Code Officials

Q Because ultimate compliance is determined post-occupancy, how will I know at the design phase that the building is capable of meeting the target?
A The design team must provide the code official with a design that is capable of meeting the target before construction can proceed. This design is proven capable through either a whole building energy model or by providing a prescriptive design that has gone through prior vetting by a mechanism acceptable to the code official (this could include a design under ICC G1-2010 Guideline for Replicable Buildings).

Q Since this path is based on maximum flexibility for the designer, how will I inspect the project?
A As discussed above, the designer will provide the code official with a design that is capable of meeting the target as determined by whole building modeling or a pre-approved prescriptive design. These designs will become the basis for inspection. Inspectors would ensure that the components included in the design are present and installed.

Q As a code official, what is my responsibility relative to the Temporary Certificate of Occupancy or Post Occupancy Verification Permit?
A Once construction is complete and all other code provisions satisfied, the code official may either: 1) issue a Temporary Certificate of Occupancy or 2) issue a Certificate of Occupancy and open a Post Occupancy Verification Permit. Similar to landscape-related or other zoning requirements that will be completed post-occupancy, the building owner has a strong incentive to remain diligent and work actively for closure. The TCO or POVP may impact the building owner’s insurance or financing, the ability to sell or lease the property, or the ability to open other permits.

Q If a project does not meet the target in the required time frame, what enforcement mechanisms are there?
A If the building does not comply within the two-year period, the code official may issue a violation and require remedial action. The extent of the remedial action may vary, but may include requiring conduct of an energy audit and the implementation of some level of the identified energy conservation measures; requiring retro-commissioning; or payment of a fine. Once the remedial action is conducted, the code official may close the TCO or POVP.

Q My department has limited resources (both in time and personnel) to enforce energy code provisions. How does this help?
A Compliance with the energy code is determined based on the measured energy performance once the building is in operation and not on the verification of specific requirements in the code. This should result in less time spent on enforcement while better realizing the energy use results intended by the code.

Q Will this compliance path address concerns that the code development and adoption process has become increasingly dominated by special interests?
A Yes. This compliance pathway is based on the achievement of a target energy use, irrespective of the materials used. Future improvements to the pathway would reduce the target amounts, rather than change parameters for specific provisions.

Q Does this type of approach exist elsewhere?
A The city of Seattle has implemented a “Target-Based Compliance Path” within their energy code that provides a similar approach.
A The state of Virginia has a program that allows communities to provide property tax reductions based on energy performance. Virginia Beach and other communities have adopted such a program.
A The 2015 International Green Construction Code (IgCC) includes an outcome-based compliance path.

Building Owners

Q Would I be required to follow this compliance path?
A No, this is an additional and optional compliance path. The performance and prescriptive compliance paths remain in the code.

Q When would I select to use this compliance path?
A A building owner and design team would likely select to use this compliance path if:
1 they share common project objectives and agree to work collaboratively to reach performance goals
2 the owner has an effective operations strategy; and
3 the owner anticipates owning the building for at least the period of compliance, with no significant changes in occupancy or use.
A Owner-occupied or government buildings would be ideal candidates for use of this option. Speculative developers or buildings where tenants are unknown would not select this option.
Q What benefit would such an approach provide to building owners?
A If the building owner and designer elect to pursue this compliance path, the building owner would be provided with some level of assurance about the building energy use and operating costs and that their investment in energy-saving measures is actually realized. Further, the design team would have greater flexibility to find the most cost-effective mechanism to achieve the target—thus potentially reducing project cost.

Q How would a building owner engage his/her design team for a project using this compliance path?
A While this is not an issue covered by the code, it is important to understand how this provision will be used. Many building owners interested in assuring the performance of their buildings have implemented contracts that include performance requirements. Such contracts should be carefully crafted to assure that the determination of responsibility for non-achievement of the target and the accompanying remedies are well-defined. Specific projects with such performance requirements include the U.S. General Services Administration Federal Center South, the Bullitt Center and State of Washington 1063 Block Replacement. See www.wbdg.org/resources/outcomebasedpathways.php.

Q How would a building owner be assured that the building is capable of achieving the target?
A In addition to the regular due diligence of an owner to find a design team capable of meeting the performance requirements, the design team must provide a design that the code official believes is capable of meeting the target. The path retains mandatory code provisions on commissioning, so the building owner receives another level of assurance that the design and construction are in a position to meet the targets.

Designers

Q How would the election to use this compliance path impact the design process and liability for operations following occupancy?
A While this issue is not addressed within the code, it is important for designers to be comfortable and understand how such an option impacts their practice. The requirements for the design team to meet the targets would be largely defined within the contract between the owner and the design team.

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Q How does this path benefit designers?
A This compliance path provides the designer with greater flexibility than is provided under both the prescriptive and performance compliance pathways to achieve the energy use anticipated by the code. This includes the utilization of new design approaches or building products, plus new opportunities in operational and procurement strategies to meet the code.

A The path also assures that current energy reduction strategies not currently recognized within the prescriptive or most modeled performance compliance paths in the code receive credit for the energy savings.

Governmental Leaders

Q What benefit would this approach provide to my community?
A If your community has adopted energy or greenhouse gas reduction goals, current provisions within the energy code do not result in verifiable reductions in energy use. This compliance path would provide a mechanism for your communities to assure that the energy code can provide the anticipated energy savings.

A The prescriptive and performance compliance pathways currently existing within the code have limited ability to address the growing percentage of energy use or greenhouse gas emissions associated with plug loads. This compliance path would capture all such energy use.

Q What if this provision is adopted into the code, but doesn’t meet the needs of our community?
A Currently, this compliance option is being offered as an appendix. Jurisdictions have the option to amend the code. A jurisdiction may elect not to adopt this compliance option or may decide to develop different target values based on more specific data for its region (e.g., results of a benchmarking and disclosure program or a building stock survey).

Learn more:

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