

**Cobb County Fire Marshal's Office**  
**Generator and Base Tank Installation—Plan Review Check Sheet**  
**NFPA 30 2003 ed., NFPA 110 2005 ed., NFPA 37 2006 ed.**

This check sheet applies to tanks used to supply generators, with a maximum of 25 gals. gasoline or 660 gals. diesel fuel. For larger tanks, see aboveground tank check sheet for additional requirements. Tanks larger than 660 gallons must also be permitted through the State Fire Marshal's Office.

**Job Name** \_\_\_\_\_ **Date** \_\_\_\_\_

**Address** \_\_\_\_\_  
 (Street) (Suite #) (City) (Zip)

**Reviewer** \_\_\_\_\_ **Tank Size in Gallons** \_\_\_\_\_ **Tank Contents** \_\_\_\_\_

ITEM	PASS	FAIL	N/A
<b>Zoning</b> – check zoning on Cobb GIS. No aboveground tanks to be installed in a residential area. 54-54.1(b)(2)			
<b>Tank</b>			
Tank is UL approved for aboveground (UL 142), 30-4.2.3.1.1			
Top fill tank – fill pipe terminates within 6" of bottom of tank, 30-4.3.2.5.4			
Tank has appropriate NFPA 704 or plain language markings, 30-4.6.2			
Secondary Containment –must have on site tightness test 3-5 psi 30-4.3.2.3.3 (9). see also 110-5-9.11?			
Double wall tanks require overfill protection if greater than 200 gallons (AHJ) and 4.3.2.3.3(5). Tanks greater than 24" high shall also have a fill tube with the overfill protection. Device shall stop filling automatically at 95% capacity.			
Double wall tanks require overfill alarm at 90% tank capacity 4.3.2.3.3(5)			
Fire extinguisher – 40BC max. 30' 37-11.2.1			
Minimum 30" working space around generator 110-7.2.4 and 7.9.12.1			
Normal Vent, 30-4.2.5.1			
Emergency Vent—Main Tank 30-4.2.5.2			
Emergency Vent—Secondary Tank 30-4.2.5.2			
<b>Tank Location—Inside Building</b>			
Size - max. 660 gals. diesel, 25 gals. gasoline, can be placed inside of buildings or on the roof 110-7.9.5, 37-6.3			
Room with 2 hr fire separation 30-4.3.4.3.1			
Fill connections shall be outside of buildings and 5 ft from any building opening 30-4.3.2.5.5			
Minimum 3' clear space around all sides of tank 30-4.3.2.2.			
Minimum 36" working space around generator 110-7.2.5			
All tank vents must be to exterior 30-4.3.4.6.2, 37-6.3.5.4			
Ventilation – a sealed letter from a PE or FPE stating ventilation is adequate to prevent dangerous levels of vapors forming. 30-7.3.4, 110-7.10			
<b>Tank Location—Outside of Building</b>			
Minimum Clearances Property Line Building			
Table 4.3.2.1.1(b)			
275 gallons or less—minimum 5 feet			5 feet
276-750 gallons—minimum 10 feet			5 feet
751-12,000 gallons—minimum 15 feet			5 feet

ITEM	PASS	FAIL	N/A
Minimum 3 ft clear space around all sides of tank 30-4.3.2.2.			
Minimum 20 ft clearance to LP tanks 30-4.3.2.2.4 See exceptions			
<b>Vehicle Impact Protection</b> —30-4.3.2.7, see Section 312, 2006 International Fire Code for installation details.			
Tank secured on reinforced concrete, 6" – 8" 30-4.3.1.1			
<b>Fuel System</b>			
Low fuel sensing switch Table 110-5.6.5.2—Life Safety Generators only			
Filling tank—closed pipe system that terminates outside the building at least 24" away from any building opening. Exception: From containers when engine is shut down. 37-6.6			

### Life Safety Generator Items to Confirm at Plan Review

ITEM	PASS	FAIL	N/A
<p>NFPA 110 Annunciator NFPA 110-5.6.5.2(4) with the following items:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Overcrank</li> <li><input type="checkbox"/> High engine temp pre-alarm</li> <li><input type="checkbox"/> High engine temp</li> <li><input type="checkbox"/> Low lube oil pressure</li> <li><input type="checkbox"/> Overspeed</li> <li><input type="checkbox"/> Low fuel (<b>low gas pressure for Natural Gas</b>)</li> <li><input type="checkbox"/> Low coolant level</li> <li><input type="checkbox"/> EPS Supplying load</li> <li><input type="checkbox"/> Control Switch not in automatic position</li> <li><input type="checkbox"/> High battery voltage</li> <li><input type="checkbox"/> Low cranking voltage</li> <li><input type="checkbox"/> Battery charger ac failure</li> <li><input type="checkbox"/> Lamp test</li> <li><input type="checkbox"/> Audible alarm silencing switch</li> <li><input type="checkbox"/> Air shutdown damper (when used)</li> </ul>			
<b>Annunciator</b> —may be mounted on the generator. Must be located in Fire Control Room in high-rise buildings. 110-5.6.5.2(4).			
<b>Remote Stop</b> —must be outside the generator room. May be inside the generator shroud if the generator is located outside. Must be in Fire Control Room in high rise. Manual stop shall be labeled. 110-5.6.5.6, 5.6.5.6.1			
Remote audible Annunciator with an audible alarm shall be located at a worksite observable by personnel, cannot be in EPS room (transfer switch room). Not required to be visual. 110-5.6.6.			
<b>Remote Manual Start</b> —required on high-rise buildings by section 911.1(14) of the 2006 IBC and section 509.1 of the 2006 IFC.			
<b>Natural Gas</b> —two gas meters be installed where a new generator is being installed for Life Safety purposes, or Level I operations. The meter for the generator must be located as close to the generator as possible. No single valve can turn off the gas supply to the building and the generator simultaneously. 110-7.9.7 and 110-7.9.8.			
Level I EPSS equipment shall not be installed in the same room with the normal service equipment, where the service equipment is rated over 150 volts to ground and equal to or greater than 1000 amperes. 7.2.2			

## Installation Acceptance Test—Life Safety Generator

ITEM—Inspection performed and items confirmed by Life Safety Inspector	PASS	FAIL	N/A
Confirm plan review items above			
Test must be done from cold start with emergency load at a standard operating level (elevators operating, fire pumps, etc.) 110-7.13.4.1(1)			
Primary power failure shall be initiation by opening all switches or breakers supplying the primary power to the building or facility. 110-7.13.4.1(1)			
Maximum 10 sec. delay to transfer to emergency power. 101-7.9.1.2			
Time delay for retransfer to normal power. Minimum 5 minutes. 7-13.4.1(12)			
Minimum 36" working space around generator 110-7.2.5			
Battery powered emergency light in room 110-7.3.2			
Instruction manual—minimum 2 sets on site in secure location 110-8.2.1			
Confirm low fuel level switch (diesel) or low fuel pressure switch (natural gas or propane) Table 110-5.6.5.2(h) and note 7.			
<b>Written Documentation</b>			
Copy of written record of 2-hour full load test. 110-7.13.6			
Copy of acceptance test required by 110-7.13.4.1			
<b>Compliance Letter</b> —must state that the generator is installed according to NFPA 101, 110 and 70 standards			