



# NFIP Checklist

## Version 3: Model Code-Coordinated Ordinance

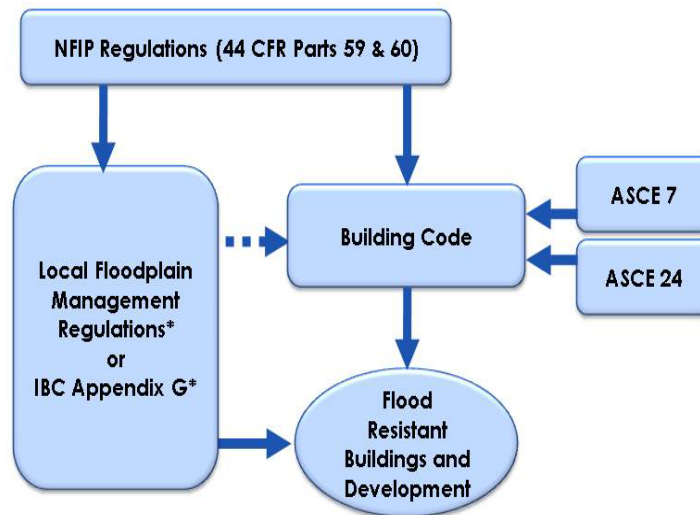
**Purpose of the National Flood Insurance Program (NFIP) Checklist.** This checklist illustrates how Version 3 of the Model Code-Coordinated Ordinance, combined with the International Codes® (I-Codes) (2009 and later), meets or exceeds the minimum requirements of the NFIP.

Version 3 assumes (1) there are no changes to the flood provisions in the bodies of the I-Codes that weaken those flood provisions, (2) Chapter 1 (administrative provisions) of the I-Codes *is not* adopted, (3) International Building Code (IBC) Appendix G *is not* adopted, and (4) the provisions for all flood zones (i.e., zones that start with “A” and “V”) are applicable.

The checklist is based on the standard checklist used by FEMA and States to review local floodplain management regulations/ordinances to determine whether the regulations/ordinances are complete for the purpose of participating in the NFIP. Pertinent Federal regulations are in [44 CFR Part 60](#) (criteria for land management and use) and [44 CFR Section 59.1](#) (definitions).

Although the checklist references the 2012 I-Codes, the checklist can also be used for the 2009 and 2015 editions. However, note that some flood provisions changed between each edition. Download excerpts of the flood provisions from the FEMA Building Science Code Resources Web page at <http://www.fema.gov/building-code-resources>.

**Floodplain Management and Building Codes.** With the inclusion of NFIP-consistent provisions in the I-Codes, States and communities now have two primary tools for regulating development in flood hazard areas: (1) building codes that govern the design and construction of buildings and structures and (2) local floodplain management regulations that are coordinated with the I-Code or IBC Appendix G. These tools are designed to work together to result in buildings, structures, and all other development that are resistant to flood loads and flood damage.



\* NFIP-consistent administrative provisions, community-specific adoption of FIS and maps, and technical requirements for development outside the scope of the building code (and higher standards, in some communities).

**Organization of the Checklist:** The checklist has two sections: NFIP requirements and NFIP definitions.

In the NFIP requirements section:

- The left column contains a short description of the requirement and a citation of the source of the requirement in [44 CFR](#).
- The middle column, “Model Ordinance (Version 3),” shows the sections of the Model Ordinance that include requirements to meet or exceed the NFIP requirements (other than those found in the I-Codes).
- The right column shows the 2012 I-Code and ASCE 24-05 sections that include requirements to meet or exceed the NFIP requirements for buildings and structures.

The NFIP definitions start on page 13.

## NFIP Requirements: Version 3 Model Ordinance, 2012 I-Codes, and ASCE 24

Required Provisions [NFIP citations]	Model Ordinance (Version 3)	I-Codes / ASCE 24
1. Citation of Statutory Authorization. [59.22(a)(2)]	Whereas	
2. Purpose section citing health, safety, and welfare reasons for adoption. [59.22(a)(1)]	MO: 101.2	IBC: 101.3 IRC: R101.3 IEBC: EB101.3
3. Definitions [59.1]	See below	See below
4. Adopt or reference correct Flood Insurance Rate Map (and where applicable, Flood Boundary Floodway Map) and date. [60.2(h)]		IBC: 1612.3 IRC: Table R301.2(1) Note: both reference revisions of FIS and FIRMs; this provision does not override individual state limitations on “auto-adoption” of maps.
5. Adopt or reference correct Flood Insurance Study and date. [60.2(h)]	MO: 102.2; 102.3	IBC: 1612.3 IRC: Table R301.2(1)
7. Adequate enforcement provisions including a violations/penalty section specifying community actions to ensure compliance. [60.2(e)]	MO: 107	IBC: 114 IRC: R113
8. Abrogation and Greater Restriction section (provide that floodplain management regulations take precedence over any less restrictive conflicting local laws, ordinances or codes). [60.1(b)]	Whereas	
9. Disclaimer of Liability (Degree of flood protection required by the ordinance is considered reasonable but does not imply total flood protection.)	Whereas	

Required Provisions [NFIP citations]	Model Ordinance (Version 3)	I-Codes / ASCE 24
10. Severability section. (If any section, provision or portion of the ordinance is deemed unconstitutional or invalid by a court, the remainder of the ordinance shall be effective.)	Whereas	
11. Framework for administering the ordinance (permit system, establish office for administering the ordinance, <i>recordkeeping</i> , etc.) [59.22(b)(1)]	MO: 103; 104	IBC Chapter 1 IRC: Chapter 1; R104 IEBC: Chapter 1; EB104
12. Designate title of community Floodplain Administrator [59.22 (b)]	MO: 103.1	IBC: 104.1 IRC: R104.1
13. Requirement to submit new technical data: within 6 months, notify FEMA of changes in the base flood elevation by submitting technical or scientific data so insurance & floodplain management can be based on current data. [65.3]		
14. Variance section with evaluation criteria & insurance notice. [60.6(a)]	MO: 105	IBC: 104.10.1 IRC: R104.10; R112.2.2 IEBC: EB104.10.1
For adopted ordinance: Signature of Appropriate Official & Certification. [59.22(3)] Date ordinance adopted: __ <i>Effective</i> Date__ Ord. # _____	<i>Signature block</i>	
<b>60.3(a) When no SFHAs have been identified, no water surface elevation data has been provided, and floodways and coastal high hazards areas have not been identified and the community applies for participation in the NFIP, the following are required:</b>	<b>Model Ordinance (Version 3)</b>	<b>I-Codes/ASCE 24</b>

Required Provisions [NFIP citations]	Model Ordinance (Version 3)	I-Codes / ASCE 24
16. Require permits for all proposed construction or other development including placement of manufactured homes. <b>[60.3(a)(1)]</b>	MO: 101.4; 104.1; 301 (subdivisions); 401 (site improvement); 501 (manufactured homes); 601 (recreational vehicles); 701 (tanks); 801 (accessory strs & other); 901 (temp strs/storage); 1001(utility & misc use group U)	IBC: 101.2; 105.1; 105.2 IRC: R101.2; R102.7; R105.1; R105.2; R105.3.1.1; R106.1.3; R301.2.4; R322 IEBC: EB101.2; EB105.1
17. Assure that all other State and Federal permits are obtained. <b>[60.3(a)(2)]</b>	MO: 103.5	IBC: 102.2 IRC: R102.2
18. Review permits to assure sites are reasonably safe from flooding and require performance for new construction and substantial improvements in flood-prone areas: <b>[60.3(a)(3)]</b>	MO: 101.3; 103.4	IBC: 107.2.5; 1612.1; 1804.4(1); 3403.1; 3403.2; 3404.2; 3404.5; 3409.2 IRC: R106.1.3; R301.1; R301.2.4; R322 IEBC: EB501.3; EB506.2.4; EB601.3; EB701.2; EB801.3; EB1003.5; EB1101.3.5; EB1202.6; EB1301.3.3 (all by reference to 1612)
(a) Anchoring (including manufactured homes) to prevent floatation, collapse, or lateral movement. <b>[60.3(a)(3)(i)]</b>	MO: 501.3; 701.1; 801.1; 901; 1001.2	IBC: 1603.1; 1603.1.7; 1605.2.2; 1605.3.1.2; 16.2.1; 1612.4 (ASCE 24) ASCE: 1.5.1; 1.5.3; 1.5.5; 1.6; 2.4; 2.5; 4.5.1; 4.5.7; 4.8; 7.4.1; 9.6 IRC: R301.1; R301.2.4; R322.1.2; R322.1.9; R322.2; R322.3 IEBC: by reference to 1612 (see sections listed in Row 18)
(b) Use of flood-resistant materials. <b>[60.3(a)(3)(ii)]</b>	MO: 501; 801; 901; 1001.5	IBC: 801.5; 1403.5; 1612.4 (ASCE 24) ASCE: Section 5; 6.2; 6.3; 7.5; 8.1; 9.1 IRC: R322.1.8 IEBC: by reference to 1612 (see sections listed in Row 18)

Required Provisions [NFIP citations]	Model Ordinance (Version 3)	I-Codes / ASCE 24
(c) Construction methods/practices that minimize flood damage. [60.3(a)(3)(iii)]	MO: 103.4; 301, 401, 501.3; 601, 701, 801, 901, 1001	IBC: 1612.1. 1612.4 (ASCE 24) ASCE 24 as a whole IRC: R322.1.3 IEBC: by reference to 1612 (see sections listed in Row 18)
(d) Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities designed and/or located to prevent water entry or accumulation. [60.3(a)(3)(iv)]	MO: 501.5; 601; 701; 801; 1001.6	IBC: 1612.4 (ASCE 24); 3001.2; also see IMC, IPC, IFGC ASCE: 4.6.1; Section 7 IRC: R322.1.6; RM1301.1.1; RM1401.5; RM1601.4.9; RM1701.2; RM2001.4; RM2201.6; RG2404.7; RP2601.3; RP2705.1; RP3001.3; RP3101.5 IEBC: by reference to 1612 (see sections listed in Row 18)
19. Review subdivision proposals and development proposals to assure that: (a) Such proposals minimize flood damage. [60.3(a)(4)(i)]	MO: 301	
(b) Public utilities and facilities are located & constructed so as to minimize flood damage. [60.3(a)(4)(ii)]	MO: 301.1; 401	ASCE: Chapter 7
(c) Adequate drainage is provided. [60.3(a)(4)(iii)]	MO: 301.1; 401.5	IBC: 1804.3 ASCE: 1.4.2; 4.5.4 IRC: R401.3
20. Require new and replacement water supply and sanitary sewer systems to be designed to minimize or eliminate infiltration. [60.3(a)(5) & (6)]	MO: 301.1; 401.3; 401.4	ASCE: 7.3 IRC: R322.1.7; RP2602.2(1)
21. Require on-site waste disposal systems be located to avoid impairment or contamination. [60.3(a)(6)(ii)]	MO: 301.1; 401.3	ASCE: 7.3.4 IRC: R322.1.7; RP2602.2(2)

Required Provisions [NFIP citations]	Model Ordinance (Version 3)	I-Codes / ASCE 24
<b>60.3(b) When SFHA's are identified by the publication of a community's FHBM or FIRM, but water surface elevation data have not been provided or a floodway or coastal high hazard area has not been identified, then all the above ordinance provisions for 60.3(a) and the following are required:</b>	<b>Model Ordinance (Version 3)</b>	<b>I-Codes/ASCE 24</b>
22. Require permits for all proposed construction and other development within SFHAs on the FIRM. <b>[60.3(b)(1)]</b>	MO: 101.4; 102.1; 104.1	Buildings only: 101.2 (see exemptions); 105.1; 1612.1 1- & 2-family homes and townhomes only: R101.2; R322.1 IEBC: EB101.2
23. Require base flood elevation data for subdivision proposals or other developments greater than 50 lots or 5 acres. <b>[60.3(b)(3)]</b>	MO: 103.6; 301.2 (subdivisions regardless of size)	
24. In A Zones, in the absence of FEMA BFE data and floodway data, obtain, review and reasonably utilize base flood elevation and floodway data available from available from a Federal, State, or other source as criteria for requiring new construction, substantial improvements, or other development in Zone A as the basis for elevating residential structures to or above base flood level, for floodproofing or elevating nonresidential structures to or above base flood level, and for prohibiting encroachments in floodways. <b>[60.3(b)(4)]</b>	MO: 103.6; 103.8	IBC: 1612.3.1; 1612.3.2 IRC: R106.3.1.1; R322.1.4.1
25. Where BFE data are utilized, obtain and maintain records of lowest floor and floodproofing elevations for new construction and substantial improvements. <b>[60.3(b)(5)]</b>	MO: 103.8	IBC: 104.7; 110.3.3; 110.3.10.1; 1612.5(1.1), (1.3) and (2.1) IRC: R104.7; R106.1.3(4); R109.1.3; R109.1.6.1; R322.1.10 IEBC: EB104.7; EB109.3.3
26. <i>In riverine areas</i> , notify neighboring communities of watercourse alterations or relocations. <b>[60.3(b)(6)]</b>	MO: 103.6	

Required Provisions [NFIP citations]	Model Ordinance (Version 3)	I-Codes / ASCE 24
27. Maintain <b>flood</b> carrying capacity of altered or relocated watercourse. <b>[60.3(b)(7)]</b>	MO: 103.6.1	
28. Require all manufactured homes to be elevated and anchored to resist flotation, collapse, or lateral movement. <b>[60.3(b)(8)]</b>	MO: 501	Permanent foundations are structures that may be subject to IBC/ASCE 24. IRC: R322.1.9
<b>60.3(c) When final flood elevations, but no floodways or coastal high hazard areas have been provided on a community's FIRM, then all the above ordinance provisions for 60.3(a) &amp; 60.3(b) and the following are required:</b>	<b>Model Ordinance (Version 3)</b>	<b>I-Codes/ASCE 24</b>
29. Require all new and substantially improved <u>residential</u> structures within A1-30, AE, and AH Zones have their lowest floor (including basement) elevated to or above the BFE. <b>[60.3(c)(2)]</b>		IBC: Dfn DFE; 1612.1; 1612.4 (ASCE 24); 1612.5(1.1); 1804.4(1); 3403.1; 3403.2; 3404.2; 3405.5; 3409.2 ASCE: 1.5.2; 2.3 (specification of flood depth in ordinance/code) IRC: R105.3.1.1; R301.2.4; R322.1.5; R322.1.10; R322.2.1; R322.2.1(3); R408.7 IEBC: by reference to 1612 (see sections listed in Row 18)
30. In AO Zones, require that new and substantially improved <u>residential</u> structures have their lowest floor (including basement) at or above the highest adjacent grade at least as high as the FIRM's depth number. <b>[60.3(c)(7)]</b>		
31. Require that new and substantially improved <u>nonresidential</u> structures within A1-30, AE, and AH Zones have their lowest floor elevated or floodproofed to or above the base flood elevation. <b>[60.3(c)(3)]</b>		IBC: Dfn DFE; 1612.1; 1612.4 (ASCE 24); 1612.5(1.3); 3403.1; 3403.2; 3404.2; 3404.5; 3409.2 ASCE: 1.5.2; 2.3; Section 6 (specification of flood depth is done in administrative provisions) IEBC: by reference to 1612 (see sections listed in Row 18)
32. In AO Zones, require new and substantially improved <u>nonresidential</u> structures have their lowest floor elevated or completely floodproofed above the highest adjacent grade to at least as high as the depth number on the FIRM. <b>[60.3(c)(8)]</b>		



Required Provisions [NFIP citations]	Model Ordinance (Version 3)	I-Codes / ASCE 24
33. Require that, for floodproofed <u>nonresidential structures</u> , a registered professional/architect certify that the design and methods of construction meet requirements at (c) (3) (ii) or (c)(8)(ii). <b>[60.3(c)(4)]</b>		IBC: 1612.5(1.3) IEBC: by reference to 1612
34. Require, for all new construction and substantial improvements, that fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage have permanent openings designed to allow the entry and exit of flood waters in accordance with specifications of <b>60.3(c)(5)</b> .		IBC: 1612.4 (ASCE 24); 1612.5(1.2) (engineered openings) ASCE: 1.5.2; 2.6 IRC: R309.3; R322.2.2; R408.7 IEBC: by reference to 1612 (see sections listed in Row 18)
35. Within Zones A1-30 and AE without a designated floodway, new development shall not be permitted unless it is demonstrated that the cumulative effect of all past and projected development will not increase the BFE by more than 1 foot. <b>[60.3(c)(10)]</b>	MO: 103.4	IBC: 1612.3.2; 1804.4(4) ASCE: 2.2 IRC: R106.1.3; R322.1.4.2
36. In Zones AO and AH, require drainage paths around structures on slopes to guide water away from structures. <b>[60.3(c)(11)]</b>	MO: 401.5	IBC: 1804.4 IRC: R401.3
37. Require that manufactured homes placed or substantially improved within A1-30, AH, and AE Zones, which meet one of the following location criteria, to be elevated such that the lowest floor is at or above the BFE and be securely anchored: i. outside a manufactured home park or subdivision; ii. in a new manufactured home park or subdivision; iii. in an expansion to an existing manufactured home park or subdivision; iv. on a site in an existing park which a manufactured home has incurred substantial damage as a result of flood. <b>[60.3(c)(6)]</b>	MO: 501 (all MFH, regardless of location)	IRC: R322.1.9 If the foundation for MFH unit is subject to ASCE 24, it would be subject to same elevation, foundation and enclosure requirements as any residential/Category II structure.

Required Provisions [NFIP citations]	Model Ordinance (Version 3)	I-Codes / ASCE 24
<p>38. In A1-30, AH, and AE Zones, require that manufactured homes to be placed or substantially improved in an <u>existing</u> manufactured home park to be elevated so that:</p> <ul style="list-style-type: none"> <li>i. the lowest floor is at or above the BFE <u>or</u></li> <li>ii. the chassis is supported by reinforced piers no less than 36 inches above grade and securely anchored. [60.3(c)(12)]</li> </ul>	MO: 501 (36" option not provided)	<p>IRC: R322.1.9 (36" option not provided; per ASCE 24 if in floodway)</p> <p>If the foundation for MFH unit is subject to ASCE 24, it would be subject to same elevation, foundation and enclosure requirements as any residential/Category II structure.</p>
<p>39. In A1-30, AH, and AE Zones, all recreational vehicles to be placed on a site must be elevated and anchored <u>or</u> be on the site for less than 180 consecutive days <u>or</u> be fully licensed and highway ready. [60.3(c)(14)]</p>	MO: 601.1 (not authorized in coastal high hazard areas and floodways)	
<p><b>60.3(d) When final flood elevations and floodway delineations have been provided on a community's FIRM, then all the above ordinance provisions for 60.3(a), 60.3(b) &amp; 60.3(c) and the following are required:</b></p>	Model Ordinance (Version 3)	I-Codes/ASCE 24
<p>40. In a regulatory floodway, prohibit any encroachment which would cause any increase in the base flood level unless hydrologic and hydraulic analyses prove that the proposed encroachment would not increase flood levels during the base flood discharge. [60.3(d)(3)]</p>	MO: 103.5; 103.5.1; 401.1; 801.2 (fences); 801.5 (pools)	<p>IBC: 1612.4 (ASCE 24); 1804.4(2)</p> <p>ASCE: 2.2</p> <p>IRC: R106.1.3; R301.2.4; R322.1 (per ASCE 24)</p>
<p><b>60.3(e) When final flood elevations &amp; coastal high hazard areas have been provided on a community's FIRM, then all the above ordinance provisions for 60.3(a), 60.3(b) &amp; 60.3(c) &amp; the following are required: <u>NOTE</u>: If a community has both floodways &amp; coastal high hazard areas, it must meet the requirements of both 60.3(d) &amp; (e).</b></p>	Model Ordinance (Version 3)	I-Codes/ASCE 24

Required Provisions [NFIP citations]	Model Ordinance (Version 3)	I-Codes / ASCE 24
41. In V1-30, VE, and V Zones, obtain and maintain the elevation of the bottom of the lowest <i>horizontal</i> structural member of the lowest floor of all new and substantially improved structures. <b>[60.3(e)(2)]</b>		IBC: 110.3.3; 110.3.10.1; 104.7; 1612.5(2.1) IRC: R104.7; R109.1.3; R109.1.6.1; R322.1.10 IEBC: by reference to 1612 (see sections listed in Row 18)
42. In V1-30, VE, and V Zones, require that all new construction and substantial improvements: (a) Are elevated on pilings/columns so that the bottom of the lowest horizontal structural member is at or above the BFE and the piles/column foundation/structure are anchored to resist flotation, collapse & lateral movement due to the effects of wind and water loads acting simultaneously. <b>[60.3(e)(4)]</b>		IBC: 1612.1; 1612.4 (ASCE 24) ASCE: 1.5.1; 1.5.2; 1.5.3; 1.6; 4.2; 4.4; 4.5; 4.8 IRC: R322.3; R322.3.2; R322.3.3 IEBC: by reference to 1612 (see sections listed in Row 18)
(b) A registered professional engineer/architect shall develop/review structural design, specs & plans; and shall certify that the design and methods of construction meet elevation and anchoring requirements at (e)(4)(i) and (ii). <b>[60.3(e)(4)]</b>		IBC: 1612.5(2.2) IRC: R322.3.3; R322.3.6 IEBC: by reference to 1612
(c) Have the space below the lowest floor either free of obstruction or constructed with non-supporting breakaway walls. Such enclosed space shall be useable solely for parking, building access, or storage. <b>[60.3(e)(5)]</b>		IBC: 1403.6; 1612.4 (ASCE 24); 1612.5(2.3); 1804.4(3) ASCE: 4.5.1; 4.5.4; 4.6 IRC: R322.3.2; R322.3.4; R322.3.5 IEBC: by reference to 1612 (see sections listed in Row 18)
(d) All new construction is landward of the reach of mean high tide. <b>[60.3(e)(3)]</b>	MO: 401.2	IBC: 1612.4 (ASCE 24) ASCE: 4.3(1) IRC: R322.3.1(1)

Required Provisions [NFIP citations]	Model Ordinance (Version 3)	I-Codes / ASCE 24
(e) Prohibit use of fill for structural support. <b>[60.3(e)(6)]</b>	MO: 401.2	IBC: 1612.4 (ASCE 24) ASCE: 4.5.4 IRC: R322.3.2(3) IEBC: by reference to 1612
(f) Prohibit alteration of sand dunes and mangrove stands which would increase potential flood damage. <b>[60.3(e)(7)]</b>	MO: 103.7	IBC: 1612.4 (ASCE 24) ASCE: 4.3(3); 4.5.4 IRC: R322.3.1(2)
<p>43. Require that manufactured homes placed or substantially improved within V1-30, VE, and V Zones, which meet one of the following location criteria, meet the V Zone standards in <b>60.3(e)(2) through (e)(7)</b>:</p> <ul style="list-style-type: none"> <li>i. outside a manufactured home park or subdivision;</li> <li>ii. in a new manufactured home park or subdivision;</li> <li>iii. in an expansion to an existing manufactured home park or subdivision;</li> <li>iv. on a site in an existing park which a manufactured home has incurred substantial damage as a result of flood. <b>[60.3(e)(8)]</b></li> </ul>	MO: 501 (all MFH, regardless of location)	IRC: R322.1.9 If the foundation for MFH unit is subject to ASCE 24, it would be subject to same elevation, foundation and enclosure requirements as any residential/Category II structure.
<p>44. In V1-30, VE and V Zones, require that manufactured homes to be placed or substantially improved in an <u>existing</u> manufactured home park to be elevated so that:</p> <ul style="list-style-type: none"> <li>i. the lowest floor is at or above the BFE, <u>or</u></li> <li>ii. the chassis is supported by reinforced piers no less than 36 inches above grade and securely anchored. <b>[60.3(e)(8)(iv); 60.3(c)(12)]</b></li> </ul>	MO: 501 (36" option not provided)	IRC: R322.1.9 (36" option not provided) If the foundation for MFH unit is subject to ASCE 24, it would be subject to same elevation, foundation and enclosure requirements as any residential/Category II structure.
<p>45. In V1-30, VE, and V Zones, all recreational vehicles to be placed on a site must be elevated and anchored <u>or</u> be on the site for less than 180 consecutive days <u>or</u> be fully licensed &amp; highway ready. <b>[60.3(e)(9)]</b></p>	MO: 601.1 (not permitted in coastal high hazard areas)	Recreational vehicles are not within the scope of ASCE 24.

## NFIP Definitions: Version 3 Model Ordinance, 2012 I-Codes, and ASCE 24

Version 3 Model Ordinance explicitly states that terms not defined in the ordinance are defined in the Building Code and used in the Residential Code.

IBC 201.3 states that terms not defined in the IBC may be defined in the IFGC, IFC, IMC, or IPC; and IBC 201.4 states that terms not defined “shall have ordinarily accepted meanings such as the context implies.”

The IRC “defines” many terms where they are used, rather than separate definitions in Section 202. Also, IRC R201.3 specifies that terms not defined in IRC have meaning in other codes (i.e., IBC); and IRC R201.4 which repeats that terms not defined in IRC or other codes “shall have ordinarily accepted meanings such as the context implies.”

The IEBC also defines addition, alteration, change of occupancy, rehabilitation, repair—some of those terms (and others) are used in the definition of substantial improvement.

Definitions Pertinent to Regulating FHAs	In 44 CFR § 59.1?	Version 3 Model Ord	IBC/24 section <sup>1</sup>	IRC section	IEBC section <sup>2</sup>	Notes
Alteration of a watercourse	N	Y	N	N	N	
ASCE 24	N	Y	N	N	N	
Base flood	Y	N	202 (1612/2) ASCE 1.2	N	N	
Base flood elevation	N	N	202 (1612/2) ASCE 1.2	R322.1.4	N	
Basement	Y	N	202 (1612/2) ASCE 1.2	R322.2.1	N	IRC usage conveys definition

<sup>1</sup> ASCE 24-05 definitions are in Sec. 1.2 (shown “ASCE 1.2”); this chart does not show all definitions in ASCE 24-05.

<sup>2</sup> The IEBC refers generally to IBC for flood resistant provisions for compliance; thus, this checklist includes only definitions used to make that reference.

<b>Definitions Pertinent to Regulating FHAs</b>	<b>In 44 CFR § 59.1?</b>	<b>Version 3 Model Ord</b>	<b>IBC/24 section<sup>1</sup></b>	<b>IRC section</b>	<b>IEBC section<sup>2</sup></b>	<b>Notes</b>
Building code	N	Y	N	N	N	
Coastal high hazard area (see note)	Y	N	202 (1612/2) ASCE 1.2	R322.3	N	IBC (see Flood Hazard Area Subject to High Velocity Wave Action)
Design flood	N	N	202 (1612/2) ASCE 1.2	R322.1.4	N	
Design flood elevation	N	N	202 (1612/2) ASCE 1.2	R322.1.4	N	
Development	Y	Y	N	N	N	
Dry floodproofing (see Floodproofing)	N See note	N	202 (1612/2) ASCE 1.2	N	N	The definition for “dry floodproofing” (IBC and ASCE 24) is equivalent to NFIP definition “floodproofing.”
Encroachment	N	Y	N	N	N	
Existing Construction (see Existing Structure)	Y	N	202 (1612.2)	See note	See note	IBC and IEBC define “Existing Building. A building erected prior to the date of adoption of the appropriate code, or one for which a legal building permit has been issued.” IRC uses the term (R102.7, R105.3.1.1, R112.2.1, AJ102.5)
Existing manufactured home park or subdivision	Y	N	See note	See note	N	IBC Appendix G and IRC treat all MFH the same, regardless of location (does not have the 36” option)
Expansion to an existing manufactured home park or subdivisions	Y	N	See note	See note	N	IBC Appendix G and IRC treat all MFH the same, regardless of location (does not have the 36” option)

<b>Definitions Pertinent to Regulating FHAs</b>	<b>In 44 CFR § 59.1?</b>	<b>Version 3 Model Ord</b>	<b>IBC/24 section<sup>1</sup></b>	<b>IRC section</b>	<b>IEBC section<sup>2</sup></b>	
Existing structure (see Existing Construction)	N	N	202 (1612/2)	R101.2 See note	EB202	IBC definition does not mean “pre-FIRM.” See notes for “Existing Construction.” IRC scope includes work on existing buildings.
Flood or Flooding	Y	N	202 (1612/2) ASCE 1.2	See note	N	IRC does not use the term “flood” as a noun.
Flood damage-resistant material	N	N	202 (1612/2) ASCE 1.2	R322.1.8	N	
Flood hazard areas	N	N	202 (1612/2) ASCE 1.2	R106.1.3; Table R301.2(1)	EB202	IBC (synonymous with SFHA if DFE = BFE)
Flood hazard area subject to high velocity wave action (see Coastal high hazard area)	N	N	202 (1612/2) See note	R322.3 (Coastal High Hazard Area)	N	IBC (synonymous with “Coastal High Hazard Area”)
Flood Hazard Boundary Map (FHBM)	Y	N	See note	See note	N	Through adoption of maps.
Flood Insurance Rate Map (FIRM)	Y	N	202 (1612/2) ASCE 1.2	Table R301.2(1)	N	
Flood Insurance Study	Y See note	N	202 (1612/2) ASCE 1.2	Table R301.2(1)	N	44 CFR 59.1 defines “Flood elevation study” and Flood Insurance Study is equivalent.
Flood proofing (see Dry Floodproofing)	Y See note	N	202 (1612/2) ASCE 1.2	N	N	The definition for “dry floodproofing” (IBC and ASCE 24) is equivalent to NFIP definition “floodproofing.”
Floodway	Y	N	202 (1612/2) ASCE 1.2	See note	N	IRC uses the term and requires compliance with ASCE 24.

Definitions Pertinent to Regulating FHAs	In 44 CFR § 59.1?	Version 3 Model Ord	IBC/24 section <sup>1</sup>	IRC section	IEBC section <sup>2</sup>	Notes
Freeboard	Y See note	N	See note	See note	N	As used in NFIP regulations, this term is related to protection level of levees. IBC and ASCE 24 do not use the term, although additional height above minimum is built into the elevation tables. IRC does not use the term; calls for additional 1-ft if CAZ designated and in Zone V depending orientation of LHSM.
Functionally dependent facility	N	Y	N	See note	N	IRC scope includes only 1- and 2-family dwellings and certain townhomes.
Highest adjacent grade	Y	N	ASCE 1.2	R322.2.1	N	
Historic structure	Y	N	202 ASCE 1.2	R112.2.1	N	The IBC general definition in 202 refers to 3409 and 3411.9; and 3409.2 Flood hazard areas, has language similar to 59.1.
Lowest floor	Y	N	202 (1612/2)	R322.1.5	N	
Manufactured home	Y	Y	N	R202, R322.1.9	N	See IBC Appendix G. 59.1 states “not a ‘recreational vehicle’ which is not in IBC Appendix G.
Manufactured home park or subdivision	Y	Y	N	See note	N	IBC Appendix G and IRC treat all MFH the same, regardless of location (does not have the 36” option)
Mudslide (mud flood, mudflow)	Y	N	ASCE 1.2	See note	N	I-Code flood provisions apply in FHAs on adopted maps; FEMA has not delineated mudslide areas.
New manufactured home park	Y	N	See note	See note	N	IBC Appendix G and IRC treat all MFH the same, regardless of location (does not have the 36” option).



<b>Definitions Pertinent to Regulating FHAs</b>	<b>In 44 CFR § 59.1?</b>	<b>Version 3 Model Ord</b>	<b>IBC/24 section<sup>1</sup></b>	<b>IRC section</b>	<b>IEBC section<sup>2</sup></b>	<b>Notes</b>
Prolonged contact with floodwater	N	N	ASCE 1.2	See note	N	IRC R322.1.8 refers to specific species of wood and TB-2.
Recreational vehicle	Y	Y	N	N	N	IBC Appendix G definition expands on 59.1 definition.
Special flood hazard area (SFHA)	Y	N	202 (1612/2) ASCE 1.2	Table R301.1(2)	N	Definition in 1612.2 omits mudslide.
Start of construction	Y	N	202 (1612/2) ASCE 1.2	N	N	Premise of the codes is that work on an existing building shall not alter any aspect of the building that was required to comply with the requirements at the time it was built.
Structure	Y	N	202 ASCE 1.2	R202	N	Definition in 59.1 defines it for flood purposes whereas IBC has very simple generic definition.
Substantial damage	Y	N	202 (1612/2) ASCE 1.2	R105.3.1.1	EB202	
Substantial improvement	Y	N	202 (1612.2) ASCE 1.2	R105.3.1.1	EB202	
Utility and Misc Group U	N	Y	312	N	N	
Variance	Y	Y	N	See note	N	Used in R112.2.2
Violation	Y	Y	114	R113	EB113	
Watercourse	N	Y	N	N	N	