

COST-BENEFIT ANALYSIS

In performing a cost-benefit analysis, each rulemaking entity must provide the information requested for the cost-benefit analysis to be considered a good faith effort. The cost-benefit analysis must be submitted to the Office of Policy, Research and Regulatory Reform at least five (5) days before the administrative hearing on the proposed rule. For all questions, please attach all underlying data that supports the statements or figures stated in this cost-benefit analysis.

DEPARTMENT: Regulatory Agencies

AGENCY: Board of Licensure for Architects,
Professional Engineers and Professional
Land Surveyors

CCR: 4 CCR 730-1

DATE: October 7, 2011

RULE TITLE OR SUBJECT:

RULE 4.9.1 – REINSTATEMENT OF EXPIRED LICENSE

RULE 4.9.2 – REACTIVATION OF INACTIVE LICENSES FOR ARCHITECTS ONLY

RULE 4.9.3.1.2 – CONTINUING EDUCATION REQUIREMENTS FOR RENEWAL

Benefits of the Proposed Rule(s)/Amendment(s)

1. Please provide the statutory authority, and detailed statements indicating the need for the proposed changes. *(This statement should include specific issues such as specific changes in statutes or the subject matter area, market failure, a compelling public need, risks to the health, safety or welfare of Coloradans, lack of efficient and effective performance of an important government function, or other specific problem(s) that are being addressed by the proposed rule(s).)* Please include the number of complaints you received (if any) that spurred you to take regulatory action.

Section 12-25-315.5 required the Board to adopt rules establishing requirements for continuing education (CE) that an Architect shall complete in order to renew a license to practice architecture in Colorado. The Board utilized the National Council of Architectural Registration Board's (NCARB) model law in place at the time of the initial rule adoption in July 2009, requiring 8 hours annually (16 hours biennially) in health, safety and welfare (HSW) activities. In August 2011, the Board voted in favor of initiating rulemaking to revise the current Colorado Architect CE requirements in order to comply with the NCARB March 2011 draft resolutions and passed by NCARB's 54 U.S. Member Boards in June 2011. This resolution amends current model law providing national equivalency and consistency in CE requirements and the reporting period in which they are completed. These rules would increase the minimum CE from 16 hours (8 hours annually) to 24 hours biennially (12 hours annually) in HSW activities, an increase of 8 hours biennially (4 hours annually) and adjust the current reporting period to a calendar year model. An estimated 55% of Architects hold licenses in multiple states. As of July 1, 2011, 46 of 54 U.S. jurisdictions require CE for licensure renewal and 32 of 54 jurisdictions already require 12 hours of HSW CE annually. This standardization would move to a national equivalency minimum requirement and lessen licensee confusion about the CE requirements for renewal, reinstatement and reactivation and allow the Architect to maintain one administrative tracking record. There have been no complaints received by the Board related to increased CE minimum requirements.

2. Please list the top three benefits of the proposed regulation, explain how the proposed regulation results in the expected benefits; and if the proposed regulation reduces or eliminates the problem(s) listed above. *(This statement should include impacts on economic growth, job creation and economic competitiveness.)*

1. Compliance with the NCARB amended model law setting a national standard with a minimum 12 hours of HSW CE annually (24 hours biennially), completed by a calendar year reporting period, for license renewal which would significantly lessen licensee confusion and reduce administrative tracking for licensees with multiple licenses.
2. Align the reinstatement and reactivation requirements with the renewal requirements which will comply with the NCARB amended model law setting a national standard with a minimum 12 hours of HSW CE annually, completed by a calendar year reporting period, for license reinstatement which would significantly lessen licensee confusion and reduce administrative tracking for licensees with multiple licenses.
3. Equivalency and consistency with the national model of a minimum of 12 hours of HSW CE annually for reciprocity applicants and removing a potential barrier for licensure.

It is the position of the Board members in favor of the rule revision that the national standardization of CE could increase the likelihood of CE compliance and lessen confusion and the burden of administrative recordkeeping costs by the licensee. There is a likelihood that the licensee has already complied with the minimum 12 hour HSW (annually) requirements as already required by another jurisdiction in which they hold a license.

3. What, in your estimation, would be the consequence of taking no action, thereby maintaining the status quo?

Maintaining status quo would place Colorado's minimum CE requirements less than that of the majority of U.S. jurisdictions. The lack of equivalency and consistency will cause confusion with licensees with differing renewal, reinstatement and/or reactivation requirements.

4. Please describe two alternatives that were considered in place of the proposed regulation. Include the costs to business and other entities required to comply for each alternative. State the reason(s) for not selecting each alternative.

There were no alternatives considered in place of the proposed rules.

5. Describe stakeholder input regarding the proposed rule(s)?

Licensees have the ability to submit written comments as well as appear and testify at the rulemaking hearing. The proposed rule changes are posted to the Board's website at <http://www.dora.state.co.us/aes/rulemaking.htm>.

6. Please describe the government costs to be incurred because of the proposed regulation (*Examples include collection; paperwork; filing; recordkeeping; audit, inspection and training costs, etc.*), and state your estimates (in dollars) of the costs that will be incurred.

There is no government cost to be incurred as a result of adoption of the proposed rule revisions. Requirements and a process are already in place, both by Board and Licensing staff, and the increase in the minimum CE hours would not require any additional workload other than already incurred. The anticipated costs are \$0.

7. Please provide the number and types of entities or small businesses that will be required to comply with the proposed rule(s). Please provide the source of data used (*i.e., program data, NAICS code statistics, etc.*).

As of September 30, 2011, per DLS, there are currently:

1. 7,192 actively licensed Architects. All actively licensed Architects would be required to meet the renewal requirements in October 2013.
2. 79 inactive Architects. Any licensee applying for reactivation would be required to meet the requirements effective on January 1, 2012.
3. 4,425 lapsed Architects in Colorado. Any licensee applying for reinstatement would be required to meet the requirements effective on January 1, 2012.

Note that it is approximated that 55% of Architects hold a license in another jurisdiction, thus the renewal exposure could be as low as 3,236 active licensees. Approximately 45% of Colorado's currently active licensees list a Colorado address (3,210). However, there currently is no way to identify how many actively licensed Architects with a Colorado address hold only a Colorado license.

8. Does the proposed regulation create barriers to entry (*i.e., licensing, permit or educational requirements*)? If so, please describe those barriers and why those barriers are necessary.

No barriers to initial licensure would be created. However, it should be noted that Colorado licensees would be affected. Renewing Architects will have two calendar years (2012 and 2013) to complete the additional 4 hours annually (8 hours biennially) above the 16 hours HSW currently required biennially. An Architect reinstating or reactivating their license, who hold only a license in Colorado, will be required to complete the additional 8 hours of HSW activity prior to licensure. The additional CE may be acquired at a cost of \$0 as long as it meets the minimum Board rules and requirements.

9. Explain the additional requirements with which small business owners will have to comply (*i.e., will they need to purchase new equipment or software to meet the requirement(s); are there training costs; are there new disclosure/filing requirements; are there transactional costs, paperwork costs, recordkeeping costs, etc.*). Please state your estimates (in dollars) of the direct and indirect compliance costs by types listed. Also include whether each cost is a one-time or ongoing expense.

Licensees applying for renewal may incur additional costs of as little as \$0 to an estimated \$120 annually, or \$240 per renewal period of two calendar years. Several entities have been identified, inclusive of professional Architect associations and organizations, which offer HSW CE for \$0. Cost may be dependent upon the licensee choice of CE and provider. Also, the licensee may already be required to meet the 12 hours of HSW CE annually (or 24 hours biennially) in another jurisdiction. There is no limitation use of CE completed for another jurisdiction's requirement, as long as it meets the Colorado Board's Rules.

10. Please state whether the proposed regulation contains different requirements for different sized entities or different geographic regions, and explain why this is, or is not, necessary.

There are no differing requirements for different sized entities or different geographic regions. All Architect licensees renewing, as well as those Architect licensees reinstating or reactivating their license will be required to meet the same CE requirements.

11. What is the ability of small business owners to implement changes required by the proposed regulation, and state the average estimated cost of implementation? (*For example, if a proposed rule required all business in a particular sector to utilize a specific software application, a small business owner may have a difficult time implementing the software if the software is expensive to purchase or if their existing computers are not able to run the software.*)

This question is addressed in #8 above.

12. Please state if the proposed regulation will force the cessation of business by any existing businesses, and the impact the cessation will have on the economy including but not limited to the number of employees losing their jobs, the economic losses by the businesses and the estimated economic ripple the cessation will have on suppliers, consumers or buyers.

There is no anticipation that the proposed rule will cause or force the cessation of an Architect, nor an impact on any business, even though the proposed rule may require the licensee to acquire an additional 8 hours of HSW CE biennially. Because the Board does not require that CE be acquired within Colorado, there would be no identifiable impact to the Colorado economy.

13. Does the proposed regulation restrict consumer choice (*i.e., availability of goods or services; price increases; etc.*)? If so, please describe those restrictions.

The proposed regulation does not restrict consumer choice.

14. Please state the estimated impact (in dollars) the proposed regulation will have on sales, employment or tax revenue.

There is no estimated impact that the proposed rule will have on sales, employment or tax revenue unless the CE is acquired or purchased from a Colorado provider. However, the current Board rules do not require that compliant CE be acquired within Colorado.

15. Please identify all other small business sector(s) that the proposed regulation(s) may impact, and state the estimated financial impact the proposed regulation will have on each small business sector.

The only potential sector identified would be those vendors or professional organizations that provide CE directed to Architects. However, the impact of the proposed rule cannot be estimated since the proposed rule does not require the acquisition of CE attained within Colorado.

Thank you for your time and effort.

N C A R B

DRAFT
OF THE
RESOLUTIONS
TO BE
ACTED UPON
AT THE
2011 ANNUAL MEETING
AND
CONFERENCE

M A R C H 2 0 1 1

*Draft of the Resolutions to be Acted Upon at the
2011 Annual Meeting and Conference*
National Council of Architectural Registration Boards
1801 K Street NW, Suite 700K
Washington, DC 20006
202/783-6500
www.ncarb.org

RESOLUTION 2011-A

Supported by the Council Board of Directors (_ - _)

TITLE: *Legislative Guidelines, Model Law and Model Regulations* Amendments – Changes to Continuing Education Requirements

SUBMITTED BY: Council Board of Directors

RESOLVED, that the second paragraph of Section 4 of the *Model Law* be amended to read as follows:

“A registered architect must demonstrate professional development completion of annual continuing education activities, ~~since the architect’s last renewal or initial registration, as the case may be;~~ † The Board shall by regulation describe professional development such activities acceptable to the Board and the form of documentation of such activities required by the Board. The Board may decline to renew a registration if the architect’s professional development continuing education activities do not meet the standards set forth in the Board’s regulations.”

FURTHER RESOLVED, that Section 100.006, Terms Defined Herein, of the *Model Regulations* be amended to add the following in appropriate alphabetic order:

“Continuing Education (CE)

Continuing education is intended to assure that all registered architects regularly increase or update their knowledge of and thereby become more competent in technical and professional subjects related to the practice of architecture to safeguard the public’s health, safety, and welfare.”

FURTHER RESOLVED, that Section 100.006, Terms Defined Herein, of the *Model Regulations* be amended to revise the existing definition of “Professional Development Unit” as follows:

“Professional Development Unit Continuing Education Hour (CEH)

One continuous instructional hour (50 to 60 minutes of contact) spent in either Structured Educational Activities or Individually Planned Activities intended to increase or update the architect’s knowledge and competence in Health, Safety, and Welfare Subjects. If the vendor/provider of the Structured Educational Activities prescribes a customary time for completion of such an Activity, then such prescribed time shall, unless the Board finds the prescribed time to be unreasonable, be accepted as the architect’s time for Professional Development Unit Continuing Education Hour purposes irrespective of actual time spent on the activity.”

FURTHER RESOLVED, that Section 100.006, Terms Defined Herein, of the *Model Regulations* be amended to revise the existing definition “Structured Educational Activities” as follows:

“Structured Educational Activities

~~Educational activities in which the teaching methodology consists primarily of the systematic presentation of at least 75 percent of an activity’s content and instructional time must be devoted to acceptable Health, Safety, and Welfare Subjects related to the practice of architecture, including courses of study or other activities under the broad categories and areas identified as Health, Safety and Welfare Subjects and provided by qualified individuals or organizations, including monographs, courses of study taught in person or by correspondence, organized lectures, presentations or workshops and other means through which identifiable technical and professional subjects are presented in a planned manner, whether delivered by direct contact or distance learning methods.”~~

FURTHER RESOLVED, that Section 100.006, Terms Defined Herein, of the *Model Regulations* be amended to delete the existing definition “Individually Planned Educational Activities” as follows:

“Individually Planned Educational Activities

~~Educational activities in which the teaching methodology primarily consists of the architect himself/herself addressing Health, Safety, and Welfare Subjects, which are not systematically presented by others, including reading or writing articles on such Subjects; studying or researching building types, designs or building systems; rendering services to the public; advancing the profession’s and the public’s understanding of the practice of architecture; and the like.”~~

FURTHER RESOLVED, that Section 100.006, Terms Defined Herein, of the *Model Regulations* be amended to revise the existing definition “Health, Safety, and Welfare Subjects” as follows:

“Health, Safety, and Welfare Subjects

~~Technical and professional subjects, which the Board deems appropriate intending to safeguard the Public’s health, safety, and welfare. Such subjects include building design; sustainable design; environmental or land use analysis; life safety; architectural programming; site and soils analysis; accessibility; structural systems considerations; lateral forces; building codes; evaluation and selection of building systems, products or materials; construction methods; contract documentation; construction administration; and the like. These subjects are necessary for the proper evaluation, design, construction, and utilization of buildings and the built environment and include the following broad categories and areas:~~

LEGAL: Laws, Codes, Zoning, Regulations, Standards, Life Safety, Accessibility, Ethics, Insurance to protect Owners and Public

TECHNICAL: Surveying, Structural, Mechanical, Electrical, Communications, Fire Protection, Controls

ENVIRONMENTAL: Energy Efficiency, Sustainability, Natural Resources, Natural Hazards, Hazardous Materials, Weatherproofing, Insulation

OCCUPANT COMFORT: Air Quality, Lighting, Acoustics, Ergonomics

MATERIALS and METHODS: Building Systems, Products, Finishes, Furnishings, Equipment

PRESERVATION: Historic, Reuse, Adaptation

PRE-DESIGN: Land Use Analysis, Programming, Site Selection, Site and Soils Analysis

DESIGN: Urban Planning, Master Planning, Building Design, Site Design, Interiors, Safety and Security Measures

CONSTRUCTION DOCUMENTS: Drawings, Specifications, Delivery Methods

CONSTRUCTION ADMINISTRATION: Contracts, Bidding, Contract Negotiations”

FURTHER RESOLVED, that Section 100.703 of the *Model Regulations* be amended as follows:

“100.703 Renewal

[Describe terms, including fee with cross reference to 100.107, citing applicable statute.]

[The Board may require that each registered architect demonstrate professional development continuing education by including the following provisions.]

~~Continuing Education Professional Development Requirements. To renew registration, i~~
~~In addition to all other requirements for registration renewal, an architect must have~~
~~acquired complete a minimum of 12 Continuing Education Hours each calendar year~~
~~Professional Development Units for each 12-month period since his/her last renewal or~~
~~initial registration as the case may be or be exempt from these continuing education~~
~~professional development requirements all as provided below. Failure to comply with~~
~~these requirements shall may result in non-renewal of the architect’s registration.~~

- (A) ~~Professional Development Units-Continuing Education Hours. Within any 12-~~
~~month period during which 12 Professional Development Units must be acquired,~~
~~at least eight Professional Development Units shall be 12 Continuing Education~~
~~Hours must be completed in Health, Safety, and Welfare Subjects acquired in~~
~~Structured Educational Activities, and the remaining four Professional~~
~~Development Units shall be in Health, Safety, and Welfare Subjects but may be in~~
~~either Structured Educational Activities or in Individual Planned Educational~~
~~Activities. Professional Development Units need not be acquired within this~~
~~jurisdiction, but Continuing Education Hours may be acquired at any location.~~
~~Excess Continuing Education Hours may not be credited to a future calendar year.~~

~~[Note: for jurisdictions having renewal periods of longer than one year adjust numbers accordingly.]~~

- (B) Reporting and Recordkeeping. An architect shall complete and submit forms ~~prescribed or accepted as required~~ by the Board certifying to the architect's having ~~acquired completed~~ the required ~~Professional Development Units Continuing Education Hours~~. Forms may be audited by the Board for verification of compliance with these requirements. ~~Evidence of compliance Documentation of reported Continuing Education Hours~~ shall be maintained by the architect for ~~two five~~ years ~~from the date of award~~ after submission of the form to which it relates. If the Board disallows any ~~Professional Development Units~~, unless ~~Continuing Education Hours~~ the Board finds following a notice and hearing that the architect willfully disregarded these requirements, then the architect shall have ~~six months~~ 45 days from notice of such disallowance either to provide further evidence of having ~~acquired completed~~ the ~~Professional Development Units Continuing Education Hours~~ disallowed or to cure remedy the disallowance by ~~acquiring completing~~ the required number of ~~Professional Development Units Continuing Education Hours~~. (but such ~~Professional Development Units Continuing Education Hours~~ shall not again be used for the next renewal calendar year). ~~If the Board finds, after proper notice and hearing, that the architect willfully disregarded these requirements or falsified documentation of required Continuing Education Hours, the architect may be subject to disciplinary action in accordance with the Board regulations.~~
- (C) Exemptions. An architect shall not be subject to these requirements if:
1. The architect has been granted emeritus or other similar honorific but inactive status by the Board; or
 2. The architect otherwise meets all renewal requirements and is ~~a civilian~~ called to active military service duty in the armed forces of the United States for a significant period of time, ~~has a serious medical condition is ill or disabled for a significant period of time,~~ or can demonstrate to the Board other like hardship, then upon the Board's so finding, the architect may be excused from some or all of these requirements; ~~or~~
 3. ~~The architect otherwise meets all renewal requirements and is registered in any other jurisdiction having continuing professional development requirements which the architect has met, provided that such other jurisdiction accepts satisfaction of this jurisdiction's continuing professional development requirements as meeting its own."~~

SPONSORS' STATEMENT OF SUPPORT

Chaos and confusion have dominated the debate over continuing education for architects for the past several years. Requirements, terminology, types of hours, number of hours, and renewal dates are literally all over the map as almost every jurisdiction now has some form of continuing education requirement. The resolution being presented is a result of the Committee on Professional Development, the Member Board Executives Committee, and the Committee on Procedures and Documents working together, analyzing, and discussing the current situation in order to standardize continuing education requirements.

Since all jurisdictions are charged with protecting the public's health, safety and welfare, NCARB's *Model Law* and *Model Regulations* only concern health, safety, and welfare (HSW) continuing education. Professional development, as it applies to the *Model Law* and *Model Regulations* should be more accurately termed "continuing education," the term used by most jurisdictions in their current laws and regulations.

Despite the variety of renewal requirements imposed by jurisdictions, the committees tried to remedy the difficult issue of mutual acceptance whereby a particular jurisdiction accepts another jurisdiction's requirements. They determined that the language in the *Model Regulations* should be simplified to allow an architect who has met all mandatory continuing educational requirements and is in good standing in one jurisdiction requiring a minimum of 12 continuing education hours per calendar year in HSW subjects acquired in structured educational activities to have met the mandatory continuing education requirements. Any registrant of a jurisdiction will still be subject to that jurisdiction's auditing policies with respect to continuing education requirements.

Since 34 jurisdictions currently require an average of 12 hours per year, the committees also concluded that 12 HSW continuing education hours cited in NCARB's *Model Regulations* was appropriate. However, the way adults learn in the 21st century is very different than that of the previous century. As a result, the committees offered to expand the definition of "structured educational activities" to include both direct contact and distance learning methods, which could include webinars, podcasts, etc. The committees dropped the term "individually planned educational activity" since it is difficult to evaluate the learning objectives, accomplishments, and time devoted to the individually planned educational activity.

The committees determined that the *NCARB Model Regulations* should not allow for any carry-over of continuing education hours earned during a previous calendar year. Under the proposed model regulations there is no justification for carry-over of CEHs. The committees also agreed on 45 days as a reasonable period to make up for any disallowed continuing education hours, and that a reasonable period for record retention would be five years from the date the continuing education hours were awarded.

The committees did not feel it realistic to try to define health, safety, and welfare, but instead chose to broaden HSW categories and subjects found in the *NCARB Model Regulations*, AIA's provider manual, and in a variety of jurisdictional regulations. The subjects are aligned with those used for the Intern Development Program (IDP) and Architect Registration Examination® (ARE®), as directed by the Practice Analysis and should reinforce the competence of practitioners in the same areas where the competence of emerging professionals is initially required.

When approved and implemented by the Member Boards, this resolution will lead to greater standardization of continuing education requirements, improved course content and quality, and simplified record keeping processes for Member Boards, while easing the burden for practitioners licensed in multiple jurisdictions.

CONTINUING EDUCATION REQUIREMENTS BY STATE

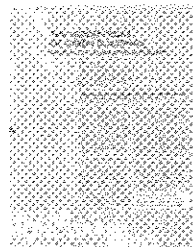
More than 40 jurisdictions require that architects complete continuing education to update their professional skills to renew their license while additional states are considering such requirements. Following is a summary of states requiring continuing education for architects, total continuing education hours required, health, safety, and welfare (HSW) continuing education hours required, and frequency of license renewal:

Note: You should check with your state board to find out the most current continuing education requirements and renewal dates.

State	Total Hours	Requirements	Renewal Cycle
Alabama	12 Hours	12 HSW	Annual
Alaska	24 Hours	24 HSW	Biennial
Arkansas	12 Hours	8 HSW	Annual
California	5 Hours	5 Disability Access	Biennial
Colorado	16 Hours	16 HSW	Biennial
Delaware	24 Hours	24 HSW	Biennial
District of Columbia	24 Hours	24 HSW	Biennial
Florida	20 Hours	20 Florida-approved	Biennial
Georgia	24 Hours	16 HSW	Biennial
Hawaii	16 Hours	16 HSW	Biennial
Idaho	8 Hours	8 HSW	Annual
Illinois	24 Hours	16 HSW	Biennial
Indiana	24 Hours	16 HSW	Biennial
Iowa	24 Hours	16 HSW	Biennial
Kansas	30 Hours	Non-HSW Accepted	Biennial
Kentucky	12 Hours	8 HSW	Annual
Louisiana	12 Hours	12 HSW	Annual
Maryland	24 Hours	16 HSW	Biennial
Massachusetts	12 Hours	8 HSW	Annual
Minnesota	24 Hours	24 HSW	Biennial
Michigan	Pending *	Pending *	Pending *
Mississippi	24 Hours	24 HSW	Biennial
Missouri	24 Hours	16 HSW	Biennial
Nebraska	24 Hours	16 HSW	Biennial
Nevada	8 Hours	8 HSW	Annual
New Hampshire	24 Hours	16 HSW	Biennial
New Jersey	24 Hours	16 HSW	Biennial
New Mexico	24 Hours	24 HSW	Biennial
New York	36 Hours	24 HSW	Every 3 Years
North Carolina	12 Hours	12 HSW	Annual
Ohio	24 Hours	16 HSW	Biennial
Oklahoma	24 Hours	24 HSW	Biennial
Oregon	24 Hours	24 HSW	Biennial
Puerto Rico	50 Hours	36 HSW	Every 5 years
Rhode Island	24 Hours	16 HSW	Biennial
South Carolina	24 Hours	24 HSW	Biennial
South Dakota	30 Hours	20 HSW	Biennial
Tennessee	24 Hours	16 HSW	Biennial
Texas	8 Hours	6 HSW+1SD+1Acc.	Annual
Utah	16 Hours	16 HSW	Biennial
Vermont	24 Hours	24 HSW	Biennial
Virginia	16 Hours	Non-HSW Accepted	Biennial
Washington	24 Hours	16 HSW	Pending *
West Virginia	12 Hours	8 HSW	Annual
Wisconsin	24 Hours	16 HSW	Biennial
Wyoming	16 Hours	16 HSW	Biennial

* Pending - State has passed enabling legislation and regulations are being promulgated, please contact state board for current requirements.

RELATED PUBLICATIONS



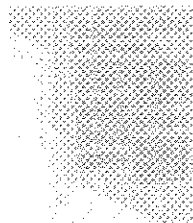
Hidden Risk of Green Buildings
Many of the aspects of building green—such as improved energy conservation, increased thermal insulation, and the use of innovative products—also make buildings susceptible to future failure. This mini-monograph examines the challenges architects face when designing higher performing buildings.

Quiz: \$35 (Free for NCARB Record Holders)
1 CEH Health, Safety, and Welfare (HSW) and Sustainable Design (SD)
Download (PDF, 3.117K)



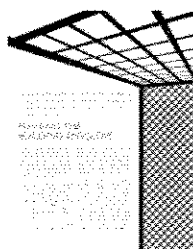
Ethics and Professional Rules of Conduct
This mini-monograph examines some of the ethical dilemmas architects face each day. The author discusses NCARB's Rules of Conduct and AIA's Code of Ethics and Professional Conduct and how they can help resolve some of these issues. Several case studies are presented that show that in some situations it is difficult to determine "right" and "wrong."

Quiz: \$35 (Free for NCARB Record Holders)
1 CEH Health, Safety, and Welfare (HSW) and Sustainable Design (SD)
Download (PDF, 216K)



Who Needs a Spec Writer
While some architects may cringe at the thought of writing a spec, others look at it as an opportunity to make an important contribution to a project. This mini-monograph looks at how specifications are developed and the important role they play in protecting the public's health, safety, and welfare.

Quiz: \$35 (Free for NCARB Record Holders)
1 CEH Health, Safety, and Welfare (HSW) and Sustainable Design (SD)
Download (PDF, 3.142K)



Pushing the Building Envelope
This mini-monograph examines the design and construction of conventional building envelopes and provides an introduction to the more unusual ones associated with many of today's state-of-the-art practices. It also encourages architects to develop a more comprehensive understanding of the complex issues associated with the design of building envelopes so that they can make appropriate decisions relative to particular projects, clients, and sites.

Quiz: \$35 (Free for NCARB Record Holders)
1 CEH Health, Safety, and Welfare (HSW) and 1 Sustainable Design (SD)
Download (PDF, 236K)

CE Exhibit A

[letter](#) [reader service](#) [widget](#) [advertise](#)


AIA Members: Your *Architectural Record* subscription has expired! Renew today and don't miss an issue.

ARCHITECTURAL RECORD

Search our site:

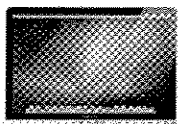

[NEWS](#) [PROJECTS](#) [RESIDENTIAL](#) [FEATURES](#) [CRITIQUE](#) [VIDEO](#) [EMERGING](#) [PRACTICE](#) [ARCHITECTS](#) [PRODUCTS](#) [COMMUNITY](#) [GREEN](#) [TECH](#) [CEU](#) [RESOURCES](#)

ADVERTISING



Sharpen your scissors.

Enter the Kingspan Legacy Papercraft Competition! Channel your creativity. Win awesome prizes. Get published. Leave a legacy.



1 2 3 4 5 6 7
PRIZES

*Awarded in your name to the institution of your choice, or put toward your project.

ARCHITECTURE NEWS

Recession, Stage II

NYC Parking Garage Gets \$4 Million Facelift

Is Vietnam the New Frontier for Architects?

Asia Theme Park Boom Is Big Business for Designers

AIA Creating Database of Stalled Building Projects

Stalled HOK Project Gets a Second Wind

Sears Tower Builder Dies at 78

Cunningham Group Scores, Belatedly, as South Korea Wins Olympics Bid

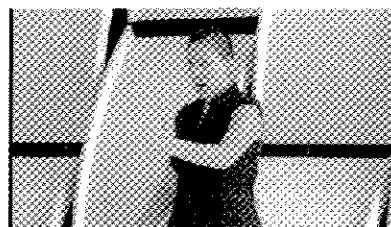
Foster's Half-Built Harmon Hotel Beyond Repair, Says Report

Top 250 Firms: Titans Maintain Lead While Industry Suffers

View all headlines

Follow us on Twitter

VIDEO



The Wild Beast at Cal Arts

By Rodgett+Fung



Page 1 of 14

View all

RECORD BLOGS: RECENT POSTS

RIBA Announces 2011 Stirling Prize Shortlist

By: [william_banley](#) 7/21/2011

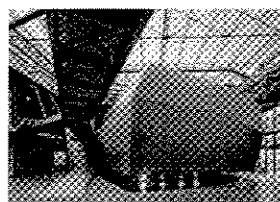
Downward Slide for Architectural Billings

By: [jenna_mcknight](#) 7/20/2011

On the Boards: 3Beirut by Foster + Partners

By: [jenna_mcknight](#) 7/19/2011

On the Boards: Wuhan Tower by



BUILDING TYPES STUDY

Museums

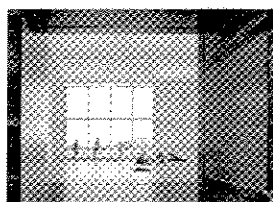
New museum projects by Odile Decq, Steven Holl, Francisco Mangado, and others.



ARCHITECTURAL TECHNOLOGY

The Royal Conservatory

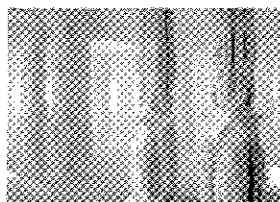
KPMB renovates and expands Canada's venerable music education institution.



BUILDING TYPES STUDY

Performing Arts

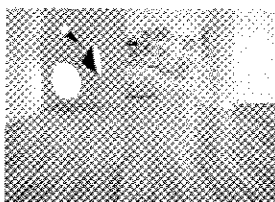
Recently completed performance spaces in L.A., New York, Toronto, and abroad.



SNAPSHOT

Subdivided Columns

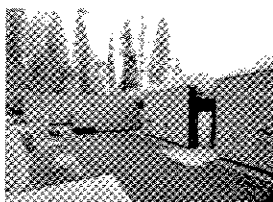
Michael Hansmeyer's mill-cut cardboard columns evoke the creations of a futuristic insect.



PRODUCTS

Flooring

The latest natural and synthetic flooring options for projects ranging from health care to hospitality.



HOUSE OF THE MONTH

Stone Creek Camp

Andersson+Wise Architects creates a sculptural lakeside refuge that balances the wild with the refined.

EDITORIAL

Back to Basics

Ideas about place, craft, and community inspire a summer camp for architects

RESIDENTIAL

Featured Houses

We present photos of, plans for, and essential information about a group of recently completed residential projects that exemplify a specific type of house.

CALL FOR ENTRIES

Product Reports 2011

Attention building product manufacturers and product designers! Submit your newly introduced products to be

CONTINUING EDUCATION

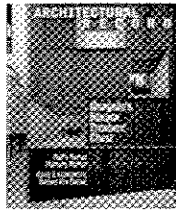
Earn CEU Credits

Access over 200 free courses to earn all of your required continuing education credits

part of our annual year-end roundup. Postmark deadline, September 9th.



ARCHITECTURAL RECORD IN PRINT

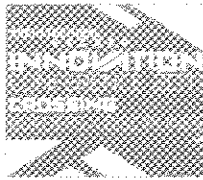


- » [Subscribe to Architectural Record](#)
- » [Manage your print subscription](#)
- » [Order Additional Copies and Back Issues](#)
- » [Get Architectural Record Collections Issues](#)
 - Record Houses
 - Interiors
 - Design Vanguard
 - AIA Honor Awards

UPCOMING EVENT

This 9th Annual Innovation Conference

- brings together design professionals who will demonstrate through specific case studies how they have successfully crossed boundaries and disciplines to increase their impact on the built environment. [Click for complete details.](#)



RECENTLY POSTED READER PHOTOS



National Museum of American Indians

In: [Architectural Photographer Showcase](#)
By: [ShaunChristopherCoffey](#)



National Museum of American Indians

In: [Architectural Photographer Showcase](#)
By: [ShaunChristopherCoffey](#)



National Museum of American Indians

In: [Architectural Photographer Showcase](#)
By: [ShaunChristopherCoffey](#)



Tivoli Concert Hall Extension

In: [Architectural Photographer Showcase](#)
By: [Darren A. Bradley](#)



Mountain Dwellings

In: [Architectural Photographer Showcase](#)
By: [Darren A. Bradley](#)

[View all photo galleries](#)

Adrian Smith + Gordon Gill

By: [jenna_mcknight](#) 7/15/2011

Waterfront Promenade Opens in Lower Manhattan

By: [laura_mirvis](#) 7/14/2011

[View all Record Blogs](#)

READER FEEDBACK

Most Commented

Most Recommended

[Report Finds Las Vegas Hotel Could Potentia...](#)

[Where a New Inclusiveness Is Changing the Fac...](#)

[Is Vietnam the New Frontier for Architects? j...](#)

[Houston Ballet Center for Dance | Gensler | H...](#)

[Bluff House | Maryann Thompson Architects | M...](#)

[Centro Cultural Oscar Niemeyer | Oscar Niemey...](#)

Rankings reflect comments made in the past 14 days

McGraw Hill
CONSTRUCTION

ENR

GreenSource

Sweets Network

[resources](#) | [editorial calendar](#) | [submit work](#) | [contact us](#) | [about us](#) | [call for entries](#) | [site map](#) | [back issues](#) | [advertise](#) | [terms of use](#) | [privacy notice](#) | [my account](#)

© 2011 The McGraw-Hill Companies, Inc. All Rights Reserved



course(s) with that search criteria.

CE Exhibit B



December 2010

Fiberglass Windows: A Sustainable Choice in Non-Residential and Multi-Family Buildings

Architects have another option for window systems in commercial and institutional building designs.

Sponsored by Pella Corporation

Credits: 1.00 HSW/SD



November 2010

A Bright Future: Daylighting for Tomorrow's Buildings

Sponsored by Technical Glass Products

Credits: 1.00 HSW/SD



November 2010

Burning Issues: Understanding Today's Fire-Rated Glass and Framing

Sponsored by Technical Glass Products

Credits: 1.00 HSW



October 2010

The Green Life of Western Redcedar

Credits: 1.00 HSW/SD



February 2010

Bold New Acts

Performing Arts Centers and Acoustics

Credits: 1.00 HSW



November 2009

Window Replacement Solutions for Commercial and Institutional Buildings

Modernizing existing buildings with new manufactured windows to improve energy efficiency, lower maintenance, and enhance design.

Sponsored by Pella Corporation

Credits: 1.00 HSW



December 2008

Protecting Below Grade Building Structures

Sponsored by Epro Services, Inc.

Credits: 1.00 HSW



September 2008

Buildings that Breathe: Thermal Protection, Moisture Proofing and Healthy Air

Moisture proofing and thermal protection depend upon well-engineered system design using new insulations, integrated flashings, and crystalline coatings, to create healthy buildings.

Sponsored by CertainTeed Gypsum, EIMA, Johns Manville, Mortar Net® USA, Ltd., PIMA® Polyisocyanurate Insulation Manufacturers Association, US Tile Company and Xypex Chemical Corp.

Credits: 1.00 HSW/SD, 1 GBCI CE Hour(s)



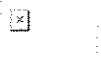
May 2008

Targets for Building Performance: Selecting Windows that Work

Building performance is affected by wind and water pressures and high-performance windows are chosen through the application of best practice calculations.

Sponsored by Pella® Windows & Doors

Credits: 1.00 HSW



January 2008

Designing and Specifying Architectural Columns

Sponsored by Crown Column and Millwork, LLC

Credits: 1.00 HSW



June 2007

Integrated BIM and Design Review for Safer, Better Buildings

How project teams using collaborative design reduce risk, creating better health and safety in projects

Advertorial course provided by NavisWorks

Credits: 1.00 HSW



May 2007

Windows and Sustainability: An Environmental Perspective

Windows and doors can contribute to green design and LEED® credits

Advertorial course provided by Pella® Windows & Doors

Credits: 1.00 HSW/SD



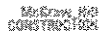
May 2005

Greater Vision: Alternate Window Materials in Commercial Buildings

Advertorial course provided by Pella® Windows & Doors

Credits: 1.00 HSW

Source: <http://continuingeducation.construction.com/search.php>



Continuing Education Center



EDUCATION PROVIDER

Search our courses.



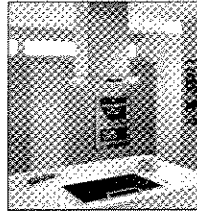
[HOME](#) [COURSE LIBRARY](#) [CREDIT TRACKER](#) [REQUIREMENTS](#) [EVENTS](#)

Kitchen Ventilation by Design

Sponsored by Thermador

[Start the course now](#) ➔

A beautiful kitchen not only looks good, it works well. Any home cook can tell you that proper ventilation is essential, particularly with today's larger kitchens that contain professional grade appliances. Cooking smells may be comforting, but the truth is that during cooking, moisture, gas, grease, and smoke are released into the air and if allowed to build up will negatively impact air quality and potentially result in kitchen fires or even a whole house fire. This course covers the basics of proper ventilation and the types of ventilation systems that deliver superior performance. Key design considerations for a functioning kitchen ventilation system are discussed and the requirements outlined for specifying various system components including the hood, ducting, fan and blower.



Learn At Your Own Pace:

You can take this course and follow along at your own pace. Speed up, slow down, or stop now and finish later. Click "Take the Course Test" to go straight to the test and earn your credits. You'll know immediately if you have earned credits and you will be able to print out your certificate of completion instantly.

Learning Objectives

At the end of this course you will be able to

- Discuss the minimum requirements for air flow and the factors that will affect it.
- Recall the relationships between air flow, capture area and hood height and compare various levels of each.
- Compare different ventilation methods and choose that which best suits a particular kitchen.
- List a number of common performance features

Credits: 1.00 HSW



Course Outline:

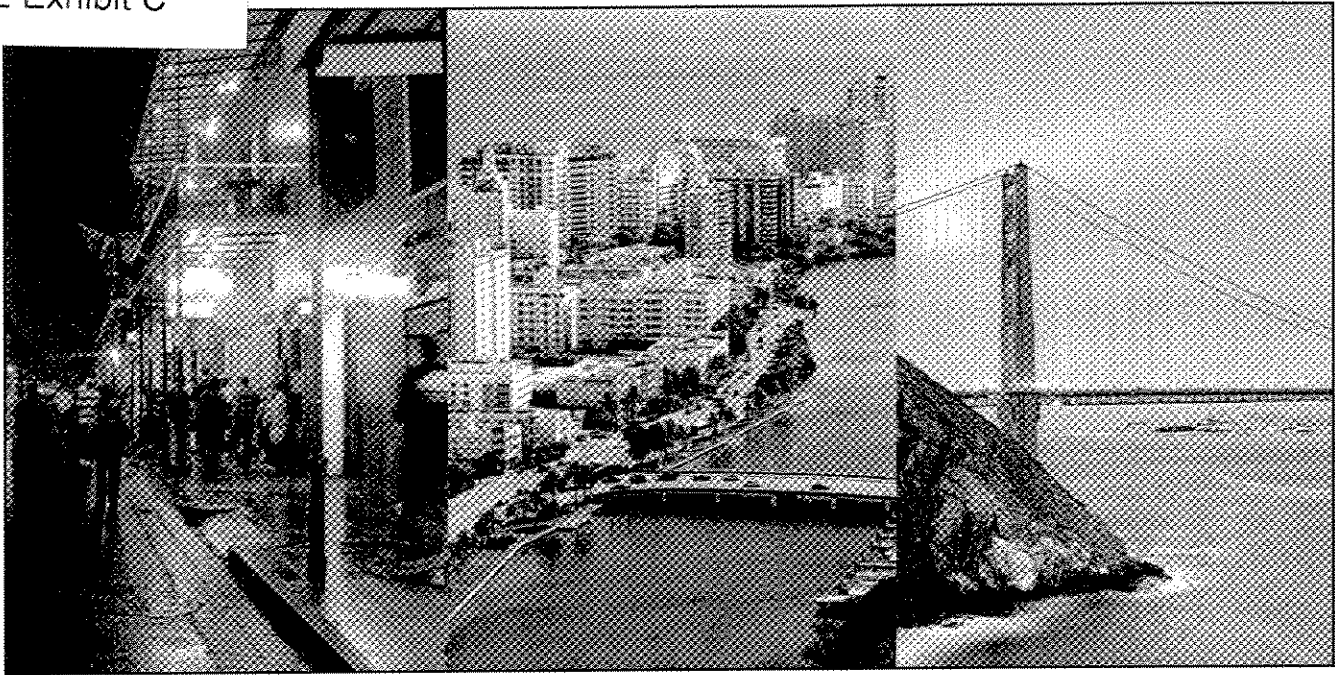
This course is a presentation designed to earn you 1.00 AIA/CES Learning Unit. Use the onscreen controls to pace the presentation to your liking, and then click "Take the Course Test" to take the exam for this course and earn your credit.

- **Kitchen Ventilation by Design**
 - Watch the presentation.
 - Download the Presentation

[Take the test](#)

Sponsor **Thermador®**

CE Exhibit C

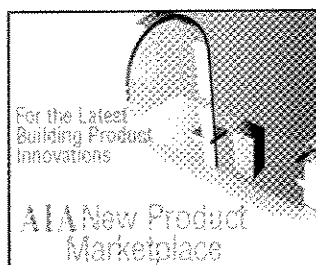
View for **FREE** / Pay for Credit

This year's Virtual Convention provides 35 courses on a wide variety of important topics including ADA, education, health, locality, practice, and sustainability. After you finish viewing a course, follow the instructions and pay the course fee that will allow you to take the quiz to receive learning units with a score of 80% or better (automatically updated to your AIA transcript within 48 hours). Already completed your CE requirements and just want to stay up with the latest in your specialty? All courses are available to view without charge.











See [the Courses Now](#)

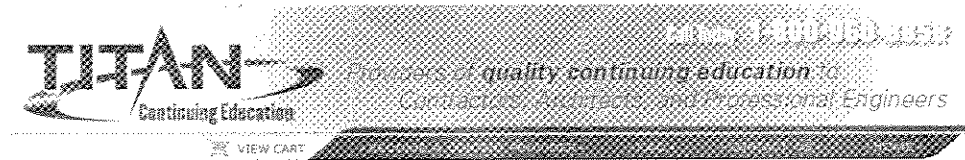
At A Glance

- View all courses for Free
- Pay the course fee and pass the quiz to receive AIA/CES learning units
- "AIA Summer Camp" special discount: \$29.99 per course (after Labor Day: \$34.99 each)
- Transcripts updated within 48 hours
- Technical questions: support@blueskybroadcast.com; Phone: (877) 925-8375 Option 2
- Course/transcript questions: AIAMemberCareCES@aia.org



CE Exhibit D

	Building A Successful Construction Company	Book / Self Study	\$24.95	Add to Cart	<i>Building a Successful Construction Company</i> is the single best resource to help company owners and executives avoid costly mistakes and minimize risk while building profitable businesses. ...More Information
	Design Professional Set	Book / Self Study	\$173.95	Add to Cart	Kaplan's NEW Design Professional Set consists of four hands-on guides to help you expand managerial skills across multiple areas of interest. ...More Information
	Feng Shui: A Practical Guide for Architects and Designers	Book / Self Study	\$39.95	Add to Cart	<i>Feng Shui: A Practical Guide for Architects and Designers</i> is the first book written specifically for design professionals and others who are seeking practical applications of Feng Shui. ...More Information
	Financial Management for Design Professionals The Path to Profitability	Book / Self Study	\$49.95	Add to Cart	This comprehensive new guide is packed with guidance to help company executives implement financial management - from developing an annual budget and profit plan to calculating a firm's overhead an ...More Information
	LEED® for New Construction Exam Prep Flashcards	Flash Cards	\$39.95	Add to Cart	Candidates planning to take the LEED® for New Construction Version 2.2 exam can use these flash cards for focused, portable review of key terms and concepts. Our flash cards contain more than three h ...More Information
	On the Road: Starting Out	Book / Self Study	\$15.95	Add to Cart	This book anticipates every hazard, detour, and speed bump you might encounter when you're starting out on the highway of life. It is a guide filled with tips and techniques that will help you avoid ...More Information
	Planning for Disaster: How Natural and Manmade Disasters Shape the Built Environment	Book / Self Study	\$19.95	Add to Cart	Disasters like Hurricane Katrina, the 2004 Tsunami, and 9/11 will leave an everlasting impression on the world. However, these disasters leave more than just memories - they are forc ...More Information
	Project Management for Design Professionals	Book / Self Study	\$34.95	Add to Cart	<i>Project Management for Design Professionals</i> is written for architects, engineers, designers, landscape architects, urban planners and others of all skill levels looking to plan and c ...More Information
	Strategic Planning for Design Professionals	Book / Self Study	\$49.95	Add to Cart	Though design professionals are masters of technical skill, very few receive formal training in management. Yet management skills, particularly strategic planning competencies, are pivotal to a firm' ...More Information
	The Illustrated Home and CD-ROM	Book / Self Study with CD ROM	\$250.00	Add to Cart	Featuring over 1,500 technically precise illustrations of a home's major systems. <i>The Illustrated Home</i> provides a one-of-a-kind



ACCOUNT LOGIN: User Name: Password: LOGIN
NEW USERS: REGISTER NOW Forgot your password?

Online Courses

- Contractors
- Architects
- Engineers

Home Study Course Books

- Contractors
- Architects
- Engineers

Live Webinars

- Architects
- Engineers

Live Seminars

- Contractors
- Architects
- Engineers

If you have any questions
please call a Titan
Representative
1-800-960-8858

Search Keyword:

SEARCH

Courses

Title: A Short Introduction to Ethics (AIA - TCESIE)
Author: Robert Clewis
Hours: 1 (1 HSW Hours)
Course Fee: \$35.00

Title: ADA Course I: Guidelines for Buildings & Facilities (AIA - TCEAD1)
Author: US Department of Justice
Hours: 4 (4 HSW Hours)
Course Fee: \$125.00

Title: ADA Course II: Specific Questions of Concern (AIA - TCEAD2)
Author: US Department of Justice
Hours: 4 (4 HSW Hours)
Course Fee: \$125.00

Title: ADA Course III: Common Errors and Omissions (AIA - TCEAD3)
Author: US Department of Justice
Hours: 1 (1 HSW Hours)
Course Fee: \$35.00

Title: ADA Course IV: Guide for Small Towns (AIA - TCEAD4)
Author: US Department of Justice
Hours: 2 (2 HSW Hours)
Course Fee: \$65.00

Title: An Introduction to Domestic Wastewater Treatment (AIA - TCEADWT)
Author: J. Paul Guyer
Hours: 2 (2 HSW Hours)
Course Fee: \$65.00

Title: An Introduction to Identification and Classification of Soil and Rock (AIA - TCEISR)
Author: J. Paul Guyer
Hours: 3
Course Fee: \$100.00

Title: Applied Ethics for Architects Part I (AIA - TCEAEA)
Author: Robert Clewis
Hours: 4 (4 HSW Hours)
Course Fee: \$125.00

Title: Applied Ethics for Architects Part II (AIA - TCEAE2)
Author: Robert Clewis
Hours: 4 (4 HSW Hours)
Course Fee: \$125.00

Title: Architectural Concrete (AIA - TCEACC)
Author: US Army Corps of Engineers
Hours: 3 (3 HSW Hours)
Course Fee: \$100.00

Title: Area Development Plans (AIA - TCEADP)
Author: J. Paul Guyer
Hours: 2
Course Fee: \$65.00

Title: Building and Site Security (AIA - TCEBSS)
Author: Carl Sontz
Hours: 7 (7 HSW Hours)
Course Fee: \$200.00

Title: Business Ethics (AIA - TCEBUS)
Author: Robert Clewis
Hours: 3
Course Fee: \$100.00

Title: Centrifugal Pumps: Basic Knowledge & Concepts (AIA - TCEPUM)
Author: Don Ladenberger
Hours: 3
Course Fee: \$100.00

Title: Change Orders (AIA - TCECHA)
Author: Jack MacGiffert

Hours: 1
Course Fee: \$35.00

Title: Chinese Drywall (AIA - TCECHI)
Author: Jack MacGiffert
Hours: 6 (6 HSW Hours)
Course Fee: \$175.00

Title: Construction with Large Stone (AIA - TCECLS)
Author: US Army Corps of Engineers
Hours: 4
Course Fee: \$125.00

Title: Contract Dispute Management (AIA - TCECDM)
Author: Jack MacGiffert
Hours: 3
Course Fee: \$100.00

Title: Design Build: Contract Formation (AIA - TCEDBC)
Author: Jack MacGiffert
Hours: 2
Course Fee: \$65.00

Title: Design Build: Legal Liability & Risk Management (AIA - TCEDBL)
Author: Jack MacGiffert
Hours: 2
Course Fee: \$65.00

Title: Design Build: Procurement Process (AIA - TCEDBP)
Author: Jack MacGiffert
Hours: 2
Course Fee: \$65.00

Title: Design Build: Project Management (AIA - TCEDBJ)
Author: Jack MacGiffert
Hours: 2
Course Fee: \$65.00

Title: Design Build: Team Formation and Specifications (AIA - TCEDBT)
Author: Jack MacGiffert
Hours: 2
Course Fee: \$65.00

Title: Design Build: The Design Build Concept (AIA - TCEDBA)
Author: Jack MacGiffert
Hours: 2
Course Fee: \$65.00

Title: Design of Pile Foundations Part 1 (AIA - TCEPF1)
Author: US Army Corps of Engineers
Hours: 6
Course Fee: \$175.00

Title: Design of Pile Foundations Part 2 (AIA - TCEPF2)
Author: US Army Corps of Engineers
Hours: 4
Course Fee: \$125.00

Title: Earthquake Design and Evaluation of Concrete Hydraulic Structures (AIA - TCEEQD)
Author: US Army Corps of Engineers
Hours: 7 (7 HSW Hours)
Course Fee: \$200.00

Title: Electrical Principles and Practice (AIA - TCEEPP)
Author: Don Kredensor
Hours: 7 (7 HSW Hours)
Course Fee: \$200.00

Title: Energy Consumption Characteristics of Commercial Building HVAC Systems (AIA - TCEHEC)
Author: US Department of Energy
Hours: 8 (8 HSW Hours)
Course Fee: \$225.00

Title: Environmental Ethics: Building Green (AIA - TCEEEB)
Author: Robert Clewis
Hours: 4
Course Fee: \$125.00

Title: Environmental Statistics (AIA - TCESTA)
Author: US Army Corps of Engineers
Hours: 7 (7 HSW Hours)
Course Fee: \$200.00

Title: Environmentally Preferable Products - Building Industry (AIA - TCEENP)
Author: Donna Timmons, PE
Hours: 6 (6 HSW Hours)
Course Fee: \$175.00

Title: Evaluation & Repair of Concrete Structures - Part 1 (AIA - TCEEC1)
Author: US Army Corps of Engineers

Hours: 5 (5 HSW Hours)
Course Fee: \$150.00

Title: Evaluation & Repair of Concrete Structures - Part 2 (AIA - TCEEC2)
Author: US Army Corps of Engineers
Hours: 5 (5 HSW Hours)
Course Fee: \$150.00

Title: Evaluation & Repair of Concrete Structures - Part 3 (AIA - TCEEC3)
Author: US Army Corps of Engineers
Hours: 6 (6 HSW Hours)
Course Fee: \$175.00

Title: Flexible Pavement Design (AIA - TCEFPD)
Author: J. Paul Guyer
Hours: 2
Course Fee: \$65.00

Title: Fundamentals of Business Management (AIA - TCEFBM)
Author: Megan Anderson
Hours: 4
Course Fee: \$125.00

Title: Green Design and Construction (AIA - TCEGDC)
Author: Jack MacGiffert
Hours: 3 (3 HSW Hours)
Course Fee: \$100.00

Title: Homeland Security: Building Threat/Vulnerability Assessment (AIA - TCEHLT)
Author: Jack MacGiffert
Hours: 2 (2 HSW Hours)
Course Fee: \$65.00

Title: Homeland Security: Design and Construction Guidelines Part I (AIA - TCEHL1)
Author: Jack MacGiffert
Hours: 2 (2 HSW Hours)
Course Fee: \$65.00

Title: Homeland Security: Design and Construction Guidelines Part II (AIA - TCEHL2)
Author: Jack MacGiffert
Hours: 2 (2 HSW Hours)
Course Fee: \$65.00

Title: Homeland Security: Introduction to Design and Construction (AIA - TCEHLI)
Author: Jack MacGiffert
Hours: 1 (1 HSW Hours)
Course Fee: \$35.00

Title: HVAC Basics (AIA - TCEHV1)
Author: James Kelly
Hours: 4 (4 HSW Hours)
Course Fee: \$125.00

Title: Hydraulic Design of Storm Sewers using Excel (AIA - TCEHYD)
Author: Harlan Bengtson
Hours: 3
Course Fee: \$100.00

Title: Impact of Building Envelope Airtightness on HVAC Energy Use (AIA - TCEHVE)
Author: US Department of Energy
Hours: 4 (4 HSW Hours)
Course Fee: \$125.00

Title: Indoor Air Quality: Commercial Buildings (AIA - TCEICB)
Author: Robert Clewis
Hours: 4 (4 HSW Hours)
Course Fee: \$125.00

Title: Indoor Air Quality: Design and Construction for Schools (AIA - TCEIDS)
Author: Robert Clewis
Hours: 4 (4 HSW Hours)
Course Fee: \$125.00

Title: Indoor Air Quality: The Inside Story (AIA - TCEIAI)
Author: Environmental Protection Agency
Hours: 3 (3 HSW Hours)
Course Fee: \$100.00

Title: Inspection, Evaluation and Repair of Hydraulic Steel Structures (AIA - TCESTE)
Author: US Army Corps of Engineers
Hours: 8 (8 HSW Hours)
Course Fee: \$225.00

Title: Interior Lighting Design (AIA - TCEILD)
Author: J. Paul Guyer
Hours: 2 (2 HSW Hours)

Course Fee: \$65.00

Title: Introduction to Cathodic Protection (AIA - TCEICP)

Author: J. Paul Guyer

Hours: 3

Course Fee: \$100.00

Title: Introduction to Designing Grid-Connected Photovoltaic Systems (AIA - TCEPV4)

Author: Roger Messenger

Hours: 4 (4 HSW Hours)

Course Fee: \$125.00

Title: Introduction to Electrical Power Requirements for Buildings (AIA - TCEEPR)

Author: J. Paul Guyer

Hours: 2

Course Fee: \$65.00

Title: Introduction to Gear Design (AIA - TCEIGD)

Author: Robert Tata

Hours: 3

Course Fee: \$100.00

Title: Introduction to Matter, Energy and Electricity (AIA - TCMEEE)

Author: Naval Education & Training

Hours: 4

Course Fee: \$125.00

Title: Introduction to Renewable Power Sources (AIA - TCEREN)

Author: Jack MacGiffert

Hours: 8 (8 HSW Hours)

Course Fee: \$225.00

Title: Introduction to Roofing Systems (AIA - TCEROS)

Author: J. Paul Guyer

Hours: 4

Course Fee: \$125.00

Title: Introduction to Solar Cooling Systems (AIA - TCESCS)

Author: J. Paul Guyer

Hours: 2 (2 HSW Hours)

Course Fee: \$65.00

Title: Introduction to Solar Energy (AIA - TCESOL)

Author: Harlan Bengtson

Hours: 3 (3 HSW Hours)

Course Fee: \$100.00

Title: Laboratory Testing of Soils (AIA - TCELT5)

Author: J. Paul Guyer

Hours: 3

Course Fee: \$100.00

Title: Mechanical Power Transmission Fundamentals (AIA - TCEMPT)

Author: Robert Tata

Hours: 4

Course Fee: \$125.00

Title: Mechanical Science Part 1: Diesel Engine Fundamentals; Heat Exchangers; Pumps (AIA - TCEMC1)

Author: US Department of Energy

Hours: 8

Course Fee: \$225.00

Title: Mechanical Science Part 2: Valves & Miscellaneous Mechanical Components (AIA - TCEMC2)

Author: US Department of Energy

Hours: 8

Course Fee: \$225.00

Title: Moisture Infiltration (AIA - TCEMOI)

Author: Jack MacGiffert

Hours: 2 (2 HSW Hours)

Course Fee: \$65.00

Title: Mold Remediation in Schools & Commercial Buildings (AIA - TCEMRE)

Author: Environmental Protection Agency

Hours: 4 (4 HSW Hours)

Course Fee: \$125.00

Title: NEC 2008 Code Changes - Part I: Introduction, Definitions & Chapter 1

Author: Joe Crump; Andrew Manzini

Hours: 2 (2 HSW Hours)

Course Fee: \$65.00

Title: NEC 2008 Code Changes - Part II: Chapter 2: Wiring Design and Protection - Articles 200 - 285

Author: Joe Crump; Andrew Manzini

Hours: 3 (3 HSW Hours)

Course Fee: \$100.00

Title: NEC 2008 Code Changes - Part III: Chapter 3: Wiring Methods and Materials - Articles 300 - 396
Author: Joe Crump; Andrew Manzini
Hours: 3 (3 HSW Hours)
Course Fee: \$100.00

Title: NEC 2008 Code Changes - Part IV: Chapter 4: Equipment for General Use - Articles 400 - 480
Author: Joe Crump; Andrew Manzini
Hours: 3 (3 HSW Hours)
Course Fee: \$100.00

Title: NEC 2008 Code Changes - Part V: Chapter 5: Special Occupancies - Articles 500 - 590
Author: Joe Crump; Andrew Manzini
Hours: 3 (3 HSW Hours)
Course Fee: \$100.00

Title: NEC 2008 Code Changes - Part VI: Chapter 6: Special Equipment - Articles 600-695
Author: Joe Crump; Andrew Manzini
Hours: 3 (3 HSW Hours)
Course Fee: \$100.00

Title: NEC 2008 Code Changes - Part VII: Chapter 7: Special Conditions - Articles 700 - 770, Chapter 8: Communications Systems Articles 800 - 830, Chapter 9: Tables
Author: Joe Crump; Andrew Manzini
Hours: 2 (2 HSW Hours)
Course Fee: \$65.00

Title: NEC 2011 Code Changes Part I - Ch 1-4 (AIA - TCEN11)
Author: Joe Crump; Andrew Manzini
Hours: 7 (7 HSW Hours)
Course Fee: \$200.00

Title: NEC 2011 Code Changes Part II - Ch 5-8
Author: Joe Crump; Andrew Manzini
Hours: 7 (7 HSW Hours)
Course Fee: \$200.00

Title: Noise Control in Buildings (AIA - TCENCB)
Author: J. Paul Guyer
Hours: 4 (4 HSW Hours)
Course Fee: \$125.00

Title: Nuclear Power - Making a Comeback? (AIA - TCENPC)
Author: Howard Sobel
Hours: 4 (4 HSW Hours)
Course Fee: \$125.00

Title: Nuclear Power Plants: What Makes them Safe? (AIA - TCENPS)
Author: Howard Sobel
Hours: 5 (5 HSW Hours)
Course Fee: \$150.00

Title: Nuclear Power: What Great Promise, What Went Wrong (AIA - TCENPW)
Author: Howard Sobel
Hours: 6 (6 HSW Hours)
Course Fee: \$175.00

Title: Open Channel Flow - Part 1 - The Manning Equation & Uniform Flow (AIA - TCEOC1)
Author: Harlan Bengtson
Hours: 2
Course Fee: \$65.00

Title: Open Channel Flow - Part 2 - Hydraulic Jumps, Supercritical Flow & Non-Uniform Flow (AIA - TCEOC2)
Author: Harlan Bengtson
Hours: 2
Course Fee: \$65.00

Title: Open Channel Flow - Part 3 - Sharp Crested Weirs (AIA - TCEOC3)
Author: Harlan Bengtson
Hours: 2
Course Fee: \$65.00

Title: Pipe Flow Measurement (AIA - TCEPFM)
Author: Harlan Bengtson
Hours: 3
Course Fee: \$100.00

Title: Principles and Use of Ball and Roller Bearings (AIA - TCEBRB)
Author: Robert Tata
Hours: 8
Course Fee: \$225.00

Title: Principles of Organizational Communication (AIA - TCEPOC)
Author: Heather Otlewski
Hours: 4

Course Fee: \$125.00

Title: Professional Ethics for Architects (AIA - TCEPEA)

Author: Robert Clewis

Hours: 4 (4 HSW Hours)

Course Fee: \$125.00

Title: Project Management - Be a Successful Project Manager (AIA - TCEPJM)

Author: Randy Klein

Hours: 7

Course Fee: \$200.00

Title: Project Management Fundamentals (AIA - TCEPMF)

Author: Jack MacGiffert

Hours: 3

Course Fee: \$100.00

Title: Quality Assurance: Focus On Design Control (AIA - TCEQAF)

Author: Howard Sobel

Hours: 6 (6 HSW Hours)

Course Fee: \$175.00

Title: Reliability and Durability of Building/Site Components (AIA - TCERDB)

Author: Carl Sontz

Hours: 8 (8 HSW Hours)

Course Fee: \$225.00

Title: Residential Green Building (Design, Construction and Certification) (AIA - TCERGB)

Author: Andrew Manzini

Hours: 6 (6 HSW Hours)

Course Fee: \$175.00

Title: Residential Green Remodeling (Design, Construction and Certification) (AIA - TCERGR)

Author: Andrew Manzini

Hours: 8 (8 HSW Hours)

Course Fee: \$225.00

Title: Respiratory Protection (AIA - TCERES)

Author: Jack MacGiffert

Hours: 1 (1 HSW Hours)

Course Fee: \$35.00

Title: Risk Management (AIA - TCERSK)

Author: Jack MacGiffert

Hours: 1

Course Fee: \$35.00

Title: Rock Foundations (AIA - TCEROC)

Author: US Army Corps of Engineers

Hours: 8

Course Fee: \$225.00

Title: Roller-Compacted Concrete (AIA - TCERCC)

Author: US Army Corps of Engineers

Hours: 6

Course Fee: \$175.00

Title: Safer Steps from Sloping Sidewalks (AIA - TCESST)

Author: Kenneth LiDonnici

Hours: 2 (2 HSW Hours)

Course Fee: \$65.00

Title: Safety Considerations in Coating and Painting (AIA - TCESCP)

Author: Mark Rossow

Hours: 1 (1 HSW Hours)

Course Fee: \$35.00

Title: Short-Circuit Testing and Overvoltage Device Coordination (AIA - TCESCT)

Author: Don Kredensor

Hours: 7 (7 HSW Hours)

Course Fee: \$200.00

Title: Slope Stability (AIA - TCESLP)

Author: US Army Corps of Engineers

Hours: 3 (3 HSW Hours)

Course Fee: \$100.00

Title: Stability Analysis of Concrete Structures (AIA - TCESCO)

Author: US Army Corps of Engineers

Hours: 5 (5 HSW Hours)

Course Fee: \$150.00

Title: Storm Water: Designing a Pollution Prevention System (AIA - TCEPPS)

Author: Trevor Otlewski

Hours: 3 (3 HSW Hours)

Course Fee: \$100.00

Title: Storm Water: Pollution Controls During Construction (AIA - TCEPCC)

Author: Trevor Otlewski

Hours: 3 (3 HSW Hours)

Course Fee: \$100.00

Title: Storm Water: Sediment & Erosion Control (AIA - TCESEC)

Author: Trevor Otlewski

Hours: 7 (7 HSW Hours)

Course Fee: \$200.00

Title: Supply Chain Management (AIA - TCESCM)

Author: Megan Anderson

Hours: 4

Course Fee: \$125.00

Title: Sustainable Design - US Approach (AIA - TCESDU)

Author: Jack MacGiffert

Hours: 8 (8 HSW Hours)

Course Fee: \$225.00

Title: Total Building Commissioning (AIA - TCETBC)

Author: Jack MacGiffert

Hours: 5

Course Fee: \$150.00

Title: Understanding the Tacoma Narrows Bridge Collapse (AIA - TCETNB)

Author: J. Paul Guyer

Hours: 2 (2 HSW Hours)

Course Fee: \$65.00

Title: Water Desalination (AIA - TCEWDS)

Author: J. Paul Guyer

Hours: 4

Course Fee: \$125.00

If you're having trouble viewing this email, you may [see it online](#).

Share This: 



e-CONNECTION

Keeping our Record Holders informed. | October 2011

at a glance: Standardizing Continuing Education

Continuing Education: Finding Common Ground

NCARB's 54 U.S. Member Boards overwhelmingly passed significant changes to the continuing education (CE) requirements in the *NCARB Model Law* and *Model Regulations* at the 92nd NCARB Annual Meeting and Conference in June. The revisions recommend that Member Boards require 12 continuing education hours (CEH) in health, safety, and welfare (HSW) subjects each calendar year.

"NCARB has laid the ground work for monumental change for the continuing education system that currently exists in the 54 jurisdictions," said 2010-2011 NCARB President Kenneth J. Naylor, AIA, NCARB, Hon. RAIC.

"This resolution will lead to greater standardization of continuing education requirements and simplified record keeping processes for Member Boards, while easing the burden on practitioners licensed in multiple jurisdictions," said Naylor.

Current Requirements

Currently, 46 jurisdictions have continuing education requirements for licensure renewal. Requirements range from five hours in one year to 50 hours in five years and are usually tied to a jurisdiction's renewal cycle, which varies greatly. Architects licensed in multiple jurisdictions must comply with each individual jurisdiction's requirement in order to renew their licenses.

Finding Common Ground

Of the 46 jurisdictions, 32 currently require an average of 12 hours per renewal cycle. The Council recommends 12 HSW hours and separating the CE reporting period from the

Recent News:

[Final Phase of IDP 2.0 to be Implemented April 2012](#)

[New Vendors Selected for the ARE](#)

[Consultant Selected and Work Begins on NCARB's 2012 Practice Analysis of Architecture Survey](#)

[IDP Firm Award and IDP Firm Outstanding Award Applications Now Available](#)

[IDP Coordinators Meet in Chicago](#)

[NCARB Member Boards Pass New Continuing Education Standards](#)

[Indiana Architect Scott Veazy Installed as NCARB President](#)

[2011 President's Medal Awarded to Seven Recipients](#)

Recent e-News:

[ARE e-News: New Exam Guides](#)

license renewal cycle.

In doing so, each jurisdiction would maintain their current renewal schedule for licensure. When architects document their continuing education hours, they would submit the hours from the previous calendar year—making their reports consistent from jurisdiction to jurisdiction.

"This recommendation will lead to standardization of continuing education requirements across jurisdictional lines and will benefit both boards and practitioners. Boards benefit from a simplified record keeping process and practitioners benefit from a consistent requirement across jurisdictions," said NCARB CEO Michael J. Armstrong.

What Happens Next

The next vital step is for individual jurisdictions to adopt and implement the newly revised standard. Over 30 jurisdictions have the ability to change their rules and/or requirements related to continuing education without legislative action. NCARB has pledged any assistance necessary to support the jurisdictions in order to facilitate this standardization of requirements.

You can read [Resolution 2011-01](#) in its entirety as well as all the resolutions passed at NCARB's Annual Meeting at www.ncarb.org.

Continuing Education Frequently Asked Questions

What are the benefits of adopting 12 HSW CEH per calendar year?

This resolution recommends one continuing education requirement for all of NCARB's 54 member jurisdictions. The benefits are:

- Consistency among jurisdictions
- Less confusion for architects registered in multiple jurisdictions
- A simpler process for architects and jurisdictional boards when renewing

Currently an architect registered in five jurisdictions may have five different CE requirements to keep all of his or her licenses active. Differences in the number of hours required, timeframe for earning hours, and types of hours (HSW, SD, ADA, etc.) accepted are variables that an architect may encounter. Twelve continuing education hours in health, safety, and welfare subjects each calendar is simpler for the architect and jurisdictions to process.

Does this impact interns?

No, this will only impact architects if it is adopted by a jurisdiction in which they are licensed.

[\(August 2011\)](#)

[IDP e-News: IDP and Your Jurisdiction \(June 2011\)](#)

[IDP Supervisor e-News: Site Visit With a Mentor \(April 2011\)](#)

Stay Informed

To help you stay up-to-date on the latest news and announcements, subscribe to our other electronic newsletters.



Learn about the latest happenings on the Architect Registration Examination with [ARE e-news](#). [Subscribe today](#).



Have news about the Intern Development Program sent right to your inbox with the [IDP e-news](#). [Subscribe today](#).



The [IDP Supervisor e-News](#) is designed to provide tips for successful supervising and resources that will assist both supervisors and their interns to navigate the system. [Subscribe today](#).

Also, check NCARB out on the web at:

twitter

[Follow us on Twitter today!](#)

facebook

Add our Facebook Page to

Is NCARB increasing the hours required to complete continuing education?

No, NCARB is recommending that jurisdictions with continuing education requirements adopt 12 HSW CEH per year. Over 30 of the jurisdictions that currently require continuing education require 12 hours.

Do I report continuing education hours to NCARB?

No, NCARB does not keep an individual's record of CEHs. Continuing education hours are a requirement for 46 of NCARB's 54 member jurisdictions for licensure renewal. You will continue to document hours as each jurisdiction requires.

Does this resolution separate the continuing education requirement from licensure renewal?

No. The major change in this recommendation relates to having an architect complete continuing education each calendar year rather than each renewal cycle. However, an architect would still report their continuing education when renewing their license. For example: If you renew your license in April, you would document hours earned between January and December of the previous year rather than from the previous April.

When will this go into effect?

It will depend on whether your jurisdiction chooses to adopt this recommendation. The timetable will vary greatly.

If my state doesn't currently require continuing education, does this resolution make them require it?

No. If your jurisdiction doesn't currently require continuing education, this resolution does not make them require it. However, if your jurisdiction decides to require continuing education in the future, this is NCARB's recommendation—as voted upon by its 54 Member Boards.

Is continuing education required to renew the NCARB Certificate?

No.

Will this increase the cost of continuing education?

No.

Do you need an NCARB Record to document continuing education hours?

No.

Why did NCARB decide to examine continuing education requirements among jurisdictions?

This issue developed at the grassroots level among NCARB's Member Boards. The boards asked the Council to examine the complex problem to see if there was a way to

your news feed. [Click here for more information.](#)



Join us on LinkedIn today!



Subscribe to our channel and watch our videos on [YouTube](#).

Helpful Links

[My NCARB Record Login](#)

create a simplified CE standard that is less confusing for both architects and the boards.

National Council of Architectural Registration Boards
1801 K Street NW | Suite 700K | Washington, DC 20006

This email was sent to **rita.carey@dora.state.co.us**. To ensure that you continue receiving our emails, please add us to your address book or safe list.

[manage](#) your preferences | [opt out](#) using TrueRemove®.

Got this as a forward? [Sign up](#) to receive our future emails.

