

TABLE OF CONTENTS

<p><i>Part I—Administrative</i> 1</p> <p>CHAPTER 1 Deleted</p> <p><i>Part II—Definitions</i> 3</p> <p>CHAPTER 2 DEFINITIONS 3</p> <p>Section</p> <p>R201 General 3</p> <p>R202 Definitions 3</p> <p><i>Part III—Building Planning and Construction</i> 17</p> <p>CHAPTER 3 BUILDING PLANNING 17</p> <p>Section</p> <p>R300 Height and Area Limitations 17</p> <p>R301 Design Criteria 17</p> <p>R302 Exterior Wall Location 38</p> <p>R303 Light, Ventilation and Heating 38</p> <p>R304 Minimum Room Areas 39</p> <p>R305 Ceiling Height 40</p> <p>R306 Sanitation 40</p> <p>R307 Toilet, Bath and Shower Spaces 40</p> <p>R308 Glazing 40</p> <p>R309 Garages and Carports 42</p> <p>R310 Emergency Escape and Rescue Openings 43</p> <p>R311 Means of Egress 43</p> <p>R312 Guards 45</p> <p>R313 Smoke Alarms 46</p> <p>R314 Foam Plastic 46</p> <p>R315 Flame Spread and Smoke Density 48</p> <p>R316 Insulation 48</p> <p>R317 Dwelling Unit Separation 48</p> <p>R318 Moisture Vapor Retarders 50</p> <p>R319 Protection Against Decay 50</p> <p>R320 Protection Against Subterranean Termites 51</p> <p>R321 Deleted</p> <p>R322 Deleted</p> <p>R323 Deleted</p> <p>R324 Flood-resistant Construction 52</p> <p>R325 Carbon Monoxide Alarms 55</p>	<p>CHAPTER 4 FOUNDATIONS 57</p> <p>Section</p> <p>R401 General 57</p> <p>R402 Materials 57</p> <p>R403 Footings 58</p> <p>R404 Foundation and Retaining Walls 67</p> <p>R405 Deleted</p> <p>R406 Foundation Waterproofing and Dampproofing 84</p> <p>R407 Columns 86</p> <p>R408 Under-floor Space 86</p> <p>CHAPTER 5 FLOORS 89</p> <p>Section</p> <p>R501 General 89</p> <p>R502 Wood Floor Framing 89</p> <p>R503 Floor Sheathing 98</p> <p>R504 Pressure Preservatively Treated-wood Floors (On Ground) 100</p> <p>R505 Steel Floor Framing 100</p> <p>R506 Concrete Floors (On Ground) 113</p> <p>CHAPTER 6 WALL CONSTRUCTION 115</p> <p>Section</p> <p>R601 General 115</p> <p>R602 Wood Wall Framing 115</p> <p>R603 Steel Wall Framing 135</p> <p>R604 Wood Structural Panels 172</p> <p>R605 Particleboard 172</p> <p>R606 General Masonry Construction 172</p> <p>R607 Unit Masonry 180</p> <p>R608 Multiple Wythe Masonry 180</p> <p>R609 Grouted Masonry 182</p> <p>R610 Glass Unit Masonry 183</p> <p>R611 Insulating Concrete Form Wall Construction 185</p> <p>R612 Conventionally Formed Concrete Wall Construction 211</p> <p>R613 Exterior Windows and Glass Doors 216</p>
---	---

TABLE OF CONTENTS

CHAPTER 7 WALL COVERING 221

Section

R701 General 221
 R702 Interior Covering 221
 R703 Exterior Covering 224

CHAPTER 8 ROOF-CEILING CONSTRUCTION 235

Section

R801 General 235
 R802 Wood Roof Framing 235
 R803 Roof Sheathing 260
 R804 Steel Roof Framing 260
 R805 Ceiling Finishes 278
 R806 Roof Ventilation 278
 R807 Attic Access 278
 R808 Insulation Clearance 279

CHAPTER 9 ROOF ASSEMBLIES 281

Section

R901 General 281
 R902 Roof Classification 281
 R903 Weather Protection 281
 R904 Materials 281
 R905 Requirements for Roof Coverings 283
 R906 Roof Insulation 290
 R907 Reroofing 291

CHAPTER 10 CHIMNEYS AND FIREPLACES .. 293

Section

R1001 Masonry Fireplaces 293
 R1002 Masonry Heaters 297
 R1003 Masonry Chimneys 297
 R1004 Factory-built Fireplaces 301
 R1005 Factory-built Chimneys 301
 R 1006 Exterior Air Supply 302

Part IV—Energy Conservation 303

CHAPTER 11 Deleted

Part V—Mechanical 305

CHAPTER 12 MECHANICAL ADMINISTRATION 305

Section

M1201 General 305
 M1202 Deleted

CHAPTER 13 GENERAL MECHANICAL SYSTEM REQUIREMENTS 307

Section

M1301 General 307
 M1302 Approval 307
 M1303 Labeling of Appliances 307
 M1304 Type of Fuel 307
 M1305 Appliance Access 307
 M1306 Clearances from Combustible Construction... 308
 M1307 Appliance Installation 311
 M1308 Mechanical Systems Installation 311

CHAPTER 14 HEATING AND COOLING EQUIPMENT 313

Section

M1401 General 313
 M1402 Central Furnaces 313
 M1403 Heat Pump Equipment 313
 M1404 Refrigeration Cooling Equipment 313
 M1405 Baseboard Convectors 313
 M1406 Radiant Heating Systems 313
 M1407 Duct Heaters 314
 M1408 Vented Floor Furnaces 314
 M1409 Vented Wall Furnaces 314
 M1410 Vented Room Heaters 315
 M1411 Heating and Cooling Equipment 315
 M1412 Absorption Cooling Equipment 316
 M1413 Evaporative Cooling Equipment 316
 M1414 Fireplace Stoves 316
 M1415 Masonry Heaters 316

CHAPTER 15 EXHAUST SYSTEMS	317	CHAPTER 21 HYDRONIC PIPING	337
Section		Section	
M1501 General	317	M2101 Hydronic Piping Systems Installation	337
M1502 Clothes Dryer Exhaust.	317	M2102 Baseboard Convectors	337
M1503 Range Hoods	317	M2103 Floor Heating Systems.	337
M1504 Installation of Microwave Ovens	317	M2104 Low Temperature Piping	337
M1505 Overhead Exhaust Hoods	318	M2105 Ground Source Heat Pump System Loop Piping	339
M1506 Exhaust Ducts.	318		
M1507 Mechanical Ventilation	318	CHAPTER 22 SPECIAL PIPING AND STORAGE SYSTEMS	341
CHAPTER 16 DUCT SYSTEMS	319	Section	
Section		M2201 Oil Tanks	341
M1601 Duct Construction	319	M2202 Oil Piping, Fitting and Connections	341
M1602 Return Air.	321	M2203 Installation	341
CHAPTER 17 COMBUSTION AIR	323	M2204 Oil Pumps and Valves	342
Section		CHAPTER 23 SOLAR SYSTEMS.	343
M1701 General	323	Section	
M1702 All Air from Inside the Building.	323	M2301 Solar Energy Systems	343
M1703 All Air from Outdoors.	323	<i>Part VI—Fuel Gas</i>	<i>345</i>
CHAPTER 18 CHIMNEYS AND VENTS	329	CHAPTER 24 FUEL GAS.	345
Section		Section	
M1801 General	329	G2401 General	345
M1802 Vent Components	329	G2402 General	345
M1803 Chimney and Vent Connectors	330	G2403 General Definitions	345
M1804 Vents	331	G2404 General	351
M1805 Masonry and Factory-built Chimneys.	331	G2405 Structural Safety.	351
CHAPTER 19 SPECIAL FUEL-BURNING EQUIPMENT	333	G2406 Appliance Location	351
Section		G2407 Combustion, Ventilation and Dilution Air	352
M1901 Ranges and Ovens	333	G2408 Installation	356
M1902 Sauna Heaters.	333	G2409 Clearance Reduction	356
M1903 Stationary Fuel Cell Power Plants	333	G2410 Electrical.	360
M1904 Gaseous Hydrogen Systems	333	G2411 Electrical Bonding	360
CHAPTER 20 BOILERS AND WATER HEATERS	335	G2412 General	360
Section		G2413 Pipe Sizing	360
M2001 Boilers.	335	G2414 Piping Materials.	370
M2002 Operating and Safety Controls	335	G2415 Piping System Installation.	371
M2003 Expansion Tanks	335	G2416 Piping Bends and Changes in Direction.	373
M2004 Water Heaters Used for Space Heating.	335	G2417 Inspection, Testing and Purging	373
M2005 Water Heaters.	335	G2418 Piping Support	374
M2006 Pool Heaters	336	G2419 Drips and Sloped Piping	374
		G2420 Gas-shutoff Valves.	375
		G2421 Flow Controls.	375

TABLE OF CONTENTS

G2422 Appliance Connections	376	<i>Part VII—Plumbing</i>	<i>407</i>
G2423 CNG Gas-dispensing Systems	376	CHAPTER 25 Deleted	
G2424 Piping Support Intervals	376	CHAPTER 26 Deleted	
G2425 General	377	CHAPTER 27 Deleted	
G2426 Vents	378	CHAPTER 28 Deleted	
G2427 Venting of Equipment	378	CHAPTER 29 Deleted	
G2428 Sizing of Category I Appliance Venting Systems	388	CHAPTER 30 Deleted	
G2429 Direct-vent, Integral Vent, Mechanical Vent and Ventilation/Exhaust Hood Venting	399	CHAPTER 31 Deleted	
G2430 Factory-built Chimneys	399	CHAPTER 32 Deleted	
G2431 General	400	<i>Part VIII—Electrical</i>	<i>423</i>
G2432 Decorative Appliances for Installation in Fireplaces	400	CHAPTER 33 Deleted	
G2433 Log Lighters	400	CHAPTER 34 Deleted	
G2434 Vented Gas Fireplaces (Decorative Fireplaces)	400	CHAPTER 35 Deleted	
G2435 Vented Gas Fireplace Heaters	400	CHAPTER 36 Deleted	
G2436 Vented Wall Furnaces	400	CHAPTER 37 Deleted	
G2437 Floor Furnaces	400	CHAPTER 38 Deleted	
G2438 Clothes Dryers	401	CHAPTER 39 Deleted	
G2439 Clothes Dryer Exhaust	401	CHAPTER 40 Deleted	
G2440 Sauna Heaters	401	CHAPTER 41 Deleted	
G2441 Pool and Spa Heaters	402	CHAPTER 42 Deleted	
G2442 Forced-air Warm-air Furnaces	402		
G2443 Conversion Burners	403		
G2444 Unit Heaters	403		
G2445 Unvented Room Heaters	403		
G2446 Vented Room Heaters	403		
G2447 Cooking Appliances	404		
G2448 Water Heaters	404		
G2449 Air Conditioning Equipment	404		
G2450 Illuminating Appliances	404		
G2451 Infrared Radiant Heaters	404		
G2452 Boilers	404		
G2453 Chimney Damper Opening Area	405		

<i>Part IX—Referenced Standards</i>	443	APPENDIX I Deleted	
CHAPTER 43 REFERENCED STANDARDS	443	APPENDIX J Deleted	
APPENDIX A SIZING AND CAPACITIES OF GAS PIPING	463	APPENDIX K SOUND TRANSMISSION	501
		Section	
APPENDIX B SIZING OF VENTING SYSTEMS SERVING APPLIANCES EQUIPPED WITH DRAFT HOODS, CATEGORY I APPLIANCES, AND APPLIANCES LISTED FOR USE WITH TYPE B VENTS	475	AK101 General	501
		AK102 Air-borne Sound	501
APPENDIX C EXIT TERMINALS OF MECHANICAL DRAFT AND DIRECT-VENT VENTING SYSTEMS	485	AK103 Structural-borne Sound	501
		AK104 Referenced Standards	501
APPENDIX D Deleted		APPENDIX L Deleted	
APPENDIX E Deleted		APPENDIX M Deleted	
APPENDIX F Deleted		APPENDIX N Deleted	
APPENDIX G SWIMMING POOLS, SPAS AND HOT TUBS	493	APPENDIX O Deleted	
Section		APPENDIX P Deleted	
AG101 General	493	APPENDIX Q Deleted	
AG102 Definitions	493	INDEX	515
AG103 Swimming Pools	493		
AG104 Spas and Hot Tubs	493		
AG105 Barrier Requirements	493		
AG106 Entrapment Protection for Swimming Pool and Spa Suction Outlets	494		
AG107 Abbreviations	494		
AG108 Standards	494		
APPENDIX H PATIO COVERS	495		
Section			
AH101 General	495		
AH102 Definition	495		
AH103 Permitted Uses	495		
AH104 Design Loads	495		
AH105 Light and Ventilation/Emergency Egress	495		
AH106 Footings	495		
AH107 Special Provisions for Aluminum Screen Enclosures in Hurricane-prone Regions	495		

