Town of Mountain Village Proposed Building Code Amendments

Due to certain changes in Colorado State law, the Town of Mountain Village will be adopting the 2021 International Plumbing Code (IPC), International Fuel Gas Code (IFGC), International Energy Conservation Code (IECC) and the Colorado Model Electric Ready and Solar Ready Code. Currently the 2018 versions of the IPC, IFGC and the IECC are being utilized.

Q. When will this change be implemented?

A. Work to implement these changes is underway and will be presented in public meetings to the Design Review Board in April 2024, with the changes being presented to the Council in April and May 2024. These codes may be in effect as soon as late May 2024.

Q. Why are these changes being introduced?

A. The State of Colorado adopted both the 2021 IPC and IFGC early in 2023 and requires jurisdictions that enforce plumbing codes to do the same. The State of Colorado also requires that any jurisdiction that adopts any new code to adopt the 2021 IECC and the Colorado Model Electric Ready and Solar Ready Code.

Q. How will these new changes in the IPC and IFGC affect me?

A. Overall the changes in the IPC and IFGC will have little effect on plumbing and gas installations, and very little to no cost increases in construction. In fact, there are sections of these codes that will make certain installations less costly.

Q. How will these new changes in the IECC and Colorado Model Electric Ready and Solar Ready Code affect me?

A. Most new housing built in the Town of Mountain Village will not be affected by the changes in the IECC as our existing amendments will remain in effect for the required HERS rating. Remodels and additions that contain conditioned space and/or remove insulation or systems/equipment will be subject to the new provisions of the 2021 IECC. The Colorado Model Electric Ready and Solar Ready Code requires that residential homes and commercial and multi-family buildings under 10,000 square feet to be built electric ready and commercial and multi-family buildings over 10,000 square feet to have additional infrastructure installed.

- Q. Where can I find more information on the Colorado Model Electric Ready and Solar Ready Code?
- A. https://energyoffice.colorado.gov/buildings/building-energy-codes/energy-code-board
- Q. Where can I find more information on the IPC, IFGC and the IECC?
- A. https://www.iccsafe.org/products-and-services/i-codes/the-i-codes/
- Q. What if I have specific questions on this change?
- A. Please contact Lars Forsythe at 970-369-8246

ORDINANCE NO. 2024-

AN ORDINANCE OF THE TOWN COUNCIL OF THE TOWN OF MOUNTAIN VILLAGE AMENDING SECTIONS 17.7.14 OF THE MOUNTAIN VILLAGE MUNICIPAL CODE REGARDING THE INTERNATIONAL FUEL GAS CODE

WHEREAS, the Town of Mountain Village ("Town") is a home rule municipality duly organized and existing under Article XX of the Colorado Constitution and the Town of Mountain Village Home Rule Charter of 1995, as amended ("Charter"); and

WHEREAS, the Town has adopted zoning and subdivision regulations codified at Title 17 of the Mountain Village Municipal Code and referred to as the Community Development Code (the "CDC"); and

WHEREAS, the CDC Section 17.7.14 includes regulations adopting and modifying the International Fuel Gas Code; and

WHEREAS, the Colorado revised statutes adopted the 2021 International Fuel Gas Code under the State Plumbing Board, Plumbing rules and Regulations 3 CCR 720-1; and

WHEREAS, Town Council now desires to amend CDC section 17.7.14, International Fuel Gas Code.

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF MOUNTAIN VILLAGE, COLORADO, AS FOLLOWS:

<u>Section 1. Recitals.</u> The above recitals are hereby incorporated as findings of the Town Council in support of the enactment of this Ordinance.

Section 2. Amendment of CDC Sec. 17.7.14. The Town Council hereby amends CDC Section 17.7.17 of the Code as follows, with added language in **bold** and <u>underlined</u> typefaces and removed language <u>stricken</u>.

A. *Adoption*. There is hereby adopted and incorporated herein by reference as the plumbing code of the Town of Mountain Village, the International Fuel Gas Code ("IPC"), 2018 2021 Edition, published by the International Code Council, Inc. 4051 West Flossmoor Road, Country Club Hills, IL 60478.

- B. *Amendments, Additions and Modifications*. The International Fuel Gas Code, 2018 2021 Edition is hereby modified as follows:
- 1. Section 101.1 Section 101.1 of the IFGC is hereby modified to read as follows:

"These regulations shall be known as the International Fuel Gas Code of the Town of Mountain Village, hereinafter referred to as "this code" or the "IFGC"

- 2. Section 101.2 Scope. Delete the following exception in entirety. "Exception: Detached one and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories high with separate means of egress and their accessory structures shall comply with the International Residential Code."
- 3. Section 103.1, General. Section 103.1 is hereby amended to read: "Section 103.1, General. The Building Division, is hereby charged with enforcing the IFGC, with the Building Official acting as the code official." Creation of Agency. The Town of Mountain Village Building Department is hereby created and the official in charge thereof shall be known as the code official.
- 4. Section 103.2, Appointment. Section 103.2 is hereby deleted in its entirety due to the administrative provisions set forth herein.
- 5. Section A103.3, Deputies. Section 103.3 is hereby deleted in its entirety due to the administrative provisions set forth herein.
- 6. Section 106.6.2 109.2 Fee schedule. Insert Delete and replace with, "All fees shall be per the Planning and Development Services Fee Schedule."
- 7. Section 107.2 Inspections and Testing. Amend by inserting under item 2, "gas pipe shall be tested with 15 PSI for 20 minutes. A category 3 or 4 appliance exhaust vent shall be tested at 5 PSI for 15 minutes."
- 8. Section $\frac{109}{17.7.8}$ Means of Appeal. Board of Appeals: Delete and replace with section $\frac{17.7.8}{17.7.8}$ of the Building Regulations.

Section 401. Section 401 of the IFGC is hereby amended by inserting the following section:

"Section 401.1.2, Underground Installation. Gas service lines shall be separated by 3 feet horizontally of undisturbed or compacted earth from other service lines such as water, sewer, electric and gas.

Exception: The required separation distance shall not apply within the first five feet of the foundation and if the services lines are encased."

- 9. Section 406.4.1 Test pressure. Amend by inserting, "The test pressure for gas piping shall be 15 PSI air for 20 minutes **minimum**". Where the design gas pressure inside the building is greater than 5PSI the pipe shall be welded and tested at 60 PSI for 20 minutes. Category 3 and 4 appliance exhaust pipes shall be tested at 5 pounds for 15 minutes."
- 10. Insert new "Section 409.5.0 <u>4</u> Gas Fireplace in Sleeping Room Areas. A timer, or permanent thermostat shall be provided to control the main burner operation, shall have a maximum operating time of 1 hour and a maximum temperature setting of 85 degrees Fahrenheit. The control for the timer or thermostat shall be in the same room as the gas fireplace."

- 11. Section 501.8 Appliances not required to be vented. Delete item 1, "Ranges." Insert new section 623.3.1 Exhaust Discharge. Domestic cooking exhaust equipment shall discharge to outdoors through a duct. The duct shall have a smooth interior surface, shall be airtight, shall be equipped with a backdraft damper and shall be independent of all other exhaust systems. Ducts serving domestic cooking equipment shall not terminate in an attic or crawl space or areas inside the building.
- 12. Appendix A, Sizing and Capacities of Gas Piping. Appendix A is a reference standard hereby adopted into the 2018 IFGC.
- 13. Appendix C, Exit Terminals of Mechanical Draft and Direct-Vent Venting Systems. Appendix C is a reference standard hereby adopted into the 2018 IFGC.
- <u>Section 6. Effect of Ordinance</u>. Those provisions of the Code not expressly amended by this Ordinance shall remain unchanged and in full force and effect.

<u>Section 7. Severability.</u> If any portion of this Ordinance is found to be void or ineffective, it shall be deemed severed from this Ordinance and the remaining provisions shall remain valid and in full force and effect.

Section 8. Safety Clause. The Town Council hereby finds, determines, and declares that this Ordinance is promulgated under the general police power of the Town, that it is promulgated for the health, safety, and welfare of the public, and that this Ordinance is necessary for the preservation of health and safety and for the protection of public convenience and welfare. The Town Council further determines that the Ordinance bears a rational relation to the proper legislative object sought to be obtained.

<u>Section 9. Effective Date.</u> This Ordinance shall become effective on fourteen (14) days after final publication pursuant to Section 4.3 of the Town Charter and shall be recorded in the official records of the Town kept for that purpose and shall be authenticated by the signatures of the Mayor and the Town Clerk.

Section 10. Public Hearing. A public hearin of , 2024, in the Town Council (•	
Blvd., Mountain Village, Colorado 81435.		
Section 11. Publication. The Town Clerk of	or Deputy Town Clerk shall	post and publish
notice of this Ordinance as required by Article V, S	Section 5.9 of the Charter.	
INTRODUCED, READ, AND REFERRED to posterior the Town of Mountain Village, Colorado on the	S	
TOWN OF MOUNTAIN VILLAGE:		
TOWN OF MOUNTAIN VILLAGE, COLORADO	O, a Home-Rule Municipality	
R_{V}		

Martinique Prohaska, Mayor

ATTEST
By:
Susan Johnston, Town Clerk
ATTECT
ATTEST
By:
Susan Johnston, Town Clerk
Approved as to Form:
Ву:
David McConaughy, Town Attorney

I, Susan Johnston, the duly qualified ("Town") do hereby certify that:	and acting Town	Clerk of the T	own of Mountain	Village, Colorado
1. The attached copy of Ordinar copy thereof.	ice No. 2024	_ (the "Ordinar	nce") is a true, con	rrect, and complete
2. The Ordinance was introduct hearing by the Town Council the Town Village Blvd., Mountain Village, Coquorum of the Town Council as follows:	vn ("Council") at lorado, on	a regular meetin	ng held at Town I	Hall, 455 Mountain
Council Member Name	"Yes"	"No"	"Absent"	"Abstain"
Marti Prohaska, Mayor				
Scott Pearson, Mayor Pro Tem				
Jack Gilbride				
Peter Duprey				
Harvey Morgenson				
Tucker Magid				
Huascar Gomez				
4. A public hearing on the Or Town Council held at Town Hall, At the public without amendment by the Town Confollows:	455 Mountain ic hearing, the Or	Village Blvd.	, Mountain Villa nsidered, read by	age, Colorado, on title, and approved
Council Member Name	"Yes"	"No"	"Absent"	"Abstain"
Marti Prohaska, Mayor	Y es	- INO	Absent	Abstain
Scott Pearson, Mayor Pro Tem				
Jack Gilbride				
Peter Duprey				
Harvey Morgenson				
Tucker Magid				
Huascar Gomez				
5. The Ordinance has been sign Clerk, and duly numbered and recorde	ed in the official	records of the T	own.	·
IN WITNESS WHEREOF, I have her2024.	eunto set my har	nd and affixed th	ne seal of the Tow	n this day of
By: Susan Johnston, Town Clerk (S	SEAL)			

ORDINANCE NO. 2024-

AN ORDINANCE OF THE TOWN COUNCIL OF THE TOWN OF MOUNTAIN VILLAGE AMENDING SECTIONS 17.7.17 OF THE MOUNTAIN VILLAGE MUNICIPAL CODE REGARDING THE INTERNATIONAL PLUMBING CODE

WHEREAS, the Town of Mountain Village ("Town") is a home rule municipality duly organized and existing under Article XX of the Colorado Constitution and the Town of Mountain Village Home Rule Charter of 1995, as amended ("Charter"); and

WHEREAS, the Town has adopted zoning and subdivision regulations codified at Title 17 of the Mountain Village Municipal Code and referred to as the Community Development Code (the "CDC"); and

WHEREAS, the CDC Section 17.7.17 includes regulations adopting and modifying the International Plumbing Code; and

WHEREAS, the Colorado revised statutes adopted the 2021 International Plumbing Code under the State Plumbing Board, Plumbing rules and Regulations 3 CCR 720-1; and

WHEREAS, Town Council now desires to amend CDC section 17.7.17, International Plumbing Code.

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF MOUNTAIN VILLAGE, COLORADO, AS FOLLOWS:

<u>Section 1. Recitals.</u> The above recitals are hereby incorporated as findings of the Town Council in support of the enactment of this Ordinance.

Section 2. Amendment of CDC Sec. 17.7.17. The Town Council hereby amends CDC Section 17.7.17 of the Code as follows, with added language in **bold** and <u>underlined</u> typefaces and removed language stricken.

A. *Adoption*. There is hereby adopted and incorporated herein by reference as the plumbing code of the Town of Mountain Village, the International Plumbing Code ("IPC"), 2018 2021 Edition, published by the International Code Council, Inc. 4051 West Flossmoor Road, Country Club Hills, IL 60478.

B. *Amendments, Additions and Modifications*. The International Plumbing Code, 2018 2021 Edition is hereby modified as follows:

1. Section 101. Section 101.1 of the IPC is hereby modified to read as follows:

"Section 101.1, Title. Section 101.1 of the IPC is hereby modified to read as follows:

- "These regulations shall be known as the International Plumbing Code of the Town of Mountain Village, hereinafter referred to as "this code" or the "IPC"
- 2. "Section 103.1, General. The Building Division is hereby charged with enforcing the IPC, with the Building Official acting as the code official." Creation of Agency. The Town of Mountain Village Building Department is hereby created and the official in charge thereof shall be known as the code official.
- 3. Section 103.2, Appointment. Section 103.2 is hereby deleted in its entirety due to the administrative provisions set forth herein.
- 4. Section A103.3, Deputies. Section 103.3 is hereby deleted in its entirety due to the administrative provisions set forth herein.
- 5. Section 106.6 Fees. Permit fees shall be based on the Planning and Development Services adopted Fee Schedule and shall supersede and replace any fee schedule adopted by the International Plumbing Code or the State of Colorado.
- 6. Section 109 Means of Appeal. Board of Appeals: Delete and replace with section 17.7.8 of the Building Regulations.
- 7. Section 305.4 Freezing. Amend by deleting "by insulation".
- 8. Amend by inserting "Heating piping shall not be located outside the conditioned space excluding properly mixed heating systems mixed with Glycol or approved anti-freeze compound installed in heated flooring or grade level snowmelt."
- 9. 7. Section 305. Section 305 of the IPC is hereby amended as follows:
- "Section 305.6.1 Sewer Depth. Private sewage disposal systems are prohibited in the Town. Building sewers shall be a minimum of 6 feet below grade."
- 10.8. Section 312.3, Drainage and Vent Air Test. Section 312.3 of the IPC is hereby amended as follows:
- 11.9. Section 312.3 Drainage and Vent Air Test. The sentence "Plastic piping shall not tested using air" shall be deleted.
- 12.10. Section 312.5 Water Supply system test. Amend by deleting the sentence "for piping systems other than plastic," delete "50 PSI" and insert "60 PSI."
- 13.11. Section 502.5 Clearances for maintenance and replacement. Shall be amended to read, "Appliances shall be provided with access for inspection, service, repair and replacement without disabling the function of a fire-resistance-rated assembly or removing permanent construction, other appliances or any other piping or ducts not connected to the appliance being inspected,

serviced, repaired or replaced. A level working space not less than 36" in length, 30 inches in width and 48" in height shall be provided in front of the control side to service an appliance."

- 14.12. Section 603.2 Separation of Water Service and Sewer. Delete the following, "Where water service piping is in the same trench with the building sewer, such sewer shall be constructed of materials listed in Table 702.2. Where the building sewer piping is not constructed of materials listed in Table 702.2."
- 15.13. Section 606.2 Location of shutoff valves. Amend by inserting, 1. On the fixture supply to each plumbing fixture other than "wall hung sinks", bathtubs and showers.
- 16.14. Section 607.2 Hot or tempered water supply to fixtures. Shall be amended to read, "The developed length of hot or tempered water piping, from the source of hot water to the fixtures that require hot or tempered water, shall not exceed 200 feet where minimum of R-3 insulation is installed to insulate the piping. Recirculating system piping and heat-traced piping shall be sources of hot or tempered water." Appendix E, Sizing of Water Piping. Adopt entire Appendix E.
- 17.15.-Appendix F, Structural Safety. Adopt entire Appendix F.
- <u>Section 6. Effect of Ordinance</u>. Those provisions of the Code not expressly amended by this Ordinance shall remain unchanged and in full force and effect.
- <u>Section 7. Severability.</u> If any portion of this Ordinance is found to be void or ineffective, it shall be deemed severed from this Ordinance and the remaining provisions shall remain valid and in full force and effect.
- Section 8. Safety Clause. The Town Council hereby finds, determines, and declares that this Ordinance is promulgated under the general police power of the Town, that it is promulgated for the health, safety, and welfare of the public, and that this Ordinance is necessary for the preservation of health and safety and for the protection of public convenience and welfare. The Town Council further determines that the Ordinance bears a rational relation to the proper legislative object sought to be obtained.
- Section 9. Effective Date. This Ordinance shall become effective on fourteen (14) days after final publication pursuant to Section 4.3 of the Town Charter and shall be recorded in the official records of the Town kept for that purpose and shall be authenticated by the signatures of the Mayor and the Town Clerk.
- Section 10. Public Hearing. A public hearing on this Ordinance was held on the _____ day of _____, 2024, in the Town Council Chambers, Town Hall, 455 Mountain Village Blvd., Mountain Village, Colorado 81435.
- <u>Section 11. Publication.</u> The Town Clerk or Deputy Town Clerk shall post and publish notice of this Ordinance as required by Article V, Section 5.9 of the Charter.

INTRODUCED, READ, AND	REFERRED to public	hearing before the	Town Council of
the Town of Mountain Village	, Colorado on the	day of	2024

TOWN OF MOUNTAIN VILLAGE:

TOWN OF MOUNTAIN VILLAGE, COLORADO, a Home-Rule Municipality

By:	
By: Martinique Prohaska, Mayor	
ATTEST	
By: Susan Johnston, Town Clerk	
	the Town Council of the Town of Mountain 2024.
TOWN OF MOUNTAIN VILLAGE: TOWN OF MOUNTAIN VILLAGE, COL	ORADO, a Home-Rule Municipality
By: Martinique Prohaska, Mayor	
ATTEST	
By: Susan Johnston, Town Clerk	
Approved as to Form:	
By: David McConaughy, Town Attorney	

1. The attached copy of Ordinance No. 2024 (the "Ordinance") is a true, correct, and copy thereof. 2. The Ordinance was introduced, read by title, approved on first reading and referred hearing by the Town Council the Town ("Council") at a regular meeting held at Town Hall, 455 Village Blvd., Mountain Village, Colorado, on, by the affirmative quorum of the Town Council as follows: Council Member Name	to public Mountain vote of a
hearing by the Town Council the Town ("Council") at a regular meeting held at Town Hall, 455 Village Blvd., Mountain Village, Colorado, on, by the affirmative quorum of the Town Council as follows: Council Member Name	Mountain vote of a
Marti Prohaska, Mayor Scott Pearson, Mayor Pro Tem Jack Gilbride Peter Duprey Harvey Morgenson Tucker Magid Huascar Gomez	tain"
Scott Pearson, Mayor Pro Tem Jack Gilbride Peter Duprey Harvey Morgenson Tucker Magid Huascar Gomez	
Jack Gilbride Peter Duprey Harvey Morgenson Tucker Magid Huascar Gomez	
Peter Duprey Harvey Morgenson Tucker Magid Huascar Gomez	
Harvey Morgenson Tucker Magid Huascar Gomez	
Tucker Magid Huascar Gomez	
Huascar Gomez	
Mountain Village Home Rule Charter. 4. A public hearing on the Ordinance was held by the Town Council at a regular meet Town Council held at Town Hall, 455 Mountain Village Blvd., Mountain Village, Cole At the public hearing, the Ordinance was considered, read by title, and without amendment by the Town Council, by the affirmative vote of a quorum of the Town Collows:	orado, on approved
Council Member Name "Yes" "No" "Absent" "Abs	toin"
Marti Prohaska, Mayor	tain
Scott Pearson, Mayor Pro Tem	
Jack Gilbride	
Peter Duprey	
Harvey Morgenson	
Tucker Magid	
Huascar Gomez	

ORDINANCE NO. 2024-

AN ORDINANCE OF THE TOWN COUNCIL OF THE TOWN OF MOUNTAIN VILLAGE AMENDING SECTION 17.7.12 OF THE MOUNTAIN VILLAGE MUNICIPAL CODE REGARDING THE INTERNATIONAL ENERGY CONSERVATION CODE AND THE COLORADO MODEL ELECTRIC READY AND SOLAR READY CODE

WHEREAS, the Town of Mountain Village ("Town") is a home rule municipality duly organized and existing under Article XX of the Colorado Constitution and the Town of Mountain Village Home Rule Charter of 1995, as amended ("Charter"); and

WHEREAS, the Town has adopted building regulations codified at Title 17 of the Mountain Village Municipal Code and referred to as the Community Development Code (the "CDC"); and

WHEREAS, the CDC Section 17.7.12 includes regulations regarding energy conservation; and

WHEREAS, under Colorado Revised Statute 31-15-602 a municipality is required to adopt an energy code that achieves equivalent or better energy performance than the 2021 International Energy Conservation Code and the model electric ready and solar ready code pursuant to CRS section 24-38.5-401(5).

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF MOUNTAIN VILLAGE, COLORADO, AS FOLLOWS:

<u>Section 1. Recitals.</u> The above recitals are hereby incorporated as findings of the Town Council in support of the enactment of this Ordinance.

Section 2. Amendment of CDC Sec. 17.8.1. The Town Council hereby amends CDC Section 17.7.12 of the Code as follows, with added language in **bold** and <u>underlined</u> typefaces and removed language stricken.

A. *Adoption*. The Town of Mountain Village ("Town") hereby adopts and incorporates herein by reference as the energy codes of the Town of Mountain Village the International Energy Conservation Code, 2018 2021 Edition, ("IECC") published by the International Code Council, Inc., 4051 West Flossmoor Road, Country Club Hills, IL 60478 and the Colorado Model Electric Ready and Solar Ready Code on file at the Town of Mountain Village, 455 Mountain Village Blvd, Suite A, Mountain Village, CO 81435

- B. *Alternative Methodologies*. A developer may propose to meet LEED Gold or higher certification as an alternative methodology to meeting the requirements of this section.
- C. Amendments, Additions and Modifications. The IECC 2018 2021 edition is hereby amended as follows:

- 1. Section 103.1, Creation of Enforcement Agency. Section 103.1 is hereby amended to read:
- "Section 103.1, Creation of Enforcement Agency. The Building Division is hereby charged with enforcing the IECC, with the Building Official acting as the code official."
- 2. Section 103.2, Appointment. Section 103.2 is hereby deleted in its entirety due to the administrative provisions set forth herein.
- 3. Section A103.3, Deputies. Section 103.3 is hereby deleted in its entirety due to the administrative provisions set forth herein.
- 4. <u>1.</u> Section C101.1, Title. Section C101.01, Title is hereby amended as follows:
- "Section C101.1, Title. This Code shall be known as the International Energy Conservation Code of the Town of Mountain Village and shall be cited as "this code" or the "IECC" <u>and the Colorado Model Electric Ready and Solar Ready Code."</u>
- 5. C402.1.1 Low-energy buildings. C402.1.2 Equipment buildings. Insert:

These sections shall apply to all buildings regardless of zoning as applicable in the Town of Mountain Village.

- 6. 2. C402.5.7 Vestibules. Amend by inserting "This section shall only apply to new commercial buildings."
- 7. 3. Local Energy Saving Measures.
- a. *Scope*. The following requirements apply to all new residential construction, remodels, or additions, including without limitation single-family dwellings, multifamily dwellings, and mixed-use developments.
- b. *Mandatory Requirements*. All projects shall comply with the local energy savings measures as set forth herein.
- c. HERS Ratings.
- i. All new detached single-family or detached condominium dwellings shall achieve one of the following Home Energy Rating System ("HERS") ratings prior to the issuance of a building permit based on the gross floor area of the home. A prescriptive method may be used for homes 3,600 square feet or less with no HERS verification prior to a Certificate of Occupancy. The prescriptive or performance (HERS) method shall be confirmed prior to issuing a building permit. Performance methods must meet the follow HERS ratings outlined below.
- (a) 3,601 sq. ft. to 7,000 sq. ft.: HERS rating of 60 or lower.
- (b) 7,001 to 13,000 sq. ft.: HERS rating of 55 or lower

(c) 13,001 feet and larger: HERS rating of 50 or below.

A confirmed HERS rating is required at or before CO. Where no exterior snowmelt is included on the project either electrical or gas, the lowest required HERS rating shall be 60.

- d. Smart Building Program. (Ordinance 2015-02) The intent of the Smart Building Program ("Program") is to reduce the amount of energy and greenhouse gas emissions produced in the community through the promotion of energy efficient designs and building practices.
- i. The following incentives are provided to accomplish the intent of the Program:
- (a) Renewable Energy. A renewable energy 20% building permit fee discount shall be provided when (1) there is no exterior energy use; and (2) at least 20% of the estimated energy use is offset by a renewable energy source.
- (b) *Roof Design*. Roofs are designed to function in this climate without the need for snowmelt systems and with snow and ice fall safety measures (protected entries) Roofs free of snowmelt systems are eligible for a 20% building permit fee discount. This would apply to new buildings and additions only (the rebate only applies to the portion of the permit that includes new square footage), and designs that meet this requirement must be approved by the Building Official.
- (c) Exterior Energy Use: Buildings designed with no exterior energy use elements other than lighting are eligible for an additional 15% building permit fee discount. When this rebate is awarded, a covenant shall be recorded for the property with the Town, acknowledging the acceptance of the owner's forfeit of right to install any exterior energy use items after obtaining the CO for a period of fifty years. If during this period after CO it is found that exterior energy use items are desired by the owner and installed, the awarded rebate pertaining to exterior energy use shall be returned to Mountain Village per the terms of the agreement.
- (d) Interior Energy Use HERS Rating: Buildings designed with a HERS rating below 50 are eligible for a building permit fee discount. The discount calculation begins at a HERS rating of 50. A new building with a HERS rating of 50 would pay 100% of the building permit fee. The building permit fee would be reduced proportionately with the percentage reduction in the HERS rating. For instance, a HERS score of 25 is a 50% reduction in the building permit fee. A HERS score of 53 would result in a 100% building permit fee discount. HERS ratings can be lowered by either on-site or off-she solar photovoltaic systems.

These four (4) owner incentives can be used collectively toward a building permit fee discount. Maximum collective building permit fee discount available with the Program efficient home design is 100% of the building permit fee.

ii. Exterior Energy Use. The IECC or accepted performance compliance methods do not address exterior energy use. However, it is the intent of the Program to include all energy use on site in the evaluation of the building's performance regarding energy use. Therefore, the energy required of exterior snowmelt systems, as well as site-built pools and spas must also be offset with renewable energy via the Offset Program (see below).

- iii. *Program Scope*. The Program shall apply to site built outdoor, spas, pools and all exterior energy used for snowmelt.
- iv. Snowmelt.
- (a) All snowmelt systems on the property shall be offset via the Renewable Energy Mitigation Program (REMP) except for:
- (i) Single-family Development: 1,000 square feet of exempt hydronic snow melt that shall be allowed without mitigation located only on the main drive and/or code required exit walkways, decks, stairs and landings.
- (ii) Multifamily, Mixed Use and Commercial Development:
- 1,000 sq. ft. plus 50 square feet per dwelling unit of exempt hydronic snow melt that shall be allowed without mitigation located only on the main drive(s) decks, amenity areas and/or code required exit walkways, stairs and landings.
- (iii) Attached single-family units reviewed from the IRC (Duplex and Townhomes). 500 square foot of exempt per dwelling unit hydronic snowmelt shall be allowed without mitigation located only on the main drive and/or code required exit walkways, decks stairs and landings.
- (iv) Pedestrian routes and plaza areas in the Village Center and other public use areas.
- (v) Pool deck areas for multifamily or mixed-use hotbed development sites as envisioned in the Comprehensive Plan.
- v. Spas. Factory built spas (hot tubs) that are in compliance with the current California Energy Commission requirements in section 1604 of title 20 and have a maximum standby energy use of 205 watts per hour are exempt. Spa energy uses above 205 watts per hour adjusted for local climatic conditions are included in renewable energy mitigation offset requirements. Proof that the site-built spa meets this requirement may be provided by a Town engineering consultant, if needed, and will be at the expense of the owner. The owner of said property shall have the option of providing energy from a Town approved renewable energy system, or making payment in lieu, or a combination of both, in order to offset energy used by exterior energy use equipment with renewable energy sources.
- vi. *Exterior Pools*. Exterior heated swimming pools must prove compliance with the currently adopted Energy Codes. The Council may waive the need to offset exterior pool heating for projects that are envisioned in the Comprehensive Plan or may use a portion of the project revenues to pay for part of or all the energy offset.
- vii. *Heated Garages*. Heated garages must prove compliance with the currently adopted Energy Codes. This can be accomplished with a free program known as RES-Check. The garage would be included in the Res-Check calculation with the heated home. The blower door test required as

per R402.4.1.2 shall apply only to the homes habitable space and the air sealing for the garage shall be visually inspected.

viii. Exterior Energy Use Calculation. The total exterior energy use that must be offset with renewable energy, or payment made as a payment in-lieu as allowed in these regulations, will be calculated by the Town Building Official using the Build Smart Exterior Energy Calculation Spreadsheet ("Spreadsheet") (Appendix 17-2). The Spreadsheet calculations were developed using the standard amount of energy used by the exterior systems and adjusted for local climatic conditions. Alternate and creative engineering solutions to reduce exterior energy use are encouraged and may be accepted as an offset method, when approved by the Building Official. The Spreadsheet will be updated regularly according to market fluctuations and may be amended and adopted by the annual Fee Resolution.

iv.viiii. Renewable Energy Credit Calculation. Renewable mitigation offsets may be produced on-site or off-site and must be approved by the Town. On site renewable energy methods receive double credit for offset purposes. For example, if a town approved renewable energy source such as solar, geothermal heat pump, etc. installed on site produces 4KW then it will get credit for offsetting 8KW of exterior energy use. As new technology or other offsite renewable energy projects come on-line, they may also be considered as approved systems by the Building Official. Where the necessary amount of renewable energy is unattainable on-site, a combination of renewable energy methods may be used.

v.x. Payment In-lieu. The Town has the resources and ability to install renewable energy systems on public property or invest in offsite renewable energy systems that will offset exterior energy used in the community. If preferred by the property owner, the Town may accept payment from the owner of the affected property, in lieu of providing energy produced by a Town approved renewable energy system, Or, the Town may accept partial payment in lieu from the affected property owner that provides only partial energy produced by a Town approved on-site or offsite renewable energy mitigation system. The owner shall make payment prior to receiving the building permit. The payment in lieu shall be calculated using the Spreadsheet.

vi.xi. Approved Renewable Energy Systems. All renewable energy systems proposed as part of the Build Smart Renewable Mitigation Program must be approved in advance by the Building Official. An engineering analysis may be required for calculating the renewable energy mitigation credit produced by an on – or off – site system. Review of the system by a Town engineering consultant, if needed, will be at the expense of the owner.

- (a) On-site renewable energy systems provided to offset exterior energy use will be required to be maintained and operated for the lifetime of the property, through a written agreement with the property owner and a covenant on the property.
- (b) Off-site renewable mitigation shall only be approved by the Building Official if, through a written agreement: (1) the system is legally tied to the property using exterior energy use with the inability to transfer to another property; and (2) the Town can easily verify at any time the offsite renewable energy system continues to provide renewable energy as provided for herein, with no restrictions on the Town's ability to access renewable energy utility information.

- xii. *Shut-off Timers*. Exterior energy use such as outdoor firepits and exterior gas illumination fixtures shall be required to have timers with a maximum of 60 minutes and shall not have continuously burning pilots.
- viii. *Appropriation of funds*. All REMP payments in lieu received by the Town shall be deposited into a separate account with the Town to be used for energy reducing town projects and programs that benefit the community. Carbon reducing town projects and programs may be considered an appropriate use of REMP funds with Town Manager approval.
- e. *Engineered Heating Systems*. All detached single-family dwellings with equipment that meets the requirements for commissioning per sub-section N must have engineered heating systems. Where mechanical ventilation is required high efficiency energy recovery ventilators or heat recovery units shall be utilized for this purpose.
- f. *Direct Vent Furnace*. When the scope of the work of an addition to a dwelling or a remodel of a dwelling requires replacement of a furnace, the furnace shall be replaced with a direct vent unit that has a minimum 92 percent AFUE.
- g. *Direct Vent Boiler*. When the scope of the work of an addition to a dwelling or a remodel of a dwelling requires replacement of a boiler, the boiler shall be a direct vent unit that has a minimum 90 percent AFUE.
- h. Fireplaces. Fireplaces must be EPA or California certified, and have tight fitting gasketed doors. Fireplaces located in sleeping areas must have <u>a</u> shut off timer with 90 minute maximum or thermostat setting maximum of 80 degrees. Wood burning fireplaces shall meet the Solid Fuel Burning Device Regulations.
- i. Programmable Thermostats. Programmable thermostats are required for forced air central heating and cooling systems.
- j. <u>i.</u> Automatic Exhaust Fan Switches. Timers, humidistats or motion sensors are required for bath exhaust fans.
- k. Local Insulation Requirements.
- i. Headers shall be insulated full open depth.
- ii. Framed corners must be capable of being insulated.
- iii. Shaft and knee walls for skylights shall be insulated as exterior walls and provided with adequate backing to support the insulation.
- 1. Range Hood Ducting. Range hoods are required and must be ducted to the exterior.

- m.k. Mechanical Systems Commissioning and Completion Requirements. Engineering and commissioning of the mechanical and hot water heating systems shall be required on all residential where any of the following apply:
- i. The equipment input rating exceeds 200,000 btu.
- ii. The heated water exceeds 210 deg. F
- iii. The heated water or water glycol storage capacity exceeds 120 gallons Prior to the approval of the final mechanical inspection, the registered design professional shall provide evidence of mechanical systems commissioning and completion of the mechanical system installation to the Building Official.
- n. l. Systems Adjusting and Balancing. HVAC systems shall be balanced in accordance with generally accepted engineering standards. Air and water flow rates shall be measured and adjusted to deliver final flow rates within the tolerances provided in the product specifications.
- e. m. Air Systems Balancing. Each supply air outlet and zone terminal device shall be equipped with a means for air balancing in accordance with the International Mechanical Code. Discharge dampers are prohibited on constant volume fans and variable volume fans with motors of 10 hp (7.35 kW) and larger. Air systems shall be balanced in a manner to first minimize throttling losses then, for fans with system power of greater than 1 hp (735 W), fan speed shall be adjusted to meet design flow conditions.

Exception: Fans with fan motor horsepower of 1 hp (735 W) or less.

p. n. Hydronic Systems. Balancing. Individual hydronic heating and cooling coils /zones shall be equipped with means for balancing and measuring flow. Hydronic systems shall be proportionately balanced in a manner to first minimize throttling losses, then the pump impeller shall be trimmed, or pump speed shall be adjusted to meet design flow conditions. Each hydronic system shall have either the capability to measure pressure or temperature across the pump or shall have test ports at each side of each pump.

Exceptions: pumps with pump motors of 5 hp (3677 W) or less where throttling results in not greater than 5 percent of the nameplate horsepower draw above that required if the impeller were trimmed.

- q. o. Functional Performance Testing. Functional performance testing shall be in accordance with the requirements of this section.
- #: p. Equipment. Equipment functional performance testing shall demonstrate the installation and operation of components, systems, and system-to-system interfacing relationships in accordance with approved plans and specifications so that operation, function, and maintenance serviceability for each of the commissioned systems is confirmed. Testing shall include all specified modes of control and sequence of operation, including under full-load, part-load and all of the following emergency conditions:

- i. Each mode as described in the sequence of operation.
- ii. Redundant or automatic backup mode.
- iii. Performance of alarms.
- iv. Mode of operation upon a loss of power and restoration of power.
- s. q. Controls. HVAC control systems shall be tested to document that control devices, components, equipment, and systems are calibrated, adjusted and operated in accordance with the approved plans and specifications. Sequences of operation shall be functionally tested to document that they operate in accordance with the approved plans and specifications.
- **<u>r.</u>** *Economizers*. Air economizers shall undergo a functional test to determine that they operate in accordance with the manufacturer's specifications.
- **u. s.** Acceptance. Buildings, or portions thereof, shall not pass the final mechanical inspection until such time as the code official has received a final commissioning report from the design professional.
- v. t. System Balancing Report. A written report describing the activities and measurements completed shall be provided.
- w. u. Final Commissioning Report. A complete report, signed and sealed by the registered design professional, documenting that the mechanical and service water heating systems comply with the International Energy Conservation Code, the approved plans and manufacturer's specifications shall be provided to the Building Official.
- ** v. Site Built Spas and Pools. Site built pools and Spas shall be insulated equivalent to current California Energy compliant factory built hot tubs and spas or be offset by a Town approved renewable energy source. (Ord. No. 2023-03 §2).
- Section 3. Effect of Ordinance. Those provisions on <u>in</u> the Code not expressly amended by this Ordinance shall remain unchanged and in full force and effect.
- <u>Section 4. Severability.</u> If any portion of this Ordinance is found to be void or ineffective, it shall be deemed severed from this Ordinance and the remaining provisions shall remain valid and in full force and effect.
- Section 5. Safety Clause. The Town Council hereby finds, determines, and declares that this Ordinance is promulgated under the general police power of the Town, that it is promulgated for the health, safety, and welfare of the public, and that this Ordinance is necessary for the preservation of health and safety and for the protection of public convenience and welfare. The Town Council further determines that the Ordinance bears a rational relation to the proper legislative object sought to be obtained.

after final publication pursuant to Section	dinance shall become effective on fourteen (14) days 4.3 of the Town Charter and shall be recorded in the purpose and shall be authenticated by the signatures of
Section 7. Public Hearing. A public of, 2024, in the Town C Blvd., Mountain Village, Colorado 81435.	c hearing on this Ordinance was held on the day Council Chambers, Town Hall, 455 Mountain Village
Section 8. Publication. The Town notice of this Ordinance as required by Arti	Clerk or Deputy Town Clerk shall post and publish icle V, Section 5.9 of the Charter.
	ED to public hearing before the Town Council of on the day of 2024
TOWN OF MOUNTAIN VILLAGE: TOWN OF MOUNTAIN VILLAGE, COL	ORADO, a Home-Rule Municipality
By: Martinique Prohaska, Mayor	
ATTEST	
By: Susan Johnston, Town Clerk	
HEARD AND FINALLY ADOPTED by Village, Colorado this day of	the Town Council of the Town of Mountain 2024.
TOWN OF MOUNTAIN VILLAGE: TOWN OF MOUNTAIN VILLAGE, COL	ORADO, a Home-Rule Municipality
By: Martinique Prohaska, Mayor	
Martinique Prohaska, Mayor	
ATTEST	
By:Susan Johnston, Town Clerk	
Approved as to Form:	
By:	
= = : : = : : : = : : : : : : : : : : :	

I, Susan Johnston, the duly qualified ("Town") do hereby certify that:	and acting Town	Clerk of the T	own of Mountain	Village, Colorado
1. The attached copy of Ordinar copy thereof.	ice No. 2024	_ (the "Ordinar	nce") is a true, con	rrect, and complete
2. The Ordinance was introduct hearing by the Town Council the Town Village Blvd., Mountain Village, Coquorum of the Town Council as follows:	vn ("Council") at lorado, on	a regular meetin	ng held at Town I	Hall, 455 Mountain
Council Member Name	"Yes"	"No"	"Absent"	"Abstain"
Marti Prohaska, Mayor				
Scott Pearson, Mayor Pro Tem				
Jack Gilbride				
Peter Duprey				
Harvey Morgenson				
Tucker Magid				
Huascar Gomez				
4. A public hearing on the Or Town Council held at Town Hall, At the public without amendment by the Town Confollows:	455 Mountain ic hearing, the Or	Village Blvd.	, Mountain Villa nsidered, read by	age, Colorado, on title, and approved
Council Member Name	"Yes"	"No"	"Absent"	"Abstain"
Marti Prohaska, Mayor	1 es	NU	Absent	Abstain
Scott Pearson, Mayor Pro Tem				
Jack Gilbride				
Peter Duprey				
Harvey Morgenson				
Tucker Magid				
Huascar Gomez				
5. The Ordinance has been sign Clerk, and duly numbered and recorde	ed in the official	records of the T	own.	·
IN WITNESS WHEREOF, I have her2024.	eunto set my har	nd and affixed th	ne seal of the Tow	n this day of
By: Susan Johnston, Town Clerk (S	SEAL)			