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WELCOME TO BUILDING ENCLOSURE COMMISSIONING

ONLINE TRAINING

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06

Construction Industry Misconceptions on Building Enclosure Commissioning

SECTION - BUILDING ENCLOSURE COMMISSIONING

Construction Industry Misconceptions on Building Enclosure Commissioning



WHAT YOU WILL LEARN

- The costs of NOT commissioning
- Rationale for standards and training
- Misunderstanding the standards
- The need for education and training

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Construction Industry Misconceptions on Building Enclosure Commissioning

- "Additional work" and "added cost" are what many general contractors (GC) think of when they hear "building enclosure commissioning (BECx)." They see it as an additional process that requires them to fill out forms, attend more meetings, prepare and revise submittals, and so on. Not surprisingly, then, commissioning has received some resistance among GCs. Unfortunately, many haven't had the opportunity to work with a Building Enclosure Commissioning Process Provider (BECxP) who is brought in at the right time for the right reasons and by the right party.
- There is also the misperception that commissioning is only about reducing the owner's risks and comes with a high price tag—not only to the owner, but
- also to the design team and the contractors. This comes from a misunderstanding of the commissioning process, the scope of commissioning, and when a commissioning provider should be brought onto the team.

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- Many BECxP professionals are just as annoyed by a process that should be very helpful and easy.
- They share the anxiety the rest of the design team, the GC, and enclosure trades feel when the process is not implemented as designed.
- Owners who hire commissioning professionals may not even fully understand this process and may only see these services as an insurance of sorts. These ideas have been a problem for the construction industry for the last 20 years and have led to commissioning a bad name despite a measurable improvement in performance outcomes on projects where commissioning (Cx) and business process engineering (BECx) were successfully integrated into the project delivery process.



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The costs of not commissioning

All contractors have experienced the costs of not commissioning: The "we have always done it this way"

"Our way" mentality and a focus on schedule above workmanship and quality often lead to call-backs and rework that cut margins and deplete contingency funds. A BECxP can help a GC finish a project on time, within budget, and with little rework and callbacks.

This only occurs if the procedure is followed and the commissioner is performing (or permitted to do) his or her role as the collaborator between all design and construction team members.

- The issue is not "contractor-resistance." Commissioning is plagued by misunderstandings about the process and processes that should benefit all participants. Commissioning should be a quality-focused process throughout the project, from design inception to schematic design, design development, construction documents, and post-construction, as shown in Figure 1.



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Misunderstanding the standards

- ANSI/ASHRAE/IES Standard 202, Commissioning Process for Buildings and Systems, states, "The Commissioning Process is a quality-focused process for enhancing the delivery of a project." The process focuses upon evaluating and documenting that "All of the systems and assemblies that have been commissioned have been planned, designed, installed, tested, run, and kept up to meet the owner's project requirements." It's easy to see that the end goal of commissioning is to build buildings that meet the owner's requirements for the project. The commissioner's scope of work is to be involved throughout this process.
- While both the standard and the guidelines give BECxP professionals standard procedures and protocols to be followed, they do not clearly guide or educate the design team, the construction team, or even the owner, as to what their part and involvement are in the commissioning process. These guidelines and standards speak more to the process and expectations of the team member providing the commissioning services. The owners know that they want a building that meets their project requirements, and most architects realize that the commissioner is yet another resource for the design team, but where does this leave the contractor?
- Commissioning is not usually taught to contractors or even the people who install the systems in the buildings we build. This creates somewhat of a disconnect for the contractor and an unclear understanding of what commissioning can do for them.

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The need for education and training

- Education and empowerment of construction companies and the tradespeople who are tasked with delivering leak-free, energy-efficient, and sustainable buildings are the keys to success. A failure to embrace the commissioning process and/or a lack of education about the process are the reasons why most construction teams struggle to deliver leak-free, efficient, and sustainable buildings.
- Building Enclosure Commissioning should be considered at the inception of the project by the owner and design team and design team. If it is deemed that the project would benefit from commissioning, the owner, designer, and commissioning professional must select construction contractors who understand the process and procedures.
- Even contractors who have programs for quality control and quality assurance do not fully understand what the BECx process can do for them. As an industry, we must educate our contractors and building enclosure trades. If they are given a clear understanding as to why and how BECx can benefit them, contractors will embrace it.
- As noted previously, IIBEC, NIBS, and ASTM are currently working together to develop education, training, and certification programs intended to advance our industry and the profession through further support of the BECx process. When the program is developed and implemented, IIBEC will be the only place a professional can become certified as an ISO 17024 accredited BECx.



THANK YOU

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