NFPA 86-2003 Ovens and Furnaces

NFPA 86-2003 Standard for ovens and furnaces (The following Indiana Amendments are reprinted here from the Indiana government web site for your convenience. We have not edited or reformatted these pages, nor have we reviewed the for accuracy. We assume them to be identical to the official amendments as originally printed in the Indiana Register. We make no stated or implied claim as to their accuracy.)

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675 IAC 28-1-31 NFPA 86; standard for ovens and furnaces

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 10-19-2; IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 31. (a) That certain standard, being titled as NFPA 86, Standard for Ovens and Furnaces, 2003 Edition, published by the National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts 02269-9101, be and the same is hereby adopted by reference, as if fully set out in this section except as revised hereafter.

(b) The following documents referenced in NFPA 86 are not adopted, are not enforceable, and are for information purposes only:

(1) NFPA 30.
(2) NFPA 31.
(3) NFPA 50A.
(4) NFPA 54.
(5) NFPA 79.
(6) NFPA 91.
(7) NFPA 750.
(8) ANSI Z50.1.
(9) ASME B31.1.
(10) ASME B31.3.
(11) ASTM D396.

(c) The following documents are adopted and are enforceable:

(1) NFPA 10, as adopted in section 2 of this rule.
(2) NFPA 11, as adopted in section 3 of this rule.
(3) NFPA 12, as adopted in section 4 of this rule.
(4) NFPA 13, as adopted in 675 IAC 13-1-8.
(5) NFPA 15, as adopted in section 8 of this rule.
(6) NFPA 17, as adopted in section 9 of this rule.
(7) NFPA 17A, as adopted in section 10 of this rule.
(8) NFPA 25, as adopted in section 12 of this rule.
(9) NFPA 50, as adopted in section 16 of this rule.
(10) NFPA 50B, as adopted in section 17 of this rule.
(11) NFPA 58, as adopted at 675 IAC 22-2.2-14.
(12) NFPA 70, as adopted in 675 IAC 17.
(13) ASME Boiler and Pressure Vessel Code, as adopted at 680 IAC 2-1-1 [675 IAC 30-1-1].

(d) Amend Section 1.1.4 to read as follows: This standard also applies to listed bakery ovens and requires all bakery ovens to be listed.

(e) Amend Section 1.3.2 by deleting all the text and substituting "This entire standard shall apply to new installations or as required otherwise under the rules of the commission.".

(f) Delete Section 1.4 in its entirety without substitution.

(g) Amend Section 1.5 by deleting in its entirety and substituting "See 675 IAC 12-6-11.".

(h) Amend Chapter 3 to read as follows:

(1) Amend the following definitions:

APPROVED means acceptance by the authority having jurisdiction by one (1) of the following methods:

(1) Investigation or tests conducted by nationally recognized authorities; or

(2) Investigation or tests conducted by nationally recognized technical or scientific organizations; or

(3) Nationally accepted principles.

The investigation, tests, or principles shall establish that the method, material, equipment, design, or type of construction is safe for its intended purpose.

AUTHORITY HAVING JURISDICTION means the Division of Fire and Building Safety or officer of a local unit of government empowered by law to administer and enforce the rules of the commission.

LABELED means equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization engaged in product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

LISTED means equipment or materials included in a list published by an organization engaged in product evaluation, that maintains periodic inspection of production of listed equipment or materials, and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.

(2) Add the following definitions:

BUILDING CODE means the building code in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of the structure.

DIVISION OF FIRE AND BUILDING SAFETY means the Division of Fire and Building Safety of the Indiana Department of Homeland Security created pursuant to IC 10-19-2.

FIRE CODE means the Indiana Fire Code.

INDIANA BUILDING CODE means the rules adopted at 675 IAC 13 in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of the structure.

INDIANA FIRE CODE means the rules adopted at 675 IAC 22 in effect in Indiana at the time of inspection by the inspection authority or, with respect to construction required to be filed under 675 IAC 12-6, 675 IAC 22 in effect at the time of construction, remodeling, alteration, addition, or repair of the structure.

MECHANICAL CODE means the Indiana Mechanical Code in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of the structure.

NFPA 70, National Electrical Code means the Indiana Electrical Code (675 IAC 17).

PLUMBING CODE means the Indiana Plumbing Code in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of the structure.

QUALIFIED means having successfully completed a course of instruction related to the equipment being installed, serviced, or repaired.

TRAINED means one who has undergone the instruction necessary to design, install, and perform testing, maintenance, and inspection.

(i) Amend Section 4.1.1 to read as follows: Before new equipment is installed or existing equipment remodeled, complete plans, sequence of operations, and specifications shall be submitted in accordance with 675 IAC 12-6.

(j) Delete Sections 4.1.1.1 through 4.1.3.3 without substitution.

(k) Delete Section 4.2.1 without substitution.

(l) Amend Section 5.1.3.1 to read as follows: Furnaces shall be located to minimize exposure to power equipment, process equipment, and sprinkler risers. Unrelated stock and combustible materials shall be

maintained at not less than two and one-half (2½) feet (0.76 m) from a furnace, a furnace heater, or ductwork.
(m) Amend Section 5.2.5.2 by deleting "in accordance with applicable federal, state, and local regulations. (See also Section 14.2)" without substitution.
(n) Amend Section 5.2.13 by deleting ", subject to approval by the authority having jurisdiction." without substitution.
(o) Amend Section 5.4.3.1 by deleting the text and substituting "Ventilating and exhaust systems shall be installed in accordance with the applicable rules of the commission, including, without limitations, the mechanical code.".
(p) In the third line of Section 5.4.3.3, delete "noncombustible" and insert "listed".
(q) Amend Section 5.4.4.1 by deleting "in accordance with all applicable codes" without substitution.
(r) Delete Section 6.2.3.2 without substitution.
(s) Amend Section 6.2.4.3 to read as follows: Piping from the point of delivery to the equipment isolation valve shall comply with the Indiana Plumbing Code and the Indiana Mechanical Code.
(t) Amend Section 6.2.5.2 to read as follows: Piping shall be sized to provide flow rates and pressure to maintain a stable flame over the burner operating range.
(u) Amend Section 6.2.7.3.4 by deleting, in the exception, "require approval" and substituting "be approved".
(v) Amend Section 6.3.1 by deleting "as specified by ASTM D 396, Standard Specifications for Fuel Oils".
(w) Amend Section 6.3.4.1 to read as follows: Storage tanks, their installation, and their supply piping materials shall comply with the requirements of this standard, the Indiana Fire Code and the Indiana Mechanical Code.
(x) Amend Section 6.3.5.2 to read as follows: Equipment piping shall be listed for the use.
(y) Amend Section 6.5.1 to read as follows: Fuel-fired equipment shall be vented and shall be sized to provide flow rates and pressure to maintain a stable flame over the burner operating range in accordance with the Indiana Mechanical Code.
(z) Amend Section 6.7.2.1 to read as follows: Piping and fittings shall be listed for the use. Relief valves shall be provided where required by this standard or the Indiana Mechanical Code.
(aa) Amend Section 7.2.1 by deleting, in the exception, "require approval" and inserting "be approved".
(bb) Amend Section 7.14.6 by deleting, in the exception, "tested" and inserting "listed".
(cc) Amend Section 9.2.1.12 by deleting, in the exception, "subject to the approval of" and inserting "when approved by".
(dd) In Section 9.3.5.2, delete the last sentence.
(ee) Amend Section 9.3.5.5 to read: Locations for compressed gas tanks and cylinders shall be in accordance with the Indiana Building Code and the Indiana Fire Code.
(ff) Amend Section 9.3.6.2 by deleting "by the agency responsible for rating them".
(gg) Amend Section 9.3.8.3 by deleting "in accordance with ASME B31.3, Process Piping" and substituting "listed for their use”.
(hh) Amend Section 11-1.4 to read as follows: Dip tanks and drain boards included in the oven enclosure shall be protected in accordance with NFPA 34, Standard for Dipping and Coating Using Flammable or Combustible Liquids, and Chapter 15 of the Indiana Fire Code.
(ii) Amend Section 11.1.5.1.2 by deleting "in accordance with ASME B31.3, Process Piping" and substituting "listed for their use”.
(jj) Amend Section 11.1.5.1.4 by deleting "applicable NFPA standards" and substituting "the Building Code and Fire Code".
(kk) Amend Section 11.1.5.1.5(4) by deleting "NFPA 30, Flammable and Combustible Liquids Code" and substituting "the Fire Code".

(ll) Amend Section 11.1.6.1.3 by deleting "in accordance with ASME B31.3, Process Piping" and substituting "listed for their use".

(mm) Amend Section 13.2.7 by deleting "designed in accordance with fire protection engineering principles. (See Annex F, Steam Extinguishing Systems.)" and substituting "in accordance with 675 IAC 12-6-11.".

(nn) In Section 13.4, delete "to the authority having jurisdiction for review and approval" and substitute "in accordance with 675 IAC 12".

(oo) Amend Section 14.1.2 by inserting "as approved by the authority having jurisdiction" after "procedures".

(pp) Chapter 2 and the annexes are not adopted as part of this code and are intended for use as a guide, and the standards referenced therein are not enforceable as part of this code.

(Fire Prevention and Building Safety Commission; 675 IAC 28-1-31; filed Aug 23, 2006, 4:03 p.m.: 20060906-IR-675050104FRA; readopted filed Aug 8, 2012, 8:08 a.m.: 20120905-IR-675120260RFA; readopted filed Jul 3, 2018, 2:22 p.m.: 20180801-IR-675180204RFA)