

## THE REAL VALUE OF RESILIENT CONSTRUCTION

# ■ Spotlight: Durable and Hazard-Resistant

### CSHUB APPROACH: INCORPORATE QUANTITATIVE HAZARD RESISTANCE INTO LIFE CYCLE COST



### By the numbers—reducing the cost of maintenance and repair

- Longer lasting materials require less maintenance.
- Less maintenance equals lower cost for owners.
- **Hazard-resistant designs save money.** Overall cost of construction is less about materials, more about labor and time spent making repairs and other upkeep on the home.

### How can concrete help?

- Concrete can be used for construction in all climates. It is non-combustible, and does not rot, warp, grow mold, or sag when exposed to moisture over time.
- **There is tangible value in using durable materials for construction.** Structural materials and finishes that resist deterioration are good choices to help minimize the costs for maintenance.
- Over the life of a building, the expected cost of maintenance and post-disaster repair can exceed initial building costs—making an economic case for investing up front in resilient construction.

### Concrete for durability and hazard resistance

There are two aspects of durability. One is the ability to stand up to normal wear and tear and last a long time. The other is to resist extreme events like natural (or man-made) disasters. Concrete is a wise choice for construction as it can be first cost-competitive, last a very long time, and cost owners much less in maintenance and repairs over the lifetime of the building. **The most sustainable building is the building that is only built once.** Resilient structures are good for the planet because their environmental footprint can be spread over many decades. More than half the houses in the U.S. are nearly 40 years old, and almost 40% are nearly 50 years old. Given that we expect our homes to last so long, it makes sense to build them with resilience in mind.