that the building components, equipment, systems, and interface conform to the Energy Code. This helps ensure that the building achieves the energy savings potential specified in its design and protects installing technicians by providing demonstrable proof that the system functioned as required by the code when it was installed.

Like HERS Raters, ATTs must complete specific compliance documentation. Certificates of acceptance are completed by the certified ATT and must be submitted to the enforcement agency during the final inspection phase and prior to the enforcement agency issuing the certificate of occupancy.<sup>29</sup> Certificates of verification are completed by HERS Raters.<sup>30</sup> In addition, certain FV&DT tests may be performed by ATTs.<sup>31</sup> Changing the name of HERS Raters to ECC Raters would cause considerable confusion and overstate the role of HERS Raters with respect to Energy Code compliance.

In addition, the proposed name change would not simplify the identification of program stakeholders. HERS programs have operated under that name for almost 30 years. Changing the name of the program now would simply cause confusion in the marketplace with no discernable benefit. The fact that Commission staff have indicated that HERS companies could continue to call themselves HERS Raters even with the name change underscores just how confusing and unnecessary this name change would be. The Commission should return to its original proposal in the Draft Staff Report and continue to identify program stakeholders in a manner that accurately reflects the work they perform.

<sup>&</sup>lt;sup>28</sup> Cal. Code Regs., tit. 24, pt. 1 § 10-103(a)4.

 $<sup>^{29}</sup>$  Id. § 10-103.1, 10-103.2.

<sup>&</sup>lt;sup>30</sup> Id. § 10-103(a)5.

<sup>&</sup>lt;sup>31</sup> Reference Nonresidential Appendix NA1 § 1.9. 4003-127j

#### III. PROPOSED REVISIONS TO CODE LANGUAGE

The following are the specific code changes that the Coalition proposes to remove the duplicative testing requirements identified above and to remove unnecessary and unfair barriers to utilizing ATTs under the Acceptance Test Technicians Alternative Procedure. Proposed additions to the code are in <u>blue</u> <u>underline</u>, while proposed deletions are in <u>red strikethrough</u>.

#### A. Proposed Additions to Title 24, Part 1, Section 10-103

The Coalition recommends the following addition to Section 10-103:

**EXCEPTION to Section 10-103(a)5**: For all buildings for which the certificate of compliance indicates that HERS field verification and diagnostic testing is required in accordance with applicable procedures specified in Reference Appendices NA1 and NA2, compliance with HERS field verification may alternatively be satisfied by a certified Acceptance Test Technician (ATT) according to the requirements specified in Reference Nonresidential Appendix NA1.9. Notwithstanding the foregoing, HERS field verification is not required where it would be duplicative of mandatory acceptance testing performed by a certified ATT.

The proposed exception codifies the ATT alternative procedure for complying with FV&DT requirements in nonresidential and multifamily buildings subject to FV&DT requirements in accordance with Reference Nonresidential Appendix NA1 and NA2 (currently this provision is just in the Nonresidential Appendix and not in the Title 24 code itself) and eliminates duplicative field verification requirements.

### B. Proposed Additions to Title 24, Part 6

1. Section 120.4(g)

The Coalition recommends the following addition to Section 120.4(g):

**EXCEPTION to 120.4(g)**: HERS field verification and diagnostic testing is not required where a certified Acceptance Test Technician is required by Reference Nonresidential Appendix NA7.5.3.2 to perform duct leakage testing as specified by Reference Nonresidential Appendix NA2.

The proposed exception eliminates redundant field verification and diagnostic testing on qualifying new duct systems in nonresidential buildings that are already required to be performed by a certified ATT using the same procedures that would have been required for field verification. This eliminates redundant duct leakage testing requirements in nonresidential buildings, reducing cost and complexity in the marketplace and provides a more streamlined compliance strategy.

2. Section 141.0(b)2D

The Coalition recommends the following addition to Section 141.0(b)2D:

**EXCEPTION 3 to Section 141.0(b)2Dii**: HERS field verification and diagnostic testing is not required where a certified Acceptance Test Technician is required by Reference Nonresidential Appendix NA7.5.3.2 to perform duct leakage testing as specified by Reference Nonresidential Appendix NA2. When it is not possible to achieve the duct leakage criterion in Section 141.0(b)2Dii, then all accessible leaks shall be sealed and verified through visual inspection and smoke test performed by a certified Acceptance Test Technician utilizing the methods specified in Reference Nonresidential Appendix NA2.1.4.2.

The proposed exception eliminates redundant field verification and diagnostic testing on qualifying altered duct systems in nonresidential buildings that certified ATTs are already required to perform using the same procedures that would have been required for field verification. This eliminates redundant duct leakage testing requirements in nonresidential buildings, reducing cost and complexity in the marketplace and provides a more streamlined compliance strategy.

3. Section 160.2(b)2Aivb2

The Coalition recommends the following addition to Section 160.2(b)2Aivb2:

**EXCEPTION to Section 160.2(b)2Aivb2**: HERS field verification and diagnostic testing in buildings with four or more habitable stories is not required where a certified Acceptance Test Technician is required to perform functional testing in accordance with Reference Nonresidential Appendix NA2.3.

The proposed exception affirms that redundant field verification and diagnostic testing on multifamily dwelling unit enclosures in buildings with four or more habitable stories is not required when a certified ATT has already performed acceptance testing using the same procedures that would have been required for field verification. This eliminates duplicative testing requirements in multifamily buildings, reducing cost and complexity in the marketplace and provides a more streamlined compliance strategy.

4. Section 160.2(b)2B

The Coalition recommends the following addition to Section 160.2(b)2B:

**EXCEPTION to Section 160.2(b)2B**: HERS field verification and diagnostic testing in buildings with four or more habitable stories is not required where a certified Acceptance Test Technician is required to perform functional testing in accordance with Reference Nonresidential Appendix NA2.2.

The proposed exception affirms that redundant field verification and diagnostic testing on multifamily dwelling unit ventilation systems in buildings with four or more habitable stories is not required when a certified ATT has already performed acceptance testing using the same procedures that would have been required for field verification. This eliminates duplicative testing requirements in multifamily buildings, reducing cost and complexity in the marketplace and provides a more streamlined compliance strategy.

#### C. Proposed Modification to the Reference Nonresidential Appendix

#### 1. Reference Nonresidential Appendix NA1.9.1

The Coalition recommends Section NA1.9.1 of Reference Nonresidential Appendix be modified as follows:

Under this alternative procedure, when the Certificate of Compliance indicates that HERS field verification and diagnostic testing is required as a condition for compliance with Title 24, Part 6, a certified ATT may perform the verification to satisfy the condition of compliance, at the discretion of the enforcement agency. Systems verified under this procedure are not eligible for use of the sampling procedures described in NA1.6.

#### 2. Reference Nonresidential Appendix NA7.2

The Coalition recommends Section NA7.2 of Reference Nonresidential Appendix be modified as follows:

Acceptance requirements are defined as implementation of targeted inspection checks and functional and performance testing to determine whether specific building components, equipment, systems, and interfaces between systems conform to the criteria set forth in the Standards and to related construction documents (plans or specifications). Acceptance requirements improve code compliance effectiveness and help meet the expected level of performance.

Acceptance testing is not intended to take the place of commissioning or test and balance procedures that a building owner might incorporate into a building project. It is an adjunct process focusing only on demonstrating compliance with the Standards.

Third-party review of the information provided on Certificate of Acceptance documentation is not required, with one exception: duct leakage diagnostic test results for some constant volume space conditioning systems serving less than 5,000 square feet of conditioned floor area are required to be verified by a certified HERS Rater as specified in Standards Section 120.4(g).

3. Reference Nonresidential Appendix NA7.5.3.2

The Coalition recommends Section NA7.5.3.2 of Reference Nonresidential Appendix be modified as follows:

- Step 1: Perform duct leakage test as specified by Reference Nonresidential Appendix NA2 to verify the duct leakage conforms to the requirements of Standards §120.4(g) and §141.0(b)2Dii.
- Step 2:Obtain HERS Rater field verification as specified in ReferenceNonresidential Appendix NA1. Or at the discretion of the enforcement<br/>agency, field verification may be satisfied by the ATT as specified in<br/>Reference Nonresidential Appendix NA1.9.

#### 4. Reference Nonresidential Appendix NA7.18.1.1.2

The Coalition recommends Section NA7.18.1.1.2 of Reference Nonresidential Appendix be modified as follows:

- Step 1: Perform the required dwelling unit mechanical ventilation system verification procedure as specified by Reference Nonresidential Appendix NA2.2 to verify the dwelling unit ventilation systems conform to the requirements of Section 160.2(b)2.
- Step 2: Obtain HERS Rater field verification as specified in Reference Nonresidential Appendix NA1.
  - 5. Reference Nonresidential Appendix NA7.18.2.2

The Coalition recommends Section NA7.18.2.2 of Reference Nonresidential Appendix be modified as follows:

- Step 1: Perform the dwelling unit envelope air leakage procedure as specified by Reference Nonresidential Appendix NA2.3 to verify the dwelling unit ventilation airflow conforms to the requirements of Section 160.2(b)2.
- Step 2: Obtain HERS Rater field verification as specified in Reference Nonresidential Appendix NA1.

#### IV. CONCLUSION

The Coalition greatly appreciates the Commission's continued efforts to improve compliance with the Energy Code and recommends that the Commission eliminate duplicative testing requirements, eliminate the requirement that a local enforcement agency pre-approve the use of certified ATTs to perform FV&DT in nonresidential buildings and multifamily dwelling units, and allow group sampling consistent with applicable procedures. In addition, to eliminate any potential confusion, the Commission should not make any changes to the FV&DT program nomenclature.

Thank you for your consideration of these comments.

Sincerely,

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Andrew J. Graf

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