

AMERICAN SOCIETY OF HOME INSPECTORS, INC. RADON MITIGATION SYSTEM INSPECTION CHECKLIST

	<u>Components</u>	<u>Condition</u>	<u>Action</u> <u>Needed</u>
1	Results of a radon test conducted within the previous two years are available	()Yes ()No	()Yes
	Type of Mitigation System Installed		
2	Active () Passive ()		
	Foundation Types		
3	Basement () Ventilated crawlspace () Closed crawlspace		
	Combined crawlspace and basement () Slab ()		
	Foundation Wall Materials		
4	Concrete () CMU () Wood () Brick ()		
	Rock w/Mortar () Rock Dry Stack () ICF () Other ()		
_	Basement or Crawlspace Floor Materials		
5	Slab () Gravel () Soil ()		
	Openings in Foundation and Foundation Condition	Condition	Action Needed
6	Top CMU block solid, filled, or sealed	() Yes () No	()Yes
7	Openings between basement and crawlspace separated with air tight doors with gaskets	()Yes ()No	() Yes
	Openings and penetrations are sealed between habitable and		
8	depressurized uninhabitable spaces (e. g., under showers and	() Yes () No	, , , ,
•	tubs, penetrations between crawlspace or basement and	() Unknown	()Yes
	habitable space above); sealant condition is acceptable		_
	Slab floor cracks, wall cracks, joints between slab floor and walls, and slab and wall penetrations that are practical to seal are		
9	sealed; sealant condition is acceptable. Applies to depressurized	() Yes () No	()Yes
	uninhabitable spaces only.	() 100 () 110	()
10	Wood in contact with soil is preservative treated	() Yes () No	()Yes
11	Foundation ventilation openings are permanently opened	()Yes ()No	()Yes
	No visible evidence of backdrafting or other combustion or vent		
12	system defects at fuel-burning appliances located in uninhabitable	()Yes ()No	()Yes
	spaces (e. g., basements and crawlspaces)	() 163 () 140	
	Sump Pumps	Condition	Action Needed
13	Sump pump drain terminates outside the foundation	()Yes ()No	()Yes
14	One-way valve installed on sump pump drain terminating outside	() Yes () No	()Yes
<u> </u>	the foundation	() ()	, , , , , ,
	Cover includes a physical access port, a flexible coupling	() Van () N-	/) \/aa
15	disconnect for suction piping, located in a manner to allow	()Yes ()No	()Yes
-	removal of cover without causing damage Cover is clear, durable, sealed with silicone or similar that allows		
16	removal for service	()Yes ()No	()Yes
17	Penetrations through the cover sealed	() Yes () No	()Yes

18	Sump pump discharge pipe has backflow valve	() Yes () No	()Yes
	Sump pump cover has label stating: "Radon Reduction System"		
19	and "Component of a Radon Reduction System. Do not Tamper	()Yes ()No	()Yes
	with or Disconnect". Similar wording is acceptable.	() 103 () 140	() 103
	Vener Detendere	Condition	Action
	Vapor Retarders	<u>Condition</u>	Needed
20	Vapor retarder present	()Yes ()No	() Yes
21	Seams lapped at least 12 in.	()Yes ()No	()Yes
22	No unsealed holes or openings in vapor retarder	()Yes ()No	()Yes
23	Vapor retarder sealed to walls when sub-slab depressurization	()Yes ()No	() Von
23	system installed	()Yes ()No	()Yes
1	Vapor retarder sealed to walls in crawlspace that are accessible	() Voc. () No.	()Yes
24	for maintenance, storage, etc.	()Yes ()No	()165
25	Grade allows water on surface of vapor retarder to drain toward	() Ves () No	()Yes
25	disposal point	()Yes ()No	() 165
		0 1141	Action
	Mitigation Fan Installation	<u>Condition</u>	Needed
26	Fan labeled "Radon Reduction System"	()Yes ()No	()Yes
27	Fan manufactured and listed as ASD; fan listed for intended use	()Yes ()No	()Yes
	Fan monitor, manometer, is accessible and appears functional		
28	and is showing adequate pressure as indicated on the information	()Yes ()No	()Yes
	label. Answer (No) if information label is not present.		`
	Fan installed in attic, exterior of building, or garage where no		
29	conditioned space is above. Fan not installed in conditioned	() Voo () No	() Vaa
	space or below conditioned space.	()Yes ()No	()Yes
30	Where fan in basement, installed prior to 1991; not allowed after	()Yes ()No	()Yes
30	1991	() 165 () 140	() 163
31	Fan installed to prevent condensation buildup in fan; fan installed	()Yes ()No	()Yes
31	vertically unless otherwise allowed by manufacturer	() 163 () 140	() 163
32	Fan installed below grade is protected from damage and moisture,	() Yes () No	()Yes
L32	and is accessible		<u> </u>
33	Flexible rubber couplings installed on both sides of fan	()Yes ()No	()Yes
34	Vertical/horizontal termination present in crawlspace, under the	()Yes ()No	()Yes
	soil gas retarder membrane and open to entire membrane	() : 55 () : 10	() . 55
35	Opening around membrane penetrations sealed in a permanent	()Yes ()No	()Yes
	airtight manner		
36	No gurgling noted in the pipe noted water collection	()Yes ()No	() Yes
	Electrical Installation	<u>Condition</u>	Action
			Needed
37	Receptacle in visible and accessible location	() Yes () No	()Yes
38	Plug & cord not over 6 ft.	() Yes () No	()Yes
39	Exterior installation hard wired to a weathertight switch	() Yes () No	()Yes
40	Breaker for hardwired system identified "Radon"	()Yes ()No	()Yes

	Vent Pipe Size, Type, Installation	Condition	Action Needed
41	ABS or PVC - Schedule 40 pipe & fittings	() Yes () No	() Yes_
42	Iron, steel, copper, Schedule 20 PVC, or other material, where approved by local authority In the garage where pipe passes to exterior plastic pipe deemed	()Yes ()No	()Yes
	acceptable by licensing or certifying agency as DWV	() 163 () 140	() 103
43	Vent pipe diameter 3 in. – 4 in. 2 in. diameter allowed where air volume less than 40 cfm	()Yes ()No	() Yes
44	Multiple suction pipes joined into a 3 in. diameter pipe, if multiple suction pipes are installed	() Yes () No () Not Applicable	()Yes
45	Horizontal pipe sloped to drain toward pipe origin	() Yes () No	()Yes
	Pipes do not compromise building structural integrity, do not		
46	compromise fireblocking and fire separation, and do not block building exits and escape openings	()Yes ()No	() Yes
47	Vent pipe labeled as "Radon Reduction System" on each level where pipe is visible	()Yes ()No	()Yes
	Downspout Material (Where Allowed)	Condition	Action Needed
48	Downspout material or equivalent noted only on exterior beyond fan installation Downspout material minimum 3 in. x 4 in. where equivalent of 3 in. plastic Downspout material minimum 4 in. x 5 in. where equivalent of 4 in. plastic	()Yes ()No	() Yes
49	Weather tight seals for downspout materials. Sealants or flange connections observed and intact.	()Yes ()No	() Yes
	Vent Pipe Integrity	Condition	Action Needed
50	Pipe, fittings, connections air tight, properly joined and sealed, no visible openings or breaks in pipe system	()Yes ()No	() Yes
51	Pipe secured to building with hangers or strapping	()Yes ()No	()Yes
52	Fasteners do not penetrate the piping material	()Yes ()No	()Yes
53	Hangers for plastic vertical piping installed every 10 ft.	() Yes () No	()Yes
54	Hangers for plastic horizontal piping installed every 6 ft.	() Yes () No	() Yes
55	Other piping materials appears adequately supported	()Yes ()No	() Yes
56	Piping does not block access to entrances or other areas requiring access for maintenance/inspection	() Yes () No	()Yes
57	Pipe insulated to at least R1.8 and a vapor retarder installed in areas where damaging condensation or ice is likely to form on outside of pipe	() Yes () No () Not Applicable	() Yes
58	Pipe and fan insulated to at least R4 in areas where ice could form on inside of pipe or fan that could affect system performance	() Yes () No () Not Applicable	() Yes

	Vent Pipe Termination	Condition	Action Needed
59	Vertical discharge vent pipe terminates at least 10 ft. above grade, patio, decking, sidewalk, and at least 12 in. above the roof penetration point, or at least 6 in. above the roof if installed at eaves	()Yes ()No	()Yes
60	Vertical discharge vent pipe terminates at least 10 ft. horizontally from opening into conditioned space (e.g. window, door), or at least 2 ft. vertically above the opening	()Yes ()No	()Yes
61	Vertical discharge vent pipe terminates at least 10 ft. in any direction from a mechanical air intake opening (e.g. HRV, ERV, evaporative cooler)	()Yes ()No	() Yes
62	Vertical discharge vent pipe terminates at least 1 ft. above any obstruction within 10 ft., such as a parapet wall	()Yes ()No	()Yes
63	Horizontal discharge (90°) vent pipe terminates at least 10 ft. from building openings in any direction, and at least 20 ft. above grade	() Yes () No	()Yes
64	Diffuse horizontal discharge (e. g., rain cap) vent pipe terminates at least 15 ft. horizontally, or at least 4 ft. vertically above opening into conditioned space, and at least 15 ft. above grade	()Yes ()No	()Yes
65	Rain cap installed in area where torrential rainfalls, high wind, or blockage from debris rain caps	()Yes ()No	()Yes
66	Caps or fittings at termination is unlikely to create a blockage (e. g., ice accumulation)	()Yes ()No	()Yes
67	Vent pipe termination does not point downward (umbrella handle style)	()Yes ()No	()Yes
68	Exhaust air is directed so it is unlikely to directly strike the building	() Yes () No	() Yes
69	Wire mesh or screen, where present, not smaller than $\frac{1}{2}$ in.	()Yes ()No	() Yes

IMPORTANT INFORMATION

This checklist is general in nature. It is not intended to discourage or limit additional or more detailed inspections, and it is not intended to supplant radon inspection standards or requirements promulgated by government authorities.

An inspection performed using this checklist does not replace a radon test to determine the radon level in the structure. Consumers are urged to have a radon test performed in addition to any inspection conducted using this checklist. Consumers are urged to use qualified and appropriately licensed people to conduct radon tests, and to install radon mitigation systems.

Consumers have several sources of information available to them. Additional information about radon may be found at the EPA website: https://www.epa.gov/radon, at state radon offices, and at some building departments. Additional information about home inspections is available at The American Society of Home Inspectors, Inc. (ASHI) website: http://www.homeinspector.org.

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