



Embassy of the United States of America
Ottawa, Canada

Subject: OBO/SHEM Residential Safety, Health and Fire Prevention Awareness Checklist.

The following OBO/SHEM guidance was generated due to the significant number of mishaps that have occurred in residences (worldwide). This checklist can be used to assist you in evaluating safety, health, fire and environmental factors when considering lease or purchase of a residence. This is not intended to be an all inclusive list. A responsible property inspector should be contacted for additional guidance. Local codes may be more stringent than the information found in this checklist.

Item	Acceptable Condition	Additional Information	Contact
Fuel Burning Appliances and Equipment - Furnaces, Boilers, Water Heaters, Kerosene Heaters, Space Heaters, Dryers			
Venting of Exhaust Gases	<ul style="list-style-type: none"> • outdoors away from intakes and windows • chimney and flue routinely inspected and cleaned • chimney and flue constructed and installed properly (correct materials, height above structure) 	ALDAC 95 State 130305 UMC Chapter 8	OBO/PE /BDE/MEB OBO/OM/SHEM
Combustion Air	<ul style="list-style-type: none"> • adequate combustion air ducted to unit or • unobstructed area large enough to provide adequate combustion air • small mechanical areas have sufficient combustion air and ventilation openings • no hazardous or flammable vapor sources near combustion equipment 	UMC Chapter 7	OBO/PE/BDE/MEB OBO/OM/SHEM
Operation and Maintenance	<ul style="list-style-type: none"> • instructions available for proper operation and maintenance • equipment operated and maintained as intended within design limits • warning labels (English and local language) present on combustion appliances 	ALDAC 96 State 086164	OBO/OM/FAC OBO/OM/SHEM
Clearance to Combustibles	<ul style="list-style-type: none"> • adequate clearance from exhaust flue to combustible materials • adequate clearance from equipment to combustible materials • boiler and furnace rooms not used for storage areas 	FPG, Section I-6 UMC Chapter 8	OBO/PE /BDE/MEB OBO/OM/FP
Fuel Type and Storage	<ul style="list-style-type: none"> • clean fuel is used • proper type and location of fuel storage container (including tanks) • protect fuel storage containers from damage 	NFPA 30	OBO/PE/BDE /MEB OBO/OM/FP OBO/OM/SHEM
Carbon Monoxide Alarms	<ul style="list-style-type: none"> • carbon monoxide alarm installed outside of sleeping areas in residences with a combustion appliance (other than stove) or an attached garage 	ALDAC 00 State 125706	OBO/OM/SHEM

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Kerosene Heaters	<ul style="list-style-type: none"> • correct grade of clear kerosene (K-1), fuel stored outside • refuel outdoors away from sources of ignition, and after the heater has cooled completely • set the wick height to the manufacturer's recommended level • chimney is seated properly • leave a window cracked in the room with the heater • do not leave the heater unattended and turn off before going to bed • keep the heater at least 0.92 m (3 ft.) from combustibles • smoke detectors and ABC extinguishers are in working order • unit is operated and maintained according to the manufacturer's instruction and residents are informed of the instructions • carbon monoxide alarms must be placed in dwelling 	FPG, Section F-4 94 State 020823	OBO/OM/FP OBO/OM/SHEM
Liquefied Petroleum Gases (LPG)	<ul style="list-style-type: none"> • cylinders during use <ul style="list-style-type: none"> • must be located on the exterior of the building • equipped with a pressure regulator having a pressure relief valve • upright and securely anchored or chained in place • at least 7.6 m (25 ft) from sources of ignition and 1.5 m (5 ft) from building openings • supply through rigid pipe (iron or steel), or tubing (steel, brass or copper) • manual shut-off valve within 1.8 m (6 ft) of appliance • trained employees for LPG installation and cylinder replacement • cylinder storage <ul style="list-style-type: none"> • outside within a fenced enclosure • outlet valves closed with cap or cover • steel posts or barriers if vehicle damage is possible • leak detection using soapy water must be conducted over all fittings and connections during cylinder or appliance replacement or anytime supply line work is done • do not recharge or fill tanks or bottles at the site, deliveries must be by packaged bottles • "No Smoking" signs clearly displayed around the storage enclosure 	FPG, Section F-2	OBO/OM/FP OBO/PE/BDE/MEB

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Fire and Life Safety			
Emergency Egress	Second only to early detection, adequate emergency egress is one of the most important fire safety elements. Requirements may vary with the type of building in question. It is therefore recommended that section B-2, B-3, B-4, B-7 and E-1 in the Fire Protection Guide (FPG) be consulted for guidance.	FPG, Sections B-2, B-3, B-4, B-7 and E-1	OBO/OM/FP
Maximum Travel Distance to an Exit	<ul style="list-style-type: none"> without automatic fire sprinkler protection: 45.8 m (200 ft.) automatic fire sprinkler protection: 61 m (250 ft.) 	FPG, Section E-1	OBO/OM/FP
Smoke Detectors	<ul style="list-style-type: none"> each sleeping room corridor leading to bedrooms top of internal stairwells one on each floor level placement should be on the ceiling, or alternately on a wall between 10 cm (4 in.) to 30.5 cm (12 in.) away from the ceiling regularly check detectors for proper operation and replace batteries once each year 	FPG, Sections E-1 and G-1	OBO/OM/FP
Fire Extinguishers	<ul style="list-style-type: none"> one Department standard 4.45 kg (10 lb.) extinguisher (4-A:40-B:C) wall mounted in each kitchen 	FPG, Sections E-1 and G-2	OBO/OM/FP
Alarm Systems	Several factors influence fire alarm and/or fire suppression system requirements for a particular building. It is therefore recommended that OBO/OM/SAF (FIRE) be contacted for specific requirements. General information regarding fire systems can be found in Sections G-4 and G-5 in the Fire Protection Guide (FPG).	FPG, Sections G-4 and G-5	OBO/OM/FP

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Lighting	<ul style="list-style-type: none"> apartment buildings or congregate residences with 10 or more occupants: public space, hallway, stairway or other means of egress must have illumination of 1 foot candle power at floor level by emergency lighting if emergency generator is not available to provide emergency lighting, provide battery-packed emergency lights in public spaces, hallway, stair way or other means of egress installed and maintained correctly 	FPG, Section E-1 NEC Section 700-12	OBO/OM/FP OBO/PE/BDE/EEB
Exit Signs	<ul style="list-style-type: none"> exit doors in public corridors on floors with sleeping accommodations: <ul style="list-style-type: none"> illuminated exit signs directional signs if path is not straight or the exit is less than obvious 	FPG, Section E-1	OBO/OM/FP
Window Grilles	<ul style="list-style-type: none"> operable from the inside minimum opening: 0.529 m² (5.7 ft.²) minimum dimension: 61 cm (24 in) x 51 cm (20 in) and not be more than 112 cm (44 in) from the floor bars or grilles must have inside release mechanism 	FPG, Sections E-1, B-4 and B-5	OBO/OM/FP
Electrical			
Ground Fault Circuit Interrupters	<ul style="list-style-type: none"> should be installed in kitchens, bathrooms, garage areas, outdoor locations and other areas where water is encountered when working with electricity 	FPG, Section F-1, NEC, Section 210-8(a)	OBO/PE/BDE/EEB OBO/OM/FP OBO/OM/SHEM
Grounding	<ul style="list-style-type: none"> verify grounding, and if missing, connect the main electrical service feeder's neutral conductor to earth-driven ground rod(s), and to the main cold water pipe provide separate equipment grounding conductors to all branch circuits and feeders (if not present) 	FPG, Section F-1 NEC, Section 210-8(a)	OBO/PE/BDE/EEB OBO/OM/FP OBO/OM/SHEM

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Circuit Capacity	<ul style="list-style-type: none"> review usage and capacity and avoid excessive electrical loads verify that the following most commonly used branch circuit connectors in residences are protected by fuses or circuit breakers having trip elements not larger than: <table border="0"> <tr> <td><u>Wires (Comparable U.S. Wire Size)</u></td> <td><u>Trip Setting</u></td> </tr> <tr> <td>1.5 mm² (smaller than #14 AWG, 15A)</td> <td>10A</td> </tr> <tr> <td>2.5 mm² (smaller than #12 AWG, 20A)</td> <td>16A</td> </tr> <tr> <td>4 mm² (smaller than #10 AWG, 30A)</td> <td>25A</td> </tr> <tr> <td>6 mm² (smaller than # 8 AWG, 50A)</td> <td>40A</td> </tr> <tr> <td>10 mm² (smaller than # 6 AWG, 65A)</td> <td>50A</td> </tr> <tr> <td>16 mm² (smaller than # 4 AWG, 85A)</td> <td>60A</td> </tr> </table>	<u>Wires (Comparable U.S. Wire Size)</u>	<u>Trip Setting</u>	1.5 mm ² (smaller than #14 AWG, 15A)	10A	2.5 mm ² (smaller than #12 AWG, 20A)	16A	4 mm ² (smaller than #10 AWG, 30A)	25A	6 mm ² (smaller than # 8 AWG, 50A)	40A	10 mm ² (smaller than # 6 AWG, 65A)	50A	16 mm ² (smaller than # 4 AWG, 85A)	60A	FPG, Section F-1 and F-3 NEC Sections 210, 220 and 310	OBO/PE/BDE/EEB OBO/OM/FP OBO/OM/SHEM
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Fall Protection: Homes with Small Children																	
Railings	<ul style="list-style-type: none"> sturdy railing supports no more than 4 inches apart bottom of railing assembly no more than 4 inches from the floor, top of railing at 42" 		OBO/PE /BDE OBO/OM/SHEM														
Windows	<ul style="list-style-type: none"> windows open no more than 4-5 inches and furniture away from windows 		OBO/OM/SHEM														
Swimming Pools																	
Barrier and Safety Equipment	<ul style="list-style-type: none"> a barrier (fence, wall, etc.) 4 ft minimum height surrounding the pool self-closing, self-latching, lockable hardware on all access points (gates) rescue equipment available (shepherd's crook, pole, ring buoy) and in plain view depth markings indicated and safety rules posted outlets equipped with Ground Fault Circuit Interrupters (GFCI) and covers chlorine stored in a cool, dry, ventilated area separate from other materials 	Resource Guide Section 10.2	OBO/PE/BDE OBO/OM/SHEM														

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Environmental			
Asbestos	<ul style="list-style-type: none"> • acquisitions: asbestos inspection conducted and impact of asbestos determined • asbestos materials identified and maintained in good condition • maintenance and minor renovations avoid disturbance of asbestos materials • if asbestos material is to be disturbed, it is removed properly and records of removal and disposal are maintained 	OBO Directive FAC001, Asbestos Mgt. Plan, Resource Guide Section 1.2	OBO/OM/FAC OBO/OM/SHEM
Leaded Paint	<ul style="list-style-type: none"> • new paint that is applied is lead-free • paint in good condition with minimal damage • paint sampled prior to renovation or major maintenance work • leaded paint removed prior to start of work or minimize disturbance 	ALDAC 93 State 120625 - Leaded Paint Hazard Program	OBO/OM/SHEM
Pesticides	<ul style="list-style-type: none"> • building conditions or location not inviting to common local pests • any history of pest problems or extensive pesticide use • willing and capable to implement Integrated Pest Management (IPM) program in USG occupied space <ul style="list-style-type: none"> • pest control measures to reduce pest habitats • self-help measures to control pests (if control measures are not effective) • apply pesticides listed in the IPM only as a last resort 	ALDAC 94 State 271156 -Integrated Pest Management Program	OBO/OM/SHEM
Water Quality	<ul style="list-style-type: none"> • water is potable (microbiologically safe and within acceptable contaminant levels listed in Environmental Protection Agency drinking water standards) • if water is not potable then filtering, boiling or other means may have to be used to render the water safe to drink 	Environmental Health Reference Resource Guide Section VII	OBO/OM/SHEM

Local Considerations - (List any additional local considerations)

Item	Acceptable Consideration	Additional Information	Contact

Acronyms	ALDAC EPA FPG NEC Resource Guide SHEM UMC	= = = = = = =	All Diplomatic and Consular Posts Environmental Protection Agency Fire Protection Guide National Electrical Code Safety, Occupational Health and Environmental Management Resource Guide Safety, Health and Environmental Management Program Uniform Mechanical Code (1997)
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