### CITY OF LAKE STATION

1969 Central Ave. Lake Station 1N 46105

(219) 850 1331

# Minimum ELECTRICAL CODE REQUIREMENTS FOR RESIDENTIAL

#### Re-wire/Upgrade or Service Changes

A. Minimum service size of 100 amps with provisions for a minimum of 20 standard size breakers or fuses. Conductor #3 Copper

B. All copper conductors, unless written permission is granted from the electrical inspector having jurisdiction. (AHJ)

C. If the main breaker is operated in an up and down configuration, the

up position must be the "ON" position

D. Ground the neutral bar in the main panel to a metal water pipe (water ground) within 5 feet of entry to the residents. If the water meter is inside, a Jumper must be installed around the meter.

- C. A supplemental ground may be an 8-foot grounding rod or equivalent using a conductor of #6 AWG copper & wire or larger. Grounding conductor conduit (metal) must be bonded to the neutral bar, and an 'acorn' nut Installed at rod and conductor.
- F. All circuits must be identified on the panel directory.

G. Install a separate circuit for the furnace. And a separate 20 amp with GFCI protection for the Laundry.

H. Kitchen countertops all work areas, must have 2 (two) 20amp circuits with GFCI protection. (Small appliance circuits)

1. All habitable rooms shall have a minimum of 2 (two) duplex Receptacles plus a switched lighting outlet.

J. All hallways and stairways must have a switched lighting outlet.

Stairways of more than six (6) steps must have a 3-way switching circuit.

K. All bath rooms must have a dedicated 20-amp GFCI protect circuit for receptacles. (Lights or fans etc. cannot be on this circuit.)

L A wall mounted switched outdoor light shall be Installed at each entrance door. (Motion detectors or dusk to dawn switching OK) Must be installed in U F cable (outdoor)

M. All receptacles on 15- and 20-amp circuits must be the grounding

type with grounding circuit.

N. Equipment bonding jumpers (Green or bare #12 for 20amp circuits and #14 for I5 amp circuits) shall be installed on all grounded circuits between the device and flush type boxes. Self-grounding devises on grounded metal boxes exempt.

O. All exposed BX. romex, or other open wiring must be concealed or

Installed In scheduled EMT or PVC conduit for protection.

P. All exterior conduit runs where exposed to damage are to be In Rigid conduit or schedule 80 PVC conduit.

0.. If a detached garage has an electrical system, it shall be in EMT conduit If exposed. Minimum service shall Include a switched celling light, a switched entrance light (man door) and at least one GFCI protected receptacle outlet. All receptacle outlets, including any for a door operating devise, must be GFCI protected.

R. Outdoor outlets- at least 2 two receptacle outlets accessible at grade level shall be Installed outdoors, usual at front and rear of residents. Such outlets shall be GFCI protected and listed as WR or weather resistant and have in use covers. Must be installed in U F

cable (outdoors)

S. Smoke detectors shall be Install in all sleeping quarters, in a hallway directly outside bed rooms, and on each level as per manufactures recommendations. See attached diagram.

T. Basements shall have at least one (I) receptacle outlet in additionto any provided for laundry equipment. All receptacles in an unfinished basement shall have GFCI protection.

U. All metal service conduit shall have grounded bushings between

Meter and distribution panel.

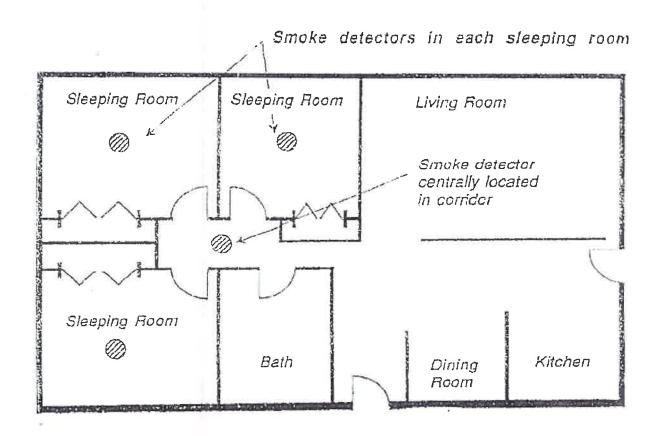
V. House numbers must be conspicuously posted on the property and provisions made for the inspector to gain entry or have access to the building which is to be inspected.

W. Where the system is not grounded, polarized plugs are to be used not the grounded type. or a GFCI receptacle that is marked "No

Equipment Ground".

New work, room additions, and open walls shall be governed by the 2008 NEC code book.

 Placing detectors within the rooms will provide the early warning the occupants of those rooms need when the fire begins within the sleeping room.



## SMOKE DETECTORS SECTION 316

# **LOCATION**

-REQUIRED INSIDE AND IN VICINITY OF EVERY SLEEPING AREA,

- ON EACH ADDITIONAL STORY, INCLUDING BASEMENTS AND CELLARS
- CRAWLSPACES AND UNINHABITABLE ATTICS ARE NOT INCLUDED
- ON EACH LEVEL OF SPLIT LEVEL, IF DOOR SEPARATES LEVELS

#### **INSTALLATION**

- INSTALLED IN CONFORMANCE WITH THEIR LISTINGS
- HARD-WIRED IN NEW CONSTRUCTION
- INSTALLED THROUGHOUT ENTIRE RESIDENCE WHEN SLEEPING ROOM ADDED OR WHEN ALTERATIONS OR ADDITIONS REQUIRE A PERMIT HARD WIRED WITH BATTERY BACKUP
- CONNECTED TO A SOUNDING DEVICE OR OTHER DETECTORS TO PROVIDE, WHEN ACTUATED, AN ALARM WHICH WILL BE AUDIBLE IN ALL SLEEPING AREAS

SMOKE DETECTORS
SECTION 316