

2018 IPC Changes

2015-2018

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102.2.1 Existing Buildings

* Regulated by :

International Existing Building Code

Additions,repairs,structural issues

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Definitions –Chapter 2

[Be] Accessible :

A building ,site ,facility or a portion of that complies with chapter 11

International Building Code

Full-Open valve

A water supply shutoff component that is not a restriction in the flow through area

[M] Press-Connect Joint - a permanent mech. incorporating an elastomeric seal or EMS/with a corrosion-resistant grip ring

Made with a pressing tool approved by the manufacturer

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Definitions –Chapter 2

Swimming Pool

permanent or temporary structure for wading, bathing or swimming

built or designed to connect to a circulation system

public or private

Residential – only available to the household and guests

Public swimming pool

other than private

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General Regulations – Chapter 3

303.4 – Third – party certification

Plumbing products required to comply with a reference standard

shall be listed by a third – party certified agency

303.5 – cast-iron soil pipe and fittings (added)

3rd party listed and labeled

Comply with annex A or A1 of CISPI and ASTM standards

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General Regulations – Chapter 3

305.1 – protection against contact

Metallic piping shall not be in direct contact with metallic framing

Exceptions:

Cast iron pipe
ductile iron
galvanized steel

Not in contact with corrosive soil

sheathing NLT 8 mil

through masonry or concrete

allow for movement of pipe in sheathing

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General Regulations – Chapter 3

305.6 – Protection against physical damage

less than **1 ¼"** from nearest edge; protected

308.6 – Sway bracing

4" and greater horizontal conveys waste or drainage

bracing to resist upstream pipe in direction of flow

change of flow into a vertical pipe

not require bracing of upstream pipe

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General Regulations – Chapter 3

308.10 – Thermal expansion tanks

Supported as per manufacturer's instructions

Piping **shall not be used** to support tanks

Table 308.5 – Hanger spacing

PEX & PE-RT - horizontal 1 ¼" and larger – 4'
horizontal 1" and smaller- 32"

308.9 – Parallel water distribution systems – Where hot water piping, for manifold systems, are bundled with cold or hot water piping, **EACH hot water pipe shall be insulated.** (2012)

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bundle

[ˈbʌndl] 

NOUN

1. a collection of things or quantity of material tied or wrapped up together.

"a thick bundle of envelopes"

synonyms: bunch · roll · clump · wad · parcel · packet · package · pack · sheaf · bale · bolt · [more]

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Fixture faucets and fittings – Chapter 4

Table 403.1 – minimum number of fixtures

Changes : Removed the occupancy column

Assembly – Added : Gaming areas

Business

Educational

Factory

Institutional

Mercantile

Residential

Storage

**Footnotes – e – Business and mercantile – 15 or less occupants
service sink not required (15)**

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Fixture faucets and fittings – Chapter 4

403.1.2 – Single – user toilet facilities & bathing room fixtures(family or assisted use) where required by IBC 1109.2.1, -contribute towards the total number of fixtures. Identified for use by either sex(male or female).

403.1.3 Lavy distribution – two or more toilet rooms for each sex

Lavies shall be distributed proportionately

403.2 – Separate facilities –

#3 – Mercantile – 100(50) or less – separate facilities not required (2012)

#4 – business occupancies – 25(15) or fewer – separate facilities not required

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Fixture faucets and fittings – Chapter 4

403.3 – Employee and public toilet facilities
customers require *public facilities*
employees require facilities

Exceptions :

1 – parking garages w/o a parking attendant.(2015)

2 – occupancies intended for pickup or drop-off – 300 sq ft or less.(2015)

403.6 – door locking – multiple use – door shall not be lockable from the inside.(2015)

403.5 – Drinking fountain location –public DF- 300' –malls

500' –all others

1 story up or down

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IPC 2015

Chapter 4 – Fixtures, Faucets/fixture fittings

Sec. 403.3.4 – Location of toilet facilities in malls

Open mall buildings – added in the 2012 cycle.

Sec. 403.3.6 – Door locking -- added in 2012 cycle

Multiple occupant toilet rooms not allowed to have an egress door lockable from the inside

Sec. 403.4 Signage – language change with locations of signage and designation of restrooms

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IPC 2015

Chapter 4 – Fixtures, Faucets/fixture fittings

Sec. 403.5 – Drinking fountain locations – traveling distance and one story up/down

Section 404 Accessible plumbing facilities

New language added – AS PER ICC A 117.1

Sec. 404.3 Exposed pipes and surfaces –
under sinks /lavatories –covered as per
ASME A112.18.9

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Fixture faucets and fittings – Chapter 4

405.3.1- Water closet installation – NLT 15” side wall

Exception : NLT 12” – children’s WC

405.3.5 – Urinal partitions – 30” horizontally between walls and partitions

405.5 Fixtures with a pumped waste - Comply with ASME A112.3.4/CSA B45.9

Installed per manufacturer's instructions

409.1 – Dishwashing machines - residential NSF 184

Commercial ASSE 1004

409.4 Residential dishwasher – wye fitting , food waste connection (sec.802.1.6-2015)

Section 411 Emergency eyewash and showers

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Fixture faucets and fittings – Chapter 4

Section 411 Emergency eyewash and showers

411.3 – water supply –ASSE 1071 temp. actuated valve required when hot and cold water is supplied.

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Fixture faucets and fittings – Chapter 4

Section 412 – Faucets and other fixture fittings (424)

412.7 Temp. actuated devices for individual fixtures

Approved method for limiting temp to 120 degrees F.

412.10 – Head shampoo sink faucets –relocated from sec.423 – specialty faucets.

Comply with ASSE 1070

limit temp to 120 degrees F.

integral check valves to prevent crossover

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Fixture faucets and fittings – Chapter 4

2015 – Section 422 health Care Fixtures – REMOVED

New Heading – Sinks (2018)

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Chapter 5 – Water Heaters

Sec. 502.1 – Solar water heaters shall comply with:

IMC

ICC 900/SRCC 300

Sec.504.6 Discharge pipe requirements

#14 – Pipe with insert fittings shall be one pipe size larger

the outlet end shall be fastened in place

504.7 - Pan - steel or aluminum

Plastic not less than 0.036 inch thick ; not under a gas-fired water heater

Other approved materials

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Chapter 6 – Water Supply & Distribution

sec. 602.3 –Sources – individual water supplies shall comply with NGWA-01

where there are no state or local laws

Push-fit joints – 605.13.7- copper

605..14.4 – CPVC

605.16.3 – PEX

Comply with ASSE 1061

Installed – manufacturer’s instructions

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Chapter 6 – Water Supply & Distribution

Sec. 605.23.1 – Copper to galvanized - copper-alloy fitting

2015 – brass fitting

Section 608 –Protection of potable water

sec. 608.4 – Potable water handling and treatment equipment

- Pumps , softeners and others that handle potable water

terminate through an air gap.

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Chapter 6 – Water Supply & Distribution

Section 608 –Protection of potable water

Sec.608.10 -Reutilization – cooling, heating or other processes-not returned to potable water

Discharge to drainage system: air gap

Or utilized for nonpotable purposes

608.12 - Potable water tanks - inside coatings – NSF 61

608.14.1 Air Gap – Products listed ASME A112.1.2 or ASME A112.1.3

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Chapter 6 – Water Supply & Distribution

Section 608 – Protection of potable water

Sec.608.10 -Reutilization – cooling, heating or other processes-not returned to potable water

Discharge to drainage system: air gap

Or utilized for nonpotable purposes

608.12 - Potable water tanks - inside coatings – NSF 61

Sec 608.17.1.2 – Coffee machines and Noncarbonated dispensers

Added- ASSE 1024

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Chapter 6 – Water Supply & Distribution

Section 609 Health Care Plumbing

Sec.609.1 – Scope

This section shall apply to special device and equipment installed in:

I-1

I-2

Group B

Ambulatory

Medical offices

Research and testing centers

Group F

Manufacturing pharmaceuticals

Removed : other structures with similar equipment

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Chapter 7 – Sanitary Drainage

701.2 – Connection to sewer required

Sanitary drainage from premises (**intended for human occupancy, abutting street ,alley**) shall connect to a public sewer.

If no public sewer
private system
by state or local requirements
no state or local
International Private Disposal Code

Exception : tubs, showers, lavys, washer , laundry trays

not required to connect to sewer or private system

complies with Chapters 13 & 14

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Chapter 7 – Sanitary Drainage

Table 702.2

Added : Polyethylene (PE) plastic pipe

703.4 Existing building sewers and building drains

Entire sanitary drainage system replaced, existing building

existing building drains under concrete slabs

existing building sewers

Internally examined for :

proper slope

damage

proper sizing for new drainage load

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Chapter 7 – Sanitary Drainage

Sec. 704.2 – Reduction in pipe size , direction of flow (**change in size**)

Following items , not considered to be reduction in size in direction of flow :

1 – 4" X 3" closet flange

2 -- a water closet bend ,4" inlet , 3" outlet

4" is upright

below the flange

does not have to be connected to the flange

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Chapter 7 – Sanitary Drainage

Added:705.15 – Polypropylene plastic

Added under Table 702.3 – Building sewer pipe

705.16.4 – Plastic pipe or tubing to other piping material

A single joint between ABS and PVC

at the end of the building drain

and the beginning of the building sewer

can be made :

using a solvent cement

complying with ASTM D3138

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Chapter 7 – Sanitary Drainage

2015 Section 713 Health Care -- Removed

2018 – 713 Computerized Drainage Design

complying with ASTM D3138

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Chapter 7 – Sanitary Drainage

705.18 – Caulking ferrules

made of copper alloy (red brass)

709.3 Conversion of gpm to dfu

discharge into a drainage system

only known in gpm

1 gpm = 2 dfu

Section 716 - Pipe bursting

Added : building drains

716.4 – high-density polyethylene (HDPE)

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Chapter 8 – Indirect/Special wastes

Sec.802.4.3.1 – connection of laundry tray to standpipe

An alternate for a laundry tray waste connection

no trap required

connected to a clothes washer standpipe

standpipe not less than 30" above trap weir

extend above the laundry tray overflow rim

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Chapter 9 -- Vents

Section 918.1 Prohibited installations

AAV shall not be used to vent tanks or sumps

Except where the vent system is designed by
an engineer (2018)

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Chapter 9 - Vents

Section 918 – Air Admittance valves

Sec 918.8

Air admittance valves shall not be installed
on outdoor vent terminals
for the sole purpose
of reducing clearances
to mechanical or gravity intake valves

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Chapter 10 - Traps, Interceptors and Separators

Section 1003 Interceptors and Separators

Sec. 1003.3.2 Food waste disposers restrictions

Food waste disposals :

Shall not discharge to a grease interceptor

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Chapter 10 - Traps, Interceptors and Separators

Section 1003 Interceptors and Separators

Sec.1003.3.3 – Additives to grease interceptors

performance additive dispensers

shall not be installed

EXCEPT :

dispenses microbes

enhances aerobic bioremediation

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Chapter 10 - Traps, Interceptors and Separators

Section 1003 Interceptors and Separators

Sec.1003.3.3 – Additives to grease interceptors

Inhibits growth of pathogenic organisms

Be installed **only** where the GI manufacturer's instructions allow.

System conforms to ASME A112.14.6

Prohibited :

systems that discharge : emulsifiers

chemicals

enzymes

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Chapter 11 Storm Drainage

Section 1106 – Size of conductors, leaders and storm drains

sec. 1106.5 Parapet wall scuppers

used for primary, secondary or both
size, quantity and location
chosen to prevent depth of ponding
from exceeding the *IBC* roof design ,section 1611.1

Opening size

not exceed 4" in height
width equal to or greater than circumference of the roof drain required
flow through primary
not considered when sizing and locating secondary scuppers

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Chapter 11 Storm Drainage

Sec. 1113

1113.1.2 - Sump pit

Pit – 18" in diameter

24" in depth

UNLESS:

Approved

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Chapter 13 – Nonpotable water systems

1301.9.1 – Location

Previous 1301.9.2

Reworded

1- tank construction – fiberglass , opaque , tinted plastic

2 – Sun barriers – specially constructed

3 – Installed in sheds , crawl spaces or garages

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Chapter 13 – Nonpotable water systems

-- Sec. 1301.9.8 – Draining of tanks

2015 – Where tanks require cleaning or servicing
a drain , at the lowest point
or a pump

2018 – Tanks **SHALL** be provided with:

a means to empty the contents

a pump

or

a drain

lowest point in the tank

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Chapter 13 – Nonpotable water systems

Section 1302 On-site nonpotable water reuse systems

sec. 1302.1 – ASTM E2635 – shall govern the on-site nonpotable water reuse systems

alteration

installation

repair

construction

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Chapter 13 – Nonpotable Water systems

Section 1302 On-site nonpotable water reuse systems

Sec. – 1302.2 – Sources

Collect discharge only from the following sources :

Showers

Lavatories

Clothes washers

Laundry trays

Where approved and appropriate :

Water from other nonpotable sources

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Chapter 13 – Nonpotable water systems

Section 1303 Nonpotable rainwater collection and distribution systems

Sec. 1303.1.1 – Fire protection systems (2018)

International Fire Code

Storage

Treatment

Distribution

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Chapter 13 – Nonpotable water systems

Section 1303 Nonpotable rainwater collection and distribution systems

Sec.1303.2 – Collection surface

Collected from approved vehicular parking

pedestrian walking surfaces

When constructed of approved materials

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Chapter 13 – Nonpotable water systems

Section 1303 Nonpotable rainwater collection and distribution systems

Sec.1303.3 Debris excluders

Downspouts and leaders connected

To prevent leaves,sticks and similar materials from entering the tank.

Removed : self cleaning

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Chapter 13 – Nonpotable water systems

Section 1303 Nonpotable rainwater collection and distribution systems

1303.04 First-flush diverter (2015 – roof washer)

Operate automatically

Discharge by local jurisdiction requirements

Be provided with access for maintenance and service

(1303.15.2 - First-flush diverter test- renamed to match)

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Chapter 13 – Nonpotable water systems

Section 1303 Nonpotable rainwater collection and distribution systems

1303.15.9 – Collected raw rainwater quality (2018)

ASTM E2727 – used to determine

Any site conditions impact the quality

For the intended use

Type of treatment , if required

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