

BUILDING INSPECTIONS Plumbing Rough-in Housing (1997 OBC)

Building Permit no.		Building Inspector:				
No	INSPECTION CHECKLIST			V	L	R
1.	PROJECT REVIEW	a	Building permit has been issued.			
		b	Plumbing fixtures installed as per architectural drawings.			
			Identification and Certification			
		a	Drain, waste and vent pipe and fittings have visual product acceptance identification			
		b	Piping not in compliance with a standard prescribed by the Code has been removed and replaced			
		c	Plastic pipe conforms to B181.1 (ABS), B181.2 (PVC), B182.1 (ABS), B182.2 (PVC) for storm water			
		d	Cast iron conforms to CSA B70, CSA B127.1, CSA B127.2 or ANSI B16.12 & not used in water system			
		e	Solder-joint drainage fittings conform to CSA B158.1 (cast brass) or ANSI B16.29 (wrought copper) and not used in a water system			
		f	Copper tube conforms to ASTM B306 (copper) above and below ground, type K and L hard, type M hard above ground and type DWV above ground			
2.	DRAINAGE SYSTEMS		Cleanouts			
		a	Cleanout located at the base of all stacks			
		b	Cleanouts are positioned so that they are readily accessible for rodding and cleaning purposes			
		c	Maximum spacing for a cleanout is 50 feet for horizontal sanitary or storm drainage pipes			
			Joints and Connections in Drainage Systems			
		a	Drainage piping or fittings are not drilled or tapped except for trap seal primer line			
		b	Pipe adaptation is made without leaving a square edge, approved bushing are acceptable			
		c	Slip joints not used except for connection of fixture drain to fixture trap			
		d	Adapters, connectors or mechanical joints are used for joining dissimilar materials			
		e	Brass or plastic water closet flange securely fastened on a firm base			
			Connections to Drainage Systems			
		a	Provision has been made for every future fixture to be directly connected to a sanitary drain			
		b	Fixtures connected to a vent stack do not exceed 8 FU's, 1 fixture connected to the vertical portion up stream of other fixtures, WC is the most downstream fixture and all other fixtures are located in the lowest storey served by the vent stack.			
		c	Connection to the waste or soil stack in a 3 storey dwelling is a minimum of 5' from offset on first floor			
			Arrangement of Drainage Piping and Fittings			
		a	Connections of piping with increaser or reducer will permit proper drainage of system			
		b	Double Y, double TY, double T or double waste fitting not installed in a horizontal soil or waste pipe			
		c	Drainage pipe protected from freezing			
		d	Storm and sanitary sewage piping is not combined			
		e	No open ends in the drainage system and dead ends slope to drain			
		f	Sump and pump installed where piping too low to drain into building sewer by gravity (automatic pump)			
		g	Discharge pipe from sump has a union, check valve and a shut-off valve installed in discharge direction			
			Minimum Slope, Length and Size of Drainage Pipes			
		a	The size of the drainage pipe serving the fixture is equal to the size required for the fixture outlet pipe			
		b	1 ¼" fixture outlet pipe size minimum for bidet and lavatory			
		b	1 ½" fixture outlet pipe size minimum for bath tub, clothes washer, dishwasher, laundry tub, shower drain (1 head), kitchen sink			
		c	2" fixture outlet pipe size minimum for floor drain, shower drain with 2 or 3 heads			
		d	3" fixture outlet pipe size minimum for a water closet			
		e	Drainage pipe has a downward slope in the direction of flow of at least 1 in 50			
		f	Island kitchen sinks have the trap located immediately below the subflooring			
g	Drainage pipes are connected to other pipes of a equal or greater size pipe downstream					
h	Fixture outlet pipe does not exceed 900 mm (3')					
	Support of Piping					
a	Copper and brass pipes are separated from the support to prevent galvanic action					
b	Cast iron pipe is supported at each joint, 3 m (9'-10") intervals or 1 m (3'-3") intervals where mechanical joints are used and the length of pipe between pipes is less than 300 mm (11 ¾")					
c	ABS or PVC plastic DWV pipe is supported at intervals of 1200 mm (3'-11"), at branches, changes in direction or elevations and if the fixture drain is more than 1 m (3'-3") in length support is near the trap					
d	Copper or brass pipe is supported at 3 m (9'-10") intervals					
e	Solid or perforated hangers are used for pipes 4" or less in size and do not compress plastic pipe					
f	Vent pipes extending above the roof surface are supported to prevent misalignment					
3.	VENTING SYSTEMS		Stack Venting and Modified Stack Venting			
		a	Soil stack is a minimum of 3" diameter and is extended as a stack vent			
		b	The number of stack vented fixtures is not more than 4 and are connected to one stack above the WC			
3.	VENTING	c	The stack vented group of fixtures are on the same floor level and the stack receives no higher waste			
		d	The WC is connected to the soil stack and remaining fixtures are located upstream of the WC			

SYSTEMS Cont'd	e	The upper most fixture is connected to the vertical portion of the stack							
	f	No fixture drain connected above the WC serves a siphonic trap or is greater than 2" pipe size							
	g	Not more than 2 stack vented WC's and are installed at the same level to the vertical part of the stack							
		Vent Pipes for Soil or Waste Stacks							
	a	Upper end of a soil or waste stack ends in a stack vent or vent stack that leads to open air							
	b	1 1/2" vent pipe installed on each floor level, including the basement (may require a roughed-in vent pipe)							
	c	Sanitary sewage tank is vented							
		Arrangement of Vent Pipes							
	a	Each waste pipe is vented on the horizontal portion of waste pipe, except WC may be vented on vertical							
	b	Horizontal vent pipes that run below flood level rim of served fixtures are eliminated asap							
	c	Dry vent pipe is connected to a nom. horizontal soil or waste pipe above center line, except for wet vent							
	d	Vent pipe protecting a trap is located not less than 75 mm (3") and not more than 1500 mm (4'-11")							
	e	The total fall of the fixture drain from the P-trap to the vent pipe is not greater than the size of the drain							
	f	Cumulative change in direction of a fixture drain from the trap to the vent is not more than 135°							
	g	Cumulative change in direction of a WC fixture drain from the bowl to the vent is not more than 225°							
	h	No waste pipe is connected between the trap and the vent pipe protecting the trap							
	i	Vent pipe located within 900 mm (2'-11") of a vertical leg of a Water closet							
	j	Vent pipe is above the flood level rim of the fixture it serves before connecting to another vent pipe							
	k	Vent pipe is terminated in open air, away from building openings and is 3" before penetrating roof							
		Vent Pipe Sizes							
	a	The minimum size of the vent pipe equals the size of the trap served							
	b	The size of the branch vents, stack vents or vent stacks are not less than the largest vent pipe connected							
	c	Wet vented fixtures are on same level, the wet vent is connected to the horizontal waste pipe a min. of 18" and not more than 5' from the trap & the wet venting fixture is drained through a vert. continuous w & v							
	d	2 wet venting fixtures connected at the same level are vented with a double fitting							
	e	Maximum of 6 - 1 1/2" vented fixtures vented on a 1 1/2" branch vent							
	f	Maximum of 2 - 1 1/2" vented water closet fixtures on a 1 1/2" branch vent							
	g	Maximum of 12 - 1 1/2" vented fixtures and 6 - 1 1/2" vented water closet fixtures on a 2" branch vent							
	4.	POTABLE WATER SYSTEMS	Identification and Certification						
	a		Water piping and fittings have a visual product acceptance identification						
	b		PEX piping and fittings are certified to CAN/CSA-B137.5						
	c		PVC piping and fittings are certified to CAN/CSA-B137.3 or .2 for cold water use only						
	d		CPVC piping and fittings are certified to CSA B137.6						
	e		PE/AL/PE composite piping and fittings are certified to CAN/CSA-B137.9 & not used in a hot water sys.						
f	PEX/AL/PEX composite piping and fittings are certified to CAN/CSA-B137.10								
g	Polypropylene pipe and fittings conform to CSA-B137.11								
h	Copper piping conforms to ASTM B42, Supply and waste fittings are certified to CAN/CSA-B125								
i	Copper piping is type K and L hard/soft or type M hard								
j	Galvanized piping is not installed in a newly erected dwelling								
	Arrangement of Piping								
a	Building control valve installed where the water service pipe enters the building								
b	Drain port installed on the downstream side of the water meter at the control valve								
c	Building configuration and setback in conformance with the building permit documents								
d	Plastic water service pipe brought above ground at least 300 mm (12") and not more than 450 mm (18")								
e	Exterior hose bibs are protected against frost with the frost proof hydrant or stop-and-waste valve								
f	Provision made to prevent water hammer								
	Protection from Contamination								
a	No apparent cross-connection made between water distribution system and a non-potable water system								
b	Water service pipe is a minimum of 3/4" size where it enters the building								
c	First branch that supplies a water heater is a minimum size of 3/4" size								
5.	TESTING Of SYSTEMS	Testing of Drainage, Venting and Water Distribution Systems							
a		Systems are ready for inspection prior to inspectors arrival							
b		The drainage and venting systems are filled with water or pressurized with air and maintains the water or air for at least 15 minutes with no visible signs of water leakage							
		c	The water distribution system is filled with water or air and maintain a water pressure that at least 1000 kPa (145 psi) for at least 1 hour or an air pressure of at least 700 kPa (102 psi) for 2 hours without a drop						

V	Date	Inspector	V	Date	Inspector	V	Date	Inspector
A			B			C		

COMPLIANCE											
BUILDING INSPECTOR			DATE			CO-SIGNER			DATE		