Houston Amendments to the 2015 International Existing Building Code



Adopted by Ord. No. 2021-<u>1037</u>¹
Passed <u>December 1, 2021</u>²
Effective <u>April 1, 2021</u>³

^{1.} The City Secretary shall insert the number of the adopting ordinance.

^{2.} The City Secretary shall insert the date passage and approval of the adopting ordinance.

^{3.} The City Secretary shall insert the effective date of the adopting ordinance.

CHAPTER 1 SCOPE AND ADMINISTRATION

[A] 101.1 Title. These regulations shall be known as the <u>City of Houston</u> Existing Building Code of [NAME OF JURISDICTION], hereinafter referred to as "this code." and also known as the <u>Existing Building Code</u>.

The Construction Code collectively includes this volume and certain other codes, pamphlets, specifications and documents that are adopted in or by reference through the adopting ordinance, City of Houston Ordinance No. 2021-10374.

[A] 101.2 Scope. The provisions of the *International-Existing Building Code* shall apply to the *repair, alteration, change of occupancy, addition* to and relocation of *existing buildings*.

[A] 101.3 Intent. The intent of this code is to provide flexibility to permit the use of alternative approaches to achieve compliance with minimum requirements to safeguard the public health, safety and welfare insofar as they are affected by the *repair*, *alteration*, *change of occupancy*, *addition* to and relocation of *existing buildings*. The provisions of this code shall not apply to any activity for which local regulation is preempted by federal or state law.

[A] 101.6 Appendices. The <u>code building</u> official is authorized to require rehabilitation and retrofit of buildings, structures or individual structural members in accordance with the appendices of this code if such appendices have been individually adopted. <u>Appendices A, B, C, and D, including any amendments thereto adopted by this jurisdiction, are hereby adopted and shall be incorporated into and made part of this code. Wherever in this code reference is made to an appendix, the provisions in the appendix shall not apply unless specifically adopted in this section.</u>

[A] 102.1 General. Where this is a conflict between a general requirement and a specific requirement, the specific requirement shall prevail-be-applicable. Where in any specific <a href="mailto:instance-instance-ase-different-sections-provisions-of-instance

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SECTION 103 DEPARTMENT OF BUILDING SAFETY CODE ENFORCEMENT

[A] 103.1 Creation of enforcement agency. The Department of Building Safety Building Code Enforcement is hereby created within the jurisdiction's department known as Houston Public Works, and the official in charge thereof shall be known as the <u>code building</u> official.

[A] 104.2.1 Determination of substantially improved or substantially damaged existing buildings and structures in flood hazard areas. For application for reconstruction, rehabilitation, repair, alteration, addition to or other improvement of existing buildings or structures located in flood hazard areas, the building official shall determine where the proposed work constitutes substantial improvement or repair of substantial damage. Where the building official determines that the proposed work constitutes substantial improvement or repair of substantial damage, and where required by this code, the building official shall require the building meet the requirements of Section 1612 of the International Building Code shall be designed and constructed in accordance with ASCE 24 and Chapter 19 of the City Code, whichever is more restrictive.

[A] 104.6 Right of entry. Where it is necessary to make an inspection to enforce the provisions of this code, or where the code building official has reasonable cause to believe that there exists in a structure or upon a premises a condition that is contrary to or in violation of this code that makes the structure or premises unsafe, dangerous, or hazardous, the code official is authorized to enter the structure or premises at reasonable times to inspect or to perform the duties imposed by this code, provided that if such structure or premises be occupied that credentials be presented to the occupant and entry requested. If such structure or premises be unoccupied, the code official shall first make a reasonable effort to locate the owner, owner's authorized agent or other person having charge or control of the structure or premises and request entry. If entry is refused, the code building official shall have recourse to the remedies provided by law to secure entry.

When, building official has obtained a proper inspection warrant or other remedy provided by law to secure entry, no owner or occupant or any other person having charge, care or control of any building or premises shall fail or neglect, after proper request is made as herein provided, to promptly permit entry therein by the building official or code official for the purpose of inspection and examination pursuant to this code.

[A] 104.8 Liability. The code official, member of the Board of Appeals, or employee charged with the enforcement of this code, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be rendered civilly or criminally liable personally and is hereby relieved from personal liability for any damage accruing to persons or property as a result of any act or by reason of an act or omission in the discharge of official duties. Except as otherwise provided by law, the building official shall not personally be liable in damages for any act or omission arising out of any official action taken to implement and enforce the provisions of this code. Additionally, except as otherwise provided by law, the building official shall not personally be liable in damages for any act or omission taken in the course and scope of employment. Where and to the extent consistent with the provisions of Chapter 2, Article X, of the City Code, this jurisdiction shall provide legal representation and indemnification for any suit or claim brought against the building official or any deputies because of acts or omissions performed in the implementation or enforcement of this code.

This code shall not be construed to relieve from or lessen the responsibility of any person owning, operating, or controlling any building, structure or system or other construction for any damages to persons or property caused by defects, nor shall the code enforcement agency or the jurisdiction be held as assuming any such liability by reason of the inspections authorized by this code or any permits or certificates issued under this code.

R104.8.1 Legal defense. Any suit or criminal complaint instituted against an officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be defended by legal representatives of the *jurisdiction* until the final termination of the proceedings. The *building official* or any subordinate shall not be liable for cost in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.

[A] 104.10 Modifications. Wherever there are practical difficulties involved in carrying out the provisions of this code, the *code official* shall have the authority to grant modifications for individual cases upon application of the owner or owner's authorized representative, provided the *code official* shall first find that special individual reason makes the strict letter of this code impractical, the modification is in compliance with the intent and purpose of this code and such modification does not lessen health, accessibility, life and fire safety, or structural requirements. The details of action granting modifications shall be recorded and entered in the files of <u>Building Code Enforcement the Department of Building Safety</u>.

[A] 105.1 Required. Any owner or owner's authorized agent who intends to repair, add to, alter, relocated, demolish, or change the occupancy of a building or to repair, install, add, alter, remove, convert, or replace any electrical, gas, mechanical, or plumbing system, the installation of which is regulated by this code, or to cause any such work to be performed, shall first make application to the <u>code building</u> official and obtain the required permit, and no person shall cause, suffer or permit the same such work to be done unless a separate permit for each building or structure has first been obtained.

[A] 105.1.2 Annual permit records. The person to whom an annual permit is issued shall keep a detailed record of alterations made under such annual permit. The code official shall have access to such records at all times, or such records shall be filed with the code official as designated.

[A] 105.2 Work exempt from permit. Exemptions from <u>building</u> permit requirements of this code shall not be deemed to grant <u>exemption from permits required by other codes or ordinances, and shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any—other codes, laws or ordinances of this jurisdiction. <u>Permits Building permits</u> shall not be required for the following:</u>

Building:

- 1. Sidewalks and driveways Uncovered decks accessory to a one- or two-family dwelling, not more than 30 inches (762 mm) above grade and not over any basement or story below and that are not part of an accessible route.
- 2. Painting, <u>tarping</u>, <u>wall</u> papering, tiling, carpeting, cabinets, <u>and</u> counter tops <u>repair and replacement</u>, and similar finish work.

- 3. Temporary motion picture, television, and theater stage sets and scenery.
- 4. Shade cloth structures constructed for nursery or agricultural purposes, and not including service systems.
- 5. Window awnings supported by an exterior wall of Group R-3 or Group U occupancies.
- 6. Movable cases, counters, and partitions not over 69 inches (1,753 mm) in height.
- 7. <u>Approved exemptions set out in any volume of the Construction Code.</u>

Except for exempt work undertaken for, by or on the premises of the state or the federal government, building permits shall be required for work undertaken for, by or on the premises of any political subdivision or unit of government (including, but not limited to, the jurisdiction) in the same manner and to the same extent as for work performed by, for, or on the premises of other persons. The fees prescribed in this code shall be applicable to all permits issued to or for governmental agencies.

Counties are required to comply with the provisions of the Construction Code. Except as provided by Section 212.903 of the Texas Local Government Code, a county shall notify the building official of each work project that is undertaken. The building official shall, upon request and demonstration of capacity, allow a county to self-permit and self-inspect work that is performed by or for the county on county-owned buildings and facilities for which a permit is required. No fee shall be imposed hereunder for work that a county is authorized to self-permit and self-inspect.

Electrical:

Repairs and maintenance: Minor *repair* work, including the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.

Radio and television transmitting stations: The provisions of this code shall not apply to electrical equipment used for radio and television transmissions, but do apply to equipment and wiring for power supply, the installations of towers, and antennas.

Temporary testing systems: A permit shall not be required for the installation of any temporary system required for the testing or servicing of electrical equipment or apparatus.

Gas:

- Portable heating appliance.
- Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.

Mechanical:

- Portable heating appliance.
- Portable ventilation equipment.
- Portable cooling unit.
- 4. Steam, hot, or chilled water piping within any heating or cooling equipment regulated by this code.

- 5. Replacement of any part that does not alter its approval or make it unsafe.
- 6. Portable evaporative cooler.
- 7. Self-contained refrigeration system containing 10 pounds (4.54 kg) or less of refrigerant and actuated by motors of 1 horsepower (746 W) or less.

Plumbing:

- 1. The stopping of leaks in drains, water, soil, waste, or vent pipe; provided, however, that if any concealed trap, drainpipe, water, soil, waste, or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work, and a permit shall be obtained and inspection made as provided in this code.
- The clearing of stoppages or the repairing of leaks in pipes, valves, or fixtures, and the removal and reinstallation of water closets, provided such repairs do not involve or require the replacement or rearrangement of valves, pipes, or fixtures.
- [A] 105.2.1 Emergency replacements or repairs.—Where An owner or owner's authorized agent shall submit an application for a permit to the building official for emergency equipment replacements and or repairs requiring a permit must be performed in an emergency situation, the permit application shall be submitted within no later than the next working business day after initiation of the replacement or repair to the code official.
- **[A] 105.3 Application for permit.** To obtain a *permit*, the applicant shall first file an application therefor in writing on a form furnished by <u>Building Code Enforcement</u> the department of building safety for that purpose. Such application shall:
 - 1. Identify and describe the work to be covered by the *permit* for which application is made.
 - 2. Describe the land on which the proposed work is to be done by legal description, street address or similar description that will readily identify and definitely locate the proposed building or work.
 - 3. Indicate the use and occupancy for which the proposed work is intended.
 - 4. Be accompanied by *construction documents* and other information as required in Section 107.
 - 5. State the valuation of total aggregate square footage of any new structure, addition(s), alteration, and the square footage of new paving, and linear feet of new sidewalks and curbs located within the right-of-way associated with the proposed work.
 - 6. Be signed by the applicant, or the applicant's authorized agent.
 - 7. Give such other data and information as required by the *building official*.
 - [A] 105.3.2 Time limitation of application. An application for which no permit is issued within 180 days following the date of application shall become inactive, and plans and other data submitted for review thereafter shall be returned to the applicant or destroyed by the code official. The code official is authorized to grant one or more extensions of time

for additional periods not to exceed 180 days each, for a maximum of two years from the date of the original application, upon written request and justifiable cause demonstrated by the applicant. If an application for permit does not result in a permit within two years after the date of original application, the permit application shall expire. In order to renew action on an application after expiration, the applicant shall submit a new permit application and plans and shall pay a new plan review fee. An application for a permit for any proposed work shall be deemed to have been inactive abandoned 180 days after the date of filing, unless such application has been pursued in good faith or a permit has been issued; except that the code official is authorized to grant one or more extensions of time for additional periods not exceeding 90 days each. The extension shall be requested in writing and justifiable cause demonstrated.

[A] 105.4 Validity of permit. Permit validity shall be governed by Section 105.4 of the *Building Code*. The issuance or granting of a permit shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this code or of any other ordinance of the jurisdiction. Permits presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid. The issuance of a permit based on construction documents and other data shall not prevent the *code official* from requiring the correction of errors in the construction documents and other data. The *code official* is authorized to prevent occupancy or use of a structure where in violation of this code or of any other ordinances of this jurisdiction.

[A] 105.5 Expiration. Every *permit* issued shall become invalid inactive on the 180th day after its issuance unless the work—on the site authorized by such *permit*—is has commenced and been inspected by a city inspector within 180 days after its issuance, or if the work authorized on the site by such *permit* is suspended or abandoned for a period of 180 days after the time date the work—is was commenced. The *building official* is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each. The extension shall be requested in writing and justifiable cause demonstrated.

If work has not commenced under a permit within two years after the date of issuance or is suspended or abandoned at any time for a period of two years, the permit shall expire. In order to recommence work associated with an expired permit, the permit holder shall re-permit the project and pay the full permit fee applicable for any previously uninspected portion of the original scope of work. Where the original plans with *building official* approval are not available for completion of field inspections, a lost plan recheck shall be submitted for *building official* approval. Appropriate plan review fees shall apply.

<u>Exception:</u> For the purpose of issuing a certificate of occupancy or a certificate of compliance, the *building official* may, upon request, reactivate a *permit* and perform a final inspection of work.

[A] 105.6 Suspension or revocation. The <u>code building</u> official is authorized to suspend or revoke a permit issued under the provisions of this code wherever the permit is issued in error or on the basis of incorrect, inaccurate, or incomplete information or in violation of any ordinance or regulation or any of the provisions of this code. <u>Prior to taking such action, the building official shall provide notice to the building owner or to a tenant therein of a right to a hearing on the matter <u>pursuant to Section 117 of the Building Code.</u></u>

[A] 106.3 Examination of documents; fees. The *code official* shall examine or cause to be examined the submittal documents and shall ascertain by such examinations whether the construction or occupancy indicated and described is in accordance with the requirements of this edge the *Construction Code* and other pertinent laws or ordinances.

Where plans or other data is required to be submitted in accordance with the *Construction Code*, a plan review fee shall be paid at the time of submitting construction documents for review. The plan review fees for any proposed work shall be charged as described in Section 118.1.11 of the *Building Code* and the *city fee schedule*.

When approved plans are lost or changed so as to require an additional plan review or when a plan review is required and there is no building permit required, a plan review fee shall be charged as described in Section 118.2.8 of the *Building Code* and the *city fee schedule*.

- 106.3.4.1 Deferred submittal plan review fees. A plan review fee shall be paid at the time of submitting construction documents for review of deferred submittal plans. The fee for any deferred submittal review shall be charged at the rate shown in the city fee schedule for a minimum permit fee plus applicable administrative fee. The plan review fees specified in this subsection are separate fees from the permit fees.
- [A] 106.5 Retention of construction documents. One set of approved construction documents shall may be retained by the <u>code building</u> official for a period of not less than the period required for retention of public records.
- **[A] 107.3 Temporary power.** The <u>code building</u> official is authorized to give permission to temporarily supply and use power in part of an electric installation before such installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in the Electrical Code NEPA 70.
- **[A] 108.2 Schedule or permit fees.** On buildings, electrical, gas, mechanical, and plumbing systems or *alterations* requiring a permit, a fee for each permit shall be paid as required in accordance with <u>Section 118 of the Building Code and</u> the schedule as established by the applicable governing authority city fee schedule.
- [A] 108.3 Building permit valuations. The applicant for a permit shall provide an estimated permit value at time of application. Permit valuations shall include total value of work including materials and labor for which the permit is being issued, such as electrical, gas, mechanical, plumbing equipment, and permanent systems. If, in the opinion of the code building official, the valuation is underestimated on the application, the permit shall be denied unless the applicant can show detailed estimates to meet the approval of the code building official. Final building permit valuation shall be set by the code building official. The value to be used in computing the permit fee for alterations, remodeling or repairs shall be the total value of all construction work for which the permit is issued based on the current building valuation data sheet published by the International Code Council.
- **[A] 108.4 Work commencing before permit issuance.** Any person who commences any work before obtaining the necessary permits shall be subject to an additional investigation fee established by the *code official* equal to the amount of the permit fee and applicable minimum investigation fees required by the *Building Code* that shall be in addition to the required permit fees.
- [A] 108.6 Refunds. The <u>code building</u> official is authorized to establish a refund policy <u>may</u> authorize the refund of any fee paid hereunder that was erroneously paid or collected due to an error by a city employee. This provision shall not be applicable if the error occurred because of incorrect information provided by the applicant.

The building official may authorize the refund of not more than 90 percent of the amount in excess of the minimum permit fee established in Section 118.1.3 of the Building Code and the city fee schedule for the permit fee paid when no work has been done under a permit issued in

accordance with this code. If work has been done under the permit, no refund shall be authorized. The originally paid administrative fee and the plan review portion of the permit fee shall be nonrefundable.

The building official shall not authorize a refund of any fee paid except on written application filed by the original permit holder or an authorized successor in the event of the death or incapacity of the original permit holder not later than 180 calendar days after the date of fee payment.

- [A] 109.3.3 Reserved. Lowest floor elevation. For additions and substantial improvements to existing buildings in flood hazard areas, upon placement of the lowest floor, including basement, and prior to further vertical construction, the elevation documentation required in the International Building Code shall be submitted to the code official.
- [A] 109.3.5 Lath or gypsum board inspection. Lath and gypsum board inspections shall be made after lathing and gypsum board, interior and exterior, is in place but before any plastering is applied or before gypsum board joints and fasteners are taped and finished.

Exception: Gypsum board that is not part of a fire-resistance-rated assembly or a shear assembly.

- **[A] 109.3.7 Other inspections.** In addition to the inspections specified above, the <u>code building</u> official is authorized to make or require other inspections of any construction work to ascertain compliance with the provisions of this code and other laws that are enforced by the Department of Building Safety <u>Building Code Enforcement</u>.
- 109.3.10 Reinspection. A reinspection fee may be assessed for each inspection or reinspection when an inspector arrives to perform the work and finds the portion of work for which inspection is called is not complete or when corrections called for in a previous inspection report have not been made.

This section is not to be interpreted as requiring inspection fees the first time a job is rejected for failure to comply with the requirements of this code, but as controlling the practice of calling for inspections before the job is ready for such inspection or reinspection.

The code official may assess reinspection fees when the inspection record card is not posted or otherwise available on the work site, or when the approved plans are not readily available to the inspector, for failure to provide access on the date for which inspection is requested, or for deviating from plans requiring the approval of the building official.

To obtain a reinspection, the applicant shall make a request and pay the reinspection fee in accordance with Section 118 of the *Building Code* the city fee schedule.

<u>In instances where reinspection fees have been assessed, no additional inspection</u> of the work will be performed until the required fees have been paid.

[A] 110.1 Altered area use and occupancy classification change. Altered areas of a building and relocated buildings, or portion thereof, such as an individual business lease space, shall not be used or occupied, and change in the existing use or occupancy classification of a building or portion thereof shall not be made until the code building official has issued a separate certificate of occupancy for each lease space therefor as provided herein. For purposes of this section, a lease space means a leasehold or tenancy held or occupied by an individual or entity for its sole

<u>use and may include one or more rooms.</u> Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction.

Exceptions:

- 1. <u>Certificates of occupancy are not required for work exempt from permits</u> under Section 105.2.
- 2. <u>One- and two-family dwellings, Group U occupancies, and individual dwelling units or sleeping units do not require a certificate of occupancy.</u>

[A] 110.2 Certificate issued. After the *code official* inspects the building and does not find violations of the provisions of this code or other laws that are enforced by the Department of Building Safety Building Code Enforcement, the code building official shall issue a certificate of occupancy that shall contain the following:

- 1. The building *permit* number or project number.
- 2. The address of the structure.
- 3. The name and address of the owner, and where applicable, the tenant and or-the owner's authorized agent.
- 4. A description of that portion of the structure for which the certificate is issued.
- 5. A statement that the described portion of the structure has been inspected for compliance with the requirements of this code for the occupancy and division of occupancy and the use for which the proposed occupancy is classified.
- 6. The name of the building official.
- 7. The edition of the code under which the *permit* was issued.
- 8. The use and occupancy, in accordance with the provisions of the *International Building Code* of the building or portion thereof.
- 9. The type of construction as defined in Chapter 6 of the *International Building Code*.
- 10. The design *occupant load* and any impact the *alteration* has on the design occupant load of the area not within the scope of the work.
- 11. If <u>a</u> fire <u>alarm_protection_systems</u> <u>is_are_provided, and whether the fire <u>alarm_protection_systems</u> is <u>are_required.</u></u>
- 12. <u>If a fire sprinkler system is provided, the type of system provided, and whether the fire sprinkler system is required.</u>
- 13. Any special stipulations and conditions of the building permit.

[A] 110.4 Revocation. The <u>code</u> <u>building</u> official is authorized to, in writing, suspend or revoke a certificate of occupancy or <u>completion</u> issued under the provisions of this code, <u>after notice of a right to a hearing on the matter pursuant to Section 117 of the <u>Building Code</u> has been delivered to the owner or occupant and the <u>applicable processes</u> thereunder have been performed, wherever the certificate is issued in error or on the basis of incorrect information supplied, or where it is determined that the building or structure or portion thereof is in violation of any ordinance or regulation or any of the provisions of this code.</u>

<u>110.5 Posting.</u> The owner or occupant shall post the certificate of occupancy in a conspicuous place on the premises, and it shall not be removed except by the *building official*.

[A] 112.1 General. In order to Except as provided below for mechanical and plumbing issues, the General Appeals Board, in accordance with the provisions of the Building Code, shall hear and decide appeals of orders, decisions, or determinations made by the edge building official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the governing body and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business.

[A] 112.2 Mechanical. The Mechanical Code Review Board, in accordance with the provisions of the Mechanical Code, shall hear and decide appeals of orders, decisions or determinations made by the building official relative to the application and interpretation of mechanical installations and repair associated with this code. Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or an equally good or better form of construction is proposed. The board shall not have authority to waive requirements of this code.

[A] 112.3 Plumbing. The Plumbing Code Review Board, in accordance with the provisions of the Plumbing Code, shall hear and decide appeals of orders, decisions or determinations made by the building official relative to the application and interpretation of fuel gas and plumbing associated with this code. Qualifications. The board of appeals shall consist of members who are qualified by experience and training to pass on matters pertaining to building construction and are not employees of the jurisdiction.

[A] 113.1 Unlawful acts. It shall be unlawful for any person, firm, or corporation to *repair*, alter, extend, add, move, remove, demolish, or change the occupancy of any building or equipment regulated by this code or cause same to be done in conflict with or in violation of any of the provisions of this code.

Where no specific penalty is otherwise provided in this code, the violation of any provision of this code shall constitute a misdemeanor punishable upon conviction by a fine of not less than \$500.00 nor more than \$2,000.00. Each day that any violation continues shall constitute and be punishable as a separate offense. Where any such conduct constitutes a violation of state penal law, the offense shall be punishable as provided in the applicable state law. In prosecutions under this code, the various provisions hereof that are designated as an "exception" or "exceptions" shall not be treated as exceptions within the meaning of Section 2.02 of the *Texas Penal Code*, and, instead, they shall constitute defenses to prosecution within the meaning of Section 2.03 of the *Texas Penal Code*.

[A] 113.4 Violation penalties. Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who *repairs* or alters or changes the occupancy of a building or structure in violation of the approved construction documents or directive of the *building official* or of a permit or certificate issued under the provisions of this code shall be subject to penalties as prescribed by law in Section 113.1.

[A] 114.2 Issuance. The stop work order shall be in writing and shall be given to the owner of the property involved, the owner's authorized agent or to the person doing the work. Upon issuance of a stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order and the conditions under which the cited work will be permitted to resume.

At issuance of a stop work order, the person performing the work and the permit holder shall be given notice of a right to a hearing on the matter by the *building official*, who shall deliver the notice to the persons performing the work, if present at the site, or otherwise conspicuously post the notice at the site. Upon request from the property owner, the owner's authorized agent or the person doing the work, a hearing shall be held within three business days of receiving the

stop work order, unless the permit holder or person who was doing the work requests an extension of time. Any stop work order that has been issued shall remain in effect pending any hearing that has been requested unless the *building official* withdraws the stop work order.

[A] 115.1 Conditions. Buildings, structures or equipment that are or hereafter become *unsafe*, shall be taken down, removed or made safe as the *code official* deems necessary and as provided for in this code. Unsafe buildings or structures. All buildings or structures regulated by this code that are structurally inadequate or unsafe, or not provided with adequate egress, or that constitute a fire hazard, or are otherwise dangerous to human life are, for the purposes of this section, unsafe buildings or structures. Any use of buildings or structures constituting a hazard to safety, health, or public welfare by reason of inadequate maintenance, dilapidation, obsolescence, fire hazard, disaster, damage, or abandonment is, for the purposes of this section, an unsafe use. Parapet walls, cornices, spires, towers, tanks, statuary and other appendages or structural members that are supported by, attached to, or a part of a building and that are in deteriorated condition or otherwise unable to sustain the design loads that are specified in this code are hereby designated as unsafe building appendages.

All such unsafe buildings, structures or appendages shall be abated, repaired, rehabilitated, demolished, or removed in accordance with the procedures set forth in the *Property Maintenance Code* and Chapter 10, Articles VIII and X of the *City Code*.

In matters of fire safety design and construction, including, but not limited to, egress (corridors, exit numbers, stairs, fire escapes and fire escape signs), wall and ceiling finish, enclosure of vertical shafts, basement access, standpipes and occupancy separation, a building shall not be deemed to be a fire hazard if it is in compliance with the most restrictive of:

- 1. <u>The provisions of the Appendix D (Life-Safety Requirements for Existing Buildings) of this code, if applicable;</u>
- 2. The building code that was applicable when the building was constructed; or
- 3. If the occupancy classification of the building or a portion thereof has changed since it was constructed, then the applicable building code that was in effect when the occupancy classification was changed.

Any building not situated within the jurisdiction at the time of its construction or change of occupancy classification shall be governed by the design and construction code and related laws applicable in the jurisdiction in which it was constructed at the time of its construction or change of occupancy and by the provisions of Appendix D (Life-Safety Requirements for Existing Buildings) of the this code. To the extent of any conflict among the requirements of any applicable codes, the most restrictive will apply. However, compliance with the aforesaid provisions shall not be deemed to excuse life-threatening defects of maintenance, sanitation, repair of casualty damage, security from unauthorized entry, structural stability, electrical systems, gas systems, plumbing systems, heating or cooling systems or other building systems.

Exception: For a building under construction or contract at the time of its annexation by the jurisdiction, see the Annexation Ordinance (Ordinance No. 78-2672), a copy of which is published in the preamble of this volume.

[A] 115.2 Record. The code official shall cause a report to be filed on an unsafe condition. The report shall state the occupancy of the structure and the nature of the unsafe condition.

[A] 115.3 Notice. If an *unsafe* condition is found, the *code official* shall serve on the owner, the owner's authorized agent or person in control of the structure a written notice that describes the condition deemed *unsafe* and specifies the required *repairs* or improvements to be made to abate the *unsafe* condition, or that requires the *unsafe* building to be demolished within a stipulated

time. Such notice shall require the person thus notified to declare immediately to the code official acceptance or rejection of the terms of the order.

[A] 115.4 Method of service. Such notice shall be deemed properly served if a copy thereof is delivered to the owner or the owner's authorized agent personally; sent by certified or registered mail addressed to the owner or the owner's authorized agent at the last known address with the return receipt requested; or delivered in any other manner as prescribed by local law. If the certified or registered letter is returned showing that the letter was not delivered, a copy thereof shall be posted in a conspicuous place in or about the structure affected by such notice. Service of such notice in the foregoing manner upon the owner's authorized agent or upon the person responsible for the structure shall constitute service of notice upon the owner.

[A] 115.5 Restoration. The building or equipment determined to be *unsafe* by the *code official* is permitted to be restored to a safe condition. To the extent that *repairs*, *alterations*, or *additions* are made or a *change of occupancy* occurs during the restoration of the building, such *repairs*, *alterations*, *additions*, or *change of occupancy* shall comply with the requirements of this code.

SECTION 118 PRIVATE PLAN REVIEW AND INSPECTION SERVICES

<u>118.1</u> Private plan review and inspection services shall be allowed as specified in Sections 119 of the *Building Code* and Section 115 of the *Residential Code*.

CHAPTER 2 DEFINITIONS

201.3 Specific construction and Tterms defined in other codes. Where specific rules of construction or terms are not addressed or defined in this code and are addressed or defined in the City Code or another volume of the other International Construction Codes, such terms or specific constructions herein shall have the meanings ascribed to them in those codes other volumes, as applicable to the construction and proposed scope of work hereunder.

SECTION 202 GENERAL DEFINITIONS

<u>{Editorial Note: ALL PORTIONS OF SECTION 202 NOT SHOWN REMAIN AS SET FORTH IN THE 2015 IEBC.}</u>

[A] ALTERATION. Any construction or renovation to an existing structure other than a *repair* or *addition*. Also, a change to an existing building, or an electrical, gas, mechanical or plumbing system that involves an extension, addition or change to the arrangement, type or purpose of the <u>original installation that requires a permit.</u> Alterations are classified as Level 1, Level 2 and Level 3 in this code.

<u>AUTHORITY HAVING JURISDICTION.</u> The director of Houston Public Works. This definition shall include the authority having jurisdiction's duly authorized representative.

BUILDING CODE. The City of Houston Building Code, as adopted and amended by this jurisdiction.

<u>BUILDING OFFICIAL.</u> The director of Houston Public Works or the duly authorized representative designated by the director to act as the chief construction code enforcement official of the jurisdiction; also known as *chief building official*. The term also includes the Houston Airport Systems building official who may be designated by the building official to perform *Construction Code* permitting and enforcement activities on Houston Airport Systems premises.

<u>CERTIFICATE OF COMPLIANCE.</u> A certificate stating that materials and products meet specified standards or that the scope of work under a specific permit was done in compliance with approved construction documents. Any reference in the *Construction Code* to a "CC", certificate of completion, or a certificate of inspection issued by this jurisdiction, is a reference to a certificate of compliance as defined herein.

CITY CODE. The Code of Ordinances, City of Houston, Texas.

<u>CITY FEE SCHEDULE.</u> The schedule of fees charged by the city for various permits, licenses, authorizations and services, which is maintained on the city's website.

[A] CODE OFFICIAL. The officer or other designated authority charged with the administration and enforcement of this code.

CODE OFFICIAL. The Houston Fire Department and Building Code Enforcement employees, including but not limited to, plan analysts, field inspectors, and other technical staff charged with the administration and enforcement of this code as specifically delegated by the *authority having jurisdiction*. The code official is authorized to approve designs, construction, equipment, materials, installations, processes, procedures, practices, and other duties necessary to verify and document compliance with the *Houston Construction Code*, the *Houston Fire Code*, Ordinances, and other laws and policies as specifically delegated by the *chief building official, fire chief*, and the *authority having jurisdiction*.

CONSTRUCTION CODE. Has the meaning ascribed in Section 1-2 of the *City Code*.

<u>ELECTRICAL CODE.</u> The City of Houston Electrical Code, as adopted and amended by this jurisdiction.

EXISTING BUILDING CODE. The City of Houston Existing Building Code, as adopted and amended by this jurisdiction.

FIRE CODE. The City of Houston Fire Code, as adopted and amended by this jurisdiction.

INTERNATIONAL BUILDING CODE. Any reference herein to the *International Building Code* shall be construed as referring to the *City of Houston Building Code*, as adopted and amended by this jurisdiction.

<u>INTERNATIONAL ENERGY CONSERVATION CODE.</u> Any reference herein to the <u>International Energy Conservation Code</u> shall be construed as referring to the <u>City of Houston Residential Energy Conservation Code</u> or the <u>City of Houston Commercial Energy Conservation Code</u>, both as adopted and amended by this jurisdiction.

INTERNATIONAL EXISTING BUILDING CODE. Any reference herein to the *International Existing Building Code* shall be construed as referring to the *City of Houston Existing Building Code*, as adopted and amended by this *jurisdiction*.

INTERNATIONAL FIRE CODE. Any reference herein to the *International Fire Code* shall be construed as referring to the *City of Houston Fire Code*, as adopted and amended by this jurisdiction.

INTERNATIONAL FUEL GAS CODE. Any reference herein to the *International Fuel Gas Code* shall be construed as referring to the *City of Houston Plumbing Code*, as adopted and amended by this jurisdiction.

<u>INTERNATIONAL MECHANICAL CODE.</u> Any reference herein to the <u>International Mechanical Code</u> shall be construed as referring to the <u>City of Houston Mechanical Code</u>, as adopted and amended by this jurisdiction.

INTERNATIONAL PLUMBING CODE. Any reference herein to the *International Plumbing Code* shall be construed as referring to the *City of Houston Plumbing Code*, as adopted by this jurisdiction.

INTERNATIONAL PROPERTY MAINTENANCE CODE. Any reference herein to the International Property Maintenance Code shall be construed as referring to Chapter 10, Article IX, of the City Code, which is also known as the Houston Building Standards Code.

<u>INTERNATIONAL RESIDENTIAL CODE.</u> Any reference herein to the <u>International Residential Code</u> shall be construed as referring to the <u>City of Houston Residential Code</u>, as adopted and amended by this jurisdiction.

<u>JURISDICTION.</u> The governmental unit that has adopted this code under due legislative authority.

<u>MECHANICAL CODE.</u> The *City of Houston Mechanical Code*, as adopted and amended by this jurisdiction.

<u>ONE- AND TWO-FAMILY DWELLING.</u> An individual free-standing structure containing not more than two *dwelling units*, also referred to as a *dwelling*, *duplex* or single-family dwelling depending on the number of *dwelling units* within.

<u>PLUMBING CODE.</u> The *City of Houston Plumbing Code*, as adopted and amended by this jurisdiction.

PROPERTY MAINTENANCE CODE. Chapter 10, Article IX, of the City Code relating to abatement of dangerous buildings, also known as the Houston Building Standards Code, as adopted and amended by this jurisdiction.

[A] REPAIR. The reconstruction or renewal of any part of an *existing building* for the purpose of its maintenance or to correct damage <u>using like for like materials</u>.

RESIDENTIAL CODE. The *City of Houston Residential Code*, as adopted and amended by this jurisdiction.

TEXAS ACCESSIBILITY STANDARDS (TAS). The accessibility standards applicable to buildings and facilities constructed within the state of Texas as promulgated by the Texas Department of Licensing and Regulation pursuant to Texas Government Code Chapter 469.

CHAPTER 3

PROVISIONS FOR ALL COMPLIANCE METHODS

[BS] 301.1.4 Seismic evaluation and design procedures. The seismic evaluation and design shall be based on the procedures specified in <u>Chapter 16 of the International Building Code</u> or ASCE 41. The procedures contained in Appendix A of this code shall be permitted to be used as specified in Section 301.1.4.2.

<u>302.6 Airport sound attenuation.</u> All alterations, repairs, additions, relocations of structures and changes of occupancy shall comply with appropriate provisions of the *Construction Code* and Chapter 9, Article VI, of the *City Code* to achieve an interior sound level of 45 dBA for the scope of work proposed.

<u>302.7 Lake Houston structures.</u> All alterations, repairs, additions, relocations of structures and changes of occupancy shall comply with appropriate provisions of the *Construction Code*, Chapter 62 of the *Building Code*, and Chapter 23 of the *City Code* for the scope of work proposed.

CHAPTER 4 PRESCRIPTIVE COMPLIANCE METHOD

[BS] I Flood hazard areas. See Chapter 19 of the City Code. For buildings and structures in flood hazard areas established in Section 1612.3 of the International Building Code, or Section R322 of the International Residential Code, as applicable, any addition that constitutes substantial improvement of the existing structure shall comply with the flood design requirements for new construction, and all aspects of the existing structure shall be brought into compliance with the requirements for new construction for flood design.

For buildings and structures in *flood hazard areas* established in Section 1612.3 of the *International Building Code*, or Section R322 of the *International Residential Code*, as applicable, any *additions* that do not constitute *substantial improvement* of the existing structure are not required to comply with the flood design requirements for new construction.

[BS] 403.2 Flood hazard areas. See Chapter 19 of the City Code. For buildings and structures in flood hazard areas established in Section 1612.3 of the International Building Code, or Section R322 of the International Residential Code, as applicable, any alteration that constitutes substantial improvement of the existing structure shall comply with the flood design requirements for new construction, and all aspects of the existing structure shall be brought into compliance with the requirements for new construction for flood design.

For buildings and structures in *flood hazard areas* established in Section 1612.3 of the *International Building Code*, or Section R322 of the *International Residential Code*, as applicable, any alterations that do not constitute *substantial improvement* of the existing structure are not required to comply with the flood design requirements for new construction.

[BS] 403.8 Roof diaphragms resisting wind loads in high-wind regions. Where the intended alteration requires a permit for reroofing and involves removal of roofing decking materials from more than 50 percent of the roof diaphragm of a building or section of a building located where the ultimate design wind speed is greater than 115 mph (51 m/s) in accordance with Figure Section 1609.3(1) of the International Building Code or in a special wind region as defined in Section 1609 of the International Building Code, roof diaphragms, connections of the roof diaphragm to roof framing members, and roof-to-wall connections shall be evaluated for the wind loads specified in Section 1609 of the International Building Code, including wind uplift. If the diaphragms and connections in their current condition are not capable of resisting at least 75 percent of those wind loads, they shall be replaced or strengthened in accordance with the loads specified in Section 1609 of the International Building Code.

[BS] 404.5 Flood hazard areas. Shall comply with ASCE 24 and Chapter 19 of the City Code, whichever is more restrictive. For buildings and structures in flood hazard areas established in Section 1612.3 of the International Building Code, or Section R322 of the International Residential Code, as applicable, any repair that constitutes substantial improvement or repair of substantial damage of the existing structure shall comply with the flood design requirements for new construction, and all aspects of the existing structure shall be brought into compliance with the requirements for new construction for flood design.

For buildings and structures in *flood hazard areas* established in Section 1612.3 of the *International Building Code*, or Section R322 of the *International Residential Code*, as applicable, any repairs that do not constitute *substantial improvement* or repair of *substantial damage* of the existing structure are not required to comply with the flood design requirements for new construction.

[BS] 408.3 Flood hazard areas. See Chapter 19 of the City Code. Within flood hazard areas established in accordance with Section 1612.3 of the International Building Code, or Section R322 of the International Residential Code, as applicable, where the work proposed constitutes substantial improvement, the building shall be brought into compliance with Section 1612 of the International Building Code, or Section R322 of the International Residential Code, as applicable:

Exception: Historic buildings need not be brought into compliance that are:

- 1. Listed or preliminarily determined to be eligible for listing in the National Register of Historic Places;
- Determined by the Secretary of the U.S. Department of Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined to qualify as an historic district; or
- 3. Designated as historic under a state or local historic preservation program that is approved by the Department of Interior.

410.1 Scope. The Accessibility provisions for the of Sections 410.1 through 410.9 apply to maintenance, change of occupancy, additions and alterations to existing buildings, including those identified as historic buildings, shall be in accordance with Chapter 11 of the Building Code. {Editorial Note: The REMAINDER OF THIS SECTION REMAINS AS SET FORTH IN THE 2015 IEBC AND IS NOT ADOPTED BY THIS JURISDICTION.}

CHAPTER 6 REPAIRS

[BS] 601.3 Flood hazard areas. See Chapter 19 of the City Code. In flood hazard areas, repairs that constitute substantial improvement shall require that the building comply with Section 1612 of the International Building Code, or Section R322 of the International Residential Code, as applicable.

605.1 General. Repairs shall be done in a manner that maintains the level of accessibility provided in accordance with the *Texas Accessibility Standards*.

[BS] 606.2.4 Flood hazard areas. See Chapter 19 of the City Code. In flood hazard areas, buildings that have sustained substantial damage shall be brought into compliance with Section 1612 of the International Building Code, or Section R322 of the International Residential Code, as applicable.

609.2 Water closet replacement. The maximum water consumption flow rates and quantities for all replaced water closets shall be 1.6 <u>1.28</u> gallons (64.85 L) per flushing cycle.

Exception: Blowout-design water closets [3.5 gallons (13 L) per flushing cycle].

CHAPTER 7 ALTERATIONS—LEVEL 1

[BS] 701.3 Flood hazard areas. See Chapter 19 of the City Code. In flood hazard areas, alterations that constitute substantial improvement shall require that the building comply with Section 1612 of the International Building Code, or Section R322 of the International Residential Code, as applicable.

705.1 General. A facility that is altered shall comply with the applicable provisions in Section 705.1.1 through 705.1.14, and Chapter 11 of the *International Building Code* unless it is technically infeasible. Where compliance with this section is technically infeasible, the alteration shall provide access to the maximum extent that is technically feasible.

<u>{Editorial Note: REMAINDER OF SECTION 705 SHALL REMAIN AS SET FORTH IN THE 2015 IEBC AND IS NOT ADOPTED BY THIS JURISDICTION.}</u>

[BS] 707.3.2 Roof diaphragms resisting wind loads in high-wind regions. Where roofing decking materials are removed from more than 50 percent of the roof diaphragm or section of a building located where the ultimate design wind speed, V_{ult} , determined in accordance with Figure Section 1609.3(1) of the *International Building Code*, is greater than 115 mph (51 m/s) or in a special wind region, as defined in Section 1609 of the *International Building Code*, roof diaphragms, connections of the roof diaphragm to roof framing members, and roof-to-wall connections shall be evaluated for the wind loads specified in the *International Building Code*, including wind uplift. If the diaphragms and connections in their current condition are not capable of resisting at least 75 percent of those wind loads, they shall be replaced or strengthened in accordance with the loads specified in the *International Building Code*.

CHAPTER 8 ALTERATIONS—LEVEL 2

803.6 Fire-resistance rating. Where approved by the <u>code building</u> official, buildings where an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 of the <u>International Building Code</u> has been added, and the building is now sprinklered throughout, the required fire-resistance ratings of building elements and materials shall be permitted to meet the <u>automatic sprinkler system</u> requirements of the current building code. The building is required to meet the other applicable requirements of the <u>International Building Code</u>.

Plans, investigation and evaluation reports, and other data shall be submitted indicating which building elements and materials the applicant is requesting the <u>code building</u> official to review and approve for determination of applying the current building code fire-resistance ratings. Any special construction features, including fire-resistance-rated assemblies and smoke-resistive assemblies, conditions of occupancy, means-of-egress conditions, fire code deficiencies, approved modifications or approved alternative materials, design and methods of construction, and equipment applying to the building that impact required fire-resistance ratings shall be identified in the evaluation reports submitted.

804.2.1.1 Supplemental automatic sprinkler system requirements. Where the *work area* on any floor exceeds 50 percent of that floor area, Section 804.2.1 shall apply to the entire floor on which the *work area* is located.

Exception: Occupied tenant spaces that are entirely outside the work area.

805.6 Dead-end corridors. Dead-end corridors in any *work area* shall not exceed 35 <u>20</u> feet (10 670 6096 mm).

Exceptions:

- 1. Where dead-end corridors of greater length are permitted by the *International Building Code*.
- In other than Group A and H occupancies, the maximum length of an existing dead-end corridor shall be 50 feet (15 240 mm) in buildings equipped throughout with an automatic fire alarm system installed in accordance with the *International Building Code*.
- 3.2. In other than Group A and H occupancies, the maximum length of an existing dead-end corridor shall be 70 50 feet (21,356–15,240 mm) in buildings equipped throughout with an automatic sprinkler system installed in accordance with the *International Building Code*.
- 4.3. In other than Group A and H occupancies, the maximum length of an existing, newly constructed, or extended dead-end corridor shall not exceed 50 feet (15 240 mm) on floors equipped with an automatic sprinkler system installed in accordance with the *International Building Code*.

805.12 Stair construction. All required stairs shall have a minimum run of 9 inches (229 mm) and a maximum rise of 8 inches (203 mm) and shall have a minimum width of 30 inches (762 mm) exclusive of handrails. Every stairway shall have at least one handrail. A landing having a minimum 30-inch (762 mm) run in the direction of travel shall be provided at each point of access to the stairway.

Exception: Fire escapes as provided for in this section.

Exterior stairs shall be of noncombustible construction.

<u>Exception:</u> On buildings of Types III, IV and V construction, provided the exterior stairs are constructed of wood of not less than 2-inch (51 mm) nominal thickness.

806.2 Stairways and escalators in existing buildings. In *alterations* where an escalator or stairway is added where none existed previously, an accessible route shall be provided in accordance with Sections 1104.4 and 1104.5 of the *International Building Code*.

CHAPTER 9 ALTERATIONS—LEVEL 3

902.1.2 Elevators. Where there is an elevator or elevators for public use, at least one elevator serving the *work area* shall comply with this section. Existing elevators with a travel distance of 25 feet (7,620 mm) or more above or below the main floor or other level of a building and intended to serve the needs of emergency personnel for fire-fighting or rescue purposes shall be provided with emergency operation in accordance with ASME A17.3. New elevators shall be provided with Phase I emergency recall operation and Phase II emergency in-car operation in accordance with ASME A17.1.

CHAPTER 10 CHANGE OF OCCUPANCY

1001.3 Certificate of occupancy required. A certificate of occupancy shall be issued where a *change of occupancy* occurs that results in a different occupancy classification as determined by according to the *International Building Code*.

1012.8 Accessibility. Existing buildings that undergo a change of group or occupancy classification shall comply with <u>Chapter 11 of the Building Code this section</u>.

Exception: Type B dwelling or sleeping units required by Section 1107 of the *International Building Code* are not required to be provided in existing buildings and facilities undergoing a *change of occupancy* in conjunction with less than a Level 3 *alteration*.

CHAPTER 11 ADDITIONS

[BS] 1103.5 Flood hazard areas. Additions and foundations in flood hazard areas shall comply with Chapter 19 of the *City Code* and the *Infrastructure Design Manual* and with the following requirements whichever is more restrictive:

- 1. For horizontal additions that are structurally interconnected to the existing building:
 - 1.1 If the addition and all other proposed work, when combined, constitute substantial improvement, the existing building and the addition shall comply with Section 1612 of the *International Building Code*, or Section R322 of the *International Residential Code*, as applicable.
 - 1.2 If the addition constitutes substantial improvement, the existing building and the addition shall comply with Section 1612 of the *International Building Code*, or Section R322 of the *International Residential Code*, as applicable.
- 2. For horizontal additions that are not structurally interconnected to the existing building:
 - 2.1 The addition shall comply with Section 1612 of the *International Building Code*, or Section R322 of the *International Residential Code*, as applicable.
 - 2.2 If the addition and all other proposed work, when combined, constitute substantial improvement, the existing building and the addition shall comply with Section 1612 of the *International Building Code*, or Section R322 of the *International Residential Code*, as applicable.
- 3. For vertical additions and all other proposed work that, when combined, constitute substantial improvement, the existing building shall comply with Section 1612 of the *International Building Code*, or Section R322 of the *International Residential Code*, as applicable.
- 4. For a raised or extended foundation, if the foundation work and all other proposed work, when combined, constitute substantial improvement, the existing building shall comply with Section 1612 of the *International Building Code*, or Section R322 of the *International Residential Code*, as applicable.
- 5. For a new foundation or replacement foundation, the foundation shall comply with Section 1612 of the International Building Code or Section R322 of the International Residential Code, as applicable.

SECTION 1107 AIRPORT SOUND ATTENUATION

<u>1107.1 Minimum requirements.</u> <u>Additions to existing buildings required to comply with airport sound attenuation requirements shall conform to Chapter 9, Article VI, of the *City Code* and the *Building Code* to achieve an interior sound level of not more than 45 dBA.</u>

SECTION 1108 LAKE HOUSTON STRUCTURES

<u>1108.1 Minimum requirements.</u> Additions to existing buildings constructed in or on Lake Houston shall conform to the provisions of Chapter 62 of the *Building Code* and Chapter 23 of the *City Code*, whichever is more restrictive.

CHAPTER 12 HISTORIC BUILDINGS

1201.1 Scope. It is the intent of this chapter to provide means for the preservation of *historic buildings*. Historical buildings shall comply with the provisions of this chapter relating to their *repair*, *alteration*, relocation and *change of occupancy*. <u>Repairs</u>, <u>alterations</u>, and <u>additions necessary for the preservation</u>, restoration, rehabilitation or continued use of a building or structure may be made with conformance to all the requirements of this code when authorized by the *building official*, provided:

- The building or structure has been designated as having special historical or architectural significance by the city council of this jurisdiction as a landmark or is a contributing structure within a historic district as designated by the city council of this jurisdiction. The foregoing designations shall be as provided in Chapter 33, Article VII, of the City Code.
- <u>2.</u> Any *unsafe* conditions described in this code are corrected.
- 3. The restored building or structure will be no more hazardous based on life safety, fire safety, and sanitation than the existing building.

[BS] 1201.4 Flood hazard areas. See Chapter 19 of the City Code. In flood hazard areas, if all proposed work, including repairs, work required because of a change of occupancy, and alterations, constitutes substantial improvement, then the existing building shall comply with Section 1612 of the International Building Code, or Section R322 of the International Residential Code, as applicable.

Exception: If an *historic building* will continue to be an *historic building* after the proposed work is completed, then the proposed work is not considered a *substantial improvement*. For the purposes of this exception, an *historic building* is:

- Listed or preliminarily determined to be eligible for listing in the National Register of Historic Places;
- Determined by the Secretary of the U.S. Department of Interior to contribute to the historical significance of a registered historic district or a district preliminarily determined to qualify as an historic district; or
- Designated as historic under a state or local historic preservation program that is approved by the Department of Interior.

1205.2 Building area. The allowable floor area for *historic buildings* undergoing a *change of occupancy* shall be permitted to exceed by 20 percent the allowable areas specified in comply with Chapter 5 of the *International Building Code*.

CHAPTER 13 RELOCATED OR MOVED BUILDINGS

1301.2 Conformance. The building shall be safe for human occupancy as determined by the International Fire Code and the International Property Maintenance Code. Any repair, alteration, or change of occupancy undertaken within the moved structure shall comply with the requirements of this code applicable to the work being performed. Any field-fabricated elements shall comply with the requirements of the International Building Code or the International Residential Code as applicable. Relocated or moved housing shall comply with Chapter 10, Article III, of the City Code and be brought into compliance with all applicable Construction Code requirements as for new construction for the designated occupancy within 150 calendar days after the building was moved onto the property. The issuance of any permit by the jurisdiction shall not be construed to extend the time to bring the building into compliance with the Construction Code beyond 150 calendar days after the building was moved onto the property.

Relocated or moved buildings and housing outside the scope of the *Houston Residential Code* shall comply with the *Building Code* for new construction.

<u>Exception:</u> Relocated or moved buildings complying with Chapter 10, Article VI, of the <u>City Code</u> and constructed under the Texas Department of Licensing and Regulation (TDLR) Industrialized Housing and Buildings (IHB) Program.

[BS] 1302.6 Flood hazard areas. If relocated or moved into a flood hazard area, structures shall comply with <u>Chapter 19 of the City Code</u>, the <u>Infrastructure Design Manual</u>, and Section 1612 of the <u>International Building Code</u>, or Section R322 of the <u>International Residential Code</u>, as applicable, whichever is more restrictive.

CHAPTER 14 PERFORMANCE COMPLIANCE METHODS

<u>{Editorial Note:</u> This Chapter is not adopted by this jurisdiction and remains as set forth in the 2015 IEBC.}

CHAPTER 15 CONSTRUCTION SAFEGUARDS

<u>{Editorial Note: This Chapter is not adopted by this jurisdiction. Safety during construction shall be governed by Section 33 of the IBC.}</u>

CHAPTER 16 REFERENCED STANDARDS

<u>{Editorial Note:</u> PORTIONS OF THIS CHAPTER NOT SHOWN SHALL REMAIN AS SET FORTH IN THE 2015 IEBC.}

ASME	American Society of Mechanical Engine 3 Park Avenue New York, NY 10016	ers
Standard Reference number	Title	Referenced in code section number
A17.3—20 <u>12</u> 08	Safety Code for Existing Elevators and Escalator	902.1.2
NFPA	National Fire Protection Association 1 Batterymarch Park Quincy, MA 02169-7471	
Standard Reference number	Title	Referenced in code section number
70— <u>20</u> 14	National Electrical Code	107.3, 119.6, 120.2, 120.4, 301.2, 202, 607.1.1, 607.1.2, 607.1.3, 607.1.4, 607.1.5, 808.1, 808.3.4, 808.3.7, 1008.1, 1008.2, 1008.3, 1008.4, Ch. 16

APPENDIX D

LIFE-SAFETY REQUIREMENTS FOR EXISTING BUILDINGS

SECTION D101 GENERAL

<u>D101.1 Purpose.</u> The purpose of this appendix is to provide a reasonable degree of safety to persons occupying existing buildings by providing for alterations to such existing buildings that do not conform with the minimum requirements of this code. This appendix shall apply to and the term "existing building" shall be construed to mean any building existing within the corporate limits of the jurisdiction on January 1, 1986, and any building annexed into the corporate limits after that date.

<u>Mith the requirement for a certificate of occupancy may be cited under this code and required to secure a certificate of compliance within 90 days after the date of citation. The owner of an existing building annexed into the jurisdiction shall apply for inspection within one year from the date of annexation. The *building official* shall determine the relative hazard category of each application and shall schedule inspections starting with the highest hazard category associated with the buildings occupancy as identified by Table D101.2.</u>

In situations where the jurisdiction or any other regulatory authority requires a valid certificate of occupancy prior to licensing a use and no certificate of occupancy was issued at the time of construction, a Life-Safety Compliance Certificate shall satisfy the requirements for an existing building. Inspections that are required for permitting or licensing shall be given priority over other inspections provided that the applicant advises the *building official* of the need. An application for inspection under this appendix chapter shall be regarded as an application for a certificate of occupancy for purposes of Section 10-3.1 of the *City Code*, and each application must be accompanied by the affidavit specified therein.

TABLE D101.2 HAZARD CATEGORIES

RELATIVE HAZARD	OCCUPANCY CLASSIFICATIONS	
1 (Highest Hazard)	Group A, Divisions 1 and 2; Group E; Group I; Group H; Divisions 1 and 2.	
2	Group A, Divisions 3, 4, and 5.	
3	Group R, Divisions 1 and 2; Group B, dining and drinking establishments; Group H other than Divisions 1 and 2.	
4 (Lowest Hazard)	Group B other than dining and drinking establishments and Groups F, M, and S.	

The building official shall notify the building owner or the owner's agent of a scheduled inspection at least 30 days in advance. Within 15 days following notification of the inspection date, the owner or agent shall pay the applicable fees established in Section 118 of the Building Code and the city fee schedule. Following the inspection, the building official shall issue a Life-Safety Compliance Certificate if there are no deficiencies. Where deficiencies are found, the owner or

agent shall be advised in writing of the nature of the observed deficiencies that require correction. Such written notice shall not be construed to excuse the existence of any defects that may not have been observed or noted by the inspector, and it shall be the duty of the owner to determine and correct all violations of this appendix. It shall be the duty of the owner or agent to bring the building into full compliance with this appendix chapter within six months from the date that notice is given of deficiencies noted in the inspection except to the extent that an extension of time has been granted as provided in Section D109.

Promptly after the *building official*'s receipt of notice from the owner that the building is in full compliance with this appendix chapter, the *building official* shall inspect the building. Upon confirmation that the building is in full compliance with this appendix chapter, the *building official* shall issue a Life-Safety Compliance Certificate for the building.

<u>D101.3 Unsafe or hazardous conditions.</u> Any condition in a building or building system, including, but not limited to, electrical, mechanical, and plumbing systems, that is found to be unsafe, unsanitary or hazardous during a life-safety compliance inspection shall be corrected as a part of the owner's compliance plan.

<u>D101.4 Alternate materials and methods.</u> Alternate materials and methods may be used, provided such materials or methods are found by the *building official* to be, for the purpose intended, at least the equivalent of that prescribed in this chapter in suitability, strength, effectiveness, fire resistance, durability and safety. The *building official* may permit alternates in conformance with Section 104.11.

<u>D101.5 Dangerous buildings.</u> The provisions of this appendix chapter shall not be construed to authorize the maintenance, use, or keeping of any building in such condition that it constitutes a dangerous building under Chapter 10, Article IX, of the *City Code* (the *Houston Building Standards Code*), or to excuse or extend time given for compliance with any order issued thereunder by the hearing officer.

SECTION D102 EXITS

<u>D102.1 Number of means of egress.</u> Every floor above the first story used for human occupancy shall have at least two separate means of egress, one of which may be an exterior fire escape complying with Section D102.4. Subject to the approval of the *building official*, an approved exit ladder device may be used in lieu of a fire escape when the construction features or location of the building on the property makes the installation of a fire escape impracticable.

<u>Exception:</u> In all occupancies, second stories with an occupant load of 10 or less may have one means of egress.

An exit ladder device, when used in lieu of a fire escape, shall conform to the provisions in Section D102.7. The use of an exit ladder device shall be permitted where all the following conditions apply:

- 1. The device shall serve an occupant load of 10 or fewer, a single dwelling, or a guest room.
- <u>2.</u> The building does not exceed three stories in height.
- 3. Access to the device is adjacent to an opening as specified for emergency egress or rescue from a balcony.
- 4. The device, when operated, shall not pass in front of any building opening below the unit being served.

- <u>5.</u> The means of activating the device for the ladder is accessible only from the opening or balcony served, and
- 6. The device shall be installed so that it will not cause a person using it to be within 6 feet (1829 mm) of exposed electrical wiring.

D102.2 Stair construction. All required stairs shall have a minimum run of 9 inches (229 mm) and a maximum rise of 8 inches (203 mm) and shall have a minimum width of 30 inches (762 mm) exclusive of handrails. Every stairway shall have at least one handrail. A landing having a minimum 30-inch (762 mm) run in the direction of travel shall be provided at each point of access to the stairway.

Exception: Fire escapes as provided for in this section.

Exterior stairs shall be of noncombustible construction.

Exception: On buildings of Type III, IV and V construction, provided the exterior stairs are constructed of wood not less than 2-inch (51 mm) nominal thickness.

D102.3 Corridors. Corridors serving as an exit for an occupant load of 30 or more shall have walls and ceilings of not less than one-hour fire-resistive construction as required by this code. Existing walls surfaced with wood lath and plaster in good condition or ½-inch (12.7 mm) gypsum wallboard or openings with fixed wired glass set in metal frames are permitted for corridor walls and ceilings and occupancy separations when approved. Doors opening into such corridors shall be protected by 20-minute fire assemblies or solid wood doors not less than 1¾-inches (45 mm) thick. Where the existing frame will not accommodate a 1¾-inch thick (45 mm) door, a 1¾-inch thick (35 mm) solid bonded wood-core door or equivalent insulated steel door shall be permitted. Except for Group I occupancy patient rooms, treatment rooms, and emergency rooms, doors shall be self-closing or automatic closing by smoke detection. Transoms and openings other than doors from corridors to rooms shall comply with Section 714 of the *Building Code* or be covered with a minimum of ½-inch (12.7 mm) gypsum wallboard or equivalent material on the room side.

Exception: Existing corridor walls, ceilings, and opening protection not in compliance with D102.3 above may be continued when such buildings are protected with an approved automatic sprinkler system throughout the floor or when such existing corridors are at least 10 feet (3048 mm) or more in width.

D102.4 Fire escapes.

<u>D102.4.1 Use as required exit.</u> Existing fire escapes that, in the opinion of the <u>building official</u>, comply with the intent of this section may be used as one of the required exits. The location and anchorage of fire escapes shall be of an approved design and construction acceptable to the <u>building official</u>.

D102.4.2 General requirements. Fire escapes shall comply with all of the following:

- 1. Access from a corridor shall not be through an intervening room.
- 2. All openings within 10 feet (3,048 mm) of fire escape shall be protected by 3/4-hour fire assemblies. When located within a recess or vestibule, adjacent enclosure walls shall be of not less than one-hour fire-resistive construction.
- 3. Egress from the building shall be by an unobstructed opening having a minimum dimension of not less than 29 inches (737 mm). Such openings shall be openable from the inside without the use of a key or special knowledge or effort. The sill of an opening giving access shall not be more than 30 inches (762 mm) above the floor of the building or balcony.

- 4. Fire escape stairways and balconies shall support the dead load plus a live load of not less than 100 pounds per square foot (4.79 kN/m²) and shall be provided with a top and intermediate handrail on each side. The pitch of the stairway shall not exceed 60 degrees with a minimum width of 18 inches (457 mm). Treads shall be not less than 4 inches (102 mm) in width and the rise between treads shall not exceed 10 inches (254 mm). All stair and balcony railings shall support a horizontal force of not less than 50 pounds per lineal foot (729.5 N/m) of railing.
- 5. Balconies shall be not less than 44 inches (1,118 mm) in width with no floor opening, other than the stairway opening, greater than 5% inch (16 mm) in width. Stairway openings in such balconies shall be not less than 22 inches by 44 inches (559 mm by 1118 mm). The balustrade of each balcony shall be not less than 36 inches (914 mm) high with not more than 9 inches (229 mm) between balusters.
- 6. Fire escapes shall extend to the roof or provide an approved gooseneck ladder between the top floor landing and the roof when serving buildings four or more stories in height having roofs with a slope of less than 4 units vertical in 12 units horizontal (33.3% slope). Fire escape ladders shall be designed and connected to the building to withstand a horizontal force of 100 pounds per lineal foot (1459 N/m); each rung shall support a concentrated load of 500 pounds (2,224 N) placed anywhere on the rung. All ladders shall be at least 15 inches (381 mm) wide, located within 12 inches (305 mm) of the building and shall be placed flatwise relative to the face of the building. Ladder rungs shall be ³/₄ inch (19 mm) in diameter and shall be located 12 inches (305 mm) on center. Openings for roof access ladders through cornices and similar projections shall have minimum dimensions of 30 inches by 33 inches (762 mm by 838 mm).
- 7. The lowest balcony shall be not more than 18 feet (5,486 mm) from the ground. Fire escapes shall extend to the ground or be provided with counterbalanced stairs reaching to the ground.
- 8. Fire escapes shall not take the place of stairways required by the codes under which the building was constructed, and
- <u>9.</u> <u>Fire escapes shall be kept unobstructed at all times and maintained in good working order.</u>

D102.5 Exit and fire escape signs. Exit signs shall be provided as required by this code.

Exception: The use of existing exit signs may be continued when found by the *building* official to provide adequate direction to the exits in emergency situations.

All doors or windows providing access to a fire escape shall be provided with fire escape signs.

<u>D102.6 Exit illumination.</u> Exits shall be illuminated as required by Section 1008 of the *Building Code*.

D102.7 Exit ladder devices.

<u>D102.7.1 General.</u> Where permitted by this appendix chapter, exit ladder devices shall be installed and maintained in accordance with the manufacturer's instructions and Section D102.1. Detailed plans with appropriate installation instructions shall be provided by a Texas professional engineer to address all structural requirements of all applicable

loads including, but not limited to, the loads identified in Section D102.7.2 Where exit ladder devices are intended for mounting on different support surfaces, specific instructions shall be provided for each surface.

<u>D102.7.2 Design.</u> All load-bearing surfaces and supporting hardware shall be of non-combustible materials. Exit ladder devices shall have a minimum width of 12 inches (305 mm) when in the position intended for use. The design load shall not be less than 400 pounds (1,780 N) for ladders having 16-feet (4,877 mm) lengths and 600 pounds (2,669 N) for ladders having 25-feet (7,620 mm) lengths. Exit ladder devices shall be capable of withstanding an applied load of four times the design load when installed in the manner intended for use.

<u>D102.7.3 Testing.</u> Exit ladder devices of the retractable type shall, in addition to the static load requirements of Section D102.7.2, be capable of withstanding all the following tests:

- 1. Rung strength.
- Rung-to-side-rail shear strength.
- 3. Release mechanism, and
- 4. Low temperature.

Test loads shall be applied for a period of one hour.

D102.7.3.1 Rung-strength test. Rungs of retractable exit ladder devices shall be capable of withstanding a load of 1,000 pounds (4,448 N) when applied to a 3½-inch (89 mm) wide block resting at the center of the rung. The test load shall be applied for a period of one hour. The ladder shall remain operational following this test.

<u>P102.7.3.2 Rung-to-side-rail shear test.</u> Rungs of retractable exit ladder devices shall be capable of withstanding a load of 1,000 pounds (4,448 N) when applied to a 3½-inch (89 mm) wide block resting on the center rung as near the side rail as possible. The test load shall be applied for a period of one hour. Acceptable test results shall show no evidence of attachment failure of the rungs to the side rails including, but not limited to, visual evidence of displacement, tears, bending, or stretching, upon removal of the test load. The ladder shall remain operational following this test.

<u>D102.7.3.3 Release mechanism test.</u> The release mechanism for a retractable exit ladder device shall be tested to determine that it operates with an average applied force of not more than 5 pounds (22.2 N) for hand-operated releasing mechanisms and an average applied force of not more than 25 pounds (111 N) for foot-pedal types of releasing mechanisms. For these tests, a force gauge shall be applied to the release mechanism, and the average of three consecutive readings shall be computed.

<u>D102.7.3.4 Low temperature operation test.</u> Evidence of successful test results shall be provided to the code official of testing consisting of representative samples of the exit ladder device subjected to a temperature of -40°C in an environmental chamber for a period of 24 hours minimum by a city registered special inspector or a nationally recognized testing lab acceptable to the *building official*. For purposes of this section, a test is considered successful when the release mechanism operates immediately upon removal from the chamber and the ladder device functions as intended without any restriction of operation.

<u>D102.7.3.5 Test verification.</u> For the purpose of this section, evidence of successful test results shall be provided to the *code official* by the permit applicant from a city registered special inspector or a nationally recognized testing lab acceptable to the *building official*.

SECTION D103 ENCLOSURE OF VERTICAL SHAFTS

D103.1 Enclosure of vertical shafts. Interior vertical shafts, including but not limited to stairways, elevator hoistways, and service and utility shafts, shall be enclosed by a minimum one-hour fire-resistive construction. All openings into such shafts shall be protected with one-hour fire assemblies that shall be maintained self-closing or be automatic closing by smoke detection. All other openings shall be fire protected in an approved manner acceptable to the *building official*. Existing fusible link-type automatic door closing devices may be permitted where the fusible link rating does not exceed 135°F (57.2°C).

Exceptions:

- 1. <u>In other than Group I occupancies, an enclosure will not be required for openings serving only one adjacent floor.</u>
- Stairways need not be enclosed in a continuous vertical shaft if each story is separated from other stories by one-hour fire-resistive construction or approved wire-glass set in steel frames. In addition, all exit corridors shall be sprinklered, and each opening between the corridor and any occupant space shall have at least one sprinkler head above the opening on the tenant side. The sprinkler system may be supplied from the domestic water supply if the water flow is of adequate volume and pressure.
- 3. <u>Vertical openings need not be protected if the building is protected by an approved automatic sprinkler system.</u>

SECTION D104 BUILDING ACCESS OR SPRINKLER PROTECTION

D104.1 Building access or sprinkler protection. An approved automatic sprinkler system shall be provided throughout a basement or a story that:

- 1. Exceeds 1,500 square feet (139.3 m²) in area; and,
- 2. Does not have a minimum of 20 square feet (1.86 m²) of opening entirely above the adjoining ground level in each 50 lineal feet (15,240 mm), or fraction thereof, of exterior wall on at least one side of the building. Openings shall have a minimum clear dimension of 30 inches (762 mm).

Additionally, and notwithstanding the application of the foregoing criteria, if any portion of a basement is located more than 75 feet (22,860 mm) from required openings, the basement shall be provided with an approved automatic sprinkler system throughout. The distance of 75 feet (22,860 mm) shall be measured in a straight line without regard to intervening walls or other objects.

Exception: Existing parking garages with no other occupancies may substitute an automatic fire alarm system utilizing "rate-of-rise" detectors when coupled with a smokeremoval system capable of six air changes per hour.

SECTION D105 STANDPIPES

<u>D105.1 Standpipes.</u> Any building over four stories in height shall be provided with an approved Class I or Class III standpipe system.

SECTION D106 SMOKE DETECTORS

<u>D106.1 General.</u> Day-care centers, dwelling units, and guest rooms in hotels or lodging houses that are used for sleeping purposes shall be equipped with smoke detectors installed in accordance with the requirements of the *Fire Code*.

<u>D106.2 Power source.</u> Smoke detectors may be battery operated or may receive their primary power from the building wiring when such wiring is served from a commercial source. Wiring shall be permanent and without disconnecting switches other than those required for over current protection.

D106.3 Location within dwelling units. In dwelling units, detectors shall be mounted on the ceiling or wall at a point centrally located in the corridor or area giving access to each separate sleeping area. Where sleeping units are on an upper level, the detector shall be placed at the center of the ceiling directly above the stairway. Detectors shall also be installed in the basements of dwelling units having stairways that open from the basement into the dwelling. Detectors shall sound an alarm audible in all sleeping areas of the dwelling unit in which they are located.

<u>D106.4 Location in efficiency dwelling units and hotels.</u> In efficiency dwelling units, hotel suites and hotel sleeping units, detectors shall be located on the ceiling or wall of the main room or hotel sleeping unit. When sleeping units within an efficiency dwelling unit or hotel suite are on an upper level, the detector shall be placed at the center of the ceiling directly above the stairway. When actuated, the detector shall sound an alarm audible within the sleeping area of the dwelling unit, hotel suite, or sleeping unit in which it is located.

SECTION D107 SEPARATION OF OCCUPANCIES

<u>D107.1 General.</u> Occupancy separations shall be provided as specified in Section 508 of the *Building Code*. When approved by the *building official*, existing wood lath and plaster in good condition or ½-inch (12.7 mm) gypsum wallboard may be acceptable where one-hour occupancy separations are required.

SECTION D108 FIRE ALARMS

<u>D108.1 General.</u> High-rise buildings as defined in the *Building Code* shall be equipped with an approved manual fire alarm system in accordance with the provisions of NFPA 72, Sections 403.4.2 and 907.2.13 of the *Building Code*. The initiation of the manual fire alarm shall activate an audible alarm at a constantly attended location within the building.

Exception: A manual fire alarm system connected to a constantly attended central, proprietary, or remote station service.

SECTION D109 EXTENSION OF TIME

<u>D109.1 Application.</u> The owner of a building may apply to the *building official* for an extension of time to comply with any requirement of this appendix chapter. The owner of the building shall set forth the following information on such an application:

- 1. The specific requirements of this appendix chapter for which the owner is seeking an extension of time;
- 2. The period of time the owner believes is necessary to meet the requirements; and
- <u>3.</u> The reason(s) why the owner believes such an extension of time is necessary.

The application shall be accompanied by documents (examples of which include affidavits, photographs, receipts, loan applications, and contracts with third parties) demonstrating that the owner has made substantial and timely attempts to bring the building into full compliance with this appendix chapter.

The owner of the building shall sign the application, which shall be sworn before a notary public or conform to minimum state law requirements for unsworn declarations.

<u>D109.2 Approval.</u> No request for an extension of time shall be granted unless the *building official* finds that such an extension of time is reasonably necessary to perform the work and that granting such an extension of time will not result in an unreasonable risk to the safety of the occupants of the building or to others.

<u>D109.3 Denial.</u> If the *building official* denies any request for an extension of time under this section, the owner of the building may appeal such a decision to the General Appeals Board. If the General Appeals Board upholds the decision of the *building official* on the matter, the board's decisions may be appealed to city council, if notice of appeal, addressed to city council, is delivered to the office of the city secretary within 10 days of the date of the board's decision. Appeals shall be subject to city council Rule 12 (see Section 2-2 of the *City Code*).