

ORDINANCE NO. 200

AN ORDINANCE ESTABLISHING A COASTAL CONSTRUCTION CODE FOR THE CITY OF MEXICO BEACH, FLORIDA, AS REQUIRED BY SECTION 161.56 (1) AND (2), FLORIDA STATUTES; PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City Council of the City of Mexico Beach, Florida, has determined in order to protect the public health, safety and welfare, it is necessary to adopt a Coastal Construction Code,

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF MEXICO BEACH, FLORIDA, THAT PROVISIONS OF THE COASTAL CONSTRUCTION CODE, AS CONTAINED HEREIN, ARE IMPOSED:

THE COASTAL CONSTRUCTION CODE

Section __00 - TITLE

__00.1 Title: The provisions contained herein shall constitute the Coastal Construction Code for construction within the coastal building zone and coastal barrier islands in the City of Mexico Beach and shall be referred to as the "Coastal Code".

Section __01 - PURPOSE

__01.1 General: The purpose of the Coastal Code is to provide minimum standards for the design and construction of buildings and structures to reduce the harmful effects of hurricanes and other severe storms occurring along the coastal area of the City of Mexico Beach which fronts on the Gulf of Mexico. These standards are intended to specifically address design features which affect the structural stability of the beach, dunes, and topography of adjacent properties. The Coastal Code is site specific to the coastal building zone as defined herein and is not applicable to other locations. In the event of a conflict between this chapter and other chapters of this code, the requirements resulting in the more restrictive design shall apply. No provisions in this chapter shall be construed to permit any construction in any area prohibited by city, county, state or federal regulation.

Section __02 - SCOPE

__02.1 Applicability: The requirements of this Coastal Code shall apply to the following types of construction in the coastal building zone in Mexico Beach.

__02.1.1 The new construction of, or substantial improvement to major structures, nonhabitable major structures, and minor structures as defined herein.

__02.1.2 Construction which would change or otherwise have the potential for substantial impact on coastal zones (i.e. excavation, grading, paving).

__02.1.3 Construction located partially within the coastal building zone.

__02.1.4 Reconstruction, redevelopment or repair of a damaged structure from any cause which meets the definition of substantial improvement as defined herein.

__02.2 Exceptions: The requirements of the coastal code shall not apply to the following:

__02.2.1 Minor work in the nature of normal beach cleaning and debris removal.

__02.2.2 Structures in existence prior to the effective date of the code, except for substantial improvements as defined herein.

__02.2.3 Construction for which a valid and unexpired building permit was issued prior to the effective date of this code.

02.2.4 Construction extending seaward of the seasonal high-water line which is regulated by the provisions of section 161.041, Florida Statutes (i.e. groins, jetties, moles, breakwaters, seawalls, piers, revetments, beach nourishment, inlet dredging, etc.).

02.2.5 Construction of non-habitable major structures as defined herein, except for the requirements of paragraph 04.4.

02.2.6 Construction of minor structures as defined herein, except for the requirements of paragraph 04.5.

02.2.7 Structures listed in the National Register of Historic Places or the State Inventory of Historic Places.

02.2.8 Construction for improvement of a major structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions.

02.3 Application for Permits: Applications for building permits for construction in the coastal building zone and on coastal barrier islands, if not of normal or usual design, may be required by the Building Official to be certified by an architect or professional engineer registered in the State of Florida. Such certifications shall state that the design plans and specifications for the construction are in compliance with the criteria established by this Coastal Code.

Section 03 - DEFINITIONS

03.1 General: The following terms are defined for general use in the Coastal Code:

03.1.1 "Beach" means the zone of unconsolidated material that extends landward from the mean low water line to the place where there is marked change in material or physiographic form, or to the line of permanent vegetation, usually the effective limit of storm waves. "Beach" is alternatively termed "shore".

03.1.2 "Breakaway wall" or "frangible wall" means a partition independent of supporting structural members that will withstand design wind forces, but which will fail under hydrodynamic, wave, and runup forces associated with the design storm surge. Under such conditions, the wall shall fail in a manner such that it breaks up into components which minimize the potential for damage to life or adjacent property. It shall be a characteristic of a breakaway or frangible wall that it shall have a horizontal design loading resistance of no less than 10 nor more than 20 pounds per square foot.

03.1.3 "Building Support Structure" means any structure which supports floor, wall or column loads, and transmits them to the foundation. The term shall include beams, grade beams, or joists, and includes the lowest horizontal structural member exclusive of piles, columns, or footings.

03.1.4 "Coastal Building Zone" means:

For mainland areas which front directly upon the open waters of either the Gulf of Mexico, Atlantic Ocean, Florida Bay, or Straits of Florida, the land area between the seasonal high-water line and a line 1500 feet landward from the coastal construction control line.

3.1.5 "Coastal Construction Control Line" means the landward extent of that portion of the beach-dune system which is subject to severe fluctuations based upon a 100-year storm surge, storm waves, or other predictable weather conditions as established by the Department of Natural Resources in accordance with section 161.053, Florida Statutes.

03.1.6 "Construction" means the building of or substantial improvement to any structure or the clearing, filling, or excavation of any land. It shall also mean any alterations in the size or use of any existing structure or the appearance of any land. When appropriate to the context, "construction" refers to the act of construction or the result of construction.

03.1.7 "Dune" means a mound or ridge of loose sediments, usually sand-sized, deposited by natural or artificial means, which lies landward of the beach.

03.1.8 "Major Structure" includes but is not limited to residential buildings including mobile homes, commercial, institutional, industrial, and other construction having the potential for substantial impact on coastal zones.

03.1.9 "Mean high-water line" means the intersection of the tidal plane of mean high water with the shore. Mean high water is the average height of high waters over a 19 year period.

03.1.10 "Minor Structure" includes but is not limited to pile-supported, elevated dune and beach walkover structures; beach access ramps and walkways; stairways; pile-supported elevated viewing platforms, gazebos, and boardwalks; lifeguard support stands; public and private bathhouses; sidewalks, driveways, parking areas, shuffleboard courts, tennis courts, handball courts, racquetball courts, and other uncovered paved areas; earth ornamental garden structures, aviaries, and other ornamental construction. It shall be a characteristic of minor structures that they are considered to be expendable under design wind, wave, and storm forces.

03.1.11 "Mobile Home" means manufactured housing which conforms to the Federal Manufactured Housing Construction and Safety Standards or the Uniform Standards Code ANSI A-119.1 pursuant to Section 320.823, Florida Statutes.

03.1.12 "Nonhabitable Major Structure" includes but is not limited to swimming pools; parking garages; pipelines; piers; canals, lakes, ditches, drainage structures, and other water retention structures; water and sewage treatment plants; electrical power plants, transmission and distribution lines, transform pads, vaults, and substations; roads, bridges, streets, and highways; and underground storage tanks.

03.1.13 "NGVD" means National Geodetic Vertical Datum - a geodetic datum established by the National Ocean Service and frequently referred to as the 1929 Mean Sea Level Datum.

03.1.14 "One Hundred Year Storm" or "100-Year Storm" means a shore incident hurricane or any other storm with accompanying wind, wave, and storm surge intensity having a one percent chance of being equaled or exceeded in any given year, during any 100-year interval.

03.1.15 "Seasonal high-water line" means the line formed by the intersection of the rising shore and the elevation of 150 percent inter-section of the rising shore and the elevation of 150 percent of the local mean tidal range above mean high water.

03.1.16 "State Minimum Building Code" means the building code adopted by a municipality or county pursuant to the requirements of Section 553.73, Florida Statutes.

03.1.17 "Substantial Improvement" means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds a cumulative total of 50 percent of the market value of the structure either:

- (a) Before the repair or improvement is started; or
- (b) If the structure has been damaged and is being restored, before the damage occurred.

For the purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include either any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions; or any alteration of a structure listed on the National Register of Historic Places or the State Inventory of Historic Places.

Section 04 - COASTAL CONSTRUCTION REQUIREMENTS

04.1 General: Construction within the coastal building zone and on coastal barrier islands shall meet the requirements of this chapter. All structures shall be designed so as to minimize damage to life, property, and the natural environment. Assistance in determining the design parameters to minimize such damage may be found in the reference documents listed in subsection 05.1.

04.2 Structural Requirements for Major Structures:

04.2.1 Design and Construction: Major structures, except for mobile homes, shall be designed and constructed in accordance with section 1205 of the 1986 revisions to the 1985 Standard Building Code using a fastest-mile wind velocity of 110 miles per hour. Major structures, except mobile homes, shall also comply with the applicable standards for construction found elsewhere in the Southern Standard Building Code, CD.

04.2.2 Mobile Homes: Mobile homes shall conform to the Federal Mobile Home Construction and Safety Standards or the Uniform Standards Code ANSI A119.1, pursuant to Section 320.823, Florida Statutes, as well as the requirements of subsection 04.2.3.

04.2.3 Elevation, Floodproofing, and Siting: All major structures shall be designed, constructed and located in compliance with the National Flood Insurance Regulations as found in 44 CFR Parts 59 and 60.

04.3 Design Conditions:

04.3.1 Velocity Pressure: Major structures, except mobile homes, shall be

designed in accordance with the requirements of Section 1205 of the 1986 revisions to the 1985 Standard Building Code using a minimum fastest-mile wind velocity of 110 mph. All construction occurring in the City of Mexico Beach shall use a minimum design fastest-mile wind velocity of 110 mph. These minimum design pressures are as follows:

Table 1205.2A
Velocity Pressure (psf)
Building Height 60 feet or less

<u>Mean Roof Height (ft)</u>	<u>Fastest-Mile Wind Velocity, V (mph)</u> <u>110</u>
0-15	25
20	28
40	34
60	38

Table 1205.3A
Gust Velocity Pressure (psf)
Building Height Greater Than 60 Feet

<u>Height (ft)</u>	<u>Fastest-Mile Wind Velocity, V (mph)</u> <u>Coastal Exposure</u> <u>110</u>
0-30	35
31-50	40
51-100	47
100-200	54
200-300	61
300-400	66
400-500	70

04.3.2 Foundations: The elevation of the soil surface to be used in the design of foundations, calculation of pile reactions and bearing capacities shall not be greater than that which would result from the erosion reasonably anticipated as a result of design storm conditions. Foundation design and construction of a major structure shall consider all anticipated loads acting simultaneously with live and dead loads. Erosion computations for foundation design shall account for all vertical and lateral erosion and scour producing forces, including localized scour due to the presence of structural components. Foundation design and construction shall provide for adequate bearing capacity taking into consideration the type of soil present and the anticipated loss of soil above the design grade as a result of localized scour. Erosion computations are not required landward of coastal construction control lines established or updated since June 30, 1980. Upon request the Department of Natural Resources may provide information as to those areas within coastal building zones where erosion and scour of a 100-year storm event is applicable.

04.3.3 Wave Forces: Calculations for wave forces resulting from design storm conditions on building foundations and superstructures may be based upon the minimum criteria and methods prescribed in the Naval Facilities Engineering Command Design Manual, NAVFAC DM-26, U.S. Department of Navy; Shore Protection Manual. U.S. Department of the Army Corps of Engineers; U.S. Department of the Army Coastal Engineering Research Center Technical Papers and Reports; the

Technical and Design Memoranda of the Division of Beaches and Shores, Florida Department of Natural Resources; or other professionally recognized methodologies which produce equivalent design criteria.

Breaking, broken, and nonbreaking waves shall be considered as applicable. Design wave loading analysis shall consider vertical uplift pressures and all lateral pressures to include impact as well as dynamic loading and the harmonic intensification resulting from repetitive waves.

04.3.4 Hydrostatic Loads: Calculations for hydrostatic loads shall consider the maximum water pressure resulting from a fully peaked, breaking wave superimposed upon the design storm surge with dynamic wave setup. Both free and hydrostatic loads shall be considered. Hydrostatic loads which are confined shall be determined by using the maximum elevation to which the confined water would freely rise if unconfined. Vertical hydrostatic loads shall be considered both upward and downward on horizontal or inclined surfaces of major structures (i.e. floors, slabs, roofs, walls). Lateral hydrostatic loads shall be considered as forces acting horizontally above and below grade on vertical or inclined surfaces. Hydrostatic loads on irregular or curved geometric surfaces shall be determined by considering the separate vertical and horizontal components acting simultaneously under the distribution of the hydrostatic pressures.

04.3.5 Hydrodynamic Loads: Hydrodynamic loads shall consider the maximum water pressures resulting from the motion of the water mass associated with the design storm. Full intensity loading shall be applied on all structural surfaces above the design grade which would affect the flow velocities.

04.4 Structural Requirements for Nonhabitable Major Structures:

04.4.1 Nonhabitable major structures need not meet the specific structural requirements of Section 04.2, except that they shall be designed to produce the minimum adverse impact on the beach and dune system and shall comply with the applicable standards of construction found in the Southern Standard Building Code, CD. All sewage treatment and public water supply systems shall be flood-proofed to prevent infiltration of surface water anticipated under design storm conditions. Underground utilities, excluding pad transforms and vaults, shall be flood-proofed to prevent infiltration of surface water expected under design storm conditions or shall otherwise be designed to function when submerged under such storm conditions.

pr.5 Structural Requirements for Minor Structures: Minor structures need not meet the specific structural requirements of Section 04.2, except that they shall be designed to produce the minimum adverse impact on the beach and dune system and shall comply with the applicable standards of construction found in the Southern Standard Building Code, CD.

04.6 Location of Construction: Construction, except for elevated walkways, lifeguard support stands, piers, beach access ramps, gazebos, and coastal or shore protection structures, shall be located a sufficient distance landward of the beach to permit natural shoreline fluctuations and to preserve dune stability. Construction, including excavation, may occur to the extent that the natural storm buffering and protection capability of the dune is not diminished.

04.7 Public Access: Where the public has established an accessway through private lands to lands seaward of mean high tide or water line by prescription, prescriptive easement, or other legal means, development or construction shall not interfere with such right of access unless a comparable alternative accessway is provided. The developer shall have the right to improve, consolidate, or relocate such public accessways so long as they are:

- (a) Of substantially similar quality and convenience to the public;
- (b) Approved by the local government and approved by the Department of Natural Resources whenever improvements are involved seaward of the coastal construction control line; and
- (c) Consistent with the coastal management element of the local comprehensive plan adopted pursuant to Section 163.3178, Florida Statutes.

Section 05 - REFERENCES

05.1 References: Assistance in determining the design parameters and methodologies necessary to comply with the requirements of this chapter may be obtained from:

Shore Protection Manual, U. S. Army Corps of Engineers, 4th edition, 1984.

U.S. Department of the Army, Coastal Engineering Research Center's Technical Papers and Reports.

Florida Department of Natural Resources, Division of Beaches and Shores Technical and Design Memoranda.

Naval Facilities Engineering Command Design Manual, NAVFAC DM-26, U.S. Department of the Navy

Coastal Construction Manual, Federal Emergency Management Agency, February, 1986. (Please note that the wind design section is based upon the 1982 edition of the Standard Building Code with the 1984 accumulated amendments and not the 1985 edition of the Standard Building Code with the 1986 revisions as required by section 161.55(1)(d), Florida Statutes.)

Section 06 - PENALTIES FOR VIOLATION

Violation of the provisions of this Ordinance or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variances and special exceptions, shall constitute an offense against the ordinances of the City of Mexico Beach. Any person who violates this Ordinance or fails to comply with any of its requirements shall upon conviction be fined not more than \$500.00 or imprisoned for not more than sixty (60) days, or both, and in addition shall pay all costs and expenses involved in the case. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent the City of Mexico Beach from taking such other lawful action as is necessary to prevent or remedy any violation.

Section __07 - SEVERABILITY

If any provision or portion of this Ordinance is adjudged unconstitutional by a court of competent jurisdiction, the declaration of invalidity thereof shall have no effect on the remaining portions and provisions of this Ordinance. All ordinances or portions thereof in conflict with this Ordinance are hereby repealed.

Section __08 - EFFECTIVE DATE

This Ordinance shall take effect as provided by law.

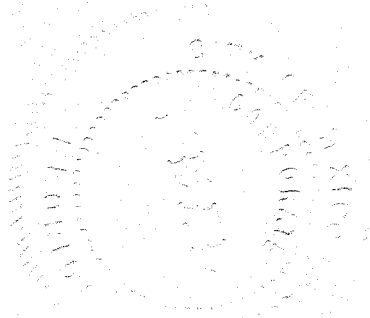
This Ordinance INTRODUCED at a regular meeting of the City Council on February 10, 1987, and ADOPTED March 10, 1987.

CITY OF MEXICO BEACH, FLORIDA



James R. Jones
Mayor-Councilman

ATTEST:



Patricia L. Hutchinson
City Clerk