

# TABLE OF CONTENTS

<p><i>Part I—Administrative</i> . . . . . 1</p> <p><b>CHAPTER 1 ADMINISTRATION</b> . . . . . 1</p> <p>Section</p> <p>R101 <u>Title, Scope and Purpose</u> . . . . . 1</p> <p>R102 <u>Unsafe Buildings, Structures or Premises</u> . . . . . 1</p> <p>R103 <u>Violations and Penalties</u> . . . . . 2</p> <p>R104 <u>Organization and Enforcement</u> . . . . . 3</p> <p>R105 <u>Building Permits</u> . . . . . 4</p> <p>R106 <u>Fees</u> . . . . . 8.1</p> <p>R107 <u>Inspections</u> . . . . . 8.1</p> <p>R108 <u>Existing Structures and Equipment</u> . . . . . 8.3</p> <p><i>Part II—Definitions</i> . . . . . 9</p> <p><b>CHAPTER 2 DEFINITIONS</b> . . . . . 9</p> <p>Section</p> <p>R201 General . . . . . 9</p> <p>R202 Definitions . . . . . 9</p> <p><i>Part III—Building Planning and Construction</i> . . . . . 23</p> <p><b>CHAPTER 3 BUILDING PLANNING</b> . . . . . 23</p> <p>Section</p> <p>R301 Design Criteria . . . . . 23</p> <p>R302 <del>((Exterior Wall))</del> <u>Location on Lot</u> . . . . . 47</p> <p>R303 Light, Ventilation and Heating . . . . . 47</p> <p>R304 Minimum Room Areas . . . . . 49</p> <p>R305 Ceiling Height . . . . . 49</p> <p>R306 Sanitation . . . . . 49</p> <p>R307 Toilet, Bath and Shower Spaces . . . . . 49</p> <p>R308 Glazing . . . . . 50</p> <p>R309 Garages and Carports . . . . . 52</p> <p>R310 Emergency Escape and Rescue Openings . . . . . 53</p> <p>R311 Means of Egress . . . . . 54</p> <p>R312 Guards . . . . . 56</p> <p>R313 Smoke Alarms . . . . . 56</p> <p>R314 Foam Plastic . . . . . 57</p> <p>R315 Flame Spread and Smoke Density . . . . . 58</p> <p>R316 Insulation . . . . . 58</p> <p>R317 Dwelling Unit Separation . . . . . 59</p> <p>R318 Moisture Vapor Retarders . . . . . 61</p> <p>R319 Protection Against Decay . . . . . 61</p>	<p>R320 Protection Against Subterranean Termites . . . . . 62</p> <p>R321 Site Address . . . . . 62</p> <p>R322 Accessibility . . . . . 62</p> <p>R323 Elevators and Platform Lifts . . . . . 63</p> <p>R324 Flood-resistant Construction . . . . . 63</p> <p>[W]R325 <u>Adult Family Homes</u> . . . . . 65</p> <p>[W]R326 <u>Family Child Day Care Homes</u> . . . . . 66</p> <p>[W]R327 <u>Protection against Radon</u> . . . . . 66</p> <p>[W]R328 <u>Swimming Pools, Spas and Hot Tubs</u> . . . . . 66</p> <p>[W]R329 <u>Methane Reduction Measures</u> . . . . . 66</p> <p>[W]R330 <u>Security from Criminal Activity</u> . . . . . 66.1</p> <p>[W]R331 <u>Sound Transmission Control</u> . . . . . 66.1</p> <p>[W]R332 <u>Floating Homes</u> . . . . . 66.1</p> <p><b>CHAPTER 4 FOUNDATIONS</b> . . . . . 67</p> <p>Section</p> <p>R401 General . . . . . 67</p> <p>R402 Materials . . . . . 67</p> <p>R403 Footings . . . . . 68</p> <p>R404 Foundation and Retaining Walls . . . . . 78</p> <p>R405 Foundation Drainage . . . . . 88</p> <p>R406 Foundation Waterproofing and Dampproofing . . . . . 90</p> <p>R407 Columns . . . . . 93</p> <p>R408 Under-floor Space . . . . . 93</p> <p><b>CHAPTER 5 FLOORS</b> . . . . . 97</p> <p>Section</p> <p>R501 General . . . . . 97</p> <p>R502 Wood Floor Framing . . . . . 97</p> <p>R503 Floor Sheathing . . . . . 106</p> <p>R504 Pressure Preservatively Treated-wood Floors (On Ground) . . . . . 108</p> <p>R505 Steel Floor Framing . . . . . 108</p> <p>R506 Concrete Floors (On Ground) . . . . . 121</p> <p><b>CHAPTER 6 WALL CONSTRUCTION</b> . . . . . 123</p> <p>Section</p> <p>R601 General . . . . . 123</p> <p>R602 Wood Wall Framing . . . . . 123</p> <p>R603 Steel Wall Framing . . . . . 143</p> <p>R604 Wood Structural Panels . . . . . 180</p>
---	--

**TABLE OF CONTENTS**

R605 Particleboard . . . . . 180  
 R606 General Masonry Construction . . . . . 180  
 R607 Unit Masonry . . . . . 188  
 R608 Multiple Wythe Masonry . . . . . 188  
 R609 Grouted Masonry . . . . . 190  
 R610 Glass Unit Masonry . . . . . 191  
 R611 Insulating Concrete Form Wall Construction . . . . . 193  
 R612 Conventionally Formed Concrete  
 Wall Construction . . . . . 224  
 R613 Exterior Windows and Glass Doors . . . . . 224

**CHAPTER 7 WALL COVERING . . . . . 229**

Section  
 R701 General . . . . . 229  
 R702 Interior Covering . . . . . 229  
 R703 Exterior Covering . . . . . 232

**CHAPTER 8 ROOF-CEILING  
 CONSTRUCTION . . . . . 243**

Section  
 R801 General . . . . . 243  
 R802 Wood Roof Framing . . . . . 243  
 R803 Roof Sheathing . . . . . 268  
 R804 Steel Roof Framing . . . . . 268  
 R805 Ceiling Finishes . . . . . 286  
 R806 Roof Ventilation . . . . . 286  
 R807 Attic Access . . . . . 287  
 R808 Insulation Clearance . . . . . 287

**CHAPTER 9 ROOF ASSEMBLIES . . . . . 289**

Section  
 R901 General . . . . . 289  
 R902 Roof Classification . . . . . 289  
 R903 Weather Protection . . . . . 289  
 R904 Materials . . . . . 289  
 R905 Requirements for Roof Coverings . . . . . 291  
 R906 Roof Insulation . . . . . 298  
 R907 Reroofing . . . . . 299

**CHAPTER 10 CHIMNEYS AND FIREPLACES . . 301**

Section  
 R1001 Masonry Fireplaces . . . . . 301  
 R1002 Masonry Heaters . . . . . 305  
 R1003 Masonry Chimneys . . . . . 305  
 R1004 Factory-built Fireplaces . . . . . 309

R1005 Factory-built Chimneys . . . . . 310  
 R1006 Exterior Air Supply . . . . . 310

**Part IV—Energy Conservation . . . . . 311**

**CHAPTER 11 ENERGY EFFICIENCY . . . . . 311**

Section  
 N1101 General . . . . . 311  
 N1102 Building Thermal Envelope . . . . . 318  
 N1103 Systems . . . . . 321

**Part V—Mechanical . . . . . 323**

**CHAPTER 12 MECHANICAL  
 ADMINISTRATION . . . . . 323**

Section  
 M1201 General . . . . . 323  
 M1202 Existing Mechanical Systems . . . . . 323

**CHAPTER 13 GENERAL MECHANICAL SYSTEM  
 REQUIREMENTS . . . . . 325**

Section  
 M1301 General . . . . . 325  
 M1302 Approval . . . . . 325  
 M1303 Labeling of Appliances . . . . . 325  
 M1304 Type of Fuel . . . . . 325  
 M1305 Appliance Access . . . . . 325  
 M1306 Clearances from Combustible Construction . . . . . 326  
 M1307 Appliance Installation . . . . . 329  
 M1308 Mechanical Systems Installation . . . . . 329

**CHAPTER 14 HEATING AND COOLING  
 EQUIPMENT . . . . . 331**

Section  
 M1401 General . . . . . 331  
 M1402 Central Furnaces . . . . . 331  
 M1403 Heat Pump Equipment . . . . . 331  
 M1404 Refrigeration Cooling Equipment . . . . . 331  
 M1405 Baseboard Convectors . . . . . 331  
 M1406 Radiant Heating Systems . . . . . 331  
 M1407 Duct Heaters . . . . . 332  
 M1408 Vented Floor Furnaces . . . . . 332  
 M1409 Vented Wall Furnaces . . . . . 332  
 M1410 Vented Room Heaters . . . . . 333  
 M1411 Heating and Cooling Equipment . . . . . 333  
 M1412 Absorption Cooling Equipment . . . . . 334

M1413 Evaporative Cooling Equipment.....	334	( <del>M2003—Expansion Tanks</del> ).....	353
M1414 Fireplace Stoves.....	334	M2004 Water Heaters Used for Space Heating .....	353
M1415 Masonry Heaters .....	334	M2005 Water Heaters.....	353
<b>CHAPTER 15 EXHAUST SYSTEMS.....</b>	<b>335</b>	M2006 Pool Heaters .....	354
Section		<b>CHAPTER 21 HYDRONIC PIPING.....</b>	<b>355</b>
M1501 General .....	335	Section	
M1502 Clothes Dryer Exhaust.....	335	M2101 Hydronic Piping Systems Installation .....	355
M1503 Range Hoods .....	335	M2102 Baseboard Convectors.....	355
M1504 Installation of Microwave Ovens .....	335	M2103 Floor Heating Systems.....	355
M1505 Overhead Exhaust Hoods .....	336	M2104 Low Temperature Piping.....	355
M1506 Exhaust Ducts.....	336	M2105 Ground Source Heat Pump System	
M1507 Mechanical Ventilation .....	336	Loop Piping .....	357
<b>CHAPTER 16 DUCT SYSTEMS.....</b>	<b>337</b>	<b>CHAPTER 22 SPECIAL PIPING AND STORAGE</b>	<b>359</b>
Section		<b>SYSTEMS .....</b>	<b>359</b>
M1601 Duct Construction .....	337	Section	
M1602 Return Air.....	339	M2201 Oil Tanks .....	359
<b>CHAPTER 17 COMBUSTION AIR .....</b>	<b>341</b>	M2202 Oil Piping, Fitting and Connections.....	359
Section		M2203 Installation .....	359
M1701 General .....	341	M2204 Oil Pumps and Valves .....	360
M1702 All Air from Inside the Building.....	341	<b>CHAPTER 23 SOLAR SYSTEMS.....</b>	<b>361</b>
M1703 All Air from Outdoors .....	341	Section	
<b>CHAPTER 18 CHIMNEYS AND VENTS .....</b>	<b>347</b>	M2301 Solar Energy Systems .....	361
Section		<i>Part VI—Fuel Gas .....</i>	<i>363</i>
M1801 General .....	347	<b>CHAPTER 24 FUEL GAS.....</b>	<b>363</b>
M1802 Vent Components.....	347	Section	
M1803 Chimney and Vent Connectors .....	348	G2401 General .....	363
M1804 Vents.....	349	G2402 General .....	363
M1805 Masonry and Factory-built Chimneys .....	349	G2403 General Definitions .....	363
<b>CHAPTER 19 SPECIAL FUEL-BURNING</b>		G2404 General .....	369
<b>EQUIPMENT .....</b>	<b>351</b>	G2405 Structural Safety.....	369
Section		G2406 Appliance Location .....	369
M1901 Ranges and Ovens .....	351	G2407 Combustion, Ventilation and Dilution Air....	370
M1902 Sauna Heaters.....	351	G2408 Installation .....	374
M1903 Stationary Fuel Cell Power Plants .....	351	G2409 Clearance Reduction .....	374
M1904 Gaseous Hydrogen Systems .....	351	G2410 Electrical.....	376
<b>CHAPTER 20 BOILERS AND</b>		G2411 Electrical Bonding.....	377
<b>WATER HEATERS.....</b>	<b>353</b>	G2412 General .....	377
Section		G2413 Pipe Sizing .....	378
( <del>M2001—Boilers</del> ) .....	353	G2414 Piping Materials.....	379
( <del>M2002—Operating and Safety Controls</del> ).....	353	G2415 Piping System Installation.....	389
		G2416 Piping Bends and Changes in Direction.....	391

**TABLE OF CONTENTS**

G2417 Inspection, Testing and Purging . . . . . 391

G2418 Piping Support . . . . . 392

G2419 Drips and Sloped Piping . . . . . 392

G2420 Gas-shutoff Valves . . . . . 393

G2421 Flow Controls . . . . . 393

G2422 Appliance Connections . . . . . 394

G2423 CNG Gas-dispensing Systems . . . . . 394

G2424 Piping Support Intervals . . . . . 394

G2425 General . . . . . 395

G2426 Vents . . . . . 396

G2427 Venting of Equipment . . . . . 396

G2428 Sizing of Category I Appliance  
Venting Systems . . . . . 406

G2429 Direct-vent, Integral Vent, Mechanical Vent  
and Ventilation/Exhaust Hood Venting . . . . . 417

G2430 Factory-built Chimneys . . . . . 417

G2431 General . . . . . 418

G2432 Decorative Appliances for Installation  
in Fireplaces . . . . . 418

G2433 Log Lighters . . . . . 418

G2434 Vented Gas Fireplaces  
(Decorative Fireplaces) . . . . . 418

G2435 Vented Gas Fireplace Heaters . . . . . 418

G2436 Vented Wall Furnaces . . . . . 418

G2437 Floor Furnaces . . . . . 418

G2438 Clothes Dryers . . . . . 419

G2439 Clothes Dryer Exhaust . . . . . 419

G2440 Sauna Heaters . . . . . 419

G2441 Pool and Spa Heaters . . . . . 420

G2442 Forced-air Warm-air Furnaces . . . . . 420

G2443 Conversion Burners . . . . . 421

G2444 Unit Heaters . . . . . 421

G2445 Unvented Room Heaters . . . . . 421

G2446 Vented Room Heaters . . . . . 421

G2447 Cooking Appliances . . . . . 422

G2448 Water Heaters . . . . . 422

G2449 Air Conditioning Equipment . . . . . 422

G2450 Illuminating Appliances . . . . . 422

G2451 Infrared Radiant Heaters . . . . . 422

G2452 Boilers . . . . . 422

G2453 Chimney Damper Opening Area . . . . . 423

**Part VII—Plumbing . . . . . 425**

**CHAPTER 25 PLUMBING  
ADMINISTRATION . . . . . 425**

Section

P2501 General . . . . . 425

P2502 Existing Plumbing Systems . . . . . 425

P2503 Inspection and Tests . . . . . 425

**CHAPTER 26 GENERAL PLUMBING  
REQUIREMENTS . . . . . 427**

Section

P2601 General . . . . . 427

P2602 Individual Water Supply and  
Sewage Disposal . . . . . 427

P2603 Structural and Piping Protection . . . . . 427

P2604 Trenching and Backfilling . . . . . 428

P2605 Support . . . . . 428

P2606 Waterproofing of Openings . . . . . 428

P2607 Workmanship . . . . . 428

P2608 Materials Evaluation and Listing . . . . . 428

**CHAPTER 27 PLUMBING FIXTURES . . . . . 431**

Section

P2701 Fixtures, Faucets and Fixture Fittings . . . . . 431

P2702 Fixture Accessories . . . . . 431

P2703 Tail Pieces . . . . . 431

P2704 Access to Connections . . . . . 431

P2705 Installation . . . . . 431

P2706 Waste Receptors . . . . . 431

P2707 Directional Fittings . . . . . 433

P2708 Showers . . . . . 433

P2709 Shower Receptors . . . . . 433

P2710 Shower Walls . . . . . 434

P2711 Lavatories . . . . . 434

P2712 Water Closets . . . . . 434

P2713 Bathtubs . . . . . 434

P2714 Sinks . . . . . 435

P2715 Laundry Tubs . . . . . 435

P2716 Food Waste Grinder . . . . . 435

P2717 Dishwashing Machines . . . . . 435

P2718 Clothes Washing Machine . . . . . 435

P2719 Floor Drains . . . . . 435

P2720 Whirlpool Bathtubs . . . . . 435

P2721 Bidet Installations . . . . . 435

P2722 Fixture Fitting . . . . . 436

P2723 Macerating Toilet Systems . . . . . 436  
 P2724 Speciality Temperature Control Devices  
 and Valves . . . . . 436

**CHAPTER 28 WATER HEATERS . . . . . 437**

Section  
 P2801 General . . . . . 437  
 P2802 Water Heaters Used for Space Heating . . . . . 437  
 P2803 Relief Valves . . . . . 437

**CHAPTER 29 WATER SUPPLY AND DISTRIBUTION . . . . . 439**

Section  
 P2901 General . . . . . 439  
 P2902 Protection of Potable Water Supply . . . . . 439  
 P2903 Water-supply System . . . . . 441  
 P2904 Materials, Joints and Connections . . . . . 447  
 P2905 Changes in Direction . . . . . 451  
 P2906 Support . . . . . 451  
 P2907 Drinking Water Treatment Units . . . . . 451

**CHAPTER 30 SANITARY DRAINAGE . . . . . 453**

Section  
 P3001 General . . . . . 453  
 P3002 Materials . . . . . 453  
 P3003 Joints and Connections . . . . . 453  
 P3004 Determining Drainage Fixture Units . . . . . 458  
 P3005 Drainage System . . . . . 458  
 P3006 Sizing of Drain Pipe Offsets . . . . . 461  
 P3007 Sumps and Ejectors . . . . . 461  
 P3008 Backwater Valves . . . . . 461

**CHAPTER 31 VENTS . . . . . 463**

Section  
 P3101 Vent Systems . . . . . 463  
 P3102 Vent Stacks and Stack Vents . . . . . 463  
 P3103 Vent Terminals . . . . . 463  
 P3104 Vent Connections and Grades . . . . . 463  
 P3105 Fixture Vents . . . . . 464  
 P3106 Individual Vent . . . . . 464  
 P3107 Common Vent . . . . . 464  
 P3108 Wet Venting . . . . . 464  
 P3109 Waste Stack Vent . . . . . 465  
 P3110 Circuit Venting . . . . . 465  
 P3111 Combination Waste and Vent System . . . . . 465  
 P3112 Island Fixture Venting . . . . . 466

P3113 Vent Pipe Sizing . . . . . 466  
 P3114 Air Admittance Valves . . . . . 466

**CHAPTER 32 TRAPS . . . . . 469**

Section  
 P3201 Fixture Traps . . . . . 469

**Part VIII—Electrical . . . . . 471**

**CHAPTER 33 GENERAL REQUIREMENTS . . . . 471**

Section  
 E3301 General . . . . . 471  
 E3302 Building Structure Protection . . . . . 471  
 E3303 Inspection and Approval . . . . . 471  
 E3304 General Equipment Requirements . . . . . 471  
 E3305 Equipment Location and Clearances . . . . . 472  
 E3306 Electrical Conductors and Connections . . . . . 474  
 E3307 Conductor and Terminal Identification . . . . . 474

**CHAPTER 34 ELECTRICAL DEFINITIONS . . . . 477**

Section  
 E3401 General . . . . . 477

**CHAPTER 35 SERVICES . . . . . 481**

Section  
 E3501 General Services . . . . . 481  
 E3502 Service Size and Rating . . . . . 481  
 E3503 Service, Feeder and Grounding Electrode  
 Conductor Sizing . . . . . 482  
 E3504 Overhead Service-drop and Service Conductor  
 Installation . . . . . 483  
 E3505 Service-entrance Conductors . . . . . 485  
 E3506 Service Equipment—General . . . . . 485  
 E3507 System Grounding . . . . . 485  
 E3508 Grounding Electrode System . . . . . 486  
 E3509 Bonding . . . . . 487  
 E3510 Grounding Electrode Conductors . . . . . 488  
 E3511 Grounding Electrode Conductor Connection to  
 the Grounding Electrodes . . . . . 488

**CHAPTER 36 BRANCH CIRCUIT AND FEEDER REQUIREMENTS . . . . . 491**

Section  
 E3601 General . . . . . 491  
 E3602 Branch Circuit Ratings . . . . . 491  
 E3603 Required Branch Circuits . . . . . 492  
 E3604 Feeder Requirements . . . . . 493

**TABLE OF CONTENTS**

E3605 Conductor Sizing and Overcurrent Protection . . . . . 494  
 E3606 Panelboards . . . . . 497

**CHAPTER 37 WIRING METHODS..... 499**

Section  
 E3701 General Requirements . . . . . 499  
 E3702 Above-ground Installation Requirements. . . . . 499  
 E3703 Underground Installation Requirements. . . . . 502

**CHAPTER 38 POWER AND LIGHTING DISTRIBUTION..... 505**

Section  
 E3801 Receptacle Outlets . . . . . 505  
 E3802 Ground-fault and Arc-fault Circuit-interrupter Protection . . . . . 507  
 E3803 Lighting Outlets . . . . . 508  
 E3804 General Installation Requirements . . . . . 508  
 E3805 Boxes, Conduit Bodies and Fittings . . . . . 519  
 E3806 Installation of Boxes, Conduit Bodies and Fittings. . . . . 521  
 E3807 Cabinets and Panelboards . . . . . 523  
 E3808 Grounding. . . . . 524  
 E3809 Flexible Cords . . . . . 526

**CHAPTER 39 DEVICES AND LUMINAIRES .... 527**

Section  
 E3901 Switches . . . . . 527  
 E3902 Receptacles. . . . . 528  
 E3903 Fixtures. . . . . 528  
 E3904 Luminaire Installation . . . . . 530  
 E3905 Track Lighting . . . . . 530

**CHAPTER 40 APPLIANCE INSTALLATION.... 533**

Section  
 E4001 General . . . . . 533

**CHAPTER 41 SWIMMING POOLS..... 535**

Section  
 E4101 General . . . . . 535  
 E4102 Wiring Methods for Pools, Spas, Hot Tubs and Hydromassage Bathtubs . . . . . 535  
 E4103 Equipment Location and Clearances . . . . . 537  
 E4104 Bonding . . . . . 538  
 E4105 Grounding. . . . . 540  
 E4106 Equipment Installation. . . . . 541

E4107 Storable Swimming Pools . . . . . 543  
 E4108 Spas and Hot Tubs. . . . . 544  
 E4109 Hydromassage Bathtubs . . . . . 544

**CHAPTER 42 CLASS 2 REMOTE-CONTROL, SIGNALING AND POWER-LIMITED CIRCUITS..... 545**

Section  
 E4201 General . . . . . 545  
 E4202 Power Sources . . . . . 545  
 E4203 Wiring Methods . . . . . 545  
 E4204 Installation Requirements . . . . . 545

*Part IX—Referenced Standards . . . . . 547*

**CHAPTER 43 REFERENCED STANDARDS..... 547**

**APPENDIX A SIZING AND CAPACITIES OF GAS PIPING..... 567**

**APPENDIX B SIZING OF VENTING SYSTEMS SERVING APPLIANCES EQUIPPED WITH DRAFT HOODS, CATEGORY I APPLIANCES, AND APPLIANCES LISTED FOR USE WITH TYPE B VENTS ..... 579**

**APPENDIX C EXIT TERMINALS OF MECHANICAL DRAFT AND DIRECT-VENT VENTING SYSTEMS ..... 589**

**APPENDIX D RECOMMENDED PROCEDURE FOR SAFETY INSPECTION OF AN EXISTING APPLIANCE INSTALLATION ..... 591**

**APPENDIX E MANUFACTURED HOUSING USED AS DWELLINGS ..... 593**

Section  
 AE101 Scope . . . . . 593  
 AE102 Application to Existing Manufactured Homes and Building Service Equipment . . . . . 593  
 AE201 Definitions . . . . . 594  
 AE301 Permits . . . . . 594  
 AE302 Application for Permit. . . . . 594  
 AE303 Permits Issuance. . . . . 595  
 AE304 Fees. . . . . 595  
 AE305 Inspections . . . . . 596  
 AE306 Special Inspections . . . . . 597

AE307 Utility Service . . . . .	597	AH106 Footings . . . . .	613
AE401 Occupancy Classification . . . . .	597	AH107 Special Provisions for Aluminum Screen Enclosures in Hurricane-prone Regions . . . . .	613
AE402 Location on Property . . . . .	597		
AE501 Design . . . . .	597	<b>APPENDIX I PRIVATE SEWAGE DISPOSAL .. 615</b>	
AE502 Foundation Systems . . . . .	598	Section	
AE503 Skirting and Perimeter Enclosures . . . . .	598	AI101 General . . . . .	615
AE504 Structural Additions . . . . .	598		
AE505 Building Service Equipment . . . . .	598	<b>APPENDIX J EXISTING BUILDINGS AND STRUCTURES . . . . . 617</b>	
AE506 Exits . . . . .	599	Section	
AE507 Occupancy, Fire Safety and Energy Conservation Standards . . . . .	599	AJ101 Purpose and Intent . . . . .	617
AE600 Special Requirements for Foundation Systems . . . . .	599	AJ102 Compliance . . . . .	617
AE601 Footings and Foundations . . . . .	599	AJ103 Preliminary Meeting . . . . .	617
AE602 Pier Construction . . . . .	599	AJ104 Evaluation of an Existing Building . . . . .	617
AE603 Height of Piers . . . . .	599	AJ105 Permit . . . . .	618
AE604 Anchorage Installations . . . . .	599	AJ201 Definitions . . . . .	618
AE605 Ties, Materials and Installation . . . . .	600	AJ301 Repairs . . . . .	618
AE606 Referenced Standards . . . . .	600	AJ401 Renovations . . . . .	619
		AJ501 Alterations . . . . .	619
<b>APPENDIX F RADON CONTROL METHODS .. 601</b>		AJ601 Reconstruction . . . . .	620
Section			
AF101 Scope . . . . .	601	<b>APPENDIX K SOUND TRANSMISSION . . . . . 621</b>	
AF102 Definitions . . . . .	601	Section	
AF103 Requirements . . . . .	601	AK101 General . . . . .	621
		AK102 Air-borne Sound . . . . .	621
<b>APPENDIX G SWIMMING POOLS, SPAS AND HOT TUBS . . . . . 609</b>		AK103 Structural-borne Sound . . . . .	621
Section		AK104 Referenced Standards . . . . .	621
AG101 General . . . . .	609		
AG102 Definitions . . . . .	609	<b>APPENDIX L PERMIT FEES . . . . . 623</b>	
AG103 Swimming Pools . . . . .	609		
AG104 Spas and Hot Tubs . . . . .	609	<b>APPENDIX M HOME DAY CARE— R-3 OCCUPANCY . . . . . 625</b>	
AG105 Barrier Requirements . . . . .	609	AM101 General . . . . .	625
AG106 Entrapment Protection for Swimming Pool and Spa Suction Outlets . . . . .	610	AM102 Definitions . . . . .	625
AG107 Abbreviations . . . . .	611	AM103 Means of Egress . . . . .	625
AG108 Standards . . . . .	611	AM104 Smoke Detection . . . . .	625
<b>APPENDIX H PATIO COVERS . . . . . 613</b>		<b>APPENDIX N VENTING METHODS . . . . . 627</b>	
Section			
AH101 General . . . . .	613	<b>APPENDIX O GRAY WATER RECYCLING SYSTEMS . . . . . 635</b>	
AH102 Definition . . . . .	613	AO101 General . . . . .	635
AH103 Permitted Uses . . . . .	613	AO102 Systems for Flushing Water Closets and Urinals . . . . .	635
AH104 Design Loads . . . . .	613	AO103 Subsurface Landscape Irrigation Systems . . . . .	637
AH105 Light and Ventilation/Emergency Egress . . . . .	613		

**TABLE OF CONTENTS**

**APPENDIX P FIRE SPRINKLER SYSTEM ..... 641**

**APPENDIX Q ICC *INTERNATIONAL*  
*RESIDENTIAL CODE* ELECTRICAL  
PROVISIONS/NATIONAL  
ELECTRICAL CODE CROSS-  
REFERENCE ..... 643**

**INDEX..... 657**



# Part I — Administrative

## CHAPTER 1 ADMINISTRATION

**Note:** Chapter 1 is entirely Seattle amendments to the *International Residential Code* and is not underlined.

### SECTION R101 TITLE, SCOPE AND PURPOSE

**R101.1 Title.** This subtitle shall be known as the “*Seattle Residential Code*” and may be so cited, and is referred to herein as “this code.”

**R101.2 Scope.** The provisions of this code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and townhouses not more than three stories above grade in height with a separate means of egress, and their accessory structures, including adult family homes, foster family care homes and family day care homes licensed by the Washington State Department of Social and Health Services.

**Note:** The seismic design for wood-frame buildings with more than two stories above grade shall comply with the *Seattle Building Code* or other standards referenced in Section R301.1. See Sections R301.2.2.4 and Table R602.10.1.

**Interpretation R101.2a:** Buildings with mixed occupancies, other than residences with home occupations, are not within the scope of the *Seattle Residential Code* and shall comply with the *Seattle Building Code*.

**Interpretation R101.2b:** Dwellings located above a common garage or other common space are not within the scope of the *Seattle Residential Code*, and shall comply with the *Seattle Building Code*. Units in detached two-family dwellings that share a garage are within the scope of this code.

**Note:** If a structure is constructed and maintained in compliance with standards and procedures of the *Seattle Residential Code* currently in effect, as well as the *Seattle Building, Mechanical, Fire, Electrical and Plumbing Codes* currently in effect, the *Seattle Housing and Building Maintenance Code*, SMC 22.200-22.208 does not apply.

**R101.3 Purpose.** The purpose of this code is to provide minimum standards to safeguard life or limb, health, property and public welfare by regulating and controlling the design, construction, quality of materials, occupancy, location and maintenance of buildings and structures within the City and certain equipment specifically regulated herein.

The purpose of this code is to provide for and promote the health, safety and welfare of the general public, and not to create or otherwise establish or designate any particular class or group of persons who will or should be especially protected or benefitted by the terms of this code.

**R101.4 Internal consistency.** Where in any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive governs.

**R101.5 Referenced codes and standards.** The codes and standards referenced in this code are part of the requirements of this code to the extent prescribed by each such reference. Where differences occur between provisions of this code and referenced codes and standards, the provisions of this code apply.

**Exception:** Where enforcement of a code provision would violate the conditions of the listing of the equipment or appliance, the conditions of the listing and manufacturer’s instructions apply.

**R101.6 Appendices.** Provisions in the *International Residential Code* appendices do not apply unless specifically adopted.

**[W]<sup>1</sup> R101.7 Conflict with Ventilation Code.** In the case of conflict between the ventilation requirements of this code and the ventilation requirements of *Washington Administrative Code* Chapter 51-13 the *Washington State Ventilation and Indoor Air Quality Code* (VIAQ), the provisions of the VIAQ govern.

**R101.8 Metric units.** Wherever in this ordinance there is a conflict between metric units of measurement and English units, the English units govern.

### SECTION R102 UNSAFE BUILDINGS, STRUCTURES OR PREMISES

**R102.1 Definition.** For the purpose of this section, “unsafe buildings, structures or premises” include all buildings or structures and all premises immediately surrounding such buildings or structures, whether erected before or after the effective date of this code, that are structurally unsound or unsafe or not provided with adequate egress, or that constitute a fire hazard, or are otherwise dangerous to human life, or that, in relation to existing occupancy, constitute a hazard to safety, health or public welfare by reason of inadequate maintenance, deterioration, instability, dilapidation, obsolescence, damage by fire or other causes or abandonment as specified in this code or any other effective ordinance.

<sup>1</sup>[W] preceding a section number indicates that the section incorporates a provision of the *Washington State Residential Code*.