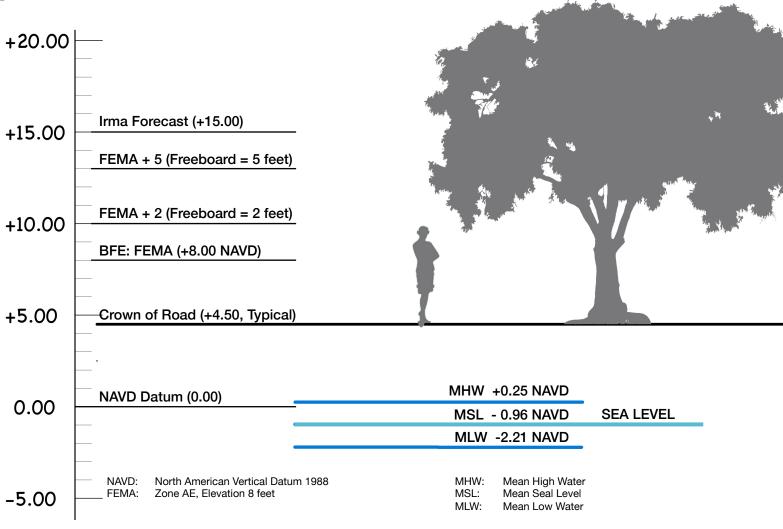
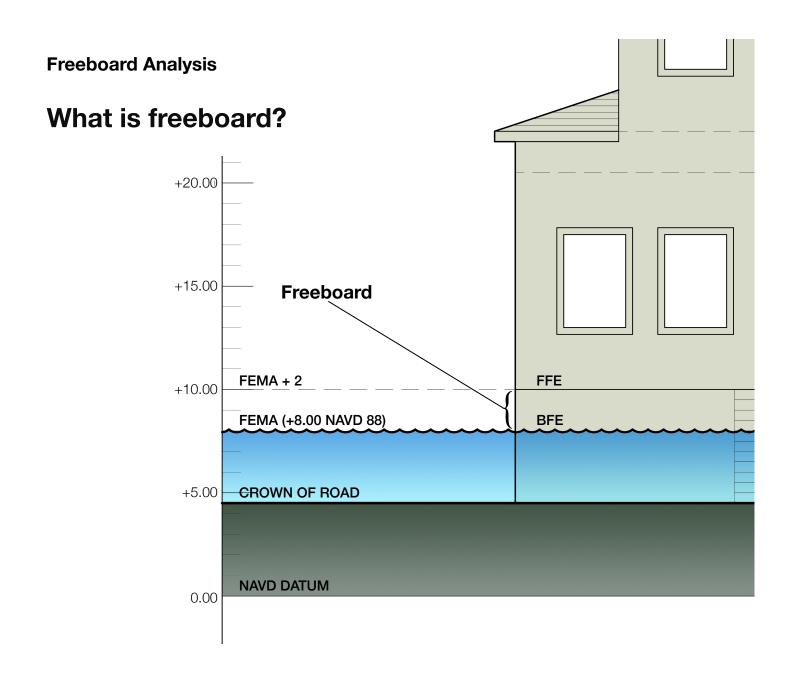
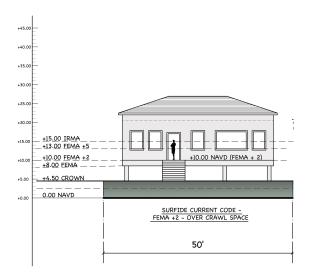
How high are we?





Current Surfside Zoning Code – One-story over crawl space



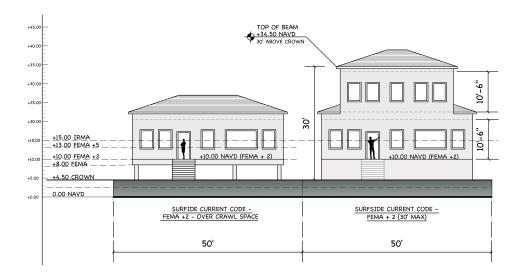
House A

Current Surfside Zoning Code One-story over crawl space FFE = +10.00' NAVD

Surfside

Maximum Allowable Height = 30' Measured to top of tie beam Measured from crown of road

Current Surfside Zoning Code – Two-stories



House A

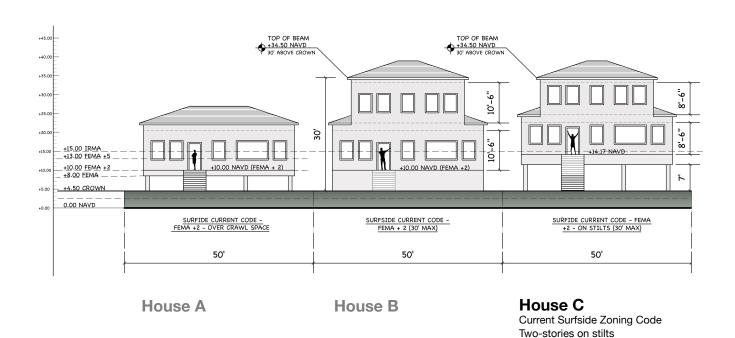
House B

Current Surfside Zoning Code Two-stories FFE = +10.00' NAVD

Surfside

Maximum Allowable Height = 30' Measured to top of tie beam Measured from crown of road

Current Surfside Zoning Code – Two-stories on stilts

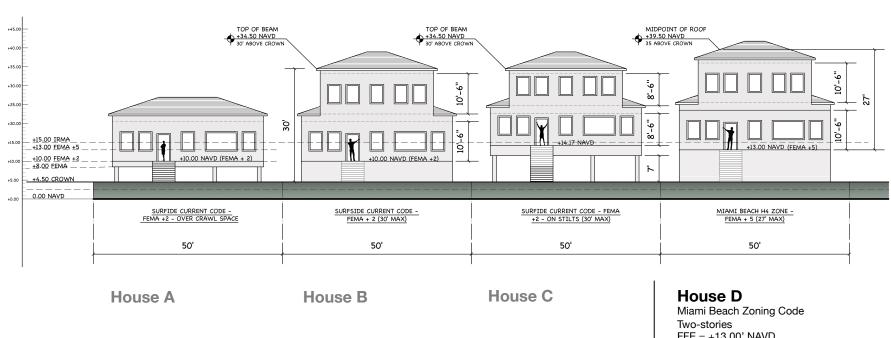


Surfside

FFE = +14.17' NAVD

Maximum Allowable Height = 30' Measured to top of tie beam Measured from crown of road

Miami Beach Zoning Code – Two-stories

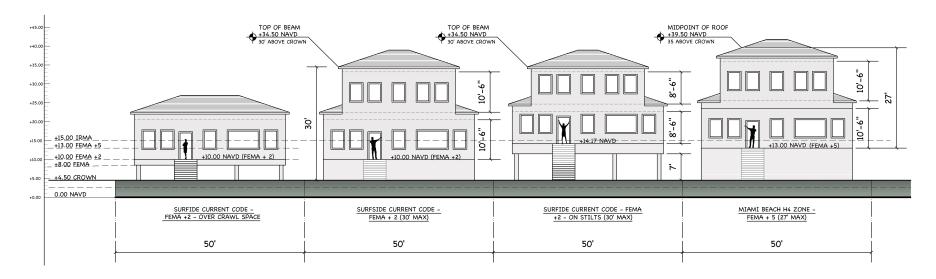


FFE = +13.00' NAVD

Miami Beach

Maximum Allowable Height = 27' Measured to midpoint of roof slope Measured from FEMA + 5 feet

Houses A, B, C, D



House A

Current Surfside Zoning Code One-story over crawl space FFE = +10.00' NAVD

Surfside

Maximum Allowable Height = 30' Measured to top of tie beam Measured from crown of road

House B

Current Surfside Zoning Code Two-stories FFE = +10.00' NAVD

House C

Current Surfside Zoning Code Two-stories on stilts FFE = +14.17' NAVD

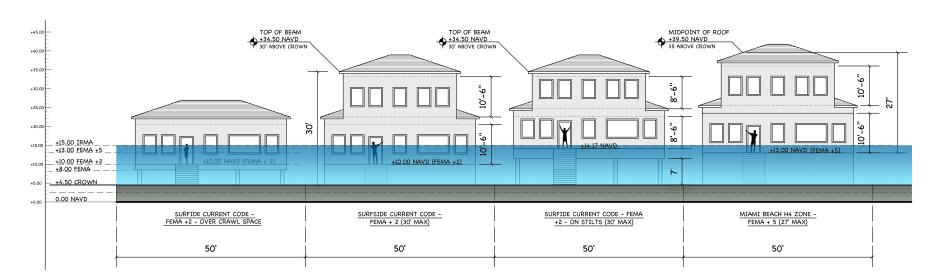
House D

Miami Beach Zoning Code Two-stories FFE = +13.00' NAVD

Miami Beach

Maximum Allowable Height = 27'
Measured to midpoint of roof slope
Measured from FEMA + 5 feet

Impact of Storm Surge – Hurricane Irma Forecast



House A

Current Surfside Zoning Code One-story over crawl space FFE = +10.00' NAVD

Surfside

Maximum Allowable Height = 30' Measured to top of tie beam Measured from crown of road

House B

Current Surfside Zoning Code Two-stories FFE = +10.00' NAVD

House C

Current Surfside Zoning Code Two-stories on stilts FFE = +14.17' NAVD

House D

Miami Beach Zoning Code Two-stories FFE = +13.00' NAVD

Miami Beach

Maximum Allowable Height = 27'
Measured to midpoint of roof slope
Measured from FEMA + 5 feet

Flood Protection above FEMA + 2 The techniques illustrated here are often used in commercial construction where the priority is a direct relationship to the adjacent grade, (without further raising the first floor elevation) such as retail meeting sidewalk. The principle is that the interior space should remain a dry +25.00 vessel as the flood waters rise. To do so, walls and slabs below the anticipated flood height 1 Waterproof walls and slabs below +12.00 must be waterproofed and reinforced to take the hydrostatic and hydrodynamic pressures (2) Reinforce walls and slabs to resist water pressure (yellow arrows). Also, any openings must be protected by temporary flood barriers, typically (3) Temporary flood bariers at low windows and doors in aluminum. +20.00 This is usually done to a code (FEMA) mandated, minimum elevation. The principle could be adapted here to protect houses to a higher anticipated flood level without raising the first floor level any higher. +15.00 Irma forecast +15.00 3 +12.00 +10.00 Matthew forecast +11.00 FEMA + 2 FEMA +8.00 +5.00 **Street Level** 0.00 Sea Level

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