

# TABLE OF CONTENTS

|   |  |
|---|--|
| <b>CHAPTER 1 GENERAL REQUIREMENTS..... 1</b>                      | 403 Public Assemblages and Events ..... 25                       |
| Section   | 404 Fire Safety and Evacuation Plans ..... 25                    |
| 101 Title, Scope and Purpose..... 1                               | 405 Emergency Evacuation Drills ..... 26                         |
| 102 Applicability ..... 1   | 406 Employee Training and Response Procedures... 27              |
| 103 Materials, Equipment and<br>Methods of Construction..... 1    | 407 Hazard Communication..... 27                                 |
| 104 Service Utilities ..... 2                                     | 408 Use and Occupancy-related Requirements ..... 28              |
| 105 Temporary Structures ..... 2                                  | <b>CHAPTER 5 FIRE SERVICE FEATURES..... 31</b>                   |
| 106 Maintenance of Equipment and Systems ..... 2                  | Section  |
| 107 Unsafe Structures and Equipment ..... 2                       | 501 General..... 31  |
| 108 Emergency Measures..... 3                                     | 502 Definitions ..... 31   |
| 109 Administration and Enforcement ..... 3                        | 503 Fire Apparatus Access Roads..... 31                          |
| 110 Code Enforcement Official Notification ..... 3                | 504 Access to Building Openings and Roofs ..... 32               |
| <b>CHAPTER 2 DEFINITIONS..... 5</b>                               | 505 Premises Identification ..... 32                             |
| Section   | 506 Key Boxes ..... 33   |
| 201 General ..... 5   | 507 Hazards to Fire Fighters ..... 33                            |
| 202 General Definitions ..... 5                                   | 508 Fire Protection Water Supplies ..... 33                      |
| <b>CHAPTER 3 GENERAL PRECAUTIONS<br/>AGAINST FIRE..... 17</b>     | 509 Fire Command Center ..... 34                                 |
| Section   | 510 Fire Department Access to Equipment..... 34                  |
| 301 General ..... 17  | <b>CHAPTER 6 BUILDING SERVICES AND<br/>SYSTEMS..... 35</b>       |
| 302 Definitions ..... 17  | Section  |
| 303 Asphalt Kettles..... 17                                       | 601 General ..... 35   |
| 304 Combustible Waste Material ..... 17                           | 602 Definitions ..... 35   |
| 305 Ignition Sources..... 18                                      | 603 Fuel-fired Appliances ..... 35                               |
| 306 Motion Picture Film and Screens ..... 18                      | 604 Emergency and Standby Power Systems ..... 37                 |
| 307 Open Burning and Recreational Fires ..... 18                  | 605 Electrical Equipment, Wiring and Hazards ..... 39            |
| 308 Open Flames ..... 19  | 606 Mechanical Refrigeration ..... 40                            |
| 309 Powered Industrial Trucks ..... 20                            | 607 Elevator Recall and Maintenance ..... 42                     |
| 310 Smoking ..... 21  | 608 Stationary Lead-acid Battery Systems ..... 42                |
| 311 Vacant Premises ..... 21                                      | 609 Valve-regulated Lead-acid (VRLA) Battery<br>Systems ..... 42 |
| 312 Vehicle Impact Protection..... 21                             | 610 Commercial Kitchen Hoods ..... 43                            |
| 313 Fueled Equipment ..... 22                                     | 611 Carbon Monoxide Alarms..... 43                               |
| 314 Indoor Displays ..... 22                                      | <b>CHAPTER 7 FIRE-RESISTANCE-RATED<br/>CONSTRUCTION..... 45</b>  |
| 315 Miscellaneous Combustible Materials Storage .. 22             | Section  |
| <b>CHAPTER 4 EMERGENCY PLANNING AND<br/>PREPAREDNESS ..... 25</b> | 701 General..... 45  |
| Section   | 702 Definitions ..... 45   |
| 401 General ..... 25  | 703 Fire-resistance-rated Construction ..... 45                  |
| 402 Definitions ..... 25  |  |

**TABLE OF CONTENTS**

**CHAPTER 8 INTERIOR FINISH, DECORATIVE MATERIALS AND FURNISHINGS ..... 47**

Section

801 General ..... 47  
 802 Definitions ..... 47  
 803 Furnishings ..... 47  
 804 Decorative Vegetation ..... 49  
 805 Decorations and Trim ..... 49  
 806 Interior Finish and Decorative Materials ..... 50

**CHAPTER 9 FIRE PROTECTION SYSTEMS .... 53**

Section

901 General ..... 53  
 902 Definitions ..... 54  
 903 Automatic Sprinkler Systems ..... 57  
 904 Alternative Automatic Fire-extinguishing Systems ..... 61  
 905 Standpipe Systems ..... 64  
 906 Portable Fire Extinguishers ..... 66  
 907 Fire Alarm and Detection Systems ..... 68  
 908 Emergency Alarm Systems ..... 77  
 909 Smoke Control Systems ..... 77  
 910 Smoke and Heat Vents ..... 84  
 911 Explosion Control ..... 86  
 912 Fire Department Connections ..... 88  
 913 Fire Pumps ..... 88

**CHAPTER 10 MEANS OF EGRESS ..... 89**

Section

1001 General ..... 89  
 1002 Definitions ..... 89  
 1003 General Means of Egress ..... 90  
 1004 Occupant Load ..... 91  
 1005 Egress Width ..... 92  
 1006 Means of Egress Illumination ..... 93  
 1007 Accessible Means of Egress ..... 93  
 1008 Doors, Gates and Turnstiles ..... 95  
 1009 Stairways and Handrails ..... 100  
 1010 Ramps ..... 103  
 1011 Exit Signs ..... 104  
 1012 Guards ..... 104  
 1013 Exit Access ..... 105  
 1014 Exit and Exit Access Doorways ..... 107

1015 Exit Access Travel Distance ..... 108  
 1016 Corridors ..... 108  
 1017 Exits ..... 110  
 1018 Number of Exits and Continuity ..... 110  
 1019 Vertical Exit Enclosures ..... 111  
 1020 Exit Passageways ..... 112  
 1021 Horizontal Exits ..... 113  
 1022 Exterior Exit Ramps and Stairways ..... 113  
 1023 Exit Discharge ..... 114  
 1024 Assembly ..... 115  
 1025 Emergency Escape and Rescue ..... 120  
 1026 Reserved ..... 120  
 1027 Maintenance of the Means of Egress ..... 120  
 1028 Means of Egress for Existing Buildings ..... 121

**CHAPTER 11 AVIATION FACILITIES ..... 125**

Section

1101 General ..... 125  
 1102 Definitions ..... 125  
 1103 General Precautions ..... 125  
 1104 Aircraft Maintenance ..... 125  
 1105 Portable Fire Extinguishers ..... 126  
 1106 Aircraft Fueling ..... 126  
 1107 Helistops and Heliports ..... 131

**CHAPTER 12 DRY CLEANING ..... 133**

Section

1201 General ..... 133  
 1202 Definitions ..... 133  
 1203 Classifications ..... 133  
 1204 General Requirements ..... 133  
 1205 Operating Requirements ..... 134  
 1206 Spotting and Pretreating ..... 134  
 1207 Dry Cleaning Systems ..... 135  
 1208 Fire Protection ..... 135

**CHAPTER 13 COMBUSTIBLE DUST-PRODUCING OPERATIONS ..... 137**

Section

1301 General ..... 137  
 1302 Definitions ..... 137  
 1303 Precautions ..... 137  
 1304 Explosion Protection ..... 137

**CHAPTER 14 FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION ..... 139**

Section

1401 General ..... 139

1402 Definitions ..... 139

1403 Temporary Heating Equipment ..... 139

1404 Precautions Against Fire ..... 139

1405 Flammable and Combustible Liquids ..... 139

1406 Flammable Gases ..... 140

1407 Explosive Materials ..... 140

1408 Owner’s Responsibility for Fire Protection ... 140

1409 Fire Alarm Reporting ..... 140

1410 Access for Fire Fighting ..... 140

1411 Means of Egress ..... 140

1412 Water Supply for Fire Protection ..... 140

1413 Standpipes ..... 140

1414 Automatic Sprinkler System ..... 141

1415 Portable Fire Extinguishers ..... 141

1416 Motorized Equipment ..... 141

1417 Safeguarding Roofing Operations ..... 141

**CHAPTER 15 FLAMMABLE FINISHES ..... 143**

Section

1501 General ..... 143

1502 Definitions ..... 143

1503 Protection of Operations ..... 143

1504 Spray Finishing ..... 145

1505 Dipping Operations ..... 148

1506 Electrostatic Apparatus ..... 149

1507 Powder Coating ..... 150

1508 Automobile Undercoating ..... 151

1509 Organic Peroxides and Dual-component Coatings ..... 151

1510 Floor Surfacing and Finishing Operations ..... 151

1511 Indoor Manufacturing of Reinforced Plastics .. 152

**CHAPTER 16 FRUIT AND CROP RIPENING .... 153**

Section

1601 General ..... 153

1602 Definitions ..... 153

1603 Ethylene Gas ..... 153

1604 Sources of Ignition ..... 153

1605 Combustible Waste ..... 153

1606 Ethylene Generators ..... 153

1607 Warning Signs ..... 153

**CHAPTER 17 FUMIGATION AND THERMAL INSECTICIDAL FOGGING ..... 155**

Section

1701 General ..... 155

1702 Definitions ..... 155

1703 Fire Safety Requirements ..... 155

**CHAPTER 18 SEMICONDUCTOR FABRICATION FACILITIES ..... 157**

Section

1801 General ..... 157

1802 Definitions ..... 157

1803 General Safety Provisions ..... 157

1804 Storage ..... 161

1805 Use and Handling ..... 161

**CHAPTER 19 LUMBER YARDS AND WOODWORKING FACILITIES ... 165**

Section

1901 General ..... 165

1902 Definitions ..... 165

1903 General Requirements ..... 165

1904 Fire Protection ..... 165

1905 Plywood, Veneer and Composite Board Mills ..... 166

1906 Log Storage Areas ..... 166

1907 Storage of Wood Chips and Hogged Material Associated with Timber and Lumber Production Facilities ..... 166

1908 Storage and Processing of Wood Chips, Hogged Material, Fines, Compost and Raw Product Associated with Yard Waste and Recycling Facilities ..... 166

1909 Exterior Storage of Finished Lumber Products ..... 167

**CHAPTER 20 MANUFACTURE OF ORGANIC COATINGS ..... 169**

Section

2001 General ..... 169

2002 Definitions ..... 169

2003 General Precautions ..... 169

2004 Electrical Equipment and Protection ..... 169

2005 Process Structures ..... 170

2006 Process Mills and Kettles ..... 170

2007 Process Piping ..... 170

2008 Raw Materials in Process Areas ..... 171

2009 Raw Materials and Finished Products ..... 171

**TABLE OF CONTENTS**

**CHAPTER 21 INDUSTRIAL OVENS..... 173**

Section

2101 General..... 173  
2102 Definitions ..... 173  
2103 Location ..... 173  
2104 Fuel Piping ..... 173  
2105 Interlocks ..... 173  
2106 Fire Protection ..... 174  
2107 Operation and Maintenance ..... 174

**CHAPTER 22 MOTOR FUEL-DISPENSING FACILITIES AND REPAIR GARAGES ..... 175**

Section

2201 General..... 175  
2202 Definitions ..... 175  
2203 Location of Dispensing Devices..... 175  
2204 Dispensing Operations ..... 176  
2205 Operational Requirements..... 177  
2206 Flammable and Combustible Liquid Motor Fuel-dispensing Facilities ..... 177  
2207 Liquefied Petroleum Gas Motor Fuel-dispensing Facilities ..... 181  
2208 Compressed Natural Gas Motor Fuel-dispensing Facilities ..... 182  
2209 Hydrogen Motor Fuel-dispensing and Generation Facilities ..... 184  
2210 Marine Motor Fuel-dispensing Facilities..... 187  
2211 Repair Garages..... 189

**CHAPTER 23 HIGH-PILED COMBUSTIBLE STORAGE ..... 193**

Section

2301 General..... 193  
2302 Definitions ..... 193  
2303 Commodity Classification..... 194  
2304 Designation of High-piled Storage Areas ..... 196  
2305 Housekeeping and Maintenance..... 196  
2306 General Fire Protection and Life Safety Features ..... 196  
2307 Solid-piled and Shelf Storage..... 200  
2308 Rack Storage ..... 200  
2309 Automated Storage ..... 201  
2310 Specialty Storage..... 201

**CHAPTER 24 TENTS, CANOPIES AND OTHER MEMBRANE STRUCTURES..... 203**

Section

2401 General..... 203  
2402 Definitions ..... 203  
2403 Temporary Tents, Canopies and Membrane Structures ..... 203  
2404 Temporary and Permanent Tents, Canopies and Membrane Structures ..... 205

**CHAPTER 25 TIRE REBUILDING AND TIRE STORAGE ..... 209**

Section

2501 General..... 209  
2502 Definitions ..... 209  
2503 Tire Rebuilding ..... 209  
2504 Precautions Against Fire ..... 209  
2505 Outdoor Storage..... 209  
2506 Fire Department Access ..... 210  
2507 Fencing..... 210  
2508 Fire Protection ..... 210  
2509 Indoor Storage Arrangement ..... 210

**CHAPTER 26 WELDING AND OTHER HOT WORK..... 211**

Section

2601 General..... 211  
2602 Definitions ..... 211  
2603 General Requirements ..... 211  
2604 Fire Safety Requirements ..... 211  
2605 Gas Welding and Cutting ..... 212  
2606 Electric Arc Hot Work..... 213  
2607 Calcium Carbide Systems..... 213  
2608 Acetylene Generators ..... 213  
2609 Piping Manifolds and Hose Systems for Fuel Gases and Oxygen..... 213

**CHAPTER 27 HAZARDOUS MATERIALS—GENERAL PROVISIONS..... 215**

Section

2701 General..... 215  
2702 Definitions ..... 217  
2703 General Requirements ..... 219  
2704 Storage ..... 231  
2705 Use, Dispensing and Handling ..... 234

**CHAPTER 28 AEROSOLS ..... 239**

Section

2801 General ..... 239  
 2802 Definitions ..... 239  
 2803 Classification of Aerosol Products ..... 239  
 2804 Inside Storage of Aerosol Products ..... 239  
 2805 Outside Storage ..... 241  
 2806 Retail Display ..... 242  
 2807 Manufacturing Facilities ..... 242

**CHAPTER 29 COMBUSTIBLE FIBERS ..... 243**

Section

2901 General ..... 243  
 2902 Definitions ..... 243  
 2903 General Precautions ..... 243  
 2904 Loose Fiber Storage ..... 243  
 2905 Baled Storage ..... 244

**CHAPTER 30 COMPRESSED GASES ..... 245**

Section

3001 General ..... 245  
 3002 Definitions ..... 245  
 3003 General Requirements ..... 245  
 3004 Storage of Compressed Gases ..... 247  
 3005 Use and Handling of Compressed Gases ..... 247  
 3006 Medical Gas Systems ..... 248  
 3007 Compressed Gases Not Otherwise Regulated .. 248

**CHAPTER 31 CORROSIVE MATERIALS ..... 249**

Section

3101 General ..... 249  
 3102 Definitions ..... 249  
 3103 General Requirements ..... 249  
 3104 Storage ..... 249  
 3105 Use ..... 249

**CHAPTER 32 CRYOGENIC FLUIDS ..... 251**

Section

3201 General ..... 251  
 3202 Definitions ..... 251  
 3203 General Requirements ..... 251  
 3204 Storage ..... 254  
 3205 Use and Handling ..... 255

**CHAPTER 33 EXPLOSIVES AND FIREWORKS ..... 257**

Section

3301 General ..... 257  
 3302 Reserved ..... 257  
 3303 Reserved ..... 257  
 3304 Reserved ..... 257  
 3305 Manufacture, Assembly and Testing of Explosives, Explosive Materials and Fireworks ..... 257  
 3306 Reserved ..... 263  
 3307 Reserved ..... 263  
 3308 Fireworks Display ..... 263

**CHAPTER 34 FLAMMABLE AND COMBUSTIBLE LIQUIDS ..... 265**

Section

3401 General ..... 265  
 3402 Definitions ..... 265  
 3403 General Requirements ..... 266  
 3404 Storage ..... 270  
 3405 Dispensing, Use, Mixing and Handling ..... 289  
 3406 Special Operations ..... 294

**CHAPTER 35 FLAMMABLE GASES ..... 305**

Section

3501 General ..... 305  
 3502 Definitions ..... 305  
 3503 General Requirements ..... 305  
 3504 Storage ..... 306  
 3505 Use ..... 306

**CHAPTER 36 FLAMMABLE SOLIDS ..... 307**

Section

3601 General ..... 307  
 3602 Definitions ..... 307  
 3603 General Requirements ..... 307  
 3604 Storage ..... 307  
 3605 Use ..... 307  
 3606 Magnesium ..... 307

**CHAPTER 37 HIGHLY TOXIC AND TOXIC MATERIALS ..... 311**

Section

3701 General ..... 311  
 3702 Definitions ..... 311  
 3703 Highly Toxic and Toxic Solids and Liquids ... 312

**TABLE OF CONTENTS**

3704 Highly Toxic and Toxic Compressed Gases ... 313  
3705 Ozone Gas Generators..... 317

**CHAPTER 38 LIQUEFIED PETROLEUM GASES ..... 319**

Section

3801 General..... 319  
3802 Definitions ..... 319  
3803 Installation of Equipment ..... 319  
3804 Location of Containers ..... 319  
3805 Prohibited Use of LP-gas ..... 321  
3806 Dispensing and Overfilling ..... 321  
3807 Safety Precautions and Devices ..... 321  
3808 Fire Protection ..... 321  
3809 Storage of Portable LP-gas Containers Awaiting Use or Resale..... 321  
3810 Containers Not in Service..... 322  
3811 Parking and Garaging ..... 323

**CHAPTER 39 ORGANIC PEROXIDES ..... 325**

Section

3901 General..... 325  
3902 Definitions ..... 325  
3903 General Requirements..... 325  
3904 Storage ..... 325  
3905 Use ..... 327

**CHAPTER 40 OXIDIZERS..... 329**

Section

4001 General..... 329  
4002 Definitions ..... 329  
4003 General Requirements ..... 329  
4004 Storage ..... 330  
4005 Use ..... 331

**CHAPTER 41 PYROPHORIC MATERIALS..... 333**

Section

4101 General..... 333  
4102 Definitions ..... 333  
4103 General Requirements ..... 333  
4104 Storage ..... 333  
4105 Use ..... 333  
4106 Silane Gas ..... 334

**CHAPTER 42 PYROXYLIN (CELLULOSE NITRATE) PLASTICS..... 337**

4201 General..... 337  
4202 Definitions ..... 337  
4203 General Requirements ..... 337  
4204 Storage and Handling ..... 337

**CHAPTER 43 UNSTABLE (REACTIVE) MATERIALS ..... 339**

Section

4301 General..... 339  
4302 Definitions ..... 339  
4303 General Requirements ..... 339  
4304 Storage ..... 339  
4305 Use ..... 340

**CHAPTER 44 WATER-REACTIVE SOLIDS AND LIQUIDS..... 341**

Section

4401 General..... 341  
4402 Definitions ..... 341  
4403 General Requirements ..... 341  
4404 Storage ..... 341  
4405 Use ..... 342

**CHAPTER 45 REFERENCED STANDARDS ..... 343**

**APPENDIX A BOARD OF APPEALS..... 351**

A101 General..... 351

**APPENDIX B RESERVED ..... 353**

**APPENDIX C RESERVED ..... 354**

**APPENDIX D FIRE APPARATUS ACCESS ROADS ..... 355**

Section

D101 General..... 357  
D102 Required Access ..... 357  
D103 Minimum Specifications ..... 357  
D104 Reserved..... 358  
D105 Aerial Fire Apparatus Access Roads ..... 358  
D106 Reserved..... 358  
D107 Reserved..... 358

**APPENDIX E HAZARD CATEGORIES ..... 359**

Section

E101 General..... 359

E102 Hazard Categories . . . . . 359

E103 Evaluation of Hazards . . . . . 362

**APPENDIX F RESERVED . . . . . 365**

**APPENDIX G CRYOGENIC FLUIDS—WEIGHT  
AND VOLUME EQUIVALENTS . . . 367**

Section

G101 General . . . . . 367

**APPENDIX H LAWS AND REGULATIONS OF  
OTHER AGENCIES . . . . . 369**

**APPENDIX I PART 1264—IDENTIFICATION OF  
BUILDING UTILIZING TRUSS TYPE  
CONSTRUCTION . . . . . 371**

**INDEX . . . . . 373**

NEW YORK STATE CODE

2nd DRAFT

COPYRIGHT® ICC 2005

**NEW YORK STATE CODE**

**2nd DRAFT**

**COPYRIGHT® ICC 2005**