Building Code of New York State

New York State Department of State
Division of Code Enforcement and Administration

George E. Pataki - Governor
ACKNOWLEDGEMENTS

The Department of State gratefully acknowledges the following individuals who contributed to the development of the Building Code of New York State:

State Fire Prevention and Building Code Council
Randy A. Daniels, Secretary of State (Chair)
Alexander F. Treadwell, former Secretary of State (Chair 1995 - 2001)
John W. Hasper, Deputy Secretary of State (designee)
James A. Burns, State Fire Administrator
Ogden J. Clark (designee)
Antonia Coello Novello, M.D., Commissioner of Health
Barbara DeBuono, M.D., former Commissioner of Health
Richard Svenson (designee)
Linda Angello, Commissioner of Labor
James McGowan, former Commissioner of Labor
Denis Peterson (designee)
Thomas V. Ognibene, Councilman, City of New York
Roy A. Bernardi, former Mayor, City of Syracuse
Nick Altieri (designee)
James P. Griffin, Mayor, City of Olean
Christopher Young (designee)
Michael Behling, Legislator, County of Jefferson
Paul Noto, Legislator, County of Westchester
Kevin Donohue, Councilman, Town of LaGrange
Scott Wohl, Trustee, Village of Goshen
Stephen Brescia, Mayor, Village of Montgomery
Carmen Dubaldi (designee)
Gunnar Neilson, Fire Service Official
Robert G. Shibley, AIA, Registered Architect
Ronald Bugaj, Registered Architect (deceased)
Dr. James J. Yarmus, P.E., Professional Engineer
John H. Flanigan, Code Enforcement Official
Robert Hankin, Builders’ representative
John J. Torpey, Trade union representative
Trence J. Moakley, Persons with disabilities representative

Department of State
Frank Milano, First Deputy Secretary of State
Dorothy M. Harris, Assistant Secretary of State (Project coordinator)
George E. Clark, Jr., Director, Division of Code Enforcement and Administration
Michael Saafir, Deputy Director
Ronald Piester, Assistant Director of Code Development
Richard DiGiovanna, Office of Counsel

Building Code Technical Subcommittee
Gary Higbee (Chair), Mark Blanke, Greg Gallagher, Joseph McGrath, Steven Rocklin, Richard Smith (Department of State Staff)

Administrative Task Group
Richard Thomson (Chair), James King, Thomas Romanowski, William Stewart, Robert Thompson

International Conference of Building Officials - Publications Staff
Kim Akhavan (Managing Editor), Alberto Herrera (Typesetter), Yolanda Nickoley (Typesetter), Suzane Nunes (Product Development Manager), Mary Bridges, Marje Cates, Sally Clem, Greg Dickson, Carmel Gieson, Jessica Hoffman, Roger Mensink, Rhonda Moller, Scott Pierce, Cindy Rodriguez, Mike Tamai, Lisa Valentino, Brian Wohn

Cover Photograph
Dave Feiden
Content


Marginal Markings

New York modifications to code language are indicated by NY tape (\[\text{ NY tape }\]) in the margin, and New York text is underlined. Deletion of code language by New York is indicated by an arrow (\[\text{→} \]) in the margin.

“Reserved” indicates that a section or portion of the International Code™ has been deleted, but its number or position has been retained.

Letter Designations in Front of Section Numbers

The content of sections in this code which begin with a letter designation are maintained by another code development committee in accordance with the following: [B] = International Building Code Development Committee; [F] = International Fire Code Development Committee; [M] = International Mechanical Code Development Committee; [P] = International Plumbing Code Development Committee; [RBE] = International Residential Code Building and Energy Development Committee; [RMP] = International Residential Code Mechanical/Plumbing Development Committee; and [E] = International Energy Conservation Code Development Committee.
# TABLE OF CONTENTS

## CHAPTER 1 GENERAL REQUIREMENTS ..........1

<table>
<thead>
<tr>
<th>Section</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>101</td>
<td>Title, Purpose and Scope</td>
</tr>
<tr>
<td>102</td>
<td>Applicability</td>
</tr>
<tr>
<td>103</td>
<td>Office of Code Enforcement</td>
</tr>
<tr>
<td>104</td>
<td>Code Enforcement Official</td>
</tr>
<tr>
<td>105</td>
<td>Permits</td>
</tr>
<tr>
<td>106</td>
<td>Construction Documents</td>
</tr>
<tr>
<td>107</td>
<td>Temporary Structures and Uses</td>
</tr>
<tr>
<td>108</td>
<td>Fees</td>
</tr>
<tr>
<td>109</td>
<td>Inspections</td>
</tr>
<tr>
<td>110</td>
<td>Certificate of Occupancy</td>
</tr>
<tr>
<td>111</td>
<td>Service Utilities</td>
</tr>
<tr>
<td>112</td>
<td>Variance Procedures</td>
</tr>
<tr>
<td>113</td>
<td>Violations</td>
</tr>
<tr>
<td>114</td>
<td>Stop Work Order</td>
</tr>
<tr>
<td>115</td>
<td>Unsafe Structures and Equipment</td>
</tr>
</tbody>
</table>

## CHAPTER 2 DEFINITIONS .........................5

<table>
<thead>
<tr>
<th>Section</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>201</td>
<td>General</td>
</tr>
<tr>
<td>202</td>
<td>Definitions</td>
</tr>
</tbody>
</table>

## CHAPTER 3 USE AND OCCUPANCY CLASSIFICATION ..........17

<table>
<thead>
<tr>
<th>Section</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>301</td>
<td>General</td>
</tr>
<tr>
<td>302</td>
<td>Classification</td>
</tr>
<tr>
<td>303</td>
<td>Assembly Group A</td>
</tr>
<tr>
<td>304</td>
<td>Business Group B</td>
</tr>
<tr>
<td>305</td>
<td>Educational Group E</td>
</tr>
<tr>
<td>306</td>
<td>Factory Industrial Group F</td>
</tr>
<tr>
<td>307</td>
<td>High-Hazard Group H</td>
</tr>
<tr>
<td>308</td>
<td>Institutional Group I</td>
</tr>
<tr>
<td>309</td>
<td>Mercantile Group M</td>
</tr>
<tr>
<td>310</td>
<td>Residential Group R</td>
</tr>
<tr>
<td>311</td>
<td>Storage Group S</td>
</tr>
<tr>
<td>312</td>
<td>Utility and Miscellaneous Group U</td>
</tr>
</tbody>
</table>

## CHAPTER 4 SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY ..........33

<table>
<thead>
<tr>
<th>Section</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>401</td>
<td>Scope</td>
</tr>
<tr>
<td>402</td>
<td>Covered Mall Buildings</td>
</tr>
<tr>
<td>403</td>
<td>High-Rise Buildings</td>
</tr>
<tr>
<td>404</td>
<td>Atriums</td>
</tr>
<tr>
<td>405</td>
<td>Underground Buildings</td>
</tr>
<tr>
<td>406</td>
<td>Motor-Vehicle-Related Occupancies</td>
</tr>
<tr>
<td>407</td>
<td>Group I-2</td>
</tr>
<tr>
<td>408</td>
<td>Group I-3</td>
</tr>
<tr>
<td>409</td>
<td>Motion Picture Projection Rooms</td>
</tr>
<tr>
<td>410</td>
<td>Stages and Platforms</td>
</tr>
<tr>
<td>411</td>
<td>Special Amusement Buildings</td>
</tr>
<tr>
<td>412</td>
<td>Aircraft-Related Occupancies</td>
</tr>
<tr>
<td>413</td>
<td>Combustible Storage</td>
</tr>
<tr>
<td>414</td>
<td>Hazardous Materials</td>
</tr>
<tr>
<td>415</td>
<td>Groups H-1, H-2, H-3, H-4 and H-5</td>
</tr>
<tr>
<td>416</td>
<td>Application of Flammable Finishes</td>
</tr>
<tr>
<td>417</td>
<td>Drying Rooms</td>
</tr>
<tr>
<td>418</td>
<td>Organic Coatings</td>
</tr>
</tbody>
</table>

## CHAPTER 5 GENERAL BUILDING HEIGHTS AND AREAS .......... 71

<table>
<thead>
<tr>
<th>Section</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>501</td>
<td>General</td>
</tr>
<tr>
<td>502</td>
<td>Definitions</td>
</tr>
<tr>
<td>503</td>
<td>General Height and Area Limitations</td>
</tr>
<tr>
<td>504</td>
<td>Height Modifications</td>
</tr>
<tr>
<td>505</td>
<td>Mezzanines</td>
</tr>
<tr>
<td>506</td>
<td>Area Modifications</td>
</tr>
<tr>
<td>507</td>
<td>Unlimited Area Buildings</td>
</tr>
<tr>
<td>508</td>
<td>Special Provisions</td>
</tr>
</tbody>
</table>

## CHAPTER 6 TYPES OF CONSTRUCTION .......... 79

<table>
<thead>
<tr>
<th>Section</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>601</td>
<td>General</td>
</tr>
<tr>
<td>602</td>
<td>Construction Classification</td>
</tr>
<tr>
<td>603</td>
<td>Combustible Material in Types I and II Construction</td>
</tr>
</tbody>
</table>

## CHAPTER 7 FIRE-RESISTANCE-RATED CONSTRUCTION .......... 83

<table>
<thead>
<tr>
<th>Section</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>701</td>
<td>General</td>
</tr>
<tr>
<td>702</td>
<td>Definitions</td>
</tr>
<tr>
<td>703</td>
<td>Fire-Resistance Ratings and Fire Tests</td>
</tr>
<tr>
<td>704</td>
<td>Exterior Walls</td>
</tr>
<tr>
<td>705</td>
<td>Fire Walls</td>
</tr>
<tr>
<td>706</td>
<td>Fire Barriers</td>
</tr>
<tr>
<td>707</td>
<td>Shaft Enclosures</td>
</tr>
<tr>
<td>708</td>
<td>Fire Partitions</td>
</tr>
<tr>
<td>709</td>
<td>Smoke Barriers</td>
</tr>
<tr>
<td>710</td>
<td>Horizontal Assemblies</td>
</tr>
<tr>
<td>711</td>
<td>Penetrations</td>
</tr>
<tr>
<td>712</td>
<td>Fire-Resistant Joint Systems</td>
</tr>
<tr>
<td>713</td>
<td>Fire-Resistance Rating of Structural Members</td>
</tr>
<tr>
<td>714</td>
<td>Opening Protectives</td>
</tr>
<tr>
<td>715</td>
<td>Ducts and Air Transfer Openings</td>
</tr>
</tbody>
</table>
## TABLE OF CONTENTS

### CHAPTER 16  STRUCTURAL DESIGN ..........281

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1601 General</td>
<td>281</td>
</tr>
<tr>
<td>1602 Definitions and Notations</td>
<td>281</td>
</tr>
<tr>
<td>1603 Construction Documents</td>
<td>284</td>
</tr>
<tr>
<td>1604 General Design Requirements</td>
<td>285</td>
</tr>
<tr>
<td>1605 Load Combinations</td>
<td>288</td>
</tr>
<tr>
<td>1606 Dead Loads</td>
<td>289</td>
</tr>
<tr>
<td>1607 Live Loads</td>
<td>289</td>
</tr>
<tr>
<td>1608 Snow Loads</td>
<td>295</td>
</tr>
<tr>
<td>1609 Wind Loads</td>
<td>297</td>
</tr>
<tr>
<td>1610 Soil Lateral Load</td>
<td>310</td>
</tr>
<tr>
<td>1611 Rain Loads</td>
<td>311</td>
</tr>
<tr>
<td>1612 Flood Loads</td>
<td>312</td>
</tr>
<tr>
<td>1613 Earthquake Loads Definitions</td>
<td>314</td>
</tr>
<tr>
<td>1614 Earthquake Loads—General</td>
<td>315</td>
</tr>
<tr>
<td>1615 Earthquake Loads—Site Ground Motion</td>
<td>316</td>
</tr>
<tr>
<td>1616 Earthquake Loads—Criteria Selection</td>
<td>323</td>
</tr>
<tr>
<td>1617 Earthquake Loads—Minimum Design</td>
<td>327</td>
</tr>
<tr>
<td>1618 Dynamic Analysis Procedure for the</td>
<td>339</td>
</tr>
<tr>
<td>Seismic Design of Buildings</td>
<td></td>
</tr>
<tr>
<td>1619 Earthquake Loads Soil-Structure</td>
<td>342</td>
</tr>
<tr>
<td>Interaction Effects</td>
<td></td>
</tr>
<tr>
<td>1620 Earthquake Loads—Design, Detailing</td>
<td>342</td>
</tr>
<tr>
<td>Requirements and Structural Component</td>
<td></td>
</tr>
<tr>
<td>Load Effects</td>
<td></td>
</tr>
<tr>
<td>1621 Architectural, Mechanical and</td>
<td>345</td>
</tr>
<tr>
<td>Electrical Component Seismic</td>
<td></td>
</tr>
<tr>
<td>Design Requirements</td>
<td></td>
</tr>
<tr>
<td>1622 Nonbuilding Structures Seismic Design</td>
<td>357</td>
</tr>
<tr>
<td>Requirements</td>
<td></td>
</tr>
<tr>
<td>1623 Seismically Isolated Structures</td>
<td>364</td>
</tr>
</tbody>
</table>

### CHAPTER 17  STRUCTURAL TESTS AND SPECIAL INSPECTIONS ..........377

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1701 General</td>
<td>377</td>
</tr>
<tr>
<td>1702 Definitions</td>
<td>377</td>
</tr>
<tr>
<td>1703 Approvals</td>
<td>378</td>
</tr>
<tr>
<td>1704 Special Inspections</td>
<td>379</td>
</tr>
<tr>
<td>1705 Quality Assurance for</td>
<td>386</td>
</tr>
<tr>
<td>Seismic Resistance</td>
<td></td>
</tr>
<tr>
<td>1706 Quality Assurance for</td>
<td>387</td>
</tr>
<tr>
<td>Wind Requirements</td>
<td></td>
</tr>
<tr>
<td>1707 Special Inspections for</td>
<td>388</td>
</tr>
<tr>
<td>Seismic Resistance</td>
<td></td>
</tr>
<tr>
<td>1708 Structural Testing for Seismic Resistance</td>
<td>389</td>
</tr>
<tr>
<td>1709 Structural Observations</td>
<td>390</td>
</tr>
<tr>
<td>1710 Design Strengths of Materials</td>
<td>391</td>
</tr>
<tr>
<td>1711 Alternative Test Procedure</td>
<td>391</td>
</tr>
<tr>
<td>1712 Test Safe Load</td>
<td>391</td>
</tr>
<tr>
<td>1713 In-Situ Load Tests</td>
<td>391</td>
</tr>
<tr>
<td>1714 Preconstruction Load Tests</td>
<td>392</td>
</tr>
<tr>
<td>1715 Material and Test Standards</td>
<td>393</td>
</tr>
</tbody>
</table>

### CHAPTER 18  SOILS AND FOUNDATIONS ......395

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1801 General</td>
<td>395</td>
</tr>
<tr>
<td>1802 Foundation and Soils Investigations</td>
<td>395</td>
</tr>
<tr>
<td>1803 Excavation, Grading and Fill</td>
<td>396</td>
</tr>
<tr>
<td>1804 Allowable Load-Bearing Values of Soils</td>
<td>397</td>
</tr>
<tr>
<td>1805 Footings and Foundations</td>
<td>398</td>
</tr>
<tr>
<td>1806 Retaining Walls</td>
<td>406</td>
</tr>
<tr>
<td>1807 Dampproofing and Waterproofing</td>
<td>406</td>
</tr>
<tr>
<td>1808 Pier and Pile Foundations</td>
<td>408</td>
</tr>
<tr>
<td>1809 Driven Pile Foundations</td>
<td>413</td>
</tr>
<tr>
<td>1810 Cast-in-Place Concrete Pile Foundations</td>
<td>416</td>
</tr>
<tr>
<td>1811 Composite Piles</td>
<td>419</td>
</tr>
<tr>
<td>1812 Pier Foundations</td>
<td>420</td>
</tr>
</tbody>
</table>

### CHAPTER 19  CONCRETE .......................423

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1901 General</td>
<td>423</td>
</tr>
<tr>
<td>1902 Definitions</td>
<td>423</td>
</tr>
<tr>
<td>1903 Specifications for Tests and Materials</td>
<td>424</td>
</tr>
<tr>
<td>1904 Durability Requirements</td>
<td>425</td>
</tr>
<tr>
<td>1905 Concrete Quality, Mixing and Placing</td>
<td>428</td>
</tr>
<tr>
<td>1906 Formwork, Embedded Pipes and</td>
<td></td>
</tr>
<tr>
<td>Construction Joints</td>
<td></td>
</tr>
<tr>
<td>1907 Details of Reinforcement</td>
<td>431</td>
</tr>
<tr>
<td>1908 Modifications to ACI 318</td>
<td>434</td>
</tr>
<tr>
<td>1909 Structural Plain Concrete</td>
<td>437</td>
</tr>
<tr>
<td>1910 Seismic Design Provisions</td>
<td>438</td>
</tr>
<tr>
<td>1911 Minimum Slab Provisions</td>
<td>439</td>
</tr>
<tr>
<td>1912 Anchorage to Concrete—Allowable</td>
<td></td>
</tr>
<tr>
<td>Stress Design</td>
<td>439</td>
</tr>
<tr>
<td>1913 Anchorage to Concrete—</td>
<td></td>
</tr>
<tr>
<td>Strength Design</td>
<td>440</td>
</tr>
<tr>
<td>1914 Shotcrete</td>
<td>448</td>
</tr>
<tr>
<td>1915 Reinforced Gypsum Concrete</td>
<td>450</td>
</tr>
<tr>
<td>1916 Concrete-Filled Pipe Columns</td>
<td>450</td>
</tr>
</tbody>
</table>

### CHAPTER 20  ALUMINUM ......................451

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001 General</td>
<td>451</td>
</tr>
<tr>
<td>2002 Materials</td>
<td>451</td>
</tr>
</tbody>
</table>

### CHAPTER 21  MASONRY .......................453

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2101 General</td>
<td>453</td>
</tr>
<tr>
<td>2102 Definitions and Notations</td>
<td>453</td>
</tr>
<tr>
<td>2103 Masonry Construction Materials</td>
<td>459</td>
</tr>
<tr>
<td>2104 Construction</td>
<td>462</td>
</tr>
<tr>
<td>2105 Quality Assurance</td>
<td>464</td>
</tr>
<tr>
<td>2106 Seismic Design</td>
<td>465</td>
</tr>
<tr>
<td>2107 Working Stress Design</td>
<td>469</td>
</tr>
<tr>
<td>2108 Strength Design of Masonry</td>
<td>470</td>
</tr>
<tr>
<td>2109 Empirical Design of Masonry</td>
<td>486</td>
</tr>
<tr>
<td>2110 Glass Unit Masonry</td>
<td>492</td>
</tr>
</tbody>
</table>
### TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Chapter</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>2111</td>
<td>Masonry Fireplaces</td>
<td>494</td>
</tr>
<tr>
<td>2112</td>
<td>Masonry Heaters</td>
<td>499</td>
</tr>
<tr>
<td>2113</td>
<td>Masonry Chimneys</td>
<td>499</td>
</tr>
<tr>
<td><strong>CHAPTER 22 STEEL</strong></td>
<td></td>
<td><strong>505</strong></td>
</tr>
<tr>
<td>2201</td>
<td>General</td>
<td>505</td>
</tr>
<tr>
<td>2202</td>
<td>Definitions and Nomenclature</td>
<td>505</td>
</tr>
<tr>
<td>2203</td>
<td>Identification and Protection of Steel for Structures</td>
<td>505</td>
</tr>
<tr>
<td>2204</td>
<td>Structural Steel Construction</td>
<td>505</td>
</tr>
<tr>
<td>2205</td>
<td>Cold-Formed Steel</td>
<td>505</td>
</tr>
<tr>
<td>2206</td>
<td>Steel Joists</td>
<td>505</td>
</tr>
<tr>
<td>2207</td>
<td>Steel Cable Structures</td>
<td>506</td>
</tr>
<tr>
<td>2208</td>
<td>Welding</td>
<td>506</td>
</tr>
<tr>
<td>2209</td>
<td>Bolting</td>
<td>506</td>
</tr>
<tr>
<td>2210</td>
<td>Steel Storage Racks</td>
<td>506</td>
</tr>
<tr>
<td>2211</td>
<td>Wind and Seismic Requirements for Light Framed Cold-Formed Steel Walls</td>
<td>506</td>
</tr>
<tr>
<td>2212</td>
<td>Seismic Requirements for Structural Steel Construction</td>
<td>509</td>
</tr>
<tr>
<td>2213</td>
<td>Seismic Requirements for Composite Construction</td>
<td>510</td>
</tr>
<tr>
<td><strong>CHAPTER 23 WOOD</strong></td>
<td></td>
<td><strong>511</strong></td>
</tr>
<tr>
<td>2301</td>
<td>General</td>
<td>511</td>
</tr>
<tr>
<td>2302</td>
<td>Definitions</td>
<td>511</td>
</tr>
<tr>
<td>2303</td>
<td>Minimum Standards and Quality</td>
<td>512</td>
</tr>
<tr>
<td>2304</td>
<td>General Construction Requirements</td>
<td>515</td>
</tr>
<tr>
<td>2305</td>
<td>General Design Requirements for Lateral-Force-Resisting Systems</td>
<td>524</td>
</tr>
<tr>
<td>2306</td>
<td>Allowable Stress Design</td>
<td>530</td>
</tr>
<tr>
<td>2307</td>
<td>Load and Resistance Factor Design</td>
<td>538</td>
</tr>
<tr>
<td>2308</td>
<td>Conventional Light-Frame Construction</td>
<td>538</td>
</tr>
<tr>
<td><strong>CHAPTER 24 GLASS AND GLAZING</strong></td>
<td></td>
<td><strong>581</strong></td>
</tr>
<tr>
<td>2401</td>
<td>General</td>
<td>581</td>
</tr>
<tr>
<td>2402</td>
<td>Definitions</td>
<td>581</td>
</tr>
<tr>
<td>2403</td>
<td>General Requirements for Glass</td>
<td>581</td>
</tr>
<tr>
<td>2404</td>
<td>Wind, Snow and Dead Loads on Glass</td>
<td>581</td>
</tr>
<tr>
<td>2405</td>
<td>Sloped Glazing and Skylights</td>
<td>590</td>
</tr>
<tr>
<td>2406</td>
<td>Safety Glazing</td>
<td>591</td>
</tr>
<tr>
<td>2407</td>
<td>Glass in Handrails and Guards</td>
<td>592</td>
</tr>
<tr>
<td>2408</td>
<td>Glazing in Athletic Facilities</td>
<td>593</td>
</tr>
<tr>
<td>2409</td>
<td>Glass in Floors and Sidewalks</td>
<td>593</td>
</tr>
<tr>
<td><strong>CHAPTER 25 GYPSUM BOARD AND PLASTER</strong></td>
<td></td>
<td><strong>595</strong></td>
</tr>
<tr>
<td>2501</td>
<td>General</td>
<td>595</td>
</tr>
<tr>
<td>2502</td>
<td>Definitions</td>
<td>595</td>
</tr>
<tr>
<td>2503</td>
<td>Inspection</td>
<td>595</td>
</tr>
<tr>
<td>2504</td>
<td>Vertical and Horizontal Assemblies</td>
<td>595</td>
</tr>
<tr>
<td>2505</td>
<td>Shear Wall Construction</td>
<td>596</td>
</tr>
<tr>
<td>2506</td>
<td>Gypsum Board Materials</td>
<td>596</td>
</tr>
<tr>
<td>2507</td>
<td>Lathing and Plastering</td>
<td>596</td>
</tr>
<tr>
<td>2508</td>
<td>Gypsum Construction</td>
<td>596</td>
</tr>
<tr>
<td>2509</td>
<td>Gypsum Board in Showers and Water Closets</td>
<td>597</td>
</tr>
<tr>
<td>2510</td>
<td>Lathing and Furring for Cement Plaster (Stucco)</td>
<td>598</td>
</tr>
<tr>
<td>2511</td>
<td>Interior Plaster</td>
<td>598</td>
</tr>
<tr>
<td>2512</td>
<td>Exterior Plaster</td>
<td>599</td>
</tr>
<tr>
<td>2513</td>
<td>Exposed Aggregate Plaster</td>
<td>600</td>
</tr>
<tr>
<td><strong>CHAPTER 26 PLASTIC</strong></td>
<td></td>
<td><strong>601</strong></td>
</tr>
<tr>
<td>2601</td>
<td>General</td>
<td>601</td>
</tr>
<tr>
<td>2602</td>
<td>Definitions</td>
<td>601</td>
</tr>
<tr>
<td>2603</td>
<td>Foam Plastic Insulation</td>
<td>601</td>
</tr>
<tr>
<td>2604</td>
<td>Interior Finish and Trim</td>
<td>604</td>
</tr>
<tr>
<td>2605</td>
<td>Plastic Veneer</td>
<td>604</td>
</tr>
<tr>
<td>2606</td>
<td>Light-Transmitting Plastics</td>
<td>605</td>
</tr>
<tr>
<td>2607</td>
<td>Light-Transmitting Plastic Wall Panels</td>
<td>606</td>
</tr>
<tr>
<td>2608</td>
<td>Light-Transmitting Plastic Glazing</td>
<td>607</td>
</tr>
<tr>
<td>2609</td>
<td>Light-Transmitting Plastic Roof Panels</td>
<td>607</td>
</tr>
<tr>
<td>2610</td>
<td>Light-Transmitting Plastic Skylight Glazing</td>
<td>608</td>
</tr>
<tr>
<td>2611</td>
<td>Light-Transmitting Plastic Interior Signs</td>
<td>609</td>
</tr>
<tr>
<td><strong>CHAPTER 27 ELECTRICAL</strong></td>
<td></td>
<td><strong>611</strong></td>
</tr>
<tr>
<td>2701</td>
<td>General</td>
<td>611</td>
</tr>
<tr>
<td>2702</td>
<td>Emergency and Standby Power Systems</td>
<td>611</td>
</tr>
<tr>
<td><strong>CHAPTER 28 MECHANICAL SYSTEMS</strong></td>
<td></td>
<td><strong>613</strong></td>
</tr>
<tr>
<td>2801</td>
<td>General</td>
<td>613</td>
</tr>
<tr>
<td><strong>CHAPTER 29 PLUMBING SYSTEMS</strong></td>
<td></td>
<td><strong>615</strong></td>
</tr>
<tr>
<td>2901</td>
<td>General</td>
<td>615</td>
</tr>
<tr>
<td>2902</td>
<td>Minimum Plumbing Facilities</td>
<td>615</td>
</tr>
<tr>
<td>2903</td>
<td>Accessible Plumbing Facilities</td>
<td>618</td>
</tr>
<tr>
<td>2904</td>
<td>Urinals</td>
<td>619</td>
</tr>
</tbody>
</table>
# TABLE OF CONTENTS

**CHAPTER 30  ELEVATORS AND CONVEYING SYSTEMS ..........621**

Section  
3001  General ...........................................621  
3002  Hoistway Enclosures  ...........................621  
3003  Emergency Operations  ..........................621  
3004  Hoistway Venting  ................................622  
3005  Conveying Systems  .............................622  
3006  Machine Rooms  ..................................623  

**CHAPTER 31  SPECIAL CONSTRUCTION ...........625**

Section  
3101  General ...........................................625  
3102  Membrane Structures  ...........................625  
3103  Temporary Structures  ............................626  
3104  Pedestrian Walkways and Tunnels ................627  
3105  Awnings and Canopies  ..........................628  
3106  Marquees ..........................................628  
3107  Signs ................................................628  
3108  Radio and Television Towers .....................628  
3109  Swimming Pool Enclosures .......................629  

**CHAPTER 32  ENCROACHMENTS INTO THE PUBLIC RIGHT-OF-WAY ........631**

Section  
3201  General ...........................................631  
3202  Encroachments ....................................631  

**CHAPTER 33  SAFEGUARDS DURING CONSTRUCTION ..................633**

Section  
3301  General ...........................................633  
3302  Construction Safeguards  .........................633  
3303  Demolition .........................................633  
3304  Site Work ..........................................633  
3305  Sanitary ............................................634  
3306  Protection of Pedestrians  .........................634  
3307  Protection of Adjoining Property ..................635  
3308  Temporary Use of Streets, Alleys and Public Property ..........635  
3309  Fire Extinguishers  ..............................635  
3310  Exits ..............................................636  
3311  Standpipes ........................................636  
3312  Automatic Sprinkler System .......................636  

**CHAPTER 34  EXISTING STRUCTURES.............637**

Section  
3401  General ...........................................637  
3402  Reserved ..........................................637  
3403  Reserved ..........................................637  
3404  Reserved ..........................................637  
3405  Reserved ..........................................637  
3406  Reserved ..........................................637  
3407  Reserved ..........................................637  
3408  Reserved ..........................................637  
3409  Reserved ..........................................637  
3410  Compliance Alternatives  ..........................637  

**CHAPTER 35  REFERENCED STANDARDS .....647**

APPENDIX A RESERVED ..................................673  
APPENDIX B RESERVED ..................................675  
APPENDIX C RESERVED ..................................677  
APPENDIX D RESERVED ..................................679  
APPENDIX E SUPPLEMENTARY ACCESSIBILITY REQUIREMENTS ..........681  

Section  
E101  General ...........................................681  
E102  Definitions .......................................681  
E103  Accessible Route ..................................681  
E104  Special Occupancies ..............................681  
E105  Other Features and Facilities .....................682  
E106  Telephones .......................................682  
E107  Signage ............................................683  
E108  Bus Stops and Terminals ..........................683  
E109  Fired Transportation Facilities and Stations .............684  
E110  Airports ..........................................685  
E111  Referenced Standards .............................685  

APPENDIX F RODENT PROOFING .......................687  
Section  
F101  General ...........................................687  

APPENDIX G RESERVED ..................................689  

APPENDIX H RESERVED ..................................691  

APPENDIX I PATIO COVERS .........................693  
Section  
I101  General ...........................................693  
I102  Definitions .......................................693  
I103  Exterior Openings ..................................693  
I104  Structural Provisions ..............................693  

APPENDIX J RESERVED ..................................695  

APPENDIX K REHABILITATION OF EXISTING STRUCTURES ..........697  

BUILDING CODE OF NEW YORK STATE ix
CHAPTER K1 GENERAL REQUIREMENTS ....697
Section
K101 General .....................................................697
K102 Compliance ..................................................697
K103 Nonconforming Rights .................................697
K104 Preliminary Meeting ....................................698

CHAPTER K2 DEFINITIONS ..............................699
Section
K201 General .....................................................699
K202 Definitions ..................................................699

CHAPTER K3 CLASSIFICATION OF WORK ...701
Section
K301 General .....................................................701
K302 Repairs .......................................................701
K303 Renovations ...............................................701
K304 Alterations ..................................................701
K305 Reconstruction .........................................701
K306 Change of Occupancy .................................701
K307 Additions ....................................................702
K308 Historic Buildings .....................................702
K309 Relocated Buildings ....................................702

CHAPTER K4 REPAIRS ....................................703
Section
K401 General .....................................................703
K402 Requirements .............................................703

CHAPTER K5 RENOVATIONS .......................705
Section
K501 General .....................................................705
K502 Requirements .............................................705
K503 Structural Requirements .............................705
K504 Accessibility ...............................................705
K505 Mechanical ..................................................705
K506 Plumbing .....................................................705
K507 Elevators .......................................................705

CHAPTER K6 ALTERATIONS .........................707
Section
K601 General .....................................................707
K602 Structural ....................................................707
K603 Electrical Equipment and Wiring .................707
K604 Accessibility ...............................................708
K605 Plumbing Fixtures .......................................709
K606 Mechanical ..................................................710
K607 Commercial Kitchens .................................710

CHAPTER K7 RECONSTRUCTION ...............711
Section
K701 General .....................................................711
K702 Means of Egress .........................................711
K703 Interior Finish ............................................715

K704 Shaft Enclosures .........................................715
K705 Fire Separations and Smoke Barriers ..............716
K706 Automatic Sprinkler Protection .....................717
K707 Fire Alarm and Detection Systems ................717
K708 High-Rise Buildings ....................................718
K709 Boiler/Furnace Rooms ..................................719

CHAPTER K8 CHANGE OF OCCUPANCY .....721
Section
K801 General .....................................................721
K802 Fire and Life Safety .....................................724
K803 Structural Safety .........................................726
K804 Handrails and Guards ...................................726
K805 Light and Ventilation ...................................726

CHAPTER K9 ADDITIONS ..............................729
Section
K901 General Requirements ................................729
K902 Heights and Areas .......................................729
K903 Structural Loads .........................................729
K904 Smoke Alarms in Group R-3 and R-4 Occupancies 729
K905 Accessibility ...............................................729
K906 Energy Conservation ....................................729

CHAPTER K10 HISTORIC BUILDINGS ..........731
Section
K1001 General .....................................................731
K1002 Repair, Renovation, Alteration or Reconstruction 731
K1003 Change of Occupancy ................................732

CHAPTER K11 RELOCATED STRUCTURES ....735
Section
K1101 Relocated Structures ................................735

CHAPTER K12 REFERENCED STANDARDS ....737
Section
K1201 Referenced Standards ...............................737

APPENDIX L ASSISTIVE LISTENING SYSTEMS 739
PERFORMANCE STANDARDS.. 739
Section
L101 General .....................................................739
L102 Induction Loop System ................................739
L103 Infra-Red System .......................................739
L104 FM System ..................................................740

INDEX ......................................................................743

BUILDING CODE OF NEW YORK STATE
CHAPTER 1
GENERAL REQUIREMENTS

SECTION 101
TITLE, PURPOSE AND SCOPE

101.1 Title. These provisions shall be known as the Building Code of New York State, and shall be cited as such and will be referred to herein as “this code.”

101.2 Scope. The provisions of this code shall apply to the construction, alteration, movement enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

Exceptions:

1. Detached one- and two-family dwellings and multiple single family dwellings (townhouses) not more than three stories high with separate means of egress and their accessory structures shall comply with the Residential Code of New York State.

2. Agricultural buildings used solely in the raising, growing or storage of agricultural products by a farmer engaged in a farming operation.

3. Electrical equipment used for radio and television transmissions, other than equipment and wiring for power supply.

101.3 Purpose. This code is intended to provide minimum requirements to safeguard the public safety, health and general welfare through structural strength, means of egress facilities, stability, sanitation, adequate light and ventilation, energy conservation, and safety to life and property from fire and other hazards attributed to the built environment.

101.4 Referenced codes. The other codes listed in Sections 101.4.1 through 101.4.7 and referenced elsewhere in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference.

101.4.1 Electrical. The provisions of Chapter 27 of this code shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto.

101.4.2 Gas. The provisions of the Fuel Gas Code of New York State shall apply to the installation of gas piping from the point of delivery, gas appliances and related accessories as covered in this code. These requirements apply to gas piping systems extending from the point of delivery to the inlet connections of appliances and the installation and operation of residential and commercial gas appliances and related accessories.

101.4.3 Mechanical. The provisions of the Mechanical Code of New York State shall apply to the installations, alterations, repairs, and replacement of mechanical systems, including equipment, appliances, fixtures, fittings and/or appurtenances, including ventilating, heating, cooling, air conditioning and refrigeration systems, incinerators, and other energy-related systems.

101.4.4 Plumbing. The provisions of the Plumbing Code of New York State shall apply to the installation, alteration, repairs and replacement of plumbing systems, including equipment, appliances, fixtures, fittings and appurtenances, and where connected to a water or sewage system and all aspects of a medical gas system.

101.4.5 Property maintenance. The provisions of the Property Maintenance Code of New York State shall apply to existing structures and premises; equipment, and facilities; light, ventilation, space heating, sanitation, life and fire safety hazards; responsibilities of owners, operators and occupants; and occupancy of existing premises and structures.

101.4.6 Fire prevention. The provisions of the Fire Code of New York State shall apply to matters affecting or relating to structures, processes and premises from the hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices; from conditions hazardous to life, property or public welfare in the occupancy of structures or premises; and, from the construction, extension, repair, alteration or removal of fire suppression and alarm systems or fire hazards in the structure or on the premise from occupancy or operation.

101.4.7 Energy. The provisions of the Energy Conservation Construction Code of New York State shall apply to all matters governing the design and construction of buildings for energy efficiency.

101.4.8 Factory manufactured buildings. The provisions of 19 NYCRR shall apply to structures wholly or in substantial part manufactured in a manufacturing facility for installation in New York State. Such structures shall be constructed and installed in accordance with the requirements of this code and shall bear Insignia of Approval issued by the Secretary of State that certifies that the structure or component is in compliance with the applicable requirements.
SECTION 102
APPLICABILITY

102.1 General. Where, in any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.

102.2 Other laws and regulations. The provisions of this code shall not be deemed to nullify any provisions of local, state or federal laws and regulations.

102.3 Application of references. References to chapter or section numbers, or to provisions not specifically identified by number, shall be construed to refer to such chapter, section or provision of this code.

102.4 Reference standards. The standards referenced in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and reference standards, the provisions of this code shall apply.

102.5 Appendices. The following appendices have been adopted and are made part of this code:

   Appendix E - Supplemental Accessibility Requirements
   Appendix F - Rodent Proofing
   Appendix I - Patio Covers
   Appendix K - Rehabilitation of Existing Structures
   Appendix L - Assistive Listening Systems

102.6 Partial invalidity. In the event any part or provision of this code is held to be illegal or void, this shall not have the effect of making void or illegal any of the other parts or provisions.

102.7 Existing structures. The legal occupancy of any structure existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically covered in this code, the Property Maintenance Code of New York State or the Fire Code of New York State.

R102.8 Stormwater runoff. Operators of construction sites from which stormwater runoff is discharged to state waters may need first to obtain a State Pollutant Discharge Elimination System (SPDES) permit authorizing such discharge. This usually means acquiring coverage under a SPDES General Construction Activity Stormwater Permit, which requires the operator to implement management practices that are aimed at minimizing pollutants in the discharged runoff. For information concerning SPDES general permit coverage and information on how to manage and reduce pollution associated with stormwater runoff, the operator should contact the New York State Department of Environmental Conservation (DEC) regional office having jurisdiction in the geographical area where the discharge will occur.

SECTION 103
OFFICE OF CODE ENFORCEMENT

103.1 Creation of enforcement agency. A city, town, village or county that is responsible for administration and enforcement of this code shall designate a code enforcement official in accordance with the applicable provisions of local law.

A state agency that is responsible for administration and enforcement of this code shall be in compliance with the applicable provisions of state agency regulations.

SECTION 104
CODE ENFORCEMENT OFFICIAL

104.1 General. A city, town, village or county that is responsible for administration and enforcement of this code shall establish its local program in accordance with the applicable provisions of local law.

A state agency that is responsible for administration and enforcement of this code shall be in compliance with the applicable provisions of state agency regulations.

104.2 and 104.3 Reserved.

104.4 Inspections. A city, town, village or county that is responsible for administration and enforcement of this code shall provide for inspections in accordance with the applicable provisions of local law.

A state agency that is responsible for administration and enforcement of this code shall be in compliance with the applicable provisions of state agency regulations.

104.5 and 104.6 Reserved.

104.7 Department records. A city, town, village or county that is responsible for administration and enforcement of this code shall keep records in compliance with the applicable provisions of state agency regulations.

104.8 Reserved.

104.9 Approved materials and equipment. Materials, equipment and devices determined to be acceptable for use shall be constructed and installed in accordance with such approval.

104.9.1 Used materials and equipment. Material, equipment and devices shall not be reused unless they meet the requirements of this code for new materials.
104.10 Reserved.

104.11 Alternate materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the State Fire Prevention and Building Code Council finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety.

SECTION 105
PERMITS

105.1 Required. A city, town, village or county that is responsible for administration and enforcement of this code shall determine local permit requirements in accordance with the applicable provisions of local law.

A state agency that is responsible for administration and enforcement of this code shall be in compliance with the applicable provisions of state regulations.

SECTION 106
CONSTRUCTION DOCUMENTS

106.1 Submittal documents. A city, town, village or county that is responsible for administration and enforcement of this code shall determine the submittal and review of appropriate documents in accordance with the applicable provisions of local law.

A state agency that is responsible for administration and enforcement of this code shall be in compliance with the applicable provisions of state agency regulations.

106.2 through 106.4 Reserved.

106.5 Retention of construction documents. A city, town, village or county that is responsible for administration and enforcement of this code shall determine appropriate methods of records retention in accordance with the applicable provisions of local law.

A state agency that is responsible for administration and enforcement of this code shall be in compliance with the applicable provisions of state agency regulations.

SECTION 107
TEMPORARY STRUCTURES AND USES

107.1 General. A city, town, village or county that is responsible for administration and enforcement of this code shall determine the qualifications for permits in accordance with the applicable provisions of local law.

A state agency that is responsible for administration and enforcement of this code shall be in compliance with the applicable provisions of state agency regulations.

107.2 Conformance. Temporary structures and uses shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this code as necessary to ensure the public health, safety and general welfare.

107.3 Temporary power. Temporary power shall comply with the requirements specified for temporary lighting, heat or power in Chapter 27 of this code.

SECTION 108
FEES

108.1 Payment of fees. A city, town, village or county that is responsible for administration and enforcement of this code shall establish fees in accordance with the applicable provisions of local law.

A state agency that is responsible for administration and enforcement of this code shall be in compliance with the applicable provisions of state agency regulations.

SECTION 109
INSPECTIONS

109.1 General. A city, town, village or county that is responsible for administration and enforcement of this code shall determine necessary inspections in accordance with the applicable provisions of local law.

A state agency that is responsible for administration and enforcement of this code shall be in compliance with the applicable provisions of state agency regulations.

SECTION 110
CERTIFICATE OF OCCUPANCY

110.1 Use and occupancy. A city, town, village or county that is responsible for administration and enforcement of this code shall provide for the issuance of certificates of occupancy in accordance with the applicable provisions of local law.

A state agency that is responsible for administration and enforcement of this code shall be in compliance with the applicable provisions of state agency regulations.
SECTION 111
SERVICE UTILITIES

111.1 Connection of service utilities. Connections from a utility, source of energy, fuel or power to any building or system which is regulated by this code shall be made in accordance with the regulations of the authority having jurisdiction.

SECTION 112
VARIANCE PROCEDURES

112.1 Application for variance or appeal. Variance or appeal for any part of this code shall be in accordance with the provisions of 19 NYCRR, titled “Variance Procedures,” which is administered by the Secretary of State. No town, village, city or county, nor any state agency charged with the administration and enforcement of this code may waive, modify or otherwise alter this code.

SECTION 113
VIOLATIONS

113.1 Unlawful acts. Violations of this code shall be dealt with in a manner appropriate to the applicable provisions of a city, town, village or county and shall be in accordance with the applicable provisions of local law.

Violations of this code on state property shall be dealt with in a manner appropriate to a state agency.

SECTION 114
STOP WORK ORDER

114.1 Authority. A city, town, village or county that is responsible for administration and enforcement of this code shall determine the criteria for the issuance of stop work orders in accordance with the applicable provisions of local law.

A state agency that is responsible for administration and enforcement of this code shall be in compliance with the applicable provisions of state agency regulations.

SECTION 115
UNSAFE STRUCTURES AND EQUIPMENT

115.1 Unsafe structures. An unsafe structure is one that is found to be dangerous to the life, health, property or safety of the public or to the occupants of the structure by not providing minimum safeguards to protect or warn occupants in the event of fire, or because such structure contains unsafe equipment or is so damaged, decayed, dilapidated, or structurally unsafe, or is of such faulty construction or unstable foundation, that partial or complete collapse is possible.

115.2 Unsafe equipment. Unsafe equipment includes any boiler, heating equipment, elevator, moving stairway, electrical wiring or device, flammable liquid containers or other equipment on the premises or within the structure that is in such disrepair or condition that the equipment is a hazard to life, health, property or safety of the public or occupants of the premises or structure.

115.3 Structure unfit for human occupancy. A structure is unfit for human occupancy whenever the structure is unsafe, unlawful, or because of the degree to which the structure is in disrepair or lacks maintenance or because the location of the structure constitutes a hazard to the occupants of the structure or to the public.

115.4 Unlawful structure. An unlawful structure is one found in whole or in part to be occupied by more persons than are permitted under this code, or that was erected, altered or occupied contrary to law.

115.5 Closing of vacant structures. If the structure is vacant and unfit for human habitation and occupancy, and is not in danger of structural collapse, a placard of condemnation shall be posted on the premises, and the structure shall be closed up, so as not to be an attractive nuisance.

115.6 Notice. Whenever a structure or equipment has been condemned under the provisions of this section, a notice shall be posted in a conspicuous place in or about the structure affected by such notice. If the notice pertains to equipment, it shall also be placed on the condemned equipment.

115.7 Prohibited occupancy. No person shall occupy a placarded premises or shall operate placarded equipment.

115.8 Removal of placard. The placard shall be removed whenever the defect or defects on which the condemnation and placarding action were based have been eliminated.
CHAPTER 2
DEFINITIONS

SECTION 201
GENERAL

201.1 Scope. Unless otherwise expressly stated, the following words and terms shall, for the purposes of this code, have the meanings shown in this chapter.

201.2 Interchangeability. Words used in the present tense include the future; words stated in the masculine gender include the feminine and neuter; the singular number includes the plural and the plural, the singular.

201.3 Terms defined in other codes. Where terms are not defined in this code and are defined in the Plumbing Code of New York State, Mechanical Code of New York State, Fuel Gas Code of New York State, or Fire Code of New York State, such terms shall have the meanings ascribed to them as in those codes.

201.4 Terms not defined. Where terms are not defined through the methods authorized by this section, such terms shall have ordinarily accepted meanings such as the context implies.

SECTION 202
DEFINITIONS

ACCESSIBLE. See Section 1102.1.
ACCESSIBLE MEANS OF EGRESS. See Section 1002.1.
ACCESSIBLE ROUTE. See Section 1102.1.
ACCESSIBLE UNIT. See Section 1102.1.
ACCREDITATION BODY. See Section 2302.1.
ACTIVE FAULT/ACTIVE FAULT TRACE. See Section 1613.1.
ADDITION. An extension or increase in floor area or height of a building or structure.
ADHERED MASONRY VENEER. See Section 1402.1.
ADJUSTED RESISTANCE ($D$). See Section 2302.1.
ADMIXTURE. See Section 1902.1.
ADOBE CONSTRUCTION. See Section 2102.1.
Stabilized adobe. See Section 2102.1.
Unstabilized adobe. See Section 2102.1.
[F] AEROSOL. See Section 307.2.
Level 1 aerosol products. See Section 307.2.
Level 2 aerosol products. See Section 307.2.
Level 3 aerosol products. See Section 307.2.
[F] AEROSOL CONTAINER. See Section 307.2.
AGGREGATE. See Section 1902.1.
AGGREGATE, LIGHTWEIGHT. See Section 1902.1.
AGRICULTURAL, BUILDING. A structure designed and constructed to house farm implements, hay, grain, poultry, livestock or other horticultural products. This structure shall not be a place of human habitation or a place of employment where agricultural products are processed, treated or packaged, nor shall it be a place used by the public.
AIR-INFLATED STRUCTURE. See Section 3102.2.
AIR-SUPPORTED STRUCTURE. See Section 3102.2.
Double skin. See Section 3102.2.
Single skin. See Section 3102.2.
AISLE ACCESSWAY. See Section 1002.1.
[F] ALARM NOTIFICATION APPLIANCE. See Section 902.1.
[F] ALARM SIGNAL. See Section 902.1.
[F] ALARM VERIFICATION FEATURE. See Section 902.1.
ALLEY. See “Public Way.”
ALLOWABLE STRESS DESIGN. See Section 1602.1.
ALTERATION. Any construction or renovation to an existing structure other than repair or addition.
ALTERNATING TREAD DEVICE. See Section 1002.1.
ALUMINUM COMPOSITE MATERIAL (ACM). See Section 1402.1.
ALUMINUM COMPOSITE MATERIAL (ACM) SYSTEM. See Section 1402.1.
ANCHOR. See Sections 1913.2.2 and 2102.1.
ANCHOR BUILDING. See Section 402.2.
ANCHOR GROUP. See Section 1913.2.2.
ANCHOR PULLOUT STRENGTH. See Section 1913.2.2.
ANCHORED MASONRY VENEER. See Section 1402.1.
ANNULAR SPACE. See Section 702.1.
[F] ANNUNCIATOR. See Section 902.1.
APPROVED. Acceptable to the code enforcement official as determined to meet the requirements of this code.

APPROVED FABRICATOR. See Section 1702.1.

APPROVED SOURCE. An independent person, firm, or corporation approved by the code enforcement official who is competent and experienced in the application of engineering principles to materials, methods or systems analyses.

ARCHITECTURAL TERRA COTTA. See Section 2102.1.

AREA. See Section 2102.1.
   Bedded. See Section 2102.1.
   Gross cross-sectional. See Section 2102.1.
   Net cross-sectional. See Section 2102.1.

AREA OF REFUGE. See Section 1002.1.

AREA WAY. A subsurface space adjacent to a building open at the top or protected at the top by a grating or guard.

ASSISTIVE LISTENING DEVICE. A permanent system that reinforces sound transmission within an area from a source to a receiver/transducer to be used by the hearing impaired within that area.

ATRIUM. See Section 404.1.1.

ATTACHMENT. See Section 1913.2.2.

ATTACHMENTS, SEISMIC. See Section 1613.1.

ATTIC. The space between the ceiling beams of the top story and the roof rafters.

AUTOMATIC. See Section 902.1.

AUTOMATIC FIRE-EXTINGUISHING SYSTEM. See Section 902.1.

AUTOMATIC SPRINKLER SYSTEM. See Section 902.1.

AUTOMATIC FIRE-EXTINGUISHING SYSTEM. See Section 902.1.

AUTOMATIC SPRINKLER SYSTEM. See Section 902.1.

AVERAGE AMBIENT SOUND LEVEL. See Section 902.1.

AWNING. An architectural projection that provides weather protection, identity or decoration and is wholly supported by the building to which it is attached. An awning is comprised of a lightweight, rigid skeleton structure over which a covering is attached.

BACKING. See Section 1402.1.

BALCONY, EXTERIOR. See Section 1602.1.

BARRICADE. See Section 307.2.
   Artificial barricade. See Section 307.2.
   Natural barricade. See Section 307.2.

BASE. See Section 1613.1.

BASE FLOOD. See Section 1612.2.

BASE FLOOD ELEVATION. See Section 1612.2.

BASE SHEAR. See Section 1602.1.

BASEMENT. See Sections 502.1 and 1612.2.

BED JOINT. See Section 2102.1.

BLEACHERS. See Section 1002.1.

BOARDING HOUSE. See Section 310.2.

BOILING POINT. See Section 307.2.

BOND BEAM. See Section 2102.1.

BOND REINFORCING. See Section 2102.1.

BOUNDARY ELEMENTS. See Sections 1602.1 and 1613.1.

BOUNDARY MEMBERS. See Section 1602.1.

BRACED WALL LINE. See Section 2302.1.

BRACED WALL PANEL. See Section 2302.1.

BRICK. See Section 2102.1.
   Calcium silicate (sand lime brick). See Section 2102.1.
   Clay or shale. See Section 2102.1.
   Concrete. See Section 2102.1.

BRITTLE. See Section 1613.1.

BRITTLE STEEL ELEMENT. See Section 1913.2.2.

BUILDING. Any structure used or intended for supporting or sheltering any use or occupancy.

BUILDING, ENCLOSED. See Section 1609.2.

BUILDING LINE. The line established by law, beyond which a building shall not extend, except as specifically provided by law.

BUILDING, LOW-RISE. See Section 1609.2.

BUILDING, OPEN. See Section 1609.2.

BUILDING, PARTIALLY ENCLOSED. See Section 1609.2.

BUILDING, SIMPLE DIAPHRAGM. See Section 1609.2.

BUILT-UP ROOF COVERING. See Section 1502.1.

CABLE-RESTRAINED, AIR SUPPORTED STRUCTURE. See Section 3102.2.
CANOPY. An architectural projection that provides weather protection, identity or decoration and is supported by the building to which it is attached and at the outer end by not less than one stanchion. A canopy is comprised of a rigid structure over which a covering is attached.

CANTILEVERED COLUMN SYSTEM. See Section 1602.1.

[F] CARBON DIOXIDE EXTINGUISHING SYSTEMS. See Section 902.1.

CAST STONE. See Section 2102.1.

[F] CEILING LIMIT. See Section 902.1.

CEILING RADIATION DAMPER. See Section 702.1.

CELL. See Section 2102.1.

CEMENT PLASTER. See Section 2502.1.

CEMENTITIOUS MATERIALS. See Section 1902.1.

CERAMIC FIBER BLANKET. See Section 720.1.1.

CERTIFICATE OF COMPLIANCE. See Section 1702.1.

CHIMNEY. See Section 2102.1.

CHIMNEY TYPES. See Section 2102.1.

High-heat appliance type. See Section 2102.1.

Low-heat appliance type. See Section 2102.1.

Masonry type. See Section 2102.1.

Medium-heat appliance type. See Section 2102.1.

CIRCULATION PATH. See Section 1102.1.

CLADDING. See “Components and Cladding.”

[F] CLEAN AGENT. See Section 902.1.

CLEANOUT. See Section 2102.1.

[F] CLOSED SYSTEM. See Section 307.2.

CODE ENFORCEMENT OFFICIAL. The officer or other designated authority charged with the administration and enforcement of this code.

COLLAR JOINT. See Section 2102.1.

COLLECTOR. See Sections 1613.1 and 2302.1.

COLLECTOR ELEMENTS. See Section 1602.1.

COLUMN. See Section 1902.1.

COLUMN, MASONRY. See Section 2102.1.

COMBINATION FIRE/SMOKE DAMPER. See Section 702.1.

[F] COMBUSTIBLE DUST. See Section 307.2.

[F] COMBUSTIBLE FIBERS. See Section 307.2.

[F] COMBUSTIBLE LIQUID. See Section 307.2.

Class II. See Section 307.2.

Class IIIA. See Section 307.2.

Class IIIB. See Section 307.2.

COMMON PATH OF EGRESS TRAVEL. See Section 1002.1.

COMPONENT. See Section 1613.1.

Component, equipment. See Section 1613.1.

Component, flexible. See Section 1613.1.

Component, rigid. See Section 1613.1.

COMPONENTS AND CLADDING. See Section 1609.2.

COMPOSITE MASONRY. See Section 2102.1.

[F] COMPRESSED GAS. See Section 307.2.

COMPRESSIVE STRENGTH OF MASONRY. See Section 2102.1.

CONCRETE. See Section 1902.1.

CONCRETE BREAKOUT STRENGTH. See Section 1913.2.2.

CONCRETE CARBONATE AGGREGATE. See Sections 702.1 and 720.1.1.

CONCRETE, CELLULAR. See Section 720.1.1.

CONCRETE, LIGHTWEIGHT AGGREGATE. See Sections 702.1 and 720.1.1.

CONCRETE, PERLITE. See Section 720.1.1.

CONCRETE PRYOUT STRENGTH. See Section 1913.2.2.

CONCRETE, SAND-LIGHTWEIGHT. See Sections 702.1 and 720.1.1.

CONCRETE, SILICEOUS AGGREGATE. See Sections 702.1 and 720.1.1.

CONCRETE, SPECIFIED COMPRRESSIVE STRENGTH OF. See Section 1902.1.

CONCRETE, VERMICULITE. See Section 720.1.1.

CONFINED REGION. See Section 1602.1.

CONNECTOR. See Section 2102.1.

[F] CONSTANTLY ATTENDED LOCATION. See Section 902.1.

CONSTRUCTION DOCUMENTS. Written, graphic and pictorial documents prepared or assembled for describing the design, location and physical characteristics of the elements of a project necessary for obtaining a building permit.

CONSTRUCTION TYPES. See Section 602.

Type I. See Section 602.2.

Type II. See Section 602.2.

Type III. See Section 602.3.

Type IV. See Section 602.4.
Continuous Gas Detection System. See Section 415.2.

Contraction Joint. See Section 1902.1.

Control Area. See Section 307.2.


Corridor. See Section 1002.1.

Corrosion Resistance. The ability of a material to withstand deterioration of its surface or its properties when exposed to its environment.

Corrosion Resistant. Any nonferrous metal or any metal having an unbroken surfacing of nonferrous metal, or steel with not less than 10-percent chromium or with not less than 0.20-percent copper.

Corrosive. See Section 307.2.

Coupling Beam. See Section 1602.1.

Court. An open, uncovered space, unobstructed to the sky, bounded on three or more sides by exterior building walls or other enclosing devices.

Cover. See Section 2102.1.

Covered Mall Building. See Section 402.2.

Cripple Wall. See Section 2302.1.

Cryogenic Fluid. See Section 307.2.

Dalle Glass. See Section 2402.1.

Damper. See Section 702.1.

Dead Loads. See Section 1602.1.

Deck. See Section 1602.1.

Decorative Glass. See Section 2402.1.

Deflagration. See Section 307.2.

Deformability. See Section 1602.1.

High deformability element. See Section 1602.1.

Limited deformability element. See Section 1602.1.

Low deformability element. See Section 1602.1.

Deformation. See Section 1602.1.

Limited deformation. See Section 1602.1.

Ultimate deformation. See Section 1602.1.

Deformed Reinforcement. See Section 1902.1.

Deluge System. See Section 902.1.

Design Earthquake. See Section 1613.1.

Design Flood. See Section 1612.2.

Design Flood Elevation. See Section 1612.2.

Design Strength. See Section 1602.1.

Designated Seismic System. See Section 1613.1.
EDGE DISTANCE. See Section 1913.2.2.

EFFECTIVE DAMPING. See Section 1613.1.

EFFECTIVE DEPTH OF SECTION \((d)\). See Section 1902.1.

EFFECTIVE EMBEDMENT DEPTH. See Section 1913.2.2.

EFFECTIVE HEIGHT. See Section 2102.1.

EFFECTIVE PERIOD. See Section 2102.1.

EFFECTIVE STIFFNESS. See Section 1613.1.

EFFECTIVE WIND AREA. See Section 1609.2.

EGRESS COURT. See Section 1002.1.

ELEMENT. See Section 1602.1.

Ductile element. See Section 1602.1.

Limited ductile element. See Section 1602.1.

Nonductile element. See Section 1602.1.

[F] EMERGENCY ALARM SYSTEM. See Section 902.1.

[F] EMERGENCY CONTROL STATION. See Section 415.2.

EMERGENCY ESCAPE AND RESCUE OPENING. See Section 1002.1.

[F] EMERGENCY VOICE/ALARM COMMUNICATIONS. See Section 902.1.

EQUIPMENT SUPPORT. See Section 1602.1.

ESSENTIAL FACILITIES. See Section 1602.1.

[F] EXHAUSTED ENCLOSURE. See Section 415.2.

EXISTING CONSTRUCTION. See Section 1612.2.

EXISTING STRUCTURE. A structure erected prior to the date of adoption of the appropriate code, or one for which a legal building permit has been issued.

EXIT. See Section 1002.1.

EXIT ACCESS. See Section 1002.1.

EXIT DISCHARGE. See Section 1002.1.

EXIT DISCHARGE, LEVEL OF. See Section 1002.1.

EXIT ENCLOSURE. See Section 1002.1.

EXIT PASSAGEWAY. See Section 1002.1.

EXPANDED VINYL WALL COVERING. See Section 802.1.

[F] EXPLOSION. See Section 902.1.


High explosive. See Section 307.2.

Low explosive. See Section 307.2.

UN/DOTn Class 1 Explosives. See Section 307.2.

Division 1.1. See Section 307.2.

Division 1.2. See Section 307.2.

Division 1.3. See Section 307.2.

Division 1.4. See Section 307.2.

Division 1.5. See Section 307.2.

Division 1.6. See Section 307.2.

EXTERIOR SURFACES. See Section 2502.1.

EXTERIOR WALL. See Section 1402.1.

EXTERIOR WALL COVERING. See Section 1402.1.

EXTERIOR WALL ENVELOPE. See Section 1402.1.

F RATING. See Section 702.1.

FABRICATED ITEM. See Section 1702.1.

[F] FABRICATION AREA. See Section 415.2.

FACILITY. See Section 1102.1.

FACTORED LOAD. See Section 1602.1.

FIBERBOARD. See Section 2302.1.

FIRE AREA. See Section 702.1.

FIRE BARRIER. See Section 702.1.

[F] FIRE COMMAND CENTER. See Section 902.1.

FIRE DAMPER. See Section 702.1.

[F] FIRE DETECTOR, AUTOMATIC. See Section 902.1.

FIRE DOOR. See Section 702.1.

FIRE DOOR ASSEMBLY. See Section 702.1.

FIRE EXIT HARDWARE. See Section 1002.1.

FIRE PARTITION. See Section 702.1.

FIRE PROTECTION RATING. See Section 702.1.

[F] FIRE PROTECTION SYSTEM. See Section 902.1.

FIRE RESISTANCE. See Section 702.1.

FIRE-RESISTANCE RATING. See Section 702.1.

FIRE-RESISTANT JOINT SYSTEM. See Section 702.1.

[F] FIRE SAFETY FUNCTIONS. See Section 902.1.

FIRE SEPARATION DISTANCE. See Section 702.1.

FIRE WALL. See Section 702.1.

FIRE WINDOW ASSEMBLY. See Section 702.1.

FIREBLOCKING. See Section 702.1.

FIREPLACE. See Section 2102.1.
FIREPLACE THROAT. See Section 2102.1.

FIREWORKS. See Section 307.2.

FIREWORKS, 1.3G. See Section 307.2.

FIREWORKS, 1.4G. See Section 307.2.

5-PERCENT FRACTILE. See Section 1913.2.2.

FLAME RESISTANCE. See Section 802.1.

FLAME SPREAD. See Section 802.1.

FLAME SPREAD INDEX. See Section 802.1.

[F] FLAMMABLE GAS. See Section 307.2.


[F] FLAMMABLE LIQUID. See Section 307.2.

Class IA. See Section 307.2.

Class IB. See Section 307.2.

Class IC. See Section 307.2.

[F] FLAMMABLE MATERIAL. See Section 307.2.

[F] FLAMMABLE SOLID. See Section 307.2.

[F] FLAMMABLE VAPORS OR FUMES. See Section 415.2.

[F] FLASH POINT. See Section 307.2.

FLEXIBLE BUILDINGS AND OTHER STRUCTURES. See Section 1609.2.

FLEXIBLE EQUIPMENT CONNECTIONS. See Section 1602.1.

FLEXURAL LENGTH. See Section 1808.1.

FLOOD OR FLOODING. See Section 1612.2.

FLOOD DAMAGE-RESISTANT MATERIALS. See Section 1612.2.

FLOOD HAZARD AREA. See Section 1612.2.

FLOOD HAZARD AREA SUBJECT TO HIGH VELOCITY WAVE ACTION. See Section 1612.2.

FLOOD INSURANCE RATE MAP (FIRM). See Section 1612.2.

FLOOD INSURANCE STUDY. See Section 1612.2.

FLOODWAY. See Section 1612.2.

FLOOR AREA, GROSS. See Section 1002.1.

FLOOR AREA, NET. See Section 1002.1.

FLOOR FIRE DOOR ASSEMBLY. See Section 702.1.

[F] FOAM-EXTINGUISHING SYSTEMS. See Section 902.1.

FOAM PLASTIC INSULATION. See Section 2602.1.

FOLDING AND TELESCOPIC SEATING. See Section 1002.1.

FOOD COURT. See Section 402.2.

FOOTBOARDS. See Section 1002.1.

FLY GALLERY. See Section 410.2.

FRAME. See Section 1602.1.

Braced frame. See Section 1602.1.

Concentrically braced frame (CBF). See Section 1602.1.

Eccentrically braced frame (EBF). See Section 1602.1.

Moment frame. See Section 1602.1.

Ordinary concentrically braced frame (OCBF). See Section 1602.1.

Special concentrically braced frame (SCBF). See Section 1602.1.

FRAME SYSTEM. See Section 1602.1.

Building frame system. See Section 1602.1.

Dual frame system. See Section 1602.1.

[F] GAS CABINET. See Section 415.2.

[F] GAS ROOM. See Section 415.2.

GLASS FIBER BOARD. See Section 720.1.1.

GLUED BUILT-UP MEMBER. See Section 2302.1.

GRADE FLOOR OPENING. A window or other opening located such that the sill height of the opening is not more than 44 inches (1118 mm) above or below the finished ground level adjacent to the opening.

GRADE (LUMBER). See Section 2302.1.

GRADE PLANE. See Section 502.1.

GRANDSTAND. See Section 1002.1.

GRAVITY LOAD. See Section 1613.1.

GRIDIRON. See Section 410.2.

GROSS LEASABLE AREA. See Section 402.2.

GROUTED MASONRY. See Section 2102.1.

Grouted hollow-unit masonry. See Section 2102.1.

Grouted multiwythe masonry. See Section 2102.1.

GUARD. See Section 1002.1.

GYPSUM BOARD. See Section 2502.1.

GYPSUM PLASTER. See Section 2502.1.

GYPSUM VENEER PLASTER. See Section 2502.1.

HABITABLE SPACE. A space in a building for living, sleeping, eating or cooking. Bathrooms, toilet rooms, closets, halls, storage or utility spaces and similar areas are not considered habitable spaces.
[F] HALOGENATED EXTINGUISHING SYSTEMS. See Section 902.1.

[F] HANDLING. See Section 307.2.

HANDBRAIL. See Section 1002.1.

HARDBOARD. See Section 2302.1.

HAZARDOUS CONTENTS. See Section 1613.1.

[F] HAZARDOUS MATERIALS. See Section 307.2.


HEAD JOINT. See Section 2102.1.

HEADER (Bonder). See Section 2102.1.

[F] HEALTH HAZARD. See Section 307.2.

HEIGHT, BUILDING. See Section 502.1.

HEIGHT, STORY. See Section 502.1.

HEIGHT, WALLS. See Section 2102.1.

HELIPORT. See Section 412.5.2.

HELISTOP. See Section 412.5.2.

[F] HIGHLY TOXIC. See Section 307.2.

HISTORIC BUILDINGS. Buildings that are listed in or eligible for listing in the National Register of Historic Places, or designated as historic under an appropriate state or local law.

HOOKED BOLT. See Section 1913.2.2.

HORIZONTAL EXIT. See Section 1002.1.

[F] HPM FLAMMABLE LIQUID. See Section 415.2.

[F] HPM ROOM. See Section 415.2.

HURRICANE-PRONE REGIONS. See Section 1609.2.

IMMEDIATELY DANGEROUS TO LIFE AND HEALTH (IDLH). See Section 415.2.

IMPACT LOAD. See Section 1602.1.

IMPORTANCE FACTOR, I. See Section 1609.2.

INCOMPATIBLE MATERIALS. See Section 307.2.

INDUSTRIAL EQUIPMENT PLATFORM. See Section 502.1.

[F] INITIATING DEVICE. See Section 902.1.

INSPECTION CERTIFICATE. See Section 1702.1.

INTENDED TO BE OCCUPIED AS A RESIDENCE. See Section 1102.

INTERIOR FINISH. See Section 802.1.

INTERIOR FLOOR FINISH. See Section 802.1.

INTERIOR SURFACES. See Section 2502.1.

INTERIOR WALL AND CEILING FINISH. See Section 802.1.

INTERLAYMENT. See Section 1502.1.

INVERTED PENDULUM-TYPE STRUCTURES. See Section 1613.1.

ISOLATION INTERFACE. See Section 1613.1.

ISOLATION JOINT. See Section 1902.1.

ISOLATION SYSTEM. See Section 1613.1.

ISOLATOR UNIT. See Section 1613.1.

JOINT. See Sections 702.1 and 1602.1.

JURISDICTION. The governmental unit that has adopted this code under due legislative authority.

LABEL. See Section 1702.1.

LIGHT-DIFFUSING SYSTEM. See Section 2602.1.

LIGHT-FRAME CONSTRUCTION. A type of construction whose vertical and horizontal structural elements are primarily formed by a system of repetitive wood or light gauge steel framing members.

LIGHT-TRANSMITTING PLASTIC ROOF PANELS. See Section 2602.1.

LIGHT-TRANSMITTING PLASTIC WALL PANELS. See Section 2602.1.

LIMIT STATE. See Section 1602.1.

[F] LIQUID. See Section 415.2.

[F] LIQUID STORAGE ROOM. See Section 415.2.

[F] LIQUID USE, DISPENSING AND MIXING ROOMS. See Section 415.2.

LISTED. See Section 902.1.

LIVE LOADS. See Section 1602.1.

LIVE LOADS (ROOF). See Section 1602.1.

LOAD AND RESISTANCE FACTOR DESIGN (LRFD). See Section 1602.1.

LOAD FACTOR. See Section 1602.1.

LOADS. See Section 1602.1.

LOADS EFFECTS. See Section 1602.1.

LOT. A portion or parcel of land considered as a unit.

LOT LINE. A line dividing one lot from another, or from a street or any public place.


LOWEST FLOOR. See Section 1612.2.

MAIN WINDFORCE-RESISTING SYSTEM. See Section 1609.2.

MALL. See Section 402.2.

[F] MANUAL FIRE ALARM BOX. See Section 902.1.
MANUFACTURER’S DESIGNATION. See Section 1702.1.

MARK. See Section 1702.1.

MARQUEE. A permanent roofed structure attached to and supported by the building and that projects into the public right of way.

MASONRY. See Section 2102.1.
- Ashlar masonry. See Section 2102.1.
- Coursed ashlar. See Section 2102.1.
- Glass unit masonry. See Section 2102.1.
- Plain masonry. See Section 2102.1.
- Random ashlar. See Section 2102.1.
- Reinforced masonry. See Section 2102.1.
- Solid masonry. See Section 2102.1.

MASONRY UNIT. See Section 2102.1.
- Clay. See Section 2102.1.
- Concrete. See Section 2102.1.
- Hollow. See Section 2102.1.
- Solid. See Section 2102.1.

MAXIMUM CONSIDERED EARTHQUAKE. See Section 1613.1.

MEAN DAILY TEMPERATURE. See Section 2102.1.

MEAN ROOF HEIGHT. See Section 1609.2.

MEANS OF EGRESS. See Section 1002.1.

MECHANICAL-ACCESS OPEN PARKING GARAGES. See Section 406.3.2.

MECHANICAL EQUIPMENT SCREEN. See Section 1502.1.

MEMBRANE-COVERED CABLE STRUCTURE. See Section 3102.2.

MEMBRANE-COVERED FRAME STRUCTURE. See Section 3102.2.

MEMBRANE PENETRATION. See Section 702.1.

MEMBRANE-PENETRATION FIRESTOP. See Section 702.1.

METAL ROOF PANEL. See Section 1502.1.

METAL ROOF SHINGLE. See Section 1502.1.

MEZZANINE. See Section 502.1.

MINERAL BOARD. See Section 720.1.1.

MODIFIED BITUMEN ROOF COVERING. See Section 1502.1.

MORTAR. See Section 2102.1.

MORTAR, SURFACE-BONDING. See Section 2102.1.


[F] MULTIPLE-STATION SMOKE ALARM. See Section 902.1.

NAILING, BOUNDARY. See Section 2302.1.

NAILING, EDGE. See Section 2302.1.

NAILING, FIELD. See Section 2302.1.

NATURALLY DURABLE WOOD. See Section 2302.1.
- Decay resistant. See Section 2302.1.
- Termite resistant. See Section 2302.1.

NORMAL TEMPERATURE AND PRESSURE (NTP). See Section 415.2.

NOSING. See Section 1002.1.

NOTATIONS, STRUCTURAL DESIGN. See Section 1602.1.

[F] NUISANCE ALARM. See Section 902.1.

OCCUPANCY IMPORTANCE FACTOR. See Section 1613.1.

OCCUPANT LOAD. See Section 1002.1.

OCCUPIABLE SPACE. A room or enclosed space designed for human occupancy in which individuals congregate for amusement, educational or similar purposes or in which occupants are engaged at labor, and which is equipped with means of egress and light and ventilation facilities meeting the requirements of this code.

OPEN-AIR SEATING GRANDSTANDS AND BLEACHERS. See Section 1002.1.

OPEN PARKING GARAGE. See Section 406.3.2.

[F] OPEN SYSTEM. See Section 307.2.

[F] ORGANIC PEROXIDE. See Section 307.2.
- Class I. See Section 307.2.
- Class II. See Section 307.2.
- Class III. See Section 307.2.
- Class IV. See Section 307.2.
- Class V. See Section 307.2.
- Unclassified detonable. See Section 307.2.

OTHER STRUCTURES. See Section 1602.1.

OWNER. Any person, agent, firm or corporation having a legal or equitable interest in the property.
DEFINITIONS

[F] OXIDIZER. See Section 307.2.
   Class 4. See Section 307.2.
   Class 3. See Section 307.2.
   Class 2. See Section 307.2.
   Class 1. See Section 307.2.


P-DELTA EFFECT. See Section 1602.1.

PANEL (PART OF A STRUCTURE). See Section 1602.1.

PANIC HARDWARE. See Section 1002.1.

PARTICLEBOARD. See Section 2302.1.

PEDESTAL. See Section 1902.1.

PENETRATION FIRESTOP. See Section 702.1.

PENTHOUSE. See Section 1502.1.

PERMIT. An official document or certificate issued by the authority having jurisdiction which authorizes performance of a specified activity.

PERSON. An individual, heirs, executors, administrators or assigns, and also includes a firm, partnership or corporation, its or their successors or assigns, or the agent of any of the aforesaid.

PERSONAL CARE SERVICE. See Section 310.2.

[F] PHYSICAL HAZARD. See Section 307.2.

PIER FOUNDATIONS. See Section 1808.1.
   Belled piers. See Section 1808.1.

PILE FOUNDATIONS. See Section 1808.1.
   Augered uncased piles. See Section 1808.1.
   Caisson piles. See Section 1808.1.
   Concrete-filled steel pipe and tube piles. See Section 1808.1.
   Driven uncased piles. See Section 1808.1.
   Enlarged base piles. See Section 1808.1.
   Steel cased piles. See Section 1808.1.

PINRAIL. See Section 410.2.

PLAIN CONCRETE. See Section 1902.1.

PRECAST CONCRETE. See Section 1902.1.

PRESTRESSED CONCRETE. See Section 1902.1.

PRESTRESSED MASONRY. See Section 2102.1.

PRISM. See Section 2102.1.

PROJECTED AREA. See Section 1913.2.2.

PROSCENIUM WALL. See Section 410.2.

PUBLIC ENTRANCE. See Section 1102.1.

PUBLIC-USE AREAS. See Section 1102.1.

PUBLIC WAY. See Section 1002.1.

[F] PYROPHORIC. See Section 307.2.

[F] PYROTECHNIC COMPOSITION. See Section 307.2.

QUALITY ASSURANCE PLAN. A written procedure complying with the requirements of Section 1705.

RAMP. See Section 1002.1.

RAMP-ACCESS OPEN PARKING GARAGES. See Section 406.3.2.

[F] RECORD DRAWINGS. See Section 902.1.

REFERENCE RESISTANCE \((D)\). See Section 2302.1.

REGISTERED DESIGN PROFESSIONAL. An individual who is a registered architect (RA) in accordance with Article 147 of the New York State Education Law or a licensed professional engineer (PE) in accordance with Article 145 of the New York State Education Law.

REINFORCED CONCRETE. See Section 1902.1.

REINFORCED PLASTIC, GLASS FIBER. See Section 2602.1.

REINFORCEMENT. See Section 1902.1.

REPAIR. The reconstruction or renewal of any part of an existing building for the purpose of its maintenance.

REQUIRED STRENGTH. See Sections 1602.1 and 2102.1.

REEROOFING. See Section 1502.1.

RESHORES. See Section 1502.1.

RESIDENTIAL AIRCRAFT HANGAR. See Section 412.3.1.

RESIDENTIAL CARE/ASSISTED LIVING FACILITIES. See Section 310.2.

RESISTANCE FACTOR. See Section 1602.1.

REVIEWING STANDS. See Section 1002.1.

ROOF ASSEMBLY. See Section 1502.1.

ROOF COVERING. See Section 1502.1.
DEFINITIONS

ROOF COVERING SYSTEM. See Section 1502.1.
ROOF DECK. See Section 1502.1.
ROOF RECOVER. See Section 1502.1.
ROOF REPAIR. See Section 1502.1.
ROOF REPLACEMENT. See Section 1502.1.
ROOF VENTILATION. See Section 1502.1.
ROOFTOP STRUCTURE. See Section 1502.1.
RUBBLE MASONRY. See Section 2102.1.
Coursed rubble. See Section 2102.1.
Random rubble. See Section 2102.1.
Rough or ordinary rubble. See Section 2102.1.
RUNNING BOND. See Section 2102.1.
SCUPPER. See Section 1502.1.
SEISMIC DESIGN CATEGORY. See Section 1613.1.
SEISMIC-FORCE-RESISTING SYSTEM. See Sections 1602.1 and 1613.1.
SEISMIC FORCES. See Section 1613.1.
SEISMIC RESPONSE COEFFICIENT. See Section 1613.1.
SEISMIC USE GROUP. See Section 1613.1.
SELF-CLOSING. See Section 702.1.
SELF-SERVICE STORAGE FACILITY. See Section 1102.1.
SERVICE CORRIDOR. See Section 415.2.
SERVICE ENTRANCE. See Section 1102.1.
SHAFT. See Section 702.1.
SHAFT ENCLOSURE. See Section 702.1.
SHALLOW ANCHORS. See Section 1602.1.
SHEAR PANEL. See Section 1602.1.
SHEAR WALL. See Sections 1602.1, 1613.1, 2102.1 and 2302.1.
Detailed plain masonry shear wall. See Section 2102.1.
Intermediate reinforced masonry shear wall. See Section 2102.1.
Ordinary plain masonry shear wall. See Section 2102.1.
Ordinary reinforced masonry shear wall. See Section 2102.1.
Special reinforced masonry shear wall. See Section 2102.1.
SHEAR WALL-FRAME INTERACTIVE SYSTEM. See Section 1613.1.
SHELL. See Section 2102.1.
SHORES. See Section 1902.1.
SHOTCRETE. See Section 1914.1.
SIDE-FACE BLOWOUT STRENGTH. See Section 1913.2.2.
SINGLE-PLY MEMBRANE. See Section 1502.1.
[S] SINGLE-STATION SMOKE ALARM. See Section 902.1.
SITE. See Section 1102.1.
SITE CLASS. See Section 1613.1.
SITE COEFFICIENTS. See Section 1613.1.
SKYLIGHTS AND SLOPED GLAZING. Glass or other transparent or translucent glazing material installed at a slope of 15 degrees (0.26 rad) or more from vertical. Glazing material in sky-lights, solariums, sun spaces, roofs and sloped walls are included in this definition.
SLEEPING UNIT. A room or space in which people sleep, which can also include permanent provisions for living, eating, and either sanitation or kitchen facilities but not both. Such rooms and spaces that are also part of a dwelling unit are not sleeping units.
[S] SMOKE ALARM. See Section 902.1.
SMOKE BARRIER. See Section 702.1.
SMOKE COMPARTMENT. See Section 702.1.
SMOKE DAMPER. See Section 702.1.
[S] SMOKE DETECTOR. See Section 902.1.
SMOKE-DEVELOPED INDEX. See Section 802.1.
SMOKE-PROTECTED ASSEMBLY SEATING. See Section 1002.1.
SMAKEPROOF ENCLOSURE. See Section 902.1.
[S] SOLID. See Section 415.2.
SPACE FRAME. See Section 1602.1.
SPECIAL AMUSEMENT BUILDING. See Section 411.2.
SPECIAL FLOOD HAZARD AREA. See Section 1612.2.
SPECIAL INSPECTION. See Section 1702.1.
Special continuous inspection. See Section 1702.1.
Special periodic inspection. See Section 1702.1.
SPECIAL TRANSVERSE REINFORCEMENT. See Section 1602.1.
SPECIFIED. See Section 2102.1.
SPECIFIED COMpressive STRENGTH OF MASONRY ($f_m$). See Section 2102.1.
SPIRAL REINFORCEMENT. See Section 1902.1.
SPIRAL STAIRWAY. See Section 1002.1.
SPLICE. See Section 702.1.
SPRAYED FIRE-RESISTANT MATERIALS. See Section 1702.1.
STACK BOND. See Section 2102.1.
STAGE. See Section 410.2.
STAIR. See Section 1002.1.
STAIRWAY. See Section 1002.1.
STAIRWAY, EXTERIOR. See Section 1002.1.
STAIRWAY, INTERIOR. See Section 1002.1.
STAIRWAY, SPIRAL. See Section 1002.1.
[F] STANDPIPE SYSTEM, CLASSES OF. See Section 902.1.
    Class I system. See Section 902.1.
    Class II system. See Section 902.1.
    Class III system. See Section 902.1.
[F] STANDPIPE, TYPES OF. See Section 902.1.
    Automatic dry. See Section 902.1.
    Automatic wet. See Section 902.1.
    Manual dry. See Section 902.1.
    Manual wet. See Section 902.1.
    Semiautomatic dry. See Section 902.1.
START OF CONSTRUCTION. See Section 1612.2.
STEEL CONSTRUCTION, COLD-FORMED. See Section 2202.1.
STEEL JOIST. See Section 2202.1.
STEEL MEMBER, STRUCTURAL. See Section 2202.1.
STEEP SLOPE. A roof slope greater than two units vertical in 12 units horizontal (17-percent slope).
STIRRUP. See Sections 1902.1 and 2102.1.
STONE MASONRY. See Section 2102.1.
    Ashlar stone masonry. See Section 2102.1.
    Rubble stone masonry. See Section 2102.1.
[F] STORAGE, HAZARDOUS MATERIALS. See Section 415.2.
STORY. That portion of a building included between the upper surface of a floor and the upper surface of the floor or roof next above (also see “Basement,” “Mezzanine” and Section 502.1). It is measured as the vertical distance from top to top of two successive tiers of beams or finished floor surfaces and, for the topmost story, from the top of the floor finish to the top of the ceiling joists or, where there is not a ceiling, to the top of the roof rafters.
STORY ABOVE GRADE PLANE. Any story having its finished floor surface entirely above grade plane, except that a basement shall be considered as a story above grade plane where the finished surface of the floor above the basement is:
    1. More than 6 feet (1829 mm) above grade plane;
    2. More than 6 feet (1829 mm) above the finished ground level for more than 50 percent of the total building perimeter; or
    3. More than 12 feet (3658 mm) above the finished ground level at any point.
STORY DRIFT RATIO. See Section 1613.1.
STRENGTH. See Section 2102.1.
    Design strength. See Section 2102.1.
    Nominal strength. See Sections 1602.1 and 2102.1.
STRENGTH DESIGN. See Section 1602.1.
STRUCTURAL CONCRETE. See Section 1902.1.
STRUCTURAL GLUED LAMINATED TIMBER. See Section 2302.1.
STRUCTURAL OBSERVATION. See Section 1702.1.
STRUCTURE. That which is built or constructed.
SUBDIAPHRAGM. See Section 2302.1.
SUBSTANTIAL DAMAGE. See Section 1612.2.
SUBSTANTIAL IMPROVEMENT. See Section 1612.2.
[F] SUPERVISORY SERVICE. See Section 902.1.
[F] SUPERVISORY SIGNAL. See Section 902.1.
[F] SUPERVISORY SIGNAL-INITIATING DEVICE. See Section 902.1.
SWIMMING POOLS. See Section 3109.2.
T RATING. See Section 702.1.
TENDON. See Section 1902.1.
TENT. Any structure, enclosure or shelter which is constructed of canvas or pliable material supported in any manner except by air or the contents it protects.
THERMOPLASTIC MATERIAL. See Section 2602.1.
THERMOSETTING MATERIAL. See Section 2602.1.
THROUGH PENETRATION. See Section 702.1.
THROUGH- PENETRATION FIRESTOP SYSTEM. See Section 702.1.
TIE, LATERAL. See Section 2102.1.
TIE, WALL. See Section 2102.1.
TIE-DOWN (HOLD-DOWN). See Section 2302.1.
TILE. See Section 2102.1.
TILE, STRUCTURAL CLAY. See Section 2102.1.
[T] TIRES, BULK STORAGE OF. See Section 902.1.
TORSIONAL FORCE DISTRIBUTION. See Section 1613.1.
TOUGHNESS. See Section 1613.1.
[T] TOXIC. See Section 307.2.
TREATED WOOD. See Section 2302.1.
TRIM. See Section 802.1.
[T] TROUBLE SIGNAL. See Section 902.1.
UNDERLAYMENT. See Section 1502.1.
[T] UNSTABLE (REACTIVE) MATERIAL. See Section 307.2.
  Class 4. See Section 307.2.
  Class 3. See Section 307.2.
  Class 2. See Section 307.2.
  Class 1. See Section 307.2.
VAPOR RETARDER. A material having a permeance ratio of 1.0 perm or less, when tested in accordance with ASTM E 96, such as foil, plastic sheeting, or insulation facing, installed to resist the transmission of water vapor through the exterior envelope.
VENEER. See Section 1402.1.
VENTILATION. The natural or mechanical process of supplying conditioned or unconditioned air to, or removing such air from, any space.
[T] VISIBLE ALARM NOTIFICATION APPLIANCE. See Section 902.1.
WALKWAY, PEDESTRIAN. A walkway used exclusively as a pedestrian trafficway.
WALL. See Section 2102.1.
  Cavity wall. See Section 2102.1.
  Composite wall. See Section 2102.1.
  Dry-stacked, surface-bonded wall. See Section 2102.1.
  Masonry-bonded hollow wall. See Section 2102.1.
  Parapet wall. See Section 2102.1.
WALL FRAME. See Section 2102.1.
WALL, LOAD BEARING. See Section 1602.1.
WALL, NONLOAD BEARING. See Section 1602.1.
  Class 3. See Section 307.2.
  Class 2. See Section 307.2.
  Class 1. See Section 307.2.
WEATHER-EXPOSED SURFACES. See Section 2502.1.
WEB. See Section 2102.1.
[T] WET-CHEMICAL EXTINGUISHING SYSTEM. See Section 902.1.
WHEELCHAIR SPACE. See Section 1102.1.
WHEELCHAIR SPACE CLUSTER. See Section 1102.1.
WIND-BORNE DEBRIS REGION. See Section 1609.2.
WIND-RESTRAINT SEISMIC SYSTEM. See Section 1613.
WIRE BACKING. See Section 2502.1.
[T] WIRELESS PROTECTION SYSTEM. See Section 902.1.
WOOD SHEAR PANEL. See Section 2302.1.
WOOD STRUCTURAL PANEL. See Section 2302.1.
[T] WORKSTATION. See Section 415.2.
WYTHE. See Section 2102.1.
YARD. An open space, other than a court, unobstructed from the ground to the sky, except where specifically provided by this code, on the lot on which a building is situated.
[T] ZONE. See Section 902.1.
CHAPTER 3
USE AND OCCUPANCY CLASSIFICATION

SECTION 301
GENERAL

301.1 Scope. The provisions of this chapter shall control the classification of all buildings and structures as to use and occupancy.

SECTION 302
CLASSIFICATION

302.1 General. Structures or portions of structures shall be classified with respect to occupancy in one or more of the groups listed below. Structures with multiple uses shall be classified according to Section 302.3. Where a structure is proposed for a purpose which is not specifically provided for in this code, such structure shall be classified in the group which the occupancy most nearly resembles, according to the fire safety and relative hazard involved.

2. Business (see Section 304): Group B
3. Educational (see Section 305): Group E
4. Factory Industrial (see Section 306): Groups F-1 and F-2
6. Institutional (see Section 308): Groups I-1, I-2, I-3 and I-4
7. Mercantile (see Section 309): Group M
8. Residential (see Section 310): Groups R-1, R-2, R-3 as applicable in Section 101.2, and R-4
9. Storage (see Section 311): Groups S-1 and S-2
10. Utility and Miscellaneous (see Section 312): Group U

302.1.1 Incidental use areas. Spaces that are incidental to the main occupancy shall be separated or protected, or both, in accordance with Table 302.1.1 and shall be classified in accordance with the main occupancy of the portion of the building in which the incidental use area is located.

Exception: Incidental use areas within and serving a dwelling unit are not required to comply with this section.

TABLE 302.1.1
INCIDENTAL USE AREAS

<table>
<thead>
<tr>
<th>ROOM OR AREA</th>
<th>SEPARATION¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Furnace room where largest piece of equipment is over 400,000 Btu per hour</td>
<td>1 hour or provide automatic fire-extinguishing system</td>
</tr>
<tr>
<td>Boilers over 15 psi and 10 horsepower</td>
<td>1 hour or provide automatic fire-extinguishing system</td>
</tr>
<tr>
<td>Refrigerant machinery rooms</td>
<td>1 hour or provide automatic fire-extinguishing system</td>
</tr>
<tr>
<td>Automotive parking garage in other than Group R-3</td>
<td>2 hours; or 1 hour and provide automatic fire-extinguishing system</td>
</tr>
<tr>
<td>Incinerator rooms</td>
<td>2 hours and automatic sprinkler system</td>
</tr>
<tr>
<td>Paint shops, not classified as Group H, located in occupancies other than Group F</td>
<td>2 hours; or 1 hour and provide automatic fire-extinguishing system</td>
</tr>
<tr>
<td>Laboratories and vocational shops, not classified as Group H, located in Group E and I-2 occupancies</td>
<td>1 hour or provide automatic fire-extinguishing system</td>
</tr>
<tr>
<td>Laundry rooms over 100 square feet</td>
<td>1 hour or provide automatic fire-extinguishing system</td>
</tr>
<tr>
<td>Storage rooms over 100 square feet</td>
<td>1 hour or provide automatic fire-extinguishing system</td>
</tr>
<tr>
<td>Group I-3 padded cells</td>
<td>1 hour</td>
</tr>
<tr>
<td>Waste and linen collection rooms over 100 square feet</td>
<td>1 hour or provide automatic fire-extinguishing system</td>
</tr>
</tbody>
</table>
| Stationary lead-acid battery systems having a liquid capacity of more than 100 gallons used for facility standby power, emergency power or uninterrupt ed power supplies | 1-hour fire barriers and floor-ceiling assemblies in Group B, F, H, M, S and U occupancies.

² For SI: 1 square foot = 0.0929 m², 1 pound per square inch = 6.9 kPa, 1 British thermal unit = 0.293 watts, 1 horsepower = 746 watts, 1 gallon = 3.785 L.

¹ Where an automatic fire-extinguishing system is provided, it need only be provided in the incidental use room or area.
302.1.1.1 Separation. Where Table 302.1.1 requires a fire-resistance-rated separation, the incidental use area shall be separated from the remainder of the building with a fire barrier. Where Table 302.1.1 permits automatic fire-extinguishing system without a fire barrier, the incidental use area shall be separated by construction capable of resisting the passage of smoke. The partitions shall extend from the floor to the underside of the fire-resistance-rated floor/ceiling assembly or fire-resistance-rated roof/ceiling assembly or to the underside of the roof or roof deck above. Doors shall be self-closing or automatic-closing upon detection of smoke. Doors shall not have air transfer openings and shall not be undercut in excess of the clearance permitted in accordance with NFPA 80.

302.2 Accessory use area. Except for accessory use areas of Group H in accordance with Section 302.3.1, or when required for incidental use areas as indicated in Section 302.1.1, a fire barrier shall not be required for a use not occupying more than 10 percent of the area of any floor of a building, nor more than the tabular values for either height or area for such use.

302.3 Mixed occupancies.

302.3.1 Two or more uses. Where the building is occupied for two or more uses not included in the same occupancy, the building or portion thereof shall comply with Sections 302.3.2 or 302.3.3 or combinations of these sections, except that areas of Group H shall be separated from other occupancies in accordance with Section 302.3.3. Areas of Group H-1, H-2 or H-3 shall be in a separate and detached building and structure where required by Table 415.3.2. Also, see Section 508 for special provisions for buildings containing mixed uses.

302.3.2 Nonseparated uses. Each portion of the building shall be individually classified as to use. The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building. The other requirements shall apply to each portion of the building based on the use of that space except that the most restrictive applicable provisions of the high rise building provisions and fire-protection system requirements shall apply to those nonseparated uses. Fire separations are not required between uses, except as required by other provisions.

302.3.3 Separated uses. Each portion of the building shall be individually classified as to use and shall be completely separated from adjacent areas by fire barrier walls or horizontal assemblies or both having a fire-resistance rating determined in accordance with Table 302.3.3 for the uses being separated. Each fire area shall comply with the code based on the use of that space. Each fire area shall comply with the height limitations based on the use of that space and the type of construction classification. In each story, the building area shall be such that the sum of the ratios of the floor area of each use divided by the allowable area for each use shall not exceed 1.

Exceptions:

1. Except for Group H and I-2 areas, where the building is equipped throughout with an automatic sprinkler system, the fire-resistance ratings in Table 302.3.3 shall be reduced by 1 hour but to not less than 1 hour and to not less than that required for floor construction according to the type of construction.

2. The private garage shall be separated from the dwelling unit and its attic area by means of minimum 1/2-inch (13 mm) gypsum board applied to the garage side. Garages beneath habitable rooms shall be separated from all habitable rooms above by not less than 5/8-inch Type X gypsum board or equivalent. Door openings between the garage and the dwelling unit shall be equipped with either solid wood doors not less than 1 3/8 inches (35 mm) thick, solid or honeycomb core steel doors not less than 1 3/8 inches (35 mm) thick, or doors in compliance with Section 714.2.3. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted.

3. Ducts in the garage and ducts penetrating the walls or ceilings separating the dwelling unit from the garage shall be constructed of minimum No. 26 gage (0.48 mm) sheet steel and shall have no openings into the garage.

4. A separation is not required between a Group R-3 and Group U carport, provided the carport is entirely open on two or more sides and there are not enclosed uses above.

302.4 Spaces used for different purposes. A room or space that is intended to be occupied at different times for different purposes shall comply with all the requirements that are applicable to each of the purposes for which the room or space will be occupied.
USE AND OCCUPANCY CLASSIFICATION

SECTION 303

ASSEMBLY GROUP A

303.1 Assembly Group A. Assembly Group A occupancy includes, among others, the use of a building or structure, or a portion thereof, for the gathering together of persons for purposes such as civic, social or religious functions, recreation, food or drink consumption or awaiting transportation. A room or space used for assembly purposes by less than 50 persons and accessory to another occupancy shall be included as a part of that occupancy. Assembly occupancies shall include the following:

A-1 Assembly uses, usually with fixed seating, intended for the production and viewing of the performing arts or motion pictures including, but not limited to:
- Motion picture theaters
- Symphony and concert halls
- Television and radio studios admitting an audience
- Theaters

TABLE 302.3.3

REQUIRED SEPARATION OF OCCUPANCIES (HOURS)

<table>
<thead>
<tr>
<th>USE</th>
<th>A-1</th>
<th>A-2</th>
<th>A-3</th>
<th>A-4</th>
<th>A-5</th>
<th>g</th>
<th>F-1</th>
<th>F-2</th>
<th>H-1</th>
<th>H-2</th>
<th>H-3</th>
<th>H-4</th>
<th>H-5</th>
<th>I-1</th>
<th>I-2</th>
<th>I-3</th>
<th>I-4</th>
<th>M</th>
<th>R-1</th>
<th>R-2</th>
<th>R-3-R-4</th>
<th>S-1</th>
<th>S-2</th>
<th>U</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>A-2h</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>A-3d</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>A-4</td>
<td>—</td>
<td>—</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>NP</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-5</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>NP</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>NP</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>NP</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>F-1</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>NP</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>F-2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>NP</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H-1</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>H-2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>H-3</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>H-4</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>H-5</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>I-1</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>I-2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>I-3</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>I-4</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>R-1</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>R-2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>R-3-R-4</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>2</td>
<td>3</td>
<td>2#</td>
<td>1#</td>
<td></td>
</tr>
<tr>
<td>S-1</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>S-2f</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>U</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

For SI: 1 square foot = 0.0929 m².
NP = Not permitted.
a. See Exception 1 to Section 302.3.3 for reductions permitted.
b. Occupancy separation need not be provided for incidental storage areas within Groups B and M if the:
1. Area is less than 10 percent of the floor area;
2. Area is provided with an automatic fire-extinguishing system and is less than 3,000 square feet; or
3. Area is less than 1,000 square feet.
c. Areas used only for private or pleasure vehicles may reduce separation by 1 hour.
d. Accessory assembly areas are not considered separate occupancies if the floor area is 750 square feet or less.
e. Assembly uses accessory to Group E are not considered separate occupancies.
f. Accessory religious educational rooms and religious auditoriums with occupant loads of less than 100 are not considered separate occupancies.
g. See exception to Section 302.3.3.
h. Commercial kitchens need not be separated from the restaurant seating areas that they serve.
A-2 Assembly uses intended for food and/or drink consumption including, but not limited to:
- Banquet halls
- Night clubs
- Restaurants
- Taverns and bars

A-3 Assembly uses intended for worship, recreation or amusement and other assembly uses not classified elsewhere in Group A, including, but not limited to:
- Amusement arcades
- Art galleries
- Bowling alleys
- Churches
- Community halls
- Courtrooms
- Dance halls (not including food or drink consumption)
- Exhibition halls
- Funeral parlors
- Gymnasiums (without spectator seating)
- Indoor swimming pools (without spectator seating)
- Indoor tennis courts (without spectator seating)
- Lecture halls
- Libraries
- Museums
- Passenger stations (waiting area)
- Pool and billiard parlors

A-4 Assembly uses intended for viewing of indoor sporting events and activities with spectator seating, including, but not limited to:
- Arenas
- Skating rinks
- Swimming pools
- Tennis courts

A-5 Assembly uses intended for participation in or viewing outdoor activities including, but not limited to:
- Amusement park structures
- Bleachers
- Grandstands
- Stadiums

SECTION 304
BUSINESS GROUP B

304.1 Business Group B. Business Group B occupancy includes, among others, the use of a building or structure, or a portion thereof, for office, professional or service-type transactions, including storage of records and accounts. Business occupancies shall include, but not be limited to, the following:
- Airport traffic control towers
- Animal hospitals, kennels and pounds
- Banks
- Barber and beauty shops
- Car wash
- Civic administration
- Clinic — outpatient
- Dry cleaning and laundries; pick-up and delivery stations and self-service
- Educational occupancies above the 12th grade
- Electronic data processing
- Fire and police stations
- Laboratories; testing and research
- Motor vehicle showrooms
- Post offices
- Print shops
- Professional services (architects, attorneys, dentists, physicians, engineers, etc.)
- Radio and television stations
- Telephone exchanges

SECTION 305
EDUCATIONAL GROUP E

305.1 Educational Group E. Educational Group E occupancy includes, among others, the use of a building or structure, or a portion thereof, by six or more persons at any one time for educational purposes through the 12th grade.

305.2 Day care. The use of a building or structure, or portion thereof, for educational, supervision or personal care services for more than five children older than 2 1/2 years of age, shall be classified as a Group E occupancy.

SECTION 306
FACTORY INDUSTRIAL GROUP F

306.1 Factory Industrial Group F. Factory Industrial Group F occupancy includes, among others, the use of a building or structure, or a portion thereof, for assembling, disassembling, fabricating, finishing, manufacturing, packaging, repair or processing operations that are not classified as a Group H hazardous occupancy.

306.2 Factory Industrial F-1 Moderate-Hazard occupancy. Factory Industrial uses that are not classified as Factory Industrial F-2 Low Hazard shall be classified as F-1 Moderate Hazard and shall include, but not be limited to, the following:
- Aircraft
- Appliances
- Athletic equipment
- Automobiles and other motor vehicles
- Bakeries
- Beverages; over 12 percent in alcoholic content
Bicycles
Boats; building
Brooms or brushes
Business machines
Carpets and rugs (includes cleaning)
Cameras and photo equipment
Construction and agricultural machinery
Disinfectants
Dry cleaning and dyeing
Electric light plants and power houses
Electronics
Engines (including rebuilding)
Food processing
Furniture
Hemp products
Jute products
Laundries
Leather products
Machinery
Metals
Millwork (sash & door)
Motion pictures and television filming
Musical instruments
Optical goods
Paper mills or products
Photographic film
Plastic products
Printing or publishing
Recreational vehicles
Refuse incineration
Shoes
Soaps and detergents
Textiles
Tobacco
Trailers
Upholstering
Wood; distillation
Woodworking (cabinet)

306.3 Factory Industrial F-2 Low-Hazard occupancy.
Factory industrial uses that involve the fabrication or manufacturing of noncombustible materials that, during finishing, packing or processing, do not involve a significant fire hazard shall be classified as F-2 occupancies and shall include, but not be limited to, the following:

Beverages; up to and including 12 percent in alcoholic content
Brick and masonry
Ceramic products
Foundries
Glass products
Gypsum

Ice
Metal products (fabrication and assembly)

[F] SECTION 307
HIGH-HAZARD GROUP H

307.1 Hazardous Group H. Hazardous Group H occupancy includes, among others, the use of a building or structure, or a portion thereof, that involves the manufacturing, processing, generation or storage of materials that constitute a physical or health hazard in quantities in excess of those found in Tables 307.7(1) and 307.7(2). (See also definition of “Control Area”.)

307.2 Definitions. The following words and terms shall, for the purposes of this section and as used elsewhere in this code, have the meanings shown herein.

AEROSOL. A product that is dispensed from an aerosol container by a propellant.

Aerosol products shall be classified by means of the calculation of their chemical heats of combustion and shall be designated Level 1, Level 2 or Level 3.

Level 1 aerosol products. Those with a total chemical heat of combustion that is less than or equal to 8,600 British thermal units per pound (Btu/lb) (20 kJ/g).

Level 2 aerosol products. Those with a total chemical heat of combustion that is greater than 8,600 Btu/lb (20 kJ/g), but less than or equal to 13,000 Btu/lb (30 kJ/g).

Level 3 aerosol products. Those with a total chemical heat combustion that is greater than 13,000 Btu/lb (30 kJ/g).

AEROSOL CONTAINER. A metal can or a glass or plastic bottle designed to dispense an aerosol. Metal cans shall be limited to a maximum size of 33.8 fluid ounces (1000 ml). Glass or plastic bottles shall be limited to a maximum size of 4 fluid ounces (118 ml).

BARRICADE. A structure that consists of a combination of walls, floor and roof, which is designed to withstand the rapid release of energy in an explosion and which is fully confined, partially vented or fully vented; or other effective method of shielding from explosive materials by a natural or artificial barrier.

Artificial barricade. An artificial mound or revetment a minimum thickness of 3 feet (914 mm).

Natural barricade. Natural features of the ground, such as hills, or timber of sufficient density that the surrounding exposures that require protection cannot be seen from the magazine or building containing explosives when the trees are bare of leaves.

BOILING POINT. The temperature at which the vapor pressure of a liquid equals the atmospheric pressure of 14.7 pounds per square inch (psia) (101 kPa) or 760 mm of
mercury. Where an accurate boiling point is unavailable for the material in question, or for mixtures which do not have a constant boiling point, for the purposes of this classification, the 20-percent evaporated point of a distillation performed in accordance with ASTM D 86 shall be used as the boiling point of the liquid.

CLOSED SYSTEM. The use of a solid or liquid hazardous material involving a closed vessel or system that remains closed during normal operations where vapors emitted by the product are not liberated outside of the vessel or system and the product is not exposed to the atmosphere during normal operations; and all uses of compressed gases. Examples of closed systems for solids and liquids include product conveyed through a piping system into a closed vessel, system or piece of equipment.

COMBUSTIBLE DUST. Finely divided solid material that is 420 microns or less in diameter and which, when dispersed in air in the proper proportions, could be ignited by a flame, spark or other source of ignition. Combustible dust will pass through a U.S. No. 40 standard sieve.

COMBUSTIBLE FIBERS. Readily ignitable and free-burning fibers, such as cocoa fiber, cloth, cotton, excelsior, hay, hemp, henequen, istle, jute, kapok, oakum, rags, sisal, Spanish moss, straw, tow, wastepaper or other like materials.

COMBUSTIBLE LIQUID. A liquid having a closed cup flash point at or above 100°F (38°C). Combustible liquids shall be subdivided as follows:

Class II. Liquids having a closed cup flash point at or above 100°F (38°C) and below 140°F (60°C).

Class IIIA. Liquids having a closed cup flash point at or above 140°F (60°C) and below 200°F (93°C).

Class IIIB. Liquids having a closed cup flash point at or above 200°F (93°C).

The category of combustible liquids does not include compressed gases or cryogenic fluids.

COMPRESSED GAS. A material, or mixture of materials which:

1. Is a gas at 68°F (20°C) or less at 14.7 pounds per square inch atmosphere (psia) (101 kPa) of pressure; and

2. Has a boiling point of 68°F (20°C) or less at 14.7 psia (101 kPa) which is either liquefied, nonliquefied or in solution, except those gases which have no other health- or physical-hazard properties are not considered to be compressed until the pressure in the packaging exceeds 41 psia (282 kPa) at 68°F (20°C).

The states of a compressed gas are categorized as follows:

1. Nonliquefied compressed gases are gases, other than those in solution, which are in a packaging under the charged pressure and are entirely gaseous at a temperature of 68°F (20°C).

2. Liquefied compressed gases are gases that, in a packaging under the charged pressure, are partially liquid at a temperature of 68°F (20°C).

3. Compressed gases in solution are nonliquefied gases that are dissolved in a solvent.

4. Compressed gas mixtures consist of a mixture of two or more compressed gases contained in a packaging, the hazard properties of which are represented by the properties of the mixture as a whole.

CONTROL AREA. Spaces within a building that are enclosed and bounded by exterior walls, fire walls, fire barriers and roofs, or a combination thereof, where quantities of hazardous materials not exceeding the maximum allowable quantities per control area are stored, dispensed, used or handled.

CORROSIVE. A chemical that causes visible destruction of, or irreversible alterations in, living tissue by chemical action at the point of contact. A chemical shall be considered corrosive if, when tested on the intact skin of albino rabbits by the method described in DOTn 49 CFR, Part 173, such a chemical destroys or changes irreversibly the structure of the tissue at the point of contact following an exposure period of 4 hours. This term does not refer to action on inanimate surfaces.

CRYOGENIC FLUID. A liquid having a boiling point lower than -150°F (-101°C) at 14.7 pounds per square inch atmosphere (psia) (an absolute pressure of 101 kPa).

DEFLAGRATION. An exothermic reaction, such as the extremely rapid oxidation of a flammable dust or vapor in air, in which the reaction progresses through the unburned material at a rate less than the velocity of sound. A deflagration can have an explosive effect.

DETACHED STORAGE BUILDING. A separate single-story building, without a basement or crawl space, used for the storage of hazardous materials and located an approved distance from all structures.

DETONATION. An exothermic reaction characterized by the presence of a shock wave in the material which establishes and maintains the reaction. The reaction zone progresses through the material at a rate greater than the velocity of sound. The principal heating mechanism is one of shock compression. Detonations have an explosive effect.

DISPENSING. The pouring or transferring of any material from a container, tank or similar vessel, whereby vapors,
dusts, fumes, mists or gases are liberated to the atmosphere.

**EXPLOSIVE.** Any chemical compound, mixture or device, the primary or common purpose of which is to function by explosion. The term includes, but is not limited to, dynamite, black powder, pellet powder, initiating explosives, detonators, safety fuses, squibs, detonating cord, igniter cord, igniters and display fireworks, 1.3G (Class B, Special).

The term “explosive” includes any material determined to be within the scope of USC Title 18: Chapter 40 and also includes any material classified as an explosive other than consumer fireworks, 1.4G (Class C, Common) by the hazardous materials regulations of DOTn 49 CFR.

**High explosive.** Explosive material, such as dynamite, which can be caused to detonate by means of a No. 8 test blasting cap when unconfined.

**Low explosive.** Explosive material that will burn or deflagrate when ignited. It is characterized by a rate of reaction that is less than the speed of sound. Examples of low explosives include, but are not limited to, black powder; safety fuse; igniters; igniter cord; fuse lighters; fireworks, 1.3G (Class B special) and propellants, 1.3C.

**UN/DOTn Class 1 explosives.** The former classification system used by DOTn included the terms “high” and “low” explosives as defined herein. The following terms further define explosives under the current system applied by DOTn for all explosive materials defined as hazard Class 1 materials. Compatibility group letters are used in concert with the division to specify further limitations on each division noted (i.e., the letter G identifies the material as a pyrotechnic substance or article containing a pyrotechnic substance and similar materials).

**Division 1.1.** Explosives that have a mass explosion hazard. A mass explosion is one which affects almost the entire load instantaneously.

**Division 1.2.** Explosives that have a projection hazard but not a mass explosion hazard.

**Division 1.3.** Explosives that have a fire hazard and either a minor blast hazard or a minor projection hazard or both, but not a mass explosion hazard.

**Division 1.4.** Explosives that pose a minor explosion hazard. The explosive effects are largely confined to the package and no projection of fragments of appreciable size or range is to be expected. An external fire must not cause virtually instantaneous explosion of almost the entire contents of the package.

**Division 1.5.** Very insensitive explosives. This division is comprised of substances that have a mass explosion hazard, but which are so insensitive that there is very little probability of initiation or of transition from burning to detonation under normal conditions of transport.

**Division 1.6.** Extremely insensitive articles which do not have a mass explosion hazard. This division is comprised of articles that contain only extremely insensitive detonating substances and which demonstrate a negligible probability of accidental initiation or propagation.

**FIREWORKS.** Any composition or device for the purpose of producing a visible or an audible effect for entertainment purposes by combustion, deflagration or detonation that meets the definition of 1.4G fireworks or 1.3G fireworks as set forth herein.

**FIREWORKS, 1.3G.** (Formerly Class B, Special Fireworks.) Small fireworks devices containing restricted amounts of pyrotechnic composition designed primarily to produce visible or audible effects by combustion, deflagration or detonation. Such 1.3G fireworks include, but are not limited to, firecrackers containing more than 130 milligrams (2 grains) of explosive composition, aerial shells containing more than 40 grams of pyrotechnic composition, and other display pieces which exceed the limits for classification as 1.4G fireworks. Such 1.3G fireworks are also described as fireworks, 49 CFR (172) by the DOTn.

**FIREWORKS, 1.4G.** (Formerly known as Class C, Common Fireworks.) Small fireworks devices containing restricted amounts of pyrotechnic composition designed primarily to produce visible or audible effects by combustion. Such 1.4G fireworks which comply with the construction, chemical composition and labeling regulations of the DOTn for fireworks, 49 CFR (172), and the U.S. Consumer Product Safety Commission (CPSC) as set forth in CPSC 16 CFR: Parts 1500 and 1507, are not explosive materials for the purpose of this code.

**FLAMMABLE GAS.** A material that is a gas at 68°F (20°C) or less at 14.7 pounds per square inch atmosphere (psia) (101 kPa) of pressure [a material that has a boiling point of 68°F (20°C) or less at 14.7 psia (101 kPa)] which:

1. Is ignitable at 14.7 psia (101 kPa) when in a mixture of 13 percent or less by volume with air; or
2. Has a flammable range at 14.7 psia (101 kPa) with air of at least 12 percent, regardless of the lower limit.

The limits specified shall be determined at 14.7 psi (101 kPa) of pressure and a temperature of 68°F (20°C) in accordance with ASTM E 681.

**FLAMMABLE LIQUEFIED GAS.** A liquefied compressed gas which, under a charged pressure, is partially liquid at a temperature of 68°F (20°C) and which is flammable.
FLAMMABLE LIQUID. A liquid having a closed cup flash point below 100°F (38°C). Flammable liquids are further categorized into a group known as Class I liquids. The Class I category is subdivided as follows:

Class IA. Liquids having a flash point below 73°F (23°C) and having a boiling point below 100°F (38°C).

Class IB. Liquids having a flash point below 73°F (23°C) and having a boiling point at or above 100°F (38°C).

Class IC. Liquids having a flash point at or above 73°F (23°C) and below 100°F (38°C).

The category of flammable liquids does not include compressed gases or cryogenic fluids.

FLAMMABLE MATERIAL. A material capable of being readily ignited from common sources of heat or at a temperature of 600°F (316°C) or less.

FLAMMABLE SOLID. A solid, other than a blasting agent or explosive, that is capable of causing fire through friction, absorption or moisture, spontaneous chemical change, or retained heat from manufacturing or processing, or which has an ignition temperature below 212°F (100°C) or which burns so vigorously and persistently when ignited as to create a serious hazard. A chemical shall be considered a flammable solid as determined in accordance with the test method of CPSC 16 CFR; Part 1500.44, if it ignites and burns with a self-sustained flame at a rate greater than 0.1 inch (2.5 mm) per second along its major axis.

FLASH POINT. The minimum temperature in degrees Fahrenheit at which a liquid will give off sufficient vapors to form an ignitable mixture with air near the surface or in the container, but will not sustain combustion. The flash point of a liquid shall be determined by appropriate test procedure and apparatus as specified in ASTM D 56, ASTM D 93 or ASTM D 3278.

HANDLING. The deliberate transport by any means to a point of storage or use.

HAZARDOUS MATERIALS. Those chemicals or substances that are physical hazards or health hazards as defined and classified in this section and the Fire Code of New York State, whether the materials are in usable or waste condition.

HEALTH HAZARD. A classification of a chemical for which there is statistically significant evidence that acute or chronic health effects are capable of occurring in exposed persons. The term “health hazard” includes chemicals that are toxic or highly toxic, and corrosive.

HIGHLY TOXIC. A material which produces a lethal dose or lethal concentration that falls within any of the following categories:

1. A chemical that has a median lethal dose \( (LD_{50}) \) of 50 milligrams or less per kilogram of body weight when administered orally to albino rats weighing between 200 and 300 grams each.

2. A chemical that has a median lethal dose \( (LD_{50}) \) of 200 milligrams or less per kilogram of body weight when administered by continuous contact for 24 hours or less if death occurs within 24 hours with the bare skin of albino rabbits weighing between 2 and 3 kilograms each.

3. A chemical that has a median lethal concentration \( (LC_{50}) \) in air of 200 parts per million by volume or less of gas or vapor, or 2 milligrams per liter or less of mist, fume or dust, when administered by continuous inhalation for 1 hour or less if death occurs within 1 hour to albino rats weighing between 200 and 300 grams each.

Mixtures of these materials with ordinary materials, such as water, might not warrant classification as highly toxic. While this system is basically simple in application, any hazard evaluation that is required for the precise categorization of this type of material shall be performed by experienced, technically competent persons.

INCOMPATIBLE MATERIALS. Materials that, when mixed, have the potential to react in a manner that generates heat, fumes, gases or byproducts which are hazardous to life or property.

OPEN SYSTEM. The use of a solid or liquid hazardous material involving a vessel or system that is continuously open to the atmosphere during normal operations and where vapors are liberated, or the product is exposed to the atmosphere during normal operations. Examples of open systems for solids and liquids include dispensing from or into open beakers or containers, dip tank and plating tank operations.

OPERATING BUILDING. A building occupied in conjunction with the manufacture, transportation, or use of explosive materials. Operating buildings are separated from one another with the use of intraplant or intraline distances.

ORGANIC PEROXIDE. An organic compound that contains the bivalent \(-O-O-\) structure and which may be considered to be a structural derivative of hydrogen peroxide where one or both of the hydrogen atoms have been replaced by an organic radical. Organic peroxides can pose an explosion hazard (detonation or deflagration) or they can be shock sensitive. They can also decompose into various unstable compounds over an extended period of time.

Class I. Those formulations that are capable of deflagration but not detonation.
**Class II.** Those formulations that burn very rapidly and that pose a moderate reactivity hazard.

**Class III.** Those formulations that burn rapidly and that pose a moderate reactivity hazard.

**Class IV.** Those formulations that burn in the same manner as ordinary combustibles and that pose a minimal reactivity hazard.

**Class V.** Those formulations that burn with less intensity than ordinary combustibles or do not sustain combustion and that pose no reactivity hazard.

**Unclassified detonable.** Organic peroxides that are capable of detonation. These peroxides pose an extremely high explosion hazard through rapid explosive decomposition.

**OXIDIZER.** A material that readily yields oxygen or other oxidizing gas, or that readily reacts to promote or initiate combustion of combustible materials. Examples of other oxidizing gases include bromine, chlorine and fluorine.

**Class 1.** An oxidizer whose primary hazard is that it slightly increases the burning rate but which does not cause spontaneous ignition when it comes in contact with combustible materials.

**Class 2.** An oxidizer that will cause a moderate increase in the burning rate or that causes spontaneous ignition of combustible materials with which it comes in contact.

**Class 3.** An oxidizer that will cause a severe increase in the burning rate of combustible materials with which it comes in contact or that will undergo vigorous self-sustained decomposition due to contamination or exposure to heat.

**OXIDIZING GAS.** A gas that can support and accelerate combustion of other materials.

**PHYSICAL HAZARD.** A chemical for which there is evidence that it is a combustible liquid, compressed gas, cryogenic, explosive, flammable gas, flammable liquid, flammable solid, organic peroxide, oxidizer, pyrophoric or unstable (reactive) or water-reactive material.

**PYROPHORIC.** A chemical with an autoignition temperature in air, at or below a temperature of 13°F (-11°C).

**PYROTECHNIC COMPOSITION.** A chemical mixture that produces visible light displays or sounds through a self-propagating, heat-releasing chemical reaction which is initiated by ignition.

**TOXIC.** A chemical falling within any of the following categories:

1. A chemical that has a median lethal dose ($LD_{50}$) of more than 50 milligrams per kilogram, but not more than 500 milligrams per kilogram of body weight when administered orally to albino rats weighing between 200 and 300 grams each.

2. A chemical that has a median lethal dose ($LD_{50}$) of more than 200 milligrams per kilogram but not more than 1,000 milligrams per kilogram of body weight when administered by continuous contact for 24 hours (or less if death occurs within 24 hours) with the bare skin of albino rabbits weighing between 2 and 3 kilograms each.

3. A chemical that has a median lethal concentration ($LC_{50}$) in air of more than 200 parts per million but not more than 2,000 parts per million by volume of gas or vapor, or more than 2 milligrams per liter but not more than 20 milligrams per liter of mist, fume or dust, when administered by continuous inhalation for 1 hour (or less if death occurs within 1 hour) to albino rats weighing between 200 and 300 grams each.

**UNSTABLE (REACTIVE) MATERIAL.** A material, other than an explosive, which in the pure state or as commercially produced, will vigorously polymerize, decompose, condense or become self-reactive and undergo other violent chemical changes, including explosion, when exposed to heat, friction or shock, or in the absence of an inhibitor, or in the presence of contaminants, or in contact with incompatible materials. Unstable (reactive) materials are subdivided as follows:

**Class 4.** Materials that in themselves are readily capable of detonation or explosive decomposition or explosive reaction at normal temperatures and pressures. This class includes materials that are sensitive to mechanical or localized thermal shock at normal temperatures and pressures.

**Class 3.** Materials that in themselves are capable of detonation or of explosive decomposition or explosive reaction but which require a strong initiating source or which must be heated under confinement before initiation. This class includes materials that are sensitive to thermal or mechanical shock at elevated temperatures and pressures.

**Class 2.** Materials that in themselves are normally unstable and readily undergo violent chemical change but do not detonate. This class includes materials that can undergo chemical change with rapid release of energy at normal temperatures and pressures, and that
307.3 - 307.6 USE AND OCCUPANCY CLASSIFICATION

can undergo violent chemical change at elevated temperatures and pressures.

Class 1. Materials that in themselves are normally stable but which can become unstable at elevated temperatures and pressure.

WATER-REACTIVE MATERIAL. A material that explodes; violently reacts; produces flammable, toxic or other hazardous gases; or evolves enough heat to cause self-ignition or ignition of nearby combustibles upon exposure to water or moisture. Water-reactive materials are subdivided as follows:

Class 3. Materials that react explosively with water without requiring heat or confinement.

Class 2. Materials that may form potentially explosive mixtures with water.

Class 1. Materials that may react with water with some release of energy, but not violently.

307.3 Group H-1 structures. Buildings and structures that contain materials that pose a detonation hazard, shall be classified as Group H-1. Such materials shall include, but not be limited to:

Explosives
Division 1.1
Division 1.2
Division 1.3

Exception: Materials that are used and maintained in a form where either confinement or configuration will not elevate the hazard from a mass fire to mass explosion hazard shall be allowed in an H-2 occupancy.

Division 1.5
Division 1.6

Organic peroxides, unclassified detonable
Oxidizers, Class 4
Unstable (reactive) materials, Class 3 detonable and
Class 4
Detonable pyrophoric materials

307.4 Group H-2 structures. Buildings and structures that contain materials that present a deflagration hazard or a hazard from accelerated burning, shall be classified as Group H-2. Such materials shall include, but not be limited to:

Class I, or II or IIIA flammable or combustible liquids that are used or stored in normally open containers or systems, or in closed containers or systems pressurized at more than 15 pounds per square inch gauge (103.4 kPa).

Combustible dusts
Cryogenic liquids, flammable
Flammable gases
Organic peroxides, Class I
Oxidizers, Class 3, that are used or stored in normally open containers or systems, or in closed containers or systems pressurized at more than 15 pounds per square inch gauge (103.3 kPa).
Pyrophoric liquids, solids and gases, non-detonable
Unstable (reactive) materials, Class 3, non-detonable
Water-reactive materials, Class 3

307.5 Group H-3 structures. Buildings and structures that contain materials that readily support combustion or present a physical hazard, shall be classified as Group H-3. Such materials shall include but not be limited to:

Class I, II or IIIA flammable or combustible liquids that are used or stored in normally closed containers or systems pressurized at less than 15 pounds per square inch gauge (103.3 kPa).

Combustible fibers
Cryogenic liquids, oxidizing
Explosives
Consumer fireworks, 1.4G (Class C Common) Division 1.4. Restricted to articles, including articles packaged for shipment that are not regulated as an explosive under Bureau of Alcohol, Tobacco and Firearms regulations, or unpackaged articles used in process operations that do not propagate detonation or deflagration between articles.

Flammable solids
Organic peroxides, Class II and Class III
Oxidizers, Class 2
Oxidizers, Class 3, that are used or stored in normally closed containers or systems pressurized at less than 15 pounds per square inch gauge (103.3 kPa)
Oxidizing gases
Unstable (reactive) materials, Class 2
Water-reactive materials, Class 2

307.6 Group H-4 structures. Buildings and structures which contain materials that are health hazards shall be classified as Group H-4. Such materials shall include, but not be limited to:

Corrosives
Highly toxic materials
Toxic materials
### Table 307.7(1)

**Maximum Allowable Quantity per Control Area of Hazardous Materials Posing a Physical Hazard**

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>CLASS</th>
<th>GROUP WHEN THE MAXIMUM ALLOWABLE QUANTITY IS EXCEEDED</th>
<th>STORAGE</th>
<th>USE-CLOSED SYSTEMS</th>
<th>USE-OPEN SYSTEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Solid pounds (cubic feet)</td>
<td>Liquid gallons (pounds)</td>
<td>Gas (cubic feet)</td>
<td>Solid pounds (cubic feet)</td>
</tr>
<tr>
<td>Combustible liquid</td>
<td>II H-2 or H-3</td>
<td>N/A</td>
<td>120d, e</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>II A</td>
<td>H-2 or H-3</td>
<td>330d, e</td>
<td>N/A</td>
<td>330d</td>
</tr>
<tr>
<td></td>
<td>IIIB</td>
<td>N/A</td>
<td>13,200c, f</td>
<td>N/A</td>
<td>13,200c, f</td>
</tr>
<tr>
<td>Combustible fiber</td>
<td>Loose baled</td>
<td>H-3</td>
<td>(100) (1,000)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Consumer fireworks (Class C, Common)</td>
<td>1.4G</td>
<td>H-3</td>
<td>125d, e, i</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Cryogenics flammable</td>
<td>H-2</td>
<td>N/A</td>
<td>45d</td>
<td>N/A</td>
<td>45d</td>
</tr>
<tr>
<td>Cryogenics, oxidizing</td>
<td>N/A</td>
<td>H-3</td>
<td>45d</td>
<td>N/A</td>
<td>45d</td>
</tr>
<tr>
<td>Explosives</td>
<td>H-1</td>
<td>1e, g</td>
<td>(1)e, g</td>
<td>0.25d</td>
<td>(0.25)d</td>
</tr>
<tr>
<td>Flammable gas</td>
<td>Gaseous liquefied</td>
<td>H-2</td>
<td>N/A</td>
<td>30d, e</td>
<td>N/A</td>
</tr>
<tr>
<td>Flammable liquid</td>
<td>1A</td>
<td>H-2 or H-3</td>
<td>30d, e</td>
<td>N/A</td>
<td>30d</td>
</tr>
<tr>
<td></td>
<td>1B</td>
<td>H-2 or H-3</td>
<td>60d, e</td>
<td>N/A</td>
<td>60d</td>
</tr>
<tr>
<td></td>
<td>1C</td>
<td>H-2 or H-3</td>
<td>90d, e</td>
<td>N/A</td>
<td>90d</td>
</tr>
<tr>
<td>Combination flammable liquid (1A, 1B, 1C)</td>
<td>H-2 or H-3</td>
<td>N/A</td>
<td>120d, e, h</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Flammable solid</td>
<td>UD</td>
<td>H-1</td>
<td>15d, f</td>
<td>N/A</td>
<td>15d</td>
</tr>
<tr>
<td></td>
<td>I</td>
<td>H-2</td>
<td>5d, e</td>
<td>N/A</td>
<td>5d</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>H-3</td>
<td>50d, e</td>
<td>N/A</td>
<td>50d</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>H-3</td>
<td>125d, e</td>
<td>N/A</td>
<td>125d</td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td>H-3</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>V</td>
<td>H-3</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Organic peroxide</td>
<td>Oxidizer</td>
<td>1</td>
<td>H-1</td>
<td>1d, g</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>3k</td>
<td>H-2</td>
<td>10d, e</td>
<td>N/A</td>
<td>1d</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>H-3</td>
<td>250d, e</td>
<td>N/A</td>
<td>2d</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>H-3</td>
<td>4,000d, e, f</td>
<td>N/A</td>
<td>4,000d, e, f</td>
</tr>
<tr>
<td>Oxidizing gas</td>
<td>Gaseous liquefied</td>
<td>H-3</td>
<td>N/A</td>
<td>1,500d, e</td>
<td>N/A</td>
</tr>
<tr>
<td>Pyrophoric material</td>
<td>H-2</td>
<td>4e, g</td>
<td>(4)e, g</td>
<td>50d, e</td>
<td>1g</td>
</tr>
<tr>
<td>Unstable (reactive)</td>
<td>4</td>
<td>H-1 or H-2</td>
<td>1d, g</td>
<td>N/A</td>
<td>1d</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>H-3</td>
<td>(5)d, e</td>
<td>N/A</td>
<td>5d</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>H-3</td>
<td>(50)d, e</td>
<td>N/A</td>
<td>50d</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>H-3</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Water reactive</td>
<td>3</td>
<td>H-2</td>
<td>5d, e</td>
<td>N/A</td>
<td>5d</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>H-3</td>
<td>50d, e</td>
<td>N/A</td>
<td>50d</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>H-3</td>
<td>50d, e</td>
<td>N/A</td>
<td>50d</td>
</tr>
</tbody>
</table>
TABLE 307.7(2) - 307.7 USE AND OCCUPANCY CLASSIFICATION

MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIALS POSING A PHYSICAL HAZARD\(a, j\)

For SI: 1 cubic foot = 0.023 m\(^3\), 1 pound = 0.454 kg, 1 gallon = 3.785 L.
NL = Not Limited; N/A = Not Applicable

a. For use of control areas, see Section 414.2.
b. The aggregate quantity in use and storage shall not exceed the quantity listed for storage.
c. The quantities of alcoholic beverages in retail and wholesale sales occupancies shall not be limited providing the liquids are packaged in individual containers not exceeding 1.3 gallons. In retail and wholesale sales occupancies, the quantities of medicines, foodstuffs, consumer or industrial products, and cosmetics containing not more than 50 percent by volume of water-miscible liquids with the remainder of the solutions not being flammable shall not be limited, provided such materials are packaged in individual containers not exceeding 1.3 gallons.
d. Maximum quantities shall be increased 100 percent in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1. Where Note e also applies, the increase for both notes shall be applied accumulatively.
e. Quantities shall be increased 100 percent when stored in approved cabinets, gas cabinets, exhausted enclosures, or safety cans as specified in the Fire Code of New York State. Where Note d also applies, the increase for both notes shall be applied accumulatively.
f. The permitted quantities shall not be limited in a building equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
g. Permitted only in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
h. Containing not more than the maximum allowable quantity per control area of Class IA, Class IB or Class IC flammable liquids.
i. Inside a building, the maximum capacity of a combustible liquid storage system that is connected to a fuel-oil piping system shall be 660 gallons provided such system conforms to the Fire Code of New York State.
j. Quantities in parenthesis indicate quantity units in parenthesis at the head of each column.
k. A maximum quantity of 200 pounds of solid or 20 gallons of liquid Class 3 oxidizers is allowed when such materials are necessary for maintenance purposes, operation or sanitation of equipment. Storage containers and the manner of storage shall be approved.
l. Net weight of the pyrotechnic composition of the fireworks. Where the net weight of the pyrotechnic composition of the fireworks is not known, 25 percent of the gross weight of the fireworks including packaging shall be used.

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>STORAGE(d)</th>
<th>USE-CLOSED SYSTEMS(d)</th>
<th>USE-OPEN SYSTEMS(d)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Solid pounds(e, f)</td>
<td>Liquid gallons (pounds)(e, f)</td>
<td>Gas cubic feet(g)</td>
</tr>
<tr>
<td>Corrosive</td>
<td>5,000</td>
<td>500</td>
<td>810(g)</td>
</tr>
<tr>
<td>Highly toxic</td>
<td>10</td>
<td>(10)(^i)</td>
<td>20(^h)</td>
</tr>
<tr>
<td>Toxic</td>
<td>500</td>
<td>(500)(^i)</td>
<td>810(^f)</td>
</tr>
</tbody>
</table>

For SI: 1 cubic foot = 0.023 m\(^3\), 1 pound = 0.454 kg, 1 gallon = 3.785 L.

a. For use of control areas, see Section 414.2.
b. In retail and wholesale sales occupancies, the quantities of medicines, foodstuffs, consumer or industrial products, and cosmetics, containing not more than 50 percent by volume of water-miscible liquids and with the remainder of the solutions not being flammable, shall not be limited, provided that such materials are packaged in individual containers not exceeding 1.3 gallons.
c. For storage and display quantities in Group M and storage quantities in Group S occupancies complying with Section 414.2.4, see Table 414.2.4.
d. The aggregate quantity in use and storage shall not exceed the quantity listed for storage.
e. Quantities shall be increased 100 percent in buildings equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1. Where Note e also applies, the increase for both notes shall be applied accumulatively.
f. Quantities shall be increased 100 percent when stored in approved storage cabinets, gas cabinets, or exhausted enclosures as specified in the Fire Code of New York State. Where Note e also applies, the increase for both notes shall be applied accumulatively.
g. A single cylinder containing 150 pounds or less of anhydrous ammonia in a single control area in a nonsprinklered building shall be considered a maximum allowable quantity. Two cylinders, each containing 150 pounds or less in a single control area shall be considered a maximum allowable quantity provided the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
h. Allowed only when stored in approved exhausted gas cabinets or exhausted enclosures as specified in the Fire Code of New York State.
i. Quantities in parenthesis indicate quantity units in parenthesis at the head of each column.

307.7 Group H-5 structures. Semiconductor fabrication facilities and comparable research and development areas in which hazardous production materials (HPM) are used and the aggregate quantity of materials is in excess of those listed in Tables 307.7(1) and 307.7(2). Such facilities and areas shall be designed and constructed in accordance with Section 415.9.
307.8 Multiple hazards. Buildings and structures containing a material or materials representing hazards that are classified in one or more of Groups H-1, H-2, H-3 and H-4 shall conform to the code requirements for each of the occupancies so classified.

307.9 Exceptions. The following shall not be classified in Group H, but shall be classified in the occupancy that they most nearly resemble. Hazardous materials in any quantity shall conform to the requirements of this code, including Section 414, and the Fire Code of New York State.

1. Buildings and structures that contain not more than the maximum allowable quantities per control area of hazardous materials as shown in Tables 307.7(1) and 307.7(2), provided that such buildings are maintained in accordance with the Fire Code of New York State.

2. Buildings utilizing control areas in accordance with Section 414.2 that contain not more than the maximum allowable quantities per control area of hazardous materials as shown in Tables 307.7(1) and 307.7(2).

3. Buildings and structures occupied for the application of flammable finishes, provided that such buildings or areas conform to the requirements of Section 416 and NFPA 33, NFPA 34 and the Fire Code of New York State.


5. Closed systems housing flammable or combustible liquids or gases utilized for the operation of machinery or equipment.

6. Cleaning establishments that utilize combustible liquid solvents having a flash point of 140°F (60°C) or higher in closed systems employing equipment listed by an approved testing agency, provided that this occupancy is separated from all other areas of the building by 1-hour fire-resistance-rated fire barrier walls or horizontal assemblies or both.

7. Cleaning establishments that utilize a liquid solvent having a flash point at or above 200°F (93°C).

8. Liquor stores and distributors without bulk storage.

9. Refrigeration systems.

10. The storage or utilization of materials for agricultural purposes on the premises.

11. Stationary batteries utilized for facility emergency power, uninterrupted power supply or telecommunication facilities, provided that the batteries are provided with safety venting caps and that ventilation is provided in accordance with the Mechanical Code of New York State.

12. Corrosives shall not include personal or household products in their original packaging used in retail display or commonly used building materials.

13. Buildings and structures used for aerosol storage shall be classified as Group S-1, provided that such buildings conform to the requirements of NFPA 30B and the Fire Code of New York State.

14. Display and storage of nonflammable solid and nonflammable or noncombustible liquid hazardous materials in quantities not exceeding the maximum allowable quantity per control area in Group M or S occupancies complying with Section 414.2.4.

15. The storage of black powder, smokeless propellant and small arms primers in Groups M and R-3 and special industrial explosive devices in Groups B, F, M and S, provided such storage conforms to the quantity limits and requirements prescribed in the Fire Code of New York State.

SECTION 308
INSTITUTIONAL GROUP I

308.1 Institutional Group I. Institutional Group I occupancy includes, among others, the use of a building or structure, or a portion thereof, in which people have physical limitations because of health or age are harbored for medical treatment or other care or treatment, or in which people are detained for penal or correctional purposes or in which the liberty of the occupants is restricted. Institutional occupancies shall be classified as Group I-1, I-2, I-3 or I-4.

308.2 Group I-1. This occupancy shall include a building or part thereof housing more than 16 persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment that provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to, the following: residential board and care facilities, assisted living facilities, half-way houses, group homes, congregate care facilities, social rehabilitation facilities, alcohol and drug centers and convalescent facilities. A facility such as the above with five or fewer persons shall be classified as a Group R-3 or shall comply with the Residential Code of New York State in accordance with Section 101.2. A facility such as above, housing at least six and not more than 16 persons shall be classified as a Group R-4.

308.3 Group I-2. This occupancy shall include buildings and structures used for medical, surgical, psychiatric,
nursing or custodial care on a 24-hour basis of more than five persons who are not capable of self-preservation. This group shall include, but not be limited to the following: hospitals, nursing homes (both intermediate care facilities and skilled nursing facilities), mental hospitals and detoxification facilities. A facility such as the above with five or fewer persons shall be classified as a Group R-3 or shall comply with the Residential Code of New York State in accordance with Section 101.2.

**308.3.1 Child care facility.** A child care facility that provides care on a 24-hour basis to more than five children 2 1/2 years of age or less shall be classified as Group I-2.

**308.4 Group I-3.** This occupancy shall include buildings and structures that are inhabited by more than five persons who are under restraint or security. An I-3 occupancy is occupied by persons who are generally incapable of self-preservation due to security measures not under the occupants' control. This group shall include, but not be limited to, the following: prisons, jails, reformatories, detention centers, correctional centers and prerelease centers. Buildings of Group I-3 shall be classified as one of the occupancy conditions indicated in Sections 308.4.1 through 308.4.5 (see Section 408.1).

**308.4.1 Condition 1.** This occupancy condition shall include buildings in which free movement is allowed from sleeping areas, and other spaces where access or occupancy is permitted, to the exterior via means of egress without restraint. A Condition 1 facility is permitted to be constructed as Group R.

**308.4.2 Condition 2.** This occupancy condition shall include buildings in which free movement is allowed from sleeping areas and any other occupied smoke compartment to one or more other smoke compartments. Egress to the exterior is impeded by locked exits.

**308.4.3 Condition 3.** This occupancy condition shall include buildings in which free movement is allowed within individual smoke compartments, such as within a residential unit comprising individual sleeping units and group activity spaces, where egress is impeded by remote-controlled release of means of egress from such a smoke compartment to another smoke compartment.

**308.4.4 Condition 4.** This occupancy condition shall include buildings in which free movement is restricted from an occupied space. Remote-controlled release is provided to permit movement from sleeping units, activity spaces and other occupied areas within the smoke compartment to other smoke compartments.

**308.4.5 Condition 5.** This occupancy condition shall include buildings in which free movement is restricted from an occupied space. Staff-controlled manual release is provided to permit movement from sleeping units, activity spaces and other occupied areas within the smoke compartment to other smoke compartments.

**308.5 Group I-4, day care facilities.** This group shall include buildings and structures occupied by persons of any age who receive custodial care for less than 24 hours by individuals other than parents or guardians, relatives by blood, marriage, or adoption, and in a place other than the home of the person cared for. A facility such as the above with five or fewer persons shall be classified as a Group R-3 or shall comply with the Residential Code of New York State in accordance with Section 101.2. Places of worship during religious functions are not included.

**308.5.1 Adult care facility.** A facility that provides accommodations for less than 24 hours for more than five unrelated adults and that provides supervision and personal care services shall be classified as Group I-4.

Exception: Where the occupants are capable of responding to an emergency situation without physical assistance from the staff, the facility shall be classified as Group A-3.

**308.5.2 Child care facility.** A facility, that provides supervision and personal care on less than a 24-hour basis for more than five children 2 1/2 years of age or less shall be classified as Group I-4.

Exception: A child day care facility that provides care for more than five but no more than 100 children 2 1/2 years or less of age, when the rooms where such children are cared for are located on the level of exit discharge and each of these child care rooms has an exit door directly to the exterior, shall be classified as Group E.

**SECTION 309 MERCANTILE GROUP M**

**309.1 Mercantile Group M.** Mercantile Group M occupancy includes, among others, buildings and structures or a portion thereof, for the display and sale of merchandise, and involves stocks of goods, wares or merchandise incidental to such purposes and accessible to the public. Mercantile occupancies shall include, but not be limited to, the following: Department stores Drug stores Markets Motor vehicle service stations Retail or wholesale stores Sales rooms

**309.2 Quantity of hazardous materials.** The aggregate quantity of nonflammable solid and nonflammable or non-combustible liquid hazardous materials stored or displayed
in a single control area of a Group M occupancy shall not exceed the quantities in Table 414.2.4.

**SECTION 310**

**RESIDENTIAL GROUP R**

310.1 Residential Group R. Residential Group R includes, among others, the use of a building or structure, or a portion thereof, for sleeping purposes when not classified as an Institutional Group I. Residential occupancies shall include the following:

R-1 Residential occupancies where the occupants are primarily transient in nature including:
- Boarding houses (transient)
- Hotels (transient)
- Motels (transient)

R-2 Residential occupancies containing sleeping units or more than two dwelling units where the occupants are primarily permanent in nature, including:
- Apartment houses
- Boarding houses (not transient)
- Convents
- Dormitories
- Fraternities and sororities
- Monasteries
- Vacation timeshare properties
- Hotels (non transient)
- Motels (non transient)

R-3 Residential occupancies where the occupants are primarily permanent in nature and not classified as R-1, R-2, R-4 or I and where buildings do not contain more than two dwelling units, as applicable in Section 101.2. Adult and child care facilities that are within a single family home are permitted to comply with the **Residential Code of New York State** in accordance with Section 101.2.

R-4 Residential occupancies shall include buildings arranged for occupancy as Residential Care/Assisted Living Facilities including more than five but not more than 16 occupants, excluding staff.

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in this code, or shall comply with the **Residential Code of New York State** in accordance with Section 101.2.

310.2 Definitions. The following words and terms shall, for the purposes of this section and as used elsewhere in this code, have the meanings shown herein.

**BOARDING HOUSE.** A building arranged or used for lodging for compensation, with or without meals, and not occupied as a single-family unit.

**DORMITORY.** A space in a building where group sleeping accommodations are provided in one room, or in a series of closely associated rooms, for persons not members of the same family group, under joint occupancy and single management, as in college dormitories or fraternity houses.

**DEWLLING UNIT.** A single unit providing complete, independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation.

**PERSONAL CARE SERVICE.** The care of residents who do not require chronic or convalescent medical or nursing care. Personal care involves responsibility for the safety of the resident while inside the building.

**RESIDENTIAL CARE/ASSISTED LIVING FACILITIES.** A building or part thereof housing persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment that provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff. This classification shall include, but not be limited to, the following: residential board and care facilities, assisted living facilities, halfway houses, group homes, congregate care facilities, social rehabilitation facilities, alcohol and drug abuse centers and convalescent facilities.

310.3 Required dwelling unit and sleeping unit separation. Walls and floors separating dwelling units in the same building, or sleeping units in Group R-1 occupancies and in Group R-2 boarding house, dormitory, sorority and fraternity occupancies, shall be fire partitions or horizontal assemblies as required by Sections 708 and 710.

**SECTION 311**

**STORAGE GROUP S**

311.1 Storage Group S. Storage Group S occupancy includes among others, the use of a building or structure, or a portion thereof, for storage that is not classified as a hazardous occupancy.

311.2 Moderate-hazard storage, Group S-1. Buildings occupied for storage uses that are not classified as Group S-2 including but not limited to storage of the following:
- Aerosols, Level 2 and Level 3
- Aircraft repair hangars
- Bags, cloth, burlap and paper
- Bamboos and rattan
- Baskets
- Belting, canvas and leather
- Books and paper in rolls or packs
- Boots and shoes
- Buttons, including cloth covered, pearl or bone
Cardboard and cardboard boxes
Clothing, woolen wearing apparel
Cordage
Furniture
Furs
Glues, mucilage, pastes and size
Grains
Horns and combs, other than celluloid
Leather
Linoleum
Lumber
Motor vehicle repair garages complying with the maximum allowable quantities of hazardous materials listed in Table 307.7(1). (See Section 406.6.)
Petroleum warehouses for storage of lubricating oils with a flash point of 200°F (93°C) or higher
Photo engravings
Resilient flooring
Silks
Soaps
Sugar
Tires, bulk storage of Tobacco, cigars, cigarettes and snuff
Upholstery and mattresses
Wax candles

311.3 Low-hazard storage, Group S-2. Includes, among others, buildings used for the storage of noncombustible materials such as products on wood pallets or in paper cartons with or without single thickness divisions; or in paper wrappings. Such products may have a negligible amount of plastic trim such as knobs, handles or film wrapping. Storage uses include, but are only limited to, storage of the following:

Aircraft hangars
Asbestos
Beverages up to and including 12-percent alcohol in metal, glass or ceramic containers
Cement in bags
Chalk and crayons
Dairy products in nonwaxed coated paper containers
Dry cell batteries
Electrical coils
Electrical motors
Empty cans
Food products
Foods in noncombustible containers
Fresh fruits and vegetables in nonplastic trays or containers
Frozen foods
Glass
Glass bottles, empty or filled with noncombustible liquids
Gypsum board
Inert pigments
Ivory

Meats
Metal cabinets
Metal desks with plastic tops and trim
Metal parts
Metals
Mirrors
Oil-filled and other types of distribution transformers
Parking garages, open or enclosed
Porcelain and pottery
Stoves
Talc and soapstones
Washers and dryers

SECTION 312
UTILITY AND MISCELLANEOUS GROUP U

312.1 General. Buildings and structures of an accessory character and miscellaneous structures not classified in any specific occupancy shall be constructed, equipped and maintained to conform to the requirements of this code commensurate with the fire and life hazard incidental to their occupancy. Group U shall include, but not be limited to, the following:

Agricultural buildings
Aircraft hangars, accessory to a one- or two-family residence (See Section 412.3)
Barns
Carports
Fences more than 6 feet (1829 mm) high
Grain silos, accessory to a residential occupancy
Greenhouses
Livestock shelters
Private garages
Retaining walls
Sheds
Stables
Towers
CHAPTER 4
SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY

SECTION 401
SCOPE

401.1 Detailed use and occupancy requirements. In addition to the occupancy and construction requirements in this code, the provisions of this chapter apply to the special uses and occupancies described herein.

SECTION 402
COVERED MALL BUILDINGS

402.1 Scope. The provisions of this section shall apply to buildings or structures defined herein as covered mall buildings not exceeding three floor levels at any point nor more than three stories above grade. Except as specifically required by this section, covered mall buildings shall meet applicable provisions of this code.

Exceptions:

1. Foyers and lobbies of Groups B, R-1 and R-2 are not required to comply with this section.
2. Buildings need not comply with the provisions of this section where they totally comply with other applicable provisions of this code.

402.2 Definitions. The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

ANCHOR BUILDING. An exterior perimeter building of a group other than H having direct access to a covered mall building but having required means of egress independent of the mall.

COVERED MALL BUILDING. A single building enclosing a number of tenants and occupants such as retail stores, drinking and dining establishments, entertainment and amusement facilities, passenger transportation terminals, offices, and other similar uses wherein two or more tenants have a main entrance into one or more malls. For the purpose of this chapter, anchor buildings shall not be considered as a part of the covered mall building.

FOOD COURT. A public seating area located in the mall that serves adjacent food preparation tenant spaces.

GROSS LEASABLE AREA. The total floor area designed for tenant occupancy and exclusive use. The area of tenant occupancy is measured from the centerlines of joint partitions to the outside of the tenant walls. All tenant areas, including areas used for storage, shall be included in calculating gross leasable area.

MALL. A roofed or covered common pedestrian area within a covered mall building that serves as access for two or more tenants and not to exceed three levels that are open to each other.

402.3 Lease plan. Each covered mall building owner shall provide both the building and fire departments with a lease plan showing the location of each occupancy and its exits after the certificate of occupancy has been issued. No modifications or changes in occupancy or use shall be made from that shown on the lease plan without prior approval of the code enforcement official.

402.4 Means of egress. Each tenant space and the covered mall building shall be provided with means of egress as required by this section and this code. Where there is a conflict between the requirements of this code and the requirements of this section, the requirements of this section shall apply.

402.4.1 Determination of occupant load. The occupant load permitted in any individual tenant space in a covered mall building shall be determined as required by this code. Means of egress requirements for individual tenant spaces shall be based on the occupant load thus determined.

402.4.1.1 Occupant formula. In determining required means of egress of the mall, the number of occupants for whom means of egress are to be provided shall be based on gross leasable area of the covered mall building (excluding anchor buildings) and the occupant load factor as determined by the following equation.

\[ OLF = (0.00007) (GLA) + 25 \]  
(Equation 4-1)

where:

\[ OLF \] = The occupant load factor (square feet per person).

\[ GLA \] = The gross leasable area (square feet).

402.4.1.2 OLF range. The occupant load factor \( (OLF) \) is not required to be less than 30 and shall not exceed 50.

402.4.1.3 Anchor buildings. The occupant load of anchor buildings opening into the mall shall not be included in computing the total number of occupants for the mall.

402.4.1.4 Food courts. The occupant load of a food court shall be determined in accordance with Section