RESIDENTIAL GENERATOR PERMITTING CHECKLIST
ART.702 N.E.C. (ART. 220 and 445)

NOTE: SUBMIT ANY MECHANICAL SUB PERMITS WITH THIS APPLICATION, INCLUDING ALL REQUIRED INFORMATION

☐ **SITE SURVEY DRAWING: SURVEY DRAWING "MUST" INCLUDE FLOOD ZONE INFORMATION ON IT.** Show generator fuel tank locations with fuel lines. Show location of all windows and doors near the generator exhaust, **GENERATOR EXHAUST SHALL BE 10 ft. AWAY FROM ANY OPENINGS THAT COULD ALLOW FUMES INTO THE BUILDING, INCLUDING THOSE IN THE NEIGHBORS' HOUSE PER FBC MECHANICAL CODE SECTION 1905**

☐ **Flood Zone:** Must comply with **FRC 322.1.6 AND PBC ARTICLE 18 CHAPTER 4 SECTION2.13**

Any flood zone not "B or C" must be at or above the finished floor elevation. Specify Flood Zone; and identify the main building FFE if anything other than B, C.

☐ **SLAB DRAWING:** Show slab size, depth of slab and type of reinforcement used. Specify generator anchor details. Generator must be set as close to the building as allowable by code and spacing from the building **SHALL MEET** manufacturer's specifications.

☐ **RISER DRAWING:** Provide a complete electrical riser drawing including service size, panel(s), transfer switch, main disconnect(s) and generator installation. Show all wire, conduit, breaker sizes and equipment sizes/ratings.

☐ **LOAD CALCULATION:** (To determine the size of the generator and transfer switch): A whole house generator system will be calculated with the optional method N.E.C. 220. Separate "EM" panel(s) will be calculated at 100% of their load, or by demand meter with approval of Chief Electrical Inspector per NEC 220.87 (1) exception (must provide information).

☐ **GENERATOR SPECS:** Provide generator specifications for the generator including KW rating, output amps, size of generator breaker, type of fuel being used and the sound rating.

☐ **TRANSFER SWITCH:** Required for all generators per N.E.C. 702.4 and 702.5. Provide transfer specification on the transfer switch (Select ***ONLY ONE*** choice below)

MANUAL TRANSFER SWITCH:(OPTIONS):

☐ A. Size .for the entire load of the service, or

☐ B. Size for dedicated optional standby NEC 702 panel(s), which may be built into the panel as a transfer switch with mechanical interlock, or a separate transfer switch. All loads to service must be identified. If cord connected, the receptacle shall be sized for at least the corresponding over current protection at the generator, or other over current protection device in front of the receptacle, not to exceed the output capacity of the generator.

AUTOMATIC TRANSFER SWITCH:(OPTIONS):

☐ A. Sized to transfer the entire load whole house, load calculation per NEC 220

☐ B. Pre-select "EM" panel(s) the load to be served with an existing panel or optional standby panel and transfer switch. Loads at 100%

☐ C. Provide automatic load shedding to reduce total load imposed on the generator, not to exceed output capacity of the generator.

☐ **Screening**: Provide an OPAQUE screen around unit to screen the generator from the street and adjacent property views. The property owner can install or utilize an existing 4 ft. opaque fence or wall or hedges around the unit. A shadowbox fence is NOT an opaque screen.

☐ **SIGN**: Signs shall be placed at the service-entrance equipment that indicates the location of on-site optional standby power sources. Grounding warning and power inlet Per NEC 702.7

☐ **Disconnects**: Disconnecting means and emergency shut down PER 445.18 (A) through (D)

COMMERCIAL GENERATOR PERMITTING CHECKLIST
ART.700 and 702 N.E.C. (ART. 220 and 445)

NOTE: SUBMIT ANY MECHANICAL SUB PERMITS WITH THIS APPLICATION, INCLUDING ALL REQUIRED INFORMATION

☐ **SITE SURVEY DRAWING: May need a DRC administrative amendment.**

Show generator and fuel tank locations with fuel lines. Show location of all windows and doors near the generator exhaust

☐ **GENERATOR EXHAUST SHALL BE 10 ft. AWAY FROM ANY OPENINGS THAT COULD ALLOW FUMES INTO THE BUILDING PER FBC MECHANICAL CODE SECTION 1905.**

☐ **Flood Zone:** Must comply with **FRC 322.1.6 AND PBC ARTICLE 18 CHAPTER 4 SECTION 2.13 Any flood zone not "B or C" must be at or above the finished floor elevation.** Specify Flood Zone; and, identify the main

building FFE if anything other than B or C.

☐ **SLAB DRAWING:** Show slab size, depth of slab and type of reinforcement used. Specify generator anchor details.

Generator must be set as close to the building as allowable by code and spacing from the building **SHALL MEET** manufacturer's specifications.

☐ **RISER DRAWING** Provide an electrical riser drawing. Complete with service, panel(s), transfer switch, main disconnect(s) and generator installation. Show breaker, pipe and wire sizes.

☐ **RISER CALCULATION** (To determine the size of the generator and transfer switch): A whole building generator system will be **Sized per NEC 220 service calculation or FPL demand meter reading for the past 12 months. Separate "EM" panel(s) will calculatated at 100% of the load.**

☐ **GENERATOR SPECS.** Provide generator specifications including the kW rating, output amps, size of generator breaker, type of fuel being used and the sound rating.

☐ **TRANSFER SWITCH:** Required for all generators per N.E.C. 702.6. Provide transfer specification on the transfer switch

Manual TRANSFER SWITCH: (OPTIONS)

☐ A. Sized tor the entire load on the service, or

☐ B. Sized for dedicated optional standby NEC 702 panel(s), which may be built into the panel as a transfer switch with mechanical interlock, or a separate transfer switch. All loads to service must be identified. If cord connected, the receptacle or cam-locks shall be sized for at least the corresponding over current protection at the generator, or other over current protection device in front of the receptacle, not to exceed the 01.1,tput capacity of the generator.

AUTOMATIC TRANSFER SWITCH: (OPTIONS)

☐ **A.** Sized to transfer the entire load. **Sized per NEC service calculation or FLP demand meter reading for the** past 12 months.

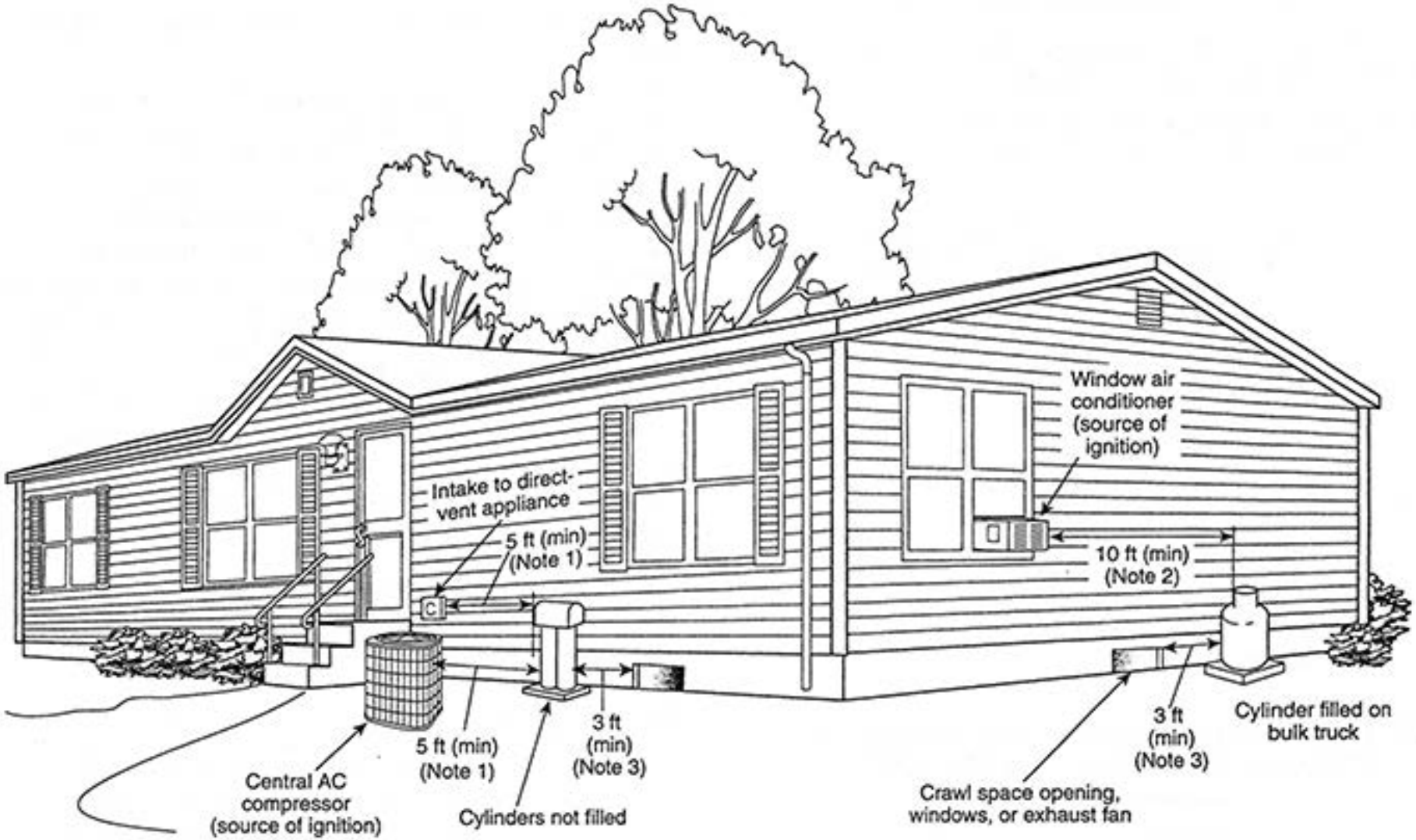
☐ **B.** Pre-select **("EM" panel(s) the** load to be served with an optional standby panel and transfer switch. **Loads calculated at 100%**

☐ **C.** Provide automatic load shedding to reduce total load imposed on the generator, not to exceed output capacity of the generator.

☐ **SCREENING:** Provide an **OPAQUE** screen around unit to screen the generator from the street and Adjacent property views. The screening must be to the **top of equipment,** by the use of opaque fence or wall or hedges around the unit. A shadowbox fence is **NOT** an opaque screen. Maintain clearances required by NEC and manufacturer specs.

☐ **SIGN:** A sign shall be placed at the service- entrance equipment that indicates the location of on-site optional standby power sources. Per N.E.C. 702.8

☐ **DISCONNECTS:** Disconnecting means and emergency shut down Per 445-18 (A) through (D)



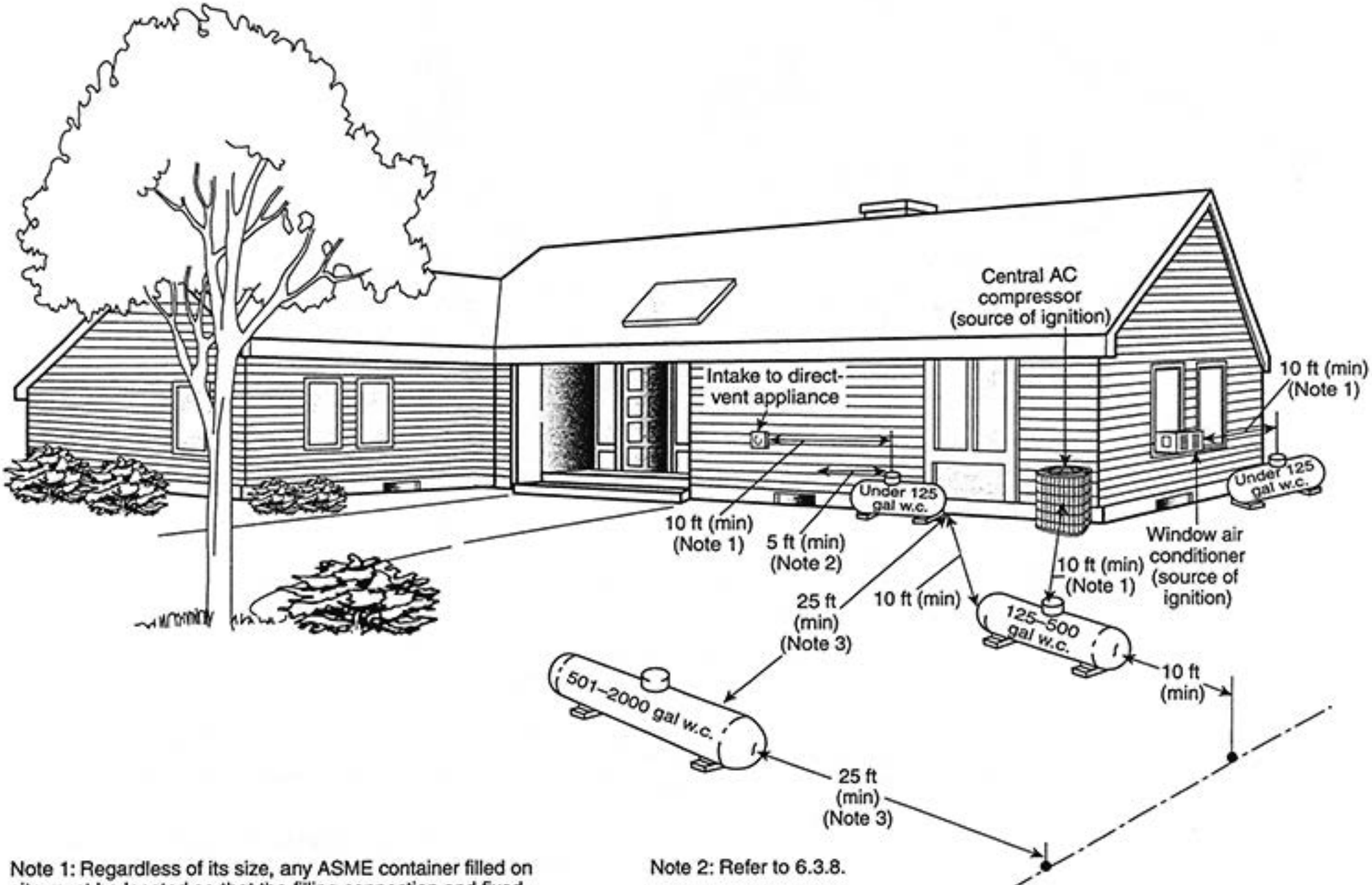
For SI units, 1 ft = 0.3048 m

Note 1: 5 ft minimum from relief valve in any direction away from any exterior source of ignition, openings into direct-vent appliances, or mechanical ventilation air intakes.

Note 2: If the cylinder is filled on site from a bulk truck, the filling connection and vent valve must be at least 10 ft from any exterior source of ignition, openings into direct-vent appliances, or mechanical ventilation air intakes. Refer to 6.3.9.

Note 3: Refer to 6.3.8.

FIGURE I.1(a) Cylinders. *(Figure for illustrative purposes only; code compliance required.)*

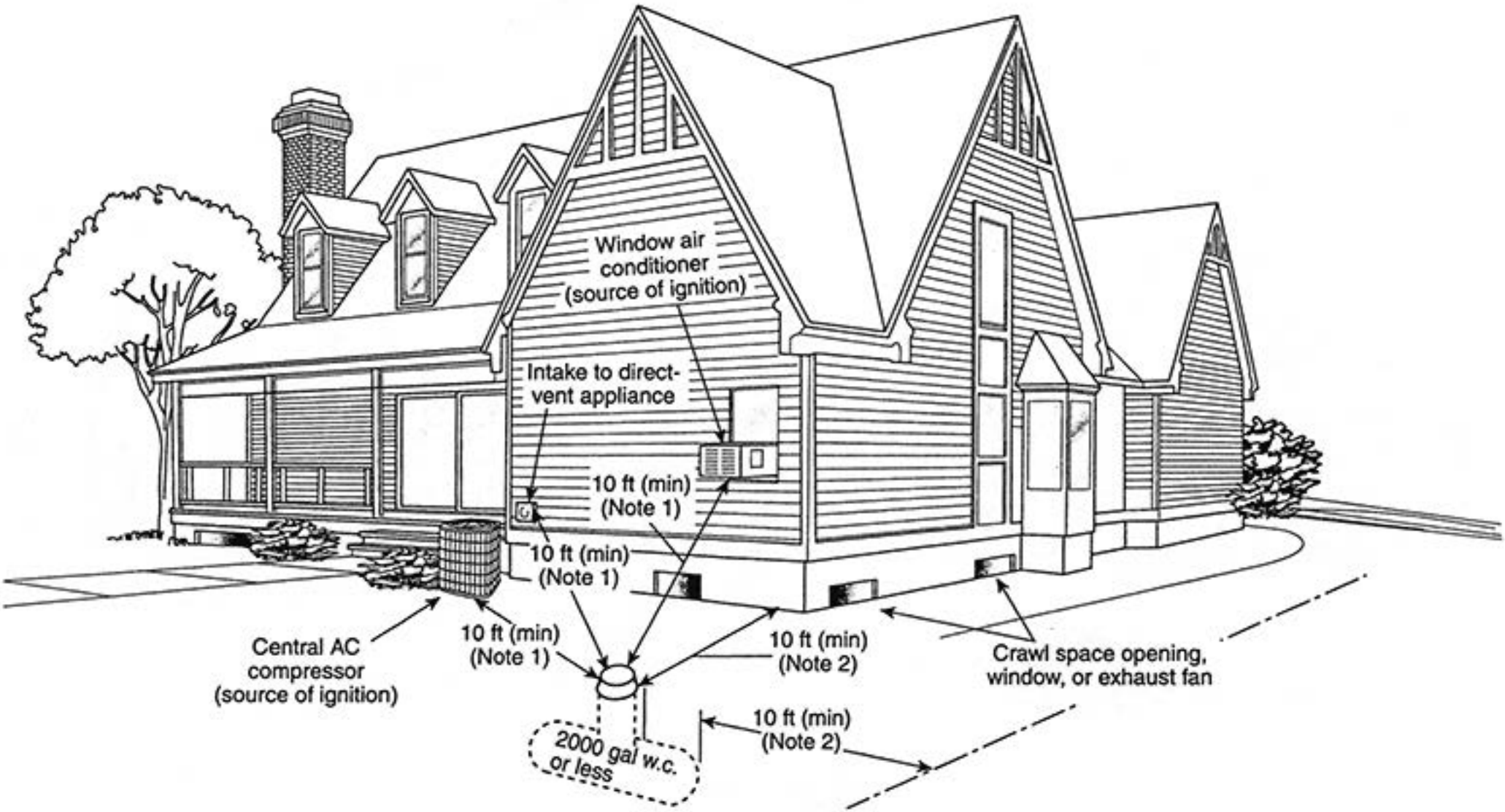


Note 1: Regardless of its size, any ASME container filled on site must be located so that the filling connection and fixed maximum liquid level gauge are at least 10 ft from any external source of ignition (e.g., open flame, window AC, compressor), intake to direct-vented gas appliance, or intake to a mechanical ventilation system. Refer to 6.3.9.

Note 2: Refer to 6.3.8.

Note 3: This distance can be reduced to no less than 10 ft for a single container of 1200 gal (4.5 m^3) water capacity or less, provided such container is at least 25 ft from any other LP-Gas container of more than 125 gal (0.5 m^3) water capacity. Refer to 6.3.3.

FIGURE I.1(b) Aboveground ASME Containers. *(Figure for illustrative purposes only; code shall govern.)*



Note 1: The relief valve, filling connection, and fixed maximum liquid level gauge vent connection at the container must be at least 10 ft from any exterior source of ignition, openings into direct-vent appliances, or mechanical ventilation air intakes. Refer to 6.3.9.

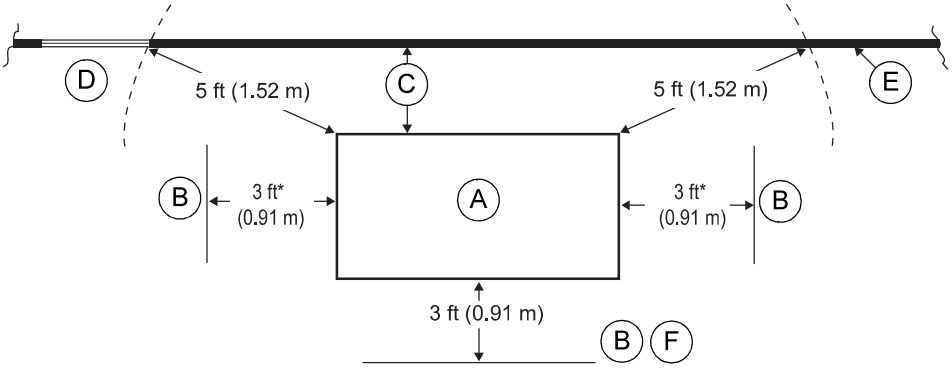
Note 2: No part of an underground container can be less than 10 ft from an important building or line of adjoining property that can be built upon. Refer to 6.3.4.2.

For SI units, 1 ft = 0.3048 m

FIGURE I.1(c) Underground ASME Containers. *(Figure for illustrative purposes only; code shall govern.)*

Site Selection and Preparation

Site Selection



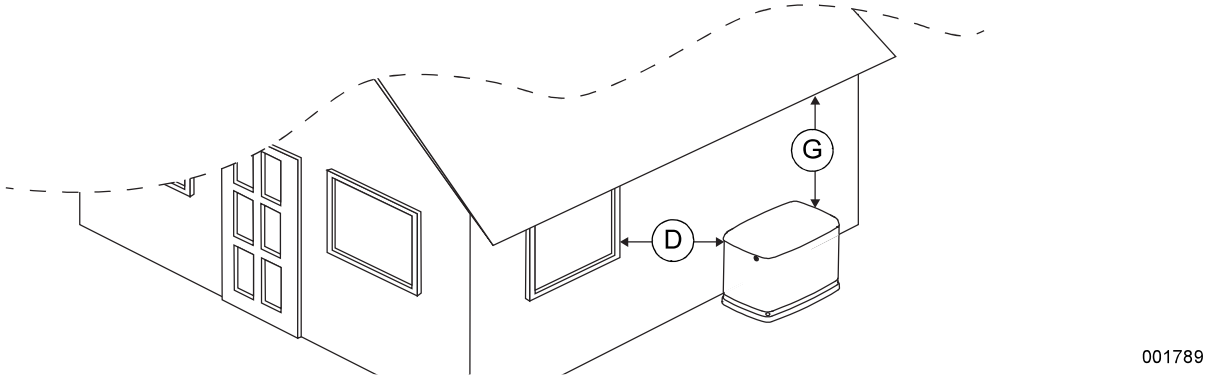


Figure 3-1. Installation Clearances

ID	Description	Comments
A	Top of generator	—
B	Front and end clearance	Minimum clear distances cannot include shrubs, bushes, or trees. ** See **IMPORTANT NOTE** on next page.*
C	Rear clearance	18 in (45.7 cm) minimum clearance per SwRI testing, labeling, and listing, unless state or local codes dictate otherwise.
D	Windows and openings	No operable windows, doors, or openings in the wall are permitted within 5 ft (1.52 m) from any point of the generator.
E	Existing wall	One-hour fire rated walls allow closer placement of the generator set. Confirm before installation.
F	Removable fence	Removable fence panels for servicing cannot be placed less than 3 ft (0.91 m) in front of the generator.
G	Overhead clearance	5 ft (1.52 m) minimum distance from any structure, overhang, or projections from the wall. DO NOT install under wooden decks or structures unless this distance is maintained.