AZBO

CODE REVIEW AND DEVELOPMENT COMMITTEE

ANNUAL REPORT

July 2003

Revised November 2003

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INTRODUCTION LETTER

Imad Eldurubi
Chair - Arizona Building Officials

June 20, 2003

Revised November 12,2003
Steve Brown
Chair – Arizona Building Officials

Mr. Chair,

The work of the Arizona Building Officials (AZBO) Code Review and Development Committee (CR & D) continues in an ongoing effort to encourage uniformity in the amendments and adoption of the construction codes enforced throughout the State of Arizona.

During the past year, Mr. Bob Lee has been the Chairperson of the AZBO CR & D Committee from August 2002 to March 7 2003. Mr. Bob Lee resigned in March 2003 and announced Vice Chair Autumn Hartsoe as the acting Chairperson of the Committee for the remaining term. Mr. Tom Hedges volunteered to assume the Vice Chair position for the remaining term.

During the past year, the Committee has met approximately every other month in various locations throughout the State to evaluate code change proposals to the International Family of Codes. In addition, the Structural Subcommittee met several times to evaluate specific structural issues of the International Building Code and the International Residential Code. Members of the Structural Subcommittee decided to disband in March of 2003 due to lack of issues being presented to the Committee. The Structural Subcommittee successfully addressed and resolved many structural issues. Meetings for both the full committee and the subcommittee have been open to all stakeholders in the development industry - refer to pages 5-7 for list of participants. Membership on the AZBO CR & D Committee is offered to anyone with an interest in developing the International Family of Codes and all members are permitted to vote.

The AZBO CR & D Committee has continued to follow the established five basic guidelines for reviewing and approving proposed amendments to the Codes. The five basic guidelines are as follows:

- Errors in the printed codes
- Coordination between codes
- Climatic/geographic considerations
- Life and health safety issues
- Local community issues

During the Inception of this committee, committee members were given the directive to remove code change proposals that were not approved by ICC during the code hearing process. The committee requests the AZBO Board of Directors to review and consider approval of a revision to this directive. The committee requests allowance for the AZBO CR & D Committee to reevaluate proposals that have been denied by ICC. The committee will either revise the proposal to

resubmit to ICC, will approve the proposal to remain as a State of Arizona amendment, or will remove the proposal from the committee's subsequent package of amendments.

The members of the AZBO CR & D Committee present two reports to the AZBO Board of Directors with a recommendation of support and approval of these reports. The first report titled *Report of Final Actions*, is a summary of the Committee's work during the past year - refer to pages 13-42. This report lists all submitted code change proposals, along with their current status. The second report tilted *2000 ICC Amendments Reformatted to the 2003 ICC Codes,* is a compilation of code change proposals approved by the CR & D Committee during the past three years - refer to pages 43-69. These approved code change proposals have been reformatted to the 2003 ICC Codes to assist jurisdictions and the development community with the adoption process of the 2003 ICC Codes. In addition, the committee reviewed and revised the amendment packet at the October 1, 2003 committee meeting to reflect the results of the September ICC Code Hearings. The committee will meet on January 9, 2004 to review the 2002 amendment packages that currently exist throughout the State. The committee will review and take action on these existing amendment packages to the current AZBO guidelines for approving code change proposals. The committee will provide to the AZBO Board a supplement amendment package of recommended amendments to the 2002 NEC.

Please feel free to contact me at (623) 932-3004 or email at ahartsoe@ci.goodyear.az.us with questions or concerns.

Sincerely,

Autumn Hartsoe
Chairperson - AZBO Code Review and Development Committee
Goodyear, Arizona

2002-2003 AZBO CODE REVIEW &DEVELOPMENT COMMITTEE			
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2000-2001 AZBO
CODE REVIEW & DEVELOPMENT STRUCTURAL SUBCOMMITTEE

Name & initial if attended	Representing	Phone & Fax Numbers	Internet Contact Information
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AZBO Code Change Committee
Final Actions Summary

Legend: AS = Approved as Submitted; AM = Approved as Modified; D = Disapproved; WP = Withdrawn by proponent; FS – Further Study.

Item #	Code Section / Subject	Orignal Committee Action	Az. Only Amd.	Action Date	Committee Action if denied by ICC	Action Date	Notes
IBC 3	101.2 exc 1	AM			Delete	10/1/03	
IBC 4	1604.8.1	AS			Delete	10/1/03	
IBC 5	Table 1607.1	AS	Yes		Az.Only Amd.	10/1/03	
IBC 7	1704.1	AS			Delete	10/1/03	
IBC 9	1805.3.1	AS			Delete	10/1/03	
IBC 10	3109	AS	Yes		Az.Only Amd.	10/1/03	
IBC 12	310.1	AS			Delete	10/1/03	
IBC 14	406.1.4 item1	AM	Yes		Az.Only Amd.	10/1/03	
IBC 15	201.4	AM			Delete	10/1/03	
IBC 17	907.2.10.1.1 907.2.10.1.2	AS			Delete	10/1/03	
IBC 20	Chapter 11	AM	Yes		Az.Only Amd.	10/1/03	

Item #	Code Section / Subject	Original Committee Action	Az. Only Amd.	Action Date	Committee Action if denied by ICC	Action Date	Notes
IBC-22	308.2 et al Adult care homes	AM	Yes	5/2/03			
IBC-22a **(Individually submitted to ICC by Tom H. & Forrest F.- Committee to support)**	308.2 et al Adult care homes	AS		5/2/03			
IBC-24	507.3 Accessory Occupancy	AS		11/7/03	Resubmit to ICC	11/7/03	
IBC-25	1607.1 Canopy Loads	AS		2/6/03			Included in 2003 IBC
IBC-26	Table 2111.1 Chimney	AM		3/7/03	Delete	10/1/03	
IBC-27	Table 2902.1 Service Sink	AS		11/7/03	Submit to ICC	11/7/03	
IBC-28	1008.2 Egress	AS		2/6/03			Approved As Submitted ICC 9/03
IBC-29	1003.3.1.9 Panic Hardware	AM		2/6/03			Approved As Submitted ICC 9/03
IBC-30	2107.2.1 Half Stress Masonry	WD		3/7/03			
IBC-30a	1704.5.2 Half Stress Masonry	FS		3/7/03			

Item #	Code Section / Subject	Committee Action	Az. Only Amd.	Action Date	Committee Action if denied by ICC	Action Date	Notes
IBC-31	1704.1 Special Inspection	AS		3/7/03	Delete	10/1/03	
IBC-32	1804.2 Presumptive Loads	AS		3/7/03			Approved As Submitted ICC 9/03
IBC-33	1503.4 Roof Drainage	AS	YES	11/7/03			
IRC-1	G2403 Appliances	AS		3/2/01	Delete	10/1/03	
IRC-2	M1307.3 Clothes Dryer	AM		5/4/01	Delete	10/1/03	
IRC-3	Table R301.4 Attic LL	AM	Yes		Az.Only Amd.	10/1/03	
IRC-5	E3603.2	AS			Delete	10/1/03	
IRC-6	R403.1.7.1 Footing Slope	AS			Delete	10/1/03	
IRC-7	R309.1 Garage Door	AM	Yes		Revise & Resubmit to ICC	10/1/03	
IRC-8	R309.2 Table R702.3.4	AS			Delete	10/1/03	
IRC-9	Appendix	AM	Yes		Az Only Amd	10/1/03	
IRC-10	R201.4 Dictionary	AM			Delete	10/1/03	
IRC-11	M1307.6 LPG	AS	Yes		Az Only Amd	10/1/03	
IRC-12	G2406.2 LPG	AM	Yes		Az Only Amd	10/1/03	

Item #	Code Section / Subject	Committee Action	Az. Only Amd.	Action Date	Committee Action if denied by ICC	Action Date	Notes
IRC-13	R305.1 Ceiling height	AM			Delete	10/1/03	
IRC-14	P2710.1 Shower Walls	AM					Included in 2003 IRC
IRC-15	M1703.2 LPG Venting	AM		5/4/01	Delete	10/1/03	
IRC-16	R313.1 Smoke Alarms	AM		4/6/01	Delete	10/1/03	Possibly resubmit to ICC, revising to "Smoke Alarms"
IRC-17	R105.2 Exempt Work	AS		6/1/01	Delete	10/1/03	
IRC-18	R316.2 Guard	AS		6/1/01			Included in 2003 IRC
IRC-19	R313.1.1 Smoke alarm	AS		6/1/01	Delete	10/1/03	
IRC-20	Table R503.2.1.1 (1)	AS		6/1/01			Included in 2003 IRC
IRC-23	R113.3 Notice	AS		6/1/01			Included in 2003 IRC
IRC-27	R320.1 Termite	AM					Approved As Submitted ICC 9/03
IRC-34	Figure R1003.1 Fireplace	AS		6/1/01			Included in 2003 IRC
IRC-35	M1308.3 Mech Equip	AM					Approved As Submitted ICC 9/03
IRC-38	M2006.2 Pool Heater	AS		6/1/01			Included in 2003 IRC
IRC-39	E3801.11 HVAC Outlet	AM			Delete	10/1/03	
IRC-41	G2415.9 Burial Depth	AM	Yes		Az Only Amd	10/1/03	

Item #	Code Section / Subject	Committee Action	Az. Only Amd.	Action Date	Committee Action if denied by ICC	Action Date	Notes
IRC-42	R310.1 Emergency Escape	AS					Approved As Submitted ICC 9/03 – Floor Vote
IRC-43	E3802.9 Arc-Fault	AS					Included in 2003 IRC
IRC-44	P2503.6 Water Supply	AS					Approved As Modified ICC 9/03
IRC-45	P3103.1 Plmg Vent	AS	Yes		Az Only Amd	10/1/03	
IRC-47	Figure R602.3(2) Top Plate	AS					Included in 2003 IRC
IRC-51	Figure R602.3(1) Top Plate	AS					Included in 2003 IRC
IRC-53	R202 Exterior Wall	AM		2/6/03			Revise to ICC RB-21 Similar Amd Approved by ICC 9/03
IRC-54	M1411.3.1 Secondary Drains	AM		2/6/03			Approved As Submitted ICC 9/03
IRC-55	Table R1003.1 Chimney	AM		3/7/03	Revise & Resubmit to ICC	10/1/03	
IRC-56	M1305.1.5 Roof Equipment	AS		3/7/03	Delete	10/1/03	
IRC-57	G2406.2 Prohibited Locations	D		2/6/03			

Item #	Code Section / Subject	Committee Action	Az. Only Amd.	Action Date	Committee Action if denied by ICC	Action Date	Notes
IRC-58	R315.1 Handrails	WP		3/7/03			
IRC-59	P2803.6.1 Req. of Discharge Pipe	AS		3/7/03	Revise & Resubmit to ICC	10/1/03	
IRC- 60	R2404.9	WP		11/7/03			
IFG-1	202 Appliance	AS		3/2/01	Delete	10/1/03	
IFG-2	305.3 Clothes Dryer	AM		5/4/01	Delete	10/1/03	
IFG-3	201.4 Dictionary	AM		4/6/01	Delete	10/1/03	
IMC-1	304.3 Clothes Dryer	AM		5/4/01	Delete	10/1/03	
IMC-3	306.5 Roof Ladder	AS		4/6/01			Included in 2003 IMC
IMC-4	201.4 Dictionary	AM		4/6/01	Delete	10/1/03	
IMC-5	303.3 Prohibited locations	AM		5/4/01	Delete	10/1/03	
IPC-1	101 Appendices	AS	Yes	3/2/01	AZ Only Amd	10/1/03	
IPC-2	201.4 Dictionary	AM		4/6/01	Delete	10/1/03	
IPC-3	312.5	AS		9/6/02			Approved As Modified ICC 9/03

Item #	Code Section / Subject	Committee Action	Az. Only Amd.	Action Date	Committee Action if denied by ICC	Action Date	Notes
IPC-4	504.6.1	AS	Yes	3/7/03	AZ Only Amd	10/1/03	
Structural 1	R401.5 & R401.4.2 Soils	AM					Approved As Submitted ICC 9/03
Structural 2	Table 1607.1 Truss Design	AM			Resubmit to ICC	10/1/03	Challenge to be submitted to ICC – IRC Structural 3 was appr as submitted 9/03
Structural 3	Table R301.5 Truss Design	AM					Approved As Submitted ICC 9/03
Structural 4	1607.11.2	AM			Delete	10/1/03	
Structural 5	1704.5 Special Insp.	AM	Yes		AZ Only Amd	10/1/03	Deleted original Proposal item #5

2003 AZBO to ICC Code Submittals Tracking Summary

AZBO Code Committee #	ICC Submittal to Code & Section #	2003 Code Section #	ICC Code Change #	Comments	Results from 9/03 ICC Code Hearings
IBC 15	IBC, IMC, IPC, IFGC, IRC, IECC, ICCEC, IPSDC, IPMC 201.4	No Change	G17-03/04	2nd time submitted	Committee, Disapproved
IBC 17	IBC, IFC 907.2.10.1.1 & 907.2.10.1.2	No Change	F117-03/04	2nd time submitted	Committee, Disapproved
IBC 24	IBC 507.3	No Change	G114-03/04		Committee, Disapproved
IBC 25	IBC Table 1607.1			Already corrected by errata per Alan Carr	
IBC 26	IBC Table 2111.1	No Change	S58-03/04		Committee, Disapproved Already approved in code
IBC 28	IBC 1008.2	1024.3	E105-03/04	Section #s revised to 2003 by ICC	Committee, approved as submitted
IBC 29	IBC 1003.3.1.9	1008.1.9	E32-03/04		Committee, Disapproved
IBC 31	IBC 1704.1 Exception 3	No Change	S33-03/04		Committee, Disapproved Needs proposal for Amd. to Chap. 21 (1/2 stress masonry)
IBC 32	IBC 1804.2	No Change	S48-03/04		Committee, approved as submitted
IFGC 4	IFGC 304.14			Per Greg Gress, Change already occurred in 2003 to Section 304.10	
IMC 1	IMC 304.3	No Change	M6-03/04	2nd time submitted	Committee, Disapproved Items 1 & 2
IPC 3	IPC 312.5	No Change	P9-03/04		Committee, approved as modified Items 1 & 2
IPC 4	IPC 504.6.1	No Change	P46-03/04		Committee, Disapproved Items 1 & 2
IRC 1	IRC G2403	No Change		Proposal withdrawn 7/21/03	Committee, Disapproved Items 1 & 2
IRC 2	IRC M1307.3	No Change	M6-03/04	2nd time submitted	Committee, Disapproved Items 1 & 2
IRC 17	IRC R105.2	No Change	RB6-03/04	2nd time submitted	Committee, Disapproved

AZBO Code Committee #	ICC Submittal to Code & Section #	2003 Code Section #	ICC Code Change #	Comments	Results from 9/03 ICC Code Hearings
IRC 27	IRC R324.1	R320.1	RB109-03/04	2nd time submitted, Errata per Larry Frank & will announce @ hearing keep last sentence of proposal & delete last 2 sentences of reason	Committee, approved as submitted
IRC 35	IRC M1308.2	M1403.2	RM19-03/04	2nd time submitted, not included in original monograph, will be in Code Change Website errata	Committee, approved as submitted
IRC 39	IRC E3801.11			Per Larry Franks, ICC, will need to be submitted through NFPA - Proposal withdrawn	
IRC 42	IRC R310.1	No Change	RB69-03/04	2nd time submitted	Floor vote, approved as submitted
IRC 43	IRC E3802.9			Change already occurred in 2003 - Section 3802.11	
IRC 44	IRC P2503.6	No Change	P9-03/04	2nd time submitted	Committee, approved as modified Items 1 & 2
IRC 45	IRC P3103.1	No Change	RP27-03/04	2nd time submitted Minor revision to proposal by ICC	Committee, Disapproved
IRC 47	IRC Figure R602.3(2)			Per Larry Franks, ICC, corrected by errata	
IRC 51	IRC Table R602.3(1)			Per Larry Franks, ICC, corrected by errata	
IRC 53	IRC R202	No Change	RB22-03/04	ICC will revise reason	Committee, Disapproved
IRC 54	IRC M1411.3.1	No Change	RM4-03/04		Committee, approved as submitted
IRC 55	IRC Table 1003.1	No Change	RB260-03/04	Per Larry Simpson, corrected by errata for vertical & horizontal reinforcing & bond beam. All other proposals to Table will be processed	Committee, Disapproved
IRC 56	IRC M1305.1.5 & M1305.1.5.1	No Change	RM2-03/04		Committee, Disapproved
AZBO Code Committee #	ICC Submittal to Code & Section #	2003 Code Section #	ICC Code Change #	Comments	Results from 9/03 ICC Code Hearings

IRC 59	IRC P2803.6.1	No Change	P46-03/04		Committee, Disapproved Items 1 & 2
Structural 1	IRC R401.5	R401.4.2	RB123-03/04		Committee, approved as submitted
Structural 2	IBC 1607.1	No Change	S13-03/04		Committee, Disapproved
Structural 3	IRC Table R301.4	R301.5	S13-03/04		Committee, approved as submitted
Structural 4	IBC 1607.11.2.1	No Change	S15-03/04	Rewritten as exception to formula per advice from Alan Carr - 9/2/03 will w/drawl proposal @ hearings due to analysis from ICC (o.k. w/ original proponent)	Committee, Disapproved
Structural 5	IBC 1704.5	No Change	S36-03/04		Committee, Disapproved

AZBO CODE REVIEW AND DEVELOPMENT COMMITTEE

REPORT of FINAL ACTIONS

IBC-22

Revision to: Sections 308.2,308.3, 310.1,310.2, (new) 419, 309.2.9, 1003.3.1.2, 1003.3.1.8.2

Proponent: Forrest Fielder - City of Surprise, Tom Hedges - Stantec

308.2 Group I-1. This occupancy shall include buildings, structures or parts thereof housing more than 10 persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a residential environment that provides supervisory care services. The occupants are capable of responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to, the following:
Residential board and care facilities
Assisted living centers
Halfway houses
Group homes
Congregate care facilities
Social rehabilitation facilities
Alcohol and drug abuse centers
Convalescent facilities
A facility such as the above with 10 or fewer persons shall be classified as a Group R-4 Condition 1 or shall comply with the *International Residential Code* in accordance with Section 101.2 where the building is in compliance with Section 419 of this code.

308.3 Group I-2. This occupancy shall include buildings and structures used for medical, surgical, psychiatric, nursing, custodial, personal, or directed care on a 24-hour basis of more than five persons who are not capable of self-preservation by responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to, the following:
Hospitals
Nursing homes (both intermediate-care facilities and skilled nursing facilities)
Mental hospitals
Detoxification facilities
A facility such as the above with five or fewer persons shall be classified as Group R-3 or shall comply with the *International Residential Code* in accordance with Section 101.2.

This occupancy shall also include buildings and structures used for assisted living homes providing supervisory, personal, or directed care on a 24-hr basis of more than 10 persons who are not capable of self-preservation by responding to an emergency situation without physical assistance from staff. A facility such as the above with ten or fewer persons shall be classified as R-4 Condition 2.

310.1…R-4 Residential occupancies shall include buildings arranged for occupancy as residential care/assisted living homes including not more than 10 occupants, excluding staff.

310.1.1 Condition 1. This occupancy condition shall include facilities licensed to provide supervisory care services, in which occupants are capable of self preservation by responding to an emergency situation without physical assistance from staff. Condition 1 facilities housing more than 10 persons shall be classified as a Group I-1.

310.1.2 Condition 2. This occupancy condition shall include facilities licensed to provide personal or directed care services, in which occupants are incapable of self preservation by responding to an emergency without physical assistance from staff. Condition 2 facilities housing more than 10 persons shall be classified as Group I-2.

R-4 occupancies shall meet the requirements for construction as defined in Group R-3 except as otherwise provided for in this code, and Section 419 or shall comply with the International Residential Code in accordance with section 101.2 where the building is in compliance with Section 419 of this code

310.2 Definitions

PERSONAL CARE SERVICE. Assistance with activities of daily living that can be performed by persons without professional skills or professional training and includes the coordination or provision of intermittent nursing services and the administration of medications and treatments.

DIRECTED CARE SERVICE. Care of residents, including personal care services, who are incapable of recognizing danger, summoning assistance, expressing need, or making basic care decisions.

SUPERVISORY CARE SERVICE. General supervision, including daily awareness of resident functioning and continuing needs.

RESIDENTIAL CARE/ASSISTED LIVING HOME. A building or part thereof housing a maximum of 10 persons, excluding staff, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment which provides supervisory, personal, or directed services. This classification shall include, but not be limited to, the following: residential board and care facilities, assisted living homes, halfway houses, group homes, congregate care facilities, social rehabilitation facilities, alcohol and drug abuse centers and convalescent facilities.

419 RESIDENTIAL CARE/ASSISTED LIVING HOMES

419.1 Applicability. The provisions of this section shall apply to a building or part thereof housing not more than 10 persons, excluding staff, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment which provides licensed care services. Except as specifically required by this division, R-4 occupancies shall meet all applicable provisions of Group R-3.

419.2 General. Buildings or portions of buildings classified as R-4 occupancies shall meet all the applicable provisions of Group R-3, may be constructed of any materials allowed by this code, shall not exceed two stories in height nor be located above the second story in any building, and shall not exceed 2000 square feet above the first story except as provided in Section 506.

419.3 Special Provisions. R-4 occupancies having more than 2000 square feet of floor area above the first floor shall be of not less than one-hour fire-resistive construction throughout.

419.3.1 Mixed Uses. R-4 occupancies shall be separated from other uses as provided in Table 302.3.2.

419.4 Access and Means of Egress Facilities.

419.4.1 Accessibility. R-4 occupancies shall be provided with at least one accessible route per the Arizonans with disabilities act. Sleeping rooms and associated toilets shall be accessible.

Exception: Existing buildings shall comply with Section 3409. Bathing and toilet facilities need not be made accessible, but shall be provided with grab bars in accordance with ICC/ANSI A 117.1.

419.4.2 Exits

4**19.4.2.1Number of Exits.** Every story, basement, or portion thereof shall have not less than two exits.

Exception: Basements and stories above the first floor containing no sleeping rooms may have one means of egress as provided in Chapter 10.

419.4.2.2 Distance to Exits. The maximum travel distance shall comply with Section 1004, except that the maximum travel distance from the center point of any sleeping room to an exit shall not exceed 75 feet.

419.4.2.3 Emergency Exit Illumination. In the event of a power failure, exit illumination shall be automatically provided from an emergency system powered by storage batteries or an onsite generator set installed in accordance with the ICC Electric Code.

419.4.2.4 Emergency Escape and Rescue. R-4 occupancies shall comply with the requirements of Section 1025, except that Exception 1 to Section 1025.1 does not apply to R-4 occupancies.

419.4.2.5 Delayed egress locks. In R-4 Condition 2 occupancies, delayed egress locks shall be permitted in accordance with Sections 1008.1.3.4 and 1008.1.8.6, items 1, 2, 4, 5 and 6.

419.5 Smoke Detectors and Sprinkler Systems

419.5.1 Smoke Alarms. All habitable rooms and hallways in R-4 occupancies shall be provided with smoke alarms installed in accordance with Section 907.2.10.

419.5.2 Sprinkler Systems. R-4 occupancies shall be provided with a sprinkler system installed in accordance with Section 903.2.9. Sprinkler systems installed under this Section shall be installed throughout, including attached garages, and in Condition 2 facilities shall include attics and concealed spaces of or containing combustible materials. Such systems may not contain unsupervised valves between the domestic water riser control valve and the sprinklers. In R-4 Condition 2 occupancies, such systems shall contain water-flow switches electrically supervised by an approved supervising station, and shall sound an audible signal at a constantly attended location.

1008.1.2 Door swing. Egress doors shall be side-hinged swinging.

Exceptions:

1. Private garages, office areas, factory and storage areas with an occupant load of 10 or less.
2. Group I-3 occupancies used as a place of detention.
3. Doors within or serving a single dwelling unit in Groups R-2, ~~and~~ R-3 as applicable in Section 101.2, <u>and R-4.</u>
4. (no other changes)

Reason: The purpose of this amendment is to bring the provisions of the code into agreement with the licensing rules of the Arizona Department of Health Services. DHS license categories have a threshold of 10 residents to move from a residential home setting to an institutional setting. DHS rules (R9-10-701) state, “Assisted living home” or “home” means an assisted living facility that provides resident rooms to (10) or fewer residents, as distinct from an “assisted living center”, which provides services to more than (10) persons. In addition, the license classifications to provide “personal care services” and “directed care services” to residents allow for residents to be bed-bound. The use of “Condition” distinctions is reflective of similar distinctions in I-occupancies.

Each state has unique agency programs for assisted living occupancies, which establish license categories based on numbers of residents and the familiar ambulatory/non-ambulatory distinction. Uniformity could be accomplished by either trusting health service agencies nationally to agree to uniform thresholds and other licensing characteristics, or by amending building codes to allow each state to adapt to that state’s unique rules. If numerical thresholds are provided on a “fill in the blanks” basis, condition categories can be added or deleted, and definitions can be customized to match licensure definitions, the hazards associated with these facilities can be addressed comprehensively on a state-by-state basis.

The most hazardous scenario is a facility in an ordinary, un-rated residential structure, occupied by (10) bed-bound residents, supervised by a single caregiver. Provisions for exiting, smoke detectors, emergency illumination, sprinklers, et al, can substantially increase the chances of survival in a fire or other emergency for these residents.

IBC-1-01 Reason: To bring the Building Code into agreement with Arizona Administrative Code, Title 9 Health Services, Article 7 Assisted Living Facilities. R9-10-701 states, '"Assisted living home" or "home" means an assisted living facility that provides resident rooms to ten or fewer residents.' An "Assisted living center" (rooms or residential units for eleven or more residents) is required to have "an individually keyed entry door" and "a kitchen area" by R9-10-720. Since the distinction for the state is between ten and eleven residents, it is felt that the Building Code should reflect the same distinction.
See http://www.sosaz.com/public services/Title 09/9-10.htm for the entire rule.

It is felt that the word "abuse" was inadvertently omitted for the definition of Group I-1 Occupancy.

Cost Impact: Slight

Committee Action: Approved as Submitted

IBC-24

Revise 507.2 & 507.3

Proponent: Tom Hedges, Stantec

Revise as follows:

507.2 Sprinklered, one story. The area of a one-story, Group B, F, M or S building or a one-story Group A-4 building of other than Type V construction shall not be limited when the building is provided with an automatic sprinkler system throughout in accordance with Section 903.3.1.1, and is surrounded and adjoined by public ways or yards not less than 60 feet (18 288 mm) in width.

Exceptions:

1. (No change)

2. (No change)

<u>Such buildings may contain other occupancies, without H fire areas, provided that such occupancies do not occupy more than 10 percent of the area of any floor of a building, nor more than the tabular values permitted in the occupancy by Table 503 for such occupancy.</u>

<u>Exception: Group H fire areas as permitted by Section 507.6.</u>

507.3 Two story. The area of a two-story, Group B, F, M or S building shall not be limited when the building is provided with an automatic sprinkler system in accordance with Section 903.3.1.1 throughout, and is surrounded and adjoined by public ways or yards not less than 60 feet (18 288 mm) in width.

<u>Such buildings may contain other occupancies, without H fire areas, provided that such occupancies do not occupy more than 10 percent of the area of any floor of a building, nor more than the tabular values permitted in the occupancy by Table 503 for such occupancy.</u>

<u>Exception: Group H fire areas as permitted by Section 507.6.</u>

Reason: The purpose of this proposal is to expand minor uses that would be permitted in an unlimited area building constructed in compliance with Sections 507.2 and 507.3. The current text is overly restrictive. As written, these buildings would not be allowed to contain separate tenants such as daycare, dance school, out-patient surgical center, restaurants, etc.. These would be considered different occupancies and no text exists to permit such uses in an unlimited area building of B, F, M or S occupancies.

It makes little sense to restrict other occupancies, while allowing an A-4, certain H's or motion picture theaters to be in unlimited area buildings.

This change will allow other use groups to be located in an unlimited area building of B, F, M or S uses as long as the aggregate area of the occupancies do no exceed 10% of the floor area of the main occupancy and further that the aggregate area of such occupancy does not exceed the tabular area permitted in Table 503.
Communications and interpretations from ICC staff in ICBO and Boca offices have confirmed there is a need for a change to allow these minor occupancies in an unlimited area building. This provision is in at least one other national code.
This change should provide a reduction in costs.

Cost Impact: None

Committee Action: Approved as Submitted

IBC-25

Revision to: Table 1607.1

Proponent: Edward J. Courtney, Pima County

Proposal: Revise Item 24 of Table 1607.1

Table 1607.1 MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS AND MINIMUM CONCENTRATED LIVE LOADS

OCCUPANY OR USE	UNIFORM (psf)	CONCENTRATED (lbs.)
24. Marquees ~~and canopies~~	75	---

Reason:
Canopy live load is already covered in IBC Section 1607.2.4,

"**1607.11.2.4 Awnings and canopies.** Awnings and canopies shall be designed for a uniform live load of 5 pounds per square foot (0.240 kN/m^2) as well as for snow loads and wind loads as specified in Sections 1608 and 1609."

Cost Impact: None

Committee Action: Approved as Submitted

IBC-26

Revision to: Table 2111.1

Proponent: Autumn Hartsoe, City of Goodyear

Proposal: Revise Table as follows:

TABLE 2111.1

ITEM	LETTER	REQUIREMENTS	SECTION
Hearth and hearth extension thickness	A	4-inch minimum thickness for hearth, 2-inch minimum thickness for hearth extension.	2111.9
Hearth extension (each side of opening)	B	8 inches for fireplace opening less than 6 square feet. 12 inches for fireplace opening greater than or equal to 6 square feet.	2111.10
Hearth extension (front of opening)	C	16 inches for fireplace opening less than 6 square feet. 20 inches for fireplace opening greater than or equal to 6 square feet.	2111.10
Firebox dimensions	D	20-inch minimum firebox depth. 12-inch minimum firebox depth for Rumford fireplaces.	2111.11

Hearth and hearth extension reinforcing	D	Reinforced to carry its own weight and all imposed loads	2111.9
Thickness of wall of firebox	E	10 inches solid masonry or 8 inches where firebrick lining is used.	2111.5
Distance from top of opening to throat.	F	8 inches minimum.	2111.7
Smoke chamber wall thickness dimensions	G	6 inches lined; 8 inches unlined. Not taller than opening width; walls not inclined more than 45 degrees from vertical for prefabricated smoke chamber linings or 30 degrees from vertical for corbelled masonry.	2111.8
Chimney vertical reinforcing[b]	H	Four No. 4 full-length bars for chimney up to 40 inches wide. Add two No. 4 bars for each additional 40 inches or fraction of width, or for each additional flue.	2111.3.1, 2113.3.1
Chimney horizontal reinforcing[b]	J	1/4-inch ties at each 18 inches, and two ties at each bend in vertical steel.	2111.3.2, 2113.3.2
Fireplace lintel	L	Noncombustible material with 4-inch bearing length of each side of opening.	2111.7
Chimney walls with flue lining	M	4-inch-thick solid masonry with 5/8-inch fireclay liner or equivalent. 1/2-inch grout or airspace between fireclay liner and wall	2113.10, 2113.11, 2113.12
Effective flue area (based on area of fireplace opening and chimney)	P	See Section 2113.16.	2113.16
Clearances From chimney From fireplace Combustible trim or materials Above roof	R	2 inches interior, 1 inch exterior 2 inches back or sides 6 inches from opening 3 feet above roof penetration, 2 feet above part of structure within 10 feet.	2113.19 2111.12 2111.13 2113.9
Anchorage[b] Strap Number Embedment into chimney Fasten to Bolts	S	3/16 inch by 1 inch Two 12 inches hooked around outer bar with 6-inch extension. 4 joists Two 1/2-inch diameter.	2111.4 2113.4.1
Footing Thickness Width	T	12-inch minimum. 6 inches each side of fireplace wall.	2111.2

For SI: I inch = 25.4 mm, 1 foot = 304.8 mm, 1 square foot = 0.0929 m^2.

a. This table provides a summary of major requirements for the construction of masonry chimneys and fireplaces. Letter references are to Figure 2111.1, which shows examples of typical construction. This table does not cover all requirements, nor does it cover all aspects of the indicated requirements. For the actual mandatory requirements of the code, see the indicated section of text.

b. Not required in Seismic Design Category A,B, or C.

Reason: Also adding footnote "b" for clarification on seismic reinforcing of masonry or concrete fireplaces in accordance with IBC Section 2111.3

Cost Impact: None

Committee Action: Approved as Modified

TABLE 2111.1[a]

ITEM	LETTER	REQUIREMENTS	SECTION
Hearth and hearth extension thickness	A	4-inch minimum thickness for hearth, 2-inch minimum thickness for hearth extension.	2111.9

Hearth extension (each side of opening)	B	8 inches for fireplace opening less than 6 square feet. 12 inches for fireplace opening greater than or equal to 6 square feet.	2111.10
Hearth extension (front of opening)	C	16 inches for fireplace opening less than 6 square feet. 20 inches for fireplace opening greater than or equal to 6 square feet.	2111.10
Firebox dimensions	D	20-inch minimum firebox depth. 12-inch minimum firebox depth for Rumford fireplaces.	2111.11
Hearth and hearth extension reinforcing	D	Reinforced to carry its own weight and all imposed loads	2111.9
Thickness of wall of firebox	E	10 inches solid masonry or 8 inches where firebrick lining is used.	2111.5
Distance from top of opening to throat.	F	8 inches minimum.	2111.7
Smoke chamber wall thickness dimensions	G	6 inches lined; 8 inches unlined. Not taller than opening width; walls not inclined more than 45 degrees from vertical for prefabricated smoke chamber linings or 30 degrees from vertical for corbelled masonry.	2111.8
Chimney vertical reinforcing[b]	H	Four No. 4 full-length bars for chimney up to 40 inches wide. Add two No. 4 bars for each additional 40 inches or fraction of width, or for each additional flue.	2111.3.1, 2113.3.1
Chimney horizontal reinforcing[b]	J	1/4-inch ties at each 18 inches, and two ties at each bend in vertical steel.	2111.3.2, 2113.3.2
Fireplace lintel	L	Noncombustible material with 4-inch bearing length of each side of opening.	2111.7
Chimney walls with flue lining	M	4-inch-thick solid masonry with 5/8-inch fireclay liner or equivalent. 1/2-inch grout or airspace between fireclay liner and wall	2113.10, 2113.11, 2113.12
Effective flue area (based on area of fireplace opening and chimney)	P	See Section 2113.16.	2113.16
Clearances From chimney From fireplace Combustible trim or materials Above roof	R	2 inches interior, 1 inch exterior 2 inches back or sides 6 inches from opening 3 feet above roof penetration, 2 feet above part of structure within 10 feet.	2113.19 2111.12 2111.13 2113.9
Anchorage[b] Strap Number Embedment into chimney Fasten to Bolts	S	3/16 inch by 1 inch Two 12 inches hooked around outer bar with 6-inch extension. 4 joists Two 1/2-inch diameter.	2111.4 2113.4.1
Footing Thickness Width	T	12-inch minimum. 6 inches each side of fireplace wall.	2111.2

For SI: I inch = 25.4 mm, 1 foot = 304.8 mm, 1 square foot = 0.0929 m^2.

c. This table provides a summary of major requirements for the construction of masonry chimneys and fireplaces. Letter references are to Figure 2111.1, which shows examples of typical construction. This table does not cover all requirements, nor does it cover all aspects of the indicated requirements. For the actual mandatory requirements of the code, see the indicated section of text.

d. Not required in Seismic Design Category A,B, or C.

Reason: This proposal will create uniformity and will delete conflicts between IBC Table 2111.1 and IRC Table R1003.1 Also adding footnote “b” for clarification on seismic reinforcing of masonry or concrete fireplaces in accordance with IBC Section 2111.3

IBC-27

Revision to: Table 2902.1

Proponent: Autumn Hartsoe, City of Goodyear

Proposal: Revise Table as follows:

Revise Items 2 and 6 of table (remainder of table unchanged):

TABLE 2902.1
MINIMUM NUMBER OF REQUIRED PLUMBING FACILITIES[a]

No.	CLASSIFICATION	USE GROUP	DESCRIPTION	WATER CLOSETS (SEE SECTION 419.2 OF THE INTERNATIONAL PLUMBING CODEFOR URINALS)		LAVATORIES		BATHTUBS OR SHOWERS	DRINKING FOUNTAINS (SEE SECTION 410.1 OF THE INTERNATIONAL PLUMBING CODE)	OTHER
				MALE	FEMALE	MALE	FEMALE			
2	Business (see Sections 2902.2, 2902.4, 2902.4.1 and 2902.6)	B	Buildings for the transaction of business, professional services, other services involving merchandise, office buildings, banks, light industrial and similar uses	1 per 25 for the first 50 and 1 per 50 for the remainder exceeding 50		1 per 40 for the first 50 and 1 per 80 for the remainder exceeding 50		—	1 per 100	~~1 service sink~~
6	Mercantile (see Section 2902.2, 2902.5 and 2902.6)	M	Retail stores, service stations, shops, salesrooms, markets and shopping centers	1 per 500		1 per 750		—	1 per 1,000	~~1 service sink~~

REASON: The current requirement for 1 service sink for mercantile and business occupancies is not necessary due to the nature of the occupancy. The majority of business and mercantile occupancies do not warrant the need to clean up spills that often occur in other occupancies. The requirement for a service sink often becomes overly restrictive to small tenant spaces. This revision will not apply if another governing agency, such as The State Health Department, requires a service sink.

Cost Impact: None

Committee Action: Approved as Submitted

IBC-28

Revision to: Section 1008.2

Proponent: Tom Hedges, Stantec

Proposal: Revise as follows:
1008.2 Assembly other exits. In addition to having access to a main exit, each level of an occupancy in Group A having an occupant load of greater than three hundred shall be provided with additional ~~exits~~ means of egress that shall provide an egress capacity for at least one-half of the total occupant load served by that level and comply with Section 1004.2.2.

Reason: The IBC defines 'exit' in 1006 as being exterior doors, vertical exit enclosure, smokeproof enclosure, exit passageway and horizontal exits. ICC staff has interpreted that this section does not mean each 'additional exit' is required to comply solely with Section 1006. But that the code intends that assembly rooms may also be served by exit-access elements. If this interpretation is correct, then the Code should reflect the correct intent. By changing the word 'exit' to 'means of egress' clarifies the purported intent correctly.

Cost Impact: None, may lower.

Committee Action: Approved as Submitted

IBC-29

Revision to: Section 1003.3.1.9

Proponent: Tom Hedges, Stantec

Proposal: Revise as follows:

1003.3.1.9 Panic and fire exit hardware. Where panic and fire exit hardware is installed, it shall comply with the following:

1. The actuating portion of the releasing device shall extend at least one-half of the door leaf width.

2. A maximum unlatching force of 15 pounds (67 N).

Each door in a means of egress from an occupancy of Group A or E having an occupant load of 100 or more and any occupancy of Group H-1, H-2, H-3 or H-5 shall not be provided with a latch or lock unless it is panic hardware or fire exit hardware.

Exception. A main exit, of a Group A use, in compliance with Section 1003.3.1.8 Exception 2.

If balanced doors are used and panic hardware is required, the panic hardware shall be of the push-pad type and the pad shall not extend more than one-half the width of the door measured from the latch side.

Reason: Current text is overly restrictive. As written, these occupancies can not contain a lunch room if the occupant load is 51 persons as this would be an A-2 Occupancy and no text exists to permit such use in an unlimited area building of B, F, M or S uses.

The IBC has a conflict between Section 1003.3.1.8, Exception 2 and the second paragraph of Section 1003.3.1.9. Section 1003.3.1.9 requires panic hardware on all egress doors serving a Group A having an occupant load of 100 or more. However, Section 1003.3.1.8, Exception 2 permits the use of key operated locking devices on the egress side of the main exit door where the occupant load is 300 or less. In applying conflict resolution from Section 102.1, it is difficult to determine which of these sections is a general requirement and which is a specific requirement nor can you readily determine which is the more restrictive. By adding this exception to the second paragraph of Section 1003.3.1.9 the code will be consistent interpretations found in the 2000 IBC Q & A Application Guideline.

Reason: The IBC has a conflict between Section 1003.3.1.8, Exception 2 and the second paragraph of Section 1003.3.1.9. Section 1003.3.1.9 requires panic hardware on all egress doors serving a Group A having an occupant load of 100 or more. However, Section 1003.3.1.8, Exception 2 permits the use of key operated locking devices on the egress side of the main exit door where the occupant load is 300 or less. In applying conflict resolution from Section 102.1, it is difficult to determine which of these sections is a general requirement and which is a specific requirement nor can you readily determine which is the more restrictive. By adding this exception to the second paragraph of Section 1003.3.1.9 the code will be consistent with interpretations found in the 2000 IBC Q & A Application Guideline.

Cost Impact: None

Committee Action: Approved as Modified

IBC-30

Revision to: Section 2107.2.1

Proponent: Steven Hess, Caruso Turley Scott, Inc.

Proposal: Revise as follows:
Committee Action: Approved as Modified

1003.3.1.9 Panic and fire exit hardware. Where panic and fire exit hardware is installed, it shall comply with the following:

1. The actuating portion of the releasing device shall extend at least one-half of the door leaf width.

2. A maximum unlatching force of 15 pounds (67 N).

Each door in a means of egress from an occupancy of Group A or E having an occupant load of 100 or more and any occupancy of Group H-1, H-2, H-3 or H-5 shall not be provided with a latch or lock unless it is panic hardware or fire exit hardware.

<u>Exception. A main exit, of a Group A use, in compliance with Section 1003.3.1.8 Exception 2.</u>

If balanced doors are used and panic hardware is required, the panic hardware shall be of the push-pad type and the pad shall not extend more than one-half the width of the door measured from the latch side.

2107.2.1 ACI 530/ASCE 5/TMS 402, Chapter 2. Special inspection during construction shall be provided as set forth in Section 1704.5. <u>Special inspection will not be required when one-half allowable masonry stresses are used with the value of f'm limited to a maximum of 1500 psi for concrete or clay masonry for the following criteria.</u>

1. <u>The maximum height to width (nominal) ratio of a building wall is limited to 20.</u>
2. <u>The maximum soil retainage for a retaining wall is 5'-0" from the top of footing for an 8 inch wall or 7'-0" for a 12 inch wall.</u>
3. <u>The maximum height to width ratio of 10 for a cantilevered fence or combination fence and retaining wall as determined from the top of footing to the top of wall.</u>

Committee Action: Withdrawn by Proponent

IBC-30a

Revision to: Section 1704.5.2

Proponent: Steven Hess, Caruso Turley Scott, Inc.

Proposal: Revise as follows:

1704.5.2 Exception: When quality assurance provisions do not include requirements for special inspection as prescribed in Section 1704.5, the allowable stresses for masonry in Section 2107 shall be reduced by one half. The following limitations shall apply to this exception.

4. The maximum unsupported height (or length) to width (nominal) ratio of a building wall is limited to 20.
5. The maximum soil retaining for a retaining wall is 4'-0" from the top of footing for an 8 inch wall or 6'-0" for a 12 inch wall.
6. The maximum height to width ratio of 10 for a cantilevered fence or combination fence and retaining wall as determined from the top of footing to the top of wall.

Reason: Historically, one-half stresses in masonry has been allowed for years in the UBC. This proposal will again allow it in low profile buildings, short retaining walls, and fences thus eliminating the added burden and expense of special inspections.

Cost Impact: None, may lower

Committee Action: Further Study

IBC-31

Revision to: Section 1704.1

Proponent: Edward J. Courtney, Pima County

Proposal: Revise 1704.1 Exception 3 as follows:

3. ~~Unless otherwise required~~ When permitted by the building official, special inspections are not required for occupancies in Group R-3 as applicable in Section 101.2 and occupancies in Group U that are accessory to a residential occupancy including, but not limited to, those listed in Section 312.1. Masonry construction exempt from special inspection by this Section shall be designed at 1/2 stress.

Reason: The term "Unless otherwise required" assume that special inspections will not be routinely performed on residences and garages. In order for a special inspection to be performed, the building official must be proactive and place the requirement for a special inspection on the builder. In past times, with the relative lack of sophistication in residential construction, this approach may have been acceptable.

Today's higher level of specialized materials and construction techniques require the use of special inspections in many circumstances that include post-tensioned slabs, epoxied connectors, grout lifts in excess of code maximums and even structural steel welding. These materials and activities are not an aberration or unusual occurrences any longer.

Rather than put the building official in the proactive position of requiring special inspections in many circumstances, this change would recognize that these technically sophisticated materials and techniques are used and do require the services of a special inspector even in residential buildings. This change will still allow discretion by the building official to exempt the requirement for special inspection on a case-by-case basis.

Cost Impact: None, may lower

Committee Action: Approved as Submitted

IBC-32

Revision to: Section 1804.2

Proponent: Edward J. Courtney, Pima County

Proposal: Revise 1704.1 Exception 3 as follows:

1804.2 Presumptive load-bearing values. The maximum allowable foundation pressure, lateral pressure or lateral sliding resistance values for supporting soils ~~at or~~ near the surface shall not exceed the values specified in Table 1804.2 unless data to substantiate the use of a higher value are submitted and approved.

Presumptive load-bearing values shall apply to materials with similar physical characteristics and dispositions.

Mud, organic silt, organic clays, peat or unprepared fill shall not be assumed to have a presumptive load bearing capacity unless data to substantiate the use of such a value are submitted.

EXCEPTION: A presumptive load-bearing capacity is permitted to be used where the building official deems the load-bearing capacity of mud, organic silt or unprepared fill is adequate for the support of lightweight and temporary structures.

Reason: The wording <u>at or</u> near the surface would lead one to believe that the soil bearing values of Table 1804.2 may be applied at the ground surface. Where as Section 1805.2 states as follows:

1805.2 Depth of footings. The minimum depth of footings below the undisturbed ground surface shall be 12 inches (305 mm). Where applicable, the depth of footings shall also conform to Sections 1805.2.1 through 1805.2.3.

Cost Impact: None

Committee Action: Approved as Submitted

IBC-33

Revise Section 1503.4

Proponent: Tom Hedges, Stantec

[P] 1503.4 Roof drainage. Design and installation of roof drainage systems shall comply with <u>Section 1503.4 and</u> the ~~*International*~~ *Plumbing Code*.

1503.4.1 Gutters. Gutters and leaders placed on the outside of buildings, other than Group R-3 as applicable in Section101.2, private garages and buildings of Type V construction, shall be of noncombustible material or a minimum of Schedule 40 plastic pipe.

<u>**1503.4.2 Where required.** All roofs, paved areas, yards, courts and courtyards shall drain into a separate storm sewer system, or a combined sewer system, or to an approved place of disposal.</u>

<u>**1503.4.3 Roof design.** Roofs shall be designed for the maximum possible depth of water that will pond thereon as determined by the relative levels of roof deck and overflow weirs, scuppers, edges or serviceable drains in combination with the deflected structural elements. In determining the maximum possible depth of water, all primary roof drainage means shall be assumed to be blocked.</u>

<u>**1503.4.4 Overflow drainage required.** Overflow (emergency) roof drains or scuppers shall be provided where the roof perimeter construction extends above the roof in such a manner that water will be entrapped if the primary drains allow buildup for any reason.</u>

<u>**1503.4.4.1 Separate systems required.** Overflow roof drain systems shall have the end point of discharge separate from the primary system. Discharge shall be above grade, in a location, which would normally be observed by the building occupants or maintenance personnel.</u>

1503.4.4.2 Overflow drains and scuppers. Where roof drains are required, overflow drains having the same size as the roof drains shall be installed with the inlet flow line located 2 inches (51 mm) above the low point of the roof, or overflow scuppers having three times the size of the roof drains may be installed in the adjacent parapet walls. Scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by the plumbing code. Scuppers shall not have an opening dimension of less than 4 inches (102 mm). The flow through the primary system shall not be considered when sizing the secondary roof drain system.

REASON: This is proposed as an Arizona only amendment to resolve the problem of using the UPC rather than the IPC. The I codes place roof drainage in the plumbing code. The U codes have drainage required in the UBC and piping system design is per the UPC and scuppers per the UBC. When the IBC is used with the UPC, there is a gaping hole in having sufficient requirements to obtain a safe roof drainage system.

New Section 1503.4.2 is from IPC 1101.2. Section 1503.4.3 is from IPC 1101.7. Section 1503.4.4 is from IPC 1107.1. Section 1503.4.4.1 is from IPC 1107.2. Section 1503.4.4.2 is a combination of IRC R903.4.1and IPC 1107.3.

The text from the IRC provides the three times scupper sizing that existed in the UBC. Note that jurisdictions that have adopted the 2000 IPC without amendments will require overflow piping to be two times the size of the main piping but have no over sizing requirement for the scuppers. The 2003 no longer requires the overflow piping size to be doubled but still does not have the three times size for the scuppers.

Cost Impact: None

Committee Action: Approved as Submitted

2000 INTERNATIONAL RESIDENTIAL CODE

IRC-53

Revision to: Section R202

Proponent: Bob Lee, Town of Cave Creek

Proposal: Revise R202 Definitions as follows:

EXTERIOR WALL. An above-grade wall enclosing conditioned and unconditioned space. Includes between floor spandrels, peripheral edges of floors, roofs and basement knee walls, dormer walls, gable end walls, walls enclosing a mansard roof, and basement walls with an average below grade wall area that is less than 50 percent of the total opaque and nonopaque area of that enclosing side.

Reason: When limiting Exterior Walls to those enclosing conditioned space in Section R302.1, it is possible to erect a wall enclosing unconditioned space such as a garage with a fire separation distance of less than 3 feet without a 1-hour fire-resistance rating. By also including those walls enclosing unconditioned space in the definition, any wall with a fire separation distance of less than 3 feet will be required to have the same 1-hour fire-resistance rating.

Cost Impact: None

Committee Action: Approved as Modified

R202 DEFINITIONS
EXTERIOR WALL - Energy Conservation. An above-grade wall enclosing conditioned space. Includes between floor spandrels, peripheral edges of floors, roofs and basement knee walls, dormer walls,

gable end walls, walls enclosing a mansard roof, and basement walls with an average below grade wall area that is less than 50 percent of the total opaque and nonopaque area of that enclosing side.

EXTERIOR WALL. A wall, bearing or nonbearing, that is used as an enclosing wall for a building and that has a slope of 60 degrees (1.05 rad) or greater with the horizontal plane. Includes between floor spandrels, peripheral edges of floors, roof and basement knee walls, dormer walls, gable end walls, walls enclosing a mansard roof, and basement walls.

Reason: The IRC uses the term exterior wall(s) in 71 different sections. Of those, only 3 sections in Chapter 11 are related to insulated walls around conditioned spaces. The remaining 68 sections use the terms in a similar manner to the definition in the IBC. This proposed change clarifies that the existing definition is for use in Chapter 11 and proposes a new definition for the remainder of the IRC. The proposed definition combines the IBC definition with the existing IRC definition to clarify intent related to fire resistance, structural, weather resistance and other conditions not related to energy conservation.

When limiting Exterior Walls to those enclosing conditioned space in Section R302.1, it is possible to erect a wall enclosing unconditioned space such as a garage with a fire separation distance of less than 3 feet without a 1-hour fire-resistance rating. By adding an additional definition, any wall with a fire separation distance of less than 3 feet will be required to have the same 1-hour fire-resistance rating.

If you picture a dwelling with an attached garage having the outside wall , bearing and non-bearing, of the garage with a separation distance of less than 3 feet apply each of the following code sections to the existing definition, one can readily see the need for an additional definition.

The following are the IRC Sections using the terms exterior wall(s):

R105.2 Work exempt from permit.
9. Window awnings supported by an **exterior wall**.

R202

EXTERIOR WALL. An above-grade wall enclosing conditioned space. Includes between floor spandrels, peripheral edges of floors, roof and basement knee walls, dormer walls, gable end walls, walls enclosing a mansard roof, and basement walls with an average below grade wall area that is less than 50 percent of the total opaque and nonopaque area of that enclosing side.

GRADE. The finished ground level adjoining the building at all **exterior walls**.

GRADE PLANE. A reference plane representing the average of the finished ground level adjoining the building at all **exterior walls**.

GROSS AREA OF EXTERIOR WALLS. The normal projection of all **exterior walls,** including the area of all windows and doors installed therein.

BUILDING THERMAL ENVELOPE. The basement walls, **exterior walls**, floor, roof and any other building element that enclose conditioned spaces.

STANDARD TRUSS. Any construction that does not permit the roof/ceiling insulation to achieve the required *R*-value over the **exterior walls**.

R302.1 Exterior walls. Exterior walls with a fire separation distance less than 3 feet (914 mm) shall have not less than a one hour fire-resistive rating with exposure from both sides. Projections shall not extend beyond the distance determined by the following two methods, whichever results in the lesser projections:
1. A point one-third the distance to the property line from an assumed vertical plane located where protected openings are required.
2. More than 12 inches (305 mm) into areas where openings are prohibited.
Projections extending into the fire separation distance shall have not less than one-hour fire-resistive construction on the underside. The above provisions shall not apply to walls which are perpendicular to the line used to determine the fire separation distance.

Exception: Tool and storage sheds, playhouses and similar structures exempted from permits by Section R105.2 are not required to provide wall protection based on location on the lot. Projections beyond the **exterior wall** shall not extend over the lot line.

TABLE R301.4, MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS (in pounds per square foot)

Footnote f. See Section R502.2.1 for decks attached to **exterior walls**.
R301.6 Deflection. The allowable deflection of any structural member under the live load listed in Sections R301.4 and R301.5 shall not exceed the values in Table R301.6.

TABLE R301.6, ALLOWABLE DEFLECTION OF STRUCTURAL MEMBERS

STRUCTURAL MEMBER	ALLOWABLE DEFLECTION
Rafters having slopes greater than 3/12 with no finished ceiling attached to rafters	L/180
Interior walls and partitions	H/180
Floors and plastered ceilings	L/360
All other structural members	L/240
Exterior walls with plaster or stucco finish	H/360
Exterior walls—wind loads with brittle finishes	L/240
Exterior walls—wind loads with flexible finishes	L/120

R318.2.5 Siding backer board. Foam plastic board of not more than 1/2-inch (12.7 mm) thickness may be used as siding backer board when separated from interior spaces by not less than 2 inches (51 mm) of mineral fiber insulation or 1/2-inch (12.7 mm) gypsum wallboard or installed over existing **exterior wall** finish in conjunction with re-siding, providing the plastic board does not have a potential heat of more than 2,000 Btu per square foot (22 720 kJ/m2) when tested in accordance with NFPA 259.

R321.1 Two-family dwellings. Dwelling units in two-family dwellings shall be separated from each other by wall and/or floor assemblies of not less than 1-hour fire-resistive rating when tested in accordance with ASTM E 119. Fire-resistance rated floor-ceiling and wall assemblies shall extend to and be tight against the **exterior wall**, and wall assemblies shall extend to the underside of the roof sheathing.

R321.2 Townhouses. Each townhouse shall be considered a separate building and shall be separated by fire-resistancerated wall assemblies meeting the requirements of Section
R302 for **exterior walls**.

R321.2.4 Structural independence. Each individual townhouse shall be structurally independent.
Exceptions:
1. Foundations supporting **exterior walls** or common

R327.1.7 Flood-resistant materials. Building materials used below the design flood elevation shall comply with the following:
1. All wood, including floor sheathing, shall be pressure preservatively treated in accordance with AWPA C1, C2, C3, C4, C9, C15, C18, C22, C23, C24, C28, P1, P2 and P3 or decay-resistant heartwood or redwood, black locust, or cedars.
2. Materials and installation methods used for flooring and interior and **exterior walls** shall conform to the provisions of FEMA/FIA-TB-2.

R327.2.2 Enclosed area below design flood elevation. Enclosed areas, including crawl spaces, that are below the design flood elevation shall:
1. Be used solely for parking of vehicles, building access or storage.
2. Be provided with flood openings which shall meet the following criteria:

2.1. There shall be a minimum of two openings on different sides of each enclosed area; if a building has more than one enclosed area below the design flood elevation, each area shall have openings on **exterior walls**.

R403.1 General. All **exterior walls** shall be supported on continuous solid or fully grouted masonry or concrete footings, wood foundations, or other approved structural systems which shall be of sufficient design to accommodate all loads according to Section R301 and to transmit the resulting loads to the soil within the limitations as determined from the character of the soil. Footings shall be supported on undisturbed natural soils or engineered fill.

R403.1.2 Continuous footings in Seismic Design Categories D1 and D2. The braced wall panels at **exterior walls** of all buildings located in Seismic Design Categories D1 and
D2 shall be supported by continuous footings. All required interior braced wall panels in buildings with plan dimensions greater than 50 feet (15 240 mm) shall also be supported by continuous footings.

TABLE R402.2
MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF CONCRETE
Basement walls, foundation walls, **exterior walls** and other vertical concrete work exposed to the weather.

R403.1.6Foundation anchorage. (2nd paragraph)
The wood sole plate at **exterior walls** on monolithic slabs and wood sill plate shall be anchored to the foundation with anchor bolts spaced a maximum of 6 feet (1829 mm) on center. Anchor bolts shall also be located within 12 inches (305 mm) from the ends of each plate section. (12.7 mm) anchor bolts.

R403.1.6.1 Foundation anchorage in Seismic Design Categories D1 and D2. In addition to the requirements of Section R403.1.6, the following requirements shall apply to light-wood frame structures in Seismic Design Categories D1 and D2. Anchor bolts shall be located within 12 inches (305 mm) from the ends of each plate section at interior bearing walls, interior braced wall lines and at all **exterior walls.** Plate washers a minimum of 2 inches by……..

R408.1 Ventilation. The under-floor space between the bottom of the floor joists and the earth under any building (except space occupied by a basement or cellar) shall be provided with ventilation openings through foundation walls or **exterior walls**. The minimum net area of ventilation openings shall not be less than 1 square foot for each 150 square feet (0.67 m2 for each 100 m2) of under-floor space area. One such ventilating opening shall bewithin 3 feet (914mm)of each corner of said building. space. See Section M1305.1.4 for access requirements where mechanical equipment is located under floors.

R502.2.1Decks. Where supported by attachment to an exterior wall, decks shall be positively anchored to the primary structure and designed for both vertical and lateral loads as applicable. Such attachment shall not be accomplished by the use of toenails or nails subject to withdrawal. Where positive connection to the primary building structure cannot be verified during inspection, decks shall be self-supporting. For decks with cantilevered framing members, connections to **exterior walls** or other framing members, shall be designed and constructed to resist uplift resulting from the full live load specified in Table R301.4 acting on the cantilevered portion of the deck.

R504.2.2 Moisture barrier. Polyethylene sheeting of minimum 6-mil (0.15 mm) thickness shall be placed over the granular base. Joints shall be lapped 6 inches (152 mm) and left unsealed. The polyethylene membrane shall be placed over the pressure preservatively treated-wood sleepers and shall not extend beneath the footing plates of the **exterior walls**.

R504.1 General. Pressure preservatively treated-wood basement floors and floors on ground shall be designed to withstand axial forces and bending moments resulting from lateral soil pressures at the base of the **exterior walls** and floor live and dead loads. Floor framing shall be designed to meet joist deflection requirements in accordance with Section R301.

R602.3 Design and construction. Exterior walls of wood frame construction shall be designed and constructed in accordance with the provisions of this chapter and Figures R602.3(1) and R602.3(2) or in accordance with AF&PA's NDS. Components of **exterior walls** shall be fastened in accordance with Tables R602.3(1) through R602.3(4).

R602.4 Interior load-bearing walls. Interior load-bearing walls shall be constructed, framed and fire blocked as specified for **exterior walls**.

FIGURE R602.3(2)
APPLY APPROVED SHEATHING OR BRACE **EXTERIOR WALLS** WITH 1 IN. BY 4 IN. BRACES LET INTO STUDS AND PLATES AND EXTENDING FROM BOTTOM PLATE TO TOP PLATE, OR OTHER APPROVED METAL STRAP DEVICES INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S
SPECIFICATIONS. SEE SECTION R602.10.

R602.6 Drilling and notching—studs. Any stud in an **exterior wall** or bearing partition may be cut or notched to a depth not exceeding 25 percent of its width. Studs in nonbearing partitions may be notched to a depth not to exceed 40 percent of a single stud width. Any stud may be bored or drilled, provided that the diameter of the resulting hole is no greater than 40 percent of the stud width, the edge of the hole is no closer than
5/8 inch (15.9 mm) to the edge of the stud, and the hole is not located in the same section as a cut or notch. See Figures R602.6(1) and R602.6(2). [See Figures R602.6(1) and R602.6(2).]

Exceptions:

1. A stud may be bored to a diameter not exceeding 60 percent of its width, provided that such studs located in **exterior walls** or bearing partitions are doubled and that not more than two successive studs are bored.

R602.6.1 Drilling and notching of top plate. When piping or ductwork is placed in or partly in an **exterior wall** or interior, braced or load-bearing wall, necessitating a cutting of the top plate by more than 50 percent of its width, a galvanized metal tie not less than 0.054 inch thick (1.37 mm) (16 gage) and 1.5 inches (38 mm) wide shall be fastened to each plate across and to each side of the opening with not less than six 16d nails. See Figure R602.6.1.

FIGURE R602.6(1)
NOTCHING AND BORED HOLE LIMITATIONS FOR EXTERIOR WALLS AND BEARING WALLS

R603.1.1 Applicability limits. The provisions of this section shall control the construction of exterior steel wall framing and interior load-bearing steel wall framing for buildings not greater than 60 feet (18 288 mm) in length perpendicular to the joist or truss span, not greater than 36 feet (10 973mm) in width parallel to the joist span or truss, and not greater than two stories in height with each story not greater than 10 feet
(3048 mm) high. All **exterior walls** installed in accordance with the provisions of this section shall be considered as load-bearing walls. Steel walls constructed in accordance with the provisions of this section shall be limited to sites subjected to a maximum design wind speed of 130 miles per hour (209 km/h) Exposure A, B or C and a maximum ground snow load of 70 pounds per foot (3.35 kN/m2).

R603.5 Exterior wall covering. The method of attachment of **exterior wall** covering materials to cold-formed steel stud wall framing shall conform to the manufacturer's installation instructions.

R603.6 Headers. Headers shall be installed above wall openings in all **exterior walls** and interior load-bearing walls in accordance with Figure R603.6 and Tables R603.6(1), R603.6(2), and R603.6(3). The number of jack and king studs shall comply with Table R603.6(4). King and jack studs shall be of the same dimension and thickness as the adjacent wall studs. Headers shall be connected to king studs in accordance with Table R603.6(5). One-half of the total number of screws shall be applied to the header and one-half to the king stud by use of a minimum 2-inch by 2-inch (51 mm by 51 mm) clip angle or 4-inch (102 mm) wide steel plate. The clip angle or plate shall extend the depth of the header minus 1/2 inch (12.7 mm) and shall have a minimum thickness of the header members or the wall studs, whichever is thicker.

R603.7 Structural sheathing. In areas where the basic wind speed is less than 110 miles per hour (177 km/h),wood structural sheathing panels shall be installed on all **exterior walls** of buildings in accordance with this section. Wood structural sheathing panels shall consist of minimum 7/16-inch (11.1 mm) thick oriented strand board or 15/32-inch (11.9 mm) thick plywood and shall be installed on all **exterior wall** surfaces in accordance with Section R603.7.1 and Figure R603.3. The minimum length of full height sheathing on **exterior walls** shall be determined in accordance with Table R603.7, but shall not be less than 20 percent of the braced wall length

in any case. The minimum percentage of full height sheathing in Table R603.7 shall include only those sheathed wall sections, uninterrupted by openings, which are a minimum of 48 inches (1120 mm) wide. The minimum percentage of full-height structural sheathing shall be multiplied by 1.10 for 9-foot (2743 mm) high walls and multiplied by 1.20 for 10-foot (3048 mm) high walls.
In addition, structural sheathing shall:

TABLE R603.7
MINIMUM PERCENTAGE OF FULL HEIGHT STRUCTURAL SHEATHING ON EXTERIOR WALLS

R603.8.1.4 Attachment of braced walls to foundations and floor and roof diaphragms.
(6th paragraph)
In regions where the basic wind speed equals or exceeds 110 miles per hour (177 km/h), the bottom track in **exterior walls** shall also comply with the provisions of Section R603.8.3.2.6 for uplift.

R603.8.3.1 Braced wall design.
(5th paragraph)
Exterior walls shall be sheathed with wood structural sheathing panels or other approved materials. Wood structural sheathing panels, and their attachments, shall comply with Section R603.8.1.2 except in regions where the basic wind speed exceeds 110 miles per hour (177 km/h) wood structural sheathing panels attached to framing spaced 24 inches (610 mm) on center shall be a minimum of 19/32 inch (15.1 mm). Attachment of wall sheathing materials other than wood structural sheathing panels shall comply with the manufacturer's instructions.

TABLE R603.8.2.2
LIGHT WEIGHT ROOF AND LIGHT WEIGHT EXTERIOR WALL

R603.8.3.2.2 Uplift connection—wall assembly to wall assembly. **Exterior wall** studs in the upper story wall of a two-story building shall be attached to the in-line framing wall studs in the supporting wall below, with connections capable of resisting the uplift loads listed in Table R603.8.3.2.2(1). Alternatively, a 1.25-inch-by-33-mil (32 mm by 0.84 mm) steel uplift strap shall be permitted with minimum No. 8 screws attached to each stud, as required by Table R603.8.3.2.2(2).

R603.8.3.2.3 Uplift connection—wall assembly to foundation or floor assembly. Exterior wall studs in bottom-story walls shall be attached to a wood sill plate or directly attached to the foundation by connections capable of resisting the uplift loads listed in Table R603.8.3.2.3(1). Alternatively, …….

R603.8.3.2.6 Wall bottom track to foundation. The bottom track of **exterior walls** shall be connected to a wood sill plate as shown in Figure R603.3.1(2). …….

R603.8.3.2.5.2 Bottom story of a two-story building. Uplift connections shall be provided to fasten the **exterior wall** studs in the upper story wall of a two-story building to the header below by connections capable of resisting the uplift loads listed in Table R603.8.3.2.2(1).

Uplift connections shall be provided to fasten the header to the jack studs by connectors capable of resisting the uplift loads listed in Table R603.8.3.2.2(1), multiplied by the number of framing members displaced, divided by two. An additional uplift strap shall be provided to fasten **exterior wall** studs in the upper story to king studs

TABLE R606.14.1
MINIMUM CORROSION PROTECTION

TABLE R611.7(8)
MINIMUM PERCENTAGE OF SOLID WALL LENGTH ALONG EXTERIOR WALL LINES

R611.7.4 Minimum length of wall without openings. Exterior ICF walls shall have a minimum of solid wall length to total wall length in accordance with TableR611.7(8), but not less than 15 percent for ICF walls supporting a light framed roof or 20 percent for ICF walls supporting an ICF or light framed second story and light framed roof. For attached dwellings in Seismic Design Category C, the minimum percentage of solid wall length shall be greater than or equal to the requirements in Table R611.7(9).

The minimum percentage of solid wall length shall include only those solid wall segments that are a minimum of 24 inches (610 mm) in length. The maximum distance between wall segments included in determining solid wall length shall not exceed 18 feet (5486 mm). A minimum length of 24 inches (610 mm) of solid wall segment, extending the full height of each wall story, shall occur at all corners of **exterior walls**.

R702.3.5 Application. Maximum spacing of supports and the size and spacing of fasteners used to attach gypsum board shall comply with Table R702.3.5. Gypsum sheathing shall be attached to **exterior walls** in accordance with Table R602.3(1). Gypsum board shall be applied at right angles or parallel to framing members. All edges and ends of gypsum board shall occur on the framing members, except those edges and ends that are perpendicular to the framing members. Interior gypsum board shall not be installed where it is exposed to the weather.

R703.1 General. Exterior walls shall provide the building with a weather-resistant exterior wall envelope. The exterior wall envelope shall include flashing as described in Section R703.8. The exterior wall envelope shall be designed and constructed in such a manner as to prevent the accumulation of water within the wall assembly by providing a water resistive barrier behind the exterior veneer as required by Section R703.2. A weather-resistant permeable membrane shall be provided over all sheathing, with horizontal overlaps in the membrane of not less than 2 inches (51 mm) and vertical overlaps of not less than 6 inches (152 mm).Where furring strips are used, they shall be 1 inch by 3 inches or 1 inch by 4 inches (25.4 mm by 76 mm or 25.4 mm by 102 mm) and shall be fastened horizontally to the studs with 7d or 8d box

R703.2 Weather-resistant sheathing paper. Asphalt-saturated felt free from holes and breaks, weighing not less than 14 pounds per 100 square feet (0.683 kg/m2) and complying with ASTMD 226 or other approved weather-resistant material shall be applied over studs or sheathing of all **exterior walls** as required by Table R703.4. exceed the maximum exposure specified in Table R703.5.2. ……
Exception: Such felt or material is permitted to be omitted in the following situations:
3. Under **exterior wall** finish materials as permitted in Table R703.4.

TABLE R703.5.2
MAXIMUM WEATHER EXPOSURE FOR WOOD SHAKES AND SHINGLES ON EXTERIOR WALLS

R703.8 Flashing. Approved corrosion-resistive flashing shall be provided in the exterior wall envelope in such a manner as to prevent entry of water into the wall cavity or penetration of water to the building structural framing components. The flashing shall extend to the surface of the **exterior wall** finish and shall be installed to prevent water from reentering the exterior wall envelope. Approved corrosion-resistant flashings shall be installed at all of the following locations:

R804.3.3.1Rafter framing. Rafters shall be connected to a parallel ceiling joist to form a continuous tie between **exterior walls** in accordance with Figures R804.3 and R804.3.1(1) and Table R804.3.1(3)……..

R905.2.7.1 Ice protection. In areas where the average daily temperature in January is 25EF (-4EC) or less, an ice barrier that consists of a least two layers of underlayment cemented together or of a self-adhering polymer modified bitumen sheet, shall be used in lieu of normal underlayment and extend from the eave's edge to a point at least
24 inches (610 mm) inside the **exterior wall** line of the building.

R905.5.3 Underlayment. In areas where the average daily temperature in January is 25EF (-4EC) or less, an ice barrier that consists of at least two layers of underlayment cemented together or of a self-adhering polymer modified bitumen sheet shall extend from the eave's edge to a point at least 24 inches (610 mm) inside the **exterior wall** line of the building. Underlayment shall conform with ASTM D 226, Type I.

R905.6.3 Underlayment. In areas where the average daily temperature in January is 25EF (-4EC) or less, an ice barrier that consists of at least two layers of underlayment cemented together or of a self-adhering polymer modified bitumen sheet shall extend from the eave's edge to a point at least 24 inches (610 mm) inside the **exterior wall** line of the building. Underlayment shall comply with ASTM D 226,
Type II. Underlayment shall comply with ASTM D 226, Type I.

R905.7.3 Underlayment. In areas where the average daily temperature in January is 25EF (-4EC) or less, an ice barrier that consists of at least two layers of underlayment cemented together or of a self-adhering polymer modified bitumen sheet shall extend from the eave's edge to a point at least 24 inches (610 mm) inside the **exterior wall** line of the building. Underlayment shall comply with ASTM D 226, Type I.

R905.8.3 Underlayment. In areas where the average daily temperature in January is 25EF (-4EC) or less, an ice barrier that consists of at least two layers of underlayment cemented together or a self-adhering polymer modified bitumen sheet shall extend from the edge of the eave to a point at least 24 inches (610 mm) inside the **exterior wall** line of the building. Underlayment shall comply with ASTM D 226, Type I.

R1001.15 Chimney clearances. Any portion of a masonry chimney located in the interior of the building or within the **exterior wall** of the building shall have a minimum air space clearance to combustibles of 2 inches (51 mm). Chimneys located entirely outside the **exterior walls** of the building, including chimneys that pass through the soffit or cornice, shall have a minimum air space clearance of 1 inch (25.4 mm). The air space shall not be filled, except to provide fire blocking in accordance with Section R1001.16.

R1003.4 Seismic anchorage. Masonry and concrete chimneys in Seismic Design Categories D1 and D2 shall be anchored at each floor, ceiling or roof line more than 6 feet (1829 mm) above grade, except where constructed completely within the **exterior walls**. Anchorage shall conform to the requirements of Section R1003.4.1.

N1101.2.1 Residential buildings, Type A-1. Compliance shall be demonstrated by either:

1. Meeting the requirements of this chapter for buildings with a glazing area that does not exceed 15 percent of the gross area of **exterior walls**; or

N1101.2.2 Residential buildings, Type A-2. Compliance shall be demonstrated by either:

1. Meeting the requirements of this chapter for buildings with a glazing area that does not exceed 25 percent of the gross area of **exterior walls**; or

N1102.1.6 Slab-on-grade floors. (2nd paragraph)

When installed between the **exterior wall** and the edge of the interior slab, the top edge of the insulation shall be permitted to be cut at a 45-degree (0.79 rad) angle away from the exterior wall. Insulation extending horizontally away from the building shall be protected by pavement or by a minimum of 10 inches (254 mm) of soil.

M1413.1 General. Cooling equipment that utilizes evaporation of water for cooling shall be installed in accordance with the manufacturer's installation instructions. Evaporative coolers shall be installed on a level platform or base not less than 3 inches (76 mm) above the adjoining ground and secured to prevent displacement. Openings in **exterior walls** shall be flashed in accordance with Section R703.8.

G2426.6.7 (503.6.8) Exterior wall penetrations. A gas vent extending through an **exterior wall** shall not terminate adjacent to the wall or below eaves or parapets, except as provided in Sections G2426.2.4 and G2426.3.4.

G2426.10.16 (503.10.16) Single-wall connector penetrations of combustible walls. A vent connector made of a single-wall metal pipe shall not pass through a combustible **exterior wall** unless guarded at the point of passage by a ventilated metal thimble not smaller than the following:

P2603.6 Freezing. In localities having a winter design temperature of 32EF (0EC) or lower as shown in Table R301.2(1) of this code, a water, soil or waste pipe shall not be installed outside of a building, in **exterior walls**, in attics or crawl spaces, or in any other place subjected to freezing temperature unless adequate provision is made to protect it from freezing by insulation or heat or both. Water service pipe shall be installed not less than 12 inches (305 mm) deep or less than 6 inches (152 mm) below the frost line.

P2606.1General. Roof and **exterior wall** penetrations shall be made water tight. Joints at the roof, around vent pipes, shall be water tight by the use of lead, copper or galvanized iron flashings or an

approved elastomeric material. Counterflashing shall not restrict the required internal cross-sectional area of any vent.

E3801.2.2Wall space. As used in this section, a wall space shall include the following:
2. The space occupied by fixed panels in **exterior walls**, excluding sliding panels.

Cost impact: None

Committee Action: Approved as Modified

IRC-54

Revision to: Section M1411.3.1

Proponent: Mike Seal, Town of Oro Valley

Proposal: Add text as shown to the 2nd line:

Drain piping shall be a minimum of 3/4 inch (19.1 mm) nominal pipe size, and shall slope to drain a minimum of 1/8 unit vertical, in 12 units horizontal (1%).

Reason: No slope requirement is in place, and to be consistent with the IMC.

Cost impact: None

Committee Action: Approved as Modified

M1411.3.1 Auxiliary and secondary drain systems. In addition to the requirements of Section M1411.3, a secondary drain or auxiliary drain pan shall be required for each cooling or evaporator coil where damage to any building components will occur as a result of overflow from the equipment drain pan or stoppage in the condensate drain piping. Such piping shall maintain a minimum horizontal slope in the direction of discharge of not less than one-eighth unit vertical in 12 units horizontal (1-percent slope). Drain piping shall be a minimum of 3/4-inch (19.1 mm) nominal pipe size. One of the following methods shall be used:

(The remainder of the section to remain unchanged.)

Reason: This inserts the necessary prescriptive language that will provide proper discharge for condensing liquid. It also aligns the IRC with the same requirement shown in the International Mechanical Code Section 307.1.

Cost impact: None

Committee Action: Approved as Modified

IRC-55

Revision to: TABLE R1003.1

Proponent: Autumn Hartsoe, City of Goodyear

Proposal: Revise Table as follows:

TABLE R1003.1
SUMMARY OF REQUIREMENTS FOR MASONRY FIREPLACES AND CHIMNEYS

ITEM	LETTER[a]	REQUIREMENTS	SECTION
Hearth slab thickness	A	4"	R1003.9.1
Hearth extension (each side of opening)	B	8" fireplace opening < 6 sq. ft. 12" fireplace opening ≥ 6 sq. ft.	R1003.10

Hearth extension (front of opening)	C	16" fireplace opening < 6 sq. ft. 20" fireplace opening ≥ 6 sq. ft.	R1003.10
Hearth slab reinforcing	D	Reinforced to carry its own weight and all imposed loads.	R1003.9
Thickness of wall of firebox	E	10" solid brick or 8" where a firebrick lining is used. Joints in firebrick 1/4" max.	R1003.5
Distance from top of opening to throat	F	8"	R1003.11
Smoke chamber wall thickness ~~unlined walls~~	G	6" for unlined walls 8" for lined walls	R1003.8
Chimney Vertical reinforcing[b]	H	~~8"~~ Four No. 4 full-length bars for chimney up to 40" wide. Add two No. 4 bars for each additional 40" or fraction of width or each additional flue	R1003.3.1
Horizontal reinforcing[b]	J	~~Four No. 4 full-length bars for chimney up to 40" wide. Add two No. 4 bars for each additional 40" or fraction of width or each additional flue~~ 1/4-inch ties at each 18 inches and two ties at each bend in vertical steel	R1003.3.2
Bond beams	K	~~1/4" ties at 18" and two ties at each bend in vertical steel.~~	R1001.1 R1001.5
Fireplace lintel	L	Noncombustible material	R1003.7
Chimney walls with flue lining	M	Solid masonry units or hollow masonry units grouted solid with at least 4 inch nominal thickness.	R1001.7
Walls with unlined flue	N	8" solid masonry.	R1003.8
Distances between adjacent flues	-	See Section R1001.10.	
Effective flue area (based on area of fireplace opening)	P	See Section R1001.12.	
Clearances: Combustible material Mantel and trim Above roof	R	See Sections R1001.15 and R1003.12. See Section R1001.13. 3' at roofline and 2' at 10'.	
Anchorage[b] Strap Number Embedment into chimney Fasten to Bolts	S	3/16" x 1" Two 12" hooked around outer bar with 6" extension 4 joists Two 1/2" diameter.	R1003.4.1
Footing Thickness Width	T	12" min. 6" each side of fireplace wall.	R1003.2

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 square foot = 0.0929 m^2.

NOTE: This table provides a summary of major requirements for the construction of masonry chimneys and fireplaces. Letter references are to Figure R 1003.1, which shows examples of typical construction. This table does not cover all requirements, nor does it coverall aspects of the indicated requirements. For the actual mandatory requirements of the code, see the indicated section of text.

a. The letters refer to Figure R 1003.1.

a. Not required in Seismic Design Category A, B or C.

Reason: Corrected the following errors to table R1003.1:
Chimney, Vertical reinforcing
Horizontal reinforcing
Bond beam requirement
Add footnote “b” to vertical reinforcing
Add “Section” column to have the same format as IBC Table 2111.1

Cost impact: **None**

Committee Action: Approved as Modified

IRC-56

Revision to: Section M1305.1

Proponent: Chuck King, Town of Oro Valley

Proposal: Add new sections as follow:

M1305.1.5 Equipment and appliances mounted on roofs or elevated structures. When equipment or appliances are installed on roofs or elevated structures, there shall be a level working area on any side of the appliance or equipment for servicing purposes. This area shall be no less than 30 inches (762 mm) in any dimension and shall not exceed a slope of 3 units vertical in 12 units horizontal.

M1305.1.5.1 Electrical requirements. There shall be a receptacle outlet located within 25 feet (7620 mm) of any appliance or equipment for servicing purposes.

Reason: In nearly all applications (under floors, attics, etc.) there are requirements for access and working spaces for servicing appliances and equipment. Currently there are no parameters in place (in the IRC) for steep sloped roofs; meaning that equipment could be installed on roofs with extreme pitches that would render them virtually un-serviceable. The maximum slope requirement will provide a reasonable level of safety for service personnel, and the 30 inch dimension is consistent with other working space requirements. There are also requirements for service outlets in just about all other applications, and are certainly needed for roof mounted equipment. In addition, this will be more consistent with the requirements of the IMC and ICCEC.

Cost Impact: Increase

Committee Action: Approved as Submitted

IRC-57

Revision to: Section M1305.1

Proponent: Chuck King, Town of Oro Valley

Proposal: Revise sections as follow:

G2406.2 (303.3) Prohibited locations. Fuel-fired appliances shall not be located in, or obtain combustion air from, the following rooms or spaces:

1. Sleeping rooms
2. Bathrooms
3. Toilet rooms
4. ~~Storage closets~~

Reason: Installing a water heater in a storage-type closet is a typical application and has been done for many years. Using the terminology of “storage closets” as a prohibition is very open ended. What constitutes a storage closet? I would say that the primary purpose of **any** closet is for the storage of materials of some kind. If this interpretation were to be used, water heaters could not be installed in a closet of any kind.

Cost Impact: None

Committee Action: Disapproved

IRC-58

Revision to: Section R315.1

Proponent: Rick Mccracken, Artistic Stairs

Proposal: Revise Exception 2 as follow:

R.315.1 Handrails
Exceptions:
2. The use of a volute, turnout or starting ~~easing~~ newel shall be allowed over the lowest tread.

Reason: in the 2000 I.B.C. Handbook 1003.3.3.11.4 continuity, it states within dwelling units, handrails are permitted to terminate at a starting newel or volute, which is located on the first tread. It goes on to say, these types of terminations have been found in residences for years without a record of accidents or lawsuits for an unsafe practice. We believe this was an oversight in creating the I.R.C. codes because technically the easing is a part attached to the volute or turnout to create a change of pitch in the railing and not a stand alone starting feature. We ask that this be changed to accommodate a long standing practice in stair design without any safety issues.

Cost Impact: None

Committee Action: Withdrawn by Proponent

IRC-59

Revision to: Section P2803.6.1

Proponent: Mike Seal, Town of Oro Valley

Proposal: Revise as follows:

P2803.6.1 Requirements of discharge pipe. The outlet of a pressure relief valve, temperature relief valve or combination thereof, shall not be directly connected to the drainage system. The discharge from the relief valve shall be piped full size separately to the outside of the building or to an indirect waste receptor located inside the building. In areas subject to freezing, the relief valve shall discharge through an air gap into an indirect waste receptor located within a heated space, or by other approved means. The discharge shall be installed in a manner that does not cause personal injury or property damage and that is readily observable by the building occupants. The discharge from a relief valve shall not be trapped. The diameter of the discharge piping shall not be less than the diameter of the relief valve outlet. The discharge pipe shall be installed so as to drain by gravity flow and shall terminate atmospherically not ~~more~~ less than 6 inches (152mm) nor more than 24 inches (610 mm) above the floor or finish grade. The end of the discharge pipe shall not be threaded.

Reason: This code section speaks to both interior and exterior discharge of relief valves, but the termination seems to only address what was intended for interior locations. The possibility of the termination to occur “at grade”, which is now currently allowed, would have the unintended effect of concealing any discharge that might occur, or of plugging the discharge line. Requiring it to be a “minimum” of 6 inches (152 mm) above grade would resolve this. The 24 inch (610 mm) maximum height will assure that possible scalding water under pressure will not injure individuals in near proximity.

Cost Impact: None

Committee Action: Approved as Submitted

IRC-60

Revision to: Section R2404.9

Proponent: Chuck King, Town of Oro Valley

Revise as follows: Delete text

Proposal: Delete entire section and relocate text in new section as follows:
(Section Heading) **R324 Rodent Proofing** (Subsection below) R324.1 Rodent proofing. Buildings or structures and the walls enclosing habitable ~~or occupiable~~ rooms and spaces in which persons live, sleep or work, or in which ~~feed,~~ food or foodstuffs intended for human consumption are stored, prepared, processed, served or sold, shall be constructed to protect against the entry of rodents.

Reason: This code section was improperly located in the fuel gas section of the code. It needs to be in the general provisions or general planning area that also speaks to other types of protections such as termites. Speaking to the changes; striking "occupiable" simply removes a fabricated word which is found nowhere else in the code or in any dictionary, and is already covered by the previous word "habitable". The second strike out is to remove the word "feed" which is more applicable to livestock or other animals. It would be nearly impossible to protect "feed" which could be located in a variety of accessory structures that are covered by the IRC. Showing what I believe to be the intent, of adding the portion "intended for human consumption", is far more appropriate and compatible with life safety concerns.

Cost Impact: None

Committee Action: Withdrawn by Proponent

2000 INTERNATIONAL PLUMBING CODE

IPC-3

Revision to: Section 312.5

Proponent: Bob Lee, Town of Cave Creek

Proposal: Revise as follow:

312.5 Water supply system test. Upon completion of a section of or the entire water supply system, the system, or portion completed, shall be tested and proved tight under a water pressure not less than the working pressure of the system; or, for piping systems other than plastic, by an air test of not less than 50 psi (344kPa). This test shall be maintained for at least 15 minutes. The water utilized for tests shall be obtained from a potable source of supply. The required tests shall be performed in accordance with this section and Section 107.

Reason: All other tests specified in Section 312, whether Drainage and vent water test under Section 312.2, Drainage and vent air test under Section 312.3, Drainage and vent final test under Section 312.4, Gravity sewer test under Section 312.6 or Forced sewer test under Section 312.7, require 15 minute duration for the respective tests. This is sufficient time to determine that a leak is not present and would provide consistency within the testing section.

Cost Impact: None

Committee Action: Approved as Submitted

IPC-4

Revision to: Section 504.6.1

Proponent: Mike Seal, Town of Oro Valley

Proposal: Revise as follow:

504.6.1 Discharge. The relief valve shall discharge full size to a safe place of disposal such as the floor, outside the building, or an indirect waste receptor. The discharge pipe shall not have any trapped sections and shall have a visible air gap or air gap fitting located in the same room as the water heater. The outlet end of the discharge pipe shall not be threaded and such discharge pipe shall not have a valve or tee installed. Relief valve piping shall be piped independent of other equipment drains or relief valve discharge piping to the disposal point. ~~Such pipe shall be installed in a manner that does not cause personal injury to occupants in the immediate area or structural damage to the building.~~ The drain shall be constructed so as to discharge in a downward direction, and shall terminate not less than 6 inches (152 mm) and not more than 24 inches (610 mm) above the finish surface or grade.

Reason: This prescriptive language removes the need to interpret what is intended by “shall be installed in a manner that does not cause personal injury to occupants in the immediate area...”. This is wide open for interpretation and discretion. The means and heights of the drain discharge also matches what is currently prescribed for drain pans in P504.7.2. Why should drain pans be specific and relief valve discharges, which relieve under pressure, be left open to interpretation?

Cost Impact: None

Committee Action: Approved as Submitted

AZBO CODE REVIEW AND DEVELOPMENT COMMITTEE

2000 ICC CODE AMENDMENTS REFORMATTED TO THE 2003 ICC CODES

AZBO Code Review and Development Committee

AZBO 2000 ICC Codes Amendments recommended for the 2003 ICC Codes

This report is a three year compilation of the AZBO amendments to the 2000 ICC codes that the Code Review and Development Committee have recommended to be included with the 2003 ICC codes to assist those jurisdictions in the adoption of the 2003 ICC codes. In addition, previous amendments that were not successful in the ICC code change process have been deleted, unless the item is scheduled to be resubmitted for inclusion in the 2006 editions of the ICC Codes. The items noted as "AZ only" have been determined by the committee to be items unique to Arizona in accordance with the guidelines approved by the AZBO Board of Directors.

The items are identified by the initials of the affected code, the original number assigned by the committee and the year the item was originally approved by the committee.

2003 INTERNATIONAL BUILDING CODE

IBC-5-01 (AZ Only)

Revision to: Table 1607.1

Committee Action: Approved as Submitted

Revise as follows:

OCCUPANCY OR USE	UNIFORM (psf)	CONCENTRATED (lbs.)
27. Residential		-
One- and two-family dwellings		
Uninhabitable attics with storage	~~20~~ 40	
Habitable attics and sleeping areas	~~30~~ 40	
(no other changes in item 27)		

Reason: All habitable areas should be designed using the same design loads. Change is in line with industry standards. Local builders and designers support the change.

Committee Reason: Committee members representing industry indicated the homebuilders and designers preferred to continue with the 40 psf in bed room areas. There was support that this would lessen complaints from buyers.

IBC-10-01 (AZ Only)

Revision to: 3109

Committee Action: Approved as Submitted

Revise as follows:

Section 3109 is hereby REPEALED

Reason: Section does not meet State law for pool enclosures. Local governing statute or code will regulate.

IBC-14-01 (Resubmit to ICC)

Revision to: 406.1.4 Item 1.

Committee Action: Approved as Modified

406.1.4 Separation. Separations shall comply with the following:
1. The private garage shall be separated from the dwelling unit and its attic area by means of a minimum 1/2-inch (12.7 mm) gypsum board applied to the garage side. Garages beneath habitable rooms shall be separated from all habitable rooms above by not less than 5/8-inch Type X gypsum board or equivalent. Door openings between a private garage and the dwelling unit shall be equipped with either solid wood doors, or solid or honeycomb core steel doors not less than 13/8 inches (34.9 mm) thick, or doors in compliance with Section 715.3.3. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Doors shall be self-closing and self-latching.

In buildings protected with an automatic fire sprinkler system, including the private garage, the room finish materials shall be permitted to be a minimum 1/2-inch (12.7 mm) gypsum board applied to the garage side.

Committee Reason: These doors should be maintained self closing and latching at all times.

IBC-20-02 (AZ Only)

Revision to: Chapter 11 Accessibility

Committee Action: Approved as Modified

Proposal: Delete Chapter 11, Accessibility, in its entirety and substitute the following:

ARIZONANS WITH DIABILITIES ACT
"Arizonans with Disabilities Act" (Arizona Revised Statutes, Title 41, Chapter 9, Article 8), and the "Arizonans with Disabilities Act Implementing Rules" (Arizona Administrative Code, Title 10, Chapter 3, Article 4), which rules incorporate The federal "Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities," be and the same is hereby adopted as the Arizonans with Disabilities Act of the Town, City or County, and shall apply to new construction and alterations and are not required in buildings or portions of existing buildings that do not meet the standards and specifications and this act is hereby referred to, adopted and made a part hereof as though fully set forth in this section.

Reason: All jurisdictions within the state are required by state law to enforce these provisions so this code change merely brings the International Building Code into compliance.

IBC-22-03 (AZ only)

Revision to: Sections 308.2,308.3, 310.1,310.2, (new) 419, 309.2.9, 1003.3.1.2, 1003.3.1.8.2

Committee Action: Approved as Modified

308.2 Group I-1. This occupancy shall include buildings, structures or parts thereof housing more than 10 persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a residential environment that provides supervisory care services. The occupants are capable of responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to, the following:
Residential board and care facilities
Assisted living centers
Halfway houses
Group homes
Congregate care facilities

Social rehabilitation facilities
Alcohol and drug abuse centers
Convalescent facilities
A facility such as the above with 10 or fewer persons shall be classified as a Group R-4 Condition 1 or shall comply with the *International Residential Code* in accordance with Section 101.2 where the building is in compliance with Section 419 of this code.

308.3 Group I-2. This occupancy shall include buildings and structures used for medical, surgical, psychiatric, nursing, custodial, personal, or directed care on a 24-hour basis of more than five persons who are not capable of self-preservation by responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to, the following:
Hospitals
Nursing homes (both intermediate-care facilities and skilled nursing facilities)
Mental hospitals
Detoxification facilities
A facility such as the above with five or fewer persons shall be classified as Group R-3 or shall comply with the *International Residential Code* in accordance with Section 101.2.

This occupancy shall also include buildings and structures used for assisted living homes providing supervisory, personal, or directed care on a 24-hr basis of more than 10 persons who are not capable of self-preservation by responding to an emergency situation without physical assistance from staff. A facility such as the above with ten or fewer persons shall be classified as R-4 Condition 2.

310.1…R-4 Residential occupancies shall include buildings arranged for occupancy as residential care/assisted living homes including not more than 10 occupants, excluding staff.

310.1.1 Condition 1. This occupancy condition shall include facilities licensed to provide supervisory care services, in which occupants are capable of self preservation by responding to an emergency situation without physical assistance from staff. Condition 1 facilities housing more than 10 persons shall be classified as a Group I-1.

310.1.2 Condition 2. This occupancy condition shall include facilities licensed to provide personal or directed care services, in which occupants are incapable of self preservation by responding to an emergency without physical assistance from staff. Condition 2 facilities housing more than 10 persons shall be classified as Group I-2.

R-4 occupancies shall meet the requirements for construction as defined in Group R-3 except as otherwise provided for in this code, and Section 419 or shall comply with the International Residential Code in accordance with section 101.2 where the building is in compliance with Section 419 of this code

310.2 Definitions

PERSONAL CARE SERVICE. Assistance with activities of daily living that can be performed by persons without professional skills or professional training and includes the coordination or provision of intermittent nursing services and the administration of medications and treatments.

DIRECTED CARE SERVICE. Care of residents, including personal care services, who are incapable of recognizing danger, summoning assistance, expressing need, or making basic care decisions.

SUPERVISORY CARE SERVICE. General supervision, including daily awareness of resident functioning and continuing needs.

RESIDENTIAL CARE/ASSISTED LIVING HOME. A building or part thereof housing a maximum of 10 persons, excluding staff, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment which provides supervisory, personal, or directed services. This classification shall include, but not be limited to, the following: residential board and care facilities, assisted living homes, halfway houses, group homes, congregate care

facilities, social rehabilitation facilities, alcohol and drug abuse centers and convalescent facilities.

419 RESIDENTIAL CARE/ASSISTED LIVING HOMES

419.1 Applicability. The provisions of this section shall apply to a building or part thereof housing not more than 10 persons, excluding staff, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment which provides licensed care services. Except as specifically required by this division, R-4 occupancies shall meet all applicable provisions of Group R-3.

419.2 General. Buildings or portions of buildings classified as R-4 occupancies shall meet all the applicable provisions of Group R-3, may be constructed of any materials allowed by this code, shall not exceed two stories in height nor be located above the second story in any building, and shall not exceed 2000 square feet above the first story except as provided in Section 506.

419.3 Special Provisions. R-4 occupancies having more than 2000 square feet of floor area above the first floor shall be of not less than one-hour fire-resistive construction throughout.

419.3.1 Mixed Uses. R-4 occupancies shall be separated from other uses as provided in Table 302.3.2.

419.4 Access and Means of Egress Facilities.

419.4.1 Accessibility. R-4 occupancies shall be provided with at least one accessible route per the Arizonans with disabilities act. Sleeping rooms and associated toilets shall be accessible.

Exception: Existing buildings shall comply with Section 3409. Bathing and toilet facilities need not be made accessible, but shall be provided with grab bars in accordance with ICC/ANSI A 117.1.

419.4.2 Exits

4**19.4.2.1Number of Exits.** Every story, basement, or portion thereof shall have not less than two exits.

Exception: Basements and stories above the first floor containing no sleeping rooms may have one means of egress as provided in Chapter 10.

419.4.2.2 Distance to Exits. The maximum travel distance shall comply with Section 1004, except that the maximum travel distance from the center point of any sleeping room to an exit shall not exceed 75 feet.

419.4.2.3 Emergency Exit Illumination. In the event of a power failure, exit illumination shall be automatically provided from an emergency system powered by storage batteries or an onsite generator set installed in accordance with the ICC Electric Code.

419.4.2.4 Emergency Escape and Rescue. R-4 occupancies shall comply with the requirements of Section 1025, except that Exception 1 to Section 1025.1 does not apply to R-4 occupancies.

419.4.2.5 Delayed egress locks. In R-4 Condition 2 occupancies, delayed egress locks shall be permitted in accordance with Sections 1008.1.3.4 and 1008.1.8.6, items 1, 2, 4, 5 and 6.

419.5 Smoke Detectors and Sprinkler Systems

419.5.1 Smoke Alarms. All habitable rooms and hallways in R-4 occupancies shall be provided with smoke alarms installed in accordance with Section 907.2.10.

419.5.2 Sprinkler Systems. R-4 occupancies shall be provided with a sprinkler system installed in accordance with Section 903.2.9. Sprinkler systems installed under this Section shall be installed throughout, including attached garages, and in Condition 2 facilities shall include attics and concealed spaces of or containing combustible materials. Such systems

may not contain unsupervised valves between the domestic water riser control valve and the sprinklers. In R-4 Condition 2 occupancies, such systems shall contain water-flow switches electrically supervised by an approved supervising station, and shall sound an audible signal at a constantly attended location.

1008.1.2 Door swing. Egress doors shall be side-hinged swinging.

Exceptions:

5. Private garages, office areas, factory and storage areas with an occupant load of 10 or less.
6. Group I-3 occupancies used as a place of detention.
7. Doors within or serving a single dwelling unit in Groups R-2, ~~and~~ R-3 as applicable in Section 101.2, <u>and R-4.</u>
8. (no other changes)

Reason: The purpose of this amendment is to bring the provisions of the code into agreement with the licensing rules of the Arizona Department of Health Services. DHS license categories have a threshold of 10 residents to move from a residential home setting to an institutional setting. DHS rules (R9-10-701) state, "Assisted living home" or "home" means an assisted living facility that provides resident rooms to (10) or fewer residents, as distinct from an "assisted living center", which provides services to more than (10) persons. In addition, the license classifications to provide "personal care services" and "directed care services" to residents allow for residents to be bed-bound. The use of "Condition" distinctions is reflective of similar distinctions in I-occupancies.

Each state has unique agency programs for assisted living occupancies, which establish license categories based on numbers of residents and the familiar ambulatory/non-ambulatory distinction. Uniformity could be accomplished by either trusting health service agencies nationally to agree to uniform thresholds and other licensing characteristics, or by amending building codes to allow each state to adapt to that state's unique rules. If numerical thresholds are provided on a "fill in the blanks" basis, condition categories can be added or deleted, and definitions can be customized to match licensure definitions, the hazards associated with these facilities can be addressed comprehensively on a state-by-state basis.

The most hazardous scenario is a facility in an ordinary, un-rated residential structure, occupied by (10) bed-bound residents, supervised by a single caregiver. Provisions for exiting, smoke detectors, emergency illumination, sprinklers, et al, can substantially increase the chances of survival in a fire or other emergency for these residents.

IBC-1-01 Reason: To bring the Building Code into agreement with Arizona Administrative Code, Title 9 Health Services, Article 7 Assisted Living Facilities. R9-10-701 states, '"Assisted living home" or "home" means an assisted living facility that provides resident rooms to ten or fewer residents.' An "Assisted living center" (rooms or residential units for eleven or more residents) is required to have "an individually keyed entry door" and "a kitchen area" by R9-10-720. Since the distinction for the state is between ten and eleven residents, it is felt that the Building Code should reflect the same distinction.
See http://www.sosaz.com/public services/Title 09/9-10.htm for the entire rule.

It is felt that the word "abuse" was inadvertently omitted for the definition of Group I-1 Occupancy.

IBC-24-03 (Resubmit to ICC)

Revise 507.2 & 507.3

Committee Action: Approved as Submitted

Revise as follows:

507.2 Sprinklered, one story. The area of a one-story, Group B, F, M or S building or a one-story Group A-4 building of other than Type V construction shall not be limited when the building is provided

with an automatic sprinkler system throughout in accordance with Section 903.3.1.1, and is surrounded and adjoined by public ways or yards not less than 60 feet (18 288 mm) in width.

Exceptions:

1. (No change)

2. (No change)

Such buildings may contain other occupancies, without H fire areas, provided that such occupancies do not occupy more than 10 percent of the area of any floor of a building, nor more than the tabular values permitted in the occupancy by Table 503 for such occupancy.

Exception: Group H fire areas as permitted by Section 507.6.

507.3 Two story. The area of a two-story, Group B, F, M or S building shall not be limited when the building is provided with an automatic sprinkler system in accordance with Section 903.3.1.1 throughout, and is surrounded and adjoined by public ways or yards not less than 60 feet (18 288 mm) in width.

Such buildings may contain other occupancies, without H fire areas, provided that such occupancies do not occupy more than 10 percent of the area of any floor of a building, nor more than the tabular values permitted in the occupancy by Table 503 for such occupancy.

Exception: Group H fire areas as permitted by Section 507.6.

Reason: The purpose of this proposal is to expand minor uses that would be permitted in an unlimited area building constructed in compliance with Sections 507.2 and 507.3. The current text is overly restrictive. As written, these buildings would not be allowed to contain separate tenants such as daycare, dance school, out-patient surgical center, restaurants, etc.. These would be considered different occupancies and no text exists to permit such uses in an unlimited area building of B, F, M or S occupancies.
It makes little sense to restrict other occupancies, while allowing an A-4, certain H's or motion picture theaters to be in unlimited area buildings.

This change will allow other use groups to be located in an unlimited area building of B, F, M or S uses as long as the aggregate area of the occupancies do no exceed 10% of the floor area of the main occupancy and further that the aggregate area of such occupancy does not exceed the tabular area permitted in Table 503.
Communications and interpretations from ICC staff in ICBO and Boca offices have confirmed there is a need for a change to allow these minor occupancies in an unlimited area building. This provision is in at least one other national code.
This change should provide a reduction in costs.

IBC-27-03 (Submit to ICC)

Revision to: Table 2902.1

Committee Action: Approved as Submitted

Revise Items 2 and 6 of table (remainder of table unchanged):

TABLE 2902.1
MINIMUM NUMBER OF REQUIRED PLUMBING FACILITIES[a]

No.	CLASSIFICATION	USE GROUP	DESCRIPTION	WATER CLOSETS (SEE SECTION 419.2 OF THE INTERNATIONAL PLUMBING CODEFOR URINALS)		LAVATORIES		BATHTUBS OR SHOWERS	DRINKING FOUNTAINS (SEE SECTION 410.1 OF THE INTERNATIONAL PLUMBING CODE)	OTHER
				MALE	FEMALE	MALE	FEMALE			
2	Business (see Sections 2902.2, 2902.4, 2902.4.1 and 2902.6)	B	Buildings for the transaction of business, professional services, other services involving merchandise, office buildings, banks, light industrial and similar uses	1 per 25 for the first 50 and 1 per 50 for the remainder exceeding 50		1 per 40 for the first 50 and 1 per 80 for the remainder exceeding 50		—	1 per 100	~~1 service sink~~
6	Mercantile (see Section 2902.2, 2902.5 and 2902.6)	M	Retail stores, service stations, shops, salesrooms, markets and shopping centers	1 per 500		1 per 750		—	1 per 1,000	~~1 service sink~~

REASON: The current requirement for 1 service sink for mercantile and business occupancies is not necessary due to the nature of the occupancy. The majority of business and mercantile occupancies do not warrant the need to clean up spills that often occur in other occupancies. The requirement for a service sink often becomes overly restrictive to small tenant spaces. This revision will not apply if another governing agency, such as The State Health Department, requires a service sink.

IBC-28-03 (Approved w/ ICC)

Revision to: Section 1024.3

Committee Action: Approved as Submitted

1024.3 Assembly other exits. In addition to having access to a main exit, each level of an occupancy in Group A having an occupant load of greater than 300 shall be provided with additional means of egress that shall provide an egress capacity for at least one-half of the total occupant load served by that level and comply with Section 1014.2.

Reason: The IBC defines ‘exit’ in 1006 as being exterior doors, vertical exit enclosure, smokeproof enclosure, exit passageway and horizontal exits. ICC staff has interpreted that this section does not mean each ‘additional exit’ is required to comply solely with Section 1006. But that the code intends that assembly rooms may also be served by exit-access elements. If this interpretation is correct, then the Code should reflect the correct intent. By changing the word ‘exit’ to ‘means of egress’ clarifies the purported intent correctly.

IBC-29-03 (Approved w/ ICC)

Revision to: Section 1008.1.9

Committee Action: Approved as Modified

1008.1.9 Panic and fire exit hardware. Where panic and fire exit hardware is installed, it shall comply with the following:

1. The actuating portion of the releasing device shall extend at least one-half of the door leaf width.

2. A maximum unlatching force of 15 pounds (67 N).

Each door in a means of egress from an occupancy of Group A or E having an occupant load of 100 or more and any occupancy of Group H-1, H-2, H-3 or H-5 shall not be provided with a latch or lock unless it is panic hardware or fire exit hardware.

Exception. A main exit, of a Group A use, in compliance with Section 1008.1.8.3 Exception 2.

If balanced doors are used and panic hardware is required, the panic hardware shall be of the push-pad type and the pad shall not extend more than one-half the width of the door measured from the latch side.

Reason: The IBC has a conflict between Section 1008.1.8.3 Exception 2 and the second paragraph of Section 1008.1.9. Section 1008.1.9 requires panic hardware on all egress doors serving a Group A having an occupant load of 100 or more. However, Section 1008.1.8.3 Exception 2 permits the use of key operated locking devices on the egress side of the main exit door where the occupant load is 300 or less. In applying conflict resolution from Section 102.1, it is difficult to determine which of these sections is a general requirement and which is a specific requirement nor can you readily determine which is the more restrictive. By adding this exception to the second paragraph of Section 1008.1.9 the code will be consistent with interpretations found in the IBC Q & A Application Guideline.

IBC-32-03 (Approved w/ ICC)

Revision to: Section 1804.2

Committee Action: Approved as Submitted

1804.2 Presumptive load-bearing values. The maximum allowable foundation pressure, lateral pressure or lateral sliding resistance values for supporting soils near the surface shall not exceed the values specified in Table 1804.2 unless data to substantiate the use of a higher value are submitted and approved.

Presumptive load-bearing values shall apply to materials with similar physical characteristics and dispositions.

Mud, organic silt, organic clays, peat or unprepared fill shall not be assumed to have a presumptive load bearing capacity unless data to substantiate the use of such a value are submitted.

EXCEPTION: A presumptive load-bearing capacity is permitted to be used where the building official deems the load-bearing capacity of mud, organic silt or unprepared fill is adequate for the support of lightweight and temporary structures.

Reason: The wording at or near the surface would lead one to believe that the soil bearing values of Table 1804.2 may be applied at the ground surface. Where as Section 1805.2 states as follows:

1805.2 Depth of footings. The minimum depth of footings below the undisturbed ground surface shall be 12 inches (305 mm). Where applicable, the depth of footings shall also conform to Sections 1805.2.1 through 1805.2.3.

IBC-33-03 (AZ Only)

Revise Section 1503.4

Committee Action: Approved as Submitted

[P] 1503.4 Roof drainage. Design and installation of roof drainage systems shall comply with Section 1503.4 and the ~~*International*~~ *Plumbing Code*.

1503.4.1 Gutters. Gutters and leaders placed on the outside of buildings, other than Group R-3 as applicable in Section101.2, private garages and buildings of Type V construction, shall be of noncombustible material or a minimum of Schedule 40 plastic pipe.

1503.4.2 Where required. All roofs, paved areas, yards, courts and courtyards shall drain into a separate storm sewer system, or a combined sewer system, or to an approved place of disposal.

1503.4.3 Roof design. Roofs shall be designed for the maximum possible depth of water that will pond thereon as determined by the relative levels of roof deck and overflow weirs, scuppers, edges or serviceable drains in combination with the deflected structural elements. In determining the maximum possible depth of water, all primary roof drainage means shall be assumed to be blocked.

1503.4.4 Overflow drainage required. Overflow (emergency) roof drains or scuppers shall be provided where the roof perimeter construction extends above the roof in such a manner that water will be entrapped if the primary drains allow buildup for any reason.

1503.4.4.1 Separate systems required. Overflow roof drain systems shall have the end point of discharge separate from the primary system. Discharge shall be above grade, in a location, which would normally be observed by the building occupants or maintenance personnel.

1503.4.4.2 Overflow drains and scuppers. Where roof drains are required, overflow drains having the same size as the roof drains shall be installed with the inlet flow line located 2 inches (51 mm) above the low point of the roof, or overflow scuppers having three times the size of the roof drains may be installed in the adjacent parapet walls. Scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by the plumbing code. Scuppers shall not have an opening dimension of less than 4 inches (102 mm). The flow through the primary system shall not be considered when sizing the secondary roof drain system.

REASON: This is proposed as an Arizona only amendment to resolve the problem of using the UPC rather than the IPC. The I codes place roof drainage in the plumbing code. The U codes have drainage required in the UBC and piping system design is per the UPC and scuppers per the UBC. When the IBC is used with the UPC, there is a gaping hole in having sufficient requirements to obtain a safe roof drainage system.

New Section 1503.4.2 is from IPC 1101.2. Section 1503.4.3 is from IPC 1101.7. Section 1503.4.4 is from IPC 1107.1. Section 1503.4.4.1 is from IPC 1107.2. Section 1503.4.4.2 is a combination of IRC R903.4.1and IPC 1107.3.

The text from the IRC provides the three times scupper sizing that existed in the UBC. Note that jurisdictions that have adopted the 2000 IPC without amendments will require overflow piping to be two times the size of the main piping but have no over sizing requirement for the scuppers. The 2003 no longer requires the overflow piping size to be doubled but still does not have the three times size for the scuppers.

Structural 2-02 (Resubmit to ICC)

Revision to: Table 1607.1 by adding new footnote I to item 27.

Committee Action: Approved as modified.

Proposal:

OCCUPANCY OR USE	UNIFORM (psf)	CONCENTRATED (lbs.)
27. Residential Uninhabitable attics without storage [i] (no other changes in item 27)		

i. For trussed systems, this live load need not be considered as acting simultaneously with other live loads imposed upon the ceiling framing or its supporting structure.

Reason: For temporary safety and construction load, not for the life of the structure. This issue has been addressed in a previous nationally recognized model code; therefore, setting a precedence on this issue.

Structural 5-02 (AZ only)

Revision to: **Section 1704.5**

Committee Action: Approved as submitted.

Proposal:

3. Masonry fences six feet or less in height above grade.
4. Masonry retaining walls four feet or less in height from bottom of footing to top of wall unless supporting a surcharge or impounding flammable liquids.

Reason: Exception 3 – No previous codes ever required special inspection for masonry fences 6 feet in height or less.
Exception 4 – Retaining walls 4 feet or less in height from bottom of footing to top of wall and not supporting a surcharge or flammable liquids are exempt from building permit requirement.

2003 INTERNATIONAL RESIDENTIAL CODE

IRC-3-01 (AZ only)

Revision to: TABLE R 301.4

Committee Action: Approved as Modified

USE	LIVE LOAD
Attics with storage [b,e]	~~20~~ 40
Sleeping rooms	~~30~~ 40

(No other changes to Table)

Reason: All habitable areas should be designed using the same design loads. Change is in line with industry standards. Local builders and designers support the change.

IRC-7-01 (Resubmit to ICC)

Revision to: R309.1

Committee Action: Approved as Modified

R309.1 Opening protection. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 13/8 inch (35 mm) in thickness, solid or honeycomb core steel doors not less than 13/8 inches (35 mm) thick, or 20-minute fire-rated doors. Doors providing opening protection shall be self-closing and self-latching.

Committee Reason: These doors should be maintained self closing and latching at all times.

IRC-9-01 (AZ only)

Revision to: APPENDIX

Committee Action: Approved as Modified

102.5 Appendices. Provisions in the appendices shall not apply unless specifically adopted. The following appendices are adopted:
Appendix A SIZING AND CAPACITIES OF GAS PIPING
Appendix B SIZING OF VENTING SYSTEMS SERVING APPLIANCES EQUIPPED WITH DRAFT HOODS, CATEGORY I APPLIANCES, AND APPLIANCES LISTED FOR USE AND TYPE B VENTS
Appendix C EXIT TERMINALS OF MECHANICAL DRAFT AND DIRECT-VENT VENTING SYSTEMS
Appendix D RECOMMENDED PROCEDURE FOR SAFETY INSPECTION OF AN EXISTING APPLIANCE INSTALLATION
Appendix H PATIO COVERS
Appendix J EXISTING BUILDINGS AND STRUCTURES
Appendix K SOUND TRANSMISSION

Reason: Comply with State and Federal laws.

IRC-11-01 (AZ only)

Revision to: M1307.6

Committee Action: Approved as Submitted

Add new text as follows:

M1307.5 Liquefied Petroleum Appliances. LPG appliances shall not be installed in an attic, pit or other location that would cause a ponding or retention of gas.

Reason: Due to the nature of LP gas, being heavier than air, it should be a function of design to eliminate the hazard of gas being trapped. The attic location is a hazard due to the gas settling in insulated frame bays and the probability of an ignition source igniting the gas fuel. Any pit will hold LP gas until an appliance or other ignition source causes a fire or explosion.
Related sections include G2406.2 and M1703.2
This also provides consistency with the State plumbing code.

IRC-12-01 (AZ only)

Revision to: G2406.2

Committee Action: Approved as Modified

Add new item 5 text after the exceptions as follows:
5. Liquefied Petroleum Appliances. LPG appliances shall not be installed in an attic, pit or other location that would cause a ponding or retention of gas.

Reason: To make text compatible with change to Section M1307.5 and to clarify that the exceptions do not apply to this text. This also provides consistency with the State plumbing code.

IRC-27-02 (Approved w/ ICC for 2004 Supplement)

Revision to: Section R320.1

Committee Action: Approved as Modified

Proposal: R320.1 Subterranean termite control. In areas designated as "slight to moderate", "moderate to heavy" and "very heavy", as established by Table R301.2(1), methods of protection shall be by chemical soil treatment, pressure preservatively treated wood in accordance with the AWPA standards listed in Section R319.1, naturally termite-resistant wood, or physical barriers (such as metal or plastic termite shields), or any combination of these methods.

Reason: The first revision is due to the fact that "favorable to termite damage" is not defined. The table number revision is editorial. The final revision delete the last part of the sentence, is due to the fact that it just isn't necessary. These specified treatments stand alone as acceptable, and are not intended to work in combination with one another to become effective.

IRC-35-02 (Approved w/ ICC for 2004 Supplement)

Revision to: Section M1403.2

Committee Action: Approved as Modified

Proposal: M1403.2 Foundations and supports. Supports and foundations for the outdoor mechanical systems shall be raised at least 3 inches (76 mm) above the finished grade, and shall conform to the manufacturer's installation instructions.

Reason: It is necessary to protect all outdoor equipment from problems associated with grade level installations, not just heat pumps.

IRC-41-02 (AZ only)

Revision to: Section G2415.9

Committee Action: Approved as Modified

Proposal: G2415.9 (404.9) Minimum burial depth. Underground piping systems shall be installed a minimum depth of 12 inches (305 mm) below grade for metal piping and 18 inches (457mm) for plastic piping.

Reason: The distinction between metal piping and plastic piping in regards to burial depth is because the plastic piping is more susceptible to damage and needs the increased depth for protection.

The elimination of the section addressing individual outside appliances is because the risks are the same whether the line serves multiple appliances or a single appliance. With similar risks, similar depths should be required.

IRC-42-02 (Approved w/ ICC for 2004 Supplement)

Revision to: R310.1 Emergency escape and rescue openings

Committee Action: Approved as submitted.

Proposal: Add another sentence at the end of the paragraph to read as follows:

Such openings shall open directly into a public street, public alley, yard or court.

Reason: This is the same language that is in IBC Section 1025.1. Without this requirement the emergency escape and rescue window could open into a carport or enclosed patio.

IRC-44-02 (Approved w/ ICC for 2004 Supplement)

Revision to: P2503.6 Water supply system testing

Committee Action: Approved as submitted.

Water-supply system testing. Upon completion of a section of or the entire water supply system, the system, or portion completed, shall be tested and proved tight under a water pressure not less than the working pressure of the system; or, for piping systems other than plastic, by an air test of not less than 50 psi (344kPa). This pressure shall be held for at least 15 minutes. The water utilized for tests shall be obtained from a potable source of supply.

Reason: A specific length of time has been an industry standard practice and 15 minutes would allow sufficient time to determine that there are no leaks.

IRC-45-02 (Resubmit to ICC)

Revision to: P3103.1 Plumbing vent termination

Committee Action: Approved as submitted.

Proposal: P3103.1 Roof Extension. All open vent pipes which extend through a roof shall be terminated at least 6 inches above the roof or 6 inches above the anticipated snow accumulation, whichever is greater, except that where a roof is to be used for any purpose other than weather protection, the vent extensions shall be run at least 7 feet (2134 mm) above the roof.

Reason: For the sake of uniformity and continuity, a single number should be used by all jurisdictions. The 6" number comes from Section 906.1 of the 1994 Uniform Plumbing Code and would not constitute a change from the existing rules. The 7 feet above roofs used for other than weather protection comes from Section 906.3 of the 1994 Uniform Plumbing Code and indicates that this section is a logical one from which to select a number.

Structural 1-02 (Approved w/ ICC)

Revision to: Sections R401.5 & R401.4.2

Committee Action: Approved as modified.

Proposal: Add a new section.
R401.4.2 Compressible or shifting soil. In lieu of a complete geotechnical evaluation, when top or subsoils are compressible or shifting, such soils shall be removed to a depth and width sufficient to

assure stable moisture content in each active zone and shall not be used as fill ~~or~~ nor stabilized within each active zone by chemical, dewatering, or presaturation.

Reason: Section renumbered for clarity. The reason for rewording R401.5 is that many soils investigation reports classify bearing soils as compressible and design procedures exist for designing foundations on compressible soils (e.g., PTI Design and Construction of Post Tensioned Slabs-On-Ground). Thus, it is not necessary for all compressible soils to be removed; rather, it is the decision of the geotechnical engineer as to the best course of action to deal with any compressible soils. Also, it appears that the intent of this section is to avoid construction on unstable, shifting, and/or collapsible soils, such as quicksand, hydro-collapsible soils, landslides, etc.

Structural 3-02 (Approved w/ ICC)

Revision to: Table R301.5

Committee Action: Approved as modified.

Proposal: Revise Table by adding footnote "g":

USE	LIVE LOAD
Attics without storage [b, e, g]	10

(No other changes to Table)

g. For trussed systems, this load need not be considered as acting simultaneously with other live loads imposed upon the ceiling framing or its supporting structure.

Reason: For temporary construction and service load, not for the life of the structure. This issue has been addressed in a previous nationally recognized model code: therefore, setting a precedence on this issue.

IRC-53-03 (Approved w/ ICC for 2004 Supplement)

Revision to: Section R202

Committee Action: Approved as Modified

R202 DEFINITIONS
EXTERIOR WALL. An above-grade wall that defines the exterior boundaries of a building. Includes between floor spandrels, peripheral edges of floors, roofs and basement knee walls, dormer walls, gable end walls, walls enclosing a mansard roof, and basement walls with an average below grade wall area that is less than 50 percent of the total opaque and non-opaque area of that enclosing side.

Reason: Section R302 provides for the fire protection of exterior walls. If walls are defined as only enclosing conditioned space, garage walls or dwelling walls that do not enclose conditioned space would be exempt from fire protection requirements.

IRC-54-02 (Approved w/ ICC for 2004 Supplement)

Revision to: Section M1411.3.1

Committee Action: Approved as Modified

M1411.3.1 Auxiliary and secondary drain systems. In addition to the requirements of Section M1411.3, a secondary drain or auxiliary drain pan shall be required for each cooling or evaporator coil where damage to any building components will occur as a result of overflow from the equipment drain pan or stoppage in the condensate drain piping. Such piping shall maintain a minimum horizontal slope in the direction of discharge of not less than one-eighth unit vertical in 12 units horizontal (1-percent slope). Drain piping shall be a minimum of 3/4-inch (19.1 mm) nominal pipe size. One of the following methods shall be used:

(The remainder of the section to remain unchanged.)

Reason: This inserts the necessary prescriptive language that will provide proper discharge for condensing liquid. It also aligns the IRC with the same requirement shown in the International Mechanical Code Section 307.1.

IRC –55-03 (Resubmit to ICC)

Revision to Table R1003.1

Committee Action: Approved as Modified

TABLE R1003.1
SUMMARY OF REQUIREMENTS FOR MASONRY FIREPLACES AND CHIMNEYS

ITEM	LETTER[a]	REQUIREMENTS	SECTION
Hearth slab thickness	A	4"	R1003.9.1
Hearth extension (each side of opening)	B	8" fireplace opening < 6 sq. ft. 12" fireplace opening ≥ 6 sq. ft. R1003.10	
Hearth extension (front of opening)	C	16" fireplace opening < 6 sq. ft. R1003.10 20" fireplace opening ≥ 6 sq. ft.	
Hearth slab reinforcing	D	Reinforced to carry its own weight and all R1003.9 imposed loads.	
Thickness of wall of firebox	E	10" solid brick or 8" where a firebrick lining is used. Joints in firebrick 1/4" max.	R1003.5
Distance from top of opening to throat	F	8"	R1003.7
Smoke chamber wall thickness ~~unlined walls~~	G	6" for lined walls 8" for unlined walls	R1003.8
Chimney Vertical reinforcing[b]	H	Four No. 4 full-length bars for chimney up to R1003.3.1 40" wide. Add two No. 4 bars for each additional 40" or fraction of width or each additional flue	
Horizontal reinforcing[b]	J	¼-inch ties at each 18 inches and two ties at R1003.3.2 each bend in vertical steel	
Bond beams	K	No specified requirement	
Fireplace lintel	L	Noncombustible material.	R1003.7
Chimney walls with flue lining	M	Solid masonry units or hollow masonry units grouted solid with at least 4 inch nominal thickness.	R1001.7
Walls with unlined flue	N	8" solid masonry.	
Distances between adjacent flues	-	See Section R1001.10.	
Effective flue area (based on area of fireplace opening)	p	See Section R1001.12.	
Clearances: Combustible material Mantel and trim Above roof	R	See Sections R1001.15 and R003.12. See Section R1001.13. 3' at roofline and 2' at 10'.	
Anchorage[b] Strap Number Embedment into chimney Fasten to Bolts	S	3/16" x 1" R1003.4.1 Two 12" hooked around outer bar with 6" extension 4 joists Two 1/2" diameter.	

Footing Thickness Width	T	12" min. 6" each side of fireplace wall.	R1003.2

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 square foot = 0.0929 m^2.

NOTE: This table provides a summary of major requirements for the construction of masonry chimneys and fireplaces. Letter references are to Figure R 1003.1, which shows examples of typical construction. This table does not cover all requirements, nor does it coverall aspects of the indicated requirements. For the actual mandatory requirements of the code, see the indicated section of text.

b. The letters refer to Figure R 1003.1.

c. Not required in Seismic Design Category A, B or C.

Reason: This proposal will create uniformity and will delete conflicts between IRC Table R1003.1 and IBC Table 2111.1 In addition, the following errors to table R1003.1 have been corrected:
Chimney, Vertical reinforcing
Horizontal reinforcing
Bond beam requirement
Add footnote "b" to horizontal reinforcing

Add "Section" column to have the same format as IBC Table 2111.1

IRC-59-03 (Resubmit to ICC)

Revision to Section P2803.6.1

Committee Action: Approved as Submitted

Proposal: Revise as follows:

P2803.6.1 Requirements of discharge pipe. The outlet of a pressure relief valve, temperature relief valve or combination thereof, shall not be directly connected to the drainage system. The discharge from the relief valve shall be piped full size separately to the floor, to the outside of the building or to an indirect waste receptor located inside the building. In areas subject to freezing, the relief valve shall discharge through an air gap into an indirect waste receptor located within a heated space, or by other approved means. The discharge shall be installed in a manner that does not cause personal injury or property damage and that is readily observable by the building occupants. The discharge from a relief valve shall not be trapped. The diameter of the discharge piping shall not be less than the diameter of the relief valve outlet. The discharge pipe shall be installed so as to drain by gravity flow and shall terminate atmospherically not less than 6 inches (152mm) nor more than 24 inches (610 mm) above the floor or finish grade. The outlet end of the discharge pipe shall not be threaded or have a valve installed.

Reason: This code section speaks to both interior and exterior discharge of relief valves, but the termination seems to only address what was intended for interior locations. The possibility of the termination to occur "at grade", which is now currently allowed, would have the unintended effect of concealing any discharge that might occur, or of plugging the discharge line. Requiring it to be a "minimum" of 6 inches (152 mm) above grade would resolve this. The 24 inch (610 mm) maximum height will assure that possible scalding water under pressure will not injure individuals in near proximity.

2003 INTERNATIONAL FUEL GAS CODE

No Changes

2003 INTERNATIONAL MECHANICAL CODE

No Changes

2003 International Plumbing Code

IPC-1-01 (AZ only)

Revision to: 101

Committee Action: Approved as Submitted

Add a new section 101.5 to read as follows:

101.5 Appendices. Provisions in the appendices shall not apply unless specifically adopted.

Reason:. This provision is included in all the other International codes and needs to be included in the International Plumbing Code to maintain uniformity among the codes.

IPC-3-03 (Approved w/ ICC)

Revision to Section 312.5

Committee Action: Approved as Submitted

Proposal: Revise Section 312.5 as follow:

312.5 Water-supply system test. Upon completion of a section of or the entire water supply system, the system, or portion completed, shall be tested and proved tight under a water pressure not less than the working pressure of the system; or, for piping systems other than plastic, by an air test of not less than 50 psi (344kPa). This pressure shall be held for at least 15 minutes. The water utilized for tests shall be obtained from a potable source of supply. The required tests shall be performed in accordance with this section and Section 107.

Reason: All other tests specified in Section 312, whether Drainage and vent water test under Section 312.2, Drainage and vent air test under Section 312.3, Drainage and vent final test under Section 312.4, Gravity sewer test under Section 312.6 or Forced sewer test under Section 312.7, require 15 minute duration for the respective tests. This is sufficient time to determine that a leak is not present and would provide consistency within the testing section.

IPC-4-03 (Resubmit to ICC)

Revision to Section 504.6.1

Committee Action: Approved as Submitted

Proposal: Revise Section 504.6.1 as follow:

504.6.1 Discharge. The relief valve shall discharge full size to a safe place of disposal such as the floor, outside the building, or an indirect waste receptor. The discharge pipe shall not have any trapped sections and shall have a visible air gap or air gap fitting located in the same room as the water heater. The outlet end of the discharge pipe shall not be threaded and such discharge pipe shall not have a valve or tee installed. Relief valve piping shall be piped independent of other equipment drains or relief valve discharge piping to the disposal point. Such pipe shall be constructed so as to discharge in a downward direction, and shall terminate not less than 6 inches (152 mm) and not more than 24 inches (610 mm) above the finish surface or grade.

Reason: This prescriptive language removes the need to interpret what is intended by “shall be installed in a manner that does not cause personal injury to occupants in the immediate area...”. This is wide open for interpretation and discretion. The means and heights of the drain discharge also matches what is currently prescribed for drain pans in P504.7.2. Why should drain pans be specific and relief valve discharges, which relieve under pressure, be left open to interpretation?