

# **Acronyms and Glossary**

## **Acronyms**

A

**ABFE** Advisory Base Flood Elevation

**ACI** American Concrete Institute

**AIA** American Institute of Architects

**ANSI** American National Standards Institute

**ARA** Applied Research Associates

**ASCE** American Society of Civil Engineers

**ASOS** Automated Surface Observation System

**ASTM** American Society for Testing and Materials

B

**BEG** Bureau of Economic Geology, Texas

**BFE** Base Flood Elevation

**BIA** Brick Industry Association

**BUR** Built-Up Roof

C

**CABO** Council of American Building Officials

**C&C** Components and Cladding

**CDT** Central Daylight Time

**CEPRA** Coastal Erosion Planning and Response Act

**CFD** Computational Fluid Dynamics

**CFR** Code of Federal Regulations

**C-MAN** Coastal Marine

**CO-OPS** Center for Operational Oceanographic Products and Services, NOAA

**CRTF** Catastrophe Reserve Trust Fund

**CWPRA** Coastal Wetlands Planning and Restoration Act

D

**DFIRM** Digital Flood Insurance Rate Map

**DHS** Department of Homeland Security

**DOJ** U.S. Department of Justice

E

**EF** Enhanced Fujita

**EIFS** Exterior Insulation Finish System

**EOC** Emergency Operations Center

F

**FCMP** Florida Coastal Monitoring Program

**FEMA** Federal Emergency Management Agency

**FIRM** Flood Insurance Rate Map

**FIS** Flood Insurance Study

**FLASH** Federal Alliance for Safe Homes

G

**GLO** General Land Office, Texas

H

**HAZUS-MH** Hazards United States Multi-Hazard

**HCFCD** Harris County Flood Control District

**HMGP** Hazard Mitigation Grant Program

**HRD** Hurricane Research Division

**HWM** High Water Mark

**HUD** U.S. Department of Housing and Urban Development

**HVAC** Heating, Ventilation, and Air-Conditioning

**IBC** International Building Code

**IBHS** Institute for Business and Home Safety

ICC International Code Council

ICMA International City/County Management Association

**IKE** Integrated Kinetic Energy

**IPCC** Intergovernmental Panel on Climate Change

**IRC** International Residential Code

**LADOTD** Louisiana Department of Transportation and Development

**LED** Louisiana Economic Development

**LiMWA** Limit of Moderate Wave Action

**LPS** Lightning Protection System

**LSUCC** Louisiana Statewide Uniform Construction Code Council

**LWCRA** Louisiana Wetland Conservation and Restoration Authority



MAT Mitigation Assessment Team

**mb** millibars

MHCSS Manufactured Home Construction and Safety Standard

**mph** miles per hour

MRGO Mississippi River Gulf Outlet

**MWFRS** Main Wind Force Resisting System

N

**NAHB** National Association of Home Builders

**NAVD** North American Vertical Datum

**NAVD 88** North American Vertical Datum of 1988

**NEC** National Electrical Code

**NFIP** National Flood Insurance Program

**NFPA** National Fire Protection Association

**NFPA 5000** NEPA Building Construction and Safety Code

**NGVD** National Geodetic Vertical Datum

**NHC** National Hurricane Center

NJ DEP New Jersey Department of Environmental Protection

**NOAA** National Oceanographic and Atmospheric Administration

NOS National Ocean Service, NOAA

**NUPC** National Underwriter and Casualty

**NWS** National Weather Service

0

OAR Office of Atmospheric Research

**OSB** Oriented Strand Board

P

**PCS** Property Claim Services

**psf** pounds per square foot

**PVC** Poly Vinyl Chloride

R

**R.S.** Revised Statutes

S

**SBC** Standard Building Code

**SBCCI** Southern Building Code Congress International

**SDP** Surge/Wave Destructive Potential

**SFHA** Special Flood Hazard Area

**SGN** Smart Growth Network

Τ

**TAC** Texas Administration Code

**TCPIA** Texas Catastrophe Property Insurance Association

**TCR** Tropical Cyclone Report

**TDI** Texas Department of Insurance

TRCC Texas Residential Construction Commission

**TTU** Texas Tech University

**TWIA** Texas Windstorm Insurance Association

**UBC** Uniform Building Code

**USACE** U.S. Army Corps of Engineers

#### C

### ACRONYMS AND GLOSSARY

**USGS** U.S. Geological Survey

**UTC** Universal Time Coordinated

**UTMB** University of Texas Medical Branch

V

VSI Vinyl Siding Institute

W

**WDP** Wind Destructive Potential

## **Glossary**

**100-year flood** – The flood elevation that has a 1-percent chance of being equaled or exceeded each year.

**ASCE 7** – National design standard issued by the American Society of Civil Engineers, *Minimum Design Loads for Buildings and Other Structures*, which gives current requirements for dead, live, soil, flood, wind, snow, rain, ice, and earthquake loads, and their combinations, suitable for inclusion in building codes and other documents.

**ASCE 24** – National design standard issued by the American Society of Civil Engineers, *Flood Resistant Design and Construction*, which outlines the requirements for flood resistant design and construction of structures in flood hazard areas.

**Base Flood Elevation** – Elevation of the 1-percent-annual-chance flood. This elevation is the basis of the insurance and floodplain management requirements of the National Flood Insurance Program.

**Building envelope** – The entire exterior surface of a building, including roofs, walls, windows, and doors, which encloses or envelops the space within.

**Capillary action** – Commonly referred to as "wicking," capillary action is the process by which water in liquid form climbs upward through materials in opposition to the force of gravity.

**Critical and essential facilities** – Facilities that, if damaged, would present an immediate threat to life, public health, and safety. Critical and essential facilities include, but are not limited to, hospitals, emergency operations centers, water systems, and utilities.

**Design flood event** – The greater of the following two flood events: (1) the base flood, affecting those areas identified as special flood hazard areas on a community's Flood Insurance Rate Map (FIRM); or (2) the flood corresponding to the area designated as a flood hazard area on a community's flood hazard map or otherwise legally designated.

**Design wind event** – An event for which the observed wind speed equaled or exceeded the design wind speed.

**Design wind speed** – The wind speed designated in ASCE 7 or the building code.

**Eave** – The horizontal lower edge of a sloped roof.

**Erosion** – Process by which floodwaters lower the ground surface in an area by removing upper layers of soil.

**Fetch** – The distance along open water or land over which the wind blows.

**Floodborne debris impact** – Floodwater moving at a moderate or high velocity can carry floodborne debris that can impact buildings and damage walls and foundations.

**Floodwall** – A long, narrow concrete or masonry wall built to protect land from flooding.

**Freeboard** – The height added to place a structure above the base flood to reduce the potential for flooding. The increased elevation of a building above the minimum design flood level to provide additional protection for flood levels higher than the 1-percent-annual-chance flood level and to compensate for inherent inaccuracies in flood hazard mapping.

**Gable end wall** – The triangular end of an exterior wall above the eaves formed under a gable roof.

**Girt** – A horizontal structural member that is attached to sidewall or endwall columns and supports wall paneling.

**Glazing** – Glass or transparent or translucent plastic sheet used in windows, doors, and skylights.

**Hem** – The portion of the cleat (coping or edge flashing) that bends out at about a 60-degree angle at the bottom portion of the cleat/coping or edge flashing.

**Hurricane** – An intense tropical weather system with a well-defined counter-clockwise circulation and sustained winds of 74 mph or higher.

**Insulated concrete form construction** – A construction technique for which the walls of the building are composed of hollow styrofoam blocks or foam panels, which serve as concrete forms that remain in place after they are reinforced and filled with concrete.

**Levee** – A manmade structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water so as to provide protection from temporary flooding.

**Pier foundation** – Vertical support member of masonry or cast-in place concrete that is designed and constructed to function as an independent structural element in supporting and transmitting both building loads and environmental loads to the ground. Typical pier foundations are constructed on footings.

**Pile foundation system** – Vertical support member of wood, steel, or precast concrete that is driven or jetted into the ground and supported primarily by friction between the pilings and surrounding earth. Pilings often cannot act as independent support units and, therefore, are often braced with connections to other pilings.

**Pole construction** – A type of construction for which the pilings extend from the ground to the roof system. It differs from platform construction for which the pilings terminate at the lowest floor.

**Purlin** – A horizontal structural member that supports roof covering and carries loads to the primary framing members.

Rake – The inclined edge of a sloped roof over a wall.

**Reinforced concrete** – Concrete with steel mesh or bars embedded in it to increase its tensile strength.

**Saffir-Simpson Scale** – Measures a hurricane's intensity on a 1–5 scale to give an estimate of the potential property damage and flooding expected. Wind speed is the determining factor in the scale. A Category 1 hurricane is the weakest, with winds from 74–95 mph (maximum, 1-minute sustained speeds), and a Category 5 hurricane is the strongest, with winds over 155 mph. Refer to Table 1-2.

**Slab-on-grade foundation** – Type of foundation for which the lowest floor of the house is formed by a concrete slab that sits directly on the ground.

**Soffit** – The underside of a horizontal element of a building, especially the underside of a stair or a roof overhang.

**Special Flood Hazard Area** – Portion of the floodplain subject to inundation by the base flood.

**Steel moment frame** – In steel moment frame buildings, the ends of the beams are rigidly joined to the columns so that the buildings can resist lateral wind forces without the assistance of additional braces or walls.

**Stem wall foundation** – A type of foundation that uses masonry block and is reinforced with steel and concrete. The wall is constructed on a concrete footing, back-filled with dirt, and compacted, and then the slab is poured on top.

**Storm surge** – The water that is pushed toward land from the high winds of a major storm (i.e., hurricane).

**Tropical storm** – A tropical cyclone with maximum sustained (1-minute average) winds of 39 to 73 mph.