think harder. concrete⁻

RESILIENT COMMUNITIES START WITH MORE DURABLE BUILDINGS

BE STRONG, BUILD WITH CONCRETE

A town or city that features stronger, better built buildings, and the roads and services that support them is truly resilient. Its leadership recognizes the value of planning for potential disasters and has taken steps to ensure the community has the ability to survive with less loss of housing, employment, and critical services. Concrete structures can play a vital role in strong communities. The residents of more robust cities and towns experience major benefits from the overall improvement of building resilience: fewer burdens on local services, a more stable local economy that provides consistent sources of money to run the municipality, and a more enduring legacy for future generations. Builders, architects, and designers have come to recognize that more durable public buildings, private homes, and businesses, often built with concrete to resist damage from natural disasters, reduce the impact entire communities have on our planet.

Fewer Burdens on Local Services

As the first line of recovery, hospitals, police and fire departments, and other critical local services need to be housed in disaster resistant facilities. Concrete building systems provide durable municipal structures so that disruption to local services can be minimized.

One study has shown that every dollar spent on reducing the potential impact of disasters saves society an average of \$4.¹ With robust construction, the damage from major storms can be less severe, reducing the energy and resources that a community will have to spend on emergency response, reconstruction, repair, and recovery.

More Stable Tax Base

The yearly direct cost of lost property from natural disasters in the United States averages more than \$35 billion.² When homes and businesses are destroyed, occupancy is disrupted, often leading to a decrease in the amount of local tax that is collected. At the same time costs rise from the expense of cleanup and recovery. Less money being available while there are greater needs squeezes budgets.

With less potential for damage, strong concrete homes and businesses are able to continue to serve the community, keeping the tax base and revenues for necessary services constant and predictable. Even when disasters do not occur, safer more resilient construction lasts longer, attracting residents and business, promoting long-term community continuity.

More Stable Economy

When disaster strikes, lives and services are disrupted. Many residents who evacuate an area will have no jobs or homes in which to return. They resettle elsewhere. With durable buildings to house residents and their jobs, normal day-to-day living and the local economy can recover in less time.

More Enduring Legacy for Future Generations

Current building codes represent minimum requirements for construction, the lowest level of quality that will be accepted. By 2030 we will have demolished and replaced 82 billion square feet of our current building stock, or nearly one-third of our existing buildings, largely because the vast majority of them weren't designed and built to last any longer.³ Requiring codes that are more

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SAFETY is important

think

harder.

concrete[®]

Homes and storm shelters built with concrete or masonry protect your family and your possessions. Concrete buildings shelter you from wind, fire, flood, and other disasters.

TALKING to the right people

Your city planners need to hear from you. Let them know that you want to build better, stronger homes, schools, and structures in your community.

RESILIENT & SUSTAINABLE buildings matter

These terms may not be familiar to you, but you know what they mean. The older, sturdy concrete and brick buildings you still see in town are examples of the value of building for the long term. They can be adapted to new uses, continuing to serve the community for years to come.

OPERATING EFFICIENCY saves you money

Concrete walls provide good thermal performance that keeps your energy bills low and your home and businesses comfortable. Not only does this impact your wallet, but conservation can play a key role in moving the U.S. toward energy independence.

NEIGHBORHOOD CONTINUITY

Resilient buildings are more able to survive natural and man-made disasters with minimal loss of housing, employment, and critical services. Even when disasters do not occur, durable buildings promote long-term continuity.

GROWING your local economy

Building with locally produced materials provides jobs in your community. It also contributes to your community's tax base, helping it continue to grow strong.

strict results in a higher level of performance and durable structures that are better able to stand up to damage from high winds, fire, flooding, and other potentially serious events. These longer lasting buildings can be adapted to future uses, avoiding demolition and replacement. Plus, less new construction means less construction debris in landfills.

Communities built to last start with comprehensive planning, including stricter building codes that produce robust structures with long service lives. More durable buildings with high-performance features including better disaster resistance, help promote community continuity, making cities and towns stronger, and better able to successfully weather any challenge.

Footnotes:

- National Hazard Mitigation Saves: An Independent Study to Assess the Future Savings of Mitigation Activities, National Institute of Building Sciences Multi-Hazard Mitigation Council – 2005
- 2. National Weather Service Office of Climate, Water and Weather Services, National Oceanic and Atmospheric Administration (NOAA) 2010. Data source is the NOAA website (www.weather.gov/os/hazstats.html)
- More, Richard, "Sustainable Stewardship Historic preservation plays an essential role in fighting climate change," *Traditional Building*, Natural Trust for Historic Preservation, Washington, DC – 2008



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