

BUILDING BLOCKS

DESIGNPRO
INSURANCE GROUP
A Wichert Insurance Agency

EXPLORING THE BENEFITS OF PROJECT PEER REVIEW. *IS IT WORTH THE EFFORT, TIME & MONEY?*

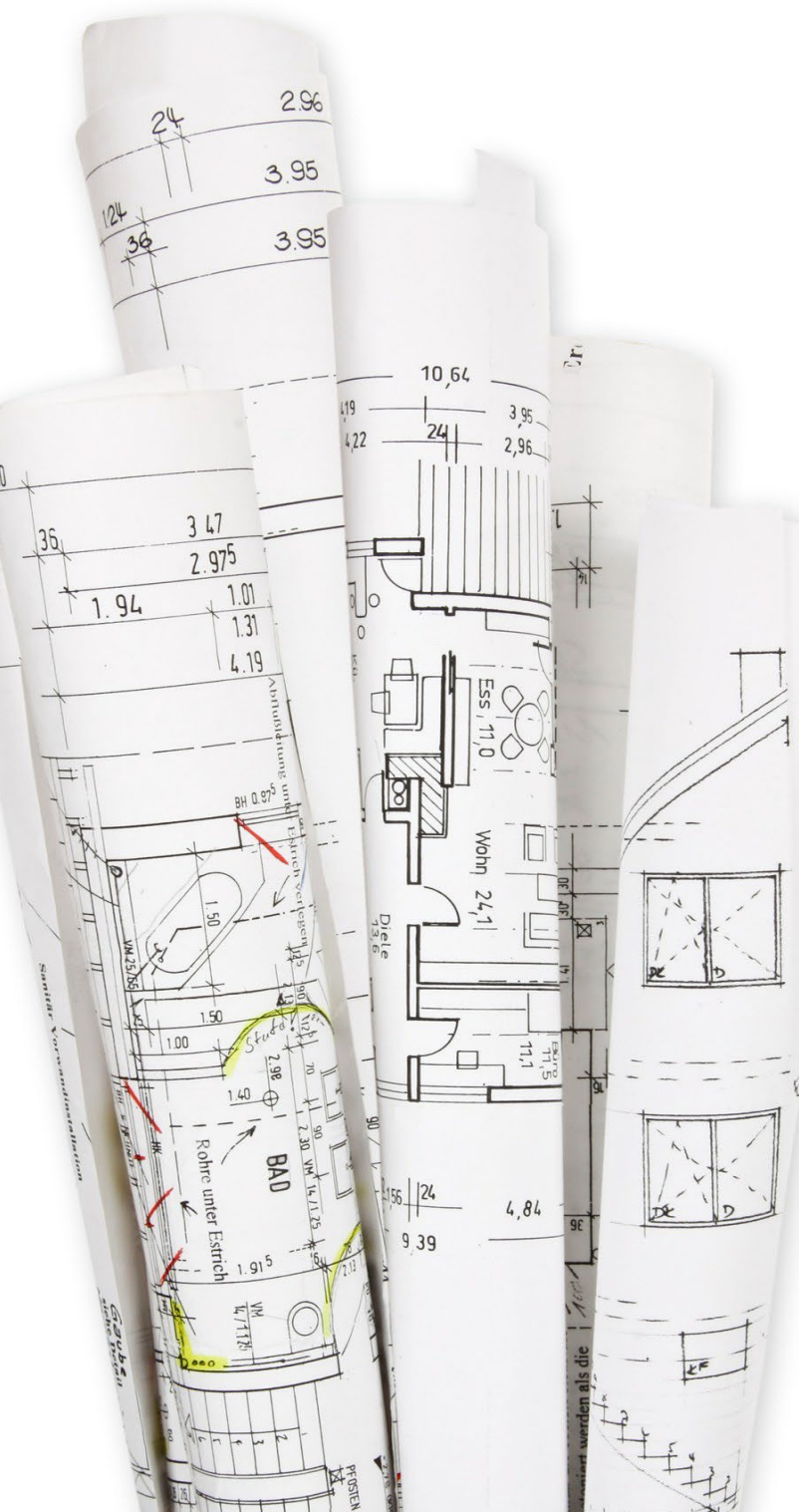
By: *Eric O. Pempus, FAIA, Esq., NCARB*
DesignPro Insurance Group

Peer reviews in the field of scientific research expose an author's scholarly work or ideas to the scrutiny of others who are experts in the same field (peers) and is considered necessary to ensure academic quality. The review is performed to see that it meets standards for ethical conduct, quality, and rigor.

Generally speaking, the same holds true for project designs and construction in the architectural and engineering professions. There is yet another type of peer review when a design firm is audited for their internal structure and practices. This risk management article focuses on peer reviews of **projects**, and the July 2023 Building Blocks will address **firm** peer reviews.

IN THIS ISSUE:

FEATURED ARTICLE
CONTINUING EDUCATION
SOCIAL MEDIA
MEET OUR PEOPLE



Firms should establish as part of their overall Quality Management program a systematic, multistep, and clearly defined program of document audits. Within this program, some audits should be either second-party or third-party; these are also referred to as peer reviews.

- A first-party audit is by the project team already responsible for the project.
- A second-party audit is by someone with an interest in the firm, but not directly responsible for the specific project.
- A third-party audit is by an independent (an outsider) not associated with the firm or the project.

Michael J. Lough, AIA, The Architect's Handbook of professional Practice, 15th Edition, AIA

SECOND-PARTY & ESPECIALLY THIRD-PARTY REVIEWS

These reviews are most effective because of the phenomenon known as inattentional blindness (also known as perceptual blindness)—not seeing the obvious right in front of your eyes. We all have not experienced this, when not seeing the obvious bottle of ketchup in the refrigerator. Or, when an individual is texting or carrying a conversation while driving, and his or her primary focus may cause them to veer off the roadway or worse yet, cause death or severe injury to others on the roadway.

And the wisdom is, especially regarding larger and complex projects, to conduct project peer reviews at significant points in document preparation—such as the end of Schematic Design, Design Development and the Construction Document phases of the project.

A professional firm such as Stonemark Construction Management is an example of a third-party peer reviewer.

Construction projects are seldom error-free, as their design undergoes multiple revision cycles and receives input from numerous design professionals and engineers. Peer reviews are an effective means of averting errors before construction gets underway. A peer review is a procedure that subjects a project to thorough scrutiny by third-party industry experts, such as construction project management companies. During the process, drawings and specifications are assessed by professionals who haven't spent copious amounts of time working on the project and are thus well positioned to find flaws. The reviewers also bring their unique industry knowledge to the table, and with that, fresh perspectives on how to make the project more efficient. During a peer review, the third-party experts look for errors and omissions, assess drawing clarity and design quality, search for cost efficiencies, and suggest ways to make the project more constructible.

<https://stonemarkcm.com/blog/5-ways-peer-reviews-improve-design-quality-and-project-efficiency-in-construction/>

THERE ARE SEVERAL PROJECT PEER REVIEW APPROACHES

Applicable to design and construction projects, one is by the U.S. Office of Energy Efficiency and Renewable Energy's (EERE). It outlines steps for conducting an In-progress Peer Review of projects.



Office of
ENERGY EFFICIENCY & RENEWABLE ENERGY

Peer review is a powerful and effective tool for enhancing the relevance, effectiveness, and productivity of the EERE research, development, and demonstration (RD3) activities because it

taps the experiences and insights of independent experts from outside of EERE. In EERE, project-level in-progress peer review is defined as follows.

A rigorous, formal, and documented evaluation process using objective criteria and qualified and independent reviewers to make a judgment of the technical/ scientific/business merit, the actual or anticipated results, and the productivity and management effectiveness of an Office's portfolio of projects.

<https://www.energy.gov/eere/analysis/peer-review-process>

Below is the outline of the steps in the peer review process organized by plan, conduct, and results phases.

PHASE 1: PLAN EVALUATION

In this planning phase, the office must decide on peer review roles and responsibilities. This includes picking a staff to manage the peer review, including the peer review leader (PRL).

The PRL will have much to do, such as:

- Begin planning many months in advance of the event date (e.g., three or more) to ensure the timely preparation that is essential for success.
- Determine the purpose, scope (e.g., how many subject areas and projects), and frequency of review (how often to conduct reviews, annually, biennially).
- Decide if review panels must have an outside review chairperson, since peer reviews of project portfolios or technical areas are typically broken into separate expert review panels for each project portfolio/ technical area.
- Define evaluation criteria and questions.
- Select individual peer reviewers, using an objective process to ensure independence of the review, as described in the EERE Peer Review Guide.
- Collect information and data from the project principal investigators (PIs), to ensure reviewers get, in the requisite level of detail, the information they need to make informed expert judgments about projects.
- Hire a support contractor to help manage the peer review logistics, manage the peer review response data, and produce the peer reviewer report.
- Provide guidance to PIs to standardize, to the extent possible, the type of project information as well as level of detail to present at the peer review meeting.
- Administer a post-review feedback evaluation questionnaire to PIs and reviewers.

PHASE 2: CONDUCT EVALUATION

This implementation phase occurs at the peer review event itself. Here the PRL and team will may need to provide onsite instructions for peer reviewers, implement uniform procedures for facilitating the review, and collect information from the reviewers generally in real time.

PHASE 3: PRODUCE, DISSEMINATE, AND USE RESULTS

This phase involves implementing several post-review activities:

- Analyzing and summarizing the collected reviewer data (numerical scores and written comments)
- Preparing, publishing, and disseminating the peer review report
- Finalizing the office response and follow-up actions to the peer review

- Evaluating the peer review process (via an evaluation feedback questionnaire or other means of communication with PIs and reviewers to obtain feedback)

IN CONCLUSION

Objective review and advice from peers—peer review—is one of the standard mechanisms for effective management of highly complex and/or technically challenging projects. It is widely used in industry, government, and academia. Peer review is a powerful and effective tool for enhancing the quality of a design and construction project. On guard for notable and possible design and construction issues include:

- inconsistent General Conditions of the Construction
- code violations
- incomplete designs
- inconsistent document scales
- poor documentation coordination
- missing clash detections
- inconsistent drawings and specifications
- missing project components
- improper or unclear symbols



<https://www.5stoday.com/think-quality-measure-twice-cut-once-square-floor-sign/>

One sure way to prevent mistakes is to check the work. The benefit best characterized in the carpenters' saying: "measure twice, cut once." Keep in mind that on any given project there are hundreds, even thousands of decisions that have to be made and communicated to the project participants. With so many opportunities for something to go amiss, it is no wonder that another look at the project's documents will certainly produce a better outcome for all concerned.

About the Author of this Risk Management Building Block Article

As a risk manager for the last 18 years for the design profession, Eric has experience in professional liability insurance and claims, architecture, engineering, land use, law, and a unique background in the construction industry. Prior to risk management, he has 25 years of experience in the practice of architecture/engineering, and as an adjunct professor teaching professional practice courses at the undergraduate and graduate levels for the last 35 years at Kent State University's College of Architecture & Environmental Design.

As a Fellow of the American Institute of Architects and AIA National Ethics Council 2021 Chair, he has demonstrated his impact on architectural profession. He has presented numerous loss prevention and continuing educational programs to design professionals since 2000 on topics of ethics, contracts, and professional practice in various venues across the United States and Canada. He is a former member and chair of his city's Board of Zoning & Building Appeals for 24 years, and is a licensed architect, attorney, and property & casualty insurance professional.

His educational background includes a JD from Southwestern University School of Law, Los Angeles; Master of Science in Architecture from University of Cincinnati; and BA in psychology/architecture from Miami University, Oxford, Ohio.

The above comments are based upon DesignPro Insurance Group's experience with Risk Management Loss Prevention activities and should not be construed to represent a determination of legal issues but are offered for general guidance with respect to your own risk management and loss prevention. The above comments do not replace your need for you to rely on your counsel for advice and a legal review, since every project and circumstance differs from every other set of facts.

Disclaimer: The viewpoints expressed in this article are those of the author(s) and are not necessarily approved by, reflective of or edited by other individuals, groups, or institutions. This article is an expression by the author(s) to generate discussion and interest in this topic.

MARK YOUR
CALENDARS
FOR ERIC'S
UPCOMING



CONTINUING EDUCATION PROGRAMS:

Speaking Engagements:



Complying with Rules of Ethics & Professional Conduct Ohio Society of Professional Engineers

June 9, 2023

Webinar, 3:00 - 4:00 pm EST



Avoiding, Identifying and Resolving Ethical Issues in Land and Water Transactions

July 21, 2023

Live Webinar, 2:00 – 3:00 pm CDT

GET TO KNOW US ON SOCIAL MEDIA



Get the latest updates from DesignPro by following us on social media!

Visit the DesignPro Website at: www.designproins.com

Visit the Wichert Website at: www.wichert.com

Follow DesignPro on Twitter at: [@DesignPro_Insurance](https://twitter.com/DesignPro_Insurance)

Follow Eric Pempus on LinkedIn at: [eric-o-pempus-esq-faia](https://www.linkedin.com/in/eric-o-pempus-esq-faia)

Follow Brad Bush on LinkedIn at: [brad-bush-a2a0136](https://www.linkedin.com/in/brad-bush-a2a0136)

Follow Wichert Insurance on Facebook at: facebook.com/wichertins

Follow Wichert Insurance on Twitter at: [@Wichert_Insurance](https://twitter.com/Wichert_Insurance)

MEET OUR PEOPLE:



Brad Bush, CPCU, AU
Principal
brad.designproins@wichert.com



Eric Pempus
FAIA, Esq., NCARB
Risk Manager
eric.designproins@wichert.com



Tracey Heise
Account Manager
tracey.designproins@wichert.com



Chuck Petretti
Account Executive
chuck.petretti@wichert.com



Roger Perry
Account Executive
roger.designproins@wichert.com



Tracy Combs
Risk Manager & Loss Control Specialist
tracy@wichert.com