



City of Phoenix

PLANNING & DEVELOPMENT DEPARTMENT

PHOENIX BUILDING CONSTRUCTION CODE

Amendment to 2018 International Mechanical Code (IMC)

Section 103, 104, 105, 106, 107, 108, 109, & 110

Submitted by: 2018 International Mechanical Code Committee

PART 2 — ADMINISTRATION AND ENFORCEMENT

SECTION 103 DEPARTMENT OF MECHANICAL INSPECTION — Reserved.

[A] 103.1 General.

~~The department of mechanical inspection is hereby created and the executive official in charge thereof shall be known as the code official.~~

[A] 103.2 Appointment.

~~The code official shall be appointed by the chief appointing authority of the jurisdiction.~~

[A] 103.3 Deputies.

~~In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the code official shall have the authority to appoint a deputy code official, other related technical officers, inspectors and other employees. Such employees shall have powers as delegated by the code official.~~

[A] 103.4 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 an act or by reason of an act or omission in the discharge of official duties.~~

[A] 103.4.1 Legal defense.

~~Any suit or criminal complaint instituted against any 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 the legal representatives of the jurisdiction until the final termination of the proceedings. The code official or any subordinate shall not be liable for costs in an action, suit or proceeding that is instituted in pursuance of the provisions of this code.~~

SECTION 104 DUTIES AND POWERS OF THE CODE OFFICIAL — Reserved.

[A] 104.1 General.

~~The code official is hereby authorized and directed to enforce the provisions of this code. The code official shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code. Such policies and procedures shall not have the effect of waiving requirements specifically provided for in this code.~~

[A] 104.2 Applications and permits.

The code official shall receive applications, review *construction documents* and issue permits for the installation and *alteration* of mechanical systems, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

[A] 104.3 Inspections.

The code official shall make all of the required inspections, or shall accept reports of inspection by *approved* agencies or individuals. Reports of such inspections shall be in writing and be certified by a responsible officer of such *approved* agency or by the responsible individual. The code official is authorized to engage such expert opinion as deemed necessary to report on unusual technical issues that arise, subject to the approval of the appointing authority.

[A] 104.4 Right of entry.

Where it is necessary to make an inspection to enforce the provisions of this code, or where the code official has reasonable cause to believe that there exists in a building or on any premises any conditions or violations of this code that make the building or premises unsafe, insanitary,¹ dangerous or hazardous, the code official shall have the authority to enter the building or premises at all reasonable times to inspect or to perform the duties imposed on the code official by this code. If such building or premises is occupied, the code official shall present credentials to the occupant and request entry. If such building or premises is unoccupied, the code official shall first make a reasonable effort to locate the owner, the owners authorized agent or other person having charge or control of the building or premises and request entry. If entry is refused, the code official has recourse to every remedy provided by law to secure entry.

Where the code official has first obtained a proper inspection warrant or other remedy provided by law to secure entry, the owner, owner's authorized agent or occupant or person having charge, care or control of the building or premises shall not fail or neglect, after proper request is made as herein provided, to promptly permit entry therein by the code official for the purpose of inspection and examination pursuant to this code.

[A] 104.5 Identification.

The code official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

[A] 104.6 Notices and orders.

The code official shall issue all necessary notices or orders to ensure compliance with this code.

[A] 104.7 Department records.

The code official shall keep official records of applications received, permits and certificates issued, fees collected, reports of inspections, and notices and orders issued. Such records shall be retained in the official records for the period required for retention of public records.

SECTION 105 APPROVAL — Reserved.

[A] 105.1 Modifications.

Where 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 agent, provided that the code official shall first find that special individual reason makes the strict letter of this code impractical and the modification is in compliance with the intent and purpose of this code and does not lessen health, life and fire safety requirements. The details of action granting modifications shall be recorded and entered in the files of the mechanical inspection department.

~~[A] 105.2 Alternative materials, design and methods of construction and equipment.~~

~~The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction shall be *approved* where the code official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety. Where the alternative material, design or method of construction is not *approved*, the code official shall respond in writing, stating the reasons why the alternative was not *approved*.~~

~~[A] 105.2.1 Research reports.~~

~~Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from *approved* sources.~~

~~[A] 105.3 Required testing.~~

~~Where there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternative materials or methods, the code official shall have the authority to require tests as evidence of compliance to be made at no expense to the jurisdiction.~~

~~[A] 105.3.1 Test methods.~~

~~Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the code official shall approve the testing procedures.~~

~~[A] 105.3.2 Testing agency.~~

~~Tests shall be performed by an *approved* agency.~~

~~[A] 105.3.3 Test reports.~~

~~Reports of tests shall be retained by the code official for the period required for retention of public records.~~

~~[A] 105.4 Approved materials and equipment.~~

~~Materials, *equipment* and devices *approved* by the code official shall be constructed and installed in accordance with such approval.~~

~~[A] 105.5 Material, equipment and appliance reuse.~~

~~Materials, *equipment*, appliances and devices shall not be reused unless such elements have been reconditioned, tested and placed in good and proper working condition and *approved*.~~

SECTION 106 PERMITS — Reserved.

~~[A] 106.1 Where required.~~

~~An owner, owner's authorized agent or contractor who desires to erect, install, enlarge, alter, repair, remove, convert or replace a mechanical system, the installation of which is regulated by this code, or to cause such work to be performed, shall first make application to the code official and obtain the required permit for the work.~~

~~Exception:~~ ~~Where *equipment and appliance* replacements or repairs must be performed in an emergency situation, the permit application shall be submitted within the next working business day of the department of mechanical inspection.~~

~~[A] 106.1.1 Annual permit.~~

~~Instead of an individual construction permit for each *alteration* to an already *approved* system or *equipment* or application installation, the code official is authorized to issue an annual permit upon application therefor to any person, firm or corporation regularly employing one or more qualified tradespersons in the building, structure or on the premises owned or operated by the applicant for the permit~~

~~[A] 106.1.2 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] 106.2 Permits not required.~~

~~Permits shall not be required for the following:~~

- ~~1. Portable heating appliances.~~
- ~~2. Portable ventilation appliances and *equipment*.~~
- ~~3. Portable cooling units.~~
- ~~4. Steam, hot water or chilled water piping within any heating or cooling *equipment* or appliances regulated by this code.~~
- ~~5. The replacement of any minor part that does not alter the approval of *equipment* or an *appliance* or make such *equipment* or appliance unsafe.~~
- ~~6. Portable evaporative coolers.~~
- ~~7. Self-contained refrigeration systems that contain 10 pounds (4.5 kg) or less of refrigerant, or that are actuated by motors of 1 horsepower (0.75 kW) or less.~~
- ~~8. Portable fuel cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.~~

~~Exemption from the permit requirements of this code shall not be deemed to grant authorization for work to be done in violation of the provisions of this code or other laws or ordinances of this jurisdiction.~~

~~[A] 106.3 Application for permit.~~

~~Each application for a permit, with the required fee, shall be filed with the code official on a form furnished for that purpose and shall contain a general description of the proposed work and its location. The application shall be signed by the owner or the owners authorized agent. The permit application shall indicate the proposed *occupancy* of all parts of the building and of that portion of the site or lot, if any, not covered by the building or structure and shall contain such other information required by the code official.~~

~~[A] 106.3.1 Construction documents.~~

~~*Construction documents*, engineering calculations, diagrams and other data shall be submitted in two or more sets with each application for a permit. The code official shall require *construction documents*, computations and specifications to be prepared and designed by a *registered design professional* where required by state law. Where special conditions exist, the code official is authorized to require additional *construction documents* to be prepared by a *registered design professional*. *Construction documents* shall be drawn to scale and shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that the work conforms to the provisions of this code. *Construction documents* for buildings more than two stories in height shall indicate where penetrations will be made for mechanical systems, and the materials and methods for maintaining required structural safety, fire resistance rating and fireblocking.~~

Exception: The code official shall have the authority to waive the submission of *construction documents*, calculations or other data if the nature of the work applied for is such that reviewing of *construction documents* is not necessary to determine compliance with this code.

[A] 106.3.2 Preliminary inspection.

Before a permit is issued, the code official is authorized to inspect and evaluate the systems, *equipment*, buildings, devices, premises and spaces or areas to be used.

[A] 106.3.3 Time limitation of application.

An application for a permit for any proposed work shall be deemed to have been 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 shall have the authority to grant one or more extensions of time for additional periods not exceeding 180 days each. The extension shall be requested in writing and justifiable cause demonstrated.

[A] 106.4 Permit issuance.

The application, *construction documents* and other data filed by an applicant for a permit shall be reviewed by the code official. If the code official finds that the proposed work conforms to the requirements of this code and all laws and ordinances applicable thereto, and that the fees specified in Section 106.5 have been paid, a permit shall be issued to the applicant.

[A] 106.4.1 Approved construction documents.

When the code official issues the permit where *construction documents* are required, the *construction documents* shall be endorsed in writing and stamped "APPROVED." Such *approved construction documents* shall not be changed, modified or altered without authorization from the code official. Work shall be done in accordance with the *approved construction documents*.

The code official shall have the authority to issue a permit for the construction of part of a mechanical system before *the construction documents* for the entire system have been submitted or *approved*, provided that adequate information and detailed statements have been filed complying with all pertinent requirements of this code. The holder of such permit shall proceed at his or her own risk without assurance that the permit for the entire mechanical system will be granted.

[A] 106.4.2 Validity.

The issuance of a permit or approval of *construction documents* 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 other ordinances of the jurisdiction. A permit presuming to give authority to violate or cancel the provisions of this code shall be invalid.

The issuance of a permit based on *construction documents* and other data shall not prevent the code official from thereafter requiring the correction of errors in said construction documents and other data or from preventing building operations from being carried on thereunder where in violation of this code or of other ordinances of this jurisdiction

[A] 106.4.3 Expiration.

Every permit issued by the code official under the provisions of this code shall expire by limitation and become null and void if the work authorized by such permit is not commenced within 180 days from the date of such permit, or if the work authorized by such permit is suspended or abandoned at any time after the work is commenced for a period of 180 days. Before such work recommences, a new permit shall be first obtained and the fee therefor shall be one half the amount required for a new permit for such work, provided that changes

have not been made and will not be made in the original construction documents for such work, and provided further that such suspension or abandonment has not exceeded one year.

[A] 106.4.4 Extensions.

A permittee holding an unexpired permit shall have the right to apply for an extension of the time within which the permittee will commence work under that permit where work is unable to be commenced within the time required by this section for good and satisfactory reasons. The code official shall extend the time for action by the permittee for a period not exceeding 180 days if there is reasonable cause. A permit shall not be extended more than once. The fee for an extension shall be one half the amount required for a new permit for such work.

[A] 106.4.5 Suspension or revocation of permit.

The code official shall have the authority 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.

[A] 106.4.6 Retention of construction documents.

One set of *approved construction documents* shall be retained by the code official for a period of not less than 180 days from date of completion of the permitted work, or as required by state or local laws. One set of *approved construction documents* shall be returned to the applicant, and said set shall be kept on the site of the building or job at all times during which the work authorized thereby is in progress.

[A] 106.4.7 Previous approvals.

This code shall not require changes in the *construction documents*, construction or designated *occupancy* of a structure for which a lawful permit has been heretofore issued or otherwise lawfully authorized, and the construction of which has been pursued in good faith within 180 days after the effective date of this code and has not been abandoned.

[A] 106.4.8 Posting of permit.

The permit or a copy shall be kept on the site of the work until the completion of the project.

[A] 106.5 Fees.

A permit shall not be issued until the fees prescribed in Section 106.52 have been paid, nor shall an amendment to a permit be released until the additional fee, if any, due to an increase of the mechanical system, has been paid.

[A] 106.5.1 Work commencing before permit issuance.

Any person who commences work on a mechanical system before obtaining the necessary permits shall be subject to 100 percent of the usual permit fee in addition to the required permit fees.

[A] 106.5.2 Fee schedule.

The fees for mechanical work shall be as indicated in the following schedule.

[JURISDICTION TO INSERT APPROPRIATE SCHEDULE]

[A] 106.5.3 Fee refunds.

The code official shall authorize the refunding of fees as follows:

1. The full amount of any fee paid hereunder that was erroneously paid or collected.

2. ~~Not more than [SPECIFY PERCENTAGE] percent of the permit fee paid where work has not been done under a permit issued in accordance with this code.~~
3. ~~Not more than [SPECIFY PERCENTAGE] percent of the plan review fee paid where an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan review effort has been expended.~~

~~The code official shall not authorize the refunding of any fee paid, except upon written application filed by the original permittee not later than 180 days after the date of fee payment.~~

SECTION 107 INSPECTIONS AND TESTING — Reserved.

[A] 107.1 General.

~~The code official is authorized to conduct such inspections as are deemed necessary to determine compliance with the provisions of this code. Construction or work for which a permit is required shall be subject to inspection by the code official, and such construction or work shall remain visible and able to be accessed for inspection purposes until *approved*. Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. Inspections presuming to give authority to violate or cancel the provisions of this code or of other ordinances of the jurisdiction shall not be valid.~~

[A] 107.2 Required inspections and testing.

~~The code official, upon notification from the permit holder or the permit holder's agent, shall make the following inspections and other such inspections as necessary, and shall either release that portion of the construction or shall notify the permit holder or the permit holder's agent of violations that must be corrected. The holder of the permit shall be responsible for the scheduling of such inspections:~~

1. ~~Underground inspection shall be made after trenches or ditches are excavated and bedded, piping installed, and before backfill is put in place. Where excavated soil contains rocks, broken concrete, frozen chunks and other rubble that would damage or break the piping or cause corrosive action, clean backfill shall be on the job site.~~
2. ~~Rough-in inspection shall be made after the roof, framing, fireblocking and bracing are in place and all ducting and other components to be concealed are complete, and prior to the installation of wall or ceiling membranes.~~
3. ~~Final inspection shall be made upon completion of the mechanical system.~~

~~**Exception:** Ground-source heat pump loop systems tested in accordance with Section 1210.10 shall be permitted to be backfilled prior to inspection.~~

~~The requirements of this section shall not be considered to prohibit the operation of any heating *equipment* or appliances installed to replace existing heating *equipment* or appliances serving an occupied portion of a structure provided that a request for inspection of such heating *equipment* or appliances has been filed with the department not more than 48 hours after such replacement work is completed, and before any portion of such *equipment* or appliances is concealed by any permanent portion of the structure.~~

[A] 107.2.1 Other inspections.

~~In addition to the inspections specified in Section 107.2, the code 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.~~

[A] 107.2.2 Inspection requests.

It shall be the duty of the holder of the permit or their duly authorized agent to notify the code official when work is ready for inspection. It shall be the duty of the permit holder to provide access to and means for inspections of such work that are required by this code.

[A] 107.2.3 Approval required.

Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the code official. The code official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this code. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the code official.

[A] 107.2.4 Approved inspection agencies.

The code official is authorized to accept reports of *approved* agencies, provided that such agencies satisfy the requirements as to qualifications and reliability.

[A] 107.2.5 Evaluation and follow-up inspection services.

Prior to the approval of a prefabricated construction assembly having concealed mechanical work and the issuance of a mechanical permit, the code official shall require the submittal of an evaluation report on each prefabricated construction assembly, indicating the complete details of the mechanical system, including a description of the system and its components, the basis on which the system is being evaluated, test results and similar information, and other data as necessary for the code official to determine conformance to this code.

[A] 107.2.5.1 Evaluation service.

The code official shall designate the evaluation service of an *approved* agency as the evaluation agency, and review such agency's evaluation report for adequacy and conformance to this code.

[A] 107.2.5.2 Follow-up inspection.

Except where ready access is provided to mechanical systems, *service equipment* and accessories for complete inspection at the site without disassembly or dismantling, the code official shall conduct the in-plant inspections as frequently as necessary to ensure conformance to the *approved* evaluation report or shall designate an independent, *approved* inspection agency to conduct such inspections. The inspection agency shall furnish the code official with the follow-up inspection manual and a report of inspections on request, and the mechanical system shall have an identifying label permanently affixed to the system indicating that factory inspections have been performed.

[A] 107.2.5.3 Test and inspection records.

Required test and inspection records shall be available to the code official at all times during the fabrication of the mechanical system and the erection of the building; or such records as the code official designates shall be filed.

[A] 107.4 Approval.

After the prescribed tests and inspections indicate that the work complies in all respects with this code, a notice of approval shall be issued by the code official.

[A] 107.4.1 Revocation.

The code official is authorized to, in writing, suspend or revoke a notice of approval issued under the provisions of this code wherever the notice is issued in error, on the basis of incorrect information supplied, or where it is determined that the building or structure, premise or portion thereof is in violation of any ordinance or regulation or any of the provisions of this code.

[A] 107.5 Temporary connection.

The code official shall have the authority to authorize the temporary connection of a mechanical system to the sources of energy for the purpose of testing mechanical systems or for use under a temporary certificate of occupancy.

[A] 107.6 Connection of service utilities.

A person shall not make connections from a utility, source of energy, fuel or power to any building or system that is regulated by this code for which a permit is required, until authorized by the code official.

SECTION 108 VIOLATIONS — Reserved.

[A] 108.1 Unlawful acts.

It shall be unlawful for a person, firm or corporation to erect, construct, alter, repair, remove, demolish or utilize a mechanical system, or cause same to be done, in conflict with or in violation of any of the provisions of this code.

[A] 108.2 Notice of violation.

The code official shall serve a notice of violation or order to the person responsible for the erection, installation, *alteration*, extension, repair, removal or demolition of mechanical work in violation of the provisions of this code, or in violation of a detail statement or the *approved* construction documents thereunder, or in violation of a permit or certificate issued under the provisions of this code. Such order shall direct the discontinuance of the illegal action or condition and the abatement of the violation.

[A] 108.3 Prosecution of violation.

If the notice of violation is not complied with promptly, the code official shall request the legal counsel of the jurisdiction to institute the appropriate proceeding at law or in equity to restrain, correct or abate such violation, or to require the removal or termination of the unlawful occupancy of the structure in violation of the provisions of this code or of the order or direction made pursuant thereto.

[A] 108.4 Violation penalties.

Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter or repair mechanical work in violation of the *approved* construction documents or directive of the code official, or of a permit or certificate issued under the provisions of this code, shall be guilty of a [SPECIFY OFFENSE], punishable by a fine of not more than [AMOUNT] dollars or by imprisonment not exceeding [NUMBER OF DAYS], or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

[A] 108.5 Stop work orders.

Upon notice from the code official that mechanical work is being performed contrary to the provisions of this code or in a dangerous or unsafe manner, such work shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, or to the owners authorized agent, or to the person doing the work. The notice shall state the conditions under which work is authorized to resume. Where an emergency exists, the code official shall not be required to give a written notice prior to stopping the work. Any person who shall continue any work on the system after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable for a fine of not less than [AMOUNT] dollars or more than [AMOUNT] dollars.

[A] 108.6 Abatement of violation.

The imposition of the penalties herein prescribed shall not preclude the legal officer of the jurisdiction from instituting appropriate action to prevent unlawful construction or to restrain, correct or abate a violation, or to prevent illegal occupancy of a building, structure or premises, or to stop an illegal act, conduct, business or utilization of the mechanical system on or about any premises.

[A] 108.7 Unsafe mechanical systems.

A mechanical system that is unsafe, constitutes a fire or health hazard, or is otherwise dangerous to human life, as regulated by this code, is hereby declared as an unsafe mechanical system. Use of a mechanical system regulated by this code constituting a hazard to health, safety or welfare by reason of inadequate maintenance, dilapidation, fire hazard, disaster, damage or abandonment is hereby declared an unsafe use. Such unsafe *equipment* and appliances are hereby declared to be a public nuisance and shall be abated by repair, rehabilitation, demolition or removal.

[A] 108.7.1 Authority to condemn mechanical systems.

Where the code official determines that any mechanical system, or portion thereof, regulated by this code has become hazardous to life, health, property, or has become insanitary, the code official shall order in writing that such system either be removed or restored to a safe condition. A time limit for compliance with such order shall be specified in the written notice. A person shall not use or maintain a defective mechanical system after receiving such notice.

Where such mechanical system is to be disconnected, written notice as prescribed in Section 108.2 shall be given. In cases of immediate danger to life or property, such disconnection shall be made immediately without such notice.

[A] 108.7.2 Authority to order disconnection of energy sources.

The code official shall have the authority to order disconnection of energy sources supplied to a building, structure or mechanical system regulated by this code, where it is determined that the mechanical system or any portion thereof has become hazardous or unsafe. Written notice of such order to disconnect service and the causes therefor shall be given within 24 hours to the owner, the owner's authorized agent and occupant of such building, structure or premises, provided, however, that in cases of immediate danger to life or property, such disconnection shall be made immediately without such notice. Where energy sources are provided by a public utility, the code official shall immediately notify the serving utility in writing of the issuance of such order to disconnect.

[A] 108.7.3 Connection after order to disconnect.

A person shall not make energy source connections to mechanical systems regulated by this code that have been disconnected or ordered to be disconnected by the code official, or the use of which has been ordered to be discontinued by the code official until the code official authorizes the reconnection and use of such mechanical systems.

Where a mechanical system is maintained in violation of this code, and in violation of a notice issued pursuant to the provisions of this section, the code official shall institute appropriate action to prevent, restrain, correct or abate the violation.

SECTION 109 MEANS OF APPEAL — Reserved.

[A] 109.1 Application for appeal.

A person shall have the right to appeal a decision of the code official to the board of appeals. 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 application shall be filed on a form obtained from the code official within 20 days after the notice was served.

~~[A] 109.1.1 Limitation of authority.~~

~~The board of appeals shall not have authority relative to interpretation of the administration of this code nor shall such board be empowered to waive requirements of this code.~~

~~[A] 109.2 Membership of board.~~

~~The board of appeals shall consist of five members appointed by the chief appointing authority as follows: one for 5 years; one for 4 years; one for 3 years; one for 2 years; and one for 1 year. Thereafter, each new member shall serve for 5 years or until a successor has been appointed.~~

~~[A] 109.2.1 Qualifications.~~

~~The board of appeals shall consist of five individuals, one from each of the following professions or disciplines:~~

- ~~1. Registered design professional who is a registered architect; or a builder or superintendent of building construction with not less than 10 years' experience, 5 of which shall have been in responsible charge of work~~
- ~~2. Registered design professional with structural engineering or architectural experience.~~
- ~~3. Registered design professional with mechanical and plumbing engineering experience; or a mechanical contractor with not less than 10 years' experience, 5 of which shall have been in responsible charge of work~~
- ~~4. Registered design professional with electrical engineering experience; or an electrical contractor with not less than 10 years' experience, 5 of which shall have been in responsible charge of work.~~
- ~~5. Registered design professional with fire protection engineering experience; or a fire protection contractor with not less than 10 years' experience, 5 of which shall have been in responsible charge of work.~~

~~[A] 109.2.2 Alternate members.~~

~~The chief appointing authority shall appoint two alternate members who shall be called by the board chairman to hear appeals during the absence or disqualification of a member. Alternate members shall possess the qualifications required for board membership and shall be appointed for 5 years, or until a successor has been appointed.~~

~~[A] 109.2.3 Chairman.~~

~~The board shall annually select one of its members to serve as chairman.~~

~~[A] 109.2.4 Disqualification of member.~~

~~A member shall not hear an appeal in which that member has a personal, professional or financial interest.~~

~~[A] 109.2.5 Secretary.~~

~~The chief administrative officer shall designate a qualified clerk to serve as secretary to the board. The secretary shall file a detailed record of all proceedings in the office of the chief administrative officer.~~

~~[A] 109.2.6 Compensation of members.~~

~~Compensation of members shall be determined by law.~~

~~[A] 109.3 Notice of meeting.~~

The board shall meet upon notice from the chairman, within 10 days of the filing of an appeal, or at stated periodic meetings.

[A] 109.4 Open hearing.

Hearings before the board shall be open to the public. The appellant, the appellant's representative, the code official and any person whose interests are affected shall be given an opportunity to be heard.

[A] 109.4.1 Procedure.

The board shall adopt and make available to the public through the secretary procedures under which a hearing will be conducted. The procedures shall not require compliance with strict rules of evidence, but shall mandate that only relevant information be received.

[A] 109.5 Postponed hearing.

When five members are not present to hear an appeal, either the appellant or the appellant's representative shall have the right to request a postponement of the hearing.

[A] 109.6 Board decision.

The board shall modify or reverse the decision of the code official by a concurring vote of three members.

[A] 109.6.1 Resolution.

The decision of the board shall be by resolution. Certified copies shall be furnished to the appellant and to the code official.

[A] 109.6.2 Administration.

The code official shall take immediate action in accordance with the decision of the board.

[A] 109.7 Court review.

Any person, whether or not a previous party of the appeal, shall have the right to apply to the appropriate court for a writ of certiorari to correct errors of law. Application for review shall be made in the manner and time required by law following the filing of the decision in the office of the chief administrative officer.

SECTION 110 TEMPORARY EQUIPMENT, SYSTEMS AND USES — Reserved.

[A] 110.1 General.

The code official is authorized to issue a permit for temporary *equipment*, systems and uses. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The code official is authorized to grant extensions for demonstrated cause.

[A] 110.2 Conformance.

Temporary *equipment*, systems and uses shall conform to the structural strength, fire safety, means of egress, accessibility; light, ventilation and sanitary requirements of this code as necessary to ensure the public health, safety and general welfare.

[A] 110.3 Temporary utilities.

The code official is authorized to give permission to temporarily supply utilities before an installation has been fully completed and the final certificate of completion has been issued. The pan covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in the code.

[A] 110.4 Termination of approval.

~~The code official is authorized to terminate such permit for temporary *equipment*, systems or uses and to order the temporary *equipment*, systems or uses to be discontinued.~~

Reasons:

The deleted provisions are contained in the Phoenix Building Construction Code, 2018 IBC - Administrative Provisions. These provisions may conflict with the adopted administrative code and retaining them is redundant.

Cost Impact: No cost impact.

Approved in previous 2012 Code Adoption process: **YES** **NO**

ACTION TAKEN:

2018 Code Committee Date: November 8, 2017
 Approved as submitted Modified and approved Denied No action taken

Development Advisory Board (DAB) Technical Subcommittee Date: January 18, 2018
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Development Advisory Board (DAB) Date: February 15, 2018
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Downtown, Aviation, Economy, and Innovation Subcommittee Date: May 2, 2018
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City of Phoenix

PLANNING & DEVELOPMENT DEPARTMENT

PHOENIX BUILDING CONSTRUCTION CODE

Amendment to 2018 International Mechanical Code (IMC) Section 307.2.2

Submitted by: 2018 International Mechanical Code Committee

307.2.2 Drain pipe materials and sizes.

Nonmetallic piping shall not be installed in exposed locations. Components of the condensate disposal system shall be cast iron, galvanized steel, copper, copper alloy, cross-linked polyethylene, polyethylene, ABS, CPVC, PVC, or polypropylene pipe or rigid tubing. Components shall be selected for the pressure and temperature rating of the installation. Joints and connections shall be made in accordance with the applicable provisions of Chapter 7 of the ~~International~~ Phoenix Building Construction Code relative to the material type. Condensate waste and drain line size shall be not less than 3/4-inch internal diameter and shall not decrease in size from the drain pan connection to the place of condensate disposal. Where the drain pipes from more than one unit are manifolded together for condensate drainage, the pipe or tubing shall be sized in accordance with Table 307.2.2.

Reasons:

Due to our extreme weather conditions, it is recommended that all nonmetallic condensate piping be prohibited from areas of direct sunlight, such as roofs. Nonmetallic piping subject to extreme heat will soften and sag between supports. This causes low spots in the drainage system and prevents gravity flow to the point of disposal. In addition, exposure to UV rays from the sun causes the pipe to become brittle and subject to fracture when placed under stress or strain. Both of these conditions lead to condensate disposal failure with the likely result of water ponding on the roof.

Cost Impact:

Increase in cost of materials. This item is in the current 2012 code.

Approved in previous 2012 Code Adoption process: **YES** **NO**

ACTION TAKEN:

2018 Code Committee Date: November 21, 2017
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City of Phoenix

PLANNING & DEVELOPMENT DEPARTMENT

PHOENIX BUILDING CONSTRUCTION CODE

Amendment to 2018 International Mechanical Code (IMC) Section 309.1

Submitted by: 2018 International Mechanical Code Committee

[BG] 309.1 ~~Space heating systems.~~ Heating and cooling systems.

~~Habitable spaces~~ Interior spaces intended for human occupancy shall be provided with active or passive space-heating and space-cooling systems capable of maintaining an indoor temperatures between 70 of not less than 68⁰ F (20¹⁰C) and 90⁰ F (32⁰C) at a point 3 feet above the floor. on the design heating day. The installation of portable space heaters or coolers shall not be used to achieve compliance with this section.

Exceptions:

1. Space heating and cooling systems are not required for interior spaces where the primary purpose is not associated with human comfort.
2. Group F, H, S, and U occupancies.

Reasons:

The 2018 IMC and IBC text covers heating concerns only and does not distinguish completely between residential or commercial buildings. The intent of this amendment is to recognize that the cooling season in Phoenix is the dominant design condition. The Phoenix City Council included provisions for space cooling in all residential dwellings during the update of the Neighborhood Preservation Ordinance approved on June 16, 1998. This proposed amendment re-establishes the City Council mandate to provide heating and cooling in residential dwellings and allows for designers and building owners to determine if it is required in commercial building based on the definition of habitable spaces.

Cost Impact: No cost impact.
This has been in effect since 1998.

Approved in previous 2012 Code Adoption process: YES NO

ACTION TAKEN:

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City of Phoenix

PLANNING & DEVELOPMENT DEPARTMENT

PHOENIX BUILDING CONSTRUCTION CODE

Amendment to 2018 International Mechanical Code (IMC) Section 402.1

Submitted by: 2018 International Mechanical Code Committee

402.1 Natural ventilation.

Natural ventilation of an occupied space in residential buildings shall be through windows, doors, louvers or other openings to the outdoors. The operating mechanism for such openings shall be provided with ready access so that the openings are readily controllable by the building occupants. Natural ventilation of commercial buildings shall be through permanently fixed openings to the outdoors.

Reasons:

Openings such as doors and windows in a commercial building cannot be reliably depended upon to remain open whenever occupants are present. Natural ventilation depends on operable openings such as doors, windows, louvers, or other openings to the outdoors. Whenever a room or space has occupants and the qualifying window or door is open to the outdoors, then the ventilation requirement of IMC 401.3 is met. If the window or door is closed, then the ventilation requirement is not met. A typical commercial building with space cooling and heating would rarely leave windows or doors in the open position.

Cost Impact: Minimal cost impact.

Approved in previous 2012 Code Adoption process: **YES** **NO**

ACTION TAKEN:

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City of Phoenix

PLANNING & DEVELOPMENT DEPARTMENT

PHOENIX BUILDING CONSTRUCTION CODE

Amendment to 2018 International Mechanical Code (IMC) Section 403.3.1.5

Submitted by: 2018 International Mechanical Code Committee

403.3.1.5 Balancing.

The *ventilation* air distribution system shall be provided with means to adjust the system to achieve not less than the minimum ventilation airflow rate as required by sections 403.3 and 403.3.1.2. Ventilation systems shall be balanced using a nationally accepted air balancing test by an approved method. Such balancing shall verify that the ventilation system is capable of supplying and exhausting the airflow rates required by Sections 403.3 and 403.3.1.2. A final report shall be provided to the engineer of record and the mechanical inspector.

Reasons:

This is a current amendment to the 2012 IMC. The proposed amendment will require an approved test and balance agency / individual to perform balancing of ventilation air systems in commercial buildings. The original code language does not define what type of “approved method” is acceptable. The proposal will further require that such agency / individual follow national standards for air balancing methods.

Cost Impact: Minimal cost impact.
Minimal impact of nationally accepted air balancing test.

Approved in previous 2012 Code Adoption process: **YES** **NO**

ACTION TAKEN:

2018 Code Committee Date: January 8, 2018
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City of Phoenix

PLANNING & DEVELOPMENT DEPARTMENT

PHOENIX BUILDING CONSTRUCTION CODE

Amendment to 2018 International Mechanical Code (IMC) Section 407.1.1

Submitted by: 2018 International Mechanical Code Committee

407.1 General.

Mechanical ventilation for ambulatory care facilities and Group 1-2 occupancies shall be designed and installed in accordance with this code and ASHRAE 170.

407.1.1

Mechanical systems designed and installed in accordance with IMC 407.1 and ASHRAE 170-2017 shall be verified by a qualified third party Special Inspector. The Special Inspector/testing agency shall be an independent third party individual or firm and shall not be the installing contractor. A report shall be generated by the third party individual or firm showing compliance. Special inspections shall be as specified in Chapter 17 of the International Building Code as amended.

Reasons:

The ventilation systems for Group 1-2 and ambulatory facilities face the possibility of communicating and perpetuating airborne diseases. Special inspections are required to ensure that life safety systems and public health standards are met. It is imperative that the ventilation systems required by IMC 407.1 are designed to control the spread of disease and operate as designed. This can only be accomplished by verification through proper testing. The Registered Design Professional in Responsible Charge shall follow the guidelines set forth in the 2018 IBC as specified in Chapter 17.

Cost Impact: No cost impact.

Currently Arizona Department of Health Services (ADHS) requires that the ventilation systems are balanced and tested.

Approved in previous 2012 Code Adoption process: YES NO

ACTION TAKEN:

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City of Phoenix

PLANNING & DEVELOPMENT DEPARTMENT

PHOENIX BUILDING CONSTRUCTION CODE

Amendment to 2018 International Mechanical Code (IMC) Section 408

Submitted by: 2018 International Mechanical Code Committee

408 MARIJUANA RELATED OCCUPANCIES

408.1 General.

Any building used to cultivate, produce, infuse or dispense marijuana shall be designed such that there shall be no emission of dust, fumes, vapors, or odors into the environment from the premise. A ventilation system shall be designed to prevent the distribution of odors to other occupied parts of the building or adjacent properties. Design of the odor control system shall be based on accepted engineering practices. All equipment and filter media shall be listed and labeled for the application. Exhaust systems used in odor control systems shall meet the requirements of Section 501.

408.1.1 Exhaust outlets.

The termination point for exhaust outlets shall be in accordance with Section 501.3. Exhaust from cultivation and production facilities shall be in accordance with Section 501.3.1(2) and for dispensaries in accordance with Section 501.3.1(3).

Reasons:

This is a current amendment to the 2012 IMC. This new section provides design guidance for required odor control systems, per City of Phoenix Zoning Ordinance section 623 D.122.

Cost Impact:

Moderate cost impact due to additional equipment necessary to comply with air quality requirements mandated by the Authority Having Jurisdiction (AHJ).

Approved in previous 2012 Code Adoption process: **YES** **NO**

ACTION TAKEN:

2018 Code Committee Date: November 16, 2017
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PHOENIX BUILDING CONSTRUCTION CODE

**Amendment to 2018 International Mechanical Code (IMC)
Section 502.14**

Submitted by: 2018 International Mechanical Code Committee

502.14 Motor vehicle operation.

In areas where motor vehicles operate, mechanical ventilation shall be provided in accordance with Section 403. Additionally, areas in which stationary motor vehicles are operated shall be provided with a source capture system that connects directly to the motor vehicle exhaust systems. Makeup air for the required exhaust systems in areas where motor vehicles operate shall be provided through permanent unobstructed openings to the outdoors, such as louvers and grills. Mechanical equipment and louvers used for makeup air purposes shall be electrically interlocked with the exhaust system. Such system shall be engineered by a registered design professional or shall be factory-built equipment designed and sized for the purpose.

Exceptions:

1. This section shall not apply where the motor vehicles being operated or repaired are electrically powered.
2. This section shall not apply to one- and two-family dwellings.
3. This section shall not apply to motor vehicle service areas where engines are operated inside the building only for the duration necessary to move the motor vehicles in and out of the building.

Reasons:

Motor vehicle operation in a building depletes oxygen and causes a build-up of carbon monoxide and other products of combustion which could be fatal to occupants. It is critical to the health of occupants to remove these emissions from the occupied space. From IMC section 403, an exhaust rate of 0.75 cfm/ft² is specified for both repair garages and enclosed parking garages. Repair garages that have stationary vehicle operation, such as engine tune-up services, radiator or transmission flushing, etc. require dedicated exhaust systems. This proposal adds specific requirements to provide permanent building openings for makeup air or use mechanical makeup air units. This eliminates the use of open doors, which cannot be reliable. It also requires any mechanical equipment or mechanical louvers used for makeup air to be electrically interlocked with the dedicated exhaust system.

Cost Impact: Minimal cost impact.

Minimal cost increase to install openings. This requirement is also an amendment carried forward from the 2012 IMC.

Approved in previous 2012 Code Adoption process:

YES

NO

ACTION TAKEN:

2018 Code Committee

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No action taken

Development Advisory Board (DAB) Technical Subcommittee

Date: February 1, 2018

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Development Advisory Board (DAB)

Date: February 15, 2018

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No action taken

Downtown, Aviation, Economy, and Innovation Subcommittee

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No action taken

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PHOENIX BUILDING CONSTRUCTION CODE

**Amendment to 2018 International Mechanical Code (IMC)
Section 502.21**

Submitted by: 2018 International Mechanical Code Committee

502.21 Storage and use of liquid carbon dioxide (CO₂) systems.

Indoor or outdoor areas that contain liquid carbon dioxide (CO₂) stored in ASME pressure vessels in new and existing facilities shall be provided with mechanical exhaust ventilation in accordance with this section.

Exception: Outdoor storage areas in non-enclosed spaces designed to prevent the collection of vapors when approved by the *Fire Marshal*.

502.21.1 System requirements.

Exhaust ventilation systems for liquid carbon dioxide CO₂ tanks shall comply with all of the following:

1. The installation shall be in accordance with this code and the *Phoenix Fire Code*.
2. Mechanical ventilation shall be provided at a rate of not less than 1 cfm per square foot [0.00508 m³/(s • m²)] of floor area over the storage area.
3. The system shall operate continuously unless alternate designs are approved by the *Fire Marshal*.
4. A manual start control shall be provided outside of the room in a position adjacent to the access door to the room or in another approved location. The switch shall be a break-glass or other approved type and shall be labeled: VENTILATION SYSTEM EMERGENCY ON-ONLY.
5. Exhaust ventilation shall be designed to consider the density of the potential vapors released. For liquid CO₂ systems, exhaust shall be taken from a point within 12 inches (305 mm) of the floor.
6. Makeup air shall be provided. The location of both the exhaust and makeup air openings shall be designed to provide air movement across all portions of the floor or room to prevent the accumulation of vapors.
7. Exhaust air shall not be recirculated to occupied areas. Exhaust termination shall be located where it will not allow for a dangerous accumulation of vapors and in accordance with Section 501.3.1 (2).
8. Sensors, controls, alarms, piping and all accessory components shall be as prescribed by the *Phoenix Fire Department*.

Reasons:

This amendment determines the requirement for a mechanical ventilation system for liquid carbon dioxide (CO₂) bulk storage systems regardless of quantity. Businesses that provide carbonated drinks have been increasingly switching from dry to liquid CO₂ storage systems. Liquid CO₂ storage systems have been deemed potentially hazardous to human health by the Phoenix Fire Department. Separate Fire Department permits are also required for CO₂ systems. This requirement is also an amendment carried forward from the 2012 IMC.

Cost Impact:

Additional costs are due to the requirement for installation of dedicated mechanical exhaust system in the area of liquid CO₂ tanks.

Approved in previous 2012 Code Adoption process: YES NO

ACTION TAKEN:

2018 Code Committee Date: November 16, 2017

Approved as submitted Modified and approved Denied No action taken

Development Advisory Board (DAB) Technical Subcommittee Date: February 1, 2018

Approved as submitted Modified and approved Denied No action taken

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PHOENIX BUILDING CONSTRUCTION CODE

Amendment to 2018 International Mechanical Code (IMC)

Section 606.2.1

Submitted by: 2018 International Mechanical Code Committee

606.2 Where required.

Smoke detectors shall be installed where indicated in Sections 606.2.1 through 606.2.3.

Exception: Smoke detectors shall not be required where air distribution systems are incapable of spreading smoke beyond the enclosing walls, floors and ceilings of the room or space in which the smoke is generated.

606.2.1 ~~Return air systems.~~ Air distribution systems.

Smoke detectors shall be installed in ~~return air systems with~~ air distribution systems downstream of the filters and ahead of any branch connections in systems having a design capacity greater than 2,000 cfm (0.9 m³/s) ~~in the return air duct or plenum upstream of any filters, exhaust air connections, outdoor air connections, or decontamination equipment and appliances.~~

Exception: Smoke detectors are not required ~~in the return air system~~ where all portions of the building served by the air distribution system are protected by area smoke detectors connected to a fire alarm system in accordance with the International Fire Code. The area smoke detection system shall comply with Section 606.4.

Reasons:

Committee recommends that this section be revised to correlate with NFPA 90A Installation of Air-Conditioning and Ventilating Systems. The 2018 IMC references NFPA 72 National Fire Alarm Code, which in turn references NFPA 90A for installation of smoke detectors. These NFPA Standards are generally recognized as the national standards for smoke detector installation. A large amount of air distribution systems installed in Phoenix utilize a filtered grill for return air, typically installed in a ceiling or wall. In order to place a duct detector in front of this filter without having it attached to the grill, an additional length of plenum or duct is required. This leads to added construction costs and space restraints. The duct smoke detector may also be subjected to a higher frequency of false alarms from contaminants in the room. The committee reasons that any appreciable amount of smoke entering the return air system will pass through the filtered grill and reach the probe for the smoke detector. This proposed amendment will help to keep down the design costs while still providing an equivalent level of life safety based on the national standard. This amendment is carried forward from the 2012 IMC.

Cost Impact:

Saves cost of additional duct work.

Approved in previous 2012 Code Adoption process:		<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
ACTION TAKEN:			
2018 Code Committee		Date: November 21, 2017	
<input checked="" type="checkbox"/> Approved as submitted	<input type="checkbox"/> Modified and approved	<input type="checkbox"/> Denied	<input type="checkbox"/> No action taken
Development Advisory Board (DAB) Technical Subcommittee		Date: February 1, 2018	
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Development Advisory Board (DAB)		Date: February 15, 2018	
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City of Phoenix

PLANNING & DEVELOPMENT DEPARTMENT

PHOENIX BUILDING CONSTRUCTION CODE

Amendment to 2018 International Mechanical Code (IMC) Section 606.5

Submitted by: 2018 International Mechanical Code Committee

606.5 Testing.

Smoke detectors shall be tested by an approved testing agency or a qualified third party Special Inspector. The Special Inspector/ testing agency shall be an independent third party individual or firm and shall not be the installing contractor. Special inspections shall be as specified in Chapter 17 of the International Building Code as amended.

Reasons:

Smoke detectors can save lives when they operate correctly. The Mechanical code requires that these devices be installed at specific locations in the building air distribution systems. Testing of the operation of each smoke detector is required to be completed by a special inspector that is independent of the installer. Such special inspector must also be qualified to complete the work. Special Inspections is covered in the International Building Code and has been extended in the City of Phoenix to include several life safety items related to Mechanical design. Due to the importance of these life safety devices, it is recommended by the committee that a Special Inspector submit a final report certifying that all devices operate as designed and the Registered Design Professional in Responsible Charge signs the certificate. To maintain consistency with the Special Inspections program, the testing agency and the registrant shall follow the guidelines set forth in the 2012 IBC, as specified in Chapter 17.

Cost Impact:

Increase costs associated with hiring a Special Inspector. However, this amendment is carried forward from the 2006 IMC and has been in place for the past six years.

Approved in previous 2012 Code Adoption process: **YES** **NO**

ACTION TAKEN:

2018 Code Committee Date: November 21, 2017
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City of Phoenix

PLANNING & DEVELOPMENT DEPARTMENT

PHOENIX BUILDING CONSTRUCTION CODE

Amendment to 2018 International Mechanical Code (IMC) Section 607.2

Submitted by: 2018 International Mechanical Code Committee

[BF] 607.2 Installation.

Fire dampers, smoke dampers, combination fire/smoke dampers and ceiling radiation dampers located within air distribution and smoke control systems shall be installed in accordance with the requirements of this section, and the manufacturer's instructions and listing. Dampers shall be tested by an approved testing agency or a qualified third party special inspector. The special Inspector/testing agency shall be an independent third party individual or firm and shall not be the installing contractor. Special inspections shall be as specified in Chapter 17 of the International Building Code as amended.

Reasons:

Fire and smoke dampers can save lives when they operate correctly. The Mechanical code requires that these devices be installed at specific locations to prevent fire and smoke from spreading throughout a building. The IMC requires all dampers to be listed and tested at the factory. This proposal will verify that the dampers operate correctly after they are installed in the building. This amendment requires that testing of dampers shall be performed by a qualified third party testing agency and all results shall be verified by the professional design engineer. Special inspection requirements are listed in the 2012 IBC and a reference is provided in this proposal.

Cost Impact:

Increase costs associated with hiring a Special Inspector. However, this amendment is carried forward from the 2012 IMC and has been in place for the past six years.

Approved in previous 2012 Code Adoption process: **YES** **NO**

ACTION TAKEN:

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PHOENIX BUILDING CONSTRUCTION CODE

**Amendment to 2018 International Mechanical Code (IMC)
Section 928.1**

Submitted by: 2018 International Mechanical Code Committee

SECTION 928 EVAPORATIVE COOLING EQUIPMENT

928.1 General.

Evaporative cooling equipment shall:

1. Be installed in accordance with the manufacturer's instructions.
2. Be installed on level platforms in accordance with Section 304.10. An evaporative cooler supported by the building structure shall be installed on a substantial level base and shall be secured directly or indirectly to the building structure by suitable means to prevent displacement of the cooler. Modifications made to the supporting framework of buildings as a result of the installation shall be made in accordance with the requirements of the *International Building Code* as amended.
3. Have openings in exterior walls or roofs flashed in accordance with the *International Building Code* as amended.
4. Be provided with potable water backflow protection in accordance with ~~Section 608~~ of the *International Phoenix Building Construction Code*.
5. Have air intake opening locations in accordance with Section 401.4.
6. A permanent relief opening or other engineered design sufficient to assure positive airflow shall balance intake air.
7. Outside air shall be provided as specified in Section 403.2.
8. Air ducts and dampers, which are a portion of an evaporative cooling system, shall comply with Chapter 6.
9. Overflow drains shall be provided that discharge to an approved disposal location and comply with the Phoenix Building Construction Code.

Reasons:

This amendment clarifies installation requirements for evaporative coolers.

Cost Impact: No cost impact.

These requirements are carried forward from the 2012 IMC.

Approved in previous 2012 Code Adoption process: **YES** **NO**

ACTION TAKEN:

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Development Advisory Board (DAB)	Date: February 15, 2018
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PHOENIX BUILDING CONSTRUCTION CODE

**Amendment to 2018 International Mechanical Code (IMC)
Section 1105.10**

Submitted by: 2018 International Mechanical Code Committee

1105.10 Dimensions.

Refrigeration machinery rooms shall be of such dimensions that all system parts are readily accessible with adequate space for service, maintenance, and operations. A minimum unobstructed walking space at least three (3) feet (914 mm) in width and six (6) feet eight (8) inches (2032 mm) in height or approved manufacturer’s installation or required clearances shall be maintained throughout, allowing free access to at least two sides of all moving machinery and approaching each stop valve. Access to refrigeration machinery rooms shall be restricted to authorized personnel and posted with permanent signage.

Reasons:

This addition to this section is needed to ensure adequate safe working space around the equipment in a refrigeration machinery room. Previously incorporated into the 2012 IMC.

Cost Impact: Minimal cost impact.

Approved in previous 2012 Code Adoption process: **YES** **NO**

ACTION TAKEN:

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<input checked="" type="checkbox"/> Approved as submitted <input type="checkbox"/> Modified and approved <input type="checkbox"/> Denied	<input type="checkbox"/> No action taken
Development Advisory Board (DAB) Technical Subcommittee	Date: February 1, 2018
<input checked="" type="checkbox"/> Approved as submitted <input type="checkbox"/> Modified and approved <input type="checkbox"/> Denied	<input type="checkbox"/> No action taken
Development Advisory Board (DAB)	Date: February 15, 2018
<input checked="" type="checkbox"/> Approved as submitted <input type="checkbox"/> Modified and approved <input type="checkbox"/> Denied	<input type="checkbox"/> No action taken
Downtown, Aviation, Economy, and Innovation Subcommittee	Date: May 2, 2018
<input checked="" type="checkbox"/> Approved as submitted <input type="checkbox"/> Modified and approved <input type="checkbox"/> Denied	<input type="checkbox"/> No action taken
City Council Action	Date: June 6, 2018
<input checked="" type="checkbox"/> Approved as submitted <input type="checkbox"/> Modified and approved <input type="checkbox"/> Denied	<input type="checkbox"/> No action taken

Adopted by City of Phoenix Ordinance G-6463 effective July 6, 2018



PHOENIX BUILDING CONSTRUCTION CODE

Amendment to 2018 International Mechanical Code (IMC)

Section 930.1

Submitted by: 2018 International Mechanical Code Committee

SECTION 930 WOOD STOVE/FIREPLACE INSTALLATION

DEFINITIONS. For purposes of this section, the following words and terms shall have the meaning ascribed thereto:

FIREPLACE: A built-in-place masonry hearth and fire chamber or a factory-built appliance, designed to burn solid fuel or to accommodate gas or electric log insert or similar device, and which is intended for occasional recreational or aesthetic use, not for cooking, heating, or industrial processes.

SOLID FUEL: Includes, but is not limited to, wood, coal, or other non-gaseous or non-liquid fuels, including those fuels defined by the Maricopa County Air Pollution Control Officer as "inappropriate fuel" to burn in residential wood burning devices.

WOODSTOVE: A solid-fuel burning heating appliance including a pellet stove, which is either freestanding or designed to be inserted into a fireplace.

930.1 General.

In accordance with the Phoenix City Council adopted Ordinance G-4062, on or after December 31, 1998, no person, firm or corporation shall construct or install a fireplace or a wood stove, and the Building Official shall not approve or issue a permit to construct or install a fireplace or a wood stove, unless the fireplace or wood stove complies with one of the following:

1. A fireplace which has a permanently installed gas or electric log insert;
2. A fireplace, wood stove or other solid fuel burning appliance which has been certified by the United States Environmental Protection Agency as conforming to 40 Code of Federal Regulations part 60, subpart AAA;
3. A fireplace, woodstove or other solid fuel burning appliance that has been tested and listed by a nationally recognized testing agency to meet performance standards equivalent to those adopted by 40 Code of Federal Regulations part 60, subpart AAA;
4. A fireplace, wood stove or other solid fuel burning appliance which has been determined by the Maricopa County Air Pollution Control Officer to meet performance standards equivalent to those adopted by 40 Code of Federal Regulations part 60, subpart AAA, as in effect on July 1, 1990.
5. A fireplace which has a permanently installed wood stove insert which complies with subparagraph 2, 3, or 4 above.

Exceptions: The following installations are not regulated and are not prohibited by this section: Furnaces, boilers, incinerators, kilns, and other similar space heating or industrial process equipment. Cook stoves, barbecue grills, and similar appliances designed primarily for cooking. Fire pits, barbecue grills, and other outdoor fireplaces.

Fireplace or wood stove alterations prohibited.

Fireplaces constructed or installed on or after December 31, 1998, that contain a gas or electric log insert or a woodstove insert, shall not be altered to directly burn wood or any other solid fuel. On or after December 31, 1998, no person, firm, or corporation shall alter a fireplace, woodstove, or other solid-fuel burning appliance in any manner that would void its certification or operational compliance with the provisions of this section.

Fireplaces constructed or installed on or after December 31, 1998, shall not be altered without first obtaining a permit from the City to ensure compliance with this section.

Reasons:

Recommendation to include code language based on City Ordinance G4062 and Maricopa County wood burning restriction ordinance. This amendment is carried over from the 2012 IMC and is also found in the 2012 IRC as Section R325.

Cost Impact: No cost impact.

Approved in previous 2012 Code Adoption process: **YES** **NO**

ACTION TAKEN:

2018 Code Committee	Date: November 21, 2017
<input checked="" type="checkbox"/> Approved as submitted <input type="checkbox"/> Modified and approved <input type="checkbox"/> Denied	<input type="checkbox"/> No action taken
Development Advisory Board (DAB) Technical Subcommittee	Date: February 1, 2018
<input checked="" type="checkbox"/> Approved as submitted <input type="checkbox"/> Modified and approved <input type="checkbox"/> Denied	<input type="checkbox"/> No action taken
Development Advisory Board (DAB)	Date: February 15, 2018
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Adopted by City of Phoenix Ordinance G-6463 effective July 6, 2018