Findings on Changing Risk and Building Codes

Across the globe, the intensity, duration, frequency and location of extreme weather events are changing. Communities and the built environment they rely on to support their economic and social prosperity must be prepared to respond to these changing risks. Building codes are fundamental to assuring buildings support the health, safety and welfare of communities, including protecting life during hazardous events. Therefore, building code development and research organizations recognise the need to work collaboratively to address the challenges posed by changing risks.

THE NEED TO ACT

Building codes have made significant contributions to protecting society from both natural and manmade hazards. However, as societal expectations change, scientific knowledge grows and risks intensify, building codes must continue to evolve to address these needs. Noting that building codes are developed to be proportionate and costs effective, and that there will always be residual risk, it is critical that they continue to be advanced to help minimize the potential for human suffering, loss of life and economic loss resulting from extreme weather events.

LOOKING AHEAD

Building code developers and representatives from across the building industry must work with climate scientists and regulators to establish reliable, authoritative and appropriate models and methodologies that allow development of forward-looking strategies to address changing risks.

To create a more resilient future, adapting to changing conditions while also mitigating the environmental impacts of buildings is needed. While building codes are a fundamental component of a resilient built environment, resilience relies on deployment of a comprehensive strategy that engages the public and private sectors.

WORKING TOGETHER.

As leaders in protecting and advancing public safety and resilience, building codes, standards and supporting resources can make a significant contribution to allowing building occupants and communities to better withstand the challenges posed by these changing risks.

To achieve this, there are opportunities to work collaboratively to:

- Identify strategies for the identification of future risks and the development of building code solutions that support adaptation to those risks.
- Cooperate on the development of international building resilience guidelines and further explore the relationship with land use planning instruments that help determine the location of buildings.
- Support research initiatives to better understand climate science, to assist in aligning expectations for building durability and resilience with the projection of future hazards.
- Develop and deploy messages and resources that enhance understanding of building codes, support a common understanding of risk and communicate the importance of up-to-date building codes. Primary audiences include the general public, policy makers, the finance and insurance sectors and building industry representatives.
- Advance risk and impact analysis to recognize the multiple economic and social benefits provided by resilience investments and the desirability of alternative approaches that fully capture the benefits and costs provided by building codes.

BUILDING CODE DEVELOPMENT/RESEARCH ORGANIZATION SIGNATORIES

- Australian Building Codes Board
- International Code Council
- Ministry of Business, Innovation & Employment, Building System Performance (New Zealand)
- National Research Council of Canada
- Scottish Government

ENDORSING ORGANIZATIONS

- American Institute of Architects
- ASTM International
- Australian Fire and Emergency Services Authorities Council
- Australian Institute for Disaster Resilience
- Australian Institute of Architects
- Australian Sustainable Built Environment Council
- Building Officials Institute of New Zealand
- Engineers Australia
- Geoscience Australia
- Insurance Council of Australia
- Northwest Code Professionals
- Planning Institute of Australia
- Standards Australia
- Urban Land Institute

PRIVATE SECTOR BUSINESS SUPPORTERS

- LumAware Safety Inc.
- Resilient Projects

These Findings were developed by code development and research organizations from the United States, Canada, Australia and New Zealand based on a workshop convened by the U.S.-based International Code Council, 29 and 30 October 2019. The original signatories invite code development bodies from across the globe and the stakeholders that participate in and rely on our processes to join these Findings and work collaboratively to address the challenges posed by changing risks. Last updated October 27, 2020

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