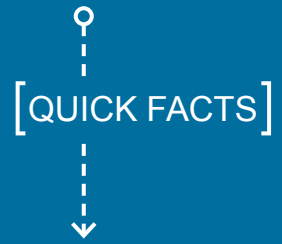


# Climate Resilience Strategies for Buildings in New York State

Although climate has always been a key consideration for the design, construction, and operation of buildings, many professionals assume that future weather conditions will be similar to what was experienced in the past. Increased exposure to climate-related hazards will require practitioners in New York State to reevaluate their standard practices. Increasing the resilience of buildings in New York State can help reduce negative impacts of extreme weather events.



## EXAMPLES OF RESILIENCE STRATEGIES

- Windows
- Wind Protection
- Emergency Management
- Redundant Building Systems
- Neighborhood Flood Protection
- Building Flood Protection
- Building Systems Flood Protection
- Building Foundations
- Green Infrastructure
- Gray Infrastructure
- Roof Covering
- Roof Drainage
- Neighborhood Fire Protection
- Building Fire Protection
- Insulation
- Neighborhood Development
- Urban Heat Island
- Building Ventilation
- Indoor Air Quality
- Passive Building Systems
- Active Building Systems
- Building Operations
- Potable Water Systems
- Reclaimed Water Systems
- Integrated Pest Management

Increased amounts of precipitation can have disastrous effects on buildings and communities. Snowvember caused 13 deaths, more than 370 reports of roof damage, and 30 collapsed roofs.



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## What are climate resilience strategies?

**1** *Climate resilience strategies* is an umbrella term used to describe the changes made to a building to improve its performance during climate hazard events or under future climate conditions. The implementation of these strategies is not limited to the physical application of materials or technologies. These strategies encompass a range of necessary actions, such as planning, costing, operations, and maintenance, in order to prepare our buildings.

## What do climate resilience strategies help us to prepare for?

**2** Changing climate conditions, such as increases in temperature and precipitation, will increase the likelihood of many different climate hazard events, including hurricanes/tropical storms, flooding, severe storms, wildfire, heat waves, pest infestations, rising sea levels, and winter storms. A necessary step for both protection against and preparation for these events is to increase building resiliency.

## Who needs to be engaged in the process of resilience?

**3** Effectively implementing climate resilience strategies requires the attention of all those involved in the building sector. This includes building owners and operators, policymakers, planners, architects, and engineers. Each has an important role to play and will approach resilience in a different way.

## Why is NYS broken into different climate regions?

**4** ClimAID divided New York State into seven different climate regions: (1) WNY/Great Lakes Plain; (2) Catskill Mountains and West Hudson River Valley; (3) Southern Tier; (4) NYC and Long Island; (5) East Hudson and Mohawk River Valleys; (6) Tug Hill Plateau; and (7) Adirondack Mountains. Each region of New York State experiences climate change differently and, as a result, should apply different resilience strategies.

## Where can all this information be found?

**5** *Climate Resilience Strategies for Buildings in New York State* builds upon existing documents that assist in implementing resilience strategies. This report aims to give an overview of resilience strategies, while allowing readers to dig deeper and access more specific information through links.