Dominic on Veneto

TABLE OF CONTENTS

ARTICLE 1 AI	DMINISTRATION AND ENFORCEMENT	1-1
Section		
100.0	Scope	
101.0	Matters covered	
102.0	Ordinary repairs	
103.0	Installation of service equipment	
104.0	Maintenance	
105.0	Change in existing use	
106.0	Alterations and repairs	
107.0	Building department	
108.0	Duties and powers of the building official and	
	the state inspector	
Table 1-	1 Required minimum inspections and certification	
14510 1	for specified use groups	
109.0	Rules and regulations	
110.0	Variances	
111.0	Inspection	
112.0	Right of entry	
113.0	Application for permit	
114.0	Permits	
115.0	Conditions of permit	
116.0	Demolition of buildings	
117.0	Removal of buildings	
118.0	Fees	
119.0	Fee computation	
120.0	Certificate of use and occupancy	
121.0	Posting buildings	
122.0	Violations	
123.0	Stop-work order	
124.0	Unsafe buildings - survey board	
125.0	Emergency measures	
126.0	Board of appeals	
127.0	Construction industry safety board	
128.0	Controlled construction	
129.0	Validity	
ARTICLE 2 DE	FINITIONS AND CLASSIFICATIONS	2-1
Section		
200.0	Scope	
201.0	General Definitions	
202.0	Use group classification	
203.0	Use group A, high hazard buildings	
Table 2-	1 Use group A, high hazard uses	
204.0	Use group B, storage buildings	
Table 2-	2 Use group B-1, storage uses - moderate hazard	
Table 2-	3 Use group B-2, storage uses - low hazard	
205.0	Use group C, mercantile buildings	
206.0	Use group D, industrial buildings	

ARTICLE 2 (cont.)

Section	
	Use group D, industrial uses
207.0	Use group E, business buildings
208.0	Use group F, assembly buildings
209.0	Use group H, institutional buildings
210.0	Use group L, residential buildings Lobanag
211.0	Use group M, miscellaneous uses
212.0	Doubtful use classification
213.0	
214.0	Construction classification
215.0	Type 1, fireproof construction
216.0	Type 2, noncombustible construction
217.0	
218.0	
Table 2-	5 Fireresistance ratings of structural elements
	in hours
Table 2-	6 Height limitations and area limitations of one
	story buildings facing on one street or public
	space not less than thirty (30) feet wide
OTE 3 OF	NERAL BUILDING LIMITATIONS
CLE 3 GE	NEVAT DATING PINTIVITONS

3-1

ARTIC

Section 300.0 Scope Fire district subdivisions 301.0 General fire district provisions 302.0 Restrictions of fire district No. 1 303.0 Restrictions of fire district No. 2 304.0 Restrictions outside fire limits 305.0 Existing buildings 306.0 General area and height limitations 307.0 Table 3-1 Percent reduction in the area limits of Table 2-6 308.0 Area exceptions Unlimited areas 309.0 Height exceptions 310.0 Street encroachments 311.0 Permissible street projections 312.0 Permissible yard and court encroachments 313.0 Special and temporary projections 314.0 315.0 Awnings and canopies Subdivision of attic spaces 316.0 Temporary structures 317.0

Dominic M. Venetor TABLE OF CONTENTS

ARTICLE 4 SPECIAL USE AND OCCUPANCY REQUIREMENTS

Section 400.0 Scope 401.0 Definitions 402.0 Explosion Hazards 403.0 Volatile Flammables Table 4-1 Capacity of outside underground tanks for volatile flammable liquids Table 4-2 Capacity of outside aboveground tanks for volatile flammable liquids 404.0 Existing buildings 405.0 Liquefied petroleum gases 406.0 Pyroxylin plastics Table 4-3 Exposure distance for pyroxylin storage buildings 407.0 Use and storage of flammable film 408.0 Use and storage of combustible fibers 409.0 Combustible dusts, grain processing and storage 410.0 Paint and spray booths 411.0 Dry cleaning establishments 412.0 Private garages 413.0 Public garages 414.0 Motor fuel service stations 415.0 Motor vehicle repair shops 416.0 Places of public assembly Public assembly other than theatres 417.0 418.0 Amusement parks 419.0 Stadiums and grandstands 420.0 Tents and other temporary structures 421.0 Radio and television towers 422.0 Swimming pools 423.0 Open parking structures Table 4-4 Height and limitation for open parking structures 424.0 Group residence in the Commonwealth of Massachusetts 425.0 Covered malls 426.0 Nursing homes, rest homes, charitable homes for the aged, convalescent homes and hospitals 427.0 Day care centers (H-2)

ARTICLE 5 LIGHT AND VENTILATION

Section

5-1

4-1

Decention	
500.0	Scope
501.0	Definitions
502.0	Plans and specifications
503.0	Standards of natural light
504.0	Standards of natural ventilation
505.0	Ventilation of institutional buildings for forced detention
506.0	Existing buildings

Reference standards for article 4

ARTICLE 5 (cont.)

Section	
507.0	Standards of artificial light
508.0	Standards of mechanical ventilation
Fig. 5-1	Minimum outside air requirements for ventilation
_	and air-conditioning
509.0	Ventilation of special spaces
510.0	Ventilation of shafts other than elevator and dumbwaiter hoistways
511.0	Industrial buildings with unpierced enclosure wall
511.0	Courts
513.0	Obstruction of courts and yards
514.0	Fire emergency ventilating system
515.0	Fire ventilation of open wells
	Window cleaning safeguards
516.0	Reference standards for article 5
	Reference standards for afficie 5
ARTICLE 6 ME	ANS OF FORESS 6-1
AKIICLE O ME	AND OF EGRESS
Section	
600.0	Scope
601.0	Definitions
602.0	Plans and specifications
603.0	Use and occupancy requirements
604.0	Air-conditioned buildings
605.0	Existing buildings
606.0	Occupancy load
	1 Floor area allowance per occupant
	Types and location of exitways
607.0	2 Maximum length of exitway access travel (feet)
608.0	Capacity of exits
	3 Capacity of exits 3 Capacity per unit egress width
609.0	Number of exitways
610.0	Exitway access passageways and corridors
	Grade passageways and lobbies used as an exitway
611.0	element
612.0	Means of egress doorways
613.0	Revolving exitway doors
Table 6-	-4 Minimum clear doorway widths
614.0	Horizontal exits
615.0	Exitway ramps
616.0	Interior exitway stairways
	-5 Door construction
Table 6-	-6 Minimum standards for stairway and enclosure con- struction
617.0	Access to roof
618.0	Smokeproof stairway enclosure
619.0	Exterior exitway stairways
620.0	Moving exitway stairways
621.0	Fire escapes
622.0	Slidescapes
623.0	Exitway signs and lights
624.0	Means of egress lighting
044.0	inding of ceross treintrine

Reference standards for article 6

Dominic m. Veneta

TABLE OF CONTENTS

ARTICLE 7 STRUCTURAL AND FOUNDATION LOADS AND STRESSES

7-1

Section	
700.0	Scope
701.0	Definition
702.0	Design safe load
702.0	Test safe load
704.0	
	Design live load
705.0	Design dead load
706.0	Existing buildings
707.0	Unit live loads
Table /-1	Minimum uniformly distributed live loads
708.0	Concentrated loads
	Concentrated loads
709.0	Impact loads
710.0	Special loads
711.0	Roof loads
	Minimum roof live loads
	Snow load
713.0	
714.0	Wind on vertical surfaces
715.0	Wind load on roofs
716.0	Wind loads on signs, tanks and radio towers, chimneys
	and other building appurtenances
717.0	Overturning and sliding
718.0	Earthquake load
719.0	Combined loading
720.0	Live load reduction
721.0	Allowable working stresses
722.0	Light weight metals
723.0	Bearing value of soils
Table 7-4	Allowable bearing pressures of foundation materials
724.0	Subsurface explorations
725.0	Bearing test and settlement analyses
726.0	Allowable foundation pressure
727.0	Spread foundations
728.0	Footing design
729.0	Timber footings
730.0	Steel grillages
731.0	Unreinforced concrete footings
732.0	Masonry unit footings
733.0	Reinforced concrete footings
734.0	Floating foundations
735.0	Pile foundations
736.0	Corrosion protection
737.0	Allowable pile loads
738.0	Timber piles
739.0	Precast concrete piles
740.0	Cast-in-place concrete piles
741.0	Concrete filled pipe piles
	Concrete-filled pipe with steel core
/ 74 • U	(drilled-in-caissons)
	(gritted_tH_Categorie)

ARTICLE 7 (cont	·.)	7-1
Fig. 7-1 Fig. 7-2 Fig. 7-3 Fig. 7-4 Fig. 7-5	Structural steel piles Composite piles Special piles and caissons Lateral support Foundation piers Design requirements for floodplains Map of design snow load Snow load distributions and coefficients Map of design wind load zones Glass thickness Reference standards for article 7	
ARTICLE 8 Part	A MATERIAL AND TESTS	8-1
Section 800.0 801.0 802.0 803.0 804.0 805.0 806.0 807.0 808.0 810.0 811.0 812.0 813.0 814.0 815.0 816.0	Scope Definitions Basic classification of construction materia Tests Conditions of acceptance Approvals Masonry construction units Brick units Structural clay tile units Glazed masonry units Concrete units Gypsum units Structural glass block units Architectural terra cotta Natural stone Cast stone Mortar for masonry Concrete aggregates	ls
818.0 819.0 820.0 821.0 822.0 823.0 824.0	Ready-mix concrete Structural wood glues Interior lathing and plastering Exterior lathing and stucco Plastering materials Plaster bases Fiber boards Plywood Wellboards and shoothing	

Dominic m. Veneto

TABLE OF CONTENTS

ARTICLE 8 Part B STEEL, MASONRY, CONCRETE, GYPSUM AND LUMBER CONSTRUCTION

Section	
827.0	Structural steel construction
828.0	Formed steel construction
829.0	Open web steel joists
830.0	Reinforcing steel
831.0	Cast steel construction
832.0	Cast iron construction
833.0	Special steels
834.0	Light weight metal alloys
835.0	Masonry wall construction
836.0	Bonding of walls
837.0	Lateral bracing of walls
838.0	Chases and recesses in bearing walls
839.0	Corbeled and projected masonry
840.0	Bearing on hollow unit walls
841.0	Plain concrete
842.0	Reinforced concrete
843.0	Structural cinder concrete
844.0	Short span floor filling
845.0	Concrete-filled pipe columns
846.0	Pneumatic concrete
847.0	Minimum concrete dimensions
848.0	Reinforced Gypsum concrete
849.0	Reinforced brickwork
850.0	Reinforced hollow block construction
851.0	Lumber and timber construction
852.0	Heavy timber type construction
853.0	Wood frame construction
854.0	Stress skin panels
855.0	Structural glued laminated timber and built-up
	wood construction

ARTICLE 8 Part C BUILDING ENCLOSURES, WALLS AND WALL THICKNESS

Section	
856.0	Enclosure walls
857.0	Protection of wall openings
Table 8	-l Requirements for glass panels subject to impact loads
858.0	Fire access panels
859.0	Structural glass block walls
860.0	Wall facings and veneers
861.0	Structural glass veneers
862.0	Thin stone and tile veneers
863.0	Metal veneers
864.0	Plastic veneers
865.0	Thickness of solid masonry walls

ARTICLE 8 Part C (cont.) Section Thickness of panel walls 866.0 Thickness of parapet walls 867.0 Foundation walls 868.0 Retaining walls 869.0 870.0 Isolated piers Waterproofing 871.0 872.0 Ratproofing Protection against decay and termites 873.0 Fire protection and firestopping 874.0 Thermal insulating materials 875.0 Reference standards for article 8 - Part A, B, C 9-1 ARTICLE 9 FIRERESISTIVE CONSTRUCTION REQUIREMENTS Section 900.0 Scope Definitions 901.0 Fire hazard classification 902.0 Fireresistance tests 903.0 Table 9-1 Fire grading of use groups 904.0 Flameresistance tests Table 9-2 Flame-spread rating Special fireresistance requirements 905.0 Enclosure walls 906.0 Fire wall and party walls 907.0 908.0 Fire wall openings Fire partitions 909.0 Fireresistive partitions 910.0 Vertical shafts and hoistways 911.0 912.0 Wall lintels Beams and girders 913.0 914.0 Columns 915.0 **Trusses** Exterior opening protectives 916.0 Fire doors 917.0 918.0 Fire windows and shutters 919.0 Wired glass Fireresistive requirements for plaster 920.0 921.0 Firestopping Interior finish and trim 922.0 Table 9-3 Interior finish requirements Application of interior finish 923.0 Combustible materials permitted in floor construc-924.0 tion of Type 1 and Type 2 buildings Decorative material restrictions 925.0 Exterior trim restrictions 926.0 927.0 Roof structures 928.0 Roof coverings

Reference standards for article 9

Dominic m. Veneto

TABLE OF CONTENTS

ARTICLE 10	CHIMNEYS,	FLUES	AND	VENT	PIPES
------------	-----------	-------	-----	------	-------

10-1

Section 1000.0	Sana
	Scope
1001.0	Definitions
1002.0	Plans and specifications
1003.0	Performance test and acceptance criteria
1004.0	Kinds of chimneys
1005.0	Appliances requiring chimneys
1006.0	Existing buildings
1007.0	Factory-built chimneys
1008.0	Masonry chimneys
1009.0	Metal chimneys
1010.0	Chimney connector (smokepipes)
1011.0	Vent systems
1012.0	Fireplaces
1013.0	Cupola chimneys
1014.0	Fuel-fired incinerator chimneys
1015.0	Miscellaneous incinerator flues
1016.0	Duct and pipe shafts
1017.0	Construction of metal ducts and vents
Tb1. 10-1	Metal duct and vent construction, other than dwellings
Tb1. 10-2	Ducts for dwellings
1018.0	Spark arrestors
	Reference standards for article 10
	The second secon

ARTICLE 11 HEATING EQUIPMENT AND APPLIANCES - MOUNTING, CLEARANCES AND CONNECTIONS 11-1

Section	
1100.0	Scope
1101.0	Definitions
1102.0	Plans and specifications
1103.0	Boiler and unfired pressure vessels
1104.0	Smoke abatement
1105.0	Industrial heating appliance classification
1106.0	Fireresistance requirements for heat appliance
	foundations
1107.0	Mounting exceptions for heat appliances
1108.0	Mounting exceptions for house heating appliances
1109.0	Mounting exceptions for restaurant appliances
1110.0	Mounting exceptions for domestic appliances
1111.0	Side and top clearances
1112.0	Clearance exceptions
Tbl. 11-1	Reduced wall and ceiling clearances
1113.0	Boiler rooms
1114.0	Ash pits and bins
1115.0	Steam and hot water pipes
1116.0	Heating panels
1117.0	Hot and cold air ducts
1118.0	Warm air heating systems

ARTICLE 11 (cont.) Section Central recirculating systems 1119.0 Flammable vapor systems 1120.0 Unit heaters 1121.0 Floor furnaces 1122.0 Industrial furnaces and power boilers 1123.0 Unfired pressure vessels 1124.0 Restaurant cooking appliances 1125.0 Hot water supply heaters 1126.0 Oil burners 1127.0 1128.0 Drying rooms Non-fuel-fired incinerators 1129.0 Fuel-fired incinerators 1130.0 Miscellaneous refuse incinerators 1131.0 Refuse chutes 1132.0 Refuse vaults 1133.0 1134.0 Blower and exhaust systems Tbl. 11-2 Thickness of steel sheet exhaust ducts in U.S. standard gage Tb1. 11-3 Clearance of exhaust ducts in inches Dust, stock and refuse conveyor systems 1135.0 Reference standards for article 11 ARTICLE 12 FIRE PROTECTION AND FIRE-EXTINGUISHING EQUIPMENT 12 - 1Section 1200.0 Scope 1201.0 Definitions Plans and specifications 1202.0 Acceptance tests 1203.0 Periodic inspections and tests 1204.0 Existing buildings and fire service equipment 1205.0 Wet standpipe requirements 1206.0 Tbl. 12-1 Conditions requiring standpipes Tb1. 12-2 Minimum standpipe size Standpipe water supplies 1207.0 1208.0 Dry standpipe fire lines First-aid standpipe fire lines 1209.0 Horizontal fire lines 1210.0 Pier and wharf protection 1211.0 Automatic sprinkler systems 1212.0

Tbl. 12-3 Conditions requiring sprinklers Sprinkler water supplies

Dry pipe automatic systems

Special fire protection

Fire alarm systems

Non-automatic sprinkler systems

Manual fire-extinguishing equipment

Reference standards for article 12

1213.0

1214.0

1215.0 1216.0

1217.0

1218.0

Dominic M. Veneto TABLE OF CONTENTS

ARTICLE 13	PRECAUTIONS DURING BUILDING OPERATIONS	13-1
Section 1300.0 1301.0 1302.0 1304.0 1305.0 1306.0 1309.0 1310.0 1311.0 1312.0 1313.0 1314.0 1315.0	Scope Plans, specifications and special permits Tests Inspection Existing buildings Protection of public and workmen Excavations Regulation of lots Retaining walls and partition fences Storage of materials Removal of waste material Protection of adjoining property Scaffolds Stairways and ladders Fire hazards	1/ 1
		14-1
Section 1400.0 1401.0 1402.0 1403.0 1404.0 1405.0 1406.0 1407.0 1408.0 1409.0 1410.0 1411.0 1412.0 1413.0 1414.0	Scope Definitions Plans, specifications and permits Exemptions Unsafe and unlawful signs Maintenance and inspection Existing signs Registration and identification General requirements for all signs Ground signs Roof signs Wall signs Projecting signs Marquee signs	
ARTICLE 15	ELECTRICAL WIRING AND FIXTURES	15-1
ARTICLE 16	ELEVATOR, DUMBWAITER, ESCALATOR, AND MOVING WALK REGULATIONS	16-1
ARTICLE 17	PLUMBING, DRAINAGE AND GAS PIPING	17-1

	AIR CONDITIONING, REFRIGERATION AND MECHANICAL VENTILATION 18-1
Section	
1800.0	Scope
1801.0	
1802.0	
1803.0	
1804.0	Inspections and certificates
1805.0	
1806.0	Existing buildings and installations
1807.0	
1808.0	
1809.0	
1810.0	
1811.0	Inlet and outlet openings
1812.0	Ducts, linings and coverings
	Reference standards for article 18
ARTICLE 19	MANUFACTURED BUILDINGS, BUILDING COMPONENTS AND MOBILE HOMES 19-1
Section	
1900.0	
	Definitions
	Certification
	Reciprocity
1904.0	Inspection
1905.0	Mobile homes
1906.0	
1907.0	Suspension and revocation of certification
1908.0	
ARTICLE 20	LIGHT-TRANSMITTING PLASTIC CONSTRUCTION 20-1
Sectio	
2000.0	-
2001.0	
2002.0	
2003.0	
2004.0	Exterior wall panels
	0-1 Area limitation and separation requirements for plastic wall panels
2005.0	
2006.0	
2007.0	_
2008.0	
2009.0	Bathroom accessories Reference standards for article 20

Dominie M. Venet TABLE OF CONTENTS

APPENDICES

A-1

APPENDIX	Α	ACCREDITED	AUTHORITATIVE	AGENCIES
THE LUMBER	Δ.	VCCVTDTIED	MOTHORITATIAN	AGENCII

- APPENDIX B ACCEPTED ENGINEERING PRACTICE
- APPENDIX C MATERIAL STANDARDS
- APPENDIX D STRUCTURAL UNIT TEST STANDARDS
- APPENDIX E STRUCTURAL ASSEMBLY TEST STANDARDS
- APPENDIX F DURABILITY TEST STANDARDS
- APPENDIX G FIRE TEST AND FLAME SPREAD TEST STANDARDS
- APPENDIX H FIRE PROTECTION STANDARDS
- APPENDIX I UNIT DESIGN DEAD LOADS FOR STRUCTURAL DESIGN PURPOSES
- APPENDIX J UNIT WORKING STRESSES FOR ORDINARY MATERIALS
- APPENDIX K SPECIALIZED CODES
- APPENDIX L LIST OF AGENCIES AND DEPARTMENTS ON THE TECHNICAL CODE COUNCIL

		•			
	•				
		•			