

Reimagining the ICCPC – Architects Roundtable 1 – Summary of Key Points

Participants

- Brian Meacham (BM), Moderator
- Dave Collins (DC), architect, Preview Group, significant experience in codes, supporting AIA, involved in original ICCPC, need to move more to performance in part derives from AIA Blue Ribbon Panel objectives to find ways to find better solutions,
- Bill Brizee (BB), architect, AHL, significant involvement with codes, chaired AIA codes committee, senate task force for building code in Hawaii, like to make it easier for architects to understand code better
- Christopher Chwedyk (CC), architect, Burnham Nationwide, significant experience in practice and codes, working with Chicago in adoption of I-Codes, adjunct professor teaching codes, involved with AIA Blue Ribbon Panel and resulting white paper
- Anica Landreneau (AL), architect, HOK, director of sustainable design, DC energy code development committee, appendix for zero energy, working on electrification, in process of mandatory net-zero energy code, on building energy performance TG for existing buildings, on AIA Blue Ribbon Panel, testified before congress on adoption of performance-based and outcome-based requirements for sustainability and resilience
- Drake Wauters (DW), architect, Wauters Consulting, practice as a technical architect, 50% design-build, looking for new solutions that are more effective, quite involved in building performance, architectural education
- Ron Geren (RG), architect, RLGA Technical Services, independent specifier and building code consultant, instructor on codes at Taliesin, involved in AIA codes and standards committee, leading WG on performance code / changes to ICCPC, textbook author for architects on applying building codes, looking to see how make performance code can be more streamlined
- Ryan Taylor (RT), architect, Ryan Taylor Architects, commercial and residential experience, HVAC and HERS, most work in performance-based design, AIA Blue Ribbon Panel, focus on existing buildings
- Mark Perepelitza (MA), architect, SERA Architects, director of sustainability, lot of projects to address performance, important trend
- Kjell Anderson (KA), architect, LMN Architects, on state building code council for WA, 70% energy use reduction mandate by 2030, chair energy code technical advisory group, code out for comment would require heat pump for space heating and water heating, AIA Committee on the Environment, study on outcome-based codes, went into study for – came out against, big challenge in code enforcement capacity, and existing buildings ASHRAE 100 requirement might be an approach but has some flaws in that it doesn't address carbon directly.
- Joe Jurkiewicz (JJ), architect, Kahler Slater, focused much of career on technical / code issues, served on state of WI commercial building council, served on AIA codes and standards committee, performance is a hard sell to municipalities, but like it because another arrow in the quiver, options needed
- Paul Karrer (PK), manager of AIA codes advocacy program, thanks to participants for joining and providing their input, important activity for AIA started in April 2020
- Brendan Smith (BS)
- Gary Dempster (GD)
- Andrew Queenan (AQ)

Key Take-Aways

- Need to clarify whether any future incarnation of ICCPC will be performance-based, outcome-based or combination. Definitions important. Understood that current ICCPC is performance-based (compliance-focused) but new could be outcome-based (where appropriate).
- If move to outcome-based, better and more integrated attention must be given to buildings in use, maintenance, and related aspects for demonstrable achievement of performance targets / objectives (outcomes).
- Challenges exist with enforcement of performance approaches due to time and expertise required. Many jurisdictions, especially small ones, may lack capacity. May not be needed in all cases. Additional education, training and review resources may be needed. Where will this come from?
- Original ICCPC intended to help guide decisions for performance objectives not well addressed in prescriptive code at the time. Much has evolved in 20 years and the ICCPC has not been kept up to date. Prescriptive code is minimum baseline – need guidance for alternatives, for innovative materials, and when there is desire to go above minimums.
- Risk and liability are concerns for designers, authorities and owners. Prescriptive codes provide standard of care. Deviations by designers, and approval by authorities, can come with risks. With outcome-based requirements, owner have risks and liability concerns over achieving outcomes. (Outcome-based for energy becoming more and more adopted.) Need to be considered.
- There are costs to performance – both in design side and review side – need to be considered.
- To develop good designs using alternative methods and materials (AMM) clause, and performance design today, need to really understand bases for all prescriptive clauses before deviating. Burden on designers and authorities.
- Use of third-party peer review, self-certification, other approaches could perhaps help.
- Qualifications and competence important, especially with self-certification, but also peer-review. Experience with self-certification in Chicago was initial hesitancy, but then demand, and finally seems to work generally well.
- Transparency important. In current approach, if owners are setting performance requirements, can be hard to gain confidence of authorities. If performance measures / criteria are set out in code, can lead to higher confidence, trust and acceptability.
- Should be clear what buildings / situation performance code targeted for. Probably not small / simple buildings, but can be helpful for larger / complex buildings, where innovative materials, methods and approaches desired, and where prescriptions do not fit well to building concept.
- General agreement that code should needs to embody holistic approach that looks how a building is expected to performance, the criteria to measure that performance, and allows for various methods to demonstrate that.