# Add Flood Provisions to the 2010 FBC, Mechanical<sup>®</sup> (Adopted Unanimously by the Workgroup May 29, 2009)

### **No modification to the IMC provisions** (other than change IBC to FBC, B)

**DESIGN FLOOD ELEVATION.** The elevation of the "design flood," including wave height, relative to the datum specified on the community's legally designated flood hazard area map.

**[B] M301.13 [General Regulations] Flood hazard**. For structures located in flood hazard areas, mechanical systems, equipment and appliances shall be located at or above the design flood elevation.

**Exception:** Mechanical systems, equipment and appliances are permitted to be located below the design flood elevation provided that they are designed and installed to prevent water from entering or accumulating within the components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding to the design flood elevation in compliance with the flood-resistant construction requirements of the *Florida Building Code, Building. International Building Code.* 

**M301.13.1** High-velocity wave action. In flood hazard areas subject to high velocity wave action, mechanical systems and equipment shall not be mounted on or penetrate walls intended to break away under flood loads.

M401.4 [Ventilation, General] Intake opening location. Air intake openings shall comply with all of the following:

4. Intake openings on structures in flood hazard areas shall be at or above the design flood level.

**M501.2.1 [Exhaust Systems, General] Location of exhaust outlets.** The termination point of exhaust outlets and ducts discharging to the outdoors shall be located with the following minimum distances:

4. Exhaust outlets serving structures in flood hazard areas shall be installed at or above the design flood level.

**M602.4 [Duct Systems, General] Flood hazard.** For structures located in flood hazard areas, plenum spaces shall be located above the design flood elevation or shall be designed and constructed to prevent water from entering or accumulating within the plenum spaces during floods up to the design flood elevation. If the plenum spaces are located below the design flood elevation, they shall be capable of resisting hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding to the design flood elevation.

**M603.13 [Duct Construction and Installation] Flood hazard areas.** For structures in flood hazard areas, ducts shall be located above the design flood elevation or shall be designed and constructed to prevent water from entering or accumulating within the ducts during floods up to the design flood elevation. If the ducts are located below the design flood elevation, the ducts shall be

capable of resisting hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding to the design flood elevation.

M1206.9.1 [Hydronic Piping, Piping installation] Flood hazard. Piping located in a flood hazard area shall be capable of resisting hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding to the design flood elevation.

**M1305.2.1 [Fuel Oil System Installation] Flood hazard.** All fuel oil pipe, equipment and appliances located in flood hazard areas shall be located above the design flood elevation or shall be capable of resisting hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding to the design flood elevation.

## Add Flood Provisions to the 2009 FBC, Plumbing<sup>®</sup> (Adopted Unanimously by the Workgroup May 29, 2009)

#### **No modification to the IPC provisions** (other than change IBC to FBC, B)

**DESIGN FLOOD ELEVATION.** The elevation of the "design flood," including wave height, relative to the datum specified on the community's legally designated flood hazard map.

#### FLOOD HAZARD AREA. The greater of the following two areas:

- 1. The area within a flood plain subject to a 1-percent or greater chance of flooding in any given year.
- 2. The area designated as a flood hazard area on a community's flood hazard map, or otherwise legally designated.

**P309.1 General**. Plumbing systems and equipment in structures erected in flood hazard areas shall be constructed in accordance with the requirements of this section and the *Florida Building Code*. *Building Liternational Building Code*.

**P309.2 Flood hazard.** For structures located in flood hazard areas, the following systems and equipment shall be located at or above the design flood elevation:

**Exception:** The following systems are permitted to be located below the design flood elevation provided that the systems are designed and installed to prevent water from entering or accumulating within their components and the systems are constructed to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding to the design flood elevation.

1. All water service pipes.

2. Pump seals in individual water supply systems where the pump is located below the base flood elevation.

3. Covers on potable water wells shall be sealed, except where the top of the casing well or pipe sleeve is elevated to at least 1 foot (304.8 mm) above the design flood elevation.

- 4. All sanitary drainage piping.
- 5. All storm drainage piping.
- 6. Manhole covers shall be sealed, except where elevated to or above the design flood elevation.
- 7. All other plumbing fixtures, faucets, fixture fittings, piping systems and equipment.
- 8. Water heaters.
- 9. Vents and vent systems.

**309.3 Flood hazard areas subject to high-velocity wave action.** Structures located in flood hazard areas subject to high-velocity wave action shall meet the requirements of Section 309.2. The plumbing systems, pipes and fixtures shall not be mounted on or penetrate through walls intended to breakaway under flood loads.

## Add Flood Provisions to the 2009 FBC, Fuel Gas<sup>®</sup> (Adopted Unanimously by the Workgroup May 29, 2009)

#### **No modification to the IFGC provisions** (other than change IBC to FBC, B)

**DESIGN FLOOD ELEVATION.** The elevation of the "design flood," including wave height, relative to the datum specified on the community's legally designated flood hazard map.

FLOOD HAZARD AREA. The greater of the following two areas:

- 1. The area within a floodplain subject to a 1 percent or greater chance of flooding in any given year.
- 2. The area designated as a flood hazard area on a community's flood hazard map, or otherwise legally designated.

**FG301.11 [General] Flood hazard.** For structures located in flood hazard areas, the appliance, equipment and system installations regulated by this code shall be located at or above the design flood elevation and shall comply with the flood-resistant construction requirements of the *Florida Building Code*, *Building. International Building Code*.

**Exception:** The appliance, equipment and system installations regulated by this code are permitted to be located below the design flood elevation provided that they are designed and installed to prevent water from entering or accumulating within the components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding to the design flood elevation and shall comply with the flood-resistant construction requirements of the *Elorida Building Code*, *Building. International Building Code*.