Introduction:

Since 2010, the Department of Labor and Industry has re-dedicated itself to the process of inviting and including stakeholders and other interested parties to participate in the department’s processes of crafting policy and procedures on a wide variety of issues, code development, and adoption practices.

In 2021 the department continued the process by holding additional “Listening Sessions” on topics vital to both industry stakeholders and the department. In May and June of 2021, the department held three introductory listening sessions on the topic of the adoption of the 2021 versions of the I-Codes, Uniform Plumbing Code, 2020 version of the National Electric Code and the adoption of updated elevator and boiler codes.

The department’s responsibilities with regard to this process is to balance the regulations found in the state building code and rules with the needs of the construction industry and the public interest in efficiency, cost-effectiveness, and safety in order to arrive at a level of regulation for building codes that meets this balance. The department is ultimately attempting to determine if additional code adoption or administrative rule amendments is necessary to protect public safety and welfare. The adoption process has a variety of steps and many opportunities for the public and stakeholders to weigh in with both written submittals and in-person testimony at any of the public hearing opportunities. See Appendix “A” for a graphic representation of the code adoption process the department follows.

This document is primarily a summary of the completed “Listening Session” meetings to date. It contains the public comments received by the department during and following the “Listening Session” meetings. The summary should assist the department and the public in understanding the dynamic perspectives functioning in, and around, the built environment on this topic.

Purpose:

The purpose of the “Listening Session” meetings is to cultivate from the most stakeholders possible using a geographical cross-section of the State of Montana. The department wants to provide as much opportunity for stakeholders to make it to a meeting and express their opinions regarding the topic and to promote a free exchange of ideas and concerns.
Transparency was a key element of this process and the department continues to seek methods and opportunities to be inclusive and open with this engagement process.

It is important to provide a local, familiar environment for stakeholders to meet and discuss their concerns with the State of Montana, Department of Labor and Industry, Building Codes Program, so a regional format was decided on. Obviously, it is not possible or practical to hold meetings in every city, county, or town so the department reviewed those areas with generally the most building activity and chose locations close to those centers of building activity.

**Scope:**

The “Listening Session” meetings were held in the following locations on the dates indicated:

- **Zoom meeting** – Wednesday May 26, 2021 – 8:30 am
- **Missoula** – Wednesday June 23, 2021 – Hilton Garden Inn – 10:00 am
- **Billings** – Friday June 25, 2021 – Billings Hotel & Convention Center – 8:30 am

All sessions were moderated by Eric Copeland, Bureau Chief Building Codes Program.

Each meeting location was provided with sign in sheet, agenda, and contact information for submitting written information to the department. This handout information was the same for each location. See Appendix “B” for this information.

At each location, notes were taken on each public comment received. Notes were not literal dictations but a synopsis of the points being made from the speaker. Some participants delivered written comments to the moderator. See Appendix “C” for written correspondence.
LISTENING SESSION – ZOOM – MAY 26, 2021 – 8:30 AM
SUMMARY OF COMMENTS RECEIVED

1. Thank you for pulling this together. There has not been much time to delve into the new codes so will rely on national entity to get comments to you soon.

2. Why so soon? This causes a burden to learn new codes again, we were just getting used to the 2018 codes recently adopted.

3. All plumbing provisions should be stricken to keep the UPC.

4. Thank you for recognizing the need to keep current; I recommend some appendixes to adopt regarding water conservation, peak water use, legionella, and others. This is an effective and efficient code and I agree with striking plumbing sections in the I-codes to have one strong code for plumbing: the UPC.

5. Eric Copeland noted that we don’t use the plumbing fixture table from the IBC or the UPC; the department publishes their own fixture table in the rules. The current fixture table could be amended/updated or removed; and the table in either code could be adopted instead. Comments on this topic are encouraged.

6. I would go with the UPC; we deserve the best code, as you can put no price on safety.

7. The fixture table currently found in rule is outdated and based on an old version of the building code. Looked at tables in both the IBC and UPC and found that the UPC has a higher fixture count and may get push back if we were to adopt it. I would go with the table in the IBC.

8. I commend the department for keeping Montana updated. I’m all for getting rid of obsolete references.

9. In the UPC a section was deleted on insulation due to difference in insulation requirement of building code.

10. The adoption of the 2018 IECC included water heater and other provisions found in the UPC; should be stricken and the UPC used.

11. A commenter asked about the Building Code Council meetings and whether the council is advisory or the last word.
12. Thank you for being committed to quality education to assist in assimilating information. We will assist in any way we can.

13. Appreciate that you are getting current. We work in many states; some on different codes.

14. Might consider the Healthcare Facilities Code (HCFC) for medical gas systems.
15. The 2021 UPC also includes NFPA 99 so they go together very well.

16. Especially interested in International Swimming Pool and Spa Code (SPSC) as I have suggestions for modifications.
1. Commenter submitted a letter about appendix F last adoption. Deaths result from radon poisoning. It is much less costly to put in a system when building than it is to retrofit. Currently code only requires a passive system, if later there are high levels of radon detected then need to retrofit. National data for radon testing; EPA sets acceptable levels min. 0.4 max 117/liter. Average is 8.5 in Montana. Commenter gave specific county numbers. Since this is voluntary it will allow a jurisdiction to put them in if they so choose.

2. The 2021 IECC provides standards for energy that is beneficial to builders financially. Buying homes is expensive; energy savings save money. Retrofitting is expensive and nearly impossible in older buildings. Immediate adoption is desired. Includes many new requirements (i.e., electric car plug in) Failure to adopt now will cost money and energy.

3. 403.5.2, states hot water piping insulation for piping ¾” and larger. Could amend to state 1” in diameter or larger.

4. I support adoption of the residential and commercial energy code. Local jurisdictions such as Missoula and Gallatin county want to go to stretch code and would be much easier to do if we are on a current code.

5. Clean energy, energy savings, adoption of this code makes it possible and will work well with a stretch code.

6. Current amendments in place in the rules are now in the 2021 UPC and should be removed from the Montana amendments.
   ii. Sections 218, Definition of Plumbing Systems, Subsection 507.13, Subsection 603.4.2, Subsection 603.5.10, Subsection 603.5.12, Subsection 604.3, Subsection 605.12.2, Subsection 610.8, Subsection 705.6.2, Section 708.1, Subsection 710.1, Subsection 718.1, Subsection 908.1, Subsection 908.1.2, Subsection 908.2

7. Why NFPA 99 instead of UPC?

8. Section 218 - definition of plumbing system includes entire property. Does running lines into homes require a license? It was noted that there are some exceptions to licensure.

9. I support adoption of the UPC and asks that all references to IPC be stricken or amended to reference UPC. Appendix L and Appendix M related to sustainability and energy will be beneficial to Montana.
SUMMARY OF COMMENTS

1. Thank you for the session. Pleased that you are working to adopt the current codes. Many communities are getting growth right now. Important sections – R404.1 install only high efficacy lighting, saves money. R402.1.3 increases R value for ceiling, saves money; R501.1 – alterations, repairs, changes in residential follow the 2021 IECC and section for commercial also; will ensure building life spans. City issues such as low housing vacancy rates; hard to find houses; higher number of renters, local economy tied to tourism, low paying jobs but high housing cost. This means we see a lot of new buildings and renovation of existing buildings. While recovering from pandemic it is important that we build lasting structures.

2. Jobs and homes are the most important. Glad we are joining the 21st century. Energy saving saves residents money. Important with our extreme cold and warm temps. Also saves water and MT does have issues with water depletion. Important for our health to have current codes. Concerned about grandchildren and world they will be living in. Concerned about energy and water conservation and hope we look carefully at those aspects. Thank you.

3. I’ve been taking care of patients and people who live in these buildings and those that face having power shut off. FHA loans require a baseline energy efficiency; saves 8.5% nationally likely 5 in MT. Energy retrofits also have health benefits, appliances, and the gases they release affect health. Many folks live in rental units and they should benefit from these codes. Air pollution kills people. 70000-25000 die from air pollution mostly from use of fossil fuel. I urge you to accept and implement these codes.

4. Lighting and electrical sections of the new code has a lot of changes having to do with energy savings. Urge you to adopt without amendments.

5. Amendments allow homeowners to do their own plumbing. It often is done wrong and it should be required to be inspected. Contractors have the homeowner say the homeowner is doing wiring, so they don’t need to pull permit or get inspections.

6. There is an electrical section in this code and electricians need to do it. I can’t tell them how to do their job. I had a training session to install; could electricians have a training session too.

7. Urging adoption of the NEC code as written. Will train apprentices.
8. Urged adoption of the NEC as written without amendment. There are many safety provisions in the new code. The code addresses energy conservation. Would like existing amendment of AFCI be reconsidered.


10. Support Montana’s adoption of the NEC as written. Many safety provisions for workers, emergency services and others.
Appendix
A
CODE ADOPTION PROCESS IN MONTANA – AT A GLANCE

Public/Stakeholder Input Opportunity → Model Code Published – various sources, code entities – documents serve as starting or base documents → Active Department participation

Department may seek help from Industry Groups (Input Opportunity) → Background Analysis performed by the Department to gauge changes and impacts to Montana → Department seeks to evaluate codes for: Standards of safety, design & fire prevention Economic considerations Use of modern practices, methods, materials Uniform application of the codes

Public/Stakeholder Input Opportunity → Department actively Seeks Stakeholder Input through stakeholder meetings – Public and written testimony taken

Public/Stakeholder Input Opportunity → Department Summarizes public input from stakeholder meetings prepares findings for Building Codes Council

Public/Stakeholder Input Opportunity → Building Codes Advisory Council meets to take public testimony, craft and establish code proposals

Public/Stakeholder Input Opportunity → Department documents action of Building Codes Council - prepares Rules Proposal

Public/Stakeholder Input Opportunity → Rules Hearing Process → MAPA Process Followed

Public/Stakeholder Participation Opportunity → Code Adoptions – Department provides substantial training opportunities on new code provisions for stakeholders → Local Certified Government Building Code Jurisdictions have an additional 90 days to adopt same codes/same modifications

Montana Department of LABOR & INDUSTRY

Montana Architect
Montana Engineer
Building Contractor
Building Inspector
Manufactured Housing Public Member
Montana Electrician
Montana Plumber
Elevator Mechanic
Home Builder
State Fire Marshall
Director DPHHS
Appendix B
2021 Code Adoption Listening Session
AGENDA

Welcome – Introductions

Review Meeting Materials

Review Purpose of Session

Review of Adoption Process

- Modifications to the Codes
- Stakeholder Input Opportunities
- Building Codes Council Process
- Administrative Rules Process

Receive Public Input on the Codes or Alternatives

- International Building Code, 2021 Edition
- International Residential Code, 2021 Edition
- International Existing Building Code, 2021 Edition
- Uniform Plumbing Code, 2021 Edition
- International Mechanical Code, 2021 Edition
- NFPA 99, 2021 Edition
- National Electrical Code, 2021 Edition
- American Society of Mechanical Engineers, Boiler and Pressure Vessel Code, 2004 Edition
- American Society of Mechanical Engineers, publication CSD-1, Controls and Safety Devices for Automatically Fired Boilers, 2002 Edition
- ASME A17.1, 2004 Edition, Appendix N, Table N1, Recommended Inspection and Test Intervals in Months

Other Public Comment
The Department will be taking comments on adopting more current editions of the following codes. Under each listing is a link to the current administrative rule adopting the code and a link to information regarding each code. All administrative rules can be accessed here.

### 2021 INTERNATIONAL BUILDING CODE

- ARM 24.301.131 [Code Information](#)
- ARM 24.301.142 [ARM 24.301.146](#)

### 2021 INTERNATIONAL RESIDENTIAL CODE

- ARM 24.301.154 [Code Information](#)

### 2021 INTERNATIONAL ENERGY CONSERVATION CODE

- ARM 24.301.161 [Code Information](#)

Montana Residential Energy Efficiency Statement of Policy - [MCA 50-60-801](#)

MCA 50-60-203 (1) b. Rules concerning the conservation of energy must conform to the policy established in [50-60-801](#) and to relevant policies developed under the provisions of [Title 90, chapter 4, part 10](#).

### 2021 INTERNATIONAL EXISTING BUILDING CODE

- ARM 24.301.171 [Code Information](#)

### 2021 UNIFORM PLUMBING CODE & NFPA 99

- ARM 24.301.301 [UPC Code Information](#)  
  [NFPA 99 Code Information](#)

### 2021 INTERNATIONAL MECHANICAL CODE

- ARM 24.301.172 [Code Information](#)

### 2021 INTERNATIONAL FUEL GAS CODE

- ARM 24.301.173 [Code Information](#)
2020 NATIONAL ELECTRICAL CODE
ARM 24.301.401  Code Information

2021 INTERNATIONAL SWIMMING POOL AND SPA CODE
ARM 24.301.175  Code Information

2021 INTERNATIONAL -WILDLAND URBAN INTERFACE CODE
ARM 24.301.181  Code Information

MONTANA BOILER SAFETY CODE
ARM 24.301.710  Code Information

MONTANA ELEVATOR SAFETY CODE
ARM 24.301.602  Code Information

ASME A17.3-2017 Information
ASME a18.1-2020 Information
Proposed Modification for Rural Gymnasiums

Proposed policy:

The following modifications apply to gymnasiums:

(a) Gymnasiums limited to 6,000 square feet with limited access to municipal water supply shall use an occupant load factor of 20 gross as an alternative to Table 1004.5 “Assembly Without fixed seats: Standing space – 5 net” to calculate sprinkler requirements. For egress and fire alarm requirements, the “5 net” occupant load will still be required to calculate egress outlined in Chapter 10. At least 50% of exits shall discharge directly to the exterior.

(b) Gymnasiums over 6,000 square feet will require normal occupant load calculations set out in 1004.5 “assembly without fixed seats: Standing space – 5 net”

The following modifications apply to gymnasiums:

(a) Gymnasiums less than 6,000 square feet without feasible access to a municipal water supply shall be permitted to be constructed without a fire sprinkler system provided all the following conditions are met.

i. The occupant load factor of ‘5 net’ shall be used to calculate egress requirements in accordance with IBC chapter 10.

ii. At least 50% of the number and minimum width or required capacity of the exits shall discharge directly to the exterior of the building.

iii. The posted occupant load of the building shall not exceed 299.

iv. A fire alarm system is installed in accordance with NFPA 72.

The premise of this proposed rule to be included in the Administrative Rules of Montana is that there is no defined way to calculate the occupant load of gymnasiums and the like. Gymnasiums fall under the Assembly Group A-3 occupancy outlined in the International Building Code (IBC) Chapter 3, section 303.4 Assembly Group A-3. This rule would more clearly define how to calculate the occupant load of a gymnasium, and in doing so, would more clearly define when a sprinkler system would be required.

Currently, to find an occupant load of a gymnasium, you calculate the total area of the gym and divide that number by the applicable occupant load factor found in Table 1004.5 of the IBC. When looking at Table 1004.5, “Gymnasium” is not specifically named, so you use the “most like” alternative. This is where the confusion in calculations can come into play. Gymnasiums are used for more than just the general sports that can be played on a gymnasium floor. A gymnasium is often used for other non-sporting activities across Montana including but not limited to: school dances, concerts, graduations, polling sites, and general “assemblies.” Due to the varied nature of the gymnasiums use as an “Assembly without fixed seats: Standing space,” an occupant load factor (OLF) of “5 net” is used. A regulation basketball court dimensions are 94’x50’, which gives you 4700sf area. Using the 5 net OLF, this would result in an occupant load of 940. Per Section 903.2.1.3 of the IBC, “An automatic sprinkler system shall be provided throughout stories containing Group A-3 occupancies and throughout all stories from the
Group A-3 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

...2) **The fire area has an occupant load of 300 or more.**”

This would require every basketball court in the state be supplied with a sprinkler system.

Many states, counties, and certified jurisdictions outside of Montana take a different stance on these restrictions. Table 1004.5 contains alternative OLF that resemble a gymnasium that could be used in the same alternative manners for which gymnasiums are currently used. These OLF include skating rinks, swimming pools, and exercise rooms. All of these have an OLF of 50 gross and would give an occupant load of 94 for the same 4700sf basketball court. This is well below the occupant load of 300 and would mean this occupant load would not require a sprinkler system. Included below are examples of other jurisdictions and their interpretation of gymnasium occupant load. Please see the links for further details about each jurisdiction.

The **Minnesota Department of Public Safety State Fire Marshal Division** uses the 50 gross OLF to calculate the load for basketball courts.

**Bismarck North Dakota Fire Department** uses the 50 gross OLF to calculate the load for basketball courts.

**Orange County Fire Authority** uses the 50 gross OLF to calculate the load for basketball courts.

Many **Design professionals** use the 50 gross OLF to calculate basketball courts occupant load.

**The City of Chicago Department of Buildings** uses an alternative of 20sf per person which would give you an occupant load of 235 for a standard 4700sf basketball court area.

The **State of California** specifies that the 50 OLF is used when “gymnasiums that do not have other uses or spectator seating.”

Acknowledging that The State of Montana is not regulated by these organizations, they show alternative regulations in different parts of The United States of America. Most of these examples are from jurisdictions that are generally more restrictive than Montana as a whole, but when considering gymnasiums, they use less restrictive OLF than Montana does.

The Montana Building Codes Program is suggesting that gymnasiums without fixed seating, up to 6,000sf (this would allow a full basketball court with room on the sides for out of bounds), would use the OLF of 50 gross to determine the occupant load for sprinkler requirements, but the OLF of 5 to calculate the Means of Egress outlined in Chapter 10 of the IBC, specifically Section 1005.3.2, Other egress components. This would require a full 6,000sf gymnasium to have 240” or 20’ of egress.
Appendix C
WRITTEN COMMENTS RECEIVED BY SEPTEMBER 1, 2021

NEC COMMENTS

From: Greg Yager <e>
Sent: Tuesday, June 23, 2020 4:09 PM
To: Copeland, Eric <ECopeland@mt.gov>
Subject: [EXTERNAL] Code change

Cliff,

I have a concern with the new code requiring that each of the service disconnects are in separate enclosures. I do not see any advantage to this code change. Emergency responders would almost certainly open the enclosure and turn off all breakers they see. If the disconnects are in separate enclosures it would actually take more time to disconnect the power since there may be up to six doors to open.

The largest concern that I have is that having disconnects in separate enclosures will cause there to be several splices in a gutter to achieve this and as you know the splices will be the weak spot in the system.

Again I can't think of any reason for this code change. I would hope that Montana will not adopt this change.

Sincerely

Greg Yager

Excel Electrical Cont. Inc.
Eric and Tracy,
I would like to submit a proposed change for the Adoption of the 2021 International Building Code.

Proposed change:
Delete ARM 24.301.146 (23) – “Subsection 2902.3. Required Public Toilet Facilities, is deleted in its entirety.”

This section has caused a tremendous amount of confusion for buildings that are open for public use, ie. stores, offices, etc. Imagine a WalMart with no public toilet facilities. With the blanket deletion of “Public Toilet Facilities” there is the potential for any building that is open to the public that there would be no toilet facilities, including theatres, restaurants, bars, schools, etc.
By deleting “Required Public Toilet Facilities” that means every building.

I propose that item (23) be removed from ARM 24.301.146 and let the replaced Plumbing Table of IBC, Section 2902- (ARM 24.301.146 (22)) dictate the required location and number of toilet fixtures required in any building. All facilities should have a toilet room available for the public.
Footnote I could be applied in many scenarios if they felt security was an issue.

Thank you for considering my proposed change.

Kimberley Mack, AIA
Chief Building Official, Building Division
(406) 447-8449 | kmack@helenamt.gov
Room 439, City-County Building
ELEVATOR CODE COMMENT

From: Larson, Russ < >
Sent: Thursday, June 25, 2020 5:54 AM
To: Copeland, Eric <ECopeland@mt.gov>
Cc: Ricks, Brent <BRicks@mt.gov>
Subject: [EXTERNAL] Montana Elevator Code

Mr. Copeland –

Thank you for your time on the phone last week. As we discussed, the 2019 A17.1 elevator code contains several significant changes from previous editions. Most significant is the requirement for 2 way voice, video and text communications to elevator cars. Similar requirements appear in the 2018 edition of the building code (IBC), although they are not perfectly aligned.

The elevator industry organization NEII has written and distributed positions recommending what to consider when adopting newer versions of the A17.1 elevator code or the IBC building code. Their recommendations are independent of specific manufacturers, and consider safety, technology and the potential conflicts between the 2 codes. Attached is a document they circulated last year, addressing the possible adoption of IBC-2018. NEII has created similar guidance documents for jurisdictions considering A17.1-2019.

As Montana goes forward with consideration of adopting A17.1-2019, I would like to be part of the discussions. Please include me in meetings or calls that you set up. Thanks in advance for the opportunity to participate.

Russ Larson
Associate Director, Codes and Standards

O: 860-286-1617
M: 860-803-5508

Otis
Otis Service Center
212 West Newberry Road
Bloomfield, CT 06002
August 28, 2019

Building Codes Program
Program Manager
PO Box 200517
Helena, MT  59620-0571
buildingcodes@mt.gov

Re: Proposed Updates to the Montana Building Codes (MAR 24-301-337)

Dear Program Manager:

As Montana considers amendments to its state building codes, the National Elevator Industry Inc. (NEII®) would like to provide the following comments and recommendations. NEII is the premier national trade association representing the interest of firms that install, maintain and/or manufacture elevators, escalators, moving walks and other building transportation products. NEII is a strong supporter of the model code process and advocates for the adoption of the model codes with minimal or no deviations. While NEII supports Montana’s proposal to adopt the 2018 International Building Code (IBC) by reference, we strongly recommend a modification to one of the new provisions added in the 2018 edition.

Specifically, Requirement 3001.2 (MAR 24-301-146(24)) mandates an emergency communication system for the deaf, hard of hearing and speech impaired. NEII supports the intent of this code change, but the actual code language in the IBC is vague and unenforceable. Because there is no technical criteria, nor a reference to another standard containing such criteria, the result will be a wide variety of communication systems and, ultimately, a disservice to the people who need to use these systems.

NEII members worked very closely with the ASME Emergency Operations Committee to develop technical standards for a communication system that would meet the intent of the IBC code change. This criterion has been approved for the 2019 edition of ASME A17.1/CSA B44 Safety Code for Elevators and Escalators (A17.1/B44) and will provide clear guidance to manufacturers and code authorities to ensure that new systems will meet the needs of the deaf, hard of hearing, and speech impaired users. A copy of the approved language from the public review draft is attached.

In order to address the vagueness of the current IBC provision, NEII encourages Montana to consider the following code language to replace Requirement 3001.2 of the 2018 IBC:

3001.2 Emergency elevator communication systems for the deaf, hard of hearing and speech impaired.
The elevator emergency communication system shall

1. provide effective communication,
2. be installed in accordance with the provisions of ASME A17.1/CSA B44 and NFPA 72,
3. be accessible by the deaf, hard of hearing and speech impaired, and
4. be available twenty-four hours a day, seven days a week, as a live interactive system.

IBC Section 3001 defines the scope and reference standards for elevator Emergency Communication design requirements. This language retains the base requirement for the system in the 2018 IBC but references the technical requirements included in the A17/B44 model elevator code. The requirements in A17.1/B44 were developed for consistency with the guidelines in the ADA Title III is the regulation specifically for effective communication with the deaf, hard of hearing and speech impaired.

NEII is committed to public and elevator personnel safety and is ready to support the Montana in understanding the latest version of the code and assisting in the process of adoption. NEII and representatives from its member companies are available to meet with you and other key stakeholders to assist your jurisdiction in a review of the most recent edition of A17.1 and facilitate your efforts to update the portions of the code related to elevators. We support updating the state building codes but feel it is vital to amend the requirements for the communication to ensure it serves those who need it most. We look forward to hearing from you and are available to assist you in this effort.

For additional information, please contact:

Kevin Brinkman
NEII® Vice President, Codes & Safety
klbrinkman@neii.org
Tel: 703-589-9814

NEII is the premier national trade association representing the interest of firms that install, maintain and/or manufacture elevators, escalators, moving walks and other building transportation products. The NEII membership includes the top elevator companies in the United States, if not the world, and reports more than eighty percent of the work hours for the industry. Member companies include: Otis Elevator Company, Schindler Elevator Corp., ThyssenKrupp Elevator Corporation, KONE, Inc., and many other companies. Safety for the riding public and industry personnel is a top priority for the industry and the NEII member companies.
September 1, 2021

Todd Younkin, Administrator
Business Standards Division
Department of Labor and Industry
301 South Park
P.O. Box 200513
Helena MT 59620-0513

Dear Mr. Younkin,

On behalf of the Radon Control Program at the Department of Environmental Quality (DEQ), I submit this letter supporting adoption of the International Residential Code Appendix F - Radon Resistant New Construction (RRNC) during the 2021 cycle of building code updates.

What is Radon and why is it a concern?
- Radon is an invisible, odorless, radioactive gas created during the decay of uranium in the soil.
- Radon decays into radioactive particles known as radon decay particles.
- These particles are easily inhaled and deposited in the lungs.
- The alpha particles that are released can kill or damage cellular tissue in the lungs leading to an increased risk of lung cancer.

Radon can enter homes through cracks in floors, walls, or foundations. It can also be released from building materials, sumps, or from water obtained from wells that contain radon. Radon levels can be higher in homes that are well insulated, tightly sealed, and/or built on uranium rich soil. Basement and first floors typically have the highest radon levels due to their proximity to the ground and because most people spend as much as 90 percent of their time indoors, indoor exposure to radon is a legitimate health concern.

How prevalent is Radon in Montana?
The Radon Control Program at DEQ distributes free radon test kits to Montana households. Of the 452 radon samples collected through DEQ test kits since 2017, the average result is **8.5 picocuries per liter** (pCi/L). The Environmental Protection Agency’s (EPA) action level for recommended remediation is **4.0 pCi/L**. Montana’s 10 most populous counties are as follows:

<table>
<thead>
<tr>
<th>County</th>
<th>Average Radon Level (pCi/L)</th>
<th>Number of Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yellowstone County</td>
<td>4.06</td>
<td>11</td>
</tr>
<tr>
<td>Missoula County</td>
<td>8.90</td>
<td>28</td>
</tr>
<tr>
<td>Gallatin County</td>
<td>6.20</td>
<td>37</td>
</tr>
<tr>
<td>Flathead County</td>
<td>5.60</td>
<td>23</td>
</tr>
<tr>
<td>Cascade County</td>
<td>9.10</td>
<td>11</td>
</tr>
<tr>
<td>Lewis &amp; Clark County</td>
<td>14.60</td>
<td>71</td>
</tr>
<tr>
<td>Ravalli County</td>
<td>6.60</td>
<td>14</td>
</tr>
<tr>
<td>Silver Bow County</td>
<td>7.20</td>
<td>13</td>
</tr>
<tr>
<td>Lake County</td>
<td>8.01</td>
<td>6</td>
</tr>
<tr>
<td>Lincoln County</td>
<td>10.05</td>
<td>38</td>
</tr>
</tbody>
</table>

The Radon Control Program at DEQ distributes free radon test kits to Montana households. Of the 452 radon samples collected through DEQ test kits since 2017, the average result is **8.5 picocuries per liter** (pCi/L). The Environmental Protection Agency’s (EPA) action level for recommended remediation is **4.0 pCi/L**. Montana’s 10 most populous counties are as follows:
What does adoption of Appendix F require?
Adopting Appendix F on the state level enables certified local jurisdictions to add RRNC requirements to local code requirements. Appendix F only requires installation of a passive radon collection system. According to the EPA, adopting radon-resistant building techniques should not increase builder liability risk as long proper construction techniques are followed.

Once the passive system is installed, the homeowner can conduct radon sampling to determine if a fan should be installed to add mechanical ventilation to further decrease radon levels. It is up to the homeowner to install additional measures if they choose. Additionally, installation of a passive system is relatively inexpensive. Based on an analysis conducted by the National Association of Home Builders (NAHB), it is more cost-effective to include a passive system when building a home, rather than installing a radon reduction system in an existing home. The Environmental Protection Agency (EPA) estimates that materials and labor cost for installing a passive system at build vs retrofitting an existing home is $300-$500 vs. $1,250-$2,500.

Adopting Appendix F enables local jurisdictions to adopt requirements for installation of passive radon control systems at the time of home construction. As you can see from the radon test results collected by DEQ, radon is a local issue and control system requirements are best implemented on the local level. Please contact our office if additional information is needed. Thank you for the opportunity to comment and provide background information.

Sincerely,

Bonnie Rouse
Section Supervisor
Energy Efficiency & Compliance Assistance
Montana Energy Office, Department of Environmental Quality
Dear committee:

I support immediate adoption of the 2021 International Energy Conservation Code (IECC). In the United States, 76% of electricity and 40% of all energy is used in buildings. Montanans' monthly electricity and gas bills are based on their use of electricity and gas, and up-to-date energy codes will lower the costs of our bills. Since lighting represents 20% of a home's energy expenses, the requirement for efficient lighting allows residents to save more money. This will save people like me money every month.

Sincerely

JL Angell
2391 Ponderosa Road
Rescue, CA 95672

-----Original Message-----
From: >
Sent: Monday, August 2, 2021 1:08 PM
To: DLI BSD Building Codes <buildingcodes@mt.gov>
Subject: [EXTERNAL] Montana building codes public comment

Dear committee:

Please adopt the 2021 International Energy Conservation Code without waiting. Many of our buildings in Montana are older and need to be upgraded. Retrofitting a building's lighting, HVAC system, or plumbing is expensive and takes a lot of time. The updated code will require existing buildings to meet current energy efficiency standards for any changes or repairs. And better yet, if a building is designed with energy-efficient codes, then homeowners can avoid those costly retrofits altogether.

Sincerely

Bruce Bender
365 Kensington Ave
Missoula, MT 59801-5725
Dear committee:

It's time to adopt the 2021 International Energy Conservation Code on a quick schedule. Energy efficiency saves Montanans money. About 30% of Montanans rent our homes, but renters usually have little to no say about the improvements to our homes. Energy-efficient standards ensure that renters can save money on their power bills.

Thanks for helping us get on track to keep more money in our pockets.

Sincerely

David Patenaude
101 Jackrabbit Lane
Belgrade, MT 59714-3311

Dear committee:

I'm writing to encourage you to adopt the 2021 International Energy Conservation Codes (IECC). Buildings last for decades. It's important we build to standards that lock in energy savings for the long term. The 2021 IECC increases the R-value for ceiling insulation from R-49 to R-60. Better insulation means energy consumers will save money on heating and cooling throughout the year.

Thank you.

Sincerely

Rick Whitman
1201 Wineglass Ct
Livingston, MT 59047
Dear committee:

As someone who cares about local Montana jobs, it's clear that one benefit of the 2021 International Energy Conservation Code is that the building sector will flourish. Adopting new building codes keeps the construction workforce competitive in the latest design strategies and building technologies. Failure to adopt these codes may result in an uncompetitive workforce when Montana workers fall behind national trends. Please help keep our workforce relevant and competitive and adopt these codes without delay.

Sincerely

Aven Satre-Meloy
916 State St
Helena, MT 59601

Dear committee:

It's time to adopt the 2021 International Energy Conservation Code on a quick schedule. Energy efficiency saves Montanans money. About 30% of Montanans rent our homes, but renters usually have little to no say about the improvements to our homes. Energy-efficient standards ensure that renters can save money on their power bills.

Thanks for helping us get on track to keep more money in our pockets.

Sincerely

Julie Chapman
20900 Whitetail Ridge Road
Huson, MT 59846-9544
Dear committee:

Please adopt the 2021 International Energy Conservation Code without waiting. Many of our buildings in Montana are older and need to be upgraded. Retrofitting a building's lighting, HVAC system, or plumbing is expensive and takes a lot of time. The updated code will require existing buildings to meet current energy efficiency standards for any changes or repairs. And better yet, if a building is designed with energy-efficient codes, then homeowners can avoid those costly retrofits altogether.

Sincerely

Raso Hultgren
PO Box 8633
Missoula, MT 59807-8633

-----Original Message-----
From:        
Sent: Monday, August 2, 2021 2:39 PM 
To: DLI BSD Building Codes <buildingcodes@mt.gov>  
Subject: [EXTERNAL] Montana building codes public comment

Dear committee:

As someone who cares about local Montana jobs, it's clear that one benefit of the 2021 International Energy Conservation Code is that the building sector will flourish. Adopting new building codes keeps the construction workforce competitive in the latest design strategies and building technologies. Failure to adopt these codes may result in an uncompetitive workforce when Montana workers fall behind national trends. Please help keep our workforce relevant and competitive and adopt these codes without delay.

Sincerely

Gary Matson
PO Box 308
Milltown, MT 59851
We need forward-looking building codes that protect Montanans health. One benefit of the 2021 International Energy Conservation Code is that the updated energy codes improve the health and safety of Montanans, which is why I’m writing to ask you to adopt these codes right away. Gas burned in furnaces, water heaters, and cooking emits dangerous pollutants, but the 2021 IECC ensures that buildings are equipped for electrification. Electrification of our energy supply is better for public health because it removes the potential for Montanans to be exposed to the harmful pollutants from gas.

Sincerely

Charlene Woodcock
2504 Langohr Ave
Bozeman, MT 59715

We absolutely need you to adopt the 2021 International Energy Conservation Code immediately. Many of our buildings in Montana are older, like all the State and University owned buildings. They need retrofitting for lighting, HVAC system, roofs, windows, insulation, modern control systems, etc. I worked at MSU for 43 years most of it in Facilities Services so I know all the projects we dealt with, tried to get money and approval from the Legislature. Very little approved over the years. The updated code requires existing buildings to meet current energy efficiency standards for retrofits and repairs and make it mandatory with the new Codes for designers, architects, developers, builders, the Legislature, the Governor, etc. to do the job, save money over the long run and get into the modern world. This will benefit homeowners too, like myself instead of being stuck with developers and builders building on the cheap. This is a win-win solution for Montana businesses and homeowners!

Sincerely

PATRICIA SIMMONS
357 Pine Creek Drive
Bozeman, MT 59718-8628
Dear committee:

It's time to adopt the 2021 International Energy Conservation Code on a quick schedule. Energy efficiency saves Montanans money. About 30% of Montanans rent our homes, but renters usually have little to no say about the improvements to our homes. Energy-efficient standards ensure that renters can save money on their power bills.

I live in a cheaply built apartment. It apparently lacks adequate insulation since I spend November through March (at least) wearing a fleece jacket IN MY APARTMENT. (I live on a fixed income. I have only so much money to devote to heating.) And I spend summer roasting to death-unable to use much of my apartment. It was 80 degrees in my main living space this morning at 6:15 am despite my having opened windows at 9:30 in the evening in the hop that my apartment would cool down.

Clearly building codes need to be substantially improved and definitely need to take into account the fact that significant climate change has already taken place. We will have more summers like the summer we are enduring this year.

Thanks for helping us get on track to keep more money in our pockets.

Sincerely

Janet Childress
2461 Sunlight Circle
Helena, MT 59601-5855
Dear committee:

I am writing in support of the adoption of the 2021 International Energy Conservation Code (IECC). I am encouraged that the Montana Department of Labor and Industry has expressed interest in adopting the codes the year they are published. As more people move to Montana, it is necessary to adopt the 2021 IECC quickly so that new construction immediately starts benefitting working Montanans.

Sincerely

Mark Schulein
P.O. Box 805
Livingston, MT 59047-0805

Yes it is hot and dry in Montana, Conserving Energy is the least expensive method for reducing our carbon footprint. Climate change is here we need to take positive action. Bob Mackin, Billings Montana I am writing in support of the adoption of the 2021 International Energy Conservation Code (IECC). I am encouraged that the Montana Department of Labor and Industry has expressed interest in adopting the codes the year they are published. As more people move to Montana, it is necessary to adopt the 2021 IECC quickly so that new construction immediately starts benefitting working Montanans.

Sincerely

Robert Mackin
3653 Quimet Cir
Billings, MT 59106-1009
Dear committee:

As someone who cares about local Montana jobs, it's clear that one benefit of the 2021 International Energy Conservation Code is that the building sector will flourish. Adopting new building codes keeps the construction workforce competitive in the latest design strategies and building technologies. Failure to adopt these codes may result in an uncompetitive workforce when Montana workers fall behind national trends. Please help keep our workforce relevant and competitive and adopt these codes without delay.

Sincerely

Dylan Flather
1114 S 3rd St
Hamilton, MT 59840-2928

Dear committee:

Please adopt the 2021 International Energy Conservation Code without waiting. Many of our buildings in Montana are older and need to be upgraded. Retrofitting a building's lighting, HVAC system, or plumbing is expensive and takes a lot of time. The updated code will require existing buildings to meet current energy efficiency standards for any changes or repairs. And better yet, if a building is designed with energy-efficient codes, then homeowners can avoid those costly retrofits altogether.

Sincerely

Katherine Dayton
1214 East Curtiss Street
Bozeman, MT 59715-3864
Dear committee:

I am writing in support of the adoption of the 2021 International Energy Conservation Code (IECC). I am encouraged that the Montana Department of Labor and Industry has expressed interest in adopting the codes the year they are published. As more people move to Montana, it is necessary to adopt the 2021 IECC quickly so that new construction immediately starts benefitting working Montanans.

Sincerely

Heidi Anderson
PO Box 568
Gardiner, MT 59030-0568

-----Original Message-----
From: >
Sent: Monday, August 2, 2021 7:42 PM
To: DLI BSD Building Codes <buildingcodes@mt.gov>
Subject: [EXTERNAL] Public comment on Montana building codes

Dear committee:

I am writing in support of the adoption of the 2021 International Energy Conservation Code (IECC). I am encouraged that the Montana Department of Labor and Industry has expressed interest in adopting the codes the year they are published. As more people move to Montana, it is necessary to adopt the 2021 IECC quickly so that new construction immediately starts benefitting working Montanans.

Sincerely

Heidi Anderson
PO Box 568
Gardiner, MT 59030-0568

-----Original Message-----
From:
Sent: Monday, August 2, 2021 7:32 PM
To: DLI BSD Building Codes <buildingcodes@mt.gov>
Subject: [EXTERNAL] Comment on Montana building codes

Dear committee:

I’m writing to encourage you to adopt the 2021 International Energy Conservation Codes (IECC). Montana building structures last for decades, so it's important we are building to standards that lock in energy savings for everyone for the long term. The 2021 IECC increases the R-value for ceiling insulation from R-49 to R-60. Better insulation means energy customers will save money on our heating bills throughout the winter months, and our cooling bills for those of us lucky enough to have air conditioning.

Thanks for your time.

Sincerely

Jenna Fallaw
1309 S Montana Ave
Bozeman, MT 59715-5742
Dear committee:

Please adopt the 2021 International Energy Conservation Code without waiting. Many of our buildings in Montana are older and need to be upgraded. Retrofitting a building's lighting, HVAC system, or plumbing is expensive and takes a lot of time. The updated code will require existing buildings to meet current energy efficiency standards for any changes or repairs. And better yet, if a building is designed with energy-efficient codes, then homeowners can avoid those costly retrofits altogether.

Sincerely

Catriona Simms
910 Ronald Ave
Missoula, MT 59801

-----Original Message-----
From: jill davies
Sent: Monday, August 2, 2021 6:11 PM
To: DLI BSD Building Codes <buildingcodes@mt.gov>
Subject: [EXTERNAL] Montana building codes public comment

Dear committee:

I support immediate adoption of the 2021 International Energy Conservation Code (IECC). In the United States, 76% of electricity and 40% of all energy is used in buildings. Montanans' monthly electricity and gas bills are based on their use of electricity and gas, and up-to-date energy codes will lower the costs of our bills. Since lighting represents 20% of a home's energy expenses, the requirement for efficient lighting allows residents to save more money. This will save people like me money every month.

Sincerely

Jill Davies
329 McVey Rd
Victor, MT 59875-9444
Dear committee:

It's time to adopt the 2021 International Energy Conservation Code on a quick schedule. Energy efficiency saves Montanans money. About 30% of Montanans rent our homes, but renters usually have little to no say about the improvements to our homes. Energy-efficient standards ensure that renters can save money on their power bills.

Thanks for helping us get on track to keep more money in our pockets.

Sincerely

Karen Stears
311, Parkhill Drive
Billings, MT 59101

-----Original Message-----
From: mailagent@thesoftedge.com <mailagent@thesoftedge.com> On Behalf Of dolphin@communitynet.org
Sent: Monday, August 2, 2021 4:07 PM
To: DLI BSD Building Codes <buildingcodes@mt.gov>
Subject: [EXTERNAL] Montana building codes public comment

Dear committee:

As someone who cares about local Montana jobs, it's clear that one benefit of the 2021 International Energy Conservation Code is that the building sector will flourish. Adopting new building codes keeps the construction workforce competitive in the latest design strategies and building technologies. Failure to adopt these codes may result in an uncompetitive workforce when Montana workers fall behind national trends. Please help keep our workforce relevant and competitive and adopt these codes without delay.

Sincerely

Gerry Milliken
4230 E Comanche Drive
Cottonwood, AZ 86326-5991
Dear committee:

Please adopt the 2021 International Energy Conservation Code without waiting. Many of our buildings in Montana are older and need to be upgraded. Retrofitting a building's lighting, HVAC system, or plumbing is expensive and takes a lot of time. The updated code will require existing buildings to meet current energy efficiency standards for any changes or repairs. And better yet, if a building is designed with energy-efficient codes, then homeowners can avoid those costly retrofits altogether.

Sincerely

Madlyn Moellering
407 1/2 N California St
Missoula, MT 59801-1625

-----Original Message-----
From: >
Sent: Monday, August 2, 2021 3:58 PM
To: DLI BSD Building Codes <buildingcodes@mt.gov>
Subject: [EXTERNAL] Public comment on Montana building codes

Dear committee:

Please adopt the 2021 International Energy Conservation Code without waiting. Many of our buildings in Montana are older and need to be upgraded. Retrofitting a building's lighting, HVAC system, or plumbing is expensive and takes a lot of time. The updated code will require existing buildings to meet current energy efficiency standards for any changes or repairs. And better yet, if a building is designed with energy-efficient codes, then homeowners can avoid those costly retrofits altogether.

This, like numerous other issues (climate change, gun safety, immigration reform, prison reform, education reform, short-term lending regulation, healthcare reform, banking regulation, opioid regulation) remains a vexing problem primarily due to corporations' ability to curry favor with elected officials. The corrupting influence of money in our political system is undermining our democratic traditions and discouraging Americans from voting and/or running for office. This ominous development may well end our experiment in representative democracy unless we alter this decades-long trend. For the sake of the republic, we must amend the US Constitution to state that corporations are not people (and do not have constitutional rights) and money is not speech (and thus can be regulated by state and/or federal campaign finance laws). Short of accomplishing this, no other reform of significance will be achieved. The moneyed interests will turn any reform to their benefit, often at the expense of the nation as a whole.

Sincerely

James Klein
3501 Monterrey St
Corpus Christi, TX 78411-1709
Dear committee:

I support immediate adoption of the 2021 International Energy Conservation Code (IECC). In the United States, 76% of electricity and 40% of all energy is used in buildings. Montanans’ monthly electricity and gas bills are based on their use of electricity and gas, and up-to-date energy codes will lower the costs of our bills. Since lighting represents 20% of a home’s energy expenses, the requirement for efficient lighting allows residents to save more money. This will save people like me money every month.

Sincerely

Tarn Ream
1250 Harrison St
Missoula, MT 59802-3850

-----Original Message-----
From: >
Sent: Monday, August 2, 2021 3:39 PM
To: DLI BSD Building Codes <buildingcodes@mt.gov>
Subject: [EXTERNAL] Montana building codes public comment

Dear committee:

I am writing in support of the adoption of the 2021 International Energy Conservation Code (IECC). I am encouraged that the Montana Department of Labor and Industry has expressed interest in adopting the codes the year they are published. As more people move to Montana, it is necessary to adopt the 2021 IECC quickly so that new construction immediately starts benefitting working Montanans.

Sincerely

Mike O’Connell
P.O. Box 6368
Bozeman, MT 59771
Dear committee:

As someone who cares about local Montana jobs, it's clear that one benefit of the 2021 International Energy Conservation Code is that the building sector will flourish. Adopting new building codes keeps the construction workforce competitive in the latest design strategies and building technologies. Failure to adopt these codes may result in an uncompetitive workforce when Montana workers fall behind national trends. Please help keep our workforce relevant and competitive and adopt these codes without delay.

Sincerely

Jade Markus
4641 Brisbane Pl
Missoula, MT 59808

-----Original Message-----
From: >
Sent: Tuesday, August 3, 2021 3:24 PM
To: DLI BSD Building Codes <buildingcodes@mt.gov>
Subject: [EXTERNAL] Montana building codes comment

Dear committee:

It's time to adopt the 2021 International Energy Conservation Code on a quick schedule. Energy efficiency saves Montanans money. About 30% of Montanans rent our homes, but renters usually have little to no say about the improvements to our homes. Energy-efficient standards ensure that renters can save money on their power bills.

Thanks for helping us get on track to keep more money in our pockets.

Sincerely

Hannah Specht
1532 Van Buren St.
Missoula, MT 59802
Dear committee:

It's time to adopt the 2021 International Energy Conservation Code on a quick schedule. Energy efficiency saves Montanans money. About 30% of Montanans rent our homes, but renters usually have little to no say about the improvements to our homes. Energy-efficient standards ensure that renters can save money on their power bills.

Thanks for helping us get on track to keep more money in our pockets.

Sincerely

sara toubman
940 wilder ave
Helena, MT 59601-2535

-----Original Message-----
From: >
Sent: Tuesday, August 3, 2021 1:36 PM
To: DLI BSD Building Codes <buildingcodes@mt.gov>
Subject: [EXTERNAL] Public comment on Montana building codes

Dear committee:

As an architect I wholeheartedly support of the adoption of the 2021 International Energy Conservation Code (IECC). It is encouraging that the Montana Department of Labor and Industry has expressed interest in adopting the codes the year they are published. As more people move to Montana, it is necessary to adopt the 2021 IECC quickly so that new construction immediately starts benefitting working Montanans. Delayed approvals at the state or municipal level can create confusion and poor implementation. The code should be adopted in entirety without waivers.

Sincerely

Gordon Whirry
1912 4th Avenue North
Great Falls, MT 59401
Dear committee:

I support immediate adoption of the 2021 International Energy Conservation Code (IECC). In the United States, 76% of electricity and 40% of all energy is used in buildings. Montanans' monthly electricity and gas bills are based on their use of electricity and gas, and up-to-date energy codes will lower the costs of our bills. Since lighting represents 20% of a home's energy expenses, the requirement for efficient lighting allows residents to save more money. This will save people like me money every month.

Sincerely

Christine Carson
1854 S 8th St W
Missoula, MT 59801-3443

Dear committee:

I'm writing to encourage you to adopt the 2021 International Energy Conservation Codes (IECC). Montana building structures last for decades, so it's important we are building to standards that lock in energy savings for everyone for the long term. The 2021 IECC increases the R-value for ceiling insulation from R-49 to R-60. Better insulation means energy customers will save money on our heating bills throughout the winter months, and our cooling bills for those of us lucky enough to have air conditioning.

Thanks for your time.

Sincerely

Gail Souther
1120 Pine Street, Apt A
Hamilton, MT 59840-2341
Dear committee:

I support immediate adoption of the 2021 International Energy Conservation Code (IECC). In the United States, 76% of electricity and 40% of all energy is used in buildings. Montanans’ monthly electricity and gas bills are based on their use of electricity and gas, and up-to-date energy codes will lower the costs of our bills. Since lighting represents 20% of a home’s energy expenses, the requirement for efficient lighting allows residents to save more money. This will save people like me money every month.

Sincerely

Sarah Elliott
811 Power St
Helena, MT 59601

-----Original Message-----
From: >
Sent: Wednesday, August 4, 2021 3:08 PM
To: DLI BSD Building Codes <buildingcodes@mt.gov>
Subject: [EXTERNAL] Montana building codes public comment

Dear committee:

It’s time to adopt the 2021 International Energy Conservation Code on a quick schedule. Energy efficiency saves Montanans money. About 30% of Montanans rent our homes, but renters usually have little to no say about the improvements to our homes. Energy-efficient standards ensure that renters can save money on their power bills.

Thanks for helping us get on track to keep more money in our pockets.

Sincerely

Ruth Swenson
11 Willow
Helena, MT 59602
Dear committee:

I support immediate adoption of the 2021 International Energy Conservation Code (IECC). In the United States, 76% of electricity and 40% of all energy is used in buildings. Montanans' monthly electricity and gas bills are based on their use of electricity and gas, and up-to-date energy codes will lower the costs of our bills. Since lighting represents 20% of a home's energy expenses, the requirement for efficient lighting allows residents to save more money. This will save people like me money every month.

Sincerely

Peter Ropp
1000 council way
Missoula, MT 59808-5001

Dear committee:

I support immediate adoption of the 2021 International Energy Conservation Code (IECC). In the United States, 76% of electricity and 40% of all energy is used in buildings. Montanans' monthly electricity and gas bills are based on their use of electricity and gas, and up-to-date energy codes will lower the costs of our bills. Since lighting represents 20% of a home's energy expenses, the requirement for efficient lighting allows residents to save more money. This will save people like me money every month.

Sincerely

Russ Lawrence
600 S 5TH ST
Hamilton, MT 59840
Dear committee:

I am writing concerning the Montana building codes and support of the 2021 International Energy Conservation Code. I believe buildings should be required to be of high quality and energy efficient. I have lived in areas without such priorities and the quality of buildings suffer greatly not only affecting those that use the buildings but they soon fall to disrepair instead of being long lasting structures. Also, encouraging energy efficiency can reduce our energy consumption.

Sincerely

Candice Hartman
201A Bentley Park Loop
Missoula, MT 59801

Dear committee:

It's time to adopt the 2021 International Energy Conservation Code on a quick schedule. Energy efficiency saves Montanans money. About 30% of Montanans rent our homes, but renters usually have little to no say about the improvements to our homes. Energy-efficient standards ensure that renters can save money on their power bills.

Thanks for helping us get on track to keep more money in our pockets.

Sincerely

Dylan Flather
1114 South 3rd Street,
Hamilton, MT 59840
Dear committee:

I am writing in support of the adoption of the 2021 International Energy Conservation Code (IECC). I am encouraged that the Montana Department of Labor and Industry has expressed interest in adopting the codes the year they are published. As more people move to Montana, it is necessary to adopt the 2021 IECC quickly so that new construction immediately starts benefitting working Montanans.

Sincerely

Gail Souther
1120 Pine Street, Apt A
Hamilton, MT 59840-2341

Dear committee:

As someone who cares about local Montana jobs, it's clear that one benefit of the 2021 International Energy Conservation Code is that the building sector will flourish. Adopting new building codes keeps the construction workforce competitive in the latest design strategies and building technologies. Failure to adopt these codes may result in an uncompetitive workforce when Montana workers fall behind national trends. Please help keep our workforce relevant and competitive and adopt these codes without delay.

Sincerely

Borries Demeler
1907 Hollis Street
Missoula, MT 59801-6736
Dear committee:

It's time to adopt the 2021 International Energy Conservation Code on a quick schedule. Energy efficiency saves Montanans money. About 30% of Montanans rent our homes, but renters usually have little to no say about the improvements to our homes. Energy-efficient standards ensure that renters can save money on their power bills.

Thanks for helping us get on track to keep more money in our pockets.

Sincerely

Linda Semones
404 S Church Ave
Bozeman, MT 59715-4817

-----Original Message-----
From: >
Sent: Monday, August 16, 2021 10:10 AM
To: DLI BSD Building Codes <buildingcodes@mt.gov>
Subject: [EXTERNAL] Comment on Montana building codes

Dear committee:

I am writing in support of the adoption of the 2021 International Energy Conservation Code (IECC). It is encouraging that the Montana Department of Labor and Industry has expressed interest in quickly adopting the IECC. As Montana’s population increases it is necessary to quickly adopt the 2021 IECC in order that new construction immediately starts benefiting working Montanans.

Sincerely

Rick Whitman
1201 Wineglass Ct
Livingston, MT 59047-2412
Dear MT Dept. of Labor and Industry,

High Plains Architects urges MLDI to adopt the 2021 IECC energy code as the state standard as soon as practicable. High Plains has an extensive track record of successfully completing projects that exceed the energy code by 20-50%, and we’ve done so within conventional construction budgets. We know it’s possible to create high performance buildings.

This summer has provided us with abundant reminders as to why we need to do it; poor energy performance from our buildings are a significant contributing cause to the human-caused changes to our climate. We want to be joined by all architecture firms in making better performing buildings. Too often the short-term thinking that values lower construction costs over lower lifecycle costs put pressure on design teams to deliver solutions that they know are not in the best interests of either the owner or the climate. Architects and engineers need stronger energy codes.

While that’s an immediate step MLDI can take, we also need to be working with building departments statewide to figure out how to address poorly performing existing buildings. Whenever a property is sold is probably the best time to be examining its performance, and perhaps we need to work with legislators to create laws requiring energy performance in property disclosure as well as minimum energy performance.

Thank you for your time and consideration.

Sincerely,

ED GULICK, AIA, LEED AP BD+C
VICE PRESIDENT

2720 Minnesota Avenue
Billings, MT 59101
(Office) 406.896.0250
(Direct) 406.384.0147

www.highplainsarchitects.com [highplainsarchitects.com]
I’m submitting a public comment as a Montana citizen and design professional with 15 years of HVAC design, construction, and energy management experience.

I strongly encourage the state of Montana to adopt the following 2021 IECC Code Appendices:

1. Appendix CB: SOLAR-READY COMMERCIAL BUILDINGS
2. Appendix CC: ZERO-ENERGY COMMERCIAL BUILDINGS
3. Appendix RB: SOLAR-READY PROVISIONS - DETACHED ONE AND TWO FAMILY DWELLINGS AND TOWNHOUSES
4. Appendix RC: ZERO ENERGY RESIDENTIAL BUILDING PROVISIONS

This additional code sections allow clients to properly understand and consider future building requirements, as well as provide a blueprint for continuing to evolve building design and reduce energy use.

Even when “optional”, progressive codes drive value and innovation into real estate- some of our longest lasting and most visible capital assets.

Please adopt the code amendments.

Thanks,

Skander Spies, P.E.

(Licensed in WA)
Senior Engineer  |  Pronouns (he/him)
406.214.3509   |  847.644.5006

Follow me on LinkedIn [linkedin.com]

Together, building a thriving planet.
www.mckinstry.com
Dear committee:

I support immediate adoption of the 2021 International Energy Conservation Code (IECC). In the United States, 76% of electricity and 40% of all energy is used in buildings. Montanans' monthly electricity and gas bills are based on their use of electricity and gas, and up-to-date energy codes will lower the costs of our bills. Since lighting represents 20% of a home's energy expenses, the requirement for efficient lighting allows residents to save more money. This will save people like me money every month.

Cost of living is a particularly important topic right now, since housing costs are skyrocketing in cities across Montana. Updating the state's energy codes will allow people to save money on their energy bills and instead inject that money into their local economy. Particularly as Montana tries to bounce back from the COVID-19 pandemic, we should all be diverting our extra money into local businesses.

Sincerely

Elizabeth Forster
414 Madison St, APT A
Missoula, MT 59802

-----Original Message-----
From: >
Sent: Tuesday, August 10, 2021 9:34 AM
To: DLI BSD Building Codes <buildingcodes@mt.gov>
Subject: [EXTERNAL] Montana building codes comment

Dear committee:

Please adopt the 2021 International Energy Conservation Code without waiting. Many of our buildings in Montana are older and need to be upgraded. Retrofitting a building's lighting, HVAC system, or plumbing is expensive and takes a lot of time. The updated code will require existing buildings to meet current energy efficiency standards for any changes or repairs. And better yet, if a building is designed with energy-efficient codes, then homeowners can avoid those costly retrofits altogether.

Sincerely

Ava Holliday
735 N 5th St W
Missoula, MT 59802
Dear committee:

It’s time to adopt the 2021 International Energy Conservation Code on a quick schedule. Energy efficiency saves Montanans money. About 30% of Montanans rent our homes, but renters usually have little to no say about the improvements to our homes. Energy-efficient standards ensure that renters can save money on their power bills.

Thanks for helping us get on track to keep more money in our pockets.

Sincerely

Ava Holliday
735 N 5th St W
Missoula, MT 59802

Dear committee:

I am writing in support of the adoption of the 2021 International Energy Conservation Code (IECC). I am encouraged that the Montana Department of Labor and Industry has expressed interest in adopting the codes the year they are published. As more people move to Montana, it is necessary to adopt the 2021 IECC quickly so that new construction immediately starts benefitting working Montanans.

Sincerely

William Clarke
1330 Lower Lincoln Hills Dr
Missoula, MT 59802
Let's be leaders in energy conservation! So many opportunities to improve efficiency and sustainability. Build with a future focus. Thank you!

As someone who cares about local Montana jobs, it's clear that one benefit of the 2021 International Energy Conservation Code is that the building sector will flourish. Adopting new building codes keeps the construction workforce competitive in the latest design strategies and building technologies. Failure to adopt these codes may result in an uncompetitive workforce when Montana workers fall behind national trends. Please help keep our workforce relevant and competitive and adopt these codes without delay.

Sincerely

Elizabeth Wasson
723 N Henry Ave
Butte, MT 59701

-----Original Message-----
From:
Sent: Monday, August 30, 2021 5:29 PM
To: DLI BSD Building Codes <buildingcodes@mt.gov>
Subject: [EXTERNAL] Comment on Montana building codes

Dear committee:

It makes no sense to put up buildings that have to be fixed in the future.

I'm writing to encourage you to adopt the 2021 International Energy Conservation Codes (IECC). Montana building structures last for decades, so it's important we are building to standards that lock in energy savings for everyone for the long term. The 2021 IECC increases the R-value for ceiling insulation from R-49 to R-60. Better insulation means energy customers will save money on our heating bills throughout the winter months, and our cooling bills for those of us lucky enough to have air conditioning.

Thanks for your time.

Sincerely

ROGER KIRK
POB 1136
BOZEMAN, MT 59771
Dear committee:

I am writing in support of the adoption of the 2021 International Energy Conservation Code (IECC). I am encouraged that the Montana Department of Labor and Industry has expressed interest in adopting the codes the year they are published. As more people move to Montana, it is necessary to adopt the 2021 IECC quickly so that new construction immediately starts benefitting working Montanans.

Sincerely

Wayne Tomicich
PO Box 644, 606 South Adams Ave.
Red Lodge, MT 59068-0644

Dear committee:

I'm writing to encourage you to adopt the 2021 International Energy Conservation Codes (IECC). Montana building structures last for decades, so it's important we are building to standards that lock in energy savings for everyone for the long term. The 2021 IECC increases the R-value for ceiling insulation from R-49 to R-60. Better insulation means energy customers will save money on our heating bills throughout the winter months, and our cooling bills for those of us lucky enough to have air conditioning.

Thanks for your time.

Sincerely

Ruth Swenson
11 Willow
Helena, MT 59602
Dear committee:

I am a young person in Montana writing in support of the adoption of the 2021 International Energy Conservation Code (IECC).

I am in a state of shock everyday. I am wracked with anxiety everyday. I struggle to live in this state everyday. We must do all that we can to address climate crisis and prepare our communities for a environmentally changing future. This includes regulating buildings— their insulation, energy efficiency, HVAC -- to ensure their longevity and safety.

I am encouraged that the Montana Department of Labor and Industry has expressed interest in adopting the codes the year they are published. As more people move to Montana, it is necessary to adopt the 2021 IECC quickly so that new construction immediately starts benefitting working Montanans.

Sincerely

Isabel Shaida
621 N. Bozeman Ave, Apt, Suite, Bldg. (optional) Bozeman, MT 59715

Dear committee:

I’m writing to encourage you to adopt the 2021 International Energy Conservation Codes (IECC). Montana building structures last for decades, so it’s important we are building to standards that lock in energy savings for everyone for the long term. The 2021 IECC increases the R-value for ceiling insulation from R-49 to R-60. Better insulation means energy customers will save money on our heating bills throughout the winter months, and our cooling bills for those of us lucky enough to have air conditioning.

Thanks for your time.

Sincerely

Dylan Flather
1114 S 3rd St,
Hamilton, MT 59840
Dear committee:

As a Montana resident who knows the importance to our economy of ample good paying jobs for Montanans, a vital benefit of the 2021 International Energy Conservation Code (IECC) is providing opportunities to promote a thriving building sector.

The IECC building codes will ensure a competitive construction workforce that uses the latest design strategies and building technologies. Without these innovative codes, Montana's construction companies and workforce will become noncompetitive and will fall behind national trends. Adopting the IECC codes will keep Montana's building industry and workforce competitive.

Sincerely

Patti Steinmuller
952 Knolls Drive
Bozeman, MT 59715

-----Original Message-----
From: >
Sent: Tuesday, August 31, 2021 6:26 AM
To: DLI BSD Building Codes <buildingcodes@mt.gov>
Subject: [EXTERNAL] Comment on Montana building codes

Dear committee:

Please adopt the 2021 International Energy Conservation Code without waiting. Many of our buildings in Montana are older and need to be upgraded. Retrofitting a building's lighting, HVAC system, or plumbing is expensive and takes a lot of time. The updated code will require existing buildings to meet current energy efficiency standards for any changes or repairs. And better yet, if a building is designed with energy-efficient codes, then homeowners can avoid those costly retrofits altogether.

Sincerely

Gary Matson
PO Box 308
Milltown, MT 59851
-----Original Message-----
From:
Sent: Tuesday, August 31, 2021 7:17 AM
To: DLI BSD Building Codes <buildingcodes@mt.gov>
Subject: [EXTERNAL] Comment on Montana building codes

Dear committee:

Comment on Montana Building Codes

To whomever it may concern,

I support the consideration in emission targets for co2 in all new building codes. Therefore natural gas hook-ups must be fazed out and codes adapted to encourage all electricity heating, cooling, stoves and water heaters. Electricity to be supplied by renewable sources such as wind, solar and hydro.

Sincerely,

David D Jones

Sincerely

David JONES
43 Ricketts Rd
Hamilton, MT 59840-9324

-----Original Message-----
From: >
Sent: Tuesday, August 31, 2021 8:07 AM
To: DLI BSD Building Codes <buildingcodes@mt.gov>
Subject: [EXTERNAL] Public comment on Montana building codes

Dear committee:

I support immediate adoption of the 2021 International Energy Conservation Code (IECC). In the United States, 76% of electricity and 40% of all energy is used in buildings. Montanans' monthly electricity and gas bills are based on their use of electricity and gas, and up-to-date energy codes will lower the costs of our bills. Since lighting represents 20% of a home's energy expenses, the requirement for efficient lighting allows residents to save more money. This will save people like me money every month.

Sincerely

Roger Sullivan
345 1st Ave. E.
Kalispell, MT 59901-4935
Good morning,

On behalf of MREA and our members, I am writing in support of the adoption of the 2021 IECC and, specifically, adoption of Appendix CB and Appendix RB which address solar-ready design.

Adopting Appendices CB and RB of the 2021 IECC does not enforce the provisions within, but rather allows local authority having jurisdictions to adopt and enforce them if they so choose. The State of Montana did the same when adopting the 2018 IECC and the associated solar-ready Appendix RA. The language in the 2021 IECC Appendices CB and RB is largely the same as the already-adopted 2018 IECC Appendix RA, with additional provisions for energy storage and roof shading.

Distributed solar and storage energy systems are being installed by Montana homes and businesses around the state with increasing frequency, demonstrating the support that these technologies have among Montanans. Appendices CB and RB provide tools for local jurisdictions to support the energy goals of Montanans by ensuring commercial and residential buildings contemplate solar and storage installation during the design phase. Doing so will streamline design and installation of solar and/or storage systems, support the energy goals of Montana business owners and families, and can save Montanans money.

We encourage the Bureau to adopt the 2021 IECC with Appendices CB and RB.

Sincerely,

Andrew
Dear committee:

One benefit of the 2021 International Energy Conservation Code is that the updated energy codes improve the health and safety of Montanans, which is why I’m writing to ask you to adopt these codes right away. Gas burned in furnaces, water heaters, and cooking emits dangerous pollutants, but the 2021 IECC ensures that buildings are equipped for electrification. Electrification of our energy supply is better for public health because it removes the potential for Montanans to be exposed to the harmful pollutants from gas. The Montana Dept. of Labor should adopt the 2021 International Energy Conservation Code (IECC) to make sure new buildings in Montana are high quality and energy efficient. It's important that as a society we do everything possible to turn around global warming - this is a good step in that direction.

Sincerely

Susan Kronenberger
422 S DAVIS ST
Helena, MT 59601-5707

-----Original Message-----
From: Susan Kronenberger
Sent: Tuesday, August 31, 2021 1:44 PM
To: DLI BSD Building Codes <buildingcodes@mt.gov>
Subject: [EXTERNAL] Comment on Montana building codes

Dear committee:

One benefit of the 2021 International Energy Conservation Code is that the updated energy codes improve the health and safety of Montanans, which is why I’m writing to ask you to adopt these codes right away. Gas burned in furnaces, water heaters, and cooking emits dangerous pollutants, but the 2021 IECC ensures that buildings are equipped for electrification. Electrification of our energy supply is better for public health because it removes the potential for Montanans to be exposed to the harmful pollutants from gas. The Montana Dept. of Labor should adopt the 2021 International Energy Conservation Code (IECC) to make sure new buildings in Montana are high quality and energy efficient. It's important that as a society we do everything possible to turn around global warming - this is a good step in that direction.

Sincerely

Susan Kronenberger
422 S DAVIS ST
Helena, MT 59601-5707

-----Original Message-----
From: Leslie Stoltz
Sent: Tuesday, August 31, 2021 2:31 PM
To: DLI BSD Building Codes <buildingcodes@mt.gov>
Subject: [EXTERNAL] Comment on Montana building codes

Dear committee:

I’m writing to encourage you to adopt the 2021 International Energy Conservation Codes (IECC). Montana building structures last for decades, so it's important we are building to standards that lock in energy savings for everyone for the long term. The 2021 IECC increases the R-value for ceiling insulation from R-49 to R-60. Better insulation means energy customers will save money on our heating bills throughout the winter months, and our cooling bills for those of us lucky enough to have air conditioning.

Thanks for your time.

Sincerely

Leslie Stoltz
PO B 866
West Yellowstone, MT 59758
Dear committee:

I am writing in support of the adoption of the 2021 International Energy Conservation Code (IECC). I am encouraged that the Montana Department of Labor and Industry has expressed interest in adopting the codes the year they are published. As more people move to Montana, it is necessary to adopt the 2021 IECC quickly so that new construction immediately starts benefitting working Montanans.

Sincerely

Bruce Bender
365 Kensington Ave
Missoula, MT 59801-5725
August 31, 2021

Eric Copeland
Bureau Chief
Montana Department of Labor & Industry
Building and Commercial Measurements Bureau
1315 Lockey Ave
Helena, MT 59601

Dear Mr. Copeland:

The Montana Environmental Information Center strongly supports the adoption of the 2021 International Energy Conservation Code (IECC) by the Montana Department of Labor & Industry (MDLI). Adoption of these codes will benefit average Montanans’ pocketbooks, as well as their health, safety, and welfare.

The IECC provides a model for energy codes designed with energy efficiency in mind. The energy codes include various requirements such as improved insulation, energy-efficient windows, and better systems to heat or cool a home or business, all of which will benefit Montanans.

The 2021 IECC offers many improvements designed to bolster the energy code. These improvements include: increasing the lighting efficiency; increasing the R-value for ceilings, and requiring measures that ensure that buildings are ready to switch to electricity for water and space heating.

As people move to Montana in droves, housing demand has increased aggressively and housing affordability seems to be a thing of the past. Builders are eager to capitalize on this demand and construct houses as quickly — and cheaply — as possible. Now, more than ever, Montana must have up-to-date building codes to ensure housing is affordable in the long term, reduce carbon emissions, and help Montanans to save money on their utility bills.

Buildings account for almost one-third of global carbon dioxide emissions. In the U.S., 43% of total energy use is for heating and cooling buildings, and residential and commercial buildings are responsible for about 13% of greenhouse gas emissions. The 2021 IECC intends to reduce

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the number of greenhouse gases produced annually from buildings, and, in turn, will allow Montanans to save money.

Energy-efficient homes and buildings allow owners to save on operating costs. Montanans’ monthly electricity and gas bills are based on their use of electricity and gas. The 2021 IECC requires high-efficiency lighting that requires less energy and can lower utility bills. For example, 20% of a home’s energy expenses derive from lighting\(^3\), and the IECC aims to reduce those expenses. By providing more natural light, better ventilation, and better temperature control in homes and buildings, owners can save money on costly utility bills.

The energy codes also benefit renters in Montana. About 30% of Montanans rent their homes\(^4\) and have little input on improvement to their rented spaces. Therefore, buildings that are built to higher energy efficiency standards lock in savings for everyone. The 2021 IECC increases the thermal resistance of insulation, which will retain more heat in the winter and lower costly heating bills. Both things will benefit average Montanans regardless of whether they rent or own a structure.

With up-to-date energy codes, future homeowners and first-time homebuyers will be able to confidently purchase a home in Montana knowing that their home meets current standards. Renters will also benefit from higher-quality housing and reduced utility bills. All Montanans can benefit from more energy-efficient buildings.

That is why we encourage MDLI to adopt the 2021 IECC. Some of the solutions provided in the 2021 IECC include, but are not limited to:

**Lighting:**
- Increases the installed lighting efficacy requirements from 60 lumens/watt to 65 lumens/watt.
- Requires lighting controls to dim or automatically turn lights off.

**Electrification:**
- Requires measures that ensure that buildings are ready to switch to electricity rather than more expensive fuels for water and space heating.

**Electric vehicles:**
- Requires both residential and commercial buildings to be ready to charge electric vehicles as the automobile industry continues to adopt electric vehicles throughout the 2020s.

**Residential water heating and water use:**
- Requires residential buildings to have a more compact water heating system.
  - Home designers will be encouraged to present plans that place water heaters and hot water outlets (i.e., showers and faucets) closer together. This strategy will shorten the lengths of pipes in which hot water sits and cools off.

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\(^4\) Quick Facts: Montana, United States Census Bureau, https://www.census.gov/quickfacts/MT
Energy rating index (ERI):

- The ERI is a voluntary compliance system that gives builders the option to meet emission reduction targets by meeting a targeted ERI score.
  - The scores range from 0-100, with 0 being a net-zero-energy home.
- The 2021 IECC proposal increases energy rating index values.

The 2021 IECC also provides a zero-energy buildings appendix. The zero-energy buildings appendix is an optional appendix for local code adoption that will result in residential buildings producing as much energy as they consume over the course of a year.

We would like to thank MDLI for accepting comments regarding the 2021 IECC. The 2021 IECC presents an opportunity for MDLI to ensure that builders and architects across Montana have a guide for energy-efficient practices that will benefit all Montanans.

Sincerely,

Conor Ploeger
Clean Energy Analyst
Montana Environmental Information Center
August 31, 2021

Todd Younkin, Administrator  
Business Standards Division  
Department of Labor and Industry  
301 South Park  
P.O. Box 200513  
Helena MT 59620-0513

Dear Mr. Younkin,

On behalf of the Energy Bureau at the Department of Environmental Quality (DEQ), I submit this letter in support of the proposed adoption of the 2021 International Energy Conservation Code, with appendices, for residential and commercial construction.

Additionally, we encourage adoption of several appendices that allow certified local jurisdictions to adopt voluntary stretch code options. To be clear, we are only advocating to allow local jurisdictions to establish voluntary—not binding—stretch codes. Enabling local jurisdictions to adopt the codes in these appendices encourages implementation of the same standards, helping to ensure consistency across those jurisdictions that choose to implement optional stretch code.

Specifically, we encourage allowing certified local jurisdictions to adopt the following non-mandatory appendices:

- **Appendix RC Zero Energy Residential Building Provisions (not mandatory)** – provides requirements for residential buildings intended to result in net zero energy consumption over the course of a year.

- **Appendix CC Zero Energy Commercial Building Provisions (not mandatory)** – provides a model for design of renewable energy systems of adequate capacity to achieve net zero energy consumption over the course of a year.

- **Appendix RB Solar-Ready Provisions – Detached one- and two-family Dwellings and Townhouses (not mandatory)** – designates space requirements for installing solar systems, providing pathways for connections, and requiring adequate structural capacity of roof systems to support the solar structure.

- **Appendix CB Solar-Ready Zone – Commercial (not mandatory)** – encourages the installation of renewable energy systems by preparing buildings for the future installation of solar energy equipment, piping, and wiring.
Adoption and implementation of updated energy code provides for a more efficient and resilient building stock now and into the future. It is important to capture utility savings at the time of initial construction as it is expensive and sometimes difficult to renovate buildings to achieve savings later.

Thank you for the opportunity to comment.

Sincerely,

Dan Lloyd, Chief
Energy Bureau
Montana Department of Environmental Quality