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ORDINANCE NO. _____

AN ORDINANCE TO AMEND CHAPTER 8 OF THE LITTLE ROCK CODE OF ORDINANCES (1988) TO ADOPT STANDARDS FOR DUCT TESTING AND OTHER STANDARDS FOR ENERGY CONSERVATION, FOR NEW RESIDENTIAL STRUCTURES WITH AMENDMENTS HEREIN; AND FOR OTHER PURPOSES.

WHEREAS, Little Rock customers spend millions of dollars annually for electricity and natural gas services; and

WHEREAS, more efficient buildings can conserve energy, reduce stress on our electricity grid and natural gas supplies while saving money and resources for our citizens; and

WHEREAS, existing State adopted and amended 2014 AR Energy Code is inferior in comparison to the standards that are being proposed; and

WHEREAS, such amendments are appropriate and necessary for the health, safety and welfare of citizens.

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF DIRECTORS OF THE CITY OF LITTLE ROCK, ARKANSAS.

Section 1. This section of Little Rock, AR. Revised Code (1988) Sec. 8-562 is hereby amended to add the following language;

Sec. 8-562 - Duct Testing (Heating and Air)

(1) New Residential Construction. Duct testing shall be required for all new single-family residential structures. Single-family residential developments that utilize the exact same floor plan multiple times are required to have duct testing completed on a minimum of 20% of new single-family residential units.

(2) New Multi-Family Construction. Duct testing shall be required for all new multi-family developments and shall meet the following testing criteria when these developments utilize the exact same floor plan.

(A) Two (2) units up to 200 units shall have a minimum of 20% of units tested and certified. This includes individual floors with 200 units or less per floor. This includes individual buildings where the total number of units are less than 200 units for the entire building.

(B) 201 units and up shall have a minimum of 10% of units tested and certified. This includes individual floors that exceed 201 units or more per floor.

1 This includes individual buildings where the total number of units exceed 201 units
2 or more.

3 (C) In cases where the development is a continuous building completely connected,
4 the number of units shall be determined where required Fire Tenant Separation Walls are
5 installed.

6 (D) If the development utilizes the same HVACR contractor for the duration of
7 construction the rules for testing 10% or 20% shall be granted. In cases where another
8 HVACR Contractor is hired prior to completion of the project, the project regardless of
9 the number of units shall meet the 20% testing criteria up to completion.

10 **(3) Addition, Alterations and Renovations.** Additions, alterations and renovations to
11 existing residential structures shall not be required to comply with the Duct Testing
12 Requirements, but shall be required to comply with the 2014 Sr. Energy Code and 2010
13 AR Mechanical Code Duct Sealing Requirements.

14 **(4) Repairs.** All repairs to existing residential structures and mechanical systems shall
15 not be required to comply with the duct testing requirements, but shall be required to
16 comply with the 2014 AR Energy Code and 2010 AR Mechanical Code duct sealing
17 requirements.

18 **(5) Duct Tester Qualifications.** The duct tester shall be certified by one (1) of the
19 following:

20 (A) Residential Energy Services Network Certified Rater (RSNET) or
21 equivalent

22 (B) Building Performance Institute Certified Rater (BPI)

23 (C) AR HVACR Association Certified Duct Tester

24 **Sec. 8-563 - Duct Testing Criteria:**

25 Duct Testing shall be verified by either of the following:

26 (1) Rough-In Test: Total leakage shall be less than or equal to 6 cfm (169.9L/min) per
27 100 ft² (9.29m²) of *conditioned floor area* when tested at a pressure differential of
28 0.1 inches w.g. (25 Pa) across the roughed in system, including the manufacturer's air
29 handler enclosure. All register boots shall be taped or otherwise sealed during the
30 test. If the air handler is not installed at the time of the test, total leakage shall be less
31 than or equal to 4 cfm (113.L/min) per 100 ft² (9.29m²) of conditioned floor area.

32 (2) Post Construction Test: Leakage to outdoors shall be less than or equal to 8 cfm
33 (226.5 L/min) per 100 ft² (9.29m²) of *conditioned floor area* or a total leakage less
34 than or equal to 12 cfm (12 L/min) per 100ft² (9.29m²) of *conditioned floor area*
35 when tested at a pressure differential of 0.1 inches w.g. (25Pa) across the entire

1 system, including the manufacturer's air handler enclosure. All register boots shall
2 be taped or otherwise sealed during the test.

3 Exceptions: Duct tightness test is not required if the air handler and all ducts are
4 located within conditioned space.

5 (3) Duct Testing Compliance and Verification: The tester shall provide (City-provided
6 form) within five (5) days of completion to the Building Codes Division, the results
7 of the test and that the duct testing complies with 8-563(1) or 8-563(2). A Certificate
8 of Occupancy shall not be issued without completion verification and compliance
9 with the duct testing requirements.

10 (4) Sticker: The 2014 AR. Energy Code label shall be completed and posted
11 permanently on the electrical distribution panel and front entrance of structure. The
12 sticker may be removed from the front entrance after occupancy or sale of the
13 property. Under other info the date of duct testing shall be noted.

14 **Sec. 8-564 - Blower Door Testing (Spray Foam Insulated Structures)**

15 (1) New Residential Construction: Blower Door Testing shall be required for all new
16 single-family residential and multi-family structures. Residential developments that
17 utilize the exact same floor plan multiple times are required to have Blower Door
18 Testing completed on a minimum of 20% of residential units.

19 (2) Addition, Alterations and Renovations: Additions, alterations and renovations to
20 existing residential structures shall not be required to comply with blower door
21 testing requirements, but shall be required to comply with the 2014 AR Energy Code
22 and 2010 AR Mechanical Code.

23 (3) Repairs: All repairs to existing residential structures and mechanical systems shall
24 not be required to comply with the Blower Door Testing Requirements, but shall be
25 required to comply with the 2014 AR Energy Code and 2010 AR Mechanical Code.

26 (4) Blower Door Testing Qualifications: The duct tester shall be certified by the
27 following:

28 (A) Residential Energy Services Network (RSNET) Certified Energy Rater
29 or equivalent.

30 **Sec.8-564 - Blower Door Testing Criteria:**

31 Blower Door Testing and compliance shall meet the 2014 AR Energy Code and 2010 AR
32 Mechanical Code for foam insulated structures.

33 (3) Blower Door Testing and compliance and Verification: The tester shall provide (City-
34 provided form) within five (5) days of completion to the Building Codes Division,
35 the results of the test and that the Blower Door Test complies with the Code. A

1 Certificate of Occupancy shall not be issued without completion verification and
2 compliance with the testing requirements.

3 (4) Sticker: The 2014 AR Energy Code label shall be completed and posted permanently
4 on the electrical distribution panel and front entrance to the residential structure. The
5 sticker may be removed from the front entrance after occupancy or sale of the
6 property. The date of Blower Door Testing results shall be noted.

7 **Section 2.** That in order to adequately prepare the residential construction industry for the duct
8 testing and the related new testing requirements, the effective date of the new Code shall be implemented
9 as follows:

10 (1) This ordinance shall be in full force and effect six (6) months from the date of its
11 passage for all new residential structures permitted on or after this date.

12 **PASSED: April 3, 2018**

13 **ATTEST:**

APPROVED:

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16 **Susan Langley, City Clerk**

Mark Stodola, Mayor

17 **APPROVED AS TO LEGAL FORM:**

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19 _____
20 **Thomas M. Carpenter, City Attorney**

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