

Mechanical Appliance and Equipment Inspection Checklist



Inspect Mechanical Appliance and Equipment				
Task	Inspection Step	Code Compliance		Comments /Location
		Yes	No	
1 Access Inspection Sections: M1305 1 M1305 11 M1305 1 2 M1305J .3_ M1305.1 4 M1305 1 4.2 M1305 1.4.3	1. Identify possible mechanical appliance and equipment locations.			
	2. Verify size of access opening.			
	3. Check access passageway_			
	4. Identify type of mechanical appliance.			
	5. Determine if mechanical appliance and equipment location conforms to code requirements.			
	6. Measure Sefttce space.—			
	7 Check size and location of platform, if required.			
	8 Check for electric outlet and light, if required.			
2 Clearance Inspection Sections. M1303 1 M1306 M1402 2 G2409 (3081 Table M1306.2	1 Locate mechanical appliance and equipment.			
	2 Determine type of mechanical appliance and equipment.			
	3. Read required clearances for appliances and equipment from label.			
	4. Measure actual clearances to combustible materials			
	5. Compare required and actual clearances.			
	0. If actual clearance is less than required, check for protection per Table M1306.2.			
3 Installation Inspection SE< lions' M1307 '713073 m1307 31	1. Locate mechanical appliances and equipment			
	2 Confirm agreement of mechanical appliance installation and manufacturer's installation instructions			
	3. Check to be sure that manufacturer's operating instructions are attached to the mechanical appliance, as applicable			
	4.1 installed in garages, check mechanical appliance and equipment for protection against physical damage and flammable vapors.			
	5. Confirm that mechanical appliance and equipment located outdoors conforms to code requirements.			



Task 1: Mechanical Appliance and Equipment Installation Inspection Checklist

Inspect Gas Fuel Supply Systems				
Task	Inspection Step	Code Compliance		Comments/ Location
		Yes	No	
1. Mechanical Appliance and Equipment Installation Inspection Sections: MI 502, 62404, 62406, G2407, G2408, 62409, 62410, 62419, G2420, 62421, 62422, 62425, 62426, 62427, 62428. G2429, G2430, 62431, 62432. G2433, G2434, 62435, 62436, G2437, G2438, G2439, G2440, 62441, 62442, 62443, 62444, 62445, G2446, 62447, 62448, G2449, G2450. 62451, 62452. 62453	I Verify mechanical appliances and equipment are installed in approved locations. I 1 Locate mechanical appliances and equipment 1.2 Verify mechanical appliance and equipment installations comply with code. 1.3 Verify that required access is provided and complies with code. 1.4 Verify that required safety devices are provided and comply with code. For example, a flame safeguard device.			
	2. Check mechanical appliance and equipment combustion air installation. 2.1 Locate combustion air openings. 2.2 Verify combustion air is being supplied from an approved source. 2.3 Verify that combustion air is not being depleted.			
	3 Check clearance to combustibles. 3.1 Locate mechanical appliances and equipment requiring clearances to combustibles. 3.2 Verify that required clearances to combustibles have been provided.			
	4. Check installation of vents to mechanical appliances and equipment. 4.1 Locate mechanical appliance and equipment that require vent installation. 4.2 Verify that venting is installed per manufacturer's instructions.			
	5. Confirm that mechanical appliances and equipment have been installed above sources of ignition. 5.1 Locate mechanical appliances and equipment in hazardous locations that require elevation 5.2 Verify that mechanical appliances and equipment are installed above sources of ignition.			

Step 4

Verify that all fittings, joining means and fitting-to-piping means are compatible, comply with the code and meet the manufacturer's recommendations (see Figure 42).



Figure 42: Connecting Appliance

Corrugated Stainless Steel Tubing, (CSST) manufacturers require installers of their piping systems to be trained and certified for their product.

Task 2: Gas Piping Materials Inspection Checklist



Inspect Gas Fuel Supply System				
Task	Inspection Step	Code Compliance		Comments/Location
		Yes	No	
2. Gas Piping Materials Inspection Sections: G2412.5, G2414, G2415, G2416, G2417.2, G2418, G2419.4, G2420.1.1, G2420.5.1, G2420.5.2, G2422.1, G2422.1.2, G2422.1.3	1. Locate mechanical appliances and equipment.			
	2. Verify that gas piping/tubing material complies with code.			
	3. Confirm that gas shutoff valves comply with the code.			
	4. Verify that all fittings, joining means and fitting-to-piping means are compatible, comply with the code and meet the manufacturer's recommendations.			



Gas Piping Installation Inspection Checklist

Inspect Gas Fuel Supply System				
Task	Inspection Step	Code Compliance		Comments/ Location
		Yes	No	
3 Gas Piping Installation Inspection Sections: G2405 62411 62412 G2413 62414 62415 G2416 62411 62418 G2419 62420 G2421 62422 62423 62424 Tables: G2413.4(1) 62413.4(2) 62413.4(3) 62413.4(4) G2413.4(5) 62413.4(6) 62424.1	1 Check gas piping installed underground for code compliance 1.1 Verify that minimum depth has been maintained. 1.2 Confirm that piping has been protected from physical damage and corrosion. 1.3 Check plastic/metallic piping connections for correct location(s) and bonding 1.4 Investigate foundation penetrations for structural integrity and proper seal. 1.5 Confirm that piping beneath buildings has been correctly installed. 1.6 Check nonmetallic gas piping for installation of tracer wire.			
	2 Check gas piping installed above ground for code compliance. 2.1 Confirm that drilling and notching of wood-framed structural members complies with code. 2.2 Verify that piping has not been installed in prohibited locations. 2.3 Check piping in concealed locations to be sure that no unions or running threads are installed, or joints have been brazed, if applicable. 2.4 Verify that piping installed in concrete slabs complies with the code. 2.5 Check bends in metallic tubing and plastic piping for code compliance. 2.6 Confirm that concealed tubing that penetrates a stud, joist or framing member has been protected from puncture. 2.7 Verify that hangers and supports are of sufficient strength to support piping, are of compatible materials, and are spaced correctly 2.8 Confirm that a sediment trap is installed as part of gas utilization equipment or at the inlet of the equipment. 2.9 Confirm that each outlet has been closed gas-tight with a cap or plug. 2.10 Check areas for "gas" labels on gas piping when other than black steel pipe is used. 2.11 Check shutoff valve location and installation for code compliance. Use special requirements for fireplace outlets and quick-disconnect devices.			
	3. Confirm that piping and tubing components are sized correctly. 3.1 Check system to be sure it is sized to meet the required demand of attached appliances. 3.2 Verify that valves are equivalent in nominal size to the piping served.			
	4. Observe testing of the system. 4.1 Verify that the correct testing medium is used for the operating pressure of the piping system 4.2 Confirm that the method of testing is appropriate for the type of piping system 4.3 Check for leaks by determining loss of test pressure per pressure gauges.			

Gas Fuel Supply System Inspection Checklist



Inspect Gas Fuel Supply System				
Task	Inspection Step	Code Compliance		Comments/ Location
		Yes	No	
1. Mechanical Appliance and Equipment Installation Inspection Sections: M1502, G2404, G2406, G2407, G2408, G2409, G2410, G2420, G2421, G2422, G2425, G2426, G2427, G2428, G2429, G2430, G2431, G2432, G2433, G2434, G2435, G2436, G2437, G2438, G2439, G2440, G2441, G2442, G2443, G2444, G2445, G2446, G2447, G2448, G2449, G2450, G2451, G2452, G2453	1. Verify mechanical appliances and equipment are installed in approved locations. 1.1 Locate mechanical appliances and equipment. 1.2 Verify mechanical appliances and equipment installations comply with code. 1.3 Verify that required access is provided and complies with code. 1.4 Verify that required safety devices are provided and comply with code.			
	2. Check mechanical appliances and equipment combustion air installation. 2.1 Locate combustion air openings. 2.2 Verify combustion air is being supplied from an approved source. 2.3 Verify that combustion air is not being depleted.			
	3. Check clearance to combustibles. 3.1 Locate mechanical appliances and equipment requiring clearances to combustibles. 3.2 Verify that required clearances to combustibles have been provided.			
	4. Check installation of vents to mechanical appliances and equipment. 4.1 Locate mechanical appliances and equipment that require vent installation. 4.2 Verify that venting is installed per manufacturer's instructions.			
	5. Confirm that mechanical appliances and equipment have been installed above sources of ignition. 5.1 Locate mechanical appliances and equipment in garages that require elevation. 5.2 Verify that mechanical appliances and equipment are installed at required elevation.			
2. Inspect Gas Piping Materials Sections: 62412.5, G2414, G2415, G2416, G2417.2, G2418, 62419.4, G2420.1.1, G2420.5.1, G2420.5.2, G2422.1, 62422.1.2, 62422.1.3	1. Locate the mechanical appliances and equipment.			
	2. Verify that gas piping/tubing material complies with code.			
	3. Confirm that gas shutoff valves comply with the code.			
	4. Verify that all fittings, joining means and fitting-to-pipe means are compatible, comply with the code and meet the manufacturer's recommendation.			



Gas Fuel Supply Systems Inspection Checklist (continued)

Inspect Gas Fuel Supply Systems				
Task	Inspection Step	Code Compliance		Comments/ Location
		Yes	No	
3. Gas Piping Installation Inspection Sections: G2405 G2411 G2412 G2413 G2414 G2415 G2416 G2417 G2418 G2419 G2420 G2421 G2422 G2423 G2424 Tables: G2413.4(1) G2413.4(2) G2413.4(3) G2413.4(4) G24.13 .4(5); G2413.4(6) G2424.1	1 Check gas piping installed underground for code compliance. 1.1 Verify that minimum depth has been maintained. 1.2 Confirm that piping has been protected from physical damage and corrosion. 1.3 Check plastic/metallic piping connections for correct location(s) and bonding. 1.4 Investigate foundation penetrations for structural integrity and proper seal. 1.5 Confirm that piping beneath buildings has been correctly installed. 1.6 Check nonmetallic gas piping for installation of tracer wire			
	2 Check gas piping installed above ground for code compliance. 2.1 Confirm that drilling and notching of wood-framed structural members complies with code. 2.2 Verify that piping has not been installed in prohibited locations. 2.3 Check piping in concealed locations to be sure that no unions or running threads are installed, or joints have been brazed, if applicable. 2.4 Verify that piping installed in concrete slabs complies with the code. 2.5 Check bends in metallic tubing and plastic piping for code compliance. 2.6 Confirm that concealed tubing that penetrates a stud, joist or framing member has been protected from puncture. 2.7 Verify that hangers and supports are of sufficient strength to support piping, are of compatible materials, and are spaced correctly. 2.8 Check to be sure a sediment trap is installed as part of gas utilization equipment or at the inlet of the equipment. 2.9 Confirm that each outlet has been closed gas-tight with a cap or plug. 2.10 Check areas for "gas" labels on gas piping when other than black steel pipe is used. 2.11 Check the shutoff valve location and installation for code compliance.			
	3. Confirm that piping and tubing components are sized correctly. 3.1 Check system to be sure it is sized to meet required demand of attached appliances. 3.2 Verify that valves are equivalent in nominal size to the piping served.			
	4. Observe testing of the system. 4.1 Verify that the correct testing medium is used for the operating pressure of the piping system 4.2 Confirm that the method of testing is appropriate for the type of piping system. 4.3 Check for leaks by determining loss of test pressure per pressure gauges.			

Venting of Mechanical Appliance Inspection Checklist



Inspect Venting of Mechanical Equipment				
Task	Inspection Step	Code Compliance		Comments/ Location
		Yes	No	
1. Inspect Vent Connectors Sections: M1803.3, M1803.3.2, M1803.3.4, M1803.3.5, G2427.10.11 Tables M1803.3.4, G2427.10.2.4	1. Confirm that materials used for connectors comply with the manufacturer's installation instructions for the equipment.			
	2. Check location of connectors.			
	3. Verify that size of connectors accommodates volume of flue gases.			
	4. Check for positive pitch of connectors.			
	5. Measure length of horizontal run.			
	6. Measure clearances from combustibles materials.			
	7. Examine for secure support for connectors.			
	8. Verify that installation conforms to code requirements.			
	9. Check joints for fasteners and for leaks.			
2. Inspect Vents Sections: M1801.7, M1801.8, M1801.10, MI 802.2.1 M1802.2.2, M1804.1, G2427.6.8, G2427.6.8.1 Table M1804.1, Table G2428.2(2), Table G2428.3(1)	1. Verify that type of vents and type of mechanical appliances are compatible.			
	2. Check size of vents.			
	3. Confirm that vents are located correctly.			
	4. Verify that vents are supported.			
	5. Confirm that vents are installed correctly.			
	6. If multiple mechanical appliances and equipment are vented, check sizing.			
3. Inspect Termination Sections: M1804.2.1, M1804.2.3, M1804.2.5, M1804.2.6, G2427.6.3 Figure G2427.6.3	1. Identify type of vent installed.			
	2.11 natural draft type vent has been installed, check for a minimum of 5' height or more termination and vent collar.			
	3. If Type B or BW vent has been installed, confirm that distance is not less than indicated in Figure 92.			
	4. If Type L vent has been installed, check for 2' above roof and 2' above any portion of building within 10 feet.			
	5. If wall furnace vent has been installed, verify that distance between termination and bottom of furnace is a minimum of 12'.			
	6. If direct vent (sealed combustion unit) has been installed, confirm that installation is per manufacturer installation instructions.			
	7. Confirm that vent termination is located as specified by code.			
	8. Verify that a flashing has been installed.			
	9. Check termination for installation of a listed vent cap.			

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Air Duct Inspection Checklist

Inspect Air Ducts				
Task	Inspection Step	Code Compliance		Comments/ Location
		Yes	No	
Inspect Materials and Installation Inspection Sections: R302.11 R602.8 M1407, M1601.1, M1601.1.1, M1601.2; M1601.3 M1601.4.1, M1602.1, M1602.2, G2407 Section R602.8, M1601.3	1 Determine that the type of materials used are suitable for the location where they are installed.			
	2 Identify type of air carried by duct.			
	3. Confirm that the type of duct material used is suitable for the type of air carried.			
	4. Confirm that the source of return air and outside air is from an approved source.			
	5. Examine joints for air tightness and fastening.			
	6. Examine duct supports for type and spacing.			
	7. Confirm that insulation is according to code requirements.			
	8. Check that openings around ducts are properly fireblocked.			
	9 Ensure makeup air is considered on rough-in if the kitchen exhaust hood exceeds 400 cfm.			
	10. Ensure clothes dryer vent is installed on rough-in to assure conformance to sizing and length requirements, i.e. now 4 inches min.			

Appliance and Equipment Installation Inspection Checklist



Inspect installation of Appliances and Equipment				
Task	Inspection Step	Code Compliance		Comments/ Location
		Yes	No	
1. Range, Clothes Dryer and Gas Log Inspection Sections: M1303 M1501, M1502, M1503, M1504, M1505, M1901.1, G2420.5, G2420.5.1, G2422 G2432.2, G2438	1. Check all labels for required information.			
	2. Measure vertical clearance between cooking top and combustible materials.			
	3. Verify that range hood has been installed in accordance with the range hood instructions.			
	4. Check clothes dryer exhaust vent installation.			
	5. Confirm that gas logs have been installed correctly.			
	6. Check size and installation of gas appliance connectors.			
2. Combustion Air Inspection Sections: M1701.1, M1701.2, G2407.1 (304.1), G2407.5 (304.5), G2407.6 (304.6), G2407.7 (304.7), G2407.9 (304.9), G2407.10 (304.10)	1. Determine if sufficient combustion air is provided.			
	2. If additional combustion air is required, determine source: adjacent inside, inside rooms, outdoors, attic, crawl space (combination).			
	3. Determine if combustion air is adequate for each source.			
	4. Inspect installation of each source. 4.1 Installation requirements for indoor air from adjacent rooms. 4.2 Installation requirements for horizontal ducts and openings. 4.3 Installation requirements for attic air. 4.4 Installation requirements for crawl space/attic air combination.			
	5. Confirm that volume dampers are not installed.			



Appliance and Equipment Installation Inspection Checklist (continued)

Inspect Installation of Appliances and Equipment				
Task	Inspection Step	Code Compliance		Comments/ Location
		Yes	No	
3. Centrally Ducted Cooling System Inspection Sections: N1102.4.1.2 N1103.1.1 N1103.3.2 1 N1103.7 M1305.1, M1401.2, M1401.4, M1403.2, M1411.3, M1411.3.1	1. Verify that an approved means collects and disposes of condensate.			
	2. Check installation of approved disposal system for size, pitch and unobstructed piping.			
	3. Check location to determine whether an additional condensate disposal system is required.			
	4. If additional condensate disposal system is required, inspect installation of the system to be sure pan system is water tight and has a drain line.			
	5. Check location of outdoor condensing unit for conformance to local zoning ordinances.			
	6. Check to be sure that equipment installed outdoors is labeled for outdoor use, level, adequately supported and installed per manufacturer's instructions.			
	7. Verify that condensing unit is supported on level base or platform and 3 inches above adjoining ground level (heat pump).			
	8. Check accessibility for inspection, service and replacement.			
	9. Verify that locking access caps are installed on refrigerant circuits to prevent unauthorized access to the refrigerant			
	10. Verify programmable thermostat is installed to control primary heating and cooling systems, that HVAC equipment is sized and complies with the code, the blower air door test and duct test reports meet requirements for locale, and air handler meets requirements for air leakage.			