The Fundamentals of Resilient & Climate Adaptive Design

Buildings and communities are subjected to destructive forces from natural and human-caused hazards. The forces affecting the built environment are evolving with climate change, environmental degradation, population growth, and migration. Apply these eight design principles to reduce harm and property damage, adapt to evolving conditions, and more readily, effectively, and efficiently recover from adverse events.



PLACE BASED

Understand and communicate the project's local hazard and climate risks as well as social, environmental and economic challenges and opportunities.

RISK PREPARED

Incorporate a project's hazard and climate risk, or building vulnerability assessment, when developing a strategy to avoid, mitigate, or reduce damage over the building's service life. Explore the potential for maladaptation that may unintentionally increase vulnerability.

EQUITABLE

Consider all populations to be serviced by the project. Remove barriers to access and service while promoting inclusive social, environmental, and economic benefits for the community.

PRECAUTIONARY

Select durable, low-maintenance building systems and materials that reduce negative consequences such as the release of toxics or wind/waterborne debris if the building or site is damaged.

SYSTEM CENTRIC

Recognize that buildings are part of a community system with inherent interdependencies, opportunities, and potential for unintended consequences. Explore the impacts of the project at the building and community scale and harmonize solutions.

READY

Plan for disruptions. Support the operation and occupants of the building, including its role in the community during an emergency, outage, or other disruption. Consider emergency preparations, safe shelter, physical protection, and mental well-being.

SERVICE-LIFE FOCUSED

Ensure design choices support building performance throughout the project's intended lifecycle; balancing first costs and long-term value.

ADAPTIVE

Design the project to accommodate and adapt to changing social, economic, and environmental conditions throughout its anticipated service life.

