780 CMR: STATE BOARD OF BUILDING REGULATIONS AND STANDARDS

TABLE OF CONTENTS

TABLE OF CONTENTS - continued

160	3 Construction Documents		W 191	1 Minimum Slab Provisions
1604	General Design Requirements	381	692, 191	2 Reserved
1605	Ecad Combinations	390	191	3 Manchorage to Concrete Manager 1, 200 468 0
1606	Dead Loads	391	191	4 Shotcrete
1607	Live Loads	391	191	5 Reinforced Gypsum Concrete
1608	Snow Loads	396		6 Concrete-Filled Pipe Columns
	Wind Loads			24,000
	Lateral Soil and Hydrostatic Loads			CMR 20.00 ALUMINUM
	Rain Loads		Sect	ion ^{, free} t, the second
1612	Flood Loads 2128 of antereot inter-		200	l General
1613	Earthquake Loads Purpose	400	200	2 ⁻⁷ Materials
1614	Earthquake Loads - General	401		Change and Alexandree and Alexandree and
1615	Earthquake Loads - Modifications to	$0 \le 0$	780	CMR 21.00 MASONRY
a contraction of	Applicable Provisions of ASCE 7			ion ^{ana}
1616				General 473
1624	In-situ Load Tests			Definitions and Notations
1625	Alternative Test Procedure	416	2103	
1626		417	2104	
1627	Preconstruction Load Tests		2105	
	(1992)		2106	
780 (CMR 17.00 QUALITY ASSURANCE D	URING	2107	しょうせい しんだいがく かくてい しょうしょう 御知 ひんてい しょうきょう ひょう かがく たいしょう
	CONSTRUCTION	A MACH		Resisting System
Secti			2108	
1701	General	419	2109	and 2110 Reserved
1702	Definitions	420	2111	
1703	Quality Assurance for Structural Componen		2112	Masonry Heaters
	and Assemblies		2112	Masonry Heaters
1704	Altonia di Stati di S			40J
	Construction			CMR 22.00 STEEL
1705	Quality Assurance for Sprayed Fire Resistiv		Section	
المراجع المراجع المراجع المراجع المراجع	Materials	426	2201	General
1706	Quality Assurance for Smoke Control Syster		2202	Definitions and Nomenclature
1707	Quality Assurance for Stairs and Railings		2202	Identification
1708	Quality Assurance for Non-structural		2204	Decerved Schull Schule Street 119 400 80
		···· 427	2205	Structural Steel
			2206	Steel Joists
780 C	MR 18.00 FOUNDATIONS AND RETA	INING	2207	Steel Joists
	WALLS	ains()	2208	Steel Storage Racks
Sectio	n n	12.13	2209	- 2014년 17월 26일 - 17일, 18일 - 18일 - 18일, 18일, 18일, 18일, 18일, 18일, 18일, 18일,
1801	General	429	2210	Cold-formed Steel
1802	Foundation and Soils Investigations		2211	Cold-formed Steel Light-Framed Shear Walls . 495
1803	Excavation, Grading and Fill		2212	Cast-steel Construction
1804	Allowable Load-bearing Values		12.6	
1805	Footings and Mat Foundations	436	780 (MR 23.00 WOOD
1806	Foundation Walls and Retaining Walls	438	Sectio	n - 「「「「」」」、「」、「」、「」、「」、「」、「」、「」、「」、「」、「」、「」
1807	Dampproofing Waterproofing and		2301	"General
	Groundwater Control	442	2301	
1808	Groundwater Control Pier and Pile Foundations	. 444	2302	Definitions
1809	Driven Pile Foundations	452	2303	
1810	Cast-in-Place Concrete Pile Foundations	455	2304	General Construction Requirements
1811	Composite Piles	462	~JUJ	Force-Resisting Systems
1812	Pier Foundations	462	2306	Capacity and Construction of Lateral Error
	Composite Piles	Transa A	<i>4.</i> 00	Capacity and Construction of Lateral Force
780 CM	AR 19.00 CONCRETE	14:47年 月	ÔN,	Resisting Systems
Section			700 00	그는 영상에서 감독을 가지 않는 것을 수 없습니다. 한 것을 가지 않는 것을 하는 것을 수 있다. 이는 것을 수 있는 것을 것을 수 있는 것을 수 있는 것을 것을 수 있는 것을 것을 수 있는 것을 수 있다. 것을 것 같이 않는 것을 것 같이 않는 것을 수 있는 것 같이 않는 것 않는 것 같이 않는 것 않는 것 않는 것 같이 않는 것 같이 않는 것 않는
1901	General	A65	2. 4 Million - Million	MR 24.00 GLASS AND GLAZING
1902	through 1907 Reserved	465	Section	
1902	through 1907 Reserved Modifications to ACI 318		2401	General
1908	Moundations to ACI 518	405	2402	Deminuons
1910	Reserved Live Constant of the second	401 167	2403	General Requirements for Glass 500.33
		. 467		
승규는 영상		ALC: NO.	Saltara	이 물질을 수 있는 것이 같은 것이 있는 것이 없는 것이 없는 것이 없다.

780 CMR: STATE BOARD OF BUILDING REGULATIONS AND STANDARDS

THE MASSACHUSETTS STATE BUILDING CODE

TABLE OF CONTENTS - continued

일 ^ 한 방법은 방법은 소설을 가지 않는 것이 있는 것 같은 것 같	슬날날 것이다. 옷에는 그 너희 안 줄 들었다. 감기에 가져 있는 것
	100 780 CMR 31.00 SPECIAL CONSTRUCTION
on Glass	
	(9 3101 (General
	3102 Membrane Structures
	3103 Temporary Structures
	1994 3104 Pedestrian Walkways and Tunnels . Action 500.73
	3105 Awnings and Canopies
	106 Marquees
780 CMR 25.00 GYPSUM BOARD AND PLASTER	3107 Signs 500.75
Section	1101: 3108 And Radio and Television Towers
2501 General	3109 Swimming Pool Enclosures and activity and a Claring
2502 Definitions 500.47	Safety Devices Annotation March 191 500.75 181
2503 Inspection	3110 Temporary Emergency Uses
2504 Vertical and Horizontal Assemblies 500.47	3111 Temporary Overnight Shelters
2505 Shear Wall Construction	ing statistical states and the second of the second states
2506 Gypsum Board Materials	780 CMR 32.00 ENCROACHMENTS INTO THE
2507 Lathing and Plastering	PUBLIC RIGHT-OF-WAY
2508 Gypsum Construction	Section
2509 Gypsum Board in Showers and	3201 General 500.77
	3202 Encroachments
2510 Lathing and Furring for Cement	
Plaster (Stucco)	780 CMR 33.00 SAFEGUARDS DURING
2511 Interior Plaster	
2512 Exterior Plaster	
2513 Exposed Aggregate Plaster 500.52	3301 General
이 같은 것은 것 같아? 물람들이 것 같아? 이 집에 가지 않는 것 같아? 이 가지 않는 것 같아? 가지 않는 것	3302 Construction Safeguards
780 CMR 26.00 PLASTIC	3303 Demolition
780 CMR 26.00 PLASTIC	3304 Site Work
2601 General	그는 것 같은 것 같
2602 Definitions	양 수업적인 이 것을 가장 있는 것을 많은 것을 하는 것을 수 있는 것은 것이 있는 것이 있다. 이렇게 다음 것은 것은 것은 것을 가지 않는 것이 있는 것이 있는 것이 있는 것이 있다.
2603 Foam Plastic Insulation	
イン・アリア 希望解する かいしょうえん しゅうごう しんしんしょう しょうしょうしん しね 超振行 読み行う	이 승규들 수요? 이 이 이 이 방법을 위해 있는 것 같아요. 그 같이 한 것 같아요. 이 가지 한 것에서 이 것 것 같아요. 이 이 가지 않는 것 같아요. 한 것 같아요. 이 이 것 같아요. 이 이 가지 않는 것 같아요.
2604 Interior Finish and Trim 500,56 2605 Plastic Veneer 500,57	
2606 Light-Transmitting Plastics 500.57	· 동물 수학 등 · · · · · · · · · · · · · · · · · ·
2607 Light-Transmitting Plastic Wall Panels 500.57	
2608 Light-Transmitting Plastic Glazing 500.59	이 집을 사람이 있는 것을 가장했다. 그는 것은 것은 것을 알려야 하는 것은 것은 것은 것은 것을 가지 않는 것을 하는 것을 수 있다. 것을 하는 것을 하는 것을 하는 것을 수 있다. 것을 수 있는 것을 하는 것을 하는 것을 수 있다. 것을 하는 것을 수 있는 것을 수 있다. 것을 수 있는 것을 수 있다. 것을 수 있는 것을 것을 수 있는 것을 수 있는 것을 것을 수 있는 것을 것을 수 있는 것을 것을 것을 것을 수 있는 것을 수 있는 것을 수 있는 것을 수 있는 것을 것을 것을 것을 수 있는 것을 수 있는 것을 것을 것을 것을 것을 것을 수 있는 것을
2609 Light-Transmitting Plastic Roof Panels	
2610 Light-Transmitting Plastic Kylight Glazing, 500.60	313 Design Loads on Structures During
2611 Light-Transmitting Plastic Interior Signs 500.61	· "请你的是你的你,你们的你们,你们的你们的你?""你们,你们的你们,你们的你们,你们就是你们是你的事件的?""你们,你们不知道你?""你们,你们不知道你们,你
2011 Light-Hansimung Flastic Interior Signs 500.01	- 영양에는 물리는 것은 것은 것을 알고 있는 것을 많이 있는 것을 통해야 한다. - 영양에는 물리는 것은 것은 것을 알고 있는 것을 많이 있는 것을 통해야 한다.
700 CMAD 27 00 BY ROTHING I	700 CMD 14 00 EXICTINC CODICTUDES
780 CMR 27.00 ELECTRICAL	780 CMR 34.00 EXISTING STRUCTURES
Section 2701 General 500.63	Section
	3400 Scope
2702 Emergency and Standby Power Systems 500.63	
n an an Arthon (1997). The Arthon (1997) and a final sector of the Arthon (1997) and a final sector of the Arth Arthon (1997)	3402 Implementation
780 CMR 28.00 MECHANICAL SYSTEMS	3403 Hazard Index
Section	3404 Requirements for Continuation of the Same Use
2801 General	Group or Change to a Use Group Resulting in
	a Change in Hazara Index of One of less 500.87
780 CMR 29.00 PLUMBING SYSTEMS	3405 Requirement for Change in Use Group
	to Two or More <i>Hazard Indices</i> Greater , 500.89
Section 2901 General	3406 Compliance Alternatives
an sea an	3407 Energy Provisions for Existing Buildings 500.89
780 CMR 30.00 ELEVATORS AND CONVEYING	3408 Structural Requirements for
SYSTEMS	Existing Buildings 500.91
Section	3409 Historic Buildings 500.101
3001 General	
3002 Hoistway Enclosures	780 CMR 35.00 REFERENCED STANDARDS 500.105
3003 Machine Rooms ,	180 Monthermond 1977, 1977 Annual 1979. 1970 - Danamar Maria annual 1979.
12.002	780 CMR 36 00 THROUGH 50 00 RESERVED 500 123
그는 그는 여름을 잡는 것을 가 흔들었다. 것은 동생은 이상 귀엽	198

780 CMR - Seventh Edition

4

SPECIAL CONSTRUCTION

shall be protected to prevent deterioration. Awnings shall have frames of noncombustible material; fireretardant-treated wood, wood of Type IV size; or 1hour construction with combustible or noncombustible covers and shall be either fixed, retractable, folding or collapsible.

3105.4 Canopy Materials. Canopies shall be constructed of a rigid framework with an approved covering, that is flame resistant in accordance with NFPA 701 or has a flame spread index not greater than 25 when tested in accordance with ASTME 84.

780 CMR 3106.0 MARQUEES

3106.1 General. Marquees shall comply with 780 CMR 3106.0 and other applicable sections of 780 CMR.

3106.2 Thickness. The maximum height or thickness of a marquee measured vertically from its lowest to its highest point shall not exceed three feet (914 mm) where the marquee projects more than two-thirds of the distance from the property line to the curb line, and shall not exceed nine feet (2743 mm) where the marquee is less than $\frac{2}{3}$ of the distance from the property line.

3106.3 Roof Construction. Where the roof or any part thereof is a skylight, the skylight shall comply with the requirements of 780 CMR 24.00. Every roof and skylight of a marquee shall be sloped to downspouts that shall conduct any drainage from the marquee in such a manner so as not to spill over the sidewalk.

3106.4 Location Prohibited. Every marquee shall be so located as not to interfere with the operation of any exterior standpipe, and such that the marquee does not obstruct the clear passage of stairways or exit discharge from the building or the installation or maintenance of street lighting.

3106.5 Construction. A marquee shall be supported entirely from the building and constructed of noncombustible materials. Marquees shall be designed as required in 7802 CMR 16.00. Structural members shall be protected to prevent deterioration.

780 CMR 3107.0 SIGNS

and and an

3107.1 General. Signs shall be designed, constructed and maintained in accordance with 780 CMR.

780 CMR 3108.0 RADIO AND TELEVISION TOWERS

3108.1 General. Subject to the provisions of 780 CMR 16.00 and the requirements of 780 CMR 15.00 governing the fire-resistance ratings of buildings for the support of roof structures, radio and television towers shall be designed and constructed as provided in 780 CMR 3108.0.

3108.2 Location and Access. Towers shall be located and equipped with step bolts and ladders so as to provide ready access for inspection purposes. Guy wires or other accessories shall not cross or encroach upon any street or other public space, or over above-ground electric utility lines, or encroach upon any privately owned property without written consent of the owner of the encroached-upon property, space or above-ground electric utility lines.

3108,3 Construction. Towers shall be constructed of approved corrosion-resistant noncombustible material. The minimum type of construction of isolated radio towers not more than 100 feet (30 480 mm) in height shall be Type IIB.

3108.4 Loads. Towers shall be designed to resist wind loads in accordance with TIA/EIA-222. Consideration shall be given to conditions involving wind load on ice-covered sections in localities subject to sustained freezing temperatures.

3108.4.1 Dead Load. Towers shall be designed for the dead load plus the ice load in regions where ice formation occurs.

3108.4.2 Wind Load. Adequate foundations and anchorage shall be provided to resist two times the calculated wind load.

3108.5 Grounding. Towers shall be permanently and effectively grounded per the requirements of 527 CMR 12.00: the Massachusetts Electrical Code.

780 CMR 3109.0 SWIMMING POOL ENCLOSURES AND SAFETY DEVICES

3109.1 General. Refer to Appendix 780 CMR 120.M.

780 CMR 3110.0 TEMPORARY

EMERGENCY USES

3110.1 General. Except as noted in 780 CMR 3110.0, the provisions of 780 CMR 3103.0 shall apply to *temporary emergency uses*.

3110.1.1 Permit Required. *Temporary emergency uses* shall not be operated or maintained for any purpose without first obtaining a permit from the municipal official having jurisdiction.

3110.2 Construction Documents. A written request for the *temporary emergency use* change, identifying the address-specific property is required.

3110.3 Certification. A temporary emergency use shall be so identified by a special certificate of use and occupancy as established for such purpose (see 780, CMR 120.M for an example of this special certificate of use and occupancy) by the municipal or state building official in consultation with other appropriate municipal and state officials in accordance with procedures.

780 CMR: STATE BOARD OF BUILDING REGULATIONS AND STANDARDS THE MASSACHUSETTS STATE BUILDING CODE

2.

established for such purposes.

3110.4 Means of Egress. All *temporary emergency uses* shall conform to the *means of egress* requirements of 780 CMR 10.00 to the degree practicable.

780 CMR 3111.0 TEMPORARY OVERNIGHT SHELTERS

3111.1 Scope and Purpose. The purpose of 780 CMR 3111.0 is to establish reasonable standards for the use of facilities designed for other purposes to be safely occupied temporarily as overnight shelters. 780 CMR 3111.0 is promulgated by the Board in acknowledgment of the safety concerns associated with homelessness and the desire to provide shelter even if a site does not meet ideal safety standards as set out in other provisions of 780 CMR. In this regard, the State Building Code is not intended to serve as a barrier to those seeking to assist individuals in need by providing shelter, but instead to offer a means to ensure that a reasonable degree of life safety is provided to the occupants of such temporary overnight shelters. 法法保护 法成本的权利

3111.2 Definition. For purposes of 780 CMR 3111.0, a Temporary Overnight Shelter shall be defined as any facility designed and used primarily as a church or house of worship for religious services or instruction which is owned or operated by a religious organization and qualified for exemption under 26 U.S.C. § 501(c)(3) of the Internal Revenue Code. The primary use of the facility is for religious services or instruction but may, on occasion, provide a sanctuary from the cold weather to a limited number of individuals for a limited period of time as provided for in 780 CMR 3111.0

3111.3 Limitations of Use.

1. A temporary overnight shelter may operate only:

(a) September 15th through June 15th

(b) for not more than 35 days, the state is the second sec

(c) for not more than seven consecutive days.

2. The limitations set forth by 780 CMR 3111.3.1 may be exceeded in the event that a state of emergency is declared by the Governor in accordance with St. 1950, c. 639 or due to an emergency deemed detrimental to the public health pursuant to M.G.L. c. 17, §2A.

3111.4 Approval and Temporary Certificate of Occupancy. In order to operate a temporary overnight shelter, a temporary certificate of occupancy must first be issued by the building official. Application for a certificate shall be made as follows:

1. The application must contain information demonstrating that the structure meets the following requirements:

(a) It has been issued a valid certificate of a occupancy for its current use.
(b) It is equipped with a functioning sprinkler system or is suitably protected by a smoke and/or heat detection and alarm system, and a carbon monoxide detection system. Battery operated interconnected detectors may be satisfactory depending upon the location.

(c) It contains adequate means of egress relative to the number of approved overnight occupants.

(d) It contains adequate emergency lighting and egress signage.

(e) It contains the necessary facilities in accordance with the applicable guidelines promulgated by the Massachusetts Department of Public Health.

(f) Attestation that the structure meets the requirements of 521 CMR: *The Architectural Access Code*.

- The application must include the following: (a) Zoning approval (if applicable).
- (a) Zoining approval (in apprecise).
 (b) A site plan (internet accessed satellite maps may be sufficient if properly labeled).
 (c) A plan for compliance with the applicable guidelines promulgated by the Massachusetts

Department of Public Health. (d) A fire safety and egress plan. The plan

- shall include, but not be limited to:
 i. The identification of the anticipated nightly occupant load.
- ii. A diagram of the bed and personal space
- iii. The identification of exits and aisles leading thereto.
- iv. Outline of procedures for accounting for employees and occupants after evacuation.

v. Outline of procedures for the evacuation of occupants with special needs.

vi. The identification of the preferred and any alternative person responsible for reporting fires and other emergencies to the fire department.

vii. A plan for assignment of personnel responsible for oversight of evacuation. viii. A plan for training of employees

relative to emergency evacuation.

(e) Identification of an on-site individual responsible for ensuring compliance with 780 CMR 3111.0.

3. Upon receipt of a completed application, the building official shall forward the application to the municipal fire chief and health official for their review. A site visit shall then be undertaken collectively by the building official, fire official, health official, building owner, and the applicant, or their respective designees. Said officials shall assess the suitability of the structure for issuance of a temporary certificate of occupancy and ensure the accuracy and efficiency of the documentation

SPECIAL CONSTRUCTION

submitted in accordance with 780 CMR 3111.4.1. and 2. Promptly after the site visit is completed, the building official shall either approve the application and issue the temporary certificate of occupancy, or deny the application, or approve the application and issue the temporary certificate of occupancy with conditions. The building official may condition the issuance of a certificate upon anything that he determines is necessary to ensure the safety of the occupants of the shelter and consistent with 780 CMR 3111.1. Prior to taking action, the building official shall review the application with the fire chief and health official, The building official shall consider any recommendations made by the fire chief or health official with due regard for their concerns. However, the building official shall not issue any temporary certificate over the objection of the Head of the Fire Department or the local Board of Health.

4. Temporary certificates of occupancy shall not be issued for a period to exceed one year. Applications for renewal shall be reviewed in accordance with 780 CMR 3111.4.1. through .3. 5. If issued, the temporary certificate shall reflect the name of the organization it was issued to, the name of the party responsible for the operation of the shelter, the address of the shelter, the issuance date, the expiration date, any conditions of issuance ordered pursuant to 780 CMR 3111.4.3, and the maximum allowed occupant load.

6. A temporary certificate of occupancy may be revoked by the building official at any time for a violation of any provision of 780 CMR 3111.0, any violation of the General Laws, or for any reason necessary to ensure the safety of the occupants of the structure. The terms of issuance of the certificate may similarly be modified. Any such action may be appealed to the Building Code (1) Appeals Board in accordance with M.G.L. c.143, §100.

3111.5 Operation of Shelter.

1. The party responsible for the operation of the shelter must notify the municipal building official and fire chief in writing at least 24 hours prior to each period of operation. The notification must include a statement as to the anticipated number of days the shelter will be in operation and an estimate as to the number of individuals who will be in occupancy per night. Notification shall similarly be made within 24 hours after use of the shelter has ended.

2. The temporary certificate of occupancy issued pursuant to 780 CMR 3111.4 shall be conspicuously posted at the main entrance to the shelter.

3. A document shall be posted, in a location approved by the municipal building official and the head of the fire department, containing an accurate number of sheltered occupants on a nightly basis. Such document shall also contain the names of all workers and volunteers who are overseeing or assisting in the shelter usage on a nightly basis.

4. The shelter shall be set up and operated in accordance with the documentation submitted pursuant to 780 CMR 3111.4.2, and any conditions mandated under 780 CMR 3111.4.3.

3111.6 Access by Public Officials. Access to the shelter for purposes of ensuring compliance with 780 CMR 3111.0 shall be granted upon request by the building official, fire chief, health official, or police officer.

3

394

, da

780 CMR: STATE BOARD OF BUILDING REGULATIONS AND STANDARDS

1. C. F. H. MARDON MURARED AND AND DESCRIPTION OF Although the without the above of the has believe when their length and had an No standard variance all anes becaldederes and respects in motivally disade to a performance to dealling graduate the same product and has the next set of the mean from the bull and one name another a to space with a contribution reco water with a training to a state and the second The stlore off to champion off to going off the second s the server line brough publication couple Sisterity dual the third and the dual the The information that which a pullback with difficult is fully off and by the maintification mason incorners then soll burger and the includer was bride institute applies initial set another if and in parameters also and manufation proposition To tensor termination in alternation of the other briefs.

(a) and (a)

NON-TEXT PAGE is of helescope of your structure of the st

Trade is contained built

1. The party community for the operation of the indultar musticality theories (cipal bricking official case. The chief to protect at least 20° computed in each packed of the context at 20° for monitorization incoficilities a science of a 20° for monitorization incopied days the sinches with the exception as 1 an estimate a science part with the extendent and with estimate as in the nonline or feel vibrate who will be in encoperate part with 20° for vibrate who will visualize the reaction be the formation and the science of the solution be formation and and visualizing the mate within be former for the data with an encoperate part with the formation and and visualizing the mate within be former for the of the science of the science.

Instance voluments of the multiple science and the science of t

3. A decompute state to publicate of a foording approximation by the monitorical instance official and the back of the foor expanding a constraint y and acceleric instation of shallock constraint with a photosic food decompositional size constate and acceleric scattering in the whether energy of a presenting brack and in the whether energy of a state back of a state of the matter instate of backs. Shall be and the matter instate of the shallow what be and the instate of the states.

individual andiatan (analo 127), dan amadangsis 1996 - Yan (S.A.1997), 1997 - Al Amurah 1997 - Tark Mathematikan (analogiana) amadanan

1411.4 Access by radia Coleis. Access to rashifts for perpose of assister accordence with the Cole Alter Scient & reased upon large of by for building offered for shirt booth Chines, a and a titler.