

ORDINANCE NO. 5055

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MESA, MARICOPA COUNTY, ARIZONA, AMENDING TITLE 4 BUILDING REGULATIONS OF THE MESA CITY CODE TO INCORPORATE ENERGY EFFICIENCY PROVISIONS OF THE ENERGY CODE IN CHAPTER 1 MESA ADMINISTRATIVE CODE, CHAPTER 2 MESA BUILDING CODE, CHAPTER 3 MESA RESIDENTIAL CODE, CHAPTER 5 MESA PLUMBING CODE, CHAPTER 6 MESA MECHANICAL CODE, CHAPTER 7 MESA FUEL GAS CODE AND ADDING CHAPTER 9 MESA ENERGY CODE AND PROVIDING PENALTIES AS ESTABLISHED IN SECTION 4-1-9.

Text written in **BOLD ALL CAPS** indicates new language.  
~~Strikethrough~~ fonts indicate deletions.

BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF MESA, MARICOPA COUNTY, ARIZONA, AS FOLLOWS:

Section 1: That Section 4-1-1 (C) of the Mesa City Code, entitled Technical Codes, is hereby amended by adding new Subsection 9, which shall read as follows:

- 9. ENERGY CODE. THE PROVISIONS OF THE MESA ENERGY CODE SHALL APPLY TO THE ENERGY EFFICIENCY OF BUILDING THERMAL ENVELOPES AND INSTALLATION OF ENERGY EFFICIENT MECHANICAL, LIGHTING AND POWER SYSTEMS. REFER TO MESA ENERGY CODE, CHAPTER 4-9 FOR THE REQUIREMENTS.**

Section 2: That Section 4-1-2 of the Mesa City Code, entitled Applicability, is hereby amended by amending Subsections A, F, H, I and L, adding new Subsections M and N, re-lettering subsequent Subsections, adding Subsection P and re-lettering subsequent Subsection as follows:

- (A) Effective Date. This Chapter and the technical codes shall apply to, and shall govern, permit applications received and accepted by the Building Safety Director or after March 3, 2008. Projects with applications submitted prior to March 3, 2008 shall be required to comply with all Mesa Building Codes in effect on March 2, 2008, except the owner, at its discretion, may request such project be subject to the requirements of this Chapter and the technical codes.

EXCEPTION: This paragraph shall not affect the Building Safety Director's ability to take action in conformity with the provisions of Subsections 4-1-4(O), 4-1-6(B), or 4-1-6(C) of this chapter, as they relate to account delinquencies owed to the City and to 4-1-7, regardless of the permit application date.

**EXCEPTION: THE MESA ENERGY CODE SHALL APPLY TO, AND SHALL GOVERN PERMIT APPLICATIONS RECEIVED AND ACCEPTED BY THE DEVELOPMENT AND SUSTAINABILITY DEPARTMENT ON OR AFTER JANUARY 1, 2012.**

- (F) International Codes References. Within the technical codes and the referenced codes and standards

therein, specific references to the following International Family of Codes shall be deemed and interpreted to mean the specific City of Mesa codes as listed herein:

1. International Building Code = Mesa Building Code.
2. International Residential Code for One- (1-) and Two- (2-) Family Dwellings = Mesa Residential Code.
3. International Electrical Code = Mesa Electrical Code.
4. International Plumbing Code = Mesa Plumbing Code.
5. International Mechanical Code = Mesa Mechanical Code.
6. International Fuel Gas Code = Mesa Fuel Gas Code.
7. International Fire Code = Mesa Fire Code.
8. International Existing Building Code = Mesa Existing Building Code.
9. **INTERNATIONAL ENERGY CONSERVATION CODE = MESA ENERGY CODE**

(H) Additions, Alterations, and Repairs. Additions, alterations, or repairs may be made to a building or its building service equipment without requiring the existing building or its building service equipment to comply with all the requirements of this Chapter and the technical codes, provided the addition, alteration, or repair conforms to the requirements for a new building or building service equipment. Refer to Chapter 4-8 for additional options and requirements governing additions, alterations, and repairs.

**EXCEPTION: PATIO COVERS, AS DEFINED IN THE MESA RESIDENTIAL CODE, ARE EXEMPTED FROM THE MESA ENERGY CODE.**

**EXCEPTION: THE FOLLOWING NEED NOT COMPLY WITH THE MESA ENERGY CODE PROVIDED THE ENERGY USE OF THE BUILDING IS NOT INCREASED:**

1. **STORM WINDOWS INSTALLED OVER EXISTING FENESTRATION.**
2. **GLASS ONLY REPLACEMENTS IN AN EXISTING SASH AND FRAME.**
3. **EXISTING CEILING, WALL OR FLOOR CAVITIES EXPOSED DURING CONSTRUCTION PROVIDED THAT THESE CAVITIES ARE FILLED WITH INSULATION.**
4. **CONSTRUCTION WHERE AN EXISTING ROOF, WALL OR FLOOR CAVITY IS NOT EXPOSED.**
5. **REROOFING FOR ROOFS WHERE NEITHER THE SHEATHING NOR THE INSULATION IS EXPOSED. ROOFS WITHOUT INSULATION IN THE CAVITY AND WHERE THE SHEATHING OR INSULATION IS EXPOSED DURING**

**REROOFING SHALL BE INSULATED EITHER ABOVE OR BELOW THE SHEATHING.**

- 6. ALTERNATIVES THAT REPLACE LESS THAN 50 PERCENT OF THE LUMINARIES IN A SPACE PROVIDED THAT SUCH ALTERATIONS DO NOT INCREASE THE INSTALLED INTERIOR LIGHTING POWER.**
- 7. ALTERNATIVES THAT REPLACE ONLY THE BULB AND BALLAST WITHIN THE EXISTING LUMINAIRE IN A SPACE PROVIDED THAT THE ALTERATION DOES NOT INCREASE THE INSTALLED INTERIOR LIGHTING POWER.**

- (I) Existing Occupancy. The legal occupancy of any building or structure existing on the date of the adoption of this Chapter shall be permitted to continue without change, provided such continued use is not dangerous to life, health, and safety as determined by the Building Safety Director.

**EXCEPTIONS:**

- 1. CHANGE IN OCCUPANCY OR USE. SPACES UNDERGOING A CHANGE IN OCCUPANCY THAT WOULD RESULT IN AN INCREASE IN DEMAND FOR EITHER FOSSIL FUEL OR ELECTRICAL ENERGY SHALL COMPLY WITH THIS CODE. WHERE THE USE IN A SPACE CHANGES FROM ONE USE IN MESA ENERGY CODE TABLE 505.5.2 TO ANOTHER USE IN TABLE 505.5.2, THE INSTALLED LIGHTING WATTAGE SHALL COMPLY WITH SECTION 505.5.**
- 2. CHANGE IN SPACE CONDITIONING. ANY NONCONDITIONED SPACE THAT IS ALTERED TO BECOME CONDITIONED SPACE SHALL BE REQUIRED TO BE BROUGHT INTO FULL COMPLIANCE WITH THIS CODE.**

- (L) Temporary Structures. Temporary structures such as reviewing stands and other miscellaneous structures, sheds, canopies, or fences used for the protection of the public around and in conjunction with construction work may be erected by special permit from the Building Safety Director for a limited period of time not to exceed one hundred eighty (180) days. Buildings or structures erected under a special permit need not comply with the type of construction or fire-resistive time periods required by the Building Code **OR ENERGY EFFICIENCY MEASURES REQUIRED BY THE MESA ENERGY CODE**. Temporary buildings or structures shall be completely removed upon the expiration of the time limit stated in the permit.

- (M) **MIXED OCCUPANCIES. WHERE A BUILDING CONTAINS BOTH RESIDENTIAL AND COMMERCIAL OCCUPANCIES, EACH OCCUPANCY SHALL BE SEPARATELY CONSIDERED AND MEET THE APPLICABLE PROVISIONS OF CHAPTER 4 OF THE MESA ENERGY CODE FOR RESIDENTIAL OCCUPANCIES AND CHAPTER 5 OF THE MESA ENERGY CODE FOR COMMERCIAL OCCUPANCIES.**

- (N) **LOW ENERGY USE BUILDINGS. THE FOLLOWING BUILDINGS, OR PORTIONS THEREOF, SEPARATED FROM THE REMAINDER OF THE BUILDING BY BUILDING THERMAL ENVELOPE ASSEMBLIES COMPLYING WITH THE MESA ENERGY CODE SHALL BE EXEMPT FROM THE THERMAL BUILDING ENVELOPE**

**PROVISIONS OF THE MESA ENERGY CODE:**

- 1. THOSE WITH A PEAK DESIGN RATE OF ENERGY USAGE LESS THAN 3.4 BTU/H-FT<sup>2</sup> (10.7 W/M<sup>2</sup>) OR 1.0 WATT/FT<sup>2</sup> (10.7 W/M<sup>2</sup>) OF FLOOR AREA FOR SPACE CONDITIONING PURPOSES.**
- 2. THOSE THAT DO NOT CONTAIN CONDITIONED SPACE.**

~~(M)~~ (O) Historic Buildings. Repairs, alterations, and additions necessary for the preservation, restoration, rehabilitation, or continued use of a building, structure, or its building service equipment may be made without conforming to the requirements of the technical codes when authorized by the Building Safety Director, provided:

1. The building or structure has been designated by official action of the legally constituted authority of this jurisdiction as having special historical or architectural significance, and
2. Unsafe conditions as described in this Chapter are corrected, and
3. The restored building or structure and its building service equipment will be no more hazardous based on life safety, fire safety, and sanitation than the existing building as determined by the Building Safety Director.

**(P) HISTORIC BUILDINGS. THE FOLLOWING IS EXEMPT FROM THE MESA ENERGY CODE: ANY BUILDING OR STRUCTURE THAT IS LISTED IN THE STATE OR NATIONAL REGISTER OF HISTORIC PLACES; IS DESIGNATED AS A HISTORIC PROPERTY OR UNDER LOCAL OR STATE DESIGNATION LAW OR SURVEY; IS CERTIFIED AS A CONTRIBUTING RESOURCE WITH A NATIONAL REGISTER LISTED OR LOCALLY DESIGNATED HISTORIC DISTRICT OR WITH AN OPINION OR CERTIFICATION THAT THE PROPERTY IS ELIGIBLE TO BE LISTED ON THE NATIONAL OR STATE REGISTERS OF HISTORIC PLACES EITHER INDIVIDUALLY OR AS A CONTRIBUTING BUILDING TO A HISTORIC DISTRICT BY THE STATE HISTORIC PRESERVATION OFFICER OR THE KEEPER OF THE NATIONAL REGISTER OF PLACES.**

~~(N)~~ (Q) Appeals. Orders, decisions, or determinations made by the Building Safety Director may, within thirty (30) days of the receipt of the notice of the decision, be appealed to the Building Board of Appeals, Section 2-11 of the Mesa City Code. The request for an appeal shall be in writing, shall set forth the specific objections to the decision of the Building Safety Director, and this shall form the basis of the appeal. A hearing shall be set as soon as practicable. The decision of the Building Board of Appeals shall be based on the evidence presented.

Section 3: That Subsection 4-1-5 (B) of the Mesa City Code, entitled Required Inspections, is hereby amended by adding a new Subsection 10 and re-numbering current Subsection 10 to 11 as follows:

**10. ENERGY EFFICIENCY INSPECTIONS. INSPECTIONS SHALL BE MADE TO DETERMINE COMPLIANCE WITH THE MESA ENERGY CODE.**

Section 4: That Section 4-2-1 of the Mesa City Code, entitled International Building Code, is hereby amended by amending Subsection GG, adding new Subsection ZZ and re-lettering existing ZZ and all subsequent Subsections as follows:

~~(GG)~~ Chapter 13 Energy Efficiency ~~shall be deleted in its entirety.~~ **IS HEREBY ADOPTED IN ITS ENTIRETY.**

**(ZZ) CHAPTER 35 REFERENCED STANDARDS IS AMENDED BY REPLACING UL 727-98 WITH UL 727-06 AND ADD UL 731-95, AND REPLACING IECC – 06 WITH IECC – 09.**

Section 5: That Section 4-3-1 of the Mesa City Code, Mesa Residential Code, is hereby amended by amending Subsection DD, adding new Subsections EE and FF, re-lettering current Subsections EE and FF, adding new Subsection HH, re-lettering the current GG and all subsequent Subsections, adding new Subsection XX and re-lettering the current Subsection XX and all subsequent Subsections as follows:

~~(DD)~~ Chapter 11 - Energy Efficiency ~~is deleted entirely.~~ **HEREBY ADOPTED IN ITS ENTIRETY**

**(EE) SECTION N1103.2 INSULATION IS AMENDED BY ADDING NEW EXCEPTIONS:**

**EXCEPTIONS:**

**SUPPLY AND RETURN DUCTS MAY BE INSULATED TO A MINIMUM OF R-6 WHEN ONE OR MORE OF THE FOLLOWING CONDITIONS IS MET:**

- 1. MINIMUM SEER RATING OF SPACE HEATING/COOLING SYSTEM IS 14.**
- 2. MAXIMUM U-FACTOR IS 0.60 AND MAXIMUM SHGC IS 0.27 FOR ALL FENESTRATION PRODUCTS.**
- 3. WALL INSULATION MINIMUM R-VALUE IS R-19.**

**(FF) SECTION N1103 SYSTEMS IS AMENDED BY ADDING A NEW SECTION N1103.7 AT THE END TO READ AS FOLLOWS:**

**N1103.7 EQUIPMENT EFFICIENCY. SPACE HEATING, SPACE COOLING, AND HOT WATER HEATING SYSTEMS SHALL MEET THE PREVAILING FEDERAL MINIMUM STANDARDS FOR EFFICIENCY RATING.**

~~(EE)~~ **(GG)** Section M1307 Appliance Installation is amended by adding a new Section M1307.6 at the end to read as follows:

M1307.6 Liquefied Petroleum Appliances. LPG appliances shall not be installed in attics, pits, or other locations that may cause ponding or retention of gas.

**(HH) SECTION M1401.3 SIZING IS AMENDED BY ADDING MANUAL “S” TO THE CALCULATION METHODOLOGIES.**

~~(FF)~~ **(II)** Section G2401.1 Application is amended by revising the Exception to read as follows:  
(4244,4636)

**EXCEPTION:** As an alternative to the provisions of this Code, fuel-gas piping systems, fuel-gas utilization equipment, and related accessories in existing buildings that are undergoing repairs,

alterations, changes in occupancy, or construction of additions shall be permitted to comply with the provisions of the Mesa Existing Building Code.

(TT) (WW) Table E4001.3 Flexible Cord Length is amended to read as follows:

**TABLE E4001.3**

**FLEXIBLE CORD LENGTH**

<b>APPLIANCE</b>	<b>MINIMUM CORD LENGTH (INCHES)</b>	<b>MAXIMUM CORD LENGTH (INCHES)</b>
KITCHEN WASTE DISPOSAL	18	36
BUILT-IN DISHWASHER	36	48
TRASH COMPACTOR	36	48
RANGE HOODS	18	36
PUMP PER E3801.12	18	48

**(XX) CHAPTER 43 REFERENCED STANDARDS ARE AMENDED AS FOLLOWS:**

**AAMA, WDMA, CSA: REPLACE 101/I.S.2/A440-05 WITH 101/I.S.2/A440-08, 450-00 WITH 450-06, AND 506-00 WITH 506-06 AND ADD 711-07**

**ACCA: ADD MANUAL S-04, RESIDENTIAL EQUIPMENT SELECTION**

**ICC: IECC REFERENCE IS REPLACED WITH IECC – 09**

**UL: 727-98 IS REPLACED WITH 727-06, 1995-98 IS REPLACED WITH 1995-05 AND ADD 731-95**

Section 6: That Section 4-5-1 of the Mesa City Code, entitled International Plumbing Code, is hereby amended by amending Subsection F and adding new Subsection R as follows:

(F) Section 313 Equipment Efficiencies is ~~amended to read as follows:~~ **HEREBY ADOPTED IN ITS ENTIRETY.**

~~Section 313 Reserved.~~

**(R) CHAPTER 13 REFERENCED STANDARDS IS AMEMDED BY REPLACING IECC – 06 WITH IECC – 09**

Section 7: That Section 4-6-1 of the Mesa City Code, entitled International Mechanical Code, is hereby amended by amending Subsections C, D, E, and F, adding new Subsection G and re-lettering subsequent Subsections, amending re-lettered Subsection L, re-lettering subsequent Subsections and amending re-lettered O as follows:

(C) Section 202. The definition of "unusually tight construction" is amended to read as follows:

**UNUSUALLY TIGHT CONSTRUCTION:** Construction meeting the following requirements:

1. Walls exposed to the outside atmosphere having a continuous water vapor retarder with a rating of 1 perm ( $57 \text{ ng/s} \cdot \text{m}^2 \cdot \text{Pa}$ ) or less with openings gasketed or sealed;
2. Openable windows and doors ~~with weather stripping; and~~ **MEETING THE AIR LEAKAGE REQUIREMENTS OF THE MESA ENERGY CODE, SECTION 402.4.2; AND**
3. Caulking or sealants are applied to areas, such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical, and gas lines, and at other openings.

(D) Section 301.2 Energy Utilization is ~~deleted entirely.~~ **HEREBY ADOPTED IN ITS ENTIRETY.**

(E) Section 303.3 Prohibited Locations is amended to read as follows:

303.3 Prohibited Locations. Fuel-fired appliances shall not be located in, or obtain combustion air from, any of the following rooms or spaces:

1. Sleeping rooms.
2. Bathrooms.
3. Toilet rooms.
4. Storage closets.
5. Surgical rooms.

EXCEPTION: This Section shall not apply to the following appliances:

1. Direct-vent appliances that obtain all combustion air directly from the outdoors.
2. Solid-fuel-fired appliances provided that the room is not a confined space and the building is not of unusually tight construction.
3. Appliances installed in a dedicated enclosure in which all combustion air is taken directly from the outdoors, in accordance with Section 703. Access to such enclosure shall be a through a solid door, weather-stripped **IN ACCORDANCE WITH THE EXTERIOR DOOR AIR LEAKAGE REQUIREMENTS OF THE MESA ENERGY CODE AND EQUIPPED WITH A SELF-CLOSING DEVICE.**

(F) Section 312.1 Load Calculations is amended to read as follows:

312.1 Load Calculations. Heating and cooling system design loads for the purpose of sizing systems, appliances, and equipment shall be determined in accordance with the procedures described in the ASHRAE Handbook of Fundamentals. Heating and cooling loads shall be adjusted to account for load reductions that are achieved when energy recovery systems are utilized in the HVAC system in accordance with the ASHRAE Handbook - HVAC Systems and Equipment. Alternatively, design loads shall be determined by an approved equivalent

computation procedure, **USING THE DESIGN PARAMETERS SPECIFIED IN CHAPTER 3 OF THE MESA ENERGY CODE.**

**(G) SECTION 401.2 VENTILATION REQUIRED IS AMENDED TO READ AS FOLLOWS:**

**SECTION 401.2 VENTILATION REQUIRED. EVERY OCCUPIED SPACE SHALL BE VENTILATED BY NATURAL MEANS IN ACCORDANCE WITH SECTION 402 OR BY MECHANICAL MEANS IN ACCORDANCE WITH EITHER SECTION 403 OR ASHRAE 62.1-2004.**

**(G)(H) Section 403.2.2 Transfer Air is amended to read as follows:**

403.2.2 Transfer Air. Except where recirculation from such spaces is prohibited by Table 403.3, air transferred from occupied spaces is not prohibited from serving as makeup air for required exhaust systems in such spaces as kitchens, baths, toilet rooms, and elevators. The amount of transfer air and exhaust air shall be sufficient to provide the flow rates as specified in Sections 403.3 and 403.3.1. The required outdoor air rates specified in Table 403.3 shall be introduced directly into such spaces or into the occupied spaces from which air is transferred or a combination of both.

**(H)(I) Table 403.3 Required Outdoor Ventilation Air is revised by deleting superscript “h” from smoking lounges in the public spaces portion of the table.**

**(H)(J) Section 506.3.10 Grease Duct Enclosures is amended by deleting Exception 3 and inserting the following:**

3. In lieu of the required shaft enclosure construction, where the ducts pass only through an attic space, the fire-resistive assembly may be limited to the installation of the total thickness of fire-resistive material applied on the duct side of the shaft enclosure.

**(H)(K) Section 509.1 Where Required is amended by adding the following exception:**

EXCEPTION: Type I hoods serving an individual electric or gas conveyor pizza oven unit or stack of units, unless the oven manufacturer requires a fire suppression system.

**(K)(L) Section 604.1 General is amended to read as follows:**

604.1 Duct insulation shall conform to the requirements of Sections 604.2 through 604.13 **AND THE MESA ENERGY CODE.**

**(L)(M) Subsection lettering is amended. Text remains unamended.**

**(M)(N) Chapter 10, Boilers, Water Heaters, and Pressure Vessels is deleted entirely.**

**(N)(O) Section 1204.1 Insulations Characteristics is amended to read as follows:**

1204.1 Insulation Characteristics. Pipe insulation installed in buildings shall **CONFORM TO THE REQUIREMENTS OF THE MESA ENERGY CODE**, be tested in accordance with ASTM E 84 and shall have a maximum flame spread index of 25 and a smoke-developed index

not exceeding 450. Insulation installed in an air plenum shall comply with Section 602.2.1.

EXCEPTION: The maximum flame spread index and smoke developed index shall not apply to one- (1-) and two- (2-) family dwellings.

Section 8: That Section 4-7-1 of the Mesa City Code, entitled International Fuel Gas Code, is hereby amended by amending Subsection D as follows and adding new Subsection G as follows:

- (D) Section 301.2 Energy Utilization is ~~deleted entirely~~ **HEREBY ADOPTED IN ITS ENTIRETY.**
- (G) **CHAPTER 8 REFERENCED STANDARDS IS AMENDED BY REPLACING IECC – 06 WITH IECC – 09.**

Section 9: That a new Chapter 9, entitled Mesa Energy Code, is added to Title 4 of the Mesa City Code as follows:

#### **MESA ENERGY CODE**

**4-9-1: INTERNATIONAL ENERGY CODE ADOPTED**

**4-9-2: PENALTY CLAUSE**

**4-9-1: INTERNATIONAL ENERGY CODE ADOPTED:**

**THAT CERTAIN DOCUMENT KNOWN AS THE INTERNATIONAL ENERGY CONSERVATION CODE, WHICH HAS BEEN PUBLISHED AS A CODE IN BOOK FORM BY THE INTERNATIONAL CODE COUNCIL AND ENTITLED INTERNATIONAL ENERGY CONSERVATION CODE, 2009 EDITION, IS HEREBY REFERRED TO, ADOPTED, AND MADE A PART HEREOF AS IF FULLY SET FORTH IN THIS SECTION, WITH THE FOLLOWING CHANGES IN AND AMENDMENTS TO SAID CODE:**

**(A) SECTION 101.1 TITLE IS AMENDED TO READ AS FOLLOWS:**

**101.1 TITLE. THESE REGULATIONS SHALL BE KNOWN AS THE "MESA ENERGY CODE," MAY BE CITED AS SUCH, AND WILL BE REFERRED TO HEREIN AS "THIS CODE." FOR ADMINISTRATION OF THIS CODE, REFER TO TITLE 4, CHAPTER 1, THE MESA ADMINISTRATIVE CODE.**

**101.1.1 ABOVE CODE PROGRAMS. THE BUILDING OFFICIAL SHALL BE PERMITTED TO DEEM A NATIONAL, STATE OR LOCAL ENERGY EFFICIENCY PROGRAM TO EQUAL OR EXCEED ENERGY EFFICIENCY REQUIRED BY THIS CODE. BUILDINGS APPROVED IN WRITING BY SUCH AN ENERGY EFFICIENCY PROGRAM SHALL BE CONSIDERED IN COMPLIANCE WITH THE MESA ENERGY CODE, EXCEPT THE REQUIREMENTS IDENTIFIED AS "MANDATORY" IN CHAPTERS 4 AND 5 OF THE MESA ENERGY CODE, AS APPLICABLE, SHALL STILL BE APPLICABLE AND MET.**

**(B) SECTIONS 101.2 THROUGH 109 INCLUSIVE ARE DELETED IN THEIR ENTIRETY.**

**(C) SECTION 202 GENERAL DEFINITIONS IS AMENDED TO ADD:**

**DWELLING UNIT: A SINGLE UNIT PROVIDING COMPLETE INDEPENDENT LIVING FACILITIES FOR ONE OR MORE PERSONS, INCLUDING PERMANENT PROVISIONS FOR LIVING, SLEEPING, EATING, COOKING AND SANITATION. SEE R-5 DEFINITION.**

**(D) SECTION 401 IS AMENDED TO ADD:**

**SECTION 401.4 COMPLIANCE TESTING. WHERE TESTING IS REQUIRED TO DETERMINE AIR LEAKAGE OF DUCT SYSTEMS, THE BUILDING OFFICIAL MAY ALLOW RANDOM TESTING OF NO FEWER THAN ONE IN SEVEN SINGLE FAMILY DWELLINGS WITHIN A SUBDIVISION.**

**(E) SECTION 402.2.1 CEILINGS WITH ATTIC SPACES IS AMENDED BY ADDING NEW EXCEPTION:**

**EXCEPTION:**

**FOR CONVENTIONALLY FRAMED ROOF SYSTEMS WHERE THE DESIGN OF THE ROOF/CEILING ASSEMBLY DOES NOT ALLOW SUFFICIENT SPACE FOR THE REQUIRED INSULATION, THE INSULATION MAY BE REDUCED, BUT SHALL NOT BE LESS THAN R-19, IF THE MINIMUM FRAME WALL INSULATION VALUE IS R-19 OR THE MINIMUM SEER RATING FOR HEATING AND COOLING EQUIPMENT IS 14. THE REDUCTION OF CEILING INSULATION SHALL BE LIMITED TO AREAS WHERE ROOF FRAMING BEARS ON EXTERIOR WALLS AND SHALL NOT EXTEND FURTHER THAN 12" FROM FACE OF EXTERIOR WALL.**

**(F) SECTION 403.2.1 DUCT INSULATION IS AMENDED BY ADDING NEW EXCEPTION:**

**EXCEPTION:**

**SUPPLY DUCTS MAY BE INSULATED TO A MINIMUM OF R-6 WHEN ONE OR MORE OF THE FOLLOWING CONDITIONS IS MET:**

- 1. MINIMUM SEER RATING OF SPACE HEATING/COOLING SYSTEM IS 14.**
- 2. MAXIMUM U-FACTOR IS 0.60 AND MAXIMUM SHGC IS 0.27 FOR ALL FENESTRATION PRODUCTS.**
- 3. WALL INSULATION MINIMUM R-VALUE IS R-19.**

**(G) SECTION 403.2.2 IS AMENDED TO CHANGE REFERENCE M1601.4.1 TO M1601.3.1**

**(H) SECTION 403 SYSTEMS IS AMENDED BY ADDING A NEW SECTION 403.10 AT THE END TO READ AS FOLLOWS:**

**403.10 EQUIPMENT EFFICIENCY. SPACE HEATING, SPACE COOLING, AND HOT WATER HEATING SYSTEMS SHALL MEET THE PREVAILING FEDERAL MINIMUM STANDARDS FOR EFFICIENCY RATING.**

(I) SECTION 501.2 APPLICATION SHALL BE AMENDED TO ADDING A NEW EXCEPTION:

EXCEPTION:

2. INDUSTRIAL BUILDINGS CONTAINING UNIQUE USES AND PROCESSES THAT MAY CONFLICT WITH THE ENERGY CODE. THE BUILDING OFFICIAL MAY GRANT EXEMPTIONS FROM MESA ENERGY CODE REQUIREMENTS FOR BUILDINGS OR IMPROVEMENTS DUE TO UNIQUE OR SPECIALIZED PROCESSING SYSTEMS OR COMPONENTS, SUCH AS PREFABRICATED PAINT BOOTHS OR ASSEMBLY LINE ENCLOSURES.

(J) CHAPTER 6 REFERENCED STANDARDS IS AMENDED BY REPLACING ASTM C90-06B WITH ASTM C90-03.

4-9-2: PENALTY CLAUSE:

ANY PERSON, FIRM, OR CORPORATION WHO SHALL VIOLATE ANY OF THE PROVISIONS OF THIS CHAPTER OF THE MESA CITY CODE AS AMENDED SHALL BE SUBJECT TO ALL PENALTIES AND PROVISIONS OF SECTION 4-1-9.

Section 10: EFFECTIVE DATE. The effective date of this Ordinance shall be January 1, 2012.

Section 11: PRESERVATION OF RIGHTS AND DUTIES. The repealing provisions of this Ordinance do not affect the rights and duties that matured, penalties that were incurred, or proceedings that were begun before the effective date of the repeal.

Section 12: SEVERABILITY. If any section, subsection, sentence, clause, phrase, or portion of this Ordinance or any part of the material adopted herein by reference is for any reason held to be invalid or unconstitutional by the decision of a court of competent jurisdiction, such decision shall not affect the validity of the remaining portions thereof.

Section 13: PENALTY. Penalties shall be as prescribed in Section 4-1-9 of the Mesa City Code, entitled Penalties.

PASSED AND ADOPTED by the Council of the City of Mesa, Maricopa County, Arizona, this 14<sup>th</sup> day of July, 2011.

APPROVED:

\_\_\_\_\_  
Mayor

ATTEST:

\_\_\_\_\_  
City Clerk

