CITY COUNCIL AGENDA REPORT

MEETING DATE: SEPTEMBER 7, 2010 **ITEM NUMBER:**

SUBJECT: **2010 EDITION OF THE MODEL CALIFORNIA CONSTRUCTION CODES**

DATE: **AUGUST 26, 2010**

FROM: **DEVELOPMENT SERVICES DEPARTMENT AND FIRE DEPARTMENT**

PRESENTATION BY: **KHANH NGUYEN, CBO, BUILDING OFFICIAL**

FOR FURTHER INFORMATION CONTACT: **KHANH NGUYEN (714) 754-5277**

SUMMARY:

The State's Health and Safety Code requires local governments to adopt the most recent editions of the model codes related to construction. The construction codes include: the California Building, Residential, Green Building Standards, Fire, Plumbing, Mechanical, and Electrical Codes. If City Council approves the attached resolution and ordinance, the most recent editions of the California construction codes with the applicable amendments will become effective January 1, 2011 as required by State law.

RECOMMENDATIONS:

1. Adopt the attached resolution of the City Council of the City of Costa Mesa, California, setting forth findings with respect to local climatic and geographic conditions within the City of Costa Mesa to allow certain modifications and changes to the California Building Code, California Residential Code, and California Fire Code as amended by the State of California; and,
2. Introduce the attached ordinance for first reading and set for second reading at the Council's September 21, 2010 meeting. This procedure is in accordance with California Government Code Title 5, Division 1, Part 1, as published by the Building Standards Bulletin 09-02.

BACKGROUND:

The State's Health and Safety Code (Section 17958) mandates that the California Building Standards Commission adopt and publish the California Building Standards Code (Title 24 California Code of Regulations) every three years. The 2010 Edition of the California Code of Regulations Title 24, which incorporates the below-listed model codes, becomes effective on January 1, 2011.

If approved, the attached ordinance will amend Titles 5 and 7 by repealing references to the prior editions of the model codes.

The list below identifies the model codes upon which the 2010 Title 24 is based:

California Building Standards Code	Reference Model Code
2010 California Building Code	2009 International Building Code (ICC)
2010 California Residential Code	2009 International Residential Code (ICC)
2010 California Green Building Standards Code	
2010 California Fire Code	2009 International Fire Code (ICC)
2010 California Plumbing Code	2009 Uniform Plumbing Code (IAPMO)
2010 California Mechanical Code	2009 Uniform Mechanical Code (IAPMO)
2010 California Electrical Code	2008 National Electrical Code (NFPA)

The construction codes proposed for adoption by reference with amendments include the following:

2010 California Building Code
2010 California Residential Code
2010 California Green Building Standards Code
2010 California Fire Code
2010 California Plumbing Code
2010 California Mechanical Code
2010 California Electrical Code
2006 International Property Maintenance Code
1997 Uniform Code for the Abatement of Dangerous Buildings
1993 Orange County Grading and Excavation Code

The two new codes that are included in this adoption cycle are the California Residential Code and the Green Building Standards Code. The California Residential Code applies to construction of single family dwellings and duplexes, and the Green Building Standards Code applies to all new construction.

The Development Services and Fire Departments are recommending that changes and modifications be made to the 2010 Editions of the California Building Code, California Residential Code, and California Fire Code, and such changes are reasonably necessary due to local climatic and geographic conditions in Costa Mesa. Other modifications are of an administrative or procedural nature and concern themselves with subjects that are not covered by the codes or are reasonably necessary to safeguard life and property within Costa Mesa.

The attached resolution sets forth the necessary findings to enable the City to amend the new construction codes to reflect our local conditions. The attached ordinance incorporates the following three amendments to reflect our local conditions:

1. **Height of High-Rise Buildings**: Due to Fire Department logistical limitations and local high winds, the requirement of high rise buildings is amended to apply to buildings over 55 feet high instead of over 75 feet high. This provision already exists from the previous code adoption cycle. (Building Code Section 403 and Fire Code Section 907)

2. **Smoke-Proof Enclosures in High-Rise Buildings**: Due to Fire Department logistical limitations, local traffic, and seismic conditions, the requirement of high-rise buildings for standby and emergency power loads are revised to place smoke-proof enclosures in the emergency power category. This provision already exists from the previous code adoption cycle. (Building Code Sections 403.4.7.2 and 403.4.8.1, and Fire Code Sections 604.2.15.1.1 and 604.2.15.2.1)

3. **Roofing Materials**: Due to the serious hazard of rapid fire spread in local high winds, minimum Class B roof covering is specified and the use of untreated wood roofs is prohibited for new buildings and re-roofing of existing buildings. This provision already exists from the previous code adoption cycle. (Building Code Section 1505 and Residential Code Section R902)

The proposed amendments are consistent with the Orange County Code Uniformity Group and have the support of the Orange County Building Industry Association. The remainder of the proposed amendments are administrative or procedural in nature, such as providing a definition for private swimming pool.

One administrative amendment worth noting is related to permit expiration in the residential model code. The current code language allows the building official to grant one or more time extensions with justifiable cause. The proposed wording limits the building official authority to only one extension. This amendment provides an incentive for homeowners to complete their improvements in a timely manner, thereby minimizing construction impacts to the neighbors.

FISCAL REVIEW

The adoption of the proposed Codes will not have any fiscal impact on the City's budget.

LEGAL REVIEW

The City Attorney has approved the Resolution and Ordinance as to form.

ALTERNATIVES CONSIDERED

City Council may adopt the model codes with the amendments recommended by Staff with or without modifications.

CONCLUSION

If the City Council adopts the attached resolution and ordinance, the 2010 editions of the California construction codes, with the applicable amendments, will become effective January 1, 2011 within the City of Costa Mesa as required by State law.

KHANH NGUYEN, CBO
Building Official

GREGG STEWARD
Deputy Chief/Fire Marshal

KIMBERLY BRANDT, AICP
Developments Services Director

ATTACHMENTS:

1. Resolution No. 10-____
2. Ordinance No. 10-____

DISTRIBUTION:
City Manager
Assistant City Manager
City Attorney
Fire Chief
Transportation Svs. Mgr.
City Clerk (2)
Staff (4)
File (2)
Building Industry Association (BIA)
South Coast Metro Alliance
Costa Mesa Chamber of Commerce

File: 090710ConstructionCodes2010	Date: 082610	Time: 3:30 p.m.

RESOLUTION NO. 10-___

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF COSTA MESA, CALIFORNIA, SETTING FORTH FINDINGS FOR REQUIRED AMENDMENTS TO THE 2010 CALIFORNIA BUILDING CODE, THE 2010 CALIFORNIA RESIDENTIAL CODE, AND TO THE 2010 CALIFORNIA FIRE CODE WITH RESPECT TO HOUSING OCCUPANCIES RELATIVE TO LOCAL CLIMATIC AND GEOGRAPHIC CONDITIONS

Section 1

The City Council of the City of Costa Mesa finds and resolves as follow:

WHEREAS, Health and Safety Code Section 17958 provides that the City of Costa Mesa ("City") shall adopt ordinances and regulations imposing the same or modified or changed requirements as are contained in the regulations adopted by the State pursuant to Health and Safety Code Section 17922; and

WHEREAS, the State of California is mandated by Health and Safety Code Section 17922 to impose the same requirements as are contained in the most recent edition of the California Building Code, the California Fire Code, the California Green Building Standards Code, the California Residential Code, the California Plumbing Code, the California Mechanical Code, and the California Electrical Code (hereinafter referred to collectively as "Codes"); and

WHEREAS, Health and Safety Code Section 17958.5(a) permits the City to make modifications or changes to the Codes, which are reasonably necessary because of local climatic, geographic, or topographic conditions; and

WHEREAS, Health and Safety Code Section 17958.7 requires that the City Council, before making any modifications or changes to the Codes, shall make an express finding that such changes or modifications are reasonably necessary because of local climatic, geographic, or topographic conditions; and

WHEREAS, the Development Services and Fire Departments have recommended that changes and modifications be made to the Codes and have advised that certain of said changes and modifications to the California Building Code, 2010 Edition, the California Residential Code, 2010 Edition, and the California Fire Code, 2010 Edition, are reasonably necessary due to local conditions in the City of Costa Mesa and have further advised that the remainder of said changes and modifications are of an administrative or procedural nature, or concern themselves with subjects not covered by the Codes or are reasonably necessary to safeguard life and property within the City of Costa Mesa.

Amendments related to life and fire safety contained in Sections 403, 403.1, 403.1.1, 403.4.7.2, 403.4.8.1, Table 1505.1, and 1505.1.3 of the 2010 Edition of the California Building Code, and Sections R902.1, R902.1.3, and R902.2 of the 2010 Edition of the California Residential Code, and Sections 907.2.13, 907.7.3.2, 604.2.15.1.1, and

604.2.15.2.1 of the 2010 Edition of the California Fire Code as recommended by the Development Services and Fire Department are hereby found to be reasonably necessary due to the following local conditions:

A. Climatic Conditions

1. Hot, dry Santa Ana winds are common to all areas within the City of Costa Mesa and Orange County in general. These winds, which can cause small fires to spread quickly, are a contributing factor to the high fire danger in the area, and create the need for an increased level of fire protection. This added protection will supplement normal fire department response available and provide immediate protection for life and safety of multiple occupants during fire occurrences.

2. Orange County and the City of Costa Mesa are located in a semi-arid Mediterranean type climate which predisposes all fuels, including wood shingles, to rapid ignition and spread of fire. Therefore, there exists a need for additional fire protection measures.

B. Geographic Conditions

1. Orange County and the City of Costa Mesa are located in a high seismically active area. There are earthquake faults that run along both the northeastern and southwestern boundaries of Orange County. The Newport-Inglewood Fault Zone (NIFZ) which runs through Orange County was the source of the destructive 1933 Long Beach earthquake (6.3 magnitude, epicenter off Newport Beach coast), which took 120 lives, with areas damaged from Laguna Beach to Marina del Rey and inland to Whittier, and poses one of the greatest hazards to lives and property in the nation. Regional planning for reoccurrence is recommended by the State of California Department of Conservation. There was also an earthquake in December 1989, with the epicenter located near the City of Irvine. The fault on which this quake occurred was unknown prior to this activity. The October 17, 1989, Santa Cruz earthquake resulted in only one major San Francisco fire in the Marina district, but when combined with the 34 other fires and over 500 responses, the department was taxed to its full capabilities. The Marina fire was difficult to contain because mains supplying water to the district burst during the earthquake. If more fires had been ignited by the earthquake, it would have been difficult for the fire department to contain them. Experts predict a major earthquake in our area within the next 50 years. This situation creates the need for both additional fire protection measures and automatic on-site fire protection for building occupants since a multitude of fires may result from breakage of gas and electric lines as a result of an earthquake. As noted by "Planning Scenario on a Major Earthquake on the Newport-Inglewood Fault Zone, 1988, State Department of Conservation," page 59, "unfortunately, barely meeting the minimum earthquake standards of building codes places a building on the verge of being legally unsafe";

2. Traffic and circulation congestion presently existing in the City of Costa Mesa often places fire department response time to fire occurrences at risk. This

condition will be exacerbated by any major disaster, including any earthquake wherein damage to the highway system will occur. This condition makes the need for additional on-site protection for property occupants necessary.

3. Placement of multiple occupancy buildings, location of arterial roads, and fire department staffing constraints due to recent revenue-limiting state legislation have made it difficult for the fire department to locate additional fire stations and provide manpower sufficient to concentrate fire companies and personnel to control fires in high density apartment or condominium buildings. Fire Department equipment does not allow easy access to areas of buildings greater than 55 feet above the level of Fire Department vehicle access. These conditions create the need for built-in on-site fire protection systems to protect occupants and property until fire fighting apparatus and personnel arrive on the scene.

   The City of Costa Mesa is located in an area subject to a climatic condition of high winds and low humidity. This combination of events creates an environment, which is conducive to rapidly spreading fires. Control of such fires requires rapid response. Obstacles generated by strong winds, such as fallen trees, street lights and utility poles, and the requirement to climb 75 feet vertically up flights of stairs will greatly impact the response time to reach an incident scene. Additionally, Section 6, Figure 6-2 of ASCE 7 identifies a significant increase in the amount of wind force at 60 feet above the ground. Use of aerial type fire fighting apparatus above this height would place rescue personnel at increased risk of injury.

   The City of Costa Mesa is located in the middle of the seismically active area. The viability of the public water system would be questionable at best after a major seismic event. This would leave tall buildings vulnerable to uncontrolled fires due to a lack of available water and an inability to pump sufficient quantities of any available water to floors above the 55-foot level. A severe seismic event has the potential to negatively impact any rescue or fire suppression activities because it is likely to create obstacles similar to those indicated under the high wind section above. With the probability of strong aftershocks there exists a need to provide increased protection for anyone on upper floors.

4. Untreated wood roofs cause or contribute to serious fire hazard and to the rapid spread of fires when such fires are accompanied by high winds. Pieces of burning wooden roofs become flying brands and are carried by the wind to other locations and thereby spread fire quickly. Recent Grand Jury Report findings support this concern.

Additional amendments have been made to the California Building Code, 2010 Edition, the California Residential Code, 2010 Edition, and the California Fire Code, 2010 Edition. On the recommendation of the Development Services Department and Fire Department, such amendments are hereby found to be either administrative or procedural in nature or concern themselves with subjects not covered in the California Building Code, the California Residential Code, or California Fire Code. The changes made include provisions making each of said Codes compatible with other Codes enforced by the City.

The aforementioned amendments have been incorporated in detail in Ordinance 10-___.

Section 2

The Development Services Department and Fire Department shall file copies of Resolution 10-_____ and Ordinance 10-____ with the California Building Standards Commission as required by Health and Safety Code Section 17958.7.

PASSED and ADOPTED this 7th day of September, 2010.

ALLAN MANSOOR
Mayor, City of Costa Mesa

ATTEST:

CITY CLERK OF THE
CITY OF COSTA MESA

CITY ATTORNEY

STATE OF CALIFORNIA)
)ss
COUNTY OF ORANGE)

I, JULIE FOLCIK, City Clerk and ex-officio Clerk of the City Council of the City of Costa Mesa, California, does hereby certify that the above Council Resolution No. 10-___ as considered at a regular meeting of said City Council held on the 7th day of September, 2010, and was passed and adopted at a regular meeting by the following vote:

AYES:

NOES:

ABSENT:

In witness whereof I have hereby set my hand and affixed the Seal of the City of Costa Mesa this _____day of _____, 2010.

ORDINANCE NO. 10-____

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF COSTA MESA, CALIFORNIA, AMENDING SECTIONS 5-1, 5-1.1, 5-1.3, 5-3, AND 5-95 OF TITLE 5 AND SECTIONS 7-14, 7-15, AND 7-19 OF TITLE 7 OF THE COSTA MESA MUNICIPAL CODE BY ADOPTING THE 2010 EDITIONS OF THE CALIFORNIA CODES AND RELATED MODEL CODES WITH APPENDICES AND AMENDMENTS THERETO WITH THE EFFECTIVE DATE OF JANUARY 1, 2011

THE CITY COUNCIL OF THE CITY OF COSTA MESA DOES HEREBY ORDAIN AS FOLLOWS:

Section 1

Section 5-1 of Chapter I, Title 5, of the Costa Mesa Municipal Code is hereby amended to read as follows:

"**Sec. 5-1. Construction Codes Adopted.**

For the purpose of prescribing regulations for erecting, construction, enlargement, alteration, repair, improving, removal, conversion, demolition, occupancy, equipment use, height, and area of buildings and structures, the following construction codes subject to the modifications set forth in this Chapter, are hereby adopted: the California Building Code, 2010 Edition, based on the 2009 International Building Code as published by the International Code Council; including Division II in Chapter 1; the California Residential Code, 2010 Edition, based on the 2009 International Residential Code as published by the International Code Council; including Division II in Chapter 1; the California Green Building Standards Code, 2010 Edition; the California Plumbing Code, 2010 Edition, based on the 2009 Uniform Plumbing Code as published by the International Association of Plumbing and Mechanical Officials; the California Mechanical Code, 2010 Edition, based on the 2009 Uniform Mechanical Code as published by the International Association of Plumbing and Mechanical Officials; the California Electrical Code, 2010 Edition, based on the 2008 National Electrical Code as published by the National Fire Protection Association; the International Property Maintenance Code, 2006 Edition, as published by the International Code Council; the Uniform Code For The Abatement of Dangerous Buildings, 1997 Edition, as published by the International Code Council. For the purpose of prescribing regulations for grading and excavations, the 1993 Orange County Grading and Excavation Code. The provisions of these Construction Codes as amended by this chapter shall constitute the Building Regulations of the City of Costa Mesa. Where the California Code of Regulations and State Building Standards Code of Regulations differ from any sections of the Construction Codes, State regulations shall prevail over the Construction Codes.

One (1) copy of all the above codes and standards therefore are on file in the office of the building official pursuant to Health and Safety Code Section 18942 (d) (1) and are made available for public inspection.

Notwithstanding the provisions of the above-referenced construction codes, all fees for services provided pursuant to the construction codes shall not take effect until a resolution for such fees is adopted by the City Council pursuant to California Government Code Sections 66016 and 66020."

Section 2

Section 5-1.1 of Chapter I, Title 5, of the Costa Mesa Municipal Code is hereby amended to read as follows:

"Sec. 5-1.1. Amendments to the 2010 California Building Code.

a)

SECTION 403

HIGH-RISE BUILDINGS HAVING OCCUPIED FLOORS LOCATED MORE THAN 55 FEET ABOVE THE LOWEST LEVEL OF FIRE DEPARTMENT VEHICLE ACCESS AND GROUP I-2 OCCUPANCIES HAVING OCCUPIED FLOORS LOCATED MORE THAN 75 FEET ABOVE THE LOWEST LEVEL OF FIRE DEPARTMENT VEHICLE ACCESS

b) Revise the first paragraph of section 403.1 to read as follows:

403.1 Applicability. New high-rise buildings having occupied floors located more than 55 feet above the lowest level of fire department vehicle access and new Group I-2 occupancies having occupied floors located more than 75 feet above the lowest level of fire department vehicle access shall comply with Sections 403.2 through 403.6.

c) Revise definition 2. under High-Rise Building of section 403.1.1 to read as follows:

2. "High-rise structure" means every building of any type of construction or occupancy having floor used for human occupancy located above 55 feet above the lowest floor level having building access (see Section 403.1.2), except buildings used as hospitals as defined by the Health and Safety Code Section 1250.

d) **403.4.7.2 Standby power loads.** The following are classified as standby power loads:

1. Power and lighting for the fire command center required by Section 403.4.5; and
2. Standby power shall be provided for elevators in accordance with Sections 1007.4, 3003, 3007, and 3008.

e) **403.4.8.1 Emergency power loads.** The following are classified as emergency power loads:

1. Exit signs and means of egress illumination required by Chapter 10;
2. Elevator car lighting;
3. Emergency voice/alarm communications systems;
4. Automatic fire detection systems;
5. Fire alarm systems;
6. Electrically powered fire pumps; and
7. Ventilation and automatic fire detection equipment for smokeproof enclosures.

TABLE 1505.1[a]
MINIMUM ROOF COVERING CLASSIFICATIONS
TYPES OF CONSTRUCTION

IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
B	B	B	B	B	B	B	B	B

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 m^2.
a. Unless otherwise required in accordance with Chapter 7A.

f) **1505.1.3 Roof coverings within all other areas.** The entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is at least Class B.

g) Section 1505.5 is amended, by the deletion of the entire section.

h) Section 1505.7 is amended, by the deletion of the entire section.

i) Amend Section 3109.4.4.1 by adding the following definition:

PRIVATE POOL, is any constructed pool, permanent or portable, and over 18 inches deep which is intended for non-commercial use as swimming pool by not more than three owner families and their guests.

j) Section 3109.4.4.2 is modified by deleting the first paragraph in its entirety and a new paragraph is added to read as follows:

3109.4.4.2 Construction permit; safety features required. Commencing January 1, 1998, except as provided in Section 3109.4.4.5, whenever a construction permit is issued for construction of a new private pool at a residence, it shall have an enclosure complying with 3109.4.4.3 and, it shall be equipped with at least one of the following safety features:"

Section 3

Section 5-1.3 of Chapter I, Title 5, of the Costa Mesa Municipal Code is hereby added to read as follows:

"**Sec. 5-1.3. Amendments to the 2010 California Residential Code.**

a) **R105.4 Expiration.** Every permit issued shall become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. The building official is authorized to grant, in writing, one extension of time, for periods not more than

180 days. The extension shall be requested in writing and justifiable cause demonstrated. In order to renew action on a permit after expiration, the permittee shall pay a new full permit fee.

b) **R110.1 Use and occupancy.** No building or structure shall be used or occupied, and no change in the existing occupancy classification of a building or structure or portion thereof shall be made until the building official has issued a certificate of occupancy therefore as provide herein. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. Certificate presuming to give authority to violate or cancel the provision of this code or other ordinances of jurisdiction shall not be valid.

Exceptions:

1. Certificates of occupancy are not required for work exempt from permits under Section R105.2.
2. Accessory buildings or structures.
3. Group R-3 and Group U Occupancies as defined in the California Building Code.

c)

TABLE R301.2(1)
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUND SNOW LOAD	WIND DESIGN		SEISMIC DESIGN CATEGORY [f]	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP [e]	ICE BARRIER UNDERLAYMENT REQUIRED [h]	FLOOD HAZARDS [g]	AIR FREEZING INDEX [i]	MEAN ANNUAL TEMP [j]
	Speed [d] (mph)	Topographic effects [k]		Weathering [a]	Frost line Depth [b]	Termite [c]					
Zero	85	No	D_2	Negligible	12-24"	Very Heavy	43	No	See Footnote g	0	60

For SI: 1 pound per square foot = 0.0479 kPa, 1 mile per hour = 0.447 m/s.

a. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code. The weathering column shall be filled in with the weathering index (i.e., "negligible," "moderate" or "severe") for concrete as determined from the Weathering Probability Map [Figure R301.2(3)]. The grade of masonry units shall be determined from ASTM C 34, C 55, C 62, C 73, C 90, C 129, C 145, C 216 or C 652.
b. The frost line depth may require deeper footings than indicated in Figure R403.1(1). The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.
c. The jurisdiction shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite damage.
d. The jurisdiction shall fill in this part of the table with the wind speed from the basic wind speed map [Figure R30I.2(4)].Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.
e. *Temperatures* shall be permitted to reflect local climates or local weather experience as determined by the building official.
f. The jurisdiction shall fill in this part of the table with the seismic design category determined from Section R301.2.2.1.
g. The jurisdiction shall fill in this part of the table with (a) the date of the jurisdiction's entry into the National Flood Insurance Program (date of adoption of the first code or ordinance for management of flood hazard areas), (b) the date(s) of the Flood Insurance Study and (c) the panel numbers and dates of all currently effective FIRMs and FBFMs or other flood hazard map adopted by the authority having jurisdiction, as amended.

(a) Date of initial ordinance, December 15, 1980. (b) initial NFIP map date, May 17, 1974; initial FIRM date, September 30, 1982; most recent FIRM panel date, December 3. 2009. (c) panels number 254, 258, 259, 262, 264, 266, 267, 268, 269, 278, 286.

h. In accordance with Sections R905.2.7.1, R905.4.3.1, R905.5.3.1, R905.6.3.1, R905.7.3.1 and R905.8.3.1, where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall fill in this part of the table with "NO."

i. The jurisdiction shall fill in this part of the table with the 100-year return period air freezing index (BF-days) from Figure R403.3(2) or from the l00-year (99%) value on the National Climatic Data Center data table "Air Freezing Index- USA Method (Base 32°)" at www.ncdc.noaa.gov/fpsf.htrnl.

j. The jurisdiction shall fill in this part of the table with the mean annual temperature from the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°F)" at www.ncdc.noaa.gov/fpsf.html.

k. In accordance with Section R30 1.2.1.5, where there is local historical data documenting structural damage to buildings due to topographic wind speed-up effects, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall indicate "NO" in this part of the table.

d) **R902.1 Roofing covering materials.** Roofs shall be covered with materials as set forth in Sections R904 and R905. A minimum Class A or B roofing shall be installed in areas designated by this section. Classes A or B roofing required by this section to be listed shall be tested in accordance with UL 790 or ASTM E 108.

Exceptions:

1. Class A roof assemblies include those with coverings of brick, masonry and exposed concrete roof deck.
2. Class A roof assemblies also include ferrous or copper shingles or sheets, metal sheets and shingles, clay or concrete roof tile, or slate installed on noncombustible decks.

e) **R902.1.3 Roof coverings within all other areas**. The entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is at least Class B.

f) **R902.2 Fire-retardant-treated shingles and shakes**. Fire-retardant-treated wood shakes and shingles are wood shakes and shingles complying with UBC Standard 15-3 or 15-4 which are impregnated by the full-cell vacuum-pressure process with fire-retardant chemicals, and which have been qualified by UBC Standard 15-2 for use on Class A or B roofs.

Fire-retardant-treated wood shakes and shingles shall comply with ICC-ES EG107 and with the weathering requirements contained in Health and Safety Code Section 13132.7(j). Each bundle shall bear labels from an ICBO accredited quality control agency identifying their roof-covering classification and indicating their compliance with ICC-ES EG107 and with the weathering requirements contained in Health and Safety Code Section 13132.7(j).

Health and Safety Code Section 13132.7 (j) No wood roof covering materials shall be sold or applied in this state unless both of the following conditions are met:

(1) The materials have been approved and listed by the State Fire Marshal as complying with the requirements of this section.

(2) The materials have passed at least five years of the 10-year natural weathering test. The 10-year natural weathering test required by this subdivision shall be conducted in accordance with Standard 15-2 of the 1994 edition of the Uniform Building Code at a testing facility recognized by the State Fire Marshal."

Section 4

a) Section 5-3 (e) of Chapter I, Title 5, of the Costa Mesa Municipal Code is hereby amended to read as follows:

"(e) Where a notice and order of the building official or fire marshal or decision of the board becomes final and a violation of this title has been determined to exist, the city attorney is hereby authorized to commence civil or criminal proceedings to abate the violation of the provisions of this title. A violation of any provision of this title shall constitute a public nuisance and costs for abatement, including attorney's fees and court costs, shall be subject to reimbursement form the property owner to the city pursuant to the construction codes adopted in section 5-1."

b) Section 5-3 (f) of Chapter I, Title 5, of the Costa Mesa Municipal Code is hereby deleted in its entirety.

c) Section 5-95 of Chapter V, Title 5, of the Costa Mesa Municipal Code is hereby amended to read as follows:

"Except as hereinafter provided all words and phrases as used in this chapter shall have the same meanings as set forth in the California Building Code and California Residential Code, and amendments thereto:

Street. Shall mean a public street, road, alley, highway, right-of-way or other ways dedicated to and for the public's use for travel."

Section 5

Section 7-14 of Chapter II, Title 7, of the Costa Mesa Municipal Code is hereby amended to read as follows:

"**Sec. 7-14. Adoption of the California Fire Code.**

There is hereby adopted by the city council of the City of Costa Mesa, for the purpose of prescribing regulations governing conditions hazardous to life and property from fire, hazardous materials or explosion, that certain code known as the California Fire Code, 2010 Edition, based on the 2009 International Fire Code as published by the International Code Council; including Chapter 1, excluding section 105.6.11 and

section 105.6.23; including Chapter 3, Appendix Chapter 4, Appendix B, Appendix BB, Appendix C, Appendix CC, and Appendix H, of which not less than one (1) copy is filed in the office of the fire marshal and the same is hereby adopted and incorporated as fully as if set out at length herein, and from the date on which this chapter shall take effect, the provisions thereof shall be controlling within the limits of the City of Costa Mesa."

Section 6

Section 7-15 of Chapter II, Title 7, of the Costa Mesa Municipal Code is hereby amended to read as follows:

"Sec. 7-15. Amendments to the 2010 California Fire Code.

a) **907.2.13** High-rise buildings having occupied floors located more than 55 feet (16 769 mm) above the lowest level of fire department vehicle access and Group I-2 occupancies having floors located more than 75 feet (22 860 mm) above the lowest level fire department vehicle access. High-rise buildings having occupied floors located more than 55 feet (16 769 mm) above the lowest level of fire department vehicle access and Group I-2 occupancies having floors located more than 75 feet (22 860 mm) above the lowest level fire department vehicle access shall be provided with an automatic smoke detection in accordance with Section 907.2.13.1, a fire department communication system in accordance with Section 907.2.13.2 and an emergency voice/alarm communication system in accordance with Section 907.6.2.2.

Exceptions:

1. Airport traffic control towers in accordance with Section 907.2.22 and Section 412 of the California Building Code.
2. Open parking garages in accordance with Section 406.3 of the California Building Code.
3. Buildings with an occupancy in Group A-5 in accordance with Section 303.1 of the California Building Code.
4. Low-hazard special occupancies in accordance with Section 503.1.1 of the California Building Code.
5. In Group I-2 and R-2.1 occupancies, the alarm shall sound at a constantly attended location and general occupant notification shall be broadcast by the emergency voice/alarm communication system.

b) **907.7.3.2 High-rise buildings.** High-rise buildings having occupied floors located more than 55 feet (16 764 mm) above the lowest level of fire department vehicle access and Group I-2 occupancies having occupied floors located more than 75 feet (22 860 mm) above the lowest level fire department vehicle access, a separate zone by floor shall be provided for all of the following types of alarm-initiating devices where provided:

1. Smoke detectors.
2. Sprinkler water-flow devices.
3. Manual fire alarm boxes.
4. Other approved types of automatic detection devices or suppression systems.

c) **[B] 604.2.15.1.1 Standby power loads.** The following loads are classified as standby power loads:

1. Smoke control system.
2. Fire pumps.
3. Standby power shall be provided for elevators in accordance with Section 3003 of the California Building Code.

d) **[B] 604.2.15.2.1 Emergency power loads.** The following loads are classified as emergency power loads:

1. Emergency voice/alarm communication systems.
2. Fire alarm systems.
3. Automatic fire detection systems.
4. Elevator car lighting.
5. Means of egress lighting and exit sign illumination as required by Chapter 10.
6. Ventilation and automatic fire detection equipment for smokeproof enclosures."

Section 7

The title of Sec. 7-19 of Chapter II, Title 7, of the Costa Mesa Municipal Code is hereby amended to read as follows:

"Sec. 7-19. Amendments to Chapter 33 of the 2010 California Fire Code, Explosives and Fireworks."

Section 8

If any section, subsection, sentence, clause, phrase or portion of this Ordinance is for any reason held out to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance. The City Council of the City of Costa Mesa hereby declares that it would have adopted this ordinance and each section, subsection, sentence, clause, phrase or portion thereof irrespective of the fact that any one or more sections, subsection, sentence clause, phrases or portions be declared valid or unconstitutionally.

PASSED AND ADOPTED this 7th day of September, 2010

ALLAN MANSOOR
Mayor

ATTEST:

CITY CLERK OF THE
CITY OF COSTA MESA

CITY ATTORNEY

STATE OF CALIFORNIA)
) SS
CITY OF COSTA MESA)

I, JULIE FOLCIK, City Clerk and ex-officio Clerk of the City Council of the City of Costa Mesa, California, does hereby certify that the above and foregoing Ordinance No. 10- ___ was duly and regularly introduced, passed and adopted at a regular meeting of the City Council held on the ____ day of _____, 2010 by the following vote:

AYES:

NOES:

ABSENT:

In witness whereof I have hereby set my hand and affixed the Seal of the City of Costa Mesa this _____day of _____, 2010.