DEPARTMENT OF LOCAL AFFAIRS

Division of Housing

RESOLUTION #36 ON-SITE CONSTRUCTION AND SAFETY CODES FOR MOTELS, HOTELS AND MULTI-FAMILY DWELLINGS IN THOSE AREAS OF THE STATE WHERE NO SUCH STANDARDS EXIST

8 CCR 1302-8

[Editor's Notes follow the text of the rules at the end of this CCR Document.]

BE IT RESOLVED BY THE STATE HOUSING BOARD OF THE STATE OF COLORADO;

THAT PURSUANT TO §24-32-3301 et seq, C.R.S. as amended, the State Housing Board of the State of Colorado (the Housing Board) repeals and readopts Resolution #36; and

THAT PURSUANT TO §24-32-3301 et seq, C.R.S. as amended, the State Housing Board adopts the nationally recognized codes as cited in SCHEDULE "B" as the "Colorado Construction Safety Code for hotels, motels, and multi-family dwellings built in areas of the state where no such standards exist including the renovation of dwelling units that are the Division of Housing responsibility;" and

THAT PURSUANT TO §24-32-3301 et seq, C.R.S. as amended, the State Housing Board states the basis and purpose of these rule changes is to update the current minimum construction and safety code for "hotels, motels, and multi-family dwellings in areas of the state with no local building codes"; and

The State Housing Board states that these rules do not include later amendments of the nationally recognized code; and

The Colorado Housing Board repeals and readopts these rules and regulations to be administered and enforced by the Colorado Division of Housing (the Division of Housing).

RULES AND REGULATIONS

Section 1: SCOPE

Every hotel, motel, and multi-family dwelling, in areas of the state with no local building codes, that is constructed or renovated after the effective date of these regulations must have a building permit, be inspected, and issued a certificate of occupancy by the Division of Housing, certifying that the structure is constructed in compliance with the codes adopted in SCHEDULE "B," which is incorporated herein and made a part of these Rules and Regulations by reference, and all other requirements set forth by this resolution.

The State Housing Board states that the Program Manager, Housing Technology and Standards Section, Colorado Division of Housing, 1313 Sherman Street, Room 321, Denver, Colorado 80203, will provide information regarding how the nationally recognized code may be obtained or examined. Incorporated material may also be examined at any state public library.

Section 2: DEFINITIONS

 "CERTIFICATE OF OCCUPANCY" is a certificate stating at the time of issuance the structure was built in compliance with all applicable codes and construction standards as adopted by the State Housing Board.

- (2) "CORRECTION NOTICE" is a notice indicating that a structure contains non-compliance(s) to the adopted code that is not life threatening, but may require correction prior to sign off of specific inspection requested.
- (3) "EQUIPMENT" means all materials, appliances, devices, fixtures, fittings and apparatus used in the construction, plumbing, mechanical and electrical systems of a structure.
- (4) "INTERIM CHANGE" means any change made between the approval date and the expiration date.
- (5) "MULTI-FAMILY" means a structure containing three or more dwelling units or a bed and breakfast dwelling that has six or more guest rooms.
- (6) "PLAN" is a specific design of a hotel, motel, or multi-family dwelling designed by the owner/developer, which is based on size, floor plan, method of construction, location arrangement and sizing of plumbing, mechanical or electrical equipment and systems therein in accordance with plans submitted to the Division of Housing.
- (7) "STRUCTURE" means a hotel, motel, or multi-family dwelling structure that shall comply with these rules and regulations.

Section 3: PLAN APPROVAL

- (1) All owners/developers shall make application to the Division of Housing for plan approval prior to construction.
- (2) Applications shall be made on forms supplied by the Division of Housing:
 - A. Submittal for approval of specifications and plans shall meet or exceed the minimum requirements as specified by the Division of Housing.
 - B. All applications submitted shall be stamped by a State of Colorado licensed architect and/or engineer.
- (3) The Division of Housing will grant or deny approval within twenty (20) working days of the receipt of a complete submittal and with the required number of copies.
 - A. If a complete application, specifications and plans are not submitted within one hundred twenty days of the original application date, the application shall expire.
 - B. Expired applications must be resubmitted as new applications with new application forms and submittals.
- (4) Approved plans and specifications shall be evidenced by the stamp of approval of the Division of Housing. One approved copy shall be returned to the owner/developer and shall be retained at the job site. An additional approved copy shall be kept on file with the Division of Housing. Interim changes, additions, or deletions will not be acceptable without prior approval of the Division of Housing.

Section 4: APPLICATIONS

- (1) All structures, as defined above, which are constructed or renovated in areas of the state with no local building codes must have a plan approved by the Division of Housing.
- (2) Plan approvals are granted to an owner/developer for a specific site location and are not transferable to other locations.

- (3) Approved copies of the specifications and plans shall be kept on the job site by the owner/developer for the purpose of construction and inspection by Division of Housing inspectors.
- (4) The granting of plan approvals shall not be construed to be a permit or approval of any violation of the provisions of these regulations. All structures shall be subject to field inspection. The approval of the plans shall not prevent the Division of Housing from requiring the correction of errors in the plans or the structure when in violation of these regulations.

Section 5: BUILDING PERMIT

The Division of Housing will issue a building permit upon approval of application and plans. The owner/developer may begin construction upon receipt of the approved plans and building permit.

Section 6: INTERIM CHANGES

- A. Interim changes shall be required where the owner/developer proposes a change in plumbing, heating, electrical, and/or fire life safety systems. Such changes shall become part of the approved plan unless the Division of Housing requires a total new design package. If determined a new design is necessary, the interim change shall be processed as a new application.
- B. When amendments to these regulations require changes to be made to an approved plan, the Division of Housing shall notify the owner/developer of the requirement and shall allow them reasonable time to submit revised plans for approval.

Section 7: ON-SITE INSPECTIONS

A. The Division of Housing shall conduct on-site inspections of all structures that are constructed or renovated in areas of the state with no local building codes. All structures shall be inspected per the requirements of the applicable codes listed in SCHEDULE "B."

Section 8: EXPIRATION DATES

A. Each plan approval shall remain in force and effect as outlined in the applicable codes listed in SCHEDULE "B."

Section 9: POSTED STRUCTURES

- A. Whenever an inspection reveals that a structure has a life threatening violation or is being constructed without Division of Housing approved plans, the Division may post such a structure with a "Stop Work Order /Red Tag".
 - (1) When a structure is posted with a "Stop Work Order/Red Tag", the Division of Housing will notify the owner/developer that the structure contains a violation(s).
 - (a) No work shall be continued on a structure until all violations are corrected.
 - (b) Within ten (10) working days, the owner/developer shall notify the Division of Housing of the action taken to correct the violation(s).
 - (c) All structures that are corrected shall be reinspected to assure compliance with the codes and regulations.
- (B) "Stop Work Order/Red Tag" shall be removed only by an authorized representative of the Division of Housing.

Section 10: CERTIFICATE OF OCCUPANCY

A Certificate of Occupancy shall be issued by the Division of Housing certifying that at the time of issuance the structure was built in compliance with the State Housing Board requirements.

Section 11: REVOCATION OF BUILDING PERMIT

- A. The State Housing Board may revoke a Building Permit after notice and hearing pursuant to Section 24 4 104 & 24 4 105, C.R.S., whenever an owner/developer has violated any provision of these regulations or when a permit was granted in error, on the basis of incorrect information supplied by the applicant.
- B. Judicial review of Building Permit revocation actions shall be governed by Section 24 4 106, C.R.S.

Section 12: DENIAL OF BUILDING PERMIT

- A. The Division of Housing may deny an application for a Building Permit if plans are in violation of SCHEDULE "B".
- B. The Division shall promptly notify the applicant of the denial, revocation or condition imposed. The applicant may, within 60 days following such action, request a hearing before the State Housing Board. If requested, a hearing shall be conducted pursuant to Section 24 4 105, C.R.S. Thereafter, the final decision of the State Housing Board shall be subject to judicial review in accordance with Section 24 4 106, C.R.S.

Section 13: FEES

Fees will be assessed for each Multi-Family Structure in accordance with SCHEDULE "A," which is incorporated herein and made part of these Rules and Regulations by reference.

Section 14: IRREGULARITIES

Any and all irregularities in these Rules and Regulations shall not be justification for producing any structure without proper inspections and in violation of the adopted construction codes.

11/13/2012

ATTEST:

Pat Coyle, Director Theo Gregory, Chairperson

Colorado Division of Housing Colorado State Housing Board

Date Date

SCHEDULE "A" FEE SCHEDULE

All fees are due in advance and must accompany the application. Fees shall not be subject to refund.

1. Plan checking fees (maximum 3-sets): Finished space \$0.25 per sq. ft. (\$160 min.)

Unfinished space \$0.10 per sq. ft.

2. Supplemental plan check fee (revisions, duplicate sets etc.): \$0.10 per sq. ft. (\$50 min.)

Note: Fee for revisions to be calculated based on space revised.

- 3. Certificate of Occupancy (each separate structure): \$100.00
- 4. Waiver of fees for Government Assisted Housing; with State Housing Board concurrence, the Division of Housing may waive plan review fees for units to be subsidized under local, state or federal housing programs for low-income households.
- 5. Inspection fees:
 - A. On-site inspection fee: \$230.00 per inspection per inspector plus \$50.00 per hour (inspection time) per inspector plus trip expenses of travel, food, lodging, parking, car rental, etc. as allowed in state fiscal rules for per diem and travel.
 - B. Stop Work Order/Red Tag fee: \$250.00

SCHEDULE "B"

The State Housing Board adopts the following nationally recognized codes as the "Colorado Construction Safety Code For On-Site Construction Of Motels, Hotels, And Multi-Family Dwellings In Those Areas Of The State Where No Such Standards Exist." Copies of the adopted codes are available for public inspection during regular business hours at the Division of Housing, Codes and Technology Section, 1313 Sherman St., Suite 321, Denver, Colorado, 80203. For further information regarding how this material can be obtained contact the Program Director at 1313 Sherman Street, Suite 321, Denver, Colorado, 80203, (303) 866-4656.

Construction Safety Code of the State of Colorado

Shall be:

- 1. The International Building Code, 2012 Edition, published by the International Code Council, Inc.
- 2. The International Residential Code, 2012 Edition, published by the International Code Council, Inc.
- 3. The International Mechanical Code, 2012 Edition, published by the International Code Council, Inc.
- 4. The International Plumbing Code, 2012 Edition, published by the International Code Council, Inc.
- The National Electric Code, published by the National Fire Protection Association, Inc. Edition as adopted by the State of Colorado Electrical Board at the time of plan submittal. Transition period of 90 days applies.

- 6. The International Fuel Gas Code, 2012 Edition, published by the International Code Council, Inc.
- 7. The International Energy Conservation Code, 2012 Edition, published by the International Code Council, Inc.

Transition Period: Owners/developers shall be permitted to use the construction codes in effect prior to the adoption of this resolution for a maximum of 90-days after this resolution takes effect.

AMENDMENTS:

The following amendments by addition, deletion, revision and exceptions are made: Wording in italics is as read per code. (See code book)

INTERNATIONAL BUILDING CODE:

Section 105.2 Work exempt from permit, add the following exemptions prior to "Building:"

Equipment Enclosures:

- 1. One story detached equipment storage cabinets (see definitions).
- One story equipment storage unit that contains no factory installed electrical wiring and contains no factory installed mechanical or plumbing <u>for the unit</u> and the unit does not exceed 200 sq. ft.

Building Components:

A building component, assembly or system constructed in the factory as open construction (See definitions).

The above exemptions from approval thru the state factory built program shall not be deemed to grant any exemption from local jurisdiction requirements or state electrical or plumbing requirements. The above exemptions do not grant authorization for any work to be done in a manner in violation of the provisions of the adopted codes (SCHEDULE "B".)

Section 901.2 Fire Protection systems: Add the following new section:

901.2.1 Certified inspector required. All fire protection systems required by this Chapter (working plans, hydraulic calculations, installation inspections and final tests) shall be approved by a certified inspector. The inspector shall be an employee of the fire department having jurisdiction or another qualified individual with prior approval of the Colorado Division of Fire Safety.

Section 907.2.11.4, Power source. Revise as shown.

"In new construction, required smoke" and carbon monoxide "alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarmsfor overcurrent protection." Smoke and/or Carbon Monoxide alarms shall not be installed on a circuit dedicated only for Smoke and/or Carbon Monoxide alarms.

"Exception: ... "

Section 908.7, Carbon monoxide alarms. Add sentence as shown

Group I or R occupancies located in a building containing a fuel-burning appliance or in a building which has an attached garage shall be equipped with single-station carbon monoxide alarms. The carbon monoxide alarms shall be listed as complying with UL 2034 and be installed and maintained in accordance with NFPA 720 and the manufacturer's instructions." Carbon monoxide alarms shall be installed outside of each separate sleeping area within 15 feet of the entrance of the bedroom(s). "An open parking garage,"

Add new section:

Section 1507.1.1. Ice Barrier Required.

An ice barrier is required where stated throughout Section 1507 due to a history of ice forming along eaves in Colorado. An ice dam protection underlayment that consists of at least two layers of underlayment cemented together or of a self-adhering polymer-modified bitumen sheet shall extend from the eave's edge to a point at least 24 inches inside the exterior wall line of the building.

The ice dam membrane shall extend continuously to a point 4 feet from any valley, cricket or similar construction junction with roofs. The ice dam membrane shall extend up vertical construction junctions such as dormer walls a minimum of twelve (12) inches prior to the installation of flashing and roof covering.

Section 1608.2. Ground snow loads. is amended to read:

Roof Snow Load (Pf) shall be in accordance with the local jurisdiction requirements and shall not be less than a minimum roof snow load of 30 PSF. The allowable increase for snow duration shall not be used when the snow load is above 65 PSF.

Section 1609.3 and 1609.4. Basic wind speed, Exposure category.

The 3 second gust basic wind speed shall be in accordance with the local jurisdiction requirements. For jurisdictions that have adopted a building code edition prior to the 2012 the basic wind speed of that jurisdiction shall be multiplied by 1.20 for Risk category I structures, 1.29 for Risk category II structures and 1.38 for Risk category III and IV structures to obtain Vult. The design wind speed Vult shall not be less than the minimum basic wind speeds as follows:

Risk category as determined by Table 1604.5

Risk category I structures- 105 MPH

Risk category II structures- 115 MPH

Risk category III and IV structures-120 MPH

The Exposure category shall be C, unless otherwise justified.

Add the following new section:

Section 2111.1.1. Fireplaces

Every new fireplace shall have permanently installed one of the following:

- 1. Approved gas logs.
- 2. Other approved gas or alcohol specific appliances.

- 3. An approved fireplace insert meeting the most stringent emission standards for wood stoves established under State statute and/or regulations promulgated by the State Air Quality Control Commission (AQCC) as of the time of installation of the fireplace; or
- 4. A solid fuel burning device which is exempt from and not eligible for certification under U.S. Environmental Agency (U.S. EPA) regulations for wood stoves but which has been tested to demonstrate its emission performance is in accordance with criteria and procedures not less stringent than those required by the U.S. EPA and/or AQCC for wood stoves manufactured after July 1, 1990.

INTERNATIONAL RESIDENTIAL CODE:

TABLE R301.2(1) IS AMENDED TO READ:

ROOF SNOW LOAD ¹	WIND DESIGN		SEISMIC	SUBJECT TO DAMAGE			WINTER	ICE BARRIER	FLOOD	AIR	MEAN
	SPEED ¹ (MPH)	TOPO GRAPHIC EFFECTS	DESIGN CATEGORY ¹	WEATHERING	FROST LINE DEPTH	TERMITE	DESIGN TEMP ²	UNDER LAYMENT REQUIRED	HAZARDS	FREEZING	TEMP 3
MIN. 30 psf	MIN. 90, Exp. C	PER LOCAL	MIN. B	SEVERE	PER LOCAL	SLIGHT	PER LOCAL	YES	PER LOCAL	PER LOCAL	PER LOCAL

(1) The roof snow load, wind design, and seismic zone shall be in accordance with the local jurisdiction requirements and shall not be less than the minimums stated. The allowable increase for snow duration shall not be used when the snow load is above 65 PSF.

(2) See Attachment A and verify with local jurisdiction.

(3) See the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32 ° Fahrenheit)" at www.ncdc.noaa.gov/fpsf.html.

Table R301.5 - Live Loads

... add footnote (j) to Decks, Exterior balconies, Fire escapes:

(j) When the snow load is above 65 psf, the minimum uniformly distributed live loads for exterior balconies, decks and fire escapes shall be as required for roof snow loads.

Section R302.2 Townhouses. Each townhouse shall be considered a separate building and shall be separated by fire-resistance-rated wall assemblies meeting the requirements of section R302.1 for exterior walls.

Exception: A common 2-hour fire-resistance-rated wall assembly tested in accordance with ASTM E 119 or UL 263

Section R302.2.4 Structural independence.

Exception :

5. Townhouses separated by a common 2-hour fire-resistance-rated wall as provided in Section R302.2.

Section R313. Automatic Fire Sprinkler Systems

Delete this Section and replace with the following:

An automatic fire sprinkler system shall be installed in one and two family dwellings and townhouses as required by the local jurisdiction where the home will be set. All fire protection systems required by this Section (working plans, hydraulic calculations, installation inspections and final tests) shall be approved by a certified inspector. The inspector shall be an employee of the fire department having jurisdiction or another qualified individual with prior approval of the Colorado Division of Fire Safety.

Section R314.4, Power source. Revise as shown.

"Smoke" and Carbon Monoxide "alarms shall receive their primary power from the building wiring when such wiring is served from a commercial source, and when primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection." Smoke and/or Carbon Monoxide alarms shall not be installed on a circuit dedicated only for Smoke and/or Carbon Monoxide alarms .

Section R315.1 Carbon monoxide alarms. Revise as shown.

For new construction, an approved carbon monoxide alarm shall be installed outside of each separate sleeping area within 15 feet of the entrance to the bedrooms in dwelling units within which fuel-fired appliances are installed and in dwelling units that have attached garages.

Section R802.10 Wood trusses. Add the following new section

R802.10.5 Marking. Each truss shall be legibly branded, marked, or otherwise have permanently affixed thereto the truss identification as shown on the truss design drawing located within two (2) feet of the peak of the truss on the face of the top chord.

Section R905.1 – Roof Covering Application. Add the following section

R905.1.1 Ice Barrier Required.

An ice barrier is required, where stated throughout Section R905, due to a history of ice forming along eaves in Colorado. An ice dam protection underlayment that consists of at least two layers of underlayment cemented together or of a self-adhering polymer-modified bitumen sheet shall extend from the eave's edge to a point at least 24 inches inside the exterior wall line of the building.

The ice dam membrane shall extend continuously to a point 4 feet from any valley, cricket or similar construction junction with roofs. The ice dam membrane shall extend up vertical construction junctions such as dormer walls a minimum of twelve (12) inches prior to the installation of flashing and roof covering.

Section R1004.4, G2406.2 exception 3 and 4, G2425.8 #7, G2445; Delete all and add:

Unvented fuel fired room heaters and unvented fuel fired fireplaces are prohibited.

Add the following new sections:

Section R1001.1.1 and R1004.1.1 – Fireplaces.

Every new fireplace shall have permanently installed one of the following:

1. Approved gas logs.

- 2. Other approved gas or alcohol specific appliances.
- 3. An approved fireplace insert meeting the most stringent emission standards for wood stoves established under State statute and/or regulations promulgated by the State Air Quality Control Commission (AQCC) as of the time of installation of the fireplace; or
- 4. A solid fuel burning device which is exempt from and not eligible for certification under U.S. Environmental Agency (U.S. EPA) regulations for wood stoves but which has been tested to demonstrate its emission performance is in accordance with criteria and procedures not less stringent than those required by the U.S. EPA and/or AQCC for wood stoves manufactured after July 1, 1990.

Section M2001.1 Installation and G2452 Boilers - add the following sentence:

All rooms or spaces containing boilers shall be provided with a floor drain and trap primer.

Section G2417.4.1 Test pressure-revise as follows:

"The test pressure to be used shall be no less than 1 $\frac{1}{2}$ times the proposed maximum working pressure, but not less than" 10 psig (69 kPa gauge), irrespective of design pressure. Where the test pressure exceeds 125 psig (862 kPa gauge), the test pressure shall not exceed a value that produces a hoop stress in the piping greater than 50 percent of the specified minimum yield strength of the pipe."

The test pressure for valves and connections to appliances shall not exceed 0.5 psig (3kPa).

Section P3009 Gray water recycling.

Delete this entire section.

Electrical Sections:

Delete Chapters 34 through 43.

INTERNATIONAL FUEL GAS CODE:

Section 303.3 Prohibited locations: add item:

Number 6. LPG appliances. LPG appliances shall not be installed in a pit, basement or crawl space where unburned fuel may accumulate unless an approved sensing device is installed in conjunction with an automatic shutoff valve located where the gas enters the structure.

Section 303.3 exception 3 and 4, 501.8 #8, Section 621: delete all and add:

Unvented fuel fired room heaters and unvented fuel fired fireplaces are prohibited.

Section 406.4.1 Test pressure.

... amend to read:

"The test pressure to be used shall be no less than 1 $\frac{1}{2}$ times the proposed maximum working pressure, but not less than" 10 psig (69 kPa gauge), irrespective of design pressure. Where the test pressure exceeds 125 psig (862 kPa gauge), the test pressure shall not exceed a value that produces a hoop stress in the piping greater than 50 percent of the specified minimum yield strength of the pipe."

The test pressure for valves and connections to appliances shall not exceed 0.5 psig (3kPa).

INTERNATIONAL PLUMBING CODE:

Adopt the following:

Appendix Chapter E – Sizing of water piping systems.

Chapter 13 Gray water recycling.

Delete this entire chapter.

INTERNATIONAL MECHANICAL CODE:

Section 303.3.1 LPG appliance: add the following new section

LPG appliances shall not be installed in a pit, basement or crawl space where unburned fuel may accumulate unless an approved sensing device is installed in conjunction with an automatic shutoff valve located where the gas enters the structure.

Section 903.1 General: add additional sentence:

Every new installation of a solid fuel-burning, vented decorative appliance or room heater shall meet the most stringent emission standards for woodstoves established under State statute and/or regulations promulgated by the State Air Quality Control Commission as of the time of installation of the appliance or room heater. (Effective January 1, 1991 – CC90-617.)

Section 903.3 Unvented gas log heaters:

Delete this entire section.

INTERNATIONAL ENERGY CONSERVATION CODE

Section C101.5.2 and R101.5.2 (N1101.6 of the IRC) Low energy buildings; add exemption

3. Zero-Energy Buildings. Zero energy buildings are exempt from the provisions of the International Energy Conservation Code.

Section 202 – Definitions: add definition

ZERO-ENERGY BUILDING. A building with zero net energy consumption and zero carbon emissions annually as certified by an approved annual energy use analysis.

Add new Section C101.5.3

Semi heated buildings.

Buildings less than or equal to 200 square feet and that enclose equipment and are conditioned only for the proper operation of the equipment may show envelope compliance as a semiheated space under ANSI/ASHRAE/IES Standard 90.1-2010.

NATIONAL ELECTRIC CODE:

The following amendments are made to the National Electrical Code for use with all Factory Built units: Any conflicts that may arise between these amendments and a future State adopted edition of the National Electrical Code shall be resolved by applying the specific amended provisions of the 2011 edition.

Add the following new article

Article 406.9(C)-(1) Shower or Bathroom space.

A receptacle outlet shall not be installed in or within 30 inches (762 mm) of a shower or bathtub base.

Exception: A receptacle outlet installed beneath a Hydromassage bathtub that is accessible only through a service access opening. (See Article 680 Part VII)

Article 545, Manufactured Buildings, add new section: 545.14. Testing.

(A) Dielectric Strength Test. The wiring of each factory built unit shall be subjected to a 1minute, 900-volt AC or 1273-volt DC dielectric strength test (with all switches closed) between live parts (including neutral) and the ground. Alternatively, the test shall be permitted to be performed at 1,080–volts AC or 1527-volts DC for 1 second. This test shall be performed after branch circuits are complete and after wiring devices are installed and wiring properly terminated.

Exception 1: Listed fixtures or appliances shall not be required to withstand the dielectric strength test.

Exception 2: Units wired in Electrical Metallic Tubing or Rigid Metal Conduit.

- (B) Continuity and Operational Tests and Polarity Checks. Each manufactured building shall be subjected to:
 - An electrical continuity test to ensure that all exposed electrically conductive parts are properly bonded;
 - (2) An electrical operational test to demonstrate that all equipment, except water heaters and electric furnaces, is connected and in working order; and
 - (3) Electrical polarity checks of permanently wired equipment and receptacle outlets to determine that connections have been properly made.

These tests shall be performed after branch circuits are complete and after wiring devices are installed and wiring properly terminated.

Article 320.23(A). Cables Run Across the Top of Floor Joists/Rafters

Add a new sentence at the end:

Substantial guard strips shall be provided to protect wiring within three (3) feet of the marriage line where the attic is exposed and the roof is completed on-site, such as a hinged roof.

ATTACHMENT "A" DEGREE DAYS AND DESIGN TEMPERATURES FOR COLORADO CITIES AND TOWNS

DEGREE DAYS AND DESIGN TEMPERATURES FOR COLORADO CITIES AND TOWNS

		•	Design Temp ° F	Design Temp ° F	Design Temp ° F	
			Winter	Summer	Summer	
•	Location	Heating Degree Days	97 ½ %	DB 2 ½ %	WB 2 ½ %	Elevation (feet) above sea
1	Alamosa	8749	-16	82	61	7546
2	Aspen	9922	-1	81	59	7928
3	Boulder	5554	2*	91	63	5385
4	Buena Vista	8003	-1	83	58	7954
5	Burlington	6320	2	95	70	4165
6	Canon City	4987	8	90	64	5343
7	Cheyenne Wells	5925	1	97	70	4250
8	Colorado Springs	6415	2	88	62	6012
9	Cortez	6667	5	88	63	6177
10	Craig	8403	-14	86	61	6280
11	Creede	11375	-18	80	58	8842
12	Del Norte	7980	-4	81	60	7884
13	Delta	5927	6	95	62	4961
14	Denver	6020	1	91	63	5283
15	Dillon	11218	-16	77	58	9065
16	Dove Creek	7401	-6	86	63	6843
17	Durango	6911	4	87	63	6550
18	Eagle	8106	- 11	87	62	6600
19	Estes Park	7944	-7	79	58	7525

HDD data taken from Department of Energy (Rescheck 4.4.2), Climate Data published by Rocky Mountain Chapter ASHRAE, First Edition-Centennial 1976, 1985 ASHRAE Fundamentals Handbook (See 2012 IPC appendix D).

Degrees North Latitude may be obtained at www.ncdc.noaa.gov/fpsf.html

•			Design Temp ° F	Design Temp ° F	Design Temp ° F	
			Winter	Summer	Summer	
•	Location	Heating Degree Days	97 ¹ ⁄ ₂ %	DB 2 ½ %	WB 2 ½ %	Elevation (feet) above sea
20	Ft. Collins	6368	-4	91	63	5001
21	Ft. Morgan	6460	-5	92	65	4321
22	Fraser	9777	-22	76	58	8560
23	Glenwood Springs	7313	5	91	63	5823
24	Granby	9316	-			7935
25	Grand Junction	5548	7	94	63	4586
26	Greeley	6306	-5	94	64	4648
27	Gunnison	10516	-17	83	59	7664
28	Holyoke	6583	-2	97	69	3746
29	Idaho Springs	8094	0	81	59	7555
30	Julesburg	6447	-3	98	69	3469
31	Kit Carson	6372	-1	98	68	4284
32	Kremmling	10095	-19	85	59	7359
33	La Junta	5263	3	98	70	4066
34	Lamar	5414	0	98	71	3635
35	Last Chance		-2	92	65	4790
36	Leadville	11500	-4	81	55	10,152
37	Limon	6961	0	91	65	5366
38	Longmont	6443	-2	91	64	4950
39	Meeker	8658	-6	87	61	6347
40	Montrose	6383	7	91	61	5830
41	Ouray	7639	7	83	59	4695

DEGREE DAYS AND DESIGN TEMPERATURES FOR COLORADO CITIES AND TOWNS

HDD data taken from Department of Energy (Rescheck 4.4.2), Climate Data published by Rocky Mountain Chapter ASHRAE, First Edition-Centennial 1976, 1985 ASHRAE Fundamentals Hand book (See 2012 IPC appendix D).

Degrees North Latitude may be obtained at www.ncdc.noaa.gov/fpsf.html

			Design Temp ° F	Design Temp ° F	Design Temp ° F	
			Winter	Summer	Summer	
	Location	Heating Degree Days	97 ¹ ⁄ ₂ %	DB 2 ½ %	WB 2 ½ %	Elevation (feet) above sea
42	Pagosa Springs	8548	-9	85	61	7079
43	Pueblo	5413	0	95	66	4695
44	Rangely	7328	-8	93	62	5250
45	Rifle	6881	0	92	63	5345
46	Saguache	8781	-3	82	61	7697
47	Salida	7355	-3	84	59	7050
48	San Luis	8759	-10	84	60	7990
49	Silverton	11064	-13	77	56	9322
50	Springfield	5167	3	95	71	4410
51	Steamboat Springs	9779	-16	84	61	6770
52	Sterling	6541	-2	93	66	3939
53	Trinidad	5339	3	91	65	6025
54	Uravan		8	97	63	5010
55	Vail	9248	-14	78	59	8150
56	Walden	10378	-17	79	58	8099
57	Walsenburg	5438	1	90	63	6220
58	Wray	6160	-1	95	69	3560
59	Yuma	5890	-2	95	69	4125

DEGREE DAYS AND DESIGN TEMPERATURES FOR COLORADO CITIES AND TOWNS

HDD data taken from Department of Energy (Rescheck 4.4.2), Climate Data published by Rocky Mountain Chapter ASHRAE, First Edition-Centennial 1976, 1985 ASHRAE Fundamentals Hand book (See 2012 IPC appendix D).

Degrees North Latitude may be obtained at www.ncdc.noaa.gov/fpsf.html

Editor's Notes

History

Entire rule eff. 07/30/2009.

Entire rule eff. 01/01/2013.