

ORDINANCE NO. __

An Ordinance to Amend the Gillette City Code, to Adopt and Amend the 2015 Editions of the International Building Code, the International Residential Code, the International Plumbing Code, the International Mechanical Code, the International Fuel Gas Code, the International Fire Code, the International Existing Building Code and Repeal Section 5-I-11 *Adoption of Construction Design Requirements For New Healthcare Facilities and Healthcare Facility Alterations and Additions*

BE IT ORDAINED BY THE GOVERNING BODY OF THE CITY OF GILLETTE, WYOMING:

SECTION ONE. Section 5-I-2 A. of the Gillette City Code is amended to read as follows:

§ 5-I-2. Adoption of International Building Code.

A. There is hereby adopted by reference that certain document known as the International Building Code, 2015 Edition, including Appendix C and J, as copyrighted by the International Code Council. Said document is hereby adopted as the Building Code for the incorporated areas of the City of Gillette providing for the regulation and the erection, construction, enlargement, alteration, repair, moving, demolition, conversion, occupancy, of all buildings and structures within this city and each and all such regulations, provisions, penalties, conditions and terms of the International Building Code, 2015 Edition, including Appendix C and J, and the International Code Council A117.1-2009 ANSI National Standard, Accessible and Useable Buildings and Facilities, are hereby referred to, adopted, and made a part hereof as though set forth herein, excepting such portions as are hereinafter deleted, modified or amended. (Ord. 3312, 4-19-2004; Ord. 3415, 4-17-2006; Ord. 3521, 11-19-2007; Ord. 3691, 9-7-2010; Ord. 3771, 8-20-2012)

SECTION TWO. Section 5-I-2 B (5) and (6) of the Gillette City Code are amended to read as follows:

(5) Sections 305.2, 308.6, 308.6.1 of the International Building Code are amended as follows:

Child Daycare shall be modified in accordance with the Wyoming State Child Care Licensing Rules. A complete guide of these rules and requirements can be viewed on the Wyoming Department of Family Services website at: <http://dfswapps.state.wy.us/> (Ord. 3691, 9-7-2010; Ord. 3771, 8-20-2012)

(6) Chapter 13 of the International Building Code is amended to read as follows:

Commercial Buildings

A Comcheck compliance report using the 2012 Edition of the International Energy Conservation Code (IECC) or ASHRAE Standard 90.1.2013 shall be submitted with the proposed building plans at the time of application for review and comment. Only the building envelope calculations are required.

Exception: IBC Occupancies S-1, S-2, F-1, F-2, & U are exempt from the above requirement.

“Comcheck” software may be obtained at no cost on the internet at:

<http://www.energycodes.gov/comcheck>

(Ord. 3630, 6-15-2009 effective 7-1-2009; Ord. 3691, 9-7-2010; Ord. 3771, 8-20-2012)

SECTION THREE. Section 5-I-3 A. of the Gillette City Code is amended to read as follows:

§5-I-3. Adoption of International Residential Code.

A. There is hereby adopted by reference that certain Document known as the International Residential Code, 2015 Edition, including Appendix A, B, C, D, and E, as copyrighted by the International Code Council. Said document is hereby adopted as the Building Code for the incorporated areas of City of Gillette providing for the regulation of the erection, construction, enlargement, alteration, repair, moving, demolition, conversion, occupancy, use, height and area of all building and structures within this city and each and all such regulations, provisions, penalties, conditions and term of the International Residential Code, 2015 Edition, including Appendix A, B, C, , E and N are hereby referred to, adopted, and made a part hereof as thoughtfully set forth herein, excepting such portions as are hereinafter deleted, modified or amended. (Ord. 3312, 4-19-2004; Ord. 3415, 4-17-2006; Ord. 3521, 11-19-2007 ;Ord. 3691, 9-7-2010; Ord. 3771, 8-20-2012)

SECTION FOUR. Section 5-I-3 B (4), (5), and (6) of the Gillette City Code are amended to read as follows:

(4) Table R301.2 (1) of the International Residential Code is amended to read as follows:

TABLE R301.2 (1)
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

Ground Snow Load		25 psf
Minimum Roof Snow Load for Roofs with = > 1:12 Pitch or greater 4.76 Degrees	Load reductions shall be <u>prohibited</u> .	30 psf See Footnote #1.
Minimum Roof Snow Load for Roofs with less than 1:12 Pitch 4.76 Degrees	Load reductions shall be <u>prohibited</u> .	35 psf See Footnote #2.
Wind Loads	All Buildings & Structures	Ultimate Design Wind Speed 115 mph Nominal Wind Speed 90 mph
100-Year, 1 Hour Rainfall (inches)	Source: IPC Figure 1106.1	2.5
Seismic Design Category		B minimum

SUBJECT TO DAMAGE FROM:		
	Weathering	Severe
	Frost Line Depth	42 inches
	Termite	Slight to moderate
	Decay	None to slight
Winter Design Temp	Source: IPC Table D-101	-8⁰ F
Ice Shield Underlayment Required	Source: IBC Section 1507.2.8.2, IRC Sections R905.2.7.1, R905.4.3.1, R905.5.3.1, R905.6.3.1, R905.7.3.1, R905.8.3.1,	Yes
Flood Hazard	Source: IRC Table R-301.2(1) Note - G	10/15/90
Air Freezing Index	Source: IRC Table R-403.3(2)	2500
Mean Annual Temp	Source: NOAA as referenced By the IBC.	45⁰ F
Heating Degree Days (HDD)	Climate Zone-6B.	7995
Structural Concrete Minimum 28 Day Compressive Strength		4,000 PSI

- 1) The roof snow load shall be 30 pounds per square foot, or as determined per ASCE 7-10 as referenced by the 2015 Edition of the International Building Code based upon ground snow load (p_g) of 25 psf; **whichever is greater.** In

either case the effects of unbalanced snow, drifting, sliding snow, and ponding shall be considered where applicable.

- 2) The roof snow load shall be 35 pounds per square foot, or as determined per ASCE 7-10 as referenced by the 2015 Edition of the International Building Code based upon ground snow load (p_g) of 25 psf; **whichever is greater.** In either case the effects of unbalanced snow, drifting, sliding snow, and ponding shall be considered where applicable.

(Ord. 3691, 9-7-2010; Ord. 3771, 8-20-2012; Ord. 3812, 1-7-2014)

(5) Section R302.1 *Exterior Walls* of the International Residential Code is amended to read as follows:

R302.1 Exterior Walls. Construction, projections, openings and penetrations of exterior walls of dwellings and accessory buildings shall comply with Table R302.1(1). (Ord. 3771, 8-20-2012)

Exceptions:

1. Walls, projections, openings or penetrations in walls perpendicular to the line used to determine the *fire separation distance*.
2. Walls of *dwellings* and *accessory structures* located on the same *lot*.
3. Detached tool sheds and storage sheds, playhouses and similar structures exempted from permits are not required to provide wall protection based on location on the *lot*. Projections beyond the *exterior wall* shall not extend over the *lot line*.
4. Detached garages accessory to a *dwelling* located within 2 feet (610 mm) of a *lot line* are permitted to have roof eave projections not exceeding 4 inches (102 mm).
5. Foundation vents installed in compliance with this code are permitted.

(6) Table R302.1(2), of the International Residential Code, is repealed.

SECTION FOUR. Section 5-I-3 B (16) of the Gillette City Code is repealed. Section 5-I-3 B (8), through (15) of the Gillette City Code are renumbered to 5-I-3 B (9), through (16)

SECTION FIVE. Section 5-I-3 B (8), of the Gillette City Code is amended to reads as follows:

(8) R-302.13 of the International Residential Code is repealed.

SECTION SIX. 5-I-3 B (9) through (17) of the Gillette City Code are amended to read as follows:

(9) Section R309.5 of the International Residential Code is Repealed. (Ord. 3771, 8-20-2012)

(10) Sections **R310.2.3.2 & R310.3.2.1** *Drainage*, of the International Residential Code is amended to read as follows:

R310.2.3.2 Drainage. Window wells shall be designed for proper drainage by connecting to the building's foundation drainage system required by Section R405.1 or by an approved alternative method. (Ord. 3771, 8-20-2012)

R310.3.2.1 Drainage. Bulkhead enclosures shall be designed for proper drainage by connecting to the building's foundation drainage system required by Section R405.1 or by an *approved* alternative method.

(11) R313.2 of the International Residential Code is repealed. (Ord. 3691, 9-7-2010; Ord. 3771, 8-20-2012)

(12) Section R313.1.1 & R313.2.1, of the International Residential Code is amended to read as follows:

R313.1.1 & **R313.2.1** When provided automatic residential fire sprinkler systems for buildings covered under the International Residential Code shall be designed and installed in accordance with IRC Section P2904, or NFPA 13D. (Ord. 3771, 8-20-2012)

(13) Section R403.1.1 *Footings* of the International Residential Code is enacted to read as follows:

R403.1.1 Footings. Minimum steel reinforcement for typical spread footings shall be 2 (two) #4 rebar continuous. (Ord. 3555, 5-119-08; Ord. 3691, 9-7-2010; Ord. 3771, 8-20-2012)

(14) Section R403.1.4.1 *Frost protection Exception 1* of the International Residential Code is amended to read as follows:

1. Freestanding accessory structures with an area of 1000 square feet (37m²) or less and an eave height of 14 feet (4267.2 mm) or less shall not be required to be protected. (Ord. 3555, 5-19-08 ; Ord. 3691, 9-7-2010; Ord. 3771, 8-20-2012)

(15) Section R404.1.3.2 *Foundation Walls* of the International Residential Code is enacted to read as follows:

R404.1.3.2 Foundation Walls. Minimum steel reinforcement of typical foundation walls shall be #4 rebar, 2' on center, horizontal and vertical. (Ord. 3555, 5-19-00; Ord. 3691, 9-7-2010; Ord. 3771, 8-20-2012)

(16) Section R405.1 *Concrete or masonry foundations*, of the International Residential Code is amended to read as follows:

R405.1 Concrete or masonry foundations. Drains shall be provided around all concrete or masonry foundations that retain earth and enclose interior spaces located below grade. Drainage tiles, gravel or crushed stone drains, perforated pipe or other approved systems or materials shall be installed at or below the area to be protected and shall discharge by gravity or mechanical means into an approved drainage system. Gravel or crushed stone drains shall extend at least 1 foot (305 mm) beyond the outside edge of the footing and 6 inches (152 mm) above the top of the footing and be covered with an approved filter membrane material. The top of open joints of drain tiles shall be protected with strips of building paper. Except where otherwise recommended by the drain manufacturer, perforated drains shall be surrounded with an approved filter membrane or the filter membrane shall cover the washed gravel or crushed rock covering the drain. Drainage tiles or perforated pipe shall be placed on a minimum of 2 inches (51 mm) of washed gravel or crushed rock at least one sieve size larger than the tile joint opening or perforation and covered with not less than 6 inches (152 mm) of the same material. (Ord. 3662, 2-1-2010; Ord. 3691, 9-7-2010; Ord. 3771, 8-20-2012)

(17) Chapter 11 of the International Residential Code is amended to read as follows:

***Residential Energy Efficiency Requirements for IRC Housing
Climate Zone-6B. Heating Degree Days (HDD) 7995***

Note: Insulation R-Values are pre-calculated for insulation only and already assume credible R-values for other building materials. I.e. you can not add R-Value for sheetrock, OSB, vinyl siding, block, concrete, house wrap, etc...

- ❖ FRAMED WALLS: R-19 CAVITY OR R-13 CAVITY + R-5 INSULATING SHEATHING.
- ❖ CEILINGS: R-49¹
- ❖ BASEMENT WALLS: R-13 CAVITY OR R-10 CONTINUOUS. NOTE: THIS APPLIES TO FINISHED AND UNFINISHED BASEMENTS.
- ❖ FLOORS: R-30^{2,3,4}
- ❖ CRAWL SPACE WALLS: R-13 CAVITY OR R-10 CONTINUOUS.
- ❖ WINDOW MAXIMUM ALLOWABLE U-FACTOR: 0.32⁴
- ❖ DOOR MAXIMUM ALLOWABLE U-FACTOR: 0.35⁴

FOOTNOTES:

- 1) Or insulation sufficient to fill the framing cavity, R-13 minimum.
Intent: To allow for the use of hand cut rafters for cathedral ceilings & shed roofs that will not accommodate R-49*
- 2) Or insulation sufficient to fill the framing cavity, R-19 minimum.
Intent: To allow for the use of 2 X 6 floor joists that will not accommodate R-30.*
- 3) Floor insulation may be deleted when the floor is over a conditioned space.*
- 4) Required as modified by RES-check option.*

(Ord. 3691, 9-7-2010)

Additional Requirements:

- 1) A permanent certificate shall be posted on or in the electrical distribution panel. The certificate shall be completed by the builder or design professional and shall list all R-values of insulation for walls, ceilings/roofs, foundation

walls, floor(s) over outside air, crawl space walls and or floors, ducts outside conditioned space(s), and U-factors of all doors & windows. The certificate shall list the type, size and efficiency of heating and cooling equipment. An additional copy shall be provided to the building inspection division prior to the final inspection. The “Residential Energy Efficiency Certificate” shall be provided by The City of Gillette Building Inspection Division.

- 2) The thickness of blown in or sprayed roof/ceiling insulation (fiberglass or cellulose) shall be written in inches on markers that are installed at least one for every 300 ft² throughout the attic space. The markers shall be affixed to the trusses or joists and marked with the minimum initial installed thickness with numbers a minimum of 1 inch high. Each marker shall face the attic access opening.
- 3) HVAC supply and return ducts located in any unconditioned space shall be insulated to a minimum R-8.
- 4) The following shall be caulked, gasketed, weatherstripped or otherwise sealed with an air barrier material, suitable film or solid material.
 - 1) All joints, seams and penetrations.
 - 2) Windows, doors and skylights.
 - 3) Openings between window and door assemblies and their respective jambs and framing.
 - 4) Utility penetrations.
 - 5) Dropped ceilings or chases adjacent to the thermal envelope.
 - 6) Knee walls.
 - 7) Walls and ceilings separating the garage from conditioned spaces.
 - 8) Behind tubs and showers on exterior walls.
 - 9) Common walls between dwelling units.
 - 10) Other sources of infiltration.
 - 11) Joints of duct systems shall be made substantially airtight in accordance with Section M1601.4.1
- 5) All building plans (including master plans) shall clearly indicate all R-values of insulation for walls, ceilings/roofs, foundation walls, floor(s) over outside air, crawl space walls and or floors, ducts outside conditioned space(s), and U-factors of all doors & windows. The plans shall list the type, size and efficiency of heating, cooling and service water heating equipment.

- 6) Heating and cooling equipment shall be sized in accordance with ACCA Manual S based on building loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies. (Ord. 3630, 6-15-2009 effective 7-1-2009; Ord. 3662, 2-1-2010; Ord. 3771, 8-20-2012)

SECTION SEVEN. 5-I-3 B (20) and (21) of the Gillette City Code are amended to read as follows:

(20) Section P2906.4 *Water Service Pipe* of the International Residential Code is enacted to read as follows:

P2906.4 Water Service Pipe. Water piping from the curb stop or meter pit to inside of a building meter or shut-off value location shall be type K copper or PE 200 Psi clear core or PE # 3408 160 psi. All joints or connections in PE piping shall be brass with minimum 2 stainless steel clamps at each side of the joint or connection. Stainless steel clamps shall be installed so that they are opposing each other or other approved connection. Interior water meters 1 inch or less in size shall have a clear space of 2 feet wide from the center of the meter and 3 feet in front of the meter housing on new construction. The measurement from the center of the meter shall be equal on both sides of the meter. (Ord. 3691, 9-7-2010; Ord. 3771, 8-20-2012)

(21) Section M1411.8 of the International Residential Code is repealed. (Ord. 3771, 8-20-2012)

SECTION EIGHT. 5-I-4 A of the Gillette City Code are amended to read as follows:

A. There is hereby adopted by reference the International Plumbing Code 2015 Edition, and Appendices B, D, and E, as copyrighted by the International Code Council. Said document is hereby adopted as the plumbing code for the City of Gillette, for regulating the installation, maintenance, and repair of plumbing, drainage systems, water systems, and each and all such regulations, provisions, penalties, conditions and terms of the International Plumbing Code, 2015 Edition and Appendices B, D, and E, thereto are hereby referred to, adopted and made a

part hereof as though fully set forth herein, excepting such portions as are hereinafter deleted, modified, or amended. (Ord. 3312, 4-19-2004; Ord. 3415, 4-17-2006; Ord. 3521, 11-19-2007 ; Ord. 3691, 9-7-2010; Ord. 3771, 8-20-2012)

SECTION NINE. Section 5-I-5 A of the Gillette City Code is amended to read as follows:

A. There is hereby adopted by referenced, that certain document known as the International Mechanical Code 2015 Edition as copyrighted by the International Code Council, Inc. Said document is hereby adopted as the International Mechanical Code for the incorporated areas of the City of Gillette providing for the regulating, installation and maintenance fuel gas piping systems, fuel gas utilization equipment and related accessories. And each and all such regulations, provisions, conditions and terms of the International Mechanical Code are hereby referred to, adopted and made a part hereof as though fully set forth herein, excepting such portions as are hereinafter deleted, modified or amended. (Ord. 3312, 4-19-2004 ; Ord. 3415, 4-17-2006; Ord. 3521, 11-19-2007; Ord. 3691, 9-7-2010; Ord. 3771, 8-20-2012)

SECTION TEN. Section 5-I-7 A of the Gillette City Code is amended to read as follows:

A. There is hereby adopted by reference, that certain document known as the International Fuel Gas Code 2015 Edition and Appendix A, B, C and D, thereof as copyrighted by the International Code Council, Inc. Said document is hereby adopted as the International Fuel Gas Code for the incorporated areas of the City of Gillette providing for the regulating, installation and maintenance fuel gas piping systems, fuel gas utilization equipment and related accessories. And each and all such regulations, provisions, conditions and terms of the International Fuel Gas Code and Appendix A, B, C and D, are hereby referred to, adopted and made a part hereof as though fully set forth herein, excepting such portions as are hereinafter deleted, modified or amended. (Ord. 3312, 4-19-2004; Ord. 3415, 4-17-2006; Ord. 3521, 11-19-2007; Ord. 3691, 9-7-2010; Ord. 3771, 8-20-2012)

SECTION ELEVEN. Section 5-I-8 A of the Gillette City Code is amended to read as follows:

A. There is hereby adopted by reference that certain Document known as the International Fire Code, 2015 Edition, including Appendices B, C, D, E, F, and G as copyrighted by the International Code Council. Said document is hereby adopted as the Fire Code for the incorporated areas of City of Gillette providing for the regulation of the erection, construction, enlargement, alteration, repair, moving, demolition, conversion, occupancy, use, height and area of all building and structures within this city and each and all such regulations, provisions, penalties, conditions and term of the International Building Code, 2015 Edition, including Appendices B, C, D, E, F, and G are hereby referred to, adopted, and made a part hereof as though fully set forth herein, except such portions as are hereinafter deleted, modified or amended. (Ord. 3312, 4-19-2004; Ord. 3415, 4-17-2006; Ord. 3521, 11-19-2007; Ord. 3691, 9-7-2010; Ord. 3771, 8-20-2012)

PASSED, APPROVED AND ADOPTED this ____ day of _____, 2015.

SECTION TWELVE. Section 5-I-8 B (7) of the Gillette City Code is amended to read as follows:

(7) Section 109.4 of the International Fire Code is repealed. (Ord. 3691, 9-7-2010)

SECTION THIRTEEN. Section 5-I-8 B (20) of the Gillette City Code is amended to read as follows:

(20) Section **5706.3.1.3.2** *Existing wells* of the International Fire Code is amended to read as follows:

5706.3.1.3.2 Existing wells. Where wells are existing, buildings shall not be constructed within the distances set forth in Section 5706.3.1 for separation of wells or buildings.

SECTION FOURTEEN. Section 5-I-9 A of the Gillette City Code is amended to read as follows:

A. There is hereby adopted by reference that certain document known as the International Existing Building Code, 2015 Edition, as published by the International Code Council. It is adopted as the Existing Building Code of the City of Gillette, for regulating and governing the repair, alteration, change of occupancy, addition, and relocation of existing buildings, including historic buildings, as herein provided except such portions as are hereinafter deleted, modified or amended or adequately addressed by the International Building code and / or the International Fire code. (Ord. 3312, 4-19-2004; Ord. 3415, 4-17-2006; Ord. 3521, 11-19-2007; Ord. 3691, 9-7-2010; Ord. 3771, 8-20-2012)

SECTION FIFTEEN. Section 5-I-9 A (3) of the Gillette City Code is amended to read as follows:

(3) Section 1401.2. Applicability, of the International Existing Building Code is amended to read as follows:

1401.2 Applicability. Structures existing prior to January 1, 1979, in which there is work involving *additions, alterations, or changes* of occupancy shall be made to conform to the requirements of this chapter or the provisions of Chapters 5 through 13. The provisions of Sections 1401.2.1 through 1401.2.5, shall apply to existing occupancies that will continue to be, or are proposed to be, in Groups A, B, E, F, I-2, M, R, and S. These provisions shall not apply to buildings with occupancies in Groups H or I-1, I-3 or I-4. .(Ord. 3691, 9-7-2010)

SECTION FIFTEEN. Section 5-I-11 of the Gillette City Code is repealed.

Louise Carter-King, Mayor

(S E A L)
ATTEST:

Karlene Abelseth, City Clerk
Published: