

**ADOPTED REGULATION OF THE
STATE PUBLIC WORKS BOARD**

LCB File No. R207-09

Effective October 15, 2010

EXPLANATION – Matter in *italics* is new; matter in brackets ~~[omitted material]~~ is material to be omitted.

AUTHORITY: §§1-19, NRS 341.110 and 341.144.

A REGULATION relating to public works; requiring the Manager of the State Public Works Board to review the plans, designs and specifications of a capital improvement project for the construction or remodeling of certain buildings to ensure that the project will achieve certain levels of efficiency in the use of energy and water; establishing procedures to facilitate the Manager’s compliance with that requirement; requiring the contractor of such a project to recycle not less than 50 percent of the total amount of solid waste generated by the project; and providing other matters properly relating thereto.

Section 1. Chapter 341 of NAC is hereby amended by adding thereto the provisions set forth as sections 2 to 17, inclusive, of this regulation.

Sec. 2. *As used in sections 2 to 17, inclusive, of this regulation, unless the context otherwise requires, the words and terms defined in sections 3 to 10, inclusive, of this regulation have the meanings ascribed to them in those sections.*

Sec. 3. *“Design consultant” means a natural person, partnership, corporation, limited liability company or other business organization or association that engages in the practice of architecture pursuant to chapter 623 of NRS and that has entered into an agreement with the Board to provide design services for a project.*

Sec. 4. *“Design services” includes, without limitation:*

1. Preliminary planning;

2. *Designing;*
3. *Estimating of costs; and*
4. *Preparation of detailed plans and specifications.*

Sec. 5. *“Green building design measure” means a design feature, material, site location, construction technique, principle, practice, device or other natural process or technological system that is designed or intended to contribute to the efficient use of energy or water in a project. The term includes the use of a source of renewable energy.*

Sec. 6. *“Project” means a capital improvement project of the State for the construction or remodeling of a building with a gross floor area greater than 20,000 square feet.*

Sec. 7. *“Project manager” means a person who holds a certificate of registration to engage in the practice of architecture pursuant to chapter 623 of NRS and who is employed by the Board to provide design services for a project.*

Sec. 8. *“Remodeling” includes, without limitation, the construction of an addition to, or the renovation or retrofit of, an existing building.*

Sec. 9. *“Renewable energy” has the meaning ascribed to it in NRS 341.144.*

Sec. 10. *“Simple payback period” means the time required for the cumulative dollar value of savings in energy or water that are attributable to a green building design measure to equal the initial cost of the measure excluding the time value of money.*

Sec. 11. 1. *The Manager shall review the preliminary plans, designs and detailed plans and specifications of a project to ensure that the project will achieve:*

(a) Efficiency in the use of energy that meets or exceeds the standards for the efficient use of energy established by:

(1) ANSI/ASHRAE Standard 90.1-2007, Energy Standard for Buildings Except Low-Rise Residential Buildings, as adopted by reference pursuant to NAC 341.045; and

(2) The United States Environmental Protection Agency pursuant to the Energy Star Program; and

(b) Efficiency in the use of water for plumbing fixtures and landscape irrigation that is at least 10 percent more efficient than the standards for the efficient use of water established by the United States Environmental Protection Agency pursuant to the WaterSense program.

2. If the project is the remodeling of a building, the requirements of subsection 1 apply only to the use of energy or water in the remodeled portion of the building.

Sec. 12. 1. *The preliminary plans of a project submitted to the Manager by a design consultant or project manager must be accompanied by a report that identifies each green building design measure that could reasonably be incorporated into the designs of the project to ensure that the project will achieve the efficiencies in the use of energy and water set forth in section 11 of this regulation. For each such measure, the report must include, without limitation:*

(a) A brief description of how the green building design measure is intended to contribute to the efficient use of energy or water in the project.

(b) The estimated dollar value of the savings in energy or water that are attributable to the green building design measure during its estimated useful life. The estimates must be supported by appropriate documentation.

(c) A life cycle cost analysis of the green building design measure. The life cycle cost analysis must be performed in a manner prescribed by the Manager and include, without limitation, the calculation of the simple payback period of the green building design measure.

2. *The report must include a study evaluating the feasibility of including a source of renewable energy in the project.*

Sec. 13. *The Manager shall review the preliminary plans of a project and the accompanying report submitted pursuant to section 12 of this regulation and determine the green building design measures that must be incorporated into the designs of the project to ensure that the project will achieve the efficiencies in the use of energy and water set forth in section 11 of this regulation. In reaching this determination, the Manager shall consider, in addition to the information provided by the design consultant or project manager pursuant to section 12 of this regulation:*

1. *The initial cost of the green building design measure in relation to the budget for the project set forth in the State's capital improvement program.*

2. *The simple payback period of the green building design measure. The simple payback period must not be longer than 10 years, unless the Manager determines that the use of a longer period is in the best interests of the State.*

3. *Any other information that the Manager considers to be relevant to the determination.*

Sec. 14. 1. *The design consultant or project manager of a project shall incorporate into the designs of a project each green building design measure that the Manager has determined must be incorporated into those designs pursuant to section 13 of this regulation.*

2. *The designs of a project submitted to the Manager by a design consultant or project manager must be accompanied by a summary report that identifies each green building design measure that has been incorporated into the designs of the project and includes the information concerning the green building design measure required pursuant to section 12 of this regulation.*

Sec. 15. 1. *Before approving the designs of a project submitted by a design consultant or project manager, the Manager shall retain or employ a person with competence and expertise equal to that of the design consultant or project manager to conduct a review of those designs.*

2. *A person who conducts the review of the designs of a project pursuant to subsection 1 shall:*

(a) *Express his or her professional opinion regarding whether the designs of the project ensure that the project will achieve the efficiencies in the use of energy and water set forth in section 11 of this regulation.*

(b) *Submit his or her opinion directly to the Manager.*

Sec. 16. *Before approving the final payment to a design consultant or project manager for the preparation of the detailed plans and specifications of a project, the Manager shall confirm that the detailed plans and specifications of the project ensure that the project will achieve the efficiencies in the use of energy and water set forth in section 11 of this regulation.*

Sec. 17. 1. *A contractor who is awarded a contract for the construction of a project shall:*

(a) *Recycle or cause to be recycled not less than 50 percent by weight of the total amount of solid waste generated by the construction of the project, including, without limitation, any associated demolition.*

(b) *Submit to the Manager a waste management plan for complying with the requirements of paragraph (a). The waste management plan must be in a form prescribed by the Manager and include, without limitation, provisions concerning the storage, collection, recycling and*

disposal of all solid waste generated by the construction of the project, including, without limitation, any associated demolition.

(c) Submit to the Manager with each progress bill or retainage bill a waste management report documenting the contractor's adherence to the waste management plan and measuring the contractor's progress toward compliance with the requirements of paragraph (a).

2. The provisions of subsection 1 must be included in:

(a) The plans and specifications of the project submitted by a design consultant or project manager to the Manager for approval;

(b) The plans and specifications of a project approved by the Manager and made available to bidders on the contract for the project pursuant to NRS 338.1385; and

(c) The contract between the Board and the contractor for the project.

3. As used in this section:

(a) "Progress bill" has the meaning ascribed to it in NRS 338.415.

(b) "Retainage bill" has the meaning ascribed to it in NRS 338.430.

Sec. 18. NAC 341.045 is hereby amended to read as follows:

341.045 1. The Board hereby adopts by reference the following publications and establishes the standards contained therein as minimum standards for the design of state buildings, other than those excepted in NRS 341.141:

(a) The *2003 International Building Code* published by the International Code Council with the following exceptions:

(1) References to the *International Plumbing Code* are replaced with references to the *Uniform Plumbing Code*; and

(2) References to the *International Electrical Code* are replaced with references to the *2002 National Electrical Code*.

↪ This code may be obtained from the International Code Council, 5203 Leesburg Pike, Suite 600, Falls Church, Virginia 22041-3401, or at the Internet address , at a price of \$65 for members and \$86 for nonmembers.

(b) The *2003 International Existing Building Code* published by the International Code Council with the following exceptions:

(1) References to the *International Plumbing Code* are replaced with references to the *Uniform Plumbing Code*; and

(2) References to the *International Electrical Code* are replaced with references to the *2002 National Electrical Code*.

↪ This code may be obtained from the International Code Council, 5203 Leesburg Pike, Suite 600, Falls Church, Virginia 22041-3401, or at the Internet address , at a price of \$35 for members and \$46 for nonmembers.

(c) The *2003 International Residential Code* published by the International Code Council with the following exceptions:

(1) References to the *International Plumbing Code* are replaced with references to the *Uniform Plumbing Code*; and

(2) References to the *International Electrical Code* are replaced with references to the *2002 National Electrical Code*.

↪ This code may be obtained from the International Code Council, 5203 Leesburg Pike, Suite 600, Falls Church, Virginia 22041-3401, or at the Internet address , at a price of \$45 for members and \$60 for nonmembers.

(d) The *2002 National Electrical Code* published by the National Fire Protection Association. This code may be obtained from the National Fire Protection Association, 11 Tracy Drive, Avon, Massachusetts 02322, or at the Internet address , at a price of \$67.50 for members and \$75 for nonmembers.

(e) The *2003 Uniform Plumbing Code* published by the International Association of Plumbing and Mechanical Officials. This code may be obtained from the International Association of Plumbing and Mechanical Officials, 5001 East Philadelphia Street, Ontario, California 91761-2816, or at the Internet address , at a price of \$64 for members and \$89 for nonmembers.

(f) The *2003 Uniform Mechanical Code* published by the International Association of Plumbing and Mechanical Officials. This code may be obtained from the International Association of Plumbing and Mechanical Officials, 5001 East Philadelphia Street, Ontario, California 91761-2816, or at the Internet address , at a price of \$64 for members and \$89 for nonmembers.

(g) The *Heating, Ventilating and Air-Conditioning Handbooks* published by the American Society of Heating, Refrigerating and Air-Conditioning Engineers. These handbooks may be obtained from the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., 1791 Tullie Circle, N.E., Atlanta, Georgia 30329, or at the Internet address . The price is \$144 each for the *2003 ASHRAE Handbook - HVAC Applications*, *2002 ASHRAE Handbook - Refrigeration*, *2001 ASHRAE Handbook - Fundamentals* and the *2000 HVAC Systems & Equipment Handbook*.

(h) The *Illuminating Engineering Society of North America, Design Guide Package*. This design guide may be obtained from the Illuminating Engineering Society of North America, 120

Wall Street, Floor 17, New York, New York 10025-4001, or at the Internet address , at a cost of \$175 for members and \$250 for nonmembers.

(i) *The Americans with Disabilities Act* published by the United States Department of Justice. This publication may be obtained from the Office of Americans with Disabilities Act, Civil Rights Division, United States Department of Justice, Washington, D.C. 20530, free of charge.

(j) *NFPA 101: Life Safety Code*, 2003 Edition, published by the National Fire Protection Association. The code may be obtained from the National Fire Protection Association, 11 Tracy Drive, Avon, Massachusetts 02322, or at the Internet address , at a price of \$55.80 for members and \$62 for nonmembers.

(k) *The 2003 International Energy Conservation Code* published by the International Code Council. This code may be obtained from the International Code Council, 5203 Leesburg Pike, Suite 600, Falls Church, Virginia 22041-3401, or at the Internet address , at a price of \$22 for members and \$29 for nonmembers.

(l) The “Guidelines for Evaluating Potential Surface Fault Rupture/Land Subsidence Hazards in Nevada” and the “Guidelines for Evaluating Liquefaction Hazards in Nevada” published by the Nevada Earthquake Safety Council. These guidelines may be obtained from the Nevada Earthquake Safety Council, c/o Nevada Bureau of Mines and Geology, University of Nevada, Reno, Mail Stop 178, Reno, Nevada 89557-0088, at a price of \$1 each.

(m) *ANSI/ASHRAE Standard 90.1-2007, Energy Standard for Buildings Except Low-Rise Residential Buildings, published by the American Society of Heating, Refrigerating and Air-Conditioning Engineers. This standard may be obtained from the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., 1791 Tullie Circle, N.E.,*

Atlanta, Georgia 30329, or at the Internet address <http://www.ashrae.org/>, at a price of \$99.00 for members and \$119.00 for nonmembers.

2. In addition to the standards contained in the *2003 International Building Code* adopted pursuant to subsection 1, all buildings and structures of the State and any parts thereof must be designed using the structural standards for seismic zones, basic wind speed, wind exposure, frost line and the live loads and snow loads for roofs adopted by the political subdivision in which the building or structure is being constructed. In the absence of such structural standards adopted by the political subdivision, the Manager may use structural standards that the Manager determines are appropriate for the geographic location at which the building or structure is being constructed.

Sec. 19. 1. The Manager of the State Public Works Board may exempt from any provision of this regulation a project for which the design process was commenced before October 15, 2010, if the Manager determines that the design process for the project has progressed beyond the stage in the design process to which the provision applies.

2. As used in this section:

(a) “Project” means a capital improvement project of the State for the construction or remodeling of a building with a gross floor area greater than 20,000 square feet.

(b) “Remodeling” includes, without limitation, the construction of an addition to, or the renovation or retrofit of, an existing building.

**NOTICE OF ADOPTION OF PROPOSED REGULATION
LCB File No. R207-09**

The State Public Works Board adopted regulations assigned LCB File No. R207-09 which pertain to chapter 341 of the Nevada Administrative Code.

INFORMATIONAL STATEMENT

1. A description of how public comment was solicited, a summary of public response, and an explanation how other interested persons may obtain a copy of the summary.

State Public Works Board solicited public comment through notices posted at State Public Works Board in Carson City and Las Vegas, the Blasdel Building, Nevada State Library, Archives in Carson City and at the Nevada County Public Libraries and mailings to our contact database.

Date of Notice	Workshop/ Hearing	Date of Workshop
1/8/10	Workshop	1/26/10
6/22/10	Hearing	7/29/10

Many oral and nine written comments were received at the workshop and hearings. A copy of the audio taped comments or the record of the proceedings may be obtained by calling State Public Works Board at (775) 684-4141 or by writing to the State Public Works Board, 515 East Musser, Room 102, Carson City, NV 89701, or by e-mailing the SPWB at dnenzel@spwb.state.nv.us.

2. The number of persons who:

	1/26/10	7/29/10
(a) Attended each hearing:	8	28
(b) Testified at each hearing:	1	0
(c) Submitted written comments:	0	0

3. A description of how comment was solicited from businesses, a summary of their response, and an explanation how other interested persons may obtain a copy of the summary.

Comments were solicited from the affected and interested contractor, unions and municipalities, by notices posted at State Public Works Board offices in Carson City and Las Vegas, Nevada State Library, and at the main public libraries in all the counties.

A copy of the audio taped comments or the record of the proceedings may be obtained by calling State Public Works Board at (775) 684-4141 or by writing to the State Public Works Board, 515 East Musser, Room 102, Carson City, NV 89701, or by e-mailing the SPWB at dnenzel@spwb.state.nv.us.

- 4. If the regulation was adopted without changing any part of the proposed regulation, a summary of the reasons for adopting the regulation without change.**

NAC 341 was adopted by the board with no objections.

- 5. The estimated economic effect of the regulation on the business which it is to regulate and on the public. These must be stated separately, and each case must include:**

- (a) Both adverse and beneficial effects; and**

This regulation should have no adverse effects on contractors. The beneficial effects would reduce overhead.

- (b) Both immediate and long-term effects.**

This regulation requires energy efficient state construction when cost effective.

- 6. The estimated cost to the agency for enforcement of the adopted regulation:**

SPWB does not estimate any cost to enforce the amendments

- 7. A description of any regulations of other State or governmental agencies which the regulation overlaps or duplicates and a statement explaining why the duplication or overlap is necessary. If the regulation overlaps or duplicates a federal regulation, the name of the regulating federal agency.**

Federal Law does not require the proposed regulation.

- 8. If the regulation includes provisions that are more stringent than a federal regulation that regulates the same activity, a summary of such provisions.**

Federal Law does not require the proposed regulation.

- 9. If the regulation provides a new fee or increases an existing fee, the total annual amount the agency expects to collect and the manner in which the money will be used.**

Does not apply

- 10. Is the proposed regulation likely to impose a direct and significant economic burden upon a small business or directly restrict the formation, operation or expansion of a small business? What methods did the agency use in determining the impact of the regulation on a small business?**

No. Small business impact questionnaires were distributed to everyone in the qualification data base plus contractor's associations, other State Agencies and the proper postings.