

# Cite It, Write It Checklist

## Most Common Missed Code Items at Required Inspections

### SETBACK / FOOTINGS – FOUNDATIONS

#	Planning, Site & Grading	ORSC	OSSC
1	Site address not plainly visible.	R321.1	501.2
2	Provide approved construction plans on job site.	R106.3.1	106.3.1
3	Inspection Sign-off Card not on job site (when provided by the jurisdiction).	R117.1	106
4	Work not ready for inspection, owner required to call when ready.	R109.3	109.5
5	Setbacks, projections and distances from lot lines.	R106.2	106
6	Slopes exceed engineering requirements and/or setback.	R403.1.9.2	1805.3
7	A copy of the building report is required on site.	R105.7	
8	Fill soils that support footings or foundations are required to be installed and tested per accepted engineering practice.	R401.2	1805
	<b>FOOTINGS</b>		
9	Exterior footings required to be min. 12" below grade or frost line and on undisturbed soil. Adjust forms.	R403.1.5 Ta.R301.2(1)	1805.2
10	In D1 or D2 seismic zones a minimum 1, #4 rebar in footing and 1, #4 rebar in stem-wall is required.	R403.1.4.1	n/a
11	In D1 or D2 seismic zones a construction joint for two pour foundations, require vertical rebar.	R403.1.4	n/a
	<b>FOUNDATION</b>		
12	Reinforced foundation walls with 4' or higher (from top of stem wall to bottom of footing) of unbalanced fill, requires vertical rebar.	TABLE R404.1.1(2-4)	1805.5(2-4) /tables
13	Top of foundation to be at 12"+ 2% above street gutter.	R403.1.9.3	1805.3.4
14	Foundation walls retaining over 4 foot of backfill must be restrained by floor or slab, or engineered as a retaining wall.	R404.1.3	1805.5
15	Under floor ventilation area is insufficient.	R408.1	1203.3
16	Grounding electrode (UFER) not installed properly.	R403.1.7	1805.4.2
17	Holdowns and rebar for ABP's or portal frame not tied in place.	R602.10.6 or Per manufacture Instructions	2308.9.3.1

## UNDERFLOOR/POST, BEAM JOIST

#	POST, BEAM, & JOIST REQUIREMENTS	ORSC	OSSC
1	Mud sills and plates in direct contact with concrete shall be pressure treated	R319.1	2304.11.2.3
2	Wood supports in direct contact with earth shall be pressure treated.	R319.1.1	2304.11.4
3	Wood girders in concrete shall have ½ inch air space on top, sides, and ends	R319.1 #4	2304.11.2.4
4	Provide a minimum of 12 inches of clearance under beams, 18 inches under joists.	R319.1 #1	2304.11.2.1
5	Floor joists shall have a bearing of not less than 1-1/2 inches on wood or metal and 3 inches on masonry.	R502.6	2308.8.1
6	Foundation plates or sills, anchor bolts, absent or insufficient.	R403.1.8.1	4 inches from each end 2308.6
7	Holes bored in joists shall not be within 2 inches of the top or bottom of the joist and the diameter shall not exceed 1/3 the depth of the joist.	R502.8.1	2308.8.2
8	Joists under and parallel to the bearing partitions shall be doubled. Bearing partitions perpendicular to joists shall not be offset from supporting girders, walls or partitions more than the joist depth.	R502.4	2308.8.4
9	Post & Beam connection not adequately fastened.	R502.9, R502.1 & R408	2304.10.2
10	Replace broken or split sill plates.	R403.1.8	2308.6
11	6 mil black Ground Cover shall turn up 12 inches foundation wall	N1104.9.2	1307.1.8.2 & 1312.1.4
12	Provide floodplain certificate and construct to plan	R323	1612.5
13	Provide as-built elevation documents prepared by design professional.	R323.1.9	1612.5
14	Install low point drain as designed.	R408.5	1803.7

## UNDERFLOOR MECHANICAL

#	UNDERFLOOR	ORSC	OMSC
1	Duct insulation absent or insufficient.	M1601.2.1	604.9
2	Clearance from earth to metal ducts or plenum insufficient.	M1601.3.7	603.14
3	Duct support strapping is absent or insufficient.	M1601.3.3	603.10
4	Dryer exhaust vent pipe exceeds allowable length.	M1501.3	504.6.1

## FRAMING

#	FRAMING REQUIREMENTS	ORSC	OSSC
	<b>Shear walls</b>		
1	Braced walls either not per plan or as engineered.	R602.10.11	2306.4
2	Sheathing fasteners overdriven. Nail sizes or pattern not per prescriptive or engineering details.	APA, R301.1.3 ,Table R602.3(1)	2308.1
3	Holddowns or straps for ABP, or Portal Frame as engineered are not correct size or per design.	R602.10.6	2308.9.3.1
4	Nails used to attach siding shall be corrosion-resistant	R703.4	1405.16
	<b>FLOOR AND ROOF FRAMING</b>		
5	Trusses installed are not according to approved plans. Lateral bracing not as detailed on truss design.	R502.11 & R802.10	2308.10
6	Floor joists shall have a 2-inch thick solid blocking the full depth of joist at each support, except where ends of joists are nailed to a header, band or rim joist.	R502.7	2308.8.2
7	Ridge board thickness shall not be less than 1-inch nominal and not less in depth than the cut end of rafters required.	R802.3	2308.10.4
8	Rafters shall be nailed to adjacent ceiling joists to form a continuous tie. When not parallel, rafters shall be tied to 1-inch by 4-inch minimum cross-ties. Rafter ties shall be spaced not more than 4-feet on center.	R802.3.1	2308.10.4.1
9	Plans and specifications for manufactured trusses prepared by an architect or engineer and submitted to Jurisdiction prior to fabrication. Such trusses shall not be altered or modified without approval of the engineer.	R802.10.1 & R802.10.4 ALT	2308.10.7 2308.10.7.3
10	Rafters, ceiling joists and trusses shall be supported laterally to prevent rotation with full-depth blocking at ends and at points of bearing.	R802.8	2308.10.4.1
11	Attic ventilation is not sufficient.	R806.2	1203.2
12	Roof flashing of 26-gauge corrosion-resistant metal over underlayment of not less than Type 15 felt is required for wood shingle or shake roofs.	R905.2.8.2	1503.2
13	Hurricane clips missing: Trusses shall be connected to wall plates with approved connectors.	R802.11	2308.10.1
	<b>WALLS</b>		
14	Top plates over notched, insufficient connections.	R602.6.1	2308.9.8
15	Provide weather resistive barrier on exterior walls.	R703.1	1403.2
16	Maximum diameter for holes bored in bearing wall studs is 40% (60% in non-bearing wall studs) of stud thickness. Maximum notching in bearing wall studs is 25% of stud thickness (40% in non-bearing partitions).	R602.6	2308.9.10 2308.9.11
17	Top Plate splices to close together. Double top plate end joints required to offset at least 24".	R602.3.2	48" OSSC 2308.9.2.1

#	<b>FRAMING</b>	<b>ORSC</b>	<b>OSSC</b>
	<b>ACCESS</b>		
<b>18</b>	Provide 18" by 24" access opening to under-floor crawl space. Provide 22" by 30" readily accessible opening to attic area.	R408.3 & R807.1	1209.1
	<b>WINDOWS</b>		
<b>19</b>	Provide Egress window with minimum net clear opening of 5.7 square feet and a minimum height of 22 inches and a minimum width of 20 inches and with sill not more than 44 inches above the floor.	R310.1	1025.2
<b>20</b>	Natural light & ventilation is insufficient.	R303.1	1203.4.1.1 &1205.2
<b>21</b>	Glazing in walls, fences, swimming pool areas and used in railings must be safety glass if any of the following apply... 1)within 18-inches of the floor and is larger than 9 square feet and higher than 36-inches and within 36 inches of a walking surface or 2)within 24-inches of a door, or 3) in a door, or 4) within a tub or shower unless the bottom edge is at least 60-inches above the standing surface, or 5) adjacent to a stairway, ramp, or landing unless the bottom edge is at least 60-inches above the bottom surface ...and glass must conform to section R308.	R308.4	2406.3
	<b>STAIRWAYS</b>		
<b>22</b>	Stairways, 4" -7" rise and 11" minimum run in commercial and 8" maximum rise and 9" minimum run in residential. Headroom in stairways shall be a minimum of 80-inches	R311.5.3 Riser and runR311.5.2 Headroom	1009.3 /1009.2 headroom
<b>23</b>	Winder treads shall have a minimum tread depth of 6" and a minimum tread depth of 10"at a point 12" from the inside corner.	R311.5.3.2	1009.3
	<b>FIRE PROTECTION</b>		
<b>24</b>	Ducts piercing garage separation wall shall be 26-gauge galvanized steel or other approved material.	R309.1.1	406.1.4#2
<b>25</b>	Provide Fire Blocking at intervals not exceeding 10' horizontal & vertical in furred walls and at floor or ceiling vertical to horizontal connections and at stair stringers	R602.8	717.2
<b>26</b>	Smoke detectors are not installed with proper clearances to return air ducts or per detector's installation instructions.	R313.1	
	<b>BATHROOMS</b>		
<b>27</b>	Water closet clear area is insufficient.	Figure R307.2	2902.6
	<b>FIREPLACES</b>		
<b>28</b>	Masonry fireplaces require anchorage at floor and ceiling levels.	Table R1003.1 S	Table 2111.1 S
<b>29</b>	Provide clearance to combustibles for masonry fireplaces min. 2".	Table R1003.1 R	Table 2111.1 R

## Mechanical ORSC

#	Framing	ORSC	OMSC
1	Type B gas vents do not have a min. 1 inch clearance from wood, romex wire, or combustibles	G2425.15.4 & M1803.3.4	Table C503.7.7
2	Furnace located in crawl space or attic does not have a minimum 30 inch by 30 inch access door, the furnace is located more than 20 feet from access door, and a permanent electrical outlet and lighting fixture controlled by a switch is not provided at access	M1305.1.3 & M1305.1.4	306.3 & 306.4
3	Exhaust fan ducts do not run to exterior	M1506.4	501.2
4	Combustion air opening into attic requires a metal sleeve to min. 6 inches above ceiling joist .	M1703.3	701.4.2
5	Insulation sleeve not provided to keep thermal insulation away from metal chimney or gas vents and extend not less than 2 inches above the insulation	G2426.4	C502.4
6	Gas line not completely installed or air pressure test not on	G2417.4.1	C406.4.1
7	Ducts support absent or insufficient or not per manufacture install instructions.	M1601.3.3	603.10 & Smacna HVAC

## INSULATION

#	INSULATION REQUIREMENTS	ORSC	OSSC
1	Exposed wall and ceiling insulation and vapor barrier shall have a Flame Spread rating of 25 or less and a Smoke Development rating of 450 or less and be installed with adequate clearances.	R316.1 Installation Instructions	719.2
2	Foamed plastic insulation ( Thermal Barrier) is not installed as per ASTM E 119 or Section R702.3.5.	R314.1.2	2602.4 & 707
3	Installed insulation does not meet energy compliance method on approved plans	N1101.4	1301.3
4	Sealing around window and doors and penetrations is absent or insufficient..	N1104.8.2	1307.1.7
5	Insulation of ducts located outside building envelope is insufficient.	M1601.3.5 & Table N1104.1(1)	1308.1.1
6	I.C. rated fixtures required in this location.	N1104.2.4 Ex	1307.1.1.6
7	Baffles as installed do not meet minimum requirements at eaves.	N1104.2.1	1307.1.1.1
8	Verify that the U-values on the window meet the energy path no label on window.	Table N1104.1(1)	Table13-E

## FINAL

#	FINAL REQUIREMENTS	ORSC	OSSC
1	Address not visible from street.	R321.1	3" min 501.2
3	Final grade does not slope away from foundation and the vents have debris.	R401.3	1803.3
4	Provide flashing above openings without eaves and at tops of veneer.	R703.8	1403.2
<b>GARAGE</b>			
5	Hot water tank required to be strapped and all appliances located in garage shall be protected from impact.	R1307.3.1	303.4 & Man. Instructs
6	Garage / Dwelling fire separation is absent or insufficient.	R309.1	406.1.4
7	Openings from a private garage into a sleeping room are prohibited.	R309.1	406.2.9
8	5/8" type X sheetrock required on garage ceiling below living space.	R309.2	
<b>BATH</b>			
10	Water closet minimum clear area is insufficient.	Fig. 307.2	2902.9
11	Shower areas shall have a hard, non-absorbent surface wall to height of not less than 6 feet above the floor.	R307.2	2509.3 & 807.1.2
12	Shower doors and bathtub doors shall have tempered laminated safety glass or approved plastic glazing.	R308.1 – R308.4	2406
<b>BEDROOMS</b>			
13	Interconnected smoke detectors in rooms and in ceiling near stairway required.	R317	907.2.10.1
14	Egress windows – minimum width 20" – minimum height 22" / minimum net clear opening 5.7 sq. ft. (821 sq. in.) – sill height max = 44"	R310.1	1025
<b>SAFETY GLASS</b>			
15	All glass must be safety glass if any of the following apply... 1)within 18-inches of the floor and is larger than 9 square feet and higher than 36-inches and within 36 inches of a walking surface or 2)within 24-inches of a door, or 3) in a door, or 4) within a tub or shower unless the bottom edge is at least 60-inches above the standing surface, or 5) adjacent to a stairway, ramp, or landing unless the bottom edge is at least 60-inches above the bottom surface ...and glass must conform to section R308.	R308.1 - R308.4	2406

#	<b>STAIRWAYS</b>	<b>ORSC</b>	<b>OSSC</b>
16	Handrails required not less than 30-inches nor more than 38-inches above nosing of stair tread. Required to be grip able. Headroom minimum of 6-foot, 8-inches.	R311.5	34-inches-38-inches1009
17	Guardrails shall be 36-inches in height for dwelling porches, balconies, or raised floor surfaces, (34 inches in height for open stairs). Guardrails for porches, or balconies shall have intermediate rails that a 4" sphere cannot pass through (4 3/8" for open tread stairs.)	R312.1	1012
18	Enclose accessible space under stairs with 1/2 -inch gypsum board.	R311.2.2	1019.1.5
	<b>CRAWL SPACE</b>		
19	Provide ground cover of 6-mil black polyethylene in crawl space.	N1104.9.2	1307.1.8.2 & 1312.1.4
20	Weather stripping at doors and access panes is absent or insufficient.	N1104.8.2	1312.1.1
21	Ducts and water pipes insulation is absent or insufficient.	N1105.2 & 1106.1	1314.1
22	Attic and or floor insulation is absent or insufficient.	TableN1104.1 (1)	1312.2

### **MECHANICAL**

#	<b>FINAL</b>	<b>ORSC</b>	<b>OMSC</b>
1	Bathroom exhaust fans not functioning.	M1506.4	Table 403.3
2	All appliances in garage need to be protected from impact.	M1307.3.1	304.5 & 304.6 and figure 304.1
3	Water heaters Straps for seismic zones D1 & D2 is absent or insufficient.	M1307	301.15
4	Clearances to combustibles are not met at following locations.	M1306.1	304.8
5	Appliance not installed to listing, labeling missing.	M1307.1	304.1

## Code Reference for Plumbing Corrections

#	GROUNDWORK	ORSC	OPSC
1	No test on DWV system	P3012.0	712.0
2	No test on waterlines	P2909.4	609.4
3	Provide required grade, supports, bedding, on DWV system	P3008.0	708.0
4	Provide required cleanouts and clearances	P3007.4	707.4 & 707.0
5	Seal around pipe thru concrete	P2613.0	313.0
6	Test failed-leaks	P2610.0(water P2909.4 & waste/vents P3012.0)	712.1 & 609.4
7	System or portion of, below upstream manhole without a backwater valve.	P3010.0	710.0
8	Improper configuration and size of DWV piping and fittings	P3006.1	706.1
9	Improper depth of water piping exiting building through foundation wall.	P2909.1	609.1
10	Provide required primer lines on floor drains/sinks	P3207.1	1007.1

## Code Reference for Plumbing Corrections

#	POST AND BEAM	ORSC	OPSC
1	Provide required cleanouts and clearances	P3007.4	707.4, 707.0
2	Support DWV and/or waterlines system	Table P2614.1(1)	table 3-2
3	Provide required grade on DWV system	P3008.0	708.0
4	Provide freeze protection for waterline below insulation	P2613.6	313.6
5	Provide nail plate protection	P2613.9	313.9
6	Provide foundation low point drain (Site Drain)	R405	1101.1
7	Test failed-leaks	P2610.0(water P2909.4 & waste/vents P3012.0)	712.1 & 609.4
8	Provide required thread sealant on CO plugs	P2616.1.1	316.1.1
9	Undersized water piping	P2910.0	610.0, table 6-5
10	Undersized DWV piping	Table P3003.1	Table 7-5
11	Under floor piping covered prior to inspection	OAR 918-785-0200	OAR 918-785-0200
12	Improper configuration of DWV piping.	P3006.1	706.1, 706.0
13	System or portion of, below upstream manhole without a backwater valve.	P3010.0	710.0
14	Improper depth of water line exiting building through foundation wall	P2909.1	609.1



## Code Reference for Plumbing Corrections

#	ROUGH IN/ TOP OUT	ORSC	OPSC
1	No test on DWV system	P3012.0	712.0
2	No test on waterlines	P2909.4	609.4
3	Support DWV and/or waterlines	Table P2614.1(1)	table 3-2
4	Provide required grade on DWV system	P3008.0	708.0
5	Insulate all pipes in unconditioned spaces	P2613.6	313.6
6	Repair as per structural code fix for over bored/over notched wood	P2613.11	313.11
7	Secure tub valve to structure	Per manufacturers installation standards	Per manufacturers installation standards
8	Secure tub to structure	Per manufacturers installation standards	Per manufacturers installation standards
9	Provide nail plate protection	P2613.9	313.9
10	Test failed -leaks	P2610.0(water P2909.4 & waste/vents P3012.0)	712
11	Install island sink loop vent per	P3108.0	909.0
12	Provide required cleanouts and clearances	P3007.4	707.4
13	Improper configuration of fittings	P3006.1	706.1
14	Undersized and number of cross sectional area of vent (s) through roof	P3104.1	904.1
15	Undersized water and DWV system	P2910.1/Table 3003.1	610.0/Table 7-5
16	Improper depth of water line exiting building through foundation wall		609.1
17	Improper cleanout location, installation or clearances	P3007.0	707.0
18	Any portion of system below upstream manhole without a backwater valve	P3010.0	710.0
19	Excessive horizontal lengths on vents	Table 3003.1	Table 7-5
20	Provide required pressure/temperature-balancing valves on fixtures	P2715.1	419.0
21	Improper spacing and clearances of fixtures	P2708.6	408.6
22	Provide approved hose bibbs and or shut off valves	P2905.0	605.0

## Code Reference for Plumbing Corrections

#	WATER SERVICE	ORSC	OPSC
1	Provide required cover on all points on waterline.	P2909.1	609.1
2	Provide 18 gauge copper blue tracer wire on waterline	P2909.6.1	609.6.1
3	No test on water system	P2909.4	609.4
4	Waterline not correctly sized for building	P2910.0	610.0
5	Test failed-leaks	P2610.0(water P2909.4 & waste/vents P3012.0)	609.4
6	Expose piping for required inspection underground. See also OAR 918-785-0200(3)	P2615.3	315.4
7	If water service was used for electrical grounding, plastic piping may be used if another grounding system is installed & inspected	P2904.8	604.8
8	Lack of purple primer when required	P2616.1.6	316.1.6
9	Provide a water pressure reducing valve	P2908.0	608.0

## Code Reference for Plumbing Corrections

#	BACKFLOW	ORSC	OPSC
1	Provide test results for backflow prevention assembly	P2903.4.2	603.3.3
2	Expose connection to potable waterline See also OAR 918-785-0200(3)	P2615.3	315.4
3	Provide required freeze protection for backflow prevention device	P2909.1	609.1
4	Test failed	P2610.0(water P2909.4 & waste/vents P3012.0)	609.4
5	Provide required clearances per	Table P2903.1	Table 6-3

## Code Reference for Plumbing Corrections

#	RAIN DRAINS	ORSC	OPSC
1	Provide minimum 12" cover on all points of rain drains	P3018.3	718.3
2	Provide connection to under floor drain or footing drain	P3208.1	1101.1
3	Expose rain drains for required inspection. See also OAR 918-785-0200(3)	P2615.3	315.4
4	Improper point of disposal	P3208.1	1101.0
5	Unsupported lines. (case by case)	P2614.0	314.0
6	Improper size for roof area	Table 3208.2	Table 11-1 & 11-2
7	Improper connectors or adapters for joining dissimilar materials	P2611	311.0
8	Provide required cleanouts	P3208.10	1101.12

### Code Reference for Plumbing Corrections

#	UNDERFLOOR DRAIN	ORSC	OPSC
1	Expose under floor drain connection to storm		1101.1
2	Remove debris from under floor drain		310.0
3	Lack of required backwater valve		710.0
4	Improper materials		311.0
5	Improper point of disposal		412.0

### Code Reference for Plumbing Corrections

#	SANITARY SEWER/STORM	ORSC	OPSC
1	No test on sewer (sanitary)	P3023.0	723.0
2	Provide minimum ¼" grade on sewer line	P3018.1	708.1
3	Provide 18 gauge copper green tracer wire on sanitary & storm	P3018.2	718.2
4	Expose sanitary/storm and connection to lateral for inspection See also OAR 918-785-0200(3)	P2615.4	315.4
5	Leak on sanitary sewer	P3023.0	712
6	Undersized line	P3208.1 & .2	Table 7-8/11-1/11-2
7	Provide required cleanouts	P3208.10	1101.12
8	Improper materials	P3015.1	715.1
9	Improper bedding	P3008.1	708.0

### Code Reference for Plumbing Corrections

#	SEPTIC TANK CONNECTIONS	ORSC	OPSC
1	Line covered prior to inspection	OAR 918-785-0200	OAR 918-785-0200
2	Improper materials	P3015.1	715.1
3	Lack of required cleanouts	P3208.10	1101.12
4	Undersized line	P3017.1	717.0
5	Improper grade or slope	P3018.1	718.0
6	Improper connectors or adapters for joining dissimilar materials	P3015.1	715.1
7	Provide required test	P3023.0	723.0

### Code Reference for Shower Pan Installation

#	SHOWER PAN INSTALLATION	ORSC	OPSC
1	Approved materials installed to required heights	P2710.5	412.6
2	Liner not clamped properly with drain body	P2710.7	412.8
3	Provide required test	P2710.7.1	412.8.1
4	Provide required slope on sub base	P2710.7	412.4

## Code Reference for Plumbing Corrections

#	FINAL	ORSC	OPSC
1	Seal and secure hose bibbs	P2613.8	313.8
2	Cap unused rain drain risers	P2613.5	313.5
3	Connect downspouts to rain drain risers	P3208.9.2..	310.4
4	Strap water heater	P2810.5	507.2
5	Provide approved means for thermal expansion to relieve closed system	P2908.3	608.3
6	Seal fixtures at wall or at floor	P2708.2	408.2
7	Hot and cold water pipes are crossed at .....	P2901.2	601.3
8	Provide access to pump motor for jetted tub	P2711.2	414.1
9	Temperature exceeds 120 deg. at tub/showers set temperature limits.	P2715.0	419.0
10	Provide test results for all backflow prevention assemblies	P2903.4.2	603.3.3
11	Test failed - leaks	P2610.0(water P2909.4 & waste/vents P3012.0)	609.4
12	Expose clean out risers for sanitary/storm	P3019.0	719.3
13	Provide required thread sealant on CO plugs	P2616.1.1	316.1.1
14	Secure DW drain hose to underside of countertop	P3029.3	807.4
15	Secure dishwasher per manufactures instructions	P2708.3	408.3
16	Water pressure exceeds max. 80 PSI	P2908.2	608.2
17	Provide required anti-siphon devices	Table P2903.1	Table 6-2
18	Provide required elevations and protective barriers on water heater	P2810.3	507.6
19	Provide hot water in system	P2901.2	601.3
20	Improper radius fitting and configuration on trap arms	P3202 .3	1002.3
21	Provide primer valves where required	P3207.0	1007.1
22	Temperature/pressure relief valves improperly routed or terminated	P2908.5	608.5
23	Provide required expansion devices where required	P2908.3	608.3
24	Provide required shut-off valves	P2905.1	605.0

## Electrical

#	Rough in/FRAMING	ORSC	NEC
1	Gas lines and metallic water lines not bonded	E35-250.104 (A) & (B)	250.104 (A) & (B)
2	Ground wires in boxes not made up with wire nut, crimps, or clips	E35-250.148	250.148
3	Insufficient receptacle outlets in kitchen and countertops	E35-210.52 (B) (3) & (C) (1)-(2)-(3)-(4)-(5) & Figure E35-210.52	210.52 (B) (3) & (C) (1)-(2)-(3)-(4)-(5) & Figure 210.52
4	Sub-panels located in clothes closets are prohibited	E34-110.26 (F)	110.26 (F)
5	Non-metallic sheathed cable installed in bored holes closer than 1 <sup>1</sup> / <sub>4</sub> inch to edge of framing member does not have nail guards installed	E36-300.4 (A) (1)	300.4 (A) (1)
6	Non-metallic sheathed cables, installed in notches require 1/16" thick nail guards	E36-300.4 (A) (2)	300.4 (A) (2)
7	Oxidation inhibitor compound not installed on Aluminum Conductors in Services and Panel boards	E34-110.3 (B)	110.3 (B)
8	Adequate working clearances not provided around services and panel boards	E34-110.26 (A) (1)-(2)-(3)	110.26 (A) (1)-(2)-(3)
9	Aerial Service conductors and/or feeders do not have correct clearance above grade or driveways	E35-230.24 (B).	230.24 (B).
10	Nonmetallic sheathed cable not secured at correct intervals	E36-334.30	334.30
11	Receptacle outlet box spacing not arranged to meet requirements	E35-210.52, (A) (1)-(2)-(3)	210.52, (A) (1)-(2)-(3)
12	Incorrect outlet boxes used to support ceiling fans	E36-314.27 (D)	314.27 (D)
13	Lighting fixture boxes in closets do not have clearances to shelving	E37-410.8	410.8
14	Separate circuits not provided for receptacle serving the dishwasher, and garbage disposal	E37-422.62	422.62
15	Separate circuits not provided for receptacle serving the laundry receptacle outlets	E35-210.52 (F)	210.52 (F)
16	Box(s) not flush with combustible surfaces	E36-314.20	314.20
17	Box(s) not securely mounted	E36-300.11	300.11
18	NM cable sheathing cover does not extend into box at least 1/4"	E36-314.17 (C)	314.17 (C)
19	Box(s) required at all outlets and splices	E36-300.15	300.15
20	Box(s) not sized large enough for amount of conductors	E36-314.16	314.16
21	Service entrance conductors and/or feeders not sized large enough for demand loads of system	E35-220.1	220.1
22	Non-metallic cable not secured and protected within 6 feet of attic access	E36-334.23	334.23
23	Equipment located in attics and under floor areas do not have light controlled by a switch which is located at access opening and a maintenance receptacle not provided within 20 feet of equipment	E35-210.70 (A) (3)	210.70 (A) (3)
24	Fire rated walls in duplexes not protected at electrical openings around boxes	E36-300.21	300.21
25	NM cable not secured above service panel when over 3' to top plate	E36.334.30	334.30
26	A minimum of 6" of free conductors not provided at box for device make-up	E36-300.14	300.14
27	<ul style="list-style-type: none"> <li>• Smoke detector boxes installed to close to air return(s) side wall ceilings and sloped ceilings</li> </ul>	E34-110.3 (B)	110.3 (B)

## Electrical

#	FINAL	ORSC	NEC
<b>1</b>	Circuits not labeled and identified in Services and panel boards	E37-408.4	408.4
<b>2</b>	Services, panel boards, and equipment not securely fastened	E37-300.11	300.11
<b>3</b>	Lock-nuts loose or missing	E36-300.10	300.10
<b>4</b>	Grounded conductor (neutral) not identified at terminals	E35-200.6	200.6
<b>5</b>	Panel board (sub-panel) grounded conductor (neutral) not isolated	E37-408.40	408.40
<b>6</b>	Unused openings in boxes, panel boards, and services not plugged	E37-408.7	408.7
<b>7</b>	Over-current devices not rated for the conductor ampacity	E35-240.4	240.4
<b>8</b>	Cover-plates on plugs and switches missing	E34-110.27	110.27
<b>9</b>	Receptacles with incorrect polarity	E35-200.11	200.11
<b>10</b>	Receptacles have open ground	E35-250.138	250.138
<b>11</b>	Terminal can only have one conductor at neutral bars and circuit breakers. Ground bars may have multiple wires/terminal	E37-408.41 & E34-110.3	408.41 & 110.3
<b>12</b>	Service and Panel boards internal parts damaged or contaminated during the construction process of the house	E34-110.12 (C)	110.12 (C)
<b>13</b>	Receptacles in GFCI locations; bathrooms, garages, outdoors, crawl space and basements, hydro-tubs, and kitchen and bar sinks not functioning	E35-210.8	210.8
<b>14</b>	Arc-fault circuit interrupters not provided for bedroom circuits supplying outlets	E35-210.12 (B)	210.12 (B)
<b>15</b>	Florescent lighting fixtures not grounded	E37-410.18 (A)	410.18 (A)
<b>16</b>	Branch circuits conductors and over-current devices serving water heaters do not allow for 125% of the nameplate rating of the appliance	E 37-422.10 & E37-422.13	422.10 & 422.13

**Common Corrections and suggestions for New Complex Commercial Structures**  
**MECHANICAL**

#	GAS APPLIAINCES	OMSC
1	Equipment not installed to manufacturers installation instructions	C305.1
2	Equipment not provided with a shut off valve with in 6'	C409.1
3	Flex connectors shall not be over 6' for ranges and domestic clothes dryer and over 3' for other equipment.	C411.2/C411.1.3
4	Draft hoods is not installed correctly	C503.12
5	Filters	605.1
6	Combustion air not provided	C304.1
7	Equipment not meeting clearances to combustibles	C305.8
8	Regulators not installed to manufactures installation instructions	C406.1.5
9	Lighting with a switch not provide within the passageway opening	C306.3.1 & C306.4.1
10	Outlet not provided at or near the appliance location	C306.3.1 & C306.4.1
11	Accessibility openings into attics or under floor where appliances are located need to be large enough to remove the appliance but a minimum of 22" by 30"	C306.2, C306.3 & C306.4
12	Working clearances of 30" by 30" be provide at the service side of the appliance	C306.1, C306.3 & C306.4
13	Vent type is incorrect for the listing of the appliance	C502.3/ Table C503.4
14	Vent size does not meet minimum size requirements	C504.2.2
15	Vent termination does not meet minimum height	C503.6.6/ Figure C503.6.6
16		
17	Vent clearances not meeting listing	Table C503.7.7
18		
19	Protection post not provided in garage	Figure C304.1
20	Appliance height in garage not meeting clearances of minimum 6' for residential and 2' higher than the tallest vehicle. Elevation to ignition source must be a minimum of 18"	C305.3, C305.4 & C305.5
	<b>SMOKE/FIRE DAMPERS</b>	<b>OSSC</b>
1	Not Classified to meet UL 555.	607.3
2	Not Accessible to motor and louvers	607.4
3	Direction of smoke/fire dampers installed incorrectly	607.2
4	Fusible link does not meet the required operating temperature for the location	607.3.1.1
5	Retaining angles absent or insufficient	OSSC 1621
6	Letters on access doors need to be a minimum of .5 inches high	607.4

<b>COMMERCIAL HOODS &amp; DUCTS</b>		<b>OMSC</b>
<b>1</b>	Type & listing absent or insufficient	507.1
<b>2</b>		
<b>3</b>	Cook top & canopy distances must not exceed 4 feet	507.12
<b>4</b>	Grease duct clearances needs to be a minimum of 18" from combustibles and 3" from noncombustible	506.3.6
<b>5</b>	Duct support, enclosure/shaft insufficient or not per listing	506.3.10
<b>6</b>	Duct joint sealed absent or insufficient	506.3.2
<b>7</b>	Duct slope is not adequate	506.3.7
<b>8</b>	Cleanouts absent or insufficient	506.3.8
<b>9</b>	Duct exhaust must meet the CFM per type of hood it is serving. Ducts serving a Type I hood need to be a minimum of 1500CFM's	506.3.4/ 507.13
<b>10</b>	Exhaust location not at an approved area	506.3.12 &506.4.1
<b>11</b>	Makeup-air needs to be provided when the hood is in operation	508.1
<b>12</b>	Trip test – gas and makeup air shutdown	509.5
<b>13</b>	Grease filters not provide as per listing	507.11
<b>14</b>	Extinguishing system (Fire Department)	509.1

### **PARKING LOT**

<b>#</b>	<b>HANDICAP SPACES</b>	
<b>1</b>	Number of handicap spaces to parking spaces provided	ORS 447.233(2a)
<b>2</b>	Signs do not meet the requirements	ORS 447.233(2e)
<b>3</b>	Ramps shall not extend into parking space	ORS 447.233(3)
<b>4</b>	Slope shall not exceed 1 unit vertical to 50 units horizontal	OSSC 1104.4.3
<b>5</b>	Striping shall be provided	OSSC 1104.1
<b>6</b>	Size does not meet the minimum of 9 feet wide	ORS 447.233(2b & 2c)
	<b>Location</b>	
<b>1</b>	Accessible route at least one main exit shall be provided	1103.1
<b>2</b>	Sidewalks do not meet the requirements for assessable	1103.2.4
<b>3</b>	Bike racks; the following items are common to new construction sites.	Follow suggested city ordinances or applicable OSSC chapter 11 sections
<b>4</b>	Transit shelters	
<b>5</b>	Lighting (glare)	
<b>6</b>	Fire lane & signs	
<b>7</b>	Fire hydrants	
<b>8</b>	Fire dept. connection	
<b>9</b>	Fire vault	
<b>10</b>	Signs (permit ?)	
<b>11</b>	Fencing	
<b>12</b>	Garbage enclosure	



### DWELLING UNIT ROOMS

1	Egress windows need to be a minimum of 5.7 sq ft with the minimum height of 24" and width of 20"	1025.2.1
2	Smoke detectors	907.2
3	Heaters- Manufacturers installation instructions needed	OMSC 304.1
4	Door smoke seal	709.5
5	Door hardware shall be installed at a min. of 34" and a max. of 48" above the floor	1008.1.8.2
6	Exhaust fan fusible links in dampers	OMSC 607.3.1.1
7	Exhaust fan operation	1203.4.2.1
8	Bathroom wall finish within 2' of urinals and water closets shall have a smooth nonabsorbent surface to a height of 4'	1210.2
9	Baseboard height in bathrooms shall be a minimum of 6" in height	1210.1
10	Tub enclosures/ tempered windows	2406.3
11	Jacuzzi tub motor access	
<b>Accessible unit</b>		
1	Visual alarms shall be provided within common and public use areas of group R, division 1 apartment buildings	1110.10
2	Storage need not comply with Section 1109.17	1110.9
3	Controls shall have a height of min of 15" and max of 48" of the floor	1110.3
4	Bathroom door hardware & clearances	1110.6
5	Sink height, pipe covers, clearances	1110.6.4.1.1/ 1110.6.4.2.1 &1109.11.3.6
6	Mirror height	1109.10.7.4
7	Toilet height, clearances, grab bars	1109.10.5.2& 1106.4.1.2& 1110.6.3
8	Shower/tub bench & grab bars	1110.6.4.2.3 or 1110.6.4.1.3 & 1110.6.3

### EXTERIOR

1	Lot grading	1803.3
2	Street trees	
3	Address numbers	501.2
4	Directory	
5	Rooftop openings	1203.2.1
6	Rooftop ventilation	1203.2
7	Rooftop access	1009.12.1
8	Siding openings ?	
9	Landings	1008.1.5
10	Stairs	1009.1 &1009.5.2
11	Handrails	1009.11
12	Guards	1012.1
13	Doors/widows (safety glazing?)	2406.3?
14	Gutters/downspouts	1504.1
15	Water meter box	
16	Knox box	

## ADA REQUIREMENTS

<b>1</b>	Assessable route	1109.4
<b>2</b>	Door hardware shall not require tight grasping, tight pinching or twisting of the wrist to operate	1109.9.8
<b>3</b>	Room signage	1109.15
<b>4</b>	Drinking fountains	1109.12
	Toilet rooms	
<b>1</b>	Lavatories	1109.10.7
<b>2</b>	Toilets	1109.10.5.2
<b>3</b>	Partitions	1109.10.3.1
<b>4</b>	Grab bars	1109.10.5.3
<b>5</b>	Appurtenances and mirrors height?	1109.10.8