Highlighting Guide for Residential Plumbing

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International Plumbing Code 2018

Highlighting guide for SC Residential Plumber

Please highlight these sections within the IPC-2018 code book, then look-up the keywords in your index, highlight the keyword(s), followed by the section number, highlight there as-well. Lastly go to the table of contents highlight the keyword(s) there! By now you should be able to locate that area of the code.

Section	***Keyword(s)*** that are italicized are in the index
Chapter 1 - Scope and Administration	
106.1	*permits*
107.1	*inspections*
109.1	*administration*
Chapter 2 - Definitions	
202	definitions*, air gap* (drainage system)
202	definitions, *backwater valve*, where required
202	definitions*, fixture* drain
Chapter 3 - General Regulations	
305..4	*piping protection,* freezing
307.5/App. C	*structural safety*, trench location 45° from horizontal
T308.5	*hangers & supports*, spacing
Chapter 4 - Fixtures, Faucets, and Fixture Fittings	
403.1 table	*plumbing fixtures*, minimum fixtures
409.2	*dishwashing machine*
416	*food waste-disposer*
Chapter 5 - Water Heaters	
501.6	*water heaters*, water temp. from tankless heater
504.5	*water heaters*, *relief valves*, safety devices
Chapter 6 - Water Supply and Distribution	
202	definitions, adapter fitting
608	*potable water, protection of*
608.14.6	*atmospheric vacuum breaker*

Chapter 7 - Drainage	
708.1.5	*cleanouts*, same size & 3 exceptions
202	Drainage Fixture Unit (dfu)
T709.1	*drainage fixture units* fix. & groups
T710.1 (1)	*building drains* & *building sewers* (footnote a)
712.3.5	*ejector connection*, pump connection to drainage
Chapter 8 - Special Waste	
802.3	*indirect wastes*, installation
802.4.3	*standpipe drain*
803.1	*special wastes*, *indirect wastes*
Chapter 9 - Vents	
902.2	*vent*, sizing, materials
903.1	*vents & venting*, vent terminal
905.5	*vent* connections & grades, height above fixtures
T909.1	*vents & venting*, distance from trap
912.1	*wet venting*
914	*vents & venting*, circuit or loop, circuit venting
917.7	*offsets,* vents for stack, lower section
Chapter 10 - Traps, Interceptors and Separators	
1003.5	*interceptors & separators,* sand
Chapter 11 - Storm Drainage	
Fig. 1106.1	100 year hourly rainfall rate
T1106.2	*storm drains* horizontal size drain piping
T1106.3	size of vertical storm drain piping, figure
1110.4	*controlled flow roof drain systems,* minimum number
Chapter 12	
Chapter 13 - Nonpotable Water Recycling Systems	
1301.3	*nonpotable water,* signage required
608.9.2.1	*graywater,* color of distribution piping
Chapter 15 - Referenced Standards	
ANSI to **UL**	*standards,* referenced chapter 15

Appendix A	**Plumbing Permit Fee Schedule**
Appendix B	**Rates of Rainfall for various Cities**
Appendix C	**Structural Safety -** *Cutting or Notching, Structural Members*
Appendix D	**Degree Day & Design Temperatures**
Appendix E	**Sizing of Water Piping System**

International Residential Code One and Two Family Dwelling Code 2018

Section	***Keyword(s)* that are italicized are in the index**
R202	*definitions;* addition, alteration, attic thru yard
R303.1	light, ventilation & heating
R306.1	*sanitation*, figure R307.1
R310.1	emergency escape
R311.7	*stairways*
R311.7.8	*handrails*
R 317.1 #1-7	*decay*
R319.1	*site* address,
R403.3	*foundations*, frost protection
R404.1.2.3.7.4	*walls*, foundation
R406.1	*waterproofing* & dampproofing
R408.1	*under floor*, spaces
TR502.3.1(1) & (2)	*span*, wood (table)
figure R502.8	*notching*
R 602.3(1)	table ,*fastening*
R702.3	*gypsum,* wallboard
R806.2	*ventilation*, roof
R905.9.1	*roofing,* built up minimum slope
TR1001.1	chimney, *hearth (*table)
R1001.1	*fireplaces* (figure)
R1003.20	*chimney*, cricket
M1601.4.3	*ducts*, installation
M2201.2.2	*Oil*, tanks
TG2413.2 / G2413.2	*piping,* fuel-gas input size determination (table)
TG2414.9.2	place a tab here page 556 (table)
G2417.2	*test*, for leaks in supply piping
G2420	*valves*, shut-off, fuel gas
TG2424.1	*piping*, support (table)
G2426	*vents*

G2427.6.3	*vents* page 587/591 (figure)
G2439	*clothes dryer*
G2440	*heaters*, sauna
P2503	*inspection*, of plumbing system
P2603	*pipe*, protection
P2603.5	*freeze protection of plumbing*
P2604	*backfill*, for piping
TP2605.1	*support*, of pipe page 617/621 (table)
P2703	*tail pieces*
P2708	*shower*, stall dimensions
P2709	*shower*, receptor
P2713	*bathtub*, enclosure
P2714	*sinks*
P2715	*laundry tubs*
P2716	*food -waste grinders*
P2717	*dishwashing machines*
P2718	*clothes washing machine*
P2719	*drains*, floor
P2720	*whirlpool bathtubs*
P2721	*bidet*
P2722	*fixtures*, plumbing fixture, general
P2723	*macerating toilet*
P2801	*water*, heaters
P2803	*valves*, water heaters
P2900	*supply*, water
TP2902.3.1	tab labeled “minimum air gaps” page 634 (table)
P2903	*sizing methods,* water piping
P2903.3 & .3.1	*pressure*, water supply, max. & minimum
P2904.1.1	*fire sprinkler system*, sprinkler location
P2905	*materials*, plumbing pipe
TP3004.1	place a tab table “d.f.u.” page 668 (table)
P3005	*joints, drainage*, connections

P3005.1.1	*drainage*, cleanouts
P3005.2.9	*joints*, pipe, slip
P3009	*gray water*
P3101	*vent*, systems
P3102	*vent*, stacks & stack vents
P3103	*ven*t, terminals
P3104	*vent*, connections & grades
TP3105.1	*vents*, fixture (table)
P3107	*vent*, common
P3108	*venting*, wet
P3109	vent, waste stack
P3110	*venting*, circuit
P3201	*trap*
TP3201.7	place a tab labeled “trap sizing” page 684 (table)
P3302	*drainage*, storm drainage
Appendix N	*venting methods*
Appendix P	*sizing of water piping system*

OSHA HIGHLIGHTING GUIDE

SECTION – 1926	***Keyword(s)* are in italics**
1926.16	The prime contractor is responsible for complete project. *Contracts*
1926.21	*Safety training* required
1926.25	Scrap lumber with nails protruding shall be removed from work areas. *Housekeeping*
1926.50 (2)	Contents of *first aid kit* kept in a weatherproof container
SAFETY EQUIPMENT	
1926.102(a) (3)	Use of corrective lenses for *eye protection*
.102(a) (5)	Table E-1 guide for selection of *face/eye protection*
.104(d)	Safety *belt lanyard*, min ½" nylon, no greater than 6' fall
.105I (1)	Safety *net*s 8' beyond, 25' max. under edge of platform
FIRE PROTECTION	
1926.150 TABLE F-1	Types of *fire extinguishers*
.153	*Liquefied petroleum gas (*LP-Gas) filling 25' from buildings
.154(b) (4)	*Heater*s at least 10ft from tarpaulins & canvas covers
.200 TABLE G-1	*Signs, accident prevention* or *tags accident prevention* colors
MATERIAL STORAGE	
1926.250(b) (1)	*Materials,* not stored within 6' of hole in floor / 10' of ext. wall
.250(b) (4)	bags stacked by stepping back layers and cross-keyed every 10 bags high *Material storage*
.250(b) (8)	lumber piles no higher than 20ft, 16ft when stacked manually
DEBRIS CLEAN-UP	
1926.252(a)	*disposal*, *waste material* dropped > 20' must use *chute*
SMALL TOOLS	
1926.300(d) (3)	*tools, hand & power* must have constant pressure switch

.302(b) (4)	*tools, hand & power* not to exceed 30 psi for cleaning
.302(e) (1)	*tools, hand & power,* operated by trained employees
GASES AND WELDING	
1926.350(a) (9)	*Gas cylinders* shall always be secured in an upright position
.350(a) (10)	Oxygen *cylinders* separated from fuel/gas cylinders by 20ft and from oil and grease
.350(a) (11)	*Cylinders* stored inside, at least 20 feet from combustible materials
.350(d) (1)	*Gas* before connecting regulator, valve shall be opened slightly and closed immediately
.350(f) (3)	Fuel/*gas* hoses shall be inspected at beginning of each shift
.351(d) (3)	Shut off power when welder stops and you leave the area
.353(b) (3)	*Welder or cutting* working in *confined spaces* must have lifeline
.403 TABLE K1/K2	Min. 30” in front of *electrical equipment* working area clearance
SCAFFOLDING	
1926.451(a)(1)	Must support without failure <u>four times</u> intended load
.451(b)(2)	Each platform or walkway shall be at least 18” wide
.451(b)(3)	Front edge of platform not more than 14” from face of work
.451(b)(3)(i)	Outrigger platforms not more than 3” from face of work
.451(b)(3)(ii)	For plastering, not more than 18” from face of work
.451(b)(4)	Platform must extend min. 6” past the support
.451(b)(5)(i)	Platform less than 10 feet shall not extend more than 12” past the support
.451(b)(5)(ii)	Platform more than 10 feet shall not extend more than 18” past the support
.451(b)(7)	Platforms overlapping to form a long platform must overlap at least 12” and over a support
.451(b)(10)	*Scaffold* components shall not be intermixed

.451(c)(2)	*Scaffold* uprights must be supported on base plates/mud sills
.451(e)(2)(iii)	*Scaffolds* more than 35 feet must have rest platforms at least every 35feet when using hook-on or attachable ladders
.451(e)(8)	Going from one *scaffold* to another must not be no more than 14" horizontally and 24" vertically from other surface
.451(g)	On *scaffold* over 10ft above a lower level, must use a personal fall arrest system or guard rails
.451(g)(4)(ii)	*Guardrail* height 38" – 45"
.452(w)(2)	Castors on *scaffolds* shall be capable of being locked
.501(b) (2)	If constructing a leading edge above 6 feet, must have fall protection
.501(b) (9) (ii)	In overhand bricklaying when reaching more than 10" below the walk platform, must have fall protection or *guard rails*
.501(b) (14)	Wall openings above 6 feet, lower edge less than 39" need fall protection or *guard rails*
.502(b)(1)	*Guardrail* height 42" plus or minus 3"
.502(b) (2) (iii)	Intermediate vertical members of *guardrail* not more than 19"
.502(b) (9)	Wire rope *guardrails* must be flagged at least every 6 feet
.502 (4) (i)	Safety nets drop test at least 400 lbs. *fall protection*
.502(d) (8)	Horizontal lifelines must have *fall protection* a safety factor of 2
.502(d) (17)	Body harness must be attached in center of wearers back
.502(f) (1) (i)	Mechanical equipment not used, warning line 6 feet from roof edge. *fall protection*
.502(f) (2) (ii)	Wire rope warning lines located at least 34" or more than 39" above the working surface. *fall protection*
.502 (i)	Cover for holes, colored & marked. *fall protection*
.502(j) (7) (i)	Roof materials not stored within 6 feet of roof edge

EXCAVATION AND SOILS	
1926.651 (c)(2)	*excavation, means of egress* in trenches more than > 4' deep, lateral travel 25' for any employee
.651(g) (1) (i)	*excavations* more than 4 feet deep where hazardous atmosphere may occur, air tested prior to employees entering trench
.651(j) (2)	Materials or equipment not placed within 2' of edge of *excavation*
.652(a) (1) (ii)	Competent person to check *excavation* less than 5 feet for potential cave-in
Appendix A to Subpart P Type "A" (i)	*Soil* classifications: Type A is cohesive soil (1.5 tons/sf)
Appendix A to Subpart P (d)(2)	Observe *soil* when excavated, clumps-cohesive, if not granular
Appendix B to Subpart P Fig. B-1	*Excavation* Slope configuration table
STEEL CONSTRUCTION	
1926.754(B) (1)	No more than 8 stories between the erection floor and the upper most permanent floor. *Steel erection*
.754(b) (2)	No more than 4 stories or 48 feet of unfinished bolting or welding above the uppermost permanent floor. *Steel erection*
.754(b) (3)	Fully planked deck or net required within 2 stories or 30 feet under any erection work. *Steel erection*
.757(e) (3)	Weight of bundle of joist bridging not more than 1,000 lbs. *Steel erection, load placement & landing*
LADDERS	
1926 .1053(B) (1)	Side rails of a *ladder* shall extend 3' above platform
.1053(b) (5) (i)	Bottom of a *ladder* shall be ¼ working length of ladder from wall
.1053(b) (13)	Top rung of a *ladder* shall not be used as a step
.1053(b) (20)	Must face the *ladder* when ascending or descending
.1903.16	Citations from OSHA shall be posted within 3 days on jobsite
1910.147	LOCKOUT/ TAGOUT. To prevent energizing equipment that is being worked on