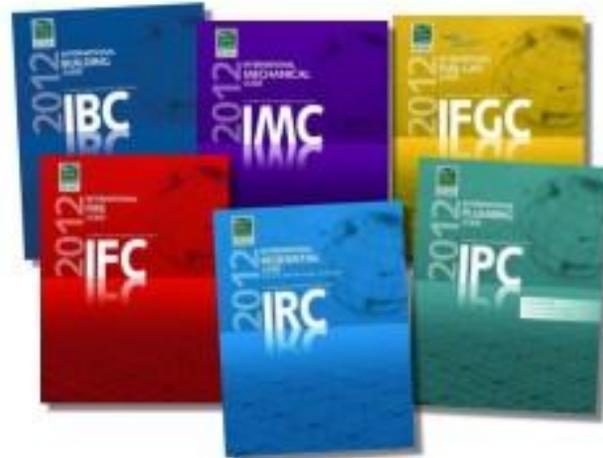


City of Hendersonville

Department of Building & Codes



Significant Changes Matrix for the  
2006 -2012 International Codes

May 1<sup>st</sup> 2013

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
<b>Part 1 Administration (Chapters 1 and 2)</b>					
102.4 Conflicting Provisions between Codes and Standards	C			Conflicts between the I-Codes and Referenced Standards, the I-Codes take precedence. (Codes before Standards)	
104.10.1 Code Modifications for Floor Hazard Areas	A			Criteria for modifications to flood hazard areas (NFIP)	City Engineer is currently responsible
105.2, #B2 Fences, Exempt from Permits	M			Increases the exempt height from 6 to 7 feet	
107.1 Submittal Documents	C		Submittal vs. Construction Documents. Provides clarity for “all” documents which may be required for application.		
202 Definitions	C		“high-rise” occupied floor 75’ above lowest level FD access.” story above grade plane” removes the reference to a basement	All definitions are located in Chapter 2 of the code.	
<b>Part 2 Building Planning (Chapters 3-6)</b>					
303.1.3 Assembly Rooms Associated with Group E Occupancies	C			Language to clarify “associated” assembly areas (larger) and for the “accessory” assembly areas (smaller) to minimize confusion with mixed use occupancies	
303.3 Occupancy Classification of Casino Gaming Floors	A			Added classification of “Casinos (gaming areas)” as A2 due to associated	

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
				hazards	
303.3, 306.2 Occupancy Classification of Commercial Kitchens	C			Added clarity of cafeterias and similar dining facilities and associated commercial kitchens as A-2 Commercial Kitchens <u>not</u> associated with restaurants, cafeterias considered as F-1	
304.1 Ambulatory Health Facilities	A		New definition: Ambulatory Health Care Facility”: less than 24-hour care for persons incapable of self-preservation due to medical reasons.* “Clinic - Outpatient” medical care, less than 24-hour basis to persons <u>not</u> rendered incapable of by medical service provided.*	*definitions moved to Chap. 2	
307.4, Table 307.1(1) Facilities Generating Combustible Dusts	M			H-2 occupancy requires technical reports on and opinion for the building official to make decision on combustible dust hazard	
308.2, 202 Definitions of Care Facilities	C			Revisions & additions for care facilities, moved to Chapter 2	
308.4, Occupancy Classification for Medical Care Facilities	M			I-2 occupancy applies only to medical care of over 5 persons	
308.5.1 Classification of Adult Care Facilities	M		Adult care for persons		

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
			capable of self preservation classified R-3		
310.1 Classification of Residential Uses	A		R-3 added transient 10 or fewer. R-2 includes Live/work units R-4 where allowed, may comply with IRC, provided sprinkled.		
310.6 Uses Classified as Group R-4 Occupancies	M			Clarification of supervised or personal care of 16 or fewer. Eliminating similar supervised care buildings constructed under IRC.	
402 Open Mall Buildings	C			Clarifications of changes to open mall provisions	
402.2 Open Mall Buildings	A		Definitions of open mall and min. open space requirements of 20'		
402.6.1, 402.8 Covered Mall Building Perimeter Open Space	M		Reduction to the required open space of covered mall buildings. Common areas wall and ceiling finishes min Class B flame spread		
403.4.4 High Rise Buildings- Emergency Responder Radio	A		High-rise emergency responder radio coverage complying with Section 510 of the IFC		
403.4.6 High Rise Buildings – Smoke Removal	A		Mandate for means of smoke removal by natural or mechanical ventilation		
403.5.2 High Rise Buildings – Additional Exit Stairway	A		Buildings over 420' in height		
403.5.5 High Rise Buildings – Luminous Egress Markings	A		High Rise buildings with		

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
			Group A, B, E, I, M and R-1 require luminous egress path marking		
403.6.1 High Rise Buildings – Fire Service Access Elevators	A/M		Buildings with occupied floor over 120' require min. one fire service access elevator	Increase the number of fire service access elevator to TWO	
403.6.2 High Rise Buildings – Occupant Evacuation Elevators	A		Properly installed elevators can be used for occupant evacuation		
406.2.4 Vehicle Barriers in Parking Garages	M		Min. height increase from 24" to 33" and increased loading.		
406.4 Public Parking Garages	C			parking garages which fall out of the scope of 406.3, private garage are regulated as public	
406.5.2.1 Open Parking Garages – Openings Below Grade	A			Requires horizontal clear space 1.5 times the depth of the opening	
406.5.5 Open Parking Garages – Hight and Area Increases	M			The calculation method was modified to be more consistent, 7' maximum height for interior area of each tier.	
408.7 Security Glazing in group I-3 Occupancies	M		Allowing security glazing in I-3 occupancies in fire barriers provided automatic sprinklers are installed on both sides without obstructions, gasketed frames, max. glazing 1296 sq. in.		

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
410.3.5 Stage Proscenium Curtains	M		Modifies section to reference the <i>NFPA 80, Fire Doors and Opening Protectives</i> .		
410.6.3, 202 Technical Production Areas	C			Updated terminology & relocates special means of egress for such areas relocated Sec. 410	
412.4.6.2 Aircraft Hangar Fire Areas	M			Ancillary spaces/storage areas not included in service fire area	
414.5 Inside Storage, Dispensing, and Use of Hazardous Materials	C			Scoping consistency with IFC	
419, 202 Live/Work Units	A/M		New section developed addressing primarily dwelling/sleeping units with a considerable non-residential use included	Means of egress & plumbing requirements for non-residential portion regulated by specific use rather than the R-2 use.	
420.2, 420.3 Separation of Dwelling and Sleeping Units	A		Same degree of fire separation between dwelling/sleeping units and any other type of occupancies within building		
422 Ambulatory Care Facilities	A/M		Special provisions for Group B health care facilities, where individuals incapable of self preservation	Ambulatory Health Care /Mixed use buildings intending to have four or more persons requires fire separation between uses	
423 Storm Shelters	A		New Storm Shelter standard ICCN55A 500-2008		
424 Children's Play Structures	M			Play structures located in	

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
				any building now regulated by IBC, (previously only those contained in covered malls)	
501.2 Address identification	M			Fire code official may require address posted in multiple locations emergency response	
502.1 Definition of Basement	M		Revision, basements do not qualify as stories above grade		
503 (Table) Allowable Building Height	M		Reduced building heights for buildings of Type IIB & IIIB for uses B, M, S-1, S-2		
505.2.2 Mezzanine Means of Egress	M			Means of egress for mezzanines located in Chapter 10	
506.2 Allowable Area Frontage Increases	C			Method of calculation on allowable area increases based on frontages clarified	
506.2.1 Frontage Increase for Buildings on the Same Lot	C		Open space between buildings may be considered for both buildings		
506.5 Mixed-occupancy Multi-story Allowable Area	C		Mixed use, multi-story buildings method of calculation clarified		
507.1 Unlimited Area Buildings – Accessory Occupancies	C			Allowances for accessory occupancies in accordance with 508.2 which are not specifically referenced in Section 507	

## **International Building Code 2006 – 2012 Significant Changes Matrix**

Section /Topic	Type	2006	2009	2012	Comments
507.1 Unlimited Area Buildings – Open Space	C			Added information to clarify the measurement method.	
507.6/507.7 Group A-3 Unlimited Area Buildings	M		A-3 occupancies of Type III or IV permitted to be unlimited when certain conditions are met		
507.8 Unlimited Area Buildings – Group H Occupancies	C			Clarification and reformatting for more consistent application	
508.2.5, Table 508.2.5 Incidental Accessory Occupancies	M		Formally Incidental Use Areas, have imposed size limitations. Parking garage & storage rooms not regulated as Incidental		
508.4 (Table) Group I-2 Separated Occupancies	M		Increased separation required between I-2 and any other occupancy (minimum 2-hour)		
509 Incidental Uses – General Provisions	C			Concept of incidental uses has been clarified by eliminating the previous relationship with the mixed-occupancy provisions	
509 Incidental Uses – Separation and Protection	M			Required separation or use of an automatic sprinkler system (not fire-extinguishing system)	
509 (Table) Incidental Uses – Rooms or Areas	M			Waste and linen rooms in Group B ambulatory care facilities must be	

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
				separated minimum 1-hour	
509.2 Horizontal Separation of Buildings	M		Allowance of Group R occupancies below the separation and presence of parking facilities is not required		
509.5, 509.6 Special Height Increases for Group R-1 Occupancies	M		Special increases allowed on Group R-2 of Type IIAI/IIIA extended to Group R-1		
509.9 Multiple Buildings Above Parking Garage	C		Special provisions allow for multiple separate and distinct buildings above or below when horizontal separation present		
602 (Table) Note h, Fire Ratings of Exterior Walls	M			Nonbearing exterior walls that are permitted to have unlimited unprotected opening based on Table 705.8 are no longer required to have a fire-resistance rating due to fire separation distance	
602.1 Fire Resistance Ratings Based on Construction Type	C		Clarified provisions regarding the fire-resistance of building elements and the presence of openings, joints, penetrations, and ducts		
603.1 Combustible Material in Types I and II Construction	M		Use of fire-retardant – treated wood (FRTW) within roof construction is		

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
			allowed in buildings of Type IB construction		
701.2 Multiple-Use Fire Assemblies	C			Where rated walls utilized for multiple purposes, all applicable requirements for all must be met	
703.4 Establishing Fire Resistance Ratings	C			Fire suppression system is not permitted to be included as part of a tested building element, component, or assembly in order to establish the fire-resistance	
703.6 Identification of Fire and Smoke Separation Walls	A		Fire wall, fire barriers and other walls required to have protected openings /penetrations must be identified above ceiling where concealed space created, i.e. "Fire Barrier Protect All Opening"		
703.7 Identification of Fire and Smoke Separation Walls	M			Size & location of identifying markings required on fire assemblies modified to increase potential for markings to be seen	
704, 202 Fire-resistance Ratings of Structural Members	M		Reorganized section, columns requiring fire-resistant now must be protected by individual encasement regardless of loading conditions		

## ***International Building Code 2006 – 2012 Significant Changes Matrix***

Section /Topic	Type	2006	2009	2012	Comments
704.9 Impact Protection for Fire Protective Coverings	M		Impact protection no longer required on concrete columns in parking garages		
704.11 Fire Protection of Bottom Flanges	M			Lintel, unprotected steel angle has been increased slightly to accommodate openings containing a pair of 3' doors	
704.13 Sprayed Fire-resistant Materials (SFRM)	A		Sprayed fire-resistant materials (SFRM) is specifically regulated to minimize the potential for the materials to be dislodged		
705.2 Limitations on Extension of Projections	M		The method for determining the maximum extent of a projection beyond the exterior wall has been extensively revised		
705.2 Extent of Projections beyond Exterior Walls	M			Minimum distance of projection clearly stated in Table 705.2	
705.2.3 Protection of Combustible Projections	M			The threshold at which combustible projections must be protected for fire exposure has been modified to include projections with greater fire separation distances than previously regulated	
705.3 Projections from Buildings on the Same Lot	M			Projections extending	

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
				beyond opposing exterior walls of two buildings on the same lot must comply with Section 705.2	
705.5 Fire-resistance Ratings of Exterior Walls	M		Exterior walls required to be fire-resistance rated must now be rated for fire exposure from both sides where fire separation distance is 10' or less		
705.8 Maximum Area of Exterior Wall Openings	M		Reformatted, slightly modified to coincide with Table 602		
706.2 Double Fire Walls	A			To satisfy the intended objective of structural stability the use of a double fire wall complying with NFPA 221 is permitted as an alternative to a single fire wall	
706.5.1 Fire Wall Intersection at Exterior Walls	A		Alternative method using an imaginary lot line established for regulating exterior wall and opening protection adjacent to the intersection of a fire wall and the exterior wall.		
706.6, 706.6.2 Fire Wall Height at Sloped Roofs	A			Provisions added for parapet height requirements for fire walls to address sloped roof on one or both sides of parapet	

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
707.3.9 Separation of Fire Areas	C		Mixed use fire-barriers must have a minimum fire-resistance rating of the most restrictive occupancy w/Table 707.3.9		
707.8, 707.9 Intersections of Fire Barriers at Roof Assemblies	M			The void intersecting a fire barrier and a nonfire-resistance rated roof assembly does not require fire-resistant joint sys.	
708.2, Exc. 7, 14, and 15 Shaft Enclosure Exceptions	C		The extent of a concealed space in regard to the allowance for two stories to be open to each other w/o shaft protection		
708.14.1 Elevator Lobby Protection	M		Group I-2 must be afforded the protection provided by elevator lobbies, same as for Group I-3 and high-rise buildings		
709.4 Continuity of Smoke Barriers	C			Smoke barrier walls used for elevator lobbies and areas of refuge are no longer required to extend from outside wall to outside wall	
712 Vertical Openings	C			Reformatting places emphasis on the presence of vertical openings rather than on shaft enclosures, recognizing the use of shaft enclosures is an acceptable protective	

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
				measure that can be utilized to address the hazards related to vertical openings	
712.9, 407.4.3 Horizontal Smoke Barriers	A		Horizontal assemblies utilized as smoke barriers are now more specifically regulated where openings for elevator shafts, penetrations, and joints		
713.13 Refuse and Laundry Chutes in Group I-2 Occupancies	M			IBC requirements for refuse & laundry chutes no longer applicable in Group I-2; now regulated by Chapter 5 NFPA 82	
713.13.4 Fire Protection of Termination Rooms	M			Level of fire protection for refuse or laundry chute termination room has been modified for consistency as mandated for the shaft encloses the chutes	
713.14.1 High-Rise Buildings – Elevator Lobbies	M			Hoistways in high-rise more than 3-stories, serving less than 75' above FDA no longer require elevator lobby protection.	
714.4.1 Exterior Wall/Floor Intersections	A		Approved material capable of resisting the spread of fire and hot gases must now be installed in open space at the intersection of an exterior curtain wall		

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
			and a nonfire-resistance-rated floor or floor assembly		
714.4.1.1.2 Floor Penetrations of Horizontal Assemblies	M			Approved through-penetration firestop system to protect floor penetrations of horizontal assemblies due to the presence of floor, tub, & shower drains no longer required to have T rating	
714.4.1.2 Interruption of Horizontal Assemblies	M			1-hour or 2-hour floor/ceiling, roof/ceiling assembly is permitted to be interrupted by double top plate of a rated wall	
714.5/715.6/202 L Ratings	C			"L" rating identifying air leakage rate as defined in Chapter 2 – is now mandated for penetration firestop systems utilized in smoke barrier construction	
715.4 Exterior Curtain Wall/Floor Intersection	M			ASTM E 119 test criteria acceptable for addressing voids at intersections of fire-resistance-rated floor assemblies and exterior curtain wall assemblies, but only curtain wall assemblies where the vision glass extends down to the finished floor level	
716.3/202 Marking of Fire-Rated Glazing Assemblies	C			Table 716.3 added to	

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
				define & relate various test standards for fire-rated glazing	
716.5 (Table) Opening Protection Ratings and Markings	C			Table 715.4 extensively expanded to include maximum size & marking requirements for door vision panels, min. rating & marking sidelight/transom	
716.5.5.1 Glazing in Exit Enclosure and Exit Passageway Doors	M			Glazing in fire door assemblies in interior stairways, ramps, exit passageways revised max. permitted size of the glazing and the limitations where the building is fully sprinklered.	
716.5.6 Protection of Air Openings in Rated Exterior Walls	A		Fire dampers mandated for duct penetration in fire-resistance-rated exterior walls required to have protected openings		
716.6 (Table) Fire-Protection-Rated Glazing	C			Table 716.6 now identifies the markings required on the fire-rated glazing for acceptance in specified applications	
726.6.5 Wired Glass in Fire Window Assemblies	D			The allowance for the use of wired glass without compliance with the appropriate test standards has been deleted	
717.5.4 Fire Damper Exemption for Fire Partitions	M			The omission of fire	

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
				dampers in fire partitions is now permitted under the same criteria that have been previously established for fire barriers	
718.2.6 Fireblocking within Exterior Wall Coverings	M			In combustible construction, the installation of fireblocking within concealed spaces of exterior wall coverings no longer required if wall covering is tested and installed per NFPA 285	
Chapter 8 Interior Finishes	C		Reformatted in its entirety to allow for a more appropriate methodology in the application of provisions for interior finishes		
803.11.4 Thin Interior Finishes	M		The maximum ¼" thick Class A materials are not permitted as interior wall or ceiling finishes where suspended or set-out from their backing unless qualified as noncombustible		
803.12 High-Density Polyethylene (HDPE) and Polypropylene (PP)				Polypropylene interior finishes must be tested by NFPA 286 test	
803.13 Site-Fabricated Stretch Systems	A		Site-fabricated stretch systems used as interior wall and ceiling finish		

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
			materials are now to be tested as composite systems		
804.4 Interior Floor Finish Requirements				Fibrous floor finishes not separated from corridor with full height walls must meet same requirements as corridor floor	
804.4.1 Floor Covering Materials in Group I-1 Occupancies	A		The minimum classification for floor covering materials in exitways of I-1 occupancies has been established as Class I in nonsprinklered buildings and Class II in sprinklered building		
901.8 Pump and Riser Room Size				Rooms housing fire protection systems must be adequately sized to facilitate maintenance	
902.1 Definition of Fire Area	M		Definition modified to include any unenclosed floor area w/roof or floor above		
903.2.2 Sprinklers in Ambulatory Care Facilities				Automatic sprinkler requirements for Group B ambulatory care facilities are now regulated on a floor-by-floor basis	
903.2.3 Sprinkler Protection in Group E Occupancies	M		Reduced fire area threshold at which a Group E occupancy must be provided with automatic		

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
			sprinkler system, reduced from 20,000SF to 12,000SF		
903.2.4/903.2.7/903.2.9 Furniture Storage and Display in Group F-1, M, and S-1 Occupancies				Automatic sprinkler systems are now required in occupancies where upholstered furniture or mattresses are manufactured, stored, or displayed	
903.2.7 Sprinkler Systems in Group M Furniture Stores	M		Automatic sprinkler protection required in all Group M that display or sell upholstered regardless of the size		
903.2.10 Sprinklers in Group S-2 Enclosed Parking Garages	M		Group S-2 enclosed parking garages now only where the fire area exceeds or is located beneath other groups		
903.2.11.1 Stories Without Adequate Exterior Openings	C		Appropriate method for the distribution of exterior wall openings providing fire department access to non-sprinklered stories and basements has been clarified		
903.2.11.1.3 Sprinkler Protection for Basements	M			Basements provided with walls, partitions, or fixtures that can obstruct water from hose streams now required automatic sprinkler protection	
903.2.11.2 Sprinkler Protection of Rubbish and Linen Chutes	M			Automatic sprinkler	

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
				protection requirements for rubbish and linen chutes have been clarified for consistency of application	
903.3.1.2.1 Sprinkler Protection of Residential Balconies and Decks	M		Automatic sprinkler protection of dwelling unit exterior decks and balconies is now required only where there is a combustibile deck or roof above		
903.3.1.3 NFPA 13D Sprinkler Systems	A		NFPA 13D 1&2 family, has been extended to include townhouses		
903.3.5.2 Secondary Water Supply				Secondary water supplies must now be designed to operate automatically	
904.3.2 Actuation of Multiple Fire-Extinguishing Systems	M			When 2 or more alternative automatic fire-extinguishing systems are required to protect a hazard, systems to be designed to simultaneously operate.	
905.4 Location of Class I Standpipe Hose Connections	M			Requirements for roof hose connections on Class I standpipes have been clarified	
906 Portable Fire Extinguishers	A		IFC provisions for portable fire extinguishers added to IBC		
906.1 Portable Fire Extinguishers in Group R-2 Occupancies	M			Portable fire extinguishers	

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
				are no longer required in many public and common areas of Group R-2 occupancies provided a complying extinguisher is provided within each individual dwelling unit	
907.2, Exceptions Manual Fire Alarm Box in Group R-2	M		Requirement and location specifications for a single manual fire alarm box in a sprinklered Group R-2 occupancy clarified		
907.2.1 Fire Alarms Systems in Group A Occupancies	M			Requirements for a fire alarm system in a building housing two or more Group A occupancies are now based on whether or not the occupancies are in separate fire areas	
907.2.1.2 Emergency Voice/Alarm Communication Captions	A			Mass notification fire alarm signals in large stadiums, arenas, and grandstands now required captioned messages	
907.2.3 Group E Fire Alarm Systems	M			An emergency voice/alarm communications system is now required in Group E occupancies with an occupant load of 30 or more	
907.2.9.3 Smoke Detection in Group R-2 College Buildings	A			Smoke detection system, tied into the occupant notification system, is now	

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
				required in certain public and common spaces of Group R-2 college and university buildings, and the required smoke alarms within individual dwelling and sleeping units must be interconnected with the building's fire alarm and detection system	
907.2.11.3 Wireless Interconnection of Smoke Alarms	M			Smoke alarm interconnection requirements are now applicable to Group I-1 occupancies and include allowances for use of wireless alarms	
908.7 Carbon Monoxide Alarms	A			In new and existing buildings, carbon monoxide (CO) alarms are now required in Group R and I occupancies with fuel-burning appliances or attached garages	
913/913.2.1 Protection of Fire Pump Rooms	A		Fire-resistant separation in accordance with the IBC		
914 Emergency Responder Safety Features	A		IFC requirements for the identification of shaftway hazards and location of fire protection systems are now included in the IBC		
<b>Part 3 Means of Egress (Chapter 10)</b>					
1001.4 Fire Safety and Evacuation Plans	A			A reference is now	

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
				provided to the IFC provisions addressing emergency planning, procedures, and training programs in order to have consistent requirements for the development of evacuation plans	
1002.1 Means of Egress Definitions	A		New & revised definitions		
1004.1.2/1004.1.2 (Table) Design Occupant Load – Areas without Fixed Seating	M			Occupant load factor for museums and exhibit galleries established - 30 SF per occupant	
1005 Means of Egress Capacity Determination	M			Reduced exit width factors established for sprinklered building provided with emergency voice/alarm communication system	
1005.1 Minimum Required Egress Width	M		Allowance for reduction in minimum required means of egress width because of the presence of an automatic sprinkler system is eliminated		
1005.2/1005.3 Door Hardware Encroachment into Egress Width	M		Clarifying the general allowances for encroachment into the required means of egress width, the method of measurements for encroaching doors has been specifically addressed		

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
1007 Accessible Means of Egress	M			Exterior area for assisted rescue can now be provided on stories above level of exit discharge. Open Interior exit access stairways are now recognized as accessible means of egress.	
1007.3/1007.4 Required Areas of Refuge	M		Areas of refuge are no longer mandated as required elements of accessible means of egress in those buildings equipped throughout with an automatic sprinkler system		
1007.6.3/1007.8 Two-way Communication Systems	A		A means of two-way communication is also required in multi-story buildings in which areas of refuge are not provided		
1008.1.2 Door Swing	C			Door swing based on entire occupant load of space served.	
1008.1.2 Exception 9 Manually Operated Horizontal Sliding Doors	A		Now permitted as a means of egress element in occupancies other than Group H, provided the occupant load is limited		
1008.1.9.4 Manually Operated Edge- or Surface-mounted Bolts	A		Allowance of manually operated edge or surface-mounted bolts on the inactive leaf of a pair of		

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
			doors extended to limited applications in Group B, F, S, and I-2 occupancies		
1008.1.9.6 Special Locking Conditions for Group I-2	A		Locks not usable by the patients in I-2 occupancy is now permitted where multiple conditions are met, provided the clinical needs require such locks		
1008.1.9.8 Electromagnetically Locked Egress Doors	A		Electromagnetically locked doors permitted in the means of egress if equipped with listed hardware that incorporates built-in switch meeting specified conditions		
1008.1.9.9 Electromagnetically Locked Egress Doors	M			Electromagnetically locked egress doors may be used on panic hardware doors, as long as operation of hardware interrupts power to electromagnet	
1008.1.10.1 Listing of Panic Hardware	C		Panic & fire exit hardware installed on means of egress doors must be listed in accordance w/UL 305		
1009/1010/202 Interior Stairways and Ramps	C			Revisions to coordinate unenclosed interior stairways and ramps to allow as portion of means of egress	

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
1009.1 Application of Stairway Provisions	C			All stairways serving occupied portions of a building shall comply w/requirements of code	
1009.4.5, Exception 2 Open risers in Industrial Occupancies	M		In Group F, H, and S occupancies, open risers permitted at stairways located in areas not accessible to the public		
1009.9 Clear Width of Spiral Stairways	M		Minimum clear width of spiral stairway must be available at handrail height and below		
1009.12 Stair Handrails in Group R-2 and R-3	M		Within dwelling & sleeping units of Groups R-2 & R-3, handrails required on four or more risers		
1009.14 Roof Access to Elevator Equipment	A		Access to roof/penthouse is required to maintain elevator equipment, stairway must be provided for access purposes		
1010.9.1 Curbs Used as Edge Protection at Ramps	C		Minimum required height of 4 inches for curbs used as edge protection at the side of ramps		
1011.1 Required Exit Sign Locations	M		Required within exits and intervening doors to clearly indicate the direction of travel		
1011.2 Floor-Level Exit Signs in Group R-1	A			Where general-use exit signs are required in R-! occupancies, low-level exit	

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
				signs must also be provided in the means of egress serving the guest rooms	
1011.4 Internally Illuminated Exit Signs	M		Illuminated exit sign required to be listed and labeled per UL 924		
1012.2 Handrail Height	M			Transition pieces of continuous handrail are now permitted to exceed the max. handrail height	
1012.2 Handrail Height for Alternating Tread Devices	M		Modifies handrail height, measuring tread height, guard opening and handrail extensions		
1012.3 Handrail Graspability	A		Criteria for complying handrail shapes, identified as Type II		
1012.3.1/1012.8 Handrail Graspability and Projections	M			A minimum cross-section dimension has now been established for the graspability of noncircular Type I handrails.	
1013.1 Required Locations for Guards	M		Vertical distance from walking surface to the grade below is based on the lowest point within 36" radius, measured horizontal		
1013.1/1013.8 Guards at Operable Windows	M			Guard requirements relocated to Chap. 10, sill height which guard is required has been	

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
				increased from 24" to 36"	
1013.2 Minimum Guard Height at Fixed Seating	M		Fixed seating adjacent to guard is considered as walking surface, guard height is measured from the surface rather than floor		
1013.3 Guard Height	M			Minimum guardrail height in R-3, individual R-2 dwelling units is decreased from 42" to 36"	
1013.3 Guard Opening Limitations	M		Maximum size of openings in the upper portion of guards has been reduced from 8" to 4-3/8"		
1014.3 Common Path of Egress Travel in Group R-2	M		Extended common path of egress travel in R-3 occupancies is now available in buildings protected with NFPA 13R automatic sprinkler system		
1015.1 Single Means of Egress from Group R-2 Units	M		Occupant load threshold at which second means of egress is required from R-2 has been increased from 11 to 21 in buildings in which an automatic sprinkler system is provided		
1016.1 Travel on Unenclosed Exit Access Stairways	C		Measurement of travel distance has been clarified to indicate it includes travel on unenclosed exit		

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
			access stairways		
1016.2 Travel Distance Increase for Roof Vents	D		Allowance for increased travel distance in fully sprinklered F-1 and S-1 with smoke and heat vents has been eliminated		
1021.2 Exits from Stories	M			Exits are now permitted to be arranged where they serve a portion of a story instead of requiring that all of the required exits from the story be accessible to all of the occupants	
1021.2.1 Exits from Mixed Occupancy Buildings	C			A ratio equation is now to be used to determine if a single exit is allow to serve the combined occupant load from different occupancies.	
1021.2.1, Table 1021.2(1) Exits from Dwelling Units	M			A new section clarifies when a single exit is permitted within or from an individual dwelling unit. Changes to Sec. 1021.2 and the tables will also provide a second option for compliance	
1022.1 Fire-Resistant Rating of Exit Enclosures	C		Consistent with the provisions of shaft enclosures		
1022.5 Enclosure Penetrations of Interior Exit Stairways	M			Penetrations of the outside membrane of a fire barrier utilized to	

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
				enclose an interior exit stair or ramp are now permitted provided penetration is properly protected	
1024 Luminous Egress Path Markings	A		Photoluminescent or self-lighting exit path marking are now required in exit enclosures and exit passageways of specific high-rise buildings		
1028.1 Egress for Group E Assembly Spaces	M		Are now subject to the specific means of egress provisions set forth for Group A occupancies in sec 1028		
1028.1.1.1	A			Spaces beneath grandstands and bleachers are now required to be adequately separated to protected the assembly seating area from any potential hazards	
1028.4 Egress Through Lobbies Serving Assembly Spaces	M		The physical barrier required to separate the waiting areas within lobbies of group A-1 occupancies from the means of egress paths is no longer required		
<b>NOTE: TDLR - Texas Accessibility Standards (TAS) may apply in addition to Chapter 11</b>					
1103.2.3 Employee Work Areas	M		The maximum size of employee work areas		

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
			specifically exempted from all accessibility requirements has been increased to 300 ft		
1103.2.13 Accessibility for Live/Work Units	A		The degree of accessibility required in a live/work unit has been established		
1104.3.1 Employee Work Areas	M			Where an employee work area is less than 1000S, the common use circulation path need not be accessible route requirements.	
1106.5 Accessible Van Parking Spaces Serving Group R-2 And R-3 occupancies	M		In buildings with private garages that contain R-2 and R-3 occupancies the accessible van clearance need be only 7 ft above the garage floor		
1107.3 Maneuvering Clearance at Group I-2 Sleeping Unit Doors	M		Maneuvering clearance mandated to passage doors is no longer required at the room side of doors to sleeping units		
1107.6.1 Accessible Units in R-1 Occupancies	M			A reduced number or percentage of the facilitates in Accessible units now required accessible.	
1107.6.1.1 Table Roll-in Showers	M		Table was modified to offer the same bathing options as found in standard rooms		

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
1108.2.7.3 Captioning of Public Address Announcements	M			The captioning of audible public announcements is now only required for assembly spaces having a public address system and 15,000 or more seats	
1108.4.1 Courtroom Accessibility	M		The general requirement has been replaced with several provisions that address specific judicial activities that occur		
1109.2,1109.5 Accessible Children’s Facilities	M			Toilet facilities and drinking fountains “primarily for children’s use” may now be installed at a lower height than generally permitted for accessible elements and considered as the required accessible elements.	
1109.2.1 Family or Assisted-use Toilet and Bathing Rooms	C		“unisex” toilet rooms are now identified as “family or assisted-use”		
1109.2.3 Accessible Lavatories with Enhanced Reach Ranges	A		A lavatory with enhanced reach ranges is now required in a toilet room or bathing facility that have six or more lavatories		
1109.6 Accessible Saunas and Steam Rooms	A			Saunas and steam rooms are now identified as features and facilities that must accessible	
1109.12.1 Accessible Operable Windows	C		In R-2 apartment houses,		

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
			monasteries, and convents in which accessible rooms in Type A units are provided with operable windows, at least one in each room shall be accessible		
1110.4 Variable Message Signs	A			Variable message signs in transportation facilities and emergency shelters are now required to comply with the provisions of the A117.1-2009	
1203.1 Mechanical Ventilation Required	A			The option of natural ventilation rather than mechanical is now unavailable when a dwelling unit is tested using a blower door test and it is determined that an adequate number of air changes are not provided.	
1203.2 Ventilation of Attic	M			The minimum required ventilation for attics clarified and exceptions provided either allow a reduction in the vent area or eliminate requirement.	
1208.3 Minimum Kitchen Floor Area	D			Required min. 50SF deleted.	
1210 Toilet Bathroom Requirements	C			The water closet compartment and urinal partition requirements	

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
				have been from Chap. 29 to Section 1210	
1210.1 Wall Base Finish Materials	M		Smooth, hard, nonabsorbent vertical base material are now permitted and a reduction from 6 in to 4 in above the floor		
1402.1, 1408 Exterior Insulation and Finish Systems (EIFS)	A		Provisions regulating exterior insulation and finish systems have been expanded to include other IBC sections and new ASTM standards		
1403.5 Flame Propagation at Exterior Walls	A			Flame-spread test is now required where combustible water-resistive barriers are used in Type I, II, III, IV buildings which are greater than 40' in height	
1404.12, 1405.18,202 Polypropylene Siding	A			Polypropylene siding now regulated, flame-spread testing and fire-separation distance	
1405.6 Anchored masonry Veneer	D			Seismic Zone D provisions	
1503.4 Roof Drainage Systems	C			Design and Installation of roof drainage systems now in IBC as well as IPC Section 1106 & 1108 for overflow – 100yr.-1-hour	
1507.2.8.1 Roof Covering Underlayment in High Wind Areas	A			Specific provisions for underlayment in areas	

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
				with wind speeds at 120 mph or greater.	
1507.16 Roof Gardens and Landscaped Roofs	A		Roof gardens and landscaped roofs are now regulated for roof construction and structural integrity	Structural frame and roof require fire resistance complying with Table 601. IFC provisions for combustible vegetation with potential limited accessibility	
1507.17, 3111, 202 Photovoltaic Systems	A			Photovoltaic elements must now meet the general code requirements for roofing materials and roof top structures	
1509, 202 Rooftop Structures	M			Reformatted and several technical changes to section.	
1509.2 Penthouse Height, Area, and Use Limitations	C		Height, Area & Use complying will be considered as portion of story below		
1509.2.4 Fire-retardant-treated Wood in Penthouses	M		Fire-retardant-treated wood is now permitted in penthouse construction in 1-2 story bldgs of type 1 construction and all of type 2,3,4,and 5 construction		
1510.3 Roof Covering Replacement	M			Existing ice barrier material is permitted to remain in place.	
Ch 16, Ch 35 ASCE/SEI-05 Supplement #2	M		Supplement No. 2 to the 2005 edition of ASCE/SEI 7		

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
			is now referenced in Ch 16, revising the minimum base shear equations		
1602, Table 1607.1 Live Loads for Decks and Balconies	M		Decks and balconies now have the same live load as the occupancy they serve		
Table 1604.3 Deflection Limits	M			Roof and floor supporting plaster or stucco clarified. Footnote F	
1604.5, 202 Risk Categories	M			“Occupancy category” changed to “risk category” (ASCE 7-10)	
1604.8.2 Anchorage of Walls	M		All walls must now be anchored to floors, roofs, and other structural elements that provide lateral support for the wall		
1604.8.3 Loading Conditions on Cantilevered Decks	M		To be consistent with Sec 1607.10 and 4.6 of ASCE 7-05 and snow loads have been added		
1605.1.1 Load Combinations in Stability Analysis	A		If factored loads are used when performing stability analysis of structures, soil resistance and strength reduction factors must now be considered		
1605.2 Load Combinations Using Strength Design of Load and Resistance Factor Design	M			Coordinated with Sec. 2.3 of ASCE 7-10, includes loads due to fluid, F, other lateral, H, and ice.	
1605.3 Load Combinations Using Allowable Stress Design	M			Coordinated with Sec. 2.4 of ASCE 7-10, includes	

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
				loads due to fluid, F, other lateral, H, and ice.	
1605.3.1 & 1605.3.2 Load Combinations Using Allowable Stress Design	M		Allowable stress design load combinations are now consistent where roof live and earthquake loads effects are combined		
1607.1 Minimum Live Load	M			Coordinated with live loads of Chap. 4 and Table 4-1, ASCE 7-10	
1607.6, 202 Helipads	M			Updated/coordinated - ASCE 7-10	
1607.7 Heavy Vehicle Loads	M			Updated provisions for heavy vehicle loads in excess 10,000lbs.	
1607.7.7.1.3 Allowable Stress Increase for Design of Handrails and Guards			The allowance for a one-third stress increase for the allowable stress design of handrails and guards has been deleted		
1607.7.3 Bumper Load Application			The loading conditions have been revised to reflect the increase in trucks, vans, and sport utility vehicles inside parking structures		
1608.3, 1611.2, 202 Ponding Instability	M			“susceptible bay” added to identify w/ponding considered	
1609, 202 Determination of Wind Loads	M			Updated with ASCE/SEI 7 wind load maps now based on ultimate design wind speeds.	

## **International Building Code 2006 – 2012 Significant Changes Matrix**

Section /Topic	Type	2006	2009	2012	Comments
1609.1.1 & 1609.6 Determination of Wind Loads, Alternate All-Heights Method	A		A new wind design method based on ASCE 7 is now available as an alternate to ASCE 7 methods 1 and 2		
1609.1.1, 1609.1.1.2 Determination of Wind Loads	A		ASCE/SEI 7-05 commentary have been added to the code		
1609.1.1, 2308.2.1 Residential Construction in High-Wind Regions	M		The reference to the ICC legacy standard SSTD 10-99 has been replaced with the new 2008 edition ICC-600		
1609.1.2 Protection of Glazed Openings in Wind-borne Regions	M		Wood structural panels in lieu of glazing or impact-resistant covering is now limited to buildings of group R-3 or R-4 occupancy		
1609.1.2.2 Impact-resistance Testing of Garage Doors	A		ANSI/DASMA 115 is now referenced by the IBC		
1610.1, 1807 Design of Foundation Walls	M		The code provisions have been reorganized and technical revisions were made to clarify the provisions		
1607.11.2.2 Live Load Design for Special Purpose Roofs	M		A previous conflict between sections 1607.9.1.4 and 1607.11.2.2 have now been resolved		
1613.3.1, 202 Mapped Acceleration Parameters	M			Updated to reflect 2008 USGS maps and technical changes of 2009 NEHRP	

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012 (FEMA P750)	Comments
1613.4 Alternatives to ASCE 7	M			Many alternatives to ASCE 7-05 in the 2009 deleted because they were incorporated in ASCE 7-10	
1613.6.1, 2305 General Design Requirements for Lateral-force-resistance Systems	M		Portions of section 2305 were deleted and are now contained in the AF&PA <i>ANSI/AF&amp;PA NDS supplement (SDPWS)</i> standard		
1613.6.3 Automatic Fire Sprinkler Systems	A		Automatic sprinkler systems installed with the 2007 NFPA 13 are now recognized as compliant with ASCE 7 seismic bracing provisions		
1613.6.4 AAC Masonry Shear Wall Design Coefficients and System Limitations	A		Seismic design coefficients and limitations (AAC) masonry shear wall systems have been added to the IBC		
1613.6.6 Steel Plate Shear Wall Height Limits	M		ASCE 7sec 12.2.5.4 has been amended to permit height increases for special steel plate shear wall systems		
1613.6.7 Minimum Distance for Building Separation	A		Minimum requirements for building separation have been restored in the IBC		
1613.6.8 HVAC Ductwork with $I_p=1.5$	M		Exemptions from seismic bracing requirements have		

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
			been extended to include small ducts where $lp = 1.5$		
1613.7 Anchorage of Walls	A		Sec 11.7.5 of ASCE 7 has been amended by eliminating the requirement that concrete and masonry walls be anchored to floors and roofs that provide lateral support for a wall		
1614 Structural Integrity of High-rise Buildings	A		Minimum structural integrity requirements have been provided for high-rise buildings to occupancy III and IV		
1614, 202 Atmospheric Ice Loads	A			New section, definition and notation of the ice loads on ice sensitive structures added to provide consistency w/ASCE 7-10	
1704 Special Inspectors Qualifications Exemptions for R-3 Occupancies	M		Special inspector qualifications has been clarified and the special inspection exemption for Group R-3 has been deleted		
1704.3 Statement of Special Inspections	M			Coordination and clarification of specific special inspections and the required information to be included in special insp. report	

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
1704.4 Special Inspections of Bolts and anchors in Concrete Construction	M		Special inspection is now required for cast-in-place bolts and periodic special inspections is now mandated for post-installed in hardened concrete		
1704.3.4, 1704.6.2 Special inspection for the Bracing of Trusses	A		Two new sections have been added for special inspectors verify temporary and permanent bracing are installed as per approved truss submittal package		
1705.2 Special Inspection of Steel Construction	M			Deleted from Chap 17 replaced by ANSI/AISC 360-10	
1705.3 Required Verification and Inspection of Concrete Construction	M			The type of special inspection required for anchors cast in concrete and post installed anchor in hardened concrete have been clarified.	
1705.4 Special Inspection of Masonry Construction	M			Replaced by TMS 402/ACI 5 and TMS 602/ACI530.1/ASCE 6.	
1705.16 Special Inspection of fire-Resistant penetration and Joint Systems	A			Where penetration firestop systems and fire-resistant joint systems are used in high-rise building and those building assigned in Risk Category III and IV, it is now	

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
				mandatory to be inspected by an approved inspection agency as a part of the special inspection process.	
1706.1 Special Inspection Requirements for Wind Resistance	A		Special inspection requirements have been established for buildings sited in areas of high wind		
1707.4 Special inspection of Light-frame Construction	M		The exemption from special inspection of wood light-frame construction fastener spacing now applies to cold-formed steel light-frame construction		
Chapter 18 Design of Footings and Foundations	M		Has been resolved between conflicting code requirements		
1802, 1810 Deep Foundations	M		Was reorganized in order to eliminate repetition, resolve conflicting definitions, and simplify requirements		
1803, 1804 Geotechnical Investigations, Excavations, Grading, and Fill	M		Reorganized and clarified and the appropriate term, geotechnical, is now consistently used as it relates to geotechnical investigations and geotechnical reports		
1803.5.12 Geotechnical Reports for Foundation Walls and Retaining Walls	M			Required In Seismic Zones D, E, and F supporting 6' of backfill.	

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
1807 Retaining Walls	M		A factor of safety of 1.1 is permitted for overturning and sliding of retaining walls subjected to earthquake loading		
1807.2 Sliding Analyses of Retaining Walls	M		Both sides of the keyway are now explicitly required to be considered in the sliding analysis		
1808.3.1 Foundation Design for seismic Overturning	M		Consistency is now provided between the IBC and ASCE 7		
1810.3.1.5 Helical Pile Foundations	M		Provisions have been added regulating the design and installation of helical pile foundations		
1810.3.3.1.6 Uplift Capacity of Grouped Deep Foundation Elements	M			The uplift capacity of pile groups is now permitted to include two-thirds of the shear resistance of the soil block.	
Chapter 19 Concrete Design and Construction	M		The concrete provisions of Ch 19 have been updated and coordinated with the 2008 edition of the ACI 318 standard	Deleted provisions of Chap 19 replaced by ACI 318 2011 edition.	
1905.1.3 Seismic Detailing of Wall Piers	A			ACI 318 Sec. 21.4 provides seismic for intermediate precast structural walls. Seismic details, wall piers in Seismic D, E, and F	
1905.1.8 Plain Concrete Footings in Dwelling Construction	M			Plain concrete footings may only support 1&2	

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
				family buildings in seismic zones A, B, and C.	
1905.1.9 Shear Wall to Concrete Foundation Connection	M			Amended provisions of ACI 318 Appendix D.	
1908.1.16 Ductility of Concrete Wall Anchorage	M		Exceptions have been added to the requirements for ductility for concrete wall anchorage		
Chapter 21 Masonry	M		Substantial portions of Ch 21 have been deleted and the reference to the <i>Building Code Requirements &amp; Specification for Masonry Structures and related commentaries</i> has been updated to the 2008 edition		
2101.2 Design Method for Masonry Structures	A			TMS 403-10 masonry design standard provides direct design method for simple, single story, concrete masonry bearing walls.	
2111.3, 2113.3 Seismic Reinforcing of Fireplaces	M		The Seismic Design Category D requirements have been extended to include Seismic Design Category C		
2206 Composite Structural Steel and Concrete Structures	A			Seismic categories D, E, and F.	
2208.1 Seismic Design of Racks	M		The latest version of the Rack Manufacturers		

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
			Institute standard, is now referenced		
2209.1 Design of Cold-formed Steel Structural Members	M		The reference to AISI's 2007 edition, has been updated and given the new number designation of AISI S100		
2209.2 Steel Decks	A		Two new Steel deck Institute (SDI) standards are now referenced		
2210 Cold Formed Steel Light-framed Construction	M		The IBC provisions on cold-formed steel have been correlated with the latest editions of the AISI standards and a new standard for floor and roof framing has been added		
2210.2 Seismic Requirements for Cold-Formed Steel Structures	A			AISI S110 standard added to Chap. 22 (CFS-SBMF)	
2210.3 Trusses	M		Code language was added for cold-formed steel trusses similar for wood trusses		
2301.2 Design and Construction of Log Structures	A		A new standard , ICC-400, is now referenced in Ch 23		
2304.6.1, Table 2304.6.1 Wood Structure Panel Sheathing Used to Resist Wind Loads	A		Guidelines are now provided for selecting wood structural panel wall sheathing used to resist component and cladding wind loads		
2304.9.5 Fasteners in Preservative-treated and Fire-retardant-treated Wood	M		The requirement for fasteners used in		

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
			preservative-treated and fire-retardant-treated wood have been clarified		
2304.11.2.6 Vertical Clearance at Wood Siding	M		A minimum vertical clearance of 2 in is required between wood siding and concrete steps, porch slabs, patio slabs, and similar surfaces		
2305 General Design Requirements for Lateral-Forced-Resisting Systems	M			Coordinated with 2008 edition of AF&PA, (SDPWS-08)	
2306 Allowable Stress Design of Wood Structures/ Allowable Stress Design	M		Portions of Sec 2306 have been deleted because they are contained in the AF&PA ANSI/AF&PA NDS Supplement (SDPWS) standard	Coordinated with 2008 edition of AF&PA, (SDPWS-08)	
Table 2306.6 Wind or Seismic Loading on Shear Walls of Fiberboard Sheathing Board	M		Revised Table 2306.6 to provide consistency with AF&PA (SDPWS) for nailed fiberboard shear walls		
2307 Load and Resistance Factor Design	M			Coordinated with 2008 edition of AF&PA, (SDPWS-08)	
2307.1 Load and Resistance Factor Design of Wood Trusses	M		A reference to the AF&PA (SDPWS) has been added to Sec 2307		
2308.2 Maximum Floor-to-floor and Stud Height	M		The limitations regarding floor-to-floor and stud height for conventional wood frame construction have been added		

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
2308.2 Limitations	M		Conventional light-frame construction provisions in areas of wind speeds up to 110 mph in Exposure Category B now excludes buildings located in hurricane-prone regions		
2308.3.2 Braced Wall Line Connections	M		Clarifies that the connections resisting wind and seismic lateral forces apply to the entire braced wall line		
2308.6, 2308.12.8, 2308.12.9 Foundation Sill Plate Anchorage	M		The permitted use of strap anchors in lieu of anchor bolts in high-seismic regions has been clarified		
2308.9.1 Continuous Wall Studs	M		Wall studs are now required to be continuous from a support at the sole plate to a support at the top plate		
2308.12 Braced Wall Line Sheathing	C			Revised to provide min. % rather than a min. length for wall bracing, in Seismic D & E	
2406.1, 2406.4 Safety Glazing-Hazardous Locations	M			Reorganized for greater consistency with the IRC	
2406.1, 2406.2 Impact Tests for Safety Glazing Material	M		Safety glazing materials may now comply with ANSI Z97.1	More restrictive test methodology unless tables in Sec. 2406.2 allow lower.	
2510.6 Water-Resistive Barriers for Stucco Applications	M			Detailed requirements for two layer weather-resistive barrier	

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
2603.4.1.14 Foam Plastic Insulation Installed in Floor Assemblies	A			Alternative method of installing thermal barrier when ½ structural panel or equiv. Is used	
2603.7, 2603.8 Interior Finish in Plenums	M			Options for separating foam plastic insulation in plenums.	
2603.10, 2603.10.1 Special Approval of Foam Plastics	M			Specific approval requirements ensure smoke development of all assemblies containing foam plastic	
2610.3 Slope Requirements of a Dome Skylight	M			Revised dimension for slope.	
2612, 202 Fiber reinforced Polymer	M			Now must be Class A, limited to 10% of exterior wall.	
<b>PART 7 Building Services, Special Devices, and Special Conditions (IBC Chapters 27 Through 34)</b>					
2902.1.1 Calculation of Plumbing fixture Count	C		In building with multiple occupancies the minimum number of plumbing fixtures has been clarified		
2902.2 Single-user Toilet Facilities	M			Where separate sex toilet facilities required and only one WC is required in each facility, two family or assisted use toilet room may now be provided as an acceptable alternative.	
2902.3 Toilet Facilities in Parking Garages	M			Public toilets no longer required.	
2902.3.5 Locking of Toilet Room Doors	A			In other than family or assisted use toilet room	

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
				the door from a toilet room can no longer be lockable from the inside, unless it is a single-user facility.	
2902.5 Required Drinking Fountains	C			Drinking fountains are now allowed to serve multiple tenants spaces, provided appropriate distances and access	
2903 Water Closet Compartments and Urinal Partitions	A		Water closet and urinal privacy provisions are now also located in the IBC		
3002.4 Elevator Car Size to Accommodate Stretcher	M		The elevator car dimension has been modified to accommodate a ambulatory stretcher		
3007 Fire Service Access Elevators	M		A fire service access elevator using key features is now required in high-rise buildings with an occupied floor more than 120 ft above the lowest level of fire dept. vehicle access	Coordination with occupant evacuation elevators.	
3008 Occupant Evacuation Elevators	M		Specific provisions have been added to address the use of passenger elevators for occupant evacuation purposes	Coordination with fire service access elevators	
3108 Telecommunication and Broadcast Towers	M			References to TIA 222-G modified to exclude exemptions from Section 3108.1	

## International Building Code 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
3302.3, 3303.7, 3313 Fire Safety during Construction	A			IFC Construction protection requirements of the have been incorporated into the IBC to ensure they are now overlooked	
3401.3 Compliance for Existing Buildings	M			Chap. 34 provisions are specific and take precedence over requirements in other codes	
3401.5 Applicability of <i>International Existing Building Code</i>	A		The use of the International Existing Building Code is now permitted as an alternative to the use of IBC Ch 34's provisions related to existing buildings		
3411 Type B Units in Existing Buildings	M			Type B units are now required in existing buildings when there is a change in occupancy or an alteration and more than 50% of building is affected.	

# ***International Building Code 2006 – 2012 Significant Changes Matrix***

***A*** = Addition

***C*** = Clarification

***D***=Deletion

***M***=Modification

## International Fire Code (IFC) 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
<b>Part 1 Administrative (Chapters 1 and 2)</b>					
101 Organization of the IFC	M			Reorganized code by grouping of Chapters in Parts	
104.9.1 Research Reports	A		Mandates valid research reports		
104.9.2 Tests	A		Provides clarity on the approval of test methods/reports		
105.6.16 Flammable and Combustible Liquids	A		Operational permit required for Class IIIB (Biodiesel) fuels		
105.6.23 Wildfire Risk Areas	M		Changes Hot Work permit to address a Wildfire Risk Area with associated definition		
105.7.4 Construction Permit for Cryogenic Fluids	A		New permit for certain Cryogenic Fluid storage systems		
106.2.1 Inspection Requests and Approvals	A		Requires permit holder to request inspections and obtain approval		
106.3 Concealed Work	M		Clarifies that work must remain accessible for inspection		
113 Fees	A		New section for permit fees		
202 Definitions	A  M  M		New definition for Ambulatory Health Care Facility in Group B   Occupancy classifications for Aircraft Facilities revised (F-1, S-1, S-2)	Definitions and terms for various medical and occupant care occupancies clarified	
<b>Part 2 General Safety Provisions(Chapters 3 and 4)</b>					
304.3.2 Container Capacity Exceeding 5.33 Cubic Feet	M		Waste containers must have limited heat release rate		
307.1.1 Prohibited Open Burning	M			Clarification of open burning rules for identified Wildland areas	

## International Fire Code (IFC) 2006 – 2012 Significant Changes Matrix

308.1.6 Open Flame Devices	M		Replaces terms of hazardous fire area to wildfire risk area		
315.3.1 Storage Beneath Overhead Projections	M		Clarification of requirements regarding fire sprinkler protection under canopies/projections		
316.4 Obstructions on Roofs	A			New section for obstructions on roofs which may be hazardous to fire fighters	
317 Roof Gardens and Landscaped Roofs	A			New requirements for rooftop gardens/landscaping	
403.3 Crowd Manager	A		Requirement for Crowd Manager with events of >1000 persons		
404.3.3 Lockdown Plans	A		Requirements for building lockdown plans		
407.2 Material Safety Data Sheets	C		Allows electronic source for Material Safety Data Sheets		
<b>Part 3 Building and Site Requirements (Chapters 5-10)</b>					
503.4.1 Traffic Calming Devices	A			Traffic calming devices must be approved	
503.5, Appendix D Section 103.5 Required Gates or Barricades	M		Security gates across fire apparatus roadways must be UL 325 and ASTM 2200 compliant		
505.1 Address Identification	M		Improved visibility of numeric address/building numbers when building is served by a private roadway		
506.1 Fire Service Elevator Keys	A			Additional requirements for elevator key boxes and keybox listing with UL 1037	
508.1.5 Required Features	M			Required information cards in buildings with Fire Command centers	
510, Appendix J Emergency Responder Radio Coverage	A		New requirements for signal coverage of emergency responder radios		
510.1 Emergency Responder Radio Coverage	A			2009 IFC Appendix J is now a	

## International Fire Code (IFC) 2006 – 2012 Significant Changes Matrix

				requirement	
603.3.1 Fuel Oil Storage Inside and Outside Building	M		Increased size of storage allowed inside building		
603.4.2 Portable Outdoor Gas-Fired Heating Appliances	A		Additional requirements for use of portable gas-fired heaters		
604.2.14.1.3 Connected Facilities	M		Electric fire pumps in high rise buildings must have an emergency power source		
604.5 Emergency Lighting Equipment	A			Testing requirements for emergency egress lighting	
605.11 Solar Photovoltaic Power Systems	A			New requirements for solar photovoltaic power systems	
606.8 Refrigerant Detection and Refrigeration System Emergency Shutoff	M		Clarifies req. for emergency shut off of refrigeration equipment		
606.13 Discharge Location for Refrigeration Machinery Room Ventilation	C/M		Removes req. for treatment system for discharge of anhydrous ammonia vapor		
607.3 Fire Service Access Elevator	A		Requires a Fire Service elevator in High Rise buildings >120' above FD access level		
607.5 Standardized Fire Service Elevator Keys	A			Additional requirements for elevator keys	
608 Stationary Storage Battery Systems	A		Requirements for Lithium Metal Polymer battery systems		
609.3 Operations and Maintenance	M		Improved req. for cleaning and inspections of commercial cooking operations		
610 Commercial Kitchen Cooking Oil Storage	A			New req. for storage of commercial kitchen cooking oils	
701.2 Unsafe Conditions	A		New section regarding unsafe conditions added to chapter on fire-resistive construction		
803.5.2 Newly Introduced Textile Wall and Ceiling Coverings	A			Clarification of requirements now includes fastening methods	
806.2 Artificial Vegetation	M			Recognizes an alternate method for evaluating/testing of materials	
808.4 Combustible Lockers	A			New section regarding combustible locker materials	
901.4.6 Pump and Riser Room Size	A			New section requiring adequate	

## International Fire Code (IFC) 2006 – 2012 Significant Changes Matrix

				space and clearances for equipment servicing	
901.9 Discontinuation or Change of Service	A			New requirement for a notice to fire official when fire alarm monitoring service is terminated/changed	
903.2.2 Ambulatory Care Facilities	A/M		Fire sprinkler protection requirements for Ambulatory Health Care Facilities	Same	
903.2.4 Furniture Storage and Display F1,M, and S1 Occupancies	M			Fire sprinkler protection in F-1 Occupancies where one of following exists: fire area exceeds 12000 sq ft, above 3 stories, combined areas exceed 24,000 sq ft, or used to manufacture upholstered furniture exceeds 2,500 sq ft.	
903.2.7 Furniture Storage and Display F1,M, and S1 Occupancies	M			Fire sprinkler protection in Group M Occupancies where one of following exists: fire area exceeds 12,000 sq ft, located more than 3 stories above grade, combined area exceeds 24,000 sq ft., or used for display/sale of upholstered furniture exceeds 5,000 sq ft.	
903.2.9 Furniture Storage and Display F1,M, and S1 Occupancies	M			Fire sprinkler protection in Group S-1 Occupancies where one of the following exists: fire area exceeds 12,000 sq ft, located more than 3 stories above grade, combined area exceeds 24,000 sq ft., fire area used for storage of commercial trucks or buses exceeds 5,000 sq ft., or used for storage of upholstered furniture exceeds 2,500 sq ft.	
903.2.10 Group S-2 Enclosed Parking Garages	M		Fire sprinkler protection in enclosed parking garages		

## International Fire Code (IFC) 2006 – 2012 Significant Changes Matrix

			where fire area exceeds 12,000 sq ft., where garage is located beneath other groups.		
903.2.11.1 Stories and Basements without Openings	C		The required openings shall be distributed such that the lineal distance does not exceed 50 feet.		
903.2.11.1.3 Basements	M			Basements are modified by the addition of a wall, partition, or fixture that can obstruct fire streams require fire sprinkler protection.	
903.2.11.2 Rubbish and Linen Chutes	M			Clarifies the fire sprinkler requirement in rubbish and linen chutes.	
903.3.1.3 NFPA 13D Sprinkler Systems	A		Automatic sprinkler requirements for new one and two family dwellings. (Texas Legislature eliminated local control)		
903.3.5.2 Secondary Water Supply	M			Secondary water supplies for high rise buildings must be automatic.	
903.6.2 Group I-2 Occupancies	A		Automatic sprinkler requirements for unprotected Group I-2 Occupancies		
904.1.1 Certification of Service Personnel	N			New requirement for qualifications of service personnel who service extinguishers and extinguisher systems.	
904.3.2 Actuation	M			Correlates IFC requirements of system actuation with appropriate NFPA standards.	
905.4 Location of Class I Standpipe Hose Connections	M			Clarifies standpipe hose connections upon rooftops and at open mall building perimeters.	
906.1 Where Required	M			Allows small portable fire extinguishers within dwellings in lieu of commons areas.	

## International Fire Code (IFC) 2006 – 2012 Significant Changes Matrix

907 Fire Alarm and Detection Systems	M		Reorganized fire alarm requirements to be aligned with NFPA 72		
907.2 Manual Fire Alarm System in Group R-2 Occupancies	M		Requires a minimum of one manual fire alarm box be installed, even if others are eliminated due to sprinkler protection.		
907.2.1 Group A Occupancies	M			Clarifies fire alarm requirements based on occupant load of Group A, considering separate occupancy.	
907.2.1.2 Emergency Voice/Alarm Comm. Captions	N			Per 2008 Federal Court Case Law, requires captioning of audible emergency voice/alarm communications in stadiums, arenas, and grand stands per IBC 1108.2.7.2	
907.2.3 Group E Fire Alarm	M			Emergency voice/alarm communications system now required in Group E occupancy.	
907.2.6.1.1 Smoke Alarms and Smoke Detectors	M			Increased smoke alarm sound level, clarified power requirements, recognized use of fire alarm systems and wireless smoke alarms.	
907.4.1 Protection of Fire Alarm Control Unit	M			Requires smoke detection to protect fire alarm system controls even in sprinkled building.	
907.5.2.1.1 Average Sound Pressure	M			Clarified requirements for sound pressure levels for fire alarm notification devices.	
908.7 Carbon Monoxide Alarms	N			CO Alarms required in Group R and I occupancies in both new and existing, with fuel burning appliances or attached garages.	
913.2.1 Protection of Fire Pump Rooms	A		Additional protection for fire pump rooms. Separation from other areas and/or fire resistive barriers.		

## International Fire Code (IFC) 2006 – 2012 Significant Changes Matrix

914.8.2 Aircraft Hangers	M		Fire suppression system for aircraft hangers correlated with NFPA 409.		
1002.1 Means of Egress Definitions	A		Added definitions for several means of egress terms.		
1004.1.2, Tab. 1004.1.2 Design Occupant Load-Areas without Fixed Seating	M			Occupant load factor now included for 30 sq ft. per occupant in museums and exhibit galleries.	
1005.1 (both) Means of Egress Sizing	M		2009 removed the reduction for sprinkler systems. @012 reinstated the sprinkler reduction if evac's provided.		
1007.3 Required Areas of Refuge 1007.4 Required Areas of Refuge	M		Areas of refuge not required in fully protected buildings with sprinklers.		
1007.6.3 Two-Way Communications 1007.8 Two- Way Communications	A		Requirements for means of communication for impaired occupants in multi story buildings.		
1008.1.2 Door Swing	C			Eliminates confusion by some code officials regarding exit door requirements	
1008.1.9.8 Electromagnetically Locked Egress Doors	A		Allows electromagnetic locks on egress doors on certain occupancies with special devices.		
1008.1.10 Listing of Panic and Fire Exit Hardware	C		Clarifies requirements that panic/fire exit hardware must be listed (UL 305-Panic Hardware).		
1009 Definitions: Exits, Stairways and Ramps	C			Clarifies use of unenclosed stairways.	
1009.4.5, Exception 2 Open Risers in Industrial Occupancies	M		In Groups F, H, & S, open risers permitted in certain areas not public accessible.		
1010 Definitions: Exits, Stairways and Ramps	C			Clarifies use of enclosed stairways.	
1011.2 Floor-Level Exit Signs in Group R-1	A			Requirement for floor level exit signage R-1 occupancies	

## International Fire Code (IFC) 2006 – 2012 Significant Changes Matrix

1011.4 Internally Illuminated Exit Signs	M		Internally illuminated exit signs must be listed & labeled per UL 924.		
1016.2 Travel Distance Increase for Roof Vents	D		Deleted increase in travel distance for smoke & heat vents.		
1021.2 Exits from Stories	M			Clarifies when a single exit is permitted from individual dwelling unit	
1022.5 Penetrations	M			Properly protected penetrations of outside membrane of fire barrier enclosures, exit stair, or ramp.	
1024 Luminous Egress Path Markings	A		Requires photo luminescent or self luminescent exit path markings of new & existing high rise buildings.		
1030.2 Reliability	M			Clarifies the requirements for reliability of an exit or exit passageway.	
1102.1 Intent	M			Clarifies the application of retroactive requirements in existing buildings.	
1103.8.1 Where Required	M			Clarifies the requirements for smoke alarms in R-2 occupancies of existing buildings.	
1104.16.5.1 Examination	N			Requirements for special inspections of existing fire escapes with frequency < 5 years	
<b>Part 4 Process and Uses (Chapters 11 – 26)</b>					
1413.1 Required Locations for Standpipes in Buildings under Construction or Demolition	C		Construction/Demolition of buildings requiring standpipes must maintain at least one stand pipe in service.		
1501.2 Non-applicability for Flammable Finishes	A		Exempts certain liquids from regulations when applies as a spray finish.		

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1506.2 & 1506.3 Location and Construction of Powder Coating Rooms and Booths	C		Clarifies requirements for powder coating rooms and booths.		
1507.2 & 1507.3 Electrostatic Apparatus	A		Requires listing for portable electrostatic paint spraying operations in certain locations.		
1803.13.2 Gas Detection System Operation	M		Establishes performance requirements for gas detection systems.		
Table 1805.2.2 Maximum Quantities of HPM at a Workstation	M		Establishes limits for volume of HPM (hazardous produced material) gas at a workstation.		
1805.2.3.4 Clearances	D		Minimum clearances around semi-conductor tools/workstations are no longer required.		
2108.2 Automatic Sprinkler System	M			New exception for dry cleaning plants using Class III-A/III-B liquids in un-sprinklered buildings.	
2204.4.1 Approved Containers Required	M		Size of portable containers for Class I, II, & III-A liquids limited to maximum size of 6 gallons.		
2205.2.1 Inspections, Repairs, and Service	A		Expands criteria for inspection of petroleum liquid dispensing equipment.		
2206.8 Alcohol Blended Fuels	A		Specific requirements for fuel dispensing stations of alcohol blended fuels.		
2209.5.1.1 Vehicle Fueling Pad	A		Criteria for electrical resistance of surfaces where hydrogen powered vehicles are fueled.		
2305.1 Tank-Filling Operations for Class I, II, or III Liquids	M			Requirements for tank filling operations sites/equipment for Class III-B liquids.	
2305.2.2 Repairs or Service	M			Improves application/enforcement of requirements of repairs and service for fuel systems.	
2305.6 Designation of Storage Heights	A		Specifies authority to require designation of storage height in		

## International Fire Code (IFC) 2006 – 2012 Significant Changes Matrix

2309.4 Automated Rack Storage	A		combustible storage areas. Emergency shut off switch required for automatic storage and retrieval systems.		
2311.7.2.1 System Design	M			Requires Listing/Approval for gas detection equipment.	
Chap. 24 Tents and Other Membrane Structures	M		Correlates requirements for tents and canopies with IBC.		
2605.2.1 Cylinders Connected for Use	A		Clarifies storage issues for oxygen and fuel-gas cylinders when connected to equipment.		
<b>Part 5 Hazardous Materials (Chapters 27 – 44)</b>					
2701.2.2.1 Physical Hazards	M		Clarification of definition and classifications for hazardous materials.		
2701.5.1, App H Hazardous Materials Management Plans and Inventory Statements	M		Clarifies information to be provided with hazardous materials management plans.		
Table 2703.1.1(1) Safety Cans	A		Listed safety cans are required for increase of quantity of liquids in control areas.		
Table 2703.1.1(1) & (4) Maximum Allowable Quantity per Control Area-Liquefied Compressed Gases	M		Maximum quantities for liquefied compressed gases to be measured by density.		
Table 2703.1.1(1) & (3) Maximum Allowable Quantity per Control Area Posing a Physical Hazard-Inert Compressed Gases and Cryogenic Fluids	A		Exemption for inert compressed gases and cryogenic fluids per control area.		
2703.2.1 Design and Construction of Containers, Cylinders, and Tanks	A		Requirement for pressure vessels to comply with ASME Boiler and Pressure Vessel Code.		
2703.10.1.2 Combustible Tools	M			Certain plastic construction materials for semi-conductor tools when listed as compliant with UL 2360 allow for redirection of requirement for automatic fire extinguishing systems.	
2703.16 Sub-Atmospheric-Pressure Gas Systems	N			Permits sub-atmosphere gas systems operated in	

## International Fire Code (IFC) 2006 – 2012 Significant Changes Matrix

	accordance with NFPA 318 in semi-conductor facilities.			
2704.7 Standby or Emergency Power for Storage of Flammable and Combustible Liquids	M		Reduced requirements for standby or emergency power for mechanical ventilation systems in certain Group H-2 & H-3 occupancies.	
2705.1.11 Design of Hazardous Materials Systems	C	Hazardous material processes using automatic controls require fail safe design.		
2705.3.1 Corridors and Exit Enclosures	M			Allows the transportation of hazardous production materials in an exit corridor within certain quantities.
3003.7.11 Tube Trailers	A	Definition and requirements for tube trailers are now specified in Chap. 30.		
3006.2 Interior Supply Locations for Medical Gases	M		Medical gas storage rooms with certain quantities now must meet requirements for a Group H Occupancy.	
3208.3.1 Flue Space Protection	N	Fire code official may require approved devices for protection of flue spaces within areas of rack storage.		
Table 3301.8.3 Consumer Fireworks	M		1.4 G Consumer fireworks have exemption from storage distance table.	
3309 Consumer Fireworks	N	Requires storage of 1.4G fireworks per NFPA 1124		
3403.6.2 Design, Fabrication, and Installation of Piping Systems and Components	M		Clarification of standards for flammable and/or combustible liquid piping.	
3404.2.9.1 Existing Noncompliant Installations	A	New requirements addressing existing non-compliant aboveground storage tanks.		
3404.2.9.5 Aboveground Tanks Inside of Buildings	M		Changes for storage tanks inside buildings to address Class III-B liquids. (biodiesel)	
3404.2.15 Maintenance of Aboveground Storage Tanks	A	Enhanced requirements regarding maintenance of		

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	existing aboveground storage tanks.				
Table 3404.3.63(1)-(8) Maximum Storage Height and Protection of Storage	M		Clarifies that tables are based upon storage of liquids in metallic containers/tanks only.		
3405.2.4 and 3405.2.5 Dispensing, Grounding, Bonding	M		Changes to address the increased risk where combustible liquids are heated up to or above their closed cup flash point temperature.		
3503.1.1 Special Limitations for Indoor Storage and Use	M		Special quantity limitations have been revised for flammable and oxidizing gases in certain occupancies.		
3506 Flammable Gases and flammable Cryogenic Fluids	A		Chapter 35 has been expanded to include requirements for bulk hydrogen storage.		
3507 Metal Hydride Storage Systems	A		Metal hydride storage systems now have requirements in Chapter 35.		
3801.2 Definition of LP-Gas Container	A		Definition for LP-Gas Container		
4002.1 Definition of Oxidizers	M		Revised definition and classification of oxidizers.		
4006 Liquid (Cryogenic) Oxygen in Home Health Care	A		Requirements for storage and use of liquid oxygen in home health care.		
4104.1 Silane Gase and Silane Gas Mixtures	M		IFC now has the requirements for silane gase/silane gas mixtures per ANSI/CGA G-13		
<b>Part 4 Existing Buildings (Chapter 46)</b>					
Chapter 45 Existing Buildings	A		New chapter prescribing fire protection requirements for marinas	Chapter 45 Existing Buildings	A
Chapter 46 Existing Buildings	A		Existing building requirements are consolidated into Chapter 46		
Table 5003.1.1(1) Maximum Allowable Quantity per Control Area	M			IFC & IBC both require submittal of technical opinion & report for combustible dusts.	

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5003.12 Outdoor Control Areas	M			Clarifies requirements for fire resistive barrier between outdoor storage and exposures.	
5704.2.7.4 Emergency Venting	N			Allows vent on protected indoor storage tank containing Class II or III-A liquids to discharge inside a building.	
5705.5 Alcohol-Based Hand Rubs Classified as Class I or II Liquids	M			Requirements for touch free alcohol based hand rubs in wall mounted dispensers	
6104.3.1 Installation on Roof Prohibited	N			Prohibits installation of LP gas containers on roofs.	
6109.15 LP-Gas Cylinder Exchange for Resale	N			Requirements for LP gas cylinder exchange operations.	
<b>Part 7 Appendices (A - J)</b>					
Appendix-D105.1 Where Required	M			Measurements for building height for aerial fire apparatus now based on grade plane.	
Appendix-E102.1.2 Hazard Categories	M		Requirements for compressed gas mixtures based upon CGA (compressed gas assoc.) standards.		
Appendix-Table F101.2 Firefighter Warning Placard Hazard Designations for Oxidizers and Water-Reactive Materials	M		Certain hazardous materials now require hazard classification or firefighter warning placards.		
Appendix I- Fire protection Systems-Noncompliant Conditions	A		Provides Guidance for non-compliant fire protection systems.		
Appendix J-Building Information Signs	N			Method of presenting building hazards information to emergency responders.	

## International Mechanical Code (IMC) 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
<b>International Mechanical Code</b>					
102.3 Maintenance	M				ASHREA/ACCA/ANSI Standard 180is now specified for maintenance of an HVAC system
103.2/103.3/103.4 Appointment, Deputies, Liability	M		Clarifies the appointment of the code official and protects against liability uniformly through the I-Codes		
106.4.7 Previous Approvals	A		A new or revised permit is not required for projects where the scope of work exceeds 180 days		
107.1/107.2/107.4/107.6 Inspection and Testing	A/M		A number of changes have been made to the administrative provisions related to inspections		
110 Temporary Equipment, Systems, and Uses	A		Provides provisions to deal with mechanical systems in temporary structures		
202 Environmental Air	C				The definition of <i>environmental air</i> has been expanded through the addition of parking garage exhaust
304.6 Public Garages	M		In public garages the distance from appliance to floor is now determined by the height of the vehicle entry door		
304.10 Clearance from Grade for Appliances	M		A min. clearance has been established for ground supported equipment		
306.5 Equipment and Appliances on Roofs or Elevated Structures	C/M		Clarifies how the height of the equipment is to be measured when access involves climbing over the parapet		Clarifies that a permanent access to equipment and appliances on roof or elevated structures
307.2.2/307.2.2 (Table) Condensate Drain Sizing	A		The code now specifies a specific pipe size based on the refrigeration capacity		
308.5 Labeled Assemblies	M				Allowable clearance reductions must now be based on listed and labeled reduced-clearance

## International Mechanical Code (IMC) 2006 – 2012 Significant Changes Matrix

				protective assemblies	
404.1 & 501.1 Ventilation and Exhaust Systems - Scope	M		Clarifies the application of chapters 4 & 5 to ventilation and exhaust systems		
404.1 Enclosed Parking Garages	M			Mechanical ventilation systems in parking garages are now permitted to be operated automatically by carbon monoxide detectors	
401.4 Intake Opening Location	M			Min. clearance between an air intake opening and any public way is measured from the opening to the lot line	
403 Mechanical Ventilation	M		Substantial revisions that will alter airflow requirements and the way they are calculated		
403.3 (Table) Minimum Ventilation Rates for Nail Salons	M			Nail stations in nail salons must now each be provided with a source capture system	
403.3.1 Zone Outdoor Airflow	M		The method for calculating the min. outdoor airflow has been revised		
403.3/403.3 (Table) Outdoor Airflow Rate	M		The table has been revised to reflect the new airflow calculations		
403.3.2 System Outdoor Airflow	M		When a single ventilation system serves more than 1 zone, the design parameters may result in overventilation of one zone. To compensate, the code allows outdoor air intake flow rate to average the outdoor air intake for all zones		
501.2/506.4 Independent Exhaust Systems Required	M			Those locations where an independent exhaust system is required are now established in a single code provision	
501.3 Pressure Equalization	A		This section will allow R-2 occupancies the same exemptions as R-3 in maintain a neutral or neg. pressure		

## International Mechanical Code (IMC) 2006 – 2012 Significant Changes Matrix

504.6 Domestic Clothes Dryer Ducts	M		Extensively revised this section. Dryer duct length was 25' and changed to 35', also clarifies duct material and installation		
504.8 Common Exhaust Systems for Clothes Dryers Located in Multi-Story Structures	A		Due to length limitations for dryer exhaust this new section provides specific requirements for multiple dryers to be gathered in a common shaft		
505.1 Domestic Kitchen Exhaust Systems	M			Domestic kitchen exhaust ducts are now required to be independent of all other exhaust	
505.2 Domestic Kitchen Exhaust Makeup Air	A		Establishes max. exhaust limit for domestic kitchen exhaust systems before makeup air is required		
506.3.7.1 Grease Reservoirs	A			Criteria are now provided for the construction of a grease reservoir in a grease duct system	
506.3.8 Grease Duct Cleanouts and Other Openings	D/M		Access doors may now be allowed the use of tools to open the access door	For grease duct cleanouts, gasket and sealing materials on grease duct doors must be rated at a min. of 1500°F	
506.3.9 Grease Duct Horizontal Cleanouts	M			Criteria for cleanouts for horizontal grease ducts have been rearranged and several technical provisions have been added	
506.3.10 Grease Duct Enclosures	M		Clarifies the application of the provision for grease duct enclosure into 3 separate sections depending on the enclosure		
506.3.10 Underground Grease Duct Installations	A			Underground grease ducts are now regulated based on new provisions	
506.3.11.2 Field-Applied Grease Duct Enclosures	C			Field-applied grease duct enclosure systems are specifically prohibited to reduce clearance from combustibles	

## *International Mechanical Code (IMC) 2006 – 2012 Significant Changes Matrix*

506.4.2 Type II Terminations	A		Provides a termination requirement for Type II commercial kitchen hood exhaust, which was previously not addressed		
507.2 Type I or Type II Hood Required	M			Type I or Type II commercial kitchen hoods are not required for appl. With integral downdraft exhaust systems	
507.2.1 Type I Hoods	M			Type I hoods no longer required for complying electric appl. Are being used	
507.2.1/507.2.2 Type I and Type II Hoods	M		This revision eliminates the reference to specific appliances and replaces the by tying the provision to the defined term of light-, medium-, heavy-, and extra-heavy- duty cooking appliance		
507.2.1.1 Operation of Type I Hoods	M			A method requiring the pilot burner to stay on a gas cooking appliance when the kitchen exhaust fan interlock shuts off	
507.2.1.2 Exhaust Flow Rate Label of Type I Hoods	A			On listed Type I commercial cooking hoods are now required to provide a label with the min. exhaust air flow rate	
507.2.2 Type II Hoods	M			Type II hoods are required to be installed above appliances that produce products of combustion but not grease or smoke	
507.9 Clearance for Type I Hood	A		Cementitious wallboard has been added to the exception for clearances from Type I hood		
507.10 Hoods Penetrating a Ceiling	A			Field-applied grease duct enclosures are now prohibited from being used over the top of a Type I hoods	

## *International Mechanical Code (IMC) 2006 – 2012 Significant Changes Matrix*

510.7 Fire Suppression Required for Hazardous Exhaust Ducts	M			Automatic fire suppression is no longer required in exhaust ducts in semiconductor fabricated facilities	
601.4 Contamination Prevention in Plenums	M			Chimneys and vents are now permitted to pass through a plenum where in compliance with one of three new allowances	
602.2.1 Materials within Plenums	C			Any material or assembly within a plenum must be noncombustible, gypsum board, or listed and labeled	
603.4.1 Minimum Fasteners	A		Adds a required method of joining round metal pipe with at least three screws		
603.7 Rigid Duct Penetrations	M			Only those ducts that penetrate a wall or ceiling between the dwelling and adjacent private garage need to comply with Sec. 603.7	
603.9 Duct Joints, Seams, and Connections	C			Unlisted duct tape is no longer permitted as a sealant on nonmetallic ducts	
603.17/202 Air Dispersion Systems	A			Air dispersion systems are now permitted to be installed	
606.4.1 Smoke Detection System Supervision	C		Smoke detectors used for air distribution systems are only required to be connected to a fire alarm system if the alarm system is required by the IFC		
607.5 Dampers for Duct and Air Transfer Openings/Where Required	A/M		Changes in the IBC and carried over to the IMC to coordinate the requirements to address the damper requirements for certain locations that were not previously addressed		
701.1 Combustion Air	M/D		Sec. 701.2 through 710.1 and three definitions of sec. 202 have been deleted without substitution. The remaining sec. 701.1 references the		

## International Mechanical Code (IMC) 2006 – 2012 Significant Changes Matrix

			combustion air requirements for solid fuel burning appliances and NFPA 31 for oil-fired appliances		
801.18.4/801.18.4.1/801.20 Chimneys and Vents	M		Masonry chimneys that do not have required air space and clearance to combustibles, the use and application of the liner systems evaluated with UL 1777 have been clarified.		
805.3 Factory-Built Chimney Offsets	A			The max. offsets in a factory-built chimney is now specified and the number of offsets has been limited	
901.4 Fireplace Accessories	A			Fireplace accessories must now comply with UL 907	
918.6 Prohibited Sources of Outdoor or Return Air for Forced-Air Warm-Air Furnaces	M		Unconditioned attics and crawl spaces are now specifically prohibited as a source of outdoor or return air for forced-air heating systems		
928 Evaporative Cooling Equipment	A			Requirements for the installation of evaporative coolers have been added to the IMC in a new Sec. 928	
1101.10 Locking Access Port Caps	A/M		Requires refrigerant access ports that are located outdoors to be equipped with a locking cap	Locking caps are no longer required on refrigerant access ports if the equipment is located in a secure location	
1103.1 (Table) Refrigerant Classification	A/M		The table was updated to include many new refrigerant types and to modify some of the values for the permitted types		
1104.2.2 Industrial Occupancies and Refrigerated Rooms	M		Excludes electrical equipment and appliances in areas using ammonia refrigerants from having to comply with the "hazardous location" requirements of NFPA 70, the NEC		

## *International Mechanical Code (IMC) 2006 – 2012 Significant Changes Matrix*

1105.6/1105.6.3 Machinery Room Ventilation	M			The min. ventilation rates in ammonia machinery rooms must now be in accordance with IIAR2	
1106.4 Flammable Refrigerants	M			The ventilation requirements for ammonia machinery rooms are now mandatory in order to be exempt from the Class 1	
1107.2 Refrigerant Piping Locations	A		Provides guidance for the installation and location of refrigerant piping not previously addressed in the IMC		
1201.2/1202.4/1202.5 (Tables) 1203.16/1203.17/1203.18/1203.19 Hydronic Piping	A		The revision of this chapter will allow a number of additional options in the design and installation of hydronic piping systems		
1209.5 Thermal Barrier Required	A		Hydronic radiant floor heating systems now require insulation installed below the piping or tubing		

## International Plumbing Code (IPC) 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
<b>Part 1 Plumbing Code</b>					
104.1/104.2/104.7 Duties and Powers of the Code Official	M		Consistency and correlation language with the other I-Codes		
105.1/105.2.1/105.5/105.5.1 Approvals for Materials, Research Reports, and Equipment	M/A		Consistency and correlation language with the other I-Codes		
110 Temporary Equipment, Systems, and Uses	A		Consistency and correlation language with the other I-Codes		
Chapter 2 – Ball Cock (Definition)	D		Now defined as a “Fill Valve”		
Chapter 2 – Depth of Water Seal (Definition)	M		Water Seal is now identified as Trap Seal and in definition Water is replaced by “Liquid”		
202 Plumbing Fixture Definition	M			Updated definition includes waterless fixtures and devices	
202 Plumbing Appliance Definition	C			Better clarifies the differences between appliances & fixtures	
202 Grease Interceptor Definition	M			More consistent with current industry terms/types: Hydromechanical and Gravity	
303.1/303.4 Material Identification and Third-Party Certification	C			Certification and identification requirements on plumbing products and materials	
305.8/504.7 Protection Against Physical Damage and Required	M		Use of metal protection		

## International Plumbing Code (IPC) 2006 – 2012 Significant Changes Matrix

Pan			plates, minimum required thickness, measurement clarification		
308.9 Parallel Water Distribution Systems	M			Hot and Cold water may be grouped in same bundle	
312.9 Shower Liner Test	A		Detailed requirements for testing shower pan liners		
315.1 Sealing of Annular Spaces at Penetrations	M			Consistent with building envelope requirements of IECC	
403.1 (Table) Minimum Number of Required Plumbing Fixtures	M		I-4 Use Groups Adult day care and child care require bathing facilities	No service sink requirement in Use Groups B & M with occupant load 15 or fewer	
Table 403.1 Assembly A-4 and A-5, Minimum Number of Required Plumbing Fixtures	M		Table modification for the section relating to 1 per 40 for up to 1520		
403.1 Minimum Number of Required Plumbing Fixtures, Footnote "f"	M		Footnote "f" removes requirement of drinking fountains in structures with 15 or less occupants		
403.2 Separate Toilet Facilities in Group M Occupancies	M			Provides exception to allow single user restrooms in Mercantile having a maximum occupant load of 100 persons	
403.2.1 Family or Assisted-Use Toilet Facilities Serving as Separate Facilities	A			Where separate toilet facilities for each sex are required and only one water closet is mandated, Family or Assisted-Use	

## International Plumbing Code (IPC) 2006 – 2012 Significant Changes Matrix

				rooms may be substituted for the separate sex facilities.	
403.3/403.1.1 Number of Occupants of Each Sex and Fixture Calculations	A		Prescriptive method for calculation the fixture count		
403.3.2 Relationship of Toilet Rooms and Food Preparation Areas	A			The IBC requirement prohibiting toilet room openings into food preparation areas, now in IPC	
403.3.6 Locking of Toilet Room Doors	A			Locking devices are prohibited on egress door of toilet rooms designed for multiple occupants	
403.4.1 Directional Signage	A		Directional signage indicating route to public facilities		
403.5 Drinking Fountain Locations	A			Where drinking fountains are required, specific placement in multi-tenant facilities	
405.3.1 Minimum Water Closet Compartment Size	M			Reduction of the minimum depth of wall hung water closet from 60" to 56"	
405.4 Floor and Wall Drainage Connections	M			Use of waste connector and sealing gasket to connect a floor outlet plumbing fixture	
407.2 Bathtub Waste Outlets and Overflows	M			Bathtubs are now required to be equipped with an overflow and the required stopper,	

## International Plumbing Code (IPC) 2006 – 2012 Significant Changes Matrix

				watertight	
410 Minimum Required Drinking Fountains	M			IBC provisions replicated in the IPC provide clarity & consistency	
410.2 Prohibited Locations (Drinking Fountains)	M		Clarifies NO drinking water outlets/equipment shall be located in public restrooms		
412.2 Floor Drains	M		Requires floor drains to be readily accessible (except' refrigerated display cases)		
413.3 Commercial Food Waste Grinder Waste Outlets	M		Allows the use of 1-1/2" drain		
416.5/424.5/425.3.1/608.1 (Table) Tempered Water for Public Hand-Washing Facilities, Bathtub, and Whirlpool Bathtub Valves, Fill Valves, and Application of Backflow Preventers	M		Tempered water required for public hand washing facilities. Updated performance criteria standard: CSA B125.3 Plumbing Fixtures		
417.2 Water Supply Riser	M		Modification to assure proper anchoring of shower arm receiver fitting		
417.5.2/417.5.2.5 Shower Lining and Sheet-Applied, Load Bearing, Bonded, Waterproof Membranes	A		Addition of the performance standard and language allows another type of shower pan liner system acceptance		
Part 2 General Safety Provisions(Chapters 3 and 4)					
417.5.2.6 Shower Pan Liner Materials	A			Liquid-type, trowel-applied, load-bearing, bonded waterproof	

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				materials acceptable	
419.1 Approval, Urinals	M		New standard added: ASME A112.19.19-2006 allows the use of vitreous china, waterless urinals		
424.9 Water Closet Personal Hygiene Devices	A			New standard ASME A112.4.2-2003 ensures protection of public by setting temperature limits and minimum backflow protection requirements	
502.5 Clearances for Maintenance and Replacement	A		Requirement for 30 x 30 work space in from of water heater without removing permanent construction or fire rated assembly consistent with IRC		
504.4.1 Water Heater Storage Tank Relief Valves	C			Water heaters with separate storage tanks shall be provided with complying temperature and pressure protection	
504.6 Requirements for Discharge Piping (Change 1)	M		Removal of unnecessary language for areas subject to freezing (air gap required #2)		
504.6 Requirements for Discharge Piping (Change 2)	M		Clarifies relief valve may discharge into the pan if equip.		
504.7 Water Heater Pans	M			Clarifies drain pans are only required on storage- tank-type water heaters (not for tankless)	

## International Plumbing Code (IPC) 2006 – 2012 Significant Changes Matrix

604.3 (Table) Water Distribution System Design	M		Updated terminology and values for consistency with plumbing design standards		
605 Polyethylene of Raised-Temperature (PE-RT) Plastic Tubing	A			PE-RT hot and cold water tubing/distribution systems recognized by the IPC	
605.3 (Table) Polyethylene (PE) Water Service Pipe	A			New standard added: AWWA C901 PE Pressure Pipe and Tubing	
605.3/605.4 (Tables) Water Service Pipe and Water Distribution Pipe	M		Inclusion of ASTM F 2262 recognizes cross linked PEX-Al-PEX pipe		
605.3/605.5 (Tables) Water Service Pipe and Pipe Fittings	M		The addition of ASTM standard recognize the (PE) pipe and fittings and there joining methods for table 605.5		
605.4 Water Distribution Pipe	M		The inclusion of standards AWWA C151/A21.51 and AWWA C115/A21.15 allow products to be used in water distribution systems		
605.5 (Table) Pipe Fittings (Change 1)	M		New standard now recognize PEX SDR9, stainless steel, and metal insert fittings with copper rings as standard fittings		
605.5 (Table) Pipe Fittings (Change 2)	M		The ASSE standard for push-fit fittings has been added to the code for performance		

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			requirements		
605.17.2 Mechanical Joints (for PEX)	M		Has been modified to ensure the correct combination of tubing and fittings will be installed together for (PEX) systems		
605.21/605.21.1 PE-AL-PE, PEX-AL-PEX, and Mechanical Joints	A		Text has now been added to recognize joining methods for (PE-AL-PE)and (PEX-AL-PEX) systems		
605.24.1 Copper or Copper-Alloy Tubing to Galvanized Steel Pipe	M		For dielectric unions between copper and galvanized pipe the ASSE 1079 standard has been added for conformance standard for these piping systems		
606.7 Labeling of Water Distribution Pipes in Bundles	A			Water distribution piping installed in bundles must be labeled with content and direction of flow	
607.1.1 Water-Temperature-Limiting Means	M			W/H thermostat is prohibited from being used as a temperature-limiting device	
607.2 Hot or Tempered Water Supply to Fixtures	M			Max. distance between a hot water source and fixture has been reduced to 50' from 100'	

## International Plumbing Code (IPC) 2006 – 2012 Significant Changes Matrix

607.5 Hot Water Piping Insulation	A			Insulating the hot water piping in a automatic temperature maintenance system is now also the IPC	
608.7 Valves and Outlets Prohibited Below Grade	M		This change ensures that devices having openings that are subject to backflow below grade are eliminated or not used. By either not being used or are separated by acceptable backflow means.		
608.8/608.8.2 Identification of Potable and Nonpotable Water	M/M		Provides greater clarification on lines that convey nonpotable water being identified by the color purple	Clarifies identifying nonpotable water inside and outside of a bldg	
608.14.2/608.14.2.1 Protection of Backflow Preventers and Relief Port Piping	A		These 2 sections have been added to ensure that protective devices are cared for in colder climates and that relief ports drain to acceptable locations		
702.1/702.4 (Tables)/705.18 DWV for Polyvinylidene Fluoride Plastic	A		Two standards that address (PVDF) plastic for corrosive systems are now in the code for the products use		
704.3/711.2.1 Horizontal Branch Connections	M			Horizontal branches can now connect at any point in the horizontal offset	

## International Plumbing Code (IPC) 2006 – 2012 Significant Changes Matrix

704.5 Dead Ends	D		Deletion of dead ends will reduce remodeling cost by allowing DWV where fixtures are removed		
709.1 (Table) Drainage Fixture Units for Bathroom Groups	M			A change to the footnote a bathroom group is not just applicable to dwelling units now	
709.1 (Table) Drainage Fixture Units for Fixtures and Groups	M		The changes in DFU provides sizing consideration for shower drains with more than 1 spray based on GPM		
709.4.1 Clear Water Waste Receptors	A		The clear water waste section was added to allow lower drainage unit flow rate for receptors in food areas		
712.3.3 Sump Pump and Ejector Discharge Pipe and Fittings	A			Sump and ejector pump pipe and fittings materials are now specifically listed	
712.3.5 Sump Pump Connection to the Drainage System	M			Sump pumps connecting to the drainage system are now allowed to connect to building sewer and drain, soil and waste stack, or horizontal branch drain	
715.1 Fixture Protection from Sewage Backflow	M			The elevation for determining for a backwater valve has changed from flood rim level to finished floor elevation	

## International Plumbing Code (IPC) 2006 – 2012 Significant Changes Matrix

802.1/802.1.8 Where Required and Food Utensils, Dishes, and Pots and Pans Sinks	A		Text has been added to identify different drainage connections permitted for sinks used in food service cleansing of utensils, dishes, and pans		
802.1.8 Indirect Discharge of Food Preparation Sinks	M			Sinks used for food prep and consumption cannot tie directly to the drainage system	
802.2 Installation of Indirect Waste Piping	M			The distance for a trap in a indirect waste line has been extended and an exception for clear waste water has been added	
802.3 Prohibited Locations for Waste Receptors	M			A specific list of prohibited locations for waste receptors has been added	
901.3/918.8 Air Admittance Valves for Chemical Waste Vent Systems	M			Air admittance valve for chemical vents has been added	
903.2 Vent Stack Required	M		The change eliminates a vent by considering the venting taking place in a special vented system		
903.5 Location of Vent Terminals	M			Prohibited locations for vents has been revised to match the IMC	
909.1 Horizontal Wet Vent Permitted	M		Ensures all fixtures' connection to a horizontal wet-vented system will receive the		

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			necessary venting from the systems' vent		
909.2/909.2.1/909.2.2 Dry Vent Connection, Horizontal Wet Vent, and Vertical Wet Vent	A		Clarifies that a dry vent connection for both the vertical and horizontal wet-vented systems can be obtained from the branch serving a water closet		
915.2 Combination Waste and Vent System Sizing	C			The length of a combination waste and vent system is unlimited	
917 Single-Stack Vent Systems	A			The single stack method has been added an acceptable venting method	
917.8 Prohibited Installations, Air Admittance Valves	M		Prohibited locations of (AAVs) has been expanded to address sump pumps		
1002.1 Floor Drains in Multi-Level Parking Structures	M			Floor drains in multi-level parking garages are no longer required to be individually trapped	
1002.4 Trap Seals	M		Clarification identifies the trap seal connection shall be above the trap seal so the device will work properly		
1003.1 Interceptors and Separators	C			Required interceptors and separators are permitted to be located downstream of the building drain	

## International Plumbing Code (IPC) 2006 – 2012 Significant Changes Matrix

1003.3.1 Alternate Grease Interceptor Locations	M			Grease interceptors are now permitted to be installed in series instead of replacing one that is too small	
1003.3.4 Grease Interceptors and Automatic Grease Removal Devices	M		Clarifies the sizing for both grease interceptors and removal devices with the standards		
1003.3.4 Hydromechanical Grease Interceptors	C			The term “hydromechanical” provides a clear distinction from gravity interceptors	
1101.9 Backwater Valves	M		Clarifies storm drainage backwater valves shall be the same as in sanitary sewer systems		
1102.4/1102.7 (Tables) Building Storm Sewer Pipe and Pipe Fittings	A		A new Polyethylene pipe conforming to ASTM F2306/F2306M-05 has been accepted into the storm drainage system		
1105 Roof Drain Strainers	M			Outdated code requirements have been replaced with new provisions that address installation and sizing of roof drains	
1107 Siphonic Roof Drainage Systems	A			New requirements have been added to address the standards ASPE 45 and ASME A112.6.9 for siphonic roof drain	

## International Plumbing Code (IPC) 2006 – 2012 Significant Changes Matrix

				systems	
Chapter 13 Gray-Water Recycling Systems	A			Gray-water recycling systems have been moved from the appendix the new Ch 13 in the code	
Chapter 13 Referenced Standards	M		Numerous standards have been revised in recognition of newer standards and many new product standards have been added		
Appendix E Sizing of Water Piping Systems	A		The added table from the Plastic Pipe Manufacturers Association provides information in obtaining pipe volumes to address Green Bldg. issues		

## International Fuel Gas Code (IFGC) 2006 – 2012 Significant Changes Matrix

Section /Topic	Type	2006	2009	2012	Comments
<b>Part 3 International Fuel Gas Code</b>					
103.2/103.3/103.4 Appointment, Deputies, Liability	M		Requirements for the appointment of the code official and protection against liability are now uniform throughout the I-Codes		
106.5.7 Previous Approvals	A		A new or revised permit is not required where the scope of work exceeds 180 day limit		
202 Definition of Appliance	M		Definitions for appliance and equipment have been clarified		
202/401.9/401.10/404.1 Identification, Testing and Certification	A			Each section of pipe and fitting utilized in a gas system requires the identification of the manufacturer	
306.3/306.4 Appliances in Attics and Under Floors	M		Attics and underfloor spaces for installations of appliances must meet the requirements for maintenance and replacement		
308.1 Clearance to Combustible Materials	C			That gypsum board is to be considered a combustible material for the purpose of required clearances	
404.1 Prohibited Locations	M		Clarification on the requirements for prohibited installation of fuel piping in vertical vent shafts used in an air duct or laundry chute		
404.2 CSST Piping Systems	A			CSST piping systems shall be installed in accordance with their listing and manufacturer's installation instructions	
404.4 Underground Penetration Prohibited	M		The IFGC no longer permits fuel gas piping to penetrate the foundation walls when piping is installed below grade		
404.6 Piping in Solid Floors	A		Specifies the installation requirements for piping that is sleeved and the sleeve terminated in or outdoors		

## International Fuel Gas Code (IFGC) 2006 – 2012 Significant Changes Matrix

404.8 Isolation	A		LP-Gas fuel gas systems using metallic pipe are now require a dielectric fitting to isolate the underground piping from the aboveground pipe that enters a building		
404.18 Prohibited Devices	C			Excess flow vales and similar devices are now permitted in gas piping systems that have been sized to accommodate the pressure loss	
408.4 Sediment Traps	M/M		Sediment traps have been revised to address their location and design	An illustration is now added in the IFGC to clarify the intent of the provision	
409.5 Appliance Shutoff Valve	M		Reorganized to clarify the shutoff valve location requirements		
410.4 Excess Flow Valves	A			An excess flow valve must now be listed, sized and installed as per the manufacturer instructions	
410.5/202 Flashback Arrestor Check Valve	A			A combination flashback arrestor and backflow check valve is now required on any fuel gas system used with oxygen in any hot work	
411.3.1 Maximum Length of Connectors	M		Length of a appliance connector has been increased from 3 ft to 6 ft		
614.6 Domestic Clothes Dryer Ducts	M		Sec. 614.6 has been reorganized and the maximum length of a gas clothes dryer duct has increased from 25 ft to 35 ft		
618.4 Prohibited Sources	M			Return air may be taken from a garage provided with a dedicated forced-air system	

## International Residential Code 2006 – 2012 Significant Changes Matrix

Section Topic/Type		2006	2009	2012	Notes
<b>Part 1</b>					
R101.2 Scope, Grade Plane	M		Grade replaced by the term Grade Plane determining story		
R 101.2 Scope Live/Work	A		New exception for Live/Work units permitted in IRC		
R 105.2 Work Exempt from Permit	M		Accessory structure exemption from 120 to 200SF. Additional list of electric exemptions	Fences over 7 feet (increased from 6 feet)	AMC
R 106.1.1 Information on construction Documents	M		Braced wall lines indentified on construction documents		
R 106.3.1 Approval of Construction Documents	M		“REVIEWED FOR CODE COMPLIANCE”		
<b>Part 2</b>					
R 202 Definitions, Attic and Habitable Attic	A		“Habitable Attic” added		
R 202 Definitions, Labeled and Listed	M		Revised for clarity/consistency		
R 202 Definitions, Structural Insulated Panel (SIP)	A		IRC definitions for SIPS to aid in prescriptive methods allowed		
R 202 Definitions, Structural Composite Lumber	A			LVL, PSL, LSL, OSL defined	
<b>Part 3</b>					
R301.1.1 Alternative Provisions	M		Recognition of ICC-400 Standard for Log Construction, updated AISI S230 Standard for Cold Formed Steel Framing		
R301.2.1 Wind Design Criteria	M			Updated wind speeds ASCE 7-2010, prescriptive provisions for buildings in regions with a wind speed less than 110mph	
R301.2.1.1 Design Criteria	M		ICC-600 replaces older standard for high wind areas, SIP construction recognized		
R301.2.1.2/Table 301.2.1.2 Protection of Openings	M		Windborne debris areas	New map defining windborne	

## International Residential Code 2006 – 2012 Significant Changes Matrix

			prescriptive requirements on garage door glazing	debris areas and all glazing requires protection	
R301.2.1.5/Table 301.2.91) Topographic Wind Effects	A		Very limited circumstances; hilltop structures must consider effects of topographic wind speed up (Pacific NW)		
R301.2.2 Seismic Provisions	C		Reorganization of seismic provisions clarify design application within seismic area	General rule & exception replaced by separate rules for 1&2 family and townhouses	
R301.2.3	M		SIP max snow load of 70 psf		
R301.3 Story Height	M		Floor framing may exceed 16" in height, SIP bearing wall height maximum 10 feet		
R301.5 Minimum Uniformity Distributed Live Loads	M		Deck & Balconies both 40 psf, limited attic storage now considers insulation depth. Attics with fixed stairs have a minimum live load 30 psf	Live load terminology updated with ASCE 7-10 for clarification	
R302.1 and Table 302.1 Fire-resistant Construction at Exterior Walls	M		Renamed and relocated Fire-Resistant provisions of the IRC. Exterior FRRC must comply with ASTM E 119 or UL263. Fire separation distance requirements no longer apply to buildings on the same lot	The minimum clearances to lot lines reduced from 5' to 3' for unrated exterior wall when fire sprinkler system is installed. Zero lot line homes are permitted to have unrated exterior walls when all subdivision dwellings have fire sprinklers. Also allows for unlimited unprotected openings and penetrations	
R302.2 and 302.3 Dwelling Unit Separation	M		Town houses are permitted a 1- hour common FRR wall w/ASTM E 119 or UL263.		
R302.2.2 Parapet Exception	M			When a parapet is not installed no penetrations allowed within	

## International Residential Code 2006 – 2012 Significant Changes Matrix

				4 feet of separation	
302.4 Rated Penetrations for Dwelling Unit Separation	M		Relocation of provisions, editorial changes clarify exceptions, modifications for electrical boxes more accurately represent accepted practices for FRRC		
302.5 Garage Openings and Penetrations	M		Relocation of garage fire-resistant construction provisions and penetration requirements reference fireblocking provisions		
302.5.1	M			Doors between garage and dwelling unit now require self-closing devices.	
302.6 and Table 302.6 Garage Separation	C		Relocation and reformatted provisions, table added for clarity		
R303 Mechanical Ventilation	M			When used, mechanical ventilation requirement must be in accordance with R1507. Whole-house mechanical ventilation system required when blower door testing determines the air infiltration rate is less than 5 ACH.	
R303.5 Ventilation Intake Openings	M			Minimum vertical clearance between a contaminant source and an outdoor air intake below has increased from 2 feet to 3 feet.	
305.1 Minimum Ceiling Height	M		Reorganized for clarity and exceptions for projections have been removed.		

## International Residential Code 2006 – 2012 Significant Changes Matrix

			Bathroom change at fixture.		
308.1.1 and 308.3 Identification of Glazing and Human Impact Loads	M		ANSI Z97.1 alternative test procedure to CPSC 16 CFR 1201 for safety glazing		
308.4 Hazardous Locations Requiring Safety Glazing	M/C		Reorganization of section for ease of use.	Reorganized numbered list of locations now has individual section with descriptive title.	
R308.4.5 Glazing and Wet Surfaces	C			Consolidated provisions for glazing and wet surfaces near tubs and swimming pools.	
R308.4.6 Glazing Adjacent Stairs and Ramps	M			Minimum height of glazing adjacent to treads is 36" or safety glazing is required	
R308.4.7 Glazing Adjacent to the Bottom Stair Landing	M			Safety glazing is required within 60" horizontally for any glazing installed 36" or less above walking surface	
R309.5 Garage Fire Sprinklers	A			Non-rated exterior garage wall permitted to be constructed on lot line when all subdivision dwellings have fire sprinklers	(N/A)
R310.1 Emergency Escape and Rescue Openings	M/C		Habitable attics require EE&RO	Max sill height measured from <u>finished</u> floor to bottom of clear opening.	
R310.2.2 Window Well Drainage	A			Drainage system required, except well-drained soil areas	
R311 Means of Egress	M		Simplified and clarifies egress ends when occupant reaches grade, clear opening of door		
R311.3.1 Floor Elevations at the Required Egress Door	C			Exception allowing 7-3/4" landing below the top of threshold, ONLY applies to exterior side	

## International Residential Code 2006 – 2012 Significant Changes Matrix

R311.7.2 Stairway Headroom	M		Added exception for the side of treads of open stairs passing thru floors maximum projection of 4 ¾ allowed		
R311.7.3 and R311.7.4 Stair Treads and Risers	M		New walkline provisions for winders, a new exception permitting winders use in a stairway of otherwise rectangular treads		
R311.7.6 Landing for Stairways	M			Curved/angular landings allowed when prescriptive requirements are met	
R311.7.7 Handrails	M		Transition fittings are now permitted to exceed max height 38" and clarification all handrails must have rounded edges		
R312 Guards / Guards and Window Fall Protection	M		Vertical distance is measured vertically to the lowest point within 36' horizontally, fixed seating is considered as floor	Window fall protection relocated from Chapter 6 to Chapter 3. Prescriptive provisions modified consistent with ASTM F 2090	
R313 Automatic Fire System	A		<i>Texas Law supersedes</i>		
R314 Smoke Alarms	C		Reorganization and alternative systems prescriptive requirements for supervision, Habitable attics require smoke alarms, minor plumbing and mechanical work does not trigger alarm requirements.	Wireless technology may be used in lieu of interconnection	
R315 Carbon Monoxide Alarms	A		Carbon Monoxide alarms required in homes with fuel-fired appliances and in dwellings with attached		

## International Residential Code 2006 – 2012 Significant Changes Matrix

			garages		
R315.2 Carbon Monoxide Detection Systems	M			Carbon Monoxide detection systems installed in accordance with NFPA 720 permitted	
R316.4 Thermal Barrier	M			New referenced standard, NFPA 275 for thermal barrier material other than ½ gypsum	
R316.5.13 Thermal Barrier for Floors	A			New provisions allow SIP floor	
R317. 1 Locations for Protection Against Delay	M			Protection from decay is now required for wood siding, sheathing, and wall framing less than 2 inches above a concrete slab exposed to weather.	
R317.3 Fasteners and Connectors in Contact with Treated Wood	M			New sections for fasteners and connectors used with preservative-treated or Fire-retardant-treated wood (FRTW)	
R317.4 Wood/Plastic Composites	A			Definition and specific requirements for manufactured wood/plastic composites. Products must be listed and labeled as complying with ASTM D 7032	
R318.1 Subterranean Termite Control Methods	M			When used pressure-preservative-treated wood must meet location requirements of R317	
R319.1 Address Numbers	M			New minimum size of 4" numbers for addressing, with a minimum stroke of ½" and a	

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			contrasting background.		
R322 Flood-Resistant Construction	M		Direct reference to ASCE 24 for buildings in floodways and coastal high-hazard V Zones		
R323 Storm Shelters	A		New section when installed must be constructed in accordance with ICC/NSSA-500 <i>Standard for Design and Construction of Storm Shelters</i>		
R401.3 Surface Drainage	M		When not feasible to provide prescriptive 6" within 10' from foundation new language requires drainage away w/o prescriptive slope.		
R401.4 Soil Tests	M		Revised text defines the necessary criteria rather than previous subjective language		
R402.3 Precast Concrete Foundation Materials	M		Minimum specifications for materials used in manufacture of Precast concrete foundations, design and installation.		
R403.1.3.2 Seismic Reinforcing for Slabs-on-Ground with Turned-Down Footings	M		Seismic Design Categories D <sub>0</sub> , D <sub>1</sub> , D <sub>2</sub> Areas		
R403.1.6 Foundation Anchorage	M		Reorganizes section, clarifies requirements and eliminates allowance of foundation anchorage in brick and solid masonry foundations.		
R403.4 Footings for Precast Concrete Foundations	A		Prescriptive requirements for crushed stone footings in supporting Precast concrete foundations are now in IRC		
Tables 404.1(1) through R404.1(3)	D		Deleted tables for lateral		

## **International Residential Code 2006 – 2012 Significant Changes Matrix**

			restraint the top of foundation walls of concrete/masonry		
R404.1 Concrete and Masonry Foundation Walls	M		Separated technical provisions for concrete from masonry, ICF's included with concrete, prescriptive concrete provision consistent with Portland Cement Association standard PCA 100		
R404.1.9 Isolated Masonry Piers	A			New prescriptive provisions for construction of isolated masonry pier foundation supporting raised floors	
R404.5 Precast Concrete Foundation Walls	A		Requires engineering, design and labeling requirements to include submittals of design criteria and drawings		
R405.1 Foundation Drainage	M			Requires a filter membrane for perforated foundation drains	
R405.1.1 Precast Concrete Foundation Drainage	A		Specific requirements of foundation drainage pipe 1 foot beyond edge of wall		
R406.4 Precast Concrete Foundation System Dampproofing	A		Panel joints require fill and sealant, exterior below grade surface to be dampproofed		
R407.3 Steel Columns	C		Steel columns must be fabricated of not less than 3-inch-diameter Schedule 40		
R408.1 and R408.2 Underfloor Space Ventilation	M		Reestablishes the 2003 IRC provisions of ventilation of Underfloor area to 1/1500		
R501.3 Fire Protection of Floors	A			With some exceptions the code requires ½ gypsum or equivalent to the underside of	

## International Residential Code 2006 – 2012 Significant Changes Matrix

				floor assemblies	
R502.2.2.1 and Table R502.2.2.1 Deck Ledger Connection	A		Prescriptive methods for securely attaching a wood deck to the dwelling		
R502.7 Lateral Restraint for Wood Joists	C		Clarification lateral support required with installation of engineered wood products		
R505 Cold-Formed Steel Floor Framing	M		Prescriptive provisions of cold-formed steel framing applies to three story buildings		
R507 Decks	M			All deck provisions relocated to a new section. Deck ledger attachment revised to correlate with the NDS	
R602.1.1 End Jointed Lumber	M			End-jointed lumber used in fire-rated assemblies must have a HRA in the grade mark. (Heat-Resistant Adhesive)	
R602.3(1) Fastener Schedule for Structural Members	M		Reorganized and updated table to reflect currently accepted industry standards/practices	Now includes requirements for nailing roof trusses, studs at wall corners, rim board to sill.	
R602.3 and Table R602.3(3) Wood Structural Panel Wall Sheathing Used to Resist Wind Pressures	M		References wind load requirements of R301.2.1 and new requirements for fastening, thickness, span, stud spacing based on design wind speed and exposure.		
R602.3(5) Table, Size, Height, and Spacing of Wood Studs	M		Habitable attic is treated the same a typical roof and ceiling forming an attic in determining stud size/spacing		
R602.6.1 Drilling and Notching of Top Plate	M		When metal plate is required, tie must extend 6 inches beyond opening, the length of		

## International Residential Code 2006 – 2012 Significant Changes Matrix

			nails used reduced to 1-1/2"		
R602.7, Table R602.7.1 Single Member Header	A			Single member headers use under limited conditions	
R602.10 Braced Wall Lines and Braced Wall Panels R602.12 Wall Bracing	M		Entirely rewritten to provide technical accuracy and clarity. No differentiating between interior and exterior braced wall lines.	2012 substantially rewritten, added Section 602.12 Simplified Wall Bracing	
R602.10.1.2 Length of Wall Bracing	M		Lateral bracing relating to wind/seismic placed in separate tables based on building location. Expressed in feet rather than percentage		
R602.10.1 Braced Wall Lines	M			Section reorganized to address braced wall lines only	
R602.10.1.3 Angled Corners of Braced Wall Lines	A		Allows angled wall segments to contribute to the amount of wall bracing in braced wall line		
R602.10.1.4 Braced Wall Panel Location	M		Location requirements now grouped together, max distances limited to combined total of 12.5 feet		
R602.10.1.5 Braced Wall Line Spacing for Seismic Design Categories D <sub>0</sub> , D <sub>1</sub> , D <sub>2</sub>	M		Expands the exception spacing to 35 feet in Seismic Design Categories D <sub>0</sub> , D <sub>1</sub> , D <sub>2</sub> Areas		
R602.10.2 Intermittent Braced Wall Panel Construction Methods	M		2006 IRC methods groups and considered intermittent to separate them from continuous		
R602.10.2 Braced Wall Panels	M			Information placed in one section. Braced wall panels may be located up to 10 feet from both ends of braced wall line	

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R602.10.3 Minimum Length of Braced Wall Panels	M		Recognition of braced wall panels less than 48", not less than 36" in Seismic Categories A, B, and C.		
R602.10.3 Required Length of Bracing	M			Consolidation of information on wall bracing, wind adjustments placed in separate table	
R602.10.3.2 Method ABW: Alternate Braced Wall Panels	M		New figure replaces much of the text, providing clarity.		
R602.10.3.3 Method PFH: Portal Frame with Hold Downs	M		Method used adjacent to door or window, typically used at overhead doors (PFH); figure		
R602.10.4 Continuous Sheathing	M		Extensive revision and expansion to provide more flexibility	Bracing construction methods grouped into single section.	
R602.10.5 Minimum Length of a Braced Wall Panel	M			Braced wall panel minimum lengths are combined in Table R602.10.5	
R602.10.6 and R602.10.7 Braced Wall Panel Connections and Support	M		Connection requirements above and below have been revised, recognizes masonry stem wall.		
R602.10.6 Construction of Methods ABW, PFH, PFG, CS-PF, and BV-WSP	M			All 2009 IRC braced wall panel methods into one section, adding new method BV-WSP	
R602.10.6.5 Wall Bracing for Dwelling with Stone and Masonry Veneer in Seismic Design Categories D <sub>0</sub> , D <sub>1</sub> , D <sub>2</sub>	M			Moved from Section R602.12, defines new method BV-WSP	
R602.10.7 Ends of Braced Wall Lines with Continuous Sheathing	M			Consolidation into one section.	
R602.10.8 Braced Wall Panel Joints	M		The exception permitting horizontal joints without		

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			blocking in lower Seismic Categories has been deleted.		
R602.10.9 Cripple Wall Bracing	M		Relocated and terminology updated. Required bracing is measured in feet vs. percentage.		
R602.10.9 Braced Wall Panel Support	M			Concrete stem walls 48 "or less that are less than 6" thick require reinforcement similar to narrow masonry stem walls	
R602.11 Wall Anchorage	C		This section only contains provisions related to anchorage of braced wall to concrete and masonry		
R602.12 Simplified Wall Bracing	A			Alternative method to brace detached dwellings located in SDC A, B, C and townhouses in SDC A or B, with basic wind speeds less than 90MPH and Wind Exposure Category A or B	
R602.12.6 Narrow Panel for Simplified Wall Bracing	A			Alternative method for narrow braced panels in accordance with a Section 602.10	
R603 Steel Wall Framing	M		Extensive revision, expansion to clarify and update prescriptive provisions, correlated w/ AISI S230, 2007 edition includes 3-story		
R606.3 and 606.4 Corbeled Masonry	M		Section divided into three sections to clarify requirements, recognizes mortar filled masonry units		
R606.12.2.1 and Table 606.12.2.1	A		Prescriptive requirements for minimum lengths of masonry		

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			walls to provide wall bracing. All building in Seismic Design Categories D <sub>0</sub> , D <sub>1</sub> , D <sub>2</sub> , above grade buildings in SDC C		
R607.3 Installation of Wall Ties	M			Now includes minimum mortar coverage for wall ties in exposed face, embedment.	
R611 Exterior Concrete Wall Construction	M		Completely revised to reflect Portland Cement Association PCA 100, above-ground concrete wall integrated w/ICF		
R612.2 Window Sills	M		Clarify child fall prevention alternatives to the minimum sill height, emergency escape and rescue opening		
R613 Structural Insulated Panel Wall Construction	A		Prescriptive provisions for SIP, limited to two story, 40'x60', 10' wall height SDC A, B, C		
R703 and Table R703.4 Weather-Resistant Exterior Covering	M		Performance requirements for wind resistance have been added to the water resistance provisions. Table changes clarify water resistive barrier requirements, updates fastening requirements to reflect current industry practices		
R703.7.3 Lintels	M		Steel lintels require a shop coat of rust-inhibitive primer or other corrosion protection. 2009 also provides alternative prescriptive method to support veneer, openings up to 18' 3" in length using steel angle and		

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			horizontal reinforcement		
R703.7.3.2 Masonry Veneer Lintel	M			Minimum and Maximum heights of masonry veneer established lintels max 18'3"	
R703.7.4 Masonry Veneer Anchorage	M		Minimum embedment & cover dimensions for metal wall ties	Updated tie fastener & air space requirements, table format for ease of use	
R703.7.4.2 Grout Fill Behind Masonry Veneer	M			Mortar is not longer permitted to fill the air space	
R703.8 Flashing	M			Pan Flashing is required on window and door openings when not provided by manufacturer, design professional, or BO	
R703.11.1.1 and 703.11.2 Vinyl Siding	A		Vinyl soffit must be individually fastened in accordance with mfg installation instructions, supporting component. Provisions for vinyl installed over foam plastic sheathing.		
R703.12 Adhered Masonry Veneer	A			Minimum clearance and flashing requirements for adhered masonry veneer on exterior walls. Clearances: 4" from grade, 2" paved, 1/2" above walking surfaces and flashing at foundation.	
R802.7 Cutting, Drilling, and Notching of Roof Members	C			Reference to R502.8.1, provisions for cantilevered rafters, ceiling joist Taper cut max 1/4 depth of member.	
802.11 Roof Uplift Resistance	M			Updated for current standards, simplified for ease of use.	
R804 Cold-Formed Steel Roof Framing	M		Extensive; revised/reorganized		

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			Prescriptive provisions of cold-formed steel framing applies to three story buildings		
R806 Attic Ventilation	M		Other than wire mesh is permitted, opening dimensions reduced from 1/8" to 1/16". Rewritten provisions for unvented attics	Options to omit attic ventilation in certain areas. Cross ventilation reduction is clarified, 40% min. 50% max. in the upper portion of roof (3')	
R806.5 Unvented Attic Assemblies	C			Clarifies section applies to rafter assemblies of vaulted or cathedral ceilings & updates for climate zones 5, 6, 7, & 8	
R807.1 Attic Access	C		Prescriptive methods to measure height of above required attic access opening		
R905.2 Asphalt Shingles	M		Asphalt shingles must comply with ASTM D7158 or D3161 (wind resistance) Flashing at end of wall requires turn-out		
R905.8.6 Wood Shake Installation	M		3/8 inch minimum spacing between shakes (keyway)		
R903.2.1 Roof Flashing Locations	M			Turn out required at the end of <u>roof</u> /wall intersection	
R903.2.2 Crickets and Saddles	C			Unit skylight flashing in accordance with manufacturer's instructions	
R905.2.7.2 Underlayment and High Wind	M			New requirements for installation of underlayment in high-wind areas	
R905.2.8.3 Sidewall Flashing	M			The use of continuous flashing allowed, use of a <i>J-turn</i>	

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				suggested. References Chapter 7 requirements for flashing/counterflashing	
R905.2.8.5 Roof Drip Edge	A			Roof drip edge is required for asphalt shingles	
R907.3 Recovering versus Replacement of Roofing	M			Hail exposure area is removed and adhered ice barrier may remain in place	
R1001 and R1003 Masonry Fireplaces and Chimneys	M		Added minimum thickness, parging, and lining requirements. Clay flue liners require a non-water-soluble refractory mortar		
R1003.9.1, R1003.3.3 Masonry Chimney Caps and Rain Caps	A			Provisions for commonly used caps consistent w/ASTM C1283	
R1005.7 Factory-Built Chimney Offsets	A			Factory-built chimneys must be vertically installed, no offsets greater than 30 degrees, 4 elbows maximum	
<b>Part 4 Energy Conservation</b>					
N1101 Energy Efficiency	M			Replaced with residential requirements of the IECC: Permanent certificate list results of blower door test & duct testing. Blower door test on all dwellings. Sets minimum insulation hot water piping. High-efficacy lamps 75% all permanent lighting fixtures. Minimum fan efficacy for whole-house mechanical ventilation	
N1101.2.1 and Table N1101.2 Climate Zones, Moisture Regimes, and Warm-Humid Designations	C		One table (map) for climate zones, moisture regimes, and		

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			war-humid designations for every county.		
N1101.9 Permanent Energy Certificate	M		The certificate shall be posted on or in the electric service panel without cover circuit directory label. When gas-fired unvented heaters, electric furnaces, baseboard heaters installed, specifically noted on certificate without reference to efficiency designation.		
Tables N1102.1 and N1102.1.2 Insulation and Fenestration Requirements by Component	M		U-factors for fenestration lowered in Zones 2, 3, and 4, an exception for impact-resistant glazing in windborne debris areas. Other changes for Zones 5, 6, and Marine 4 not applicable to TX,		
N1102.2 Ceiling and Hatch Insulation Requirements	C		Envelope also applies to access hatches and doors, weather-stripping and insulation required.		
Table N1102.2.5 Steel Framed Wall Insulation	M		Option of continuous R-10 applied to steel framing considered equivalent to R-13 cavity insulation (wood wall)		
N1102.4.1 Sealing of the Building Thermal Envelope	C		Now includes attic access openings and rim joist junction		
N102.4.5 Recessed Lighting	M		All recessed luminaires must be IC rated & labeled for air movement. Sealed where penetrating ext. wall or ceiling.		
N1103.7 Snow Melting System Controls	A		Automatic shut off required		
N1103.8 Swimming Pools	A		Pool heaters require automatic		

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			& manual on-off controls. Gas-fired heaters without continuous pilot lights, Cover required on heated pools		
N1104 Lighting Systems	A		50% of permanently installed fixtures to be compact fluorescent lamp or other high-efficacy lamps	75% of permanently installed fixtures to be compact fluorescent lamp or other high-efficacy lamps	
Part 5 Mechanical Chapters 12 through 23					
M1301 Identification and Certification of Pipe, Tubing, and Fittings	A			Third party certification and identification on pipe, tubing, and fittings used	
M1305.5.1.4.1 and M1308.3 Ground Clearance for Appliances	M		Consolidation of requirements, min 3" clearance from grade, supported in accordance with manufacturers requirements		
M1307.3.1 Protection from Impact	M		Expands requirements beyond garages and carports		
M1411.6 Locking Access Port Caps	M			Now allows for any approved means, not only locking caps	
M1502 Clothes Dryer Exhaust	M		Focus on the Manufacturer's installation instructions. New table for equivalent length, lengths greater than 25' require permanent identification of developed length. Protection plates required when penetrating framing, 1-1/4" from edge.	Support requirements increased from 4' up to 12'. Ducts must now be mechanically fastened; fasteners must not penetrate more than 1/8". Duct developed length has increased from 25' up to 35'	
M1503.4 Makeup Air for Kitchens Exhaust Hoods	A		Kitchen hoods w/ rating over 400cfm requires synchronized makeup air		
M1506 Exhaust Openings				Minimum clearances between air terminations and openings	

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				in to the building.	
M1507 Mechanical Ventilation	A			Prescriptive criteria for whole-house ventilation. Kitchen and bathroom ventilation is local	
M1601.1 Above-Ground Duct Systems	M			Exterior wall cavities are not permitted for use as return air plenums	
M1601.3 and M1601.4 Duct Insulation Materials and Duct Installation	M		Alternative testing method for duct insulation materials for smoke and flame spread. Spray foam insulation in specific attic and crawl space applications		
M1601.4.1 Duct Joints, Seams and Connections	M			IRC replaced w/ IMC provisions , reference SMACNA HVAC, Unlisted duct tape not permitted for sealing duct	
M1601.6 Independent Garage HVAC Systems	A		HVAC may not serve both dwelling unit and the garage		
M1602.2 Prohibited Sources of Outdoor and Return Air	M/C		Unconditioned attics and crawl spaces specifically prohibited source of outdoor or return air	Garage HVAC unit may take return air from garage. Return air may be taken from mechanical room. 10' rule	
M1701 Combustion Air	M		Significant changes for combustion air, Solid-fuel-burning appliances installed to manufacturer's installation instructions and NFPA for oil-fired appliances.		
M2103.2 Hydronic Floor Heating Systems	A		Insulation is required below Hydronic radiant floor heating systems; R-value visible, thermal break is required		

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			between slab and foundation.		
M2104 and Table M2101.1 Hydronic Piping Materials	A		Two polyethylene materials and their associated fittings now recognized		
M2301, M2302 Thermal and Photovoltaic Solar Energy Systems	A			Photovoltaic solar energy systems have been added to the IRC Mechanical system to distinguish them from thermal solar energy systems.	
Part 6 Fuel Gas					
G2408.2.1 Appliance Installation in Garages	A		Elevation of ignition source not required when installed in enclosed space not opening into a garage. Installation w/no strain on piping connections		
G2409.1 Reduced Clearance to Combustible Materials	C			Gypsum board is specifically identified as combustible material for the purpose of determining clearance	
G2412, G2415 Pipe Identification and Certification	A			Pipe and fittings utilized in a gas systems require the identification of the manufacturer and certification	
G2415.4 Underground Penetrations Prohibited	A		Gas piping is no longer permitted to penetrate the foundation wall below ground.		
G2415.6 Piping in Solid Floors	M		When protective conduit installed in a slab both ends terminating inside a building prohibits sealing of ends. If one end terminates outside, the inside portion must be sealed, outside preventing entry of water and insects and vented.		

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G2415.12 Piping Underground Beneath Buildings	M		Prohibits sealing of protective conduit which terminates inside the building.		
G2419.4 Sediment Trap	M			New illustration for correct configuration of a sediment trap. Exempts some gas fired decorative fireplaces.	
G2420.5 Appliance Shutoff Valve	M		Manifold piping provisions allow shut off at manifold, max 50' from appliance. Appliance replaces the term equipment.		
G2422.1.2.1 Maximum Length of Connectors	M		Appliance connectors max. length increased from 3' to 6'		
G2439.5 Clothes Dryer Ducts	M		Except where determined by manufacturer max. length increased from 25' up to 35'. Label or tag required within 6' of dryer. Protection of duct.		
G2442.4 Prohibited Sources of Outdoor and Return Air	M			HVAC serving only the garage may obtain return air from garage. 10' separation between return air inlets and draft hood/open combustion.	
G2447.5 Vertical Clearance Above Cooking Top	A		Kitchen wall cabinet must have 30" clearance of cook top. Reduced w/ listed appliances or insulating materials installed		
Part 7 Plumbing					
P2503.5.1 Rough Plumbing Test	M			Air testing of DWV piping is systems no longer permitted	
P2601.2 Connections to Drainage Systems	M			Waste water from: lavatories, bathtubs, clothes washers, and laundry trays is now defined as gray water and can be	

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				discharged to approved gray-water system	
P2603.4 Pipes through Foundation Walls	M			A sleeve or relieving arch is not required for pipes passing under a footing.	
P2606 Sealing of Annular Spaces	C			Sealing revised for approved types of materials and correct application, correlates w/ IECC	
P2609.1, 2609.4 Identification and Certification				Pipe, fittings, & plumbing components utilized require the identification of the standard and manufacturer. All products listed by third party certification	
P2702.1, 2706.1 Plumbing Fixtures	M			Now includes devices which discharge to the drainage system but are not connected to the water supply. Strainers excluded on hub drains and standpipes. Attics and crawlspaces are now listed as prohibited for waste receptors and standpipes. Clothes washer standpipes permitted in bathrooms.	
P2705.1 Installation of Fixtures	M		Revised fixture clearance consistent with the IPC		
P2709.1, P2709.2 Shower Receptors and Linings	M			Distance liner must extend above finished threshold reduced from 3" to 2". Thickness requirements of PVC and CPE replaced by referenced standards	
P2709.2.4 Liquid-Type Shower Lining	A			IRC now recognizes a new	

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				liquid-applied liner material	
P2713.1 Bathtub Waste Outlets and Overflows	C			Revised text clarifying bathtubs require overflow outlet	
P2709.1 Floor Drains	C		Drains not permitted beneath fixed appliances or in inaccessible areas		
P2801.5 Required Water Heater Pan	C		Tankless do not require pan.		
P2902.6 Location of Backflow Preventers	C		Guidelines for the location and protection of backflow preventer per manufacturer		
P2904 Dwelling Fire Sprinkler Systems <b>*NOT applicable in most Texas municipalities</b>	A		Prescriptive requirements for the design of dwelling fire sprinklers.		
*P2904.2.4.2 Minimum Fire Sprinkler Separation from Obstructions	M		Figure for separation between sprinkler and obstruction		
P3003.19 Joints between Drainage Piping and Water Closets	M			Use of waste connector and sealing gasket is now permitted as an alternative to a flanged floor-mounted WC	
P3005.2.6 Cleanout at the Base of Stacks	M		Cleanout now required at the base of each sanitary drainage stack. Alternative locations near stack or outside building are no longer permitted.		
P3007 Sumps and Ejectors	M		Replaced text to match provisions in 712 of IPC		
P3007.3.5 Ejector Connection to the Drainage System	M			Ejector discharge may now connect to soil stacks, waste stacks, horizontal branch drains, in addition to sewer	
P3009 Gray-Water Recycling Systems	A			Moved from appendix into body of code.	

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P3103.5 Location of Vent Terminal	M			Minimum clearance for vent terminations above openings within 10' has been increased from 2' to 3'	
P3108.1 and P3108.2 Wet Venting	M		Each fixture drain must connect individually to the horizontal wet vent. WC may now be located upstream of the dry vent connection to the horizontal wet vent.		
<b>Part 8 Electrical Chapters 34 through 43</b> <i>(Informational purposes only Texas Law requires NEC as the Electrical Code in the State of Texas, currently the 2011 NEC)</i>					
			<b>2009 references 2008 NEC currently adopted by COA</b>	<b>2012 IRC references 2011 NEC</b>	
E3607.3 Grounding for Buildings Supplied by Feeders	M		For other than existing, the code no longer permits feeders or branch circuits without grounding conductors to serve separate buildings		
E3608.1 Grounding Electrodes	M		Clarifies locations concrete-encased electrodes and requires only one to be connected to grounding electrode system.		
E3608.1.2 Concrete-Encased Electrodes	C			Separate section created	
E3608.4 Supplemental Electrode Required	C			Rod, pipe, or plate electrode requires supplemental electrode unless testing confirms the single electrode has resistance to earth 25 ohms or less	
E3609.3 Intersystem Bonding Termination	M		Bonding terminations for communications, satellite, and		

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			cable television grounding conductors are now required in one of three prescribed locations/accessible locations		
E3705.7 Location of Overcurrent Devices	M		Prohibits overcurrent devices from being located over steps		
E3901 Required Receptacle Outlets	M		Receptacle outlets controlled by a wall switch no longer count towards the required		
E3901.7 Outdoor Outlets	M		An outdoor outlet is required for any deck, porch, or balcony that is 20sf or larger, accessible from inside dwelling unit	An outdoor outlet is required for any deck, porch, or balcony that is accessible from inside the dwelling unit	
E3901.11 Receptacle Outlets in Foyers	A			Dwelling unit foyers exceeding 60SF require receptacle outlets	
E3909.2 and E3902.5 Ground-Fault Circuit-Interrupter (GFCI) Protection	M		All 15 or 20 ampere receptacles installed in garages & unfinished basements require GFCI, exception fire/burglar alarms		
E3902.11 Arc-Fault Protection	M		Required in all habitable spaces, except kitchens, bathrooms, unfinished basements		
E3902.11 Location of Ground-Fault Circuit Interrupters	A			GFCI must be readily accessible	
E3905.8 Boxes at Fan Outlets	M			When wired for fan, box must be listed for support of fan	
E4001.11.1 Switch and Faceplate Grounding	M			Two exceptions for kits or assemblies of non-metallic yokes, as well as snap switches	
E4001.15 Switching Controlling Lighting Loads	A			Unless a means of access for	

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				rewiring is provided, a grounded circuit conductor must be provided at the switch outlet	
E4002.14 Tamper-Resistant Receptacles	A		Tamper-resistant receptacles are required on all 125-volt 15- and 20-ampere receptacles	Receptacles 5-1/2' above floor, part of luminaire or appliance, or in a dedicated space for appliance, do not require TRR	
E4003.12 Luminaires in Clothes Closets	M		Recessed or surface-mounted LED and fluorescent luminaires may be installed within defined storage area when identified as suitable		
E4203.3 Disconnecting Means for Pools, Spas, and Hot Tubs	M		Disconnecting means must simultaneously disconnect all ungrounded conductors and not be located within 5' of the water's edge		
E4204.2 Bonded Parts of Pools, Spas, and Hut Tubs	M			Where walls are at least 5' high and within 3' from edge of pool, equipotential bonding is required pool side. Metal parts within 5' require bonding	
E4206.5.1 Servicing of Wet-Niche Luminaires	C		All maintenance able to be performed from pool deck		
E4209.1 Hydromassage Bathtubs	M		Individual circuit required, GFCI must be readily accessible		
E4209.3 Accessibility to Electrical Equipment of Hydromassage Bathtubs	M			When behind access panes receptacle outlets must face in direct view and within 1' of access opening	
Part 9 Swimming Pools, Spas, and Hot Tubs, Appendix G					
AG 105.2 Outdoor Swimming Pool Barrier	C		Prescriptive door alarms must be in accordance with UL 2017		

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AG 106 Entrapment Protection for Swimming Pool and Spa Suction Outlets	M		ANSI/APSP-7 is the referenced standard.		