

CITY OF SAN ANSELMO

ORDINANCE NO. 546

AN ORDINANCE AMENDING SECTION 9-2.403 (TITLE 9, CHAPTER 2, ARTICLE 4) OF THE SAN ANSELMO MUNICIPAL CODE BY ADOPTING BY REFERENCE THE 1965 EDITION OF THE NATIONAL ELECTRICAL CODE OF THE NATIONAL BOARD OF FIRE UNDERWRITERS WITH CERTAIN CHANGES, ADDITIONS AND DELETIONS

The City Council of the City of San Anselmo does ordain as follows:

Section 1. Section 9-2.403 (Title 9, Chapter 2, Article 4) of the San Anselmo Municipal Code is hereby amended as follows:

9-2.403. National Electrical Code.

The 1965 Edition of the National Electrical Code of the National Board of Fire Underwriters is hereby adopted by reference thereto subject to the following changes, additions and deletions and as so modified shall remain in full force and effect until a superseding edition is adopted and becomes effective.

The following sections of 1965 Edition of the National Electrical Code are amended as follows:

~~SECTION 14.00: ADDITION AND AMENDMENTS TO THE NATIONAL ELECTRICAL CODE:~~

~~14-01:~~ 210-19 (b). Change to read:

Minimum size branch circuit conductors for 60°C (140°F) insulation shall not be smaller than the sizes listed below. For other types of insulation use ampacity tables in Article 310. All loads listed below shall be supplied by separate circuits.

	Conductors	
	Copper	Aluminum
1. Household electric range	No. 6	No. 4
2. Built-in oven and range top	No. 6	No. 4
3. Apartment range (not exceeding 12 KW)	No. 8	No. 6
4. Counter mounted cooking top not over 6 KW	No. 10	No. 8
5. Single built-in oven	No. 10	No. 8
6. Double built-in oven	No. 8	No. 6
7. Split counter mounted cooking tops	No. 12	No. 10
8. Dryers (not exceeding 5.5 KW)	No. 10	No. 8
9. Dryers (over 5.5 KW)	No. 8	No. 6
10. Laundry	No. 12	No. 10
11. Dishwasher	No. 12	No. 10
12. Disposal unit or furnace (if connected to the same branch circuit)	No. 14 No. 12	No. 12 No. 10
13. The minimum size branch circuit conductor for other loads shall not be smaller than	No. 14	No. 12

~~14-02:~~ 210-22 (b). DWELLING TYPE OCCUPANCIES: Add: In all rooms, including unfinished rooms suitable for future occupancy, except bathrooms, garages, storage closets and work shops, adequate circuit wiring must be extended to the unfinished area, terminated in an approved outlet box accessible for future use and identified. One plug receptacle, not part of a lighting fixture, shall be provided in each bathroom where lavatory is provided in dwellings, apartments and hotels.

~~14-03:~~ 210-22. Add new section (d). SHOW-WINDOWS: At least one receptacle shall be installed directly above a show-window for each 12 linear feet or fraction thereof of show-window area measured horizontally along its base.

~~14-04:~~ 210-22. Add new section (e): ENTRANCE LIGHTING: One light outlet shall be provided at each outside entrance to a building intended for residential occupancy. Where two entrances are located on the same side of the building, one light may be adequate provided it is controlled by a switch at each entrance.

~~14-05:~~ 210-22. Add new section (f): OUTDOOR RECEPTACLE: In single or two-family dwellings, each unit shall have not less than one weather-proof grounding type receptacle which may be connected to one 20 AMP appliance circuits.

~~14-06:~~ 220-3 (a). Change last paragraph to read: For general illumination in single and multi-family dwellings, not less than one branch circuit

shall be installed for each 500 square feet or fraction thereof of floor area in addition to the receptacle circuits called in Section 220-3 (b).

~~220-3~~: 220-3 (b). Change to read: RECEPTACLE CIRCUITS; DWELLING OCCUPANCIES:

For the small appliance load in kitchen, laundry, pantry, dining-room; if no dining-room, family-room, and breakfast-room of dwelling occupancies, two or more 20-ampere branch circuits in addition to the branch circuits specified in paragraph 220-3 (a) shall be provided for all receptacle outlets (other than outlets for clocks) in these rooms, and such circuits shall have no other outlets. Each such circuit shall be limited to eight (8) outlets. Receptacle outlets supplied by at least two appliance receptacle branch circuits shall be installed in the kitchen, and at least one 20-ampere circuit in addition thereto shall be provided for laundry equipment and limited to one (1) outlet.

~~220-4~~: 220-4 (d). Change to read: NEUTRAL FEEDER LOAD: The neutral feeder load shall be the maximum unbalance of the load to which it may be subjected.

~~220-4~~: 220-4 (i). Change to read: ELECTRIC RANGES: For each dwelling unit the feeder load for the combination of counter-mounted cooking units and wall-mounted ovens may be calculated as one appliance using Column A, Table 220-5. The feeder load for household electric ranges shall be computed in accordance with Table 220-5, Column A. Where a number of ranges are supplied by a 3-phase, 4-wire feeder, the current shall be computed on the basis of the demand of twice the maximum number of ranges connected between any two-phase wires.

~~220-5~~: Table 220-5. Note 5: Change to read: BRANCH CIRCUIT LOAD: Branch circuit load for one range may be computed in accordance with Table 220-5. The branch circuit load for one wall-mounted oven or one counter-mounted cooking unit shall be the name plate rating of the appliance.

~~230-26~~: 230-26: POINT OF ATTACHMENT: Add: The point of attachment shall be below the service head and so arranged that the service drop may be secured to the building with one point of attachment only.

~~230-32~~: 230-32 (a). Change to read: IN THE GROUND: Underground service conductors shall be protected against physical damage by being installed in duct, conduit or other approved raceway. Other means may be used only when approved by the authority enforcing the code.

~~230-41~~: 230-41. Change to read: SIZE OF SERVICE ENTRANCE CONDUCTORS OVER-

HEAD SYSTEM AND UNDERGROUND SYSTEM: Service entrance conductors shall have sufficient ampacity to carry the load as determined by Article 200, and in accordance with Tables 310-12, 310-13, 310-14, 310-15.

The ampacity for a single-family dwelling shall not be less than 100 amp, 3-wire in rigid metal conduit size (min. 1 $\frac{1}{4}$ " ) conforming to Table 1 of Chapter 9 of the National Electrical Code.

For other installations of 3-wire service, and for 2-wire service with loads not exceeding 2 - 15 amp. circuits or 2 - 20 amp. circuits the service entrance conductors shall not be smaller than No. 8 copper or No. 6 aluminum.

~~230-44~~: 230-44. Change to read: WIRING METHODS:

(a) Service-entrance conductors extending along the exterior or entering buildings shall be installed in rigid metallic conduit.

(b) Where service conduit or busway passes into the wall, roof, or other portion of any building it shall be installed so as to effectively prevent leakage of water into the building.

(c) Where service is run on the exterior of buildings having plastered exterior finish, the conduit shall be so installed that it will not be wholly or partly imbedded in the plaster. Such surface run of conduit shall preferably be installed after the last coat of plaster has been applied, but may be installed before the last coat of plaster is applied if the conduit is neatly secured in place with galvanized metal hangers or fastenings or other approved means (not wooden blocks) that support it away from the sheathing so as to permit the required thickness of plaster to be spread underneath.

~~230-46~~: 230-46. Delete

~~230-47~~: 230-47. Delete

~~230-48~~: 230-48. Delete

~~230-49~~: 230-49. Delete

~~230-50~~: 230-50. Delete

~~230-51~~: 230-51. SERVICE HEAD: Add: The service head shall be located on that portion of the building served which is facing the serving line. The service head shall be located at that height which will allow for the proper clearance of the service drop over curb and sidewalk, drive-ways, and areas where persons may walk. The following are minimum

clearances permitted

Above curb and sidewalk - 18 feet

Above private driveways - 12 feet

Above areas accessible to pedestrians only - 10 feet

If the height of the building involved is such that these heights cannot be maintained, then a periscope type service or some other approved auxiliary structure shall be used. In the event a periscope type service is used, it may be placed on the side of the building served, not more than 18 inches back of that wall which is facing the serving line.

~~230-70~~: 230-70(b). Change to read: LOCATION: The service disconnecting means shall be located at a readily accessible point nearest to the entrance of the service conductors, and in residential property shall be accessible from the exterior, except in garage, carport, or where a meter room is provided. Such service disconnecting means shall not be installed under show-windows or at any location above the ground floor level or in the case of multiple occupancies in any location not readily accessible to all parties concerned. The center of the grip of the operating handle of the disconnecting means when in its highest position shall not be more than six and one-half (6½') feet above the floor or working platform.

~~230-70~~: 230-70(d). Add sub-section (3): A main service disconnecting means shall be provided for each separately metered subdivision of the service conductors. Switches or circuit breakers accessible from the exterior of a single-family or duplex dwelling shall be located within a single enclosure approved for the purpose.

~~230-70~~: 230-70(g). SWITCH AND CIRCUIT BREAKER: Add exception: For single family dwellings the service disconnecting means shall consist of a switch or circuit-breaker equipped with a handle which is manually operable for simultaneous disconnection of all ungrounded service conductors. The disconnecting means shall be of a type approved for service equipment.

~~230-70~~: 230-70(h). Change to read: SIMULTANEOUS OPENINGS: The disconnecting means shall simultaneously disconnect all ungrounded conductors.

~~230-71~~: 230-71(a). Change to read: Exception No. 1. For single-family and duplex dwelling units the service disconnecting means shall have a minimum rating of 100 ampere, 230 volt, 3-wire.

The panel or combination of panels shall be designed to accommodate not less than sixteen (16) branch circuit fuses or circuit breaker poles. If only 100 ampere main service switch is installed, at the service location, the distribution panel or panels shall be of a design which will provide for the overcurrent devices required by this section. The panel or panels must be accessible for future wiring, or extension of circuits. The feeder which carries the total current supplied by the service conductors to the distribution panel or panels shall not be smaller than the service conductor specified in Section 230-41.

~~240-16~~: 240-16. Add new section (d): In apartment houses and other buildings of multiple occupancy, branch circuit overcurrent devices shall be located within the apartment or unit served. All circuits supplying individual units in buildings of multiple occupancy shall be confined to each individual unit. In remodel jobs, or where this is impracticable exceptions may be granted by the authority enforcing the code.

~~250-43~~: 250-43 (f). Change to read:

Electric signs and associated equipment shall be grounded.

~~250-57~~: 250-57 (b) (2). Delete.

~~250-82~~: 250-82. Change to read: OTHER AVAILABLE ELECTRODES: Where a water system as described in Section 250-81 is not available, the grounding connection may be made to any of the following: (a) The metal frame of the building if effectively grounded, provided that metal covering on a metal-clad building shall not be used; (b) Other local metallic underground systems such as piping, tanks and the like, provided that such underground systems containing flammable substance shall not be used.

~~250-92~~: 250-92 (b). Change to read: CONDUCTOR ENCLOSURES AND EQUIPMENT ONLY: A grounding conductor for conductor enclosures and equipment only shall meet the requirements of Paragraphs 250-57 (a), 250-57 (b) (1) or 250-92 (a).

~~250-114~~: 250-114. Add new section (c): NON-GROUNDED DEVICE: At each location where a fixture or a non-grounded device is within reach of a grounded object the device or fixture shall be grounded.

~~250-115~~: 250-115. Change to read: ATTACHMENT TO ELECTRODES: The grounding conductor shall be attached to the grounding electrode by means of an

approved bolted clamp of cast bronze or brass or plain malleable cast iron. Not more than one conductor shall be connected to the grounding electrode by a single clamp or fitting unless the clamp or fitting is of a type approved for such use. The point of attachment to the electrode shall be readily accessible.

~~333~~: Add new Section 300-24: RACEWAY REQUIRED: The wiring method for the following occupancies defined in Section 15.00 of this Ordinance as Group A, B, C, D, E, F, and G inclusive shall be raceway as defined under Article 100 National Electrical Code, except for use limited in this Code.

Type M. I. cable, Article 330, N.E.C. and Type MC power cable supported by continuous cable supports referred to in Section 334-6 N.E.C. may be installed in the above occupancies.

~~334~~: Delete Article 320.

~~335~~: 324-2. Change to read: USE: Concealed knob-and-tube work may only be used in the hollow spaces of walls and ceilings of wood frame construction, Groups H, I and J occupancies and must be concealed by the permanent finish of the building. It shall not be used in Group A, B, C, D, E, F and G occupancies or in Fire Zone No. 1. Concealed knob-and-tube wiring is limited to use on circuits not exceeding 300 volts between conductors or 150 volts to ground.

~~336~~: 334-6(b). Change to read: TYPE AC: Armored cable types AC, ACT, and ACL may only be used for concealed or exposed work in wood frame construction, Groups H, I and J occupancies, or by special permission in other locations where other wiring methods are impracticable. It is limited to use on circuits not exceeding 300 volts between conductors on 150 volts to ground. Armored cable types AC, ACT, AND ACL may not be installed in Fire Zone No. 1, or in Groups A, B, C, D, E, F, and G occupancies.

~~337~~: 334-13(a). Change to read: IN ACCESSIBLE ATTICS: Cable in accessible attics or roof spaces shall be run through bored holes in the joists or protected by approved means. EXCEPTION: In attics not accessible by a permanent stairway, no boring or protection is necessary where the vertical height between the ceiling joists and rafter is less than 12 inches, or attics with maximum height less than 30 inches.

~~338~~: 336-3. USE: Add new section (d): Non-metallic sheathed cable which

is run exposed in accessory buildings and attached garages shall be installed not less than 7' 6" above the floor. Where the cable is subject to physical damage it shall be protected by the use of running boards, conduit or other approved means. It is limited to use on circuits not exceeding 300 volts between conductors or 150 volts to ground. Non-metallic sheathed cable shall not be installed in Fire Zone No. 1, or in Groups A, B, C, D, E, F, G occupancies. See section 334-13 for installation in attics and roof spaces.

~~336-3~~: 336.3: USE: Add new section (e):

CONCEALED ELECTRIC WIRING UNDER ROOFING MATERIALS: Non-metallic sheathed cable may be used for circuits feeding ceiling lights and respective switch legs only; it must be protected from injury by the use of conduit or metal channels not less than 1/16" thick.

Wiring under roofing to all other outlets shall be run in metal conduit continuous from outlet to outlet. The minimum temperature rating of the circuit conductor shall not be less than 75° c.

~~338-2~~: 338-2: Delete

~~339-3(c)~~: 339-3 (c): Change to read: The use of direct burial cable will require a minimum depth of 18 inches where not subject to probable mechanical injury or 24 inches under driveways; other approved means may be substituted under varying conditions. U. F. Cable shall not be used for exposed exterior wiring, or direct burial under slab floors within a building.

~~350-2~~: 350-2: Change to read: USE: Flexible metal conduit shall only be used where the use of rigid conduit or electrical metallic tubing is impractical.

~~384-2~~: 384-2. Add: All switches, circuit breakers, fuses and other protective devices shall be so located that they may be operated, renewed, or repaired from a readily accessible place. They shall be so installed that the top of the fuse or the center of the grip of the operating



handle of the switch, circuit breaker or other control device when in its highest position will be not more than six and one-half (6½') feet from the floor of the working platform.

All switchboards or panelboards shall have adequate illumination for safety of operations or repair. The lights and switches used for the control of such illumination shall be so located that they will be readily and safely accessible.

All switches, circuit breakers, automatic cut-outs, and other control devices shall be so located or marked as to clearly indicate the equipment controlled by them, and switches (excepting magnetic switches) shall indicate whether they are open or closed.

~~384-13~~: 384-13. Add: Panelboards shall be approved dead front type.

~~410-3~~: 410-3. Add: CONTROL: Switches shall be provided for the control of keyless lampholders and for the control of lampholders of the switched type that are not within safe and convenient reach. In those rooms of dwelling type occupancies where receptacle outlets are required see 210-22 (b) but no lighting outlet is installed, at least one such receptacle outlet shall be controlled by a wall switch.

~~410-4~~: 410-4. Add new section (c): FIXTURES NEAR GROUNDED SURFACES: Fixtures which are operated through any type of switching device which is part of the lampholder, such as pull chain sockets, key sockets, or push type sockets, shall not be used in bathrooms, kitchens, laundry rooms, or on the exterior of buildings or structures, or within eight (8) feet vertically or five (5) feet horizontally of a grounded surface.

~~422-14~~: Add new section 422-14: APPLIANCES, DISPOSAL, DOMESTIC INSTALLATIONS: An approved grounding type single plug receptacle may be provided for the connection of electrically powered waste disposals. The final connection between the plug receptacle and the appliance terminal housing shall be made through the use of an approved three conductor cord and grounding type plug assembly.

~~422-24~~: 422-24: Add: SIMULTANEOUS OPENING: The disconnecting means, including branch circuit disconnecting means, shall simultaneously disconnect all ungrounded conductors from the source of supply.

~~600-1~~: 600-1: Add: These provisions shall be supplementary to any and all local ordinances or regulations which govern the location, erection, and/or structural support of signs.

~~600-2~~: 600-2(a). Change to read: IN SIGHT OF SIGN: In addition to the switch required by Section 600-2, an approved disconnecting means shall be provided for the disconnecting of all signs and/or outline lighting and shall be so located that it shall be within sight of the sign and/or outline lighting and under the control of authorized sign servicement, but normally not readily accessible to unauthorized persons whenever operating voltages are in excess of 1,000 volts. When said disconnecting means controls roof signs, it shall be located not more than six and one half (6½) feet above the roof.

~~600-6~~: 600-6. Add: SIGN CIRCUIT REQUIRED: Each commercial building and/or each commercial occupancy with ground floor frontage shall be provided with a minimum 20-ampere branch circuit to the sign location, or a spare circuit and an empty raceway may be provided.

~~600-7~~: 600-7. Add new section (c). The inspection label of the Underwriter's Laboratories shall be required on all new signs.

A label showing evidence of approval of the Local Inspection Department will be required on all signs being moved from one location to another and on all existing signs requiring any alteration to the electrical circuits except the changes or replacement of tubing and other normal repairs. Any sign found not to be in conformance with these regulations shall be deemed a violation of these regulations and same shall be removed from place of erection.

~~600-31(a)~~: 600-31(a). Change to read: WIRING METHOD: Conductors shall be installed in rigid metallic conduit or in electrical metallic tubing. Open conductors may not be used either indoors or outdoors except when contained within the sign enclosure or as provided for under 600-31(h). All conductors for outline lighting, either interior or exterior, or where passing through walls, shall be in a raceway system, with approved fittings.

~~600-31(d)~~: Section 600-31(d). Delete.

~~600-31(e)~~: Section 600-31(e). Change to read: Concealed conductors or insulators shall not be allowed outside the sign enclosure.

~~600-31(g)~~: 600-31(g). Delete.

~~725-8~~: Add new section 725-8: TRANSFORMER LOCATIONS: Signal transformers shall be installed in fuse cabinets in a separate compartment or mounted on outlet boxes adjacent thereto, insofar as practical. When installed in closets or furnace rooms exposed signal transformers shall be located on ceiling or on the wall over the door. Transformers shall not be installed in attics or in concealed areas of basements.

*add new section 725-9.*  
SECTION ~~1500~~: GROUP OCCUPANCIES DEFINED: For the purpose of this Code

occupancies are defined as follows:

Group A Occupancies shall be:

Any assembly building with a stage and an occupant load of 1000 or more in the building.

Group B Occupancies shall be:

Division 1. Any assembly building with a stage and an occupant load of less than 1000 in the building.

Division 2. Any assembly building without a stage and an occupant load of less than 1000 in the building.

Division 3. Any assembly building without a stage and having an occupant load of less than 300 in the building, including such buildings used for school purposes less than eight hours per week.

Division 4. Stadiums, reviewing stands, and amusement park structures not included within Group A nor Divisions 1, 2, and 3, Group B Occupancies. Specific and general requirements for grandstands, bleachers and reviewing stands are to be found in Chapter 33.

Group C Occupancies shall be:

Any building used for school or day-care purposes more than eight hours per week, involving assemblage for instruction, education, or recreation, and not classed in Group A Occupancies or in Divisions 1 and 2 of Group B Occupancies.

Group D Occupancies shall be:

Division 1. Mental hospitals, mental sanitariums, jails, prisons, reformatories, and buildings where personal liberties of inmates are similarly restrained.

Division 2. Nurseries for the full-time care of children under kindergarten age (each accommodating more than five persons). Hospitals, sanitariums, nursing homes with non-ambulatory patients and similar buildings (each accommodating more than five persons).

Group E Occupancies shall be:

Division 1. Storage and handling of hazardous and highly flammable or explosive materials other than flammable liquids.

Division 2. Storage and handling of Class I, II, and III flammable liquids as set forth in U.B.C. Standard No. 9-1-64; dry-cleaning plants using flammable liquids; paint stores with bulk handling; paint shops and spray painting rooms and shops.

Division 3. Woodworking establishments, planing mills and box factories; shops, factories where loose, combustible fibers or dust is manufactured, processed or generated; warehouses where highly combustible material is stored.

Group F Occupancies shall be:

Division 1. Gasoline service stations, storage garages where no repair work is done except exchange of parts and maintenance requiring no open flame, welding, or the use of highly flammable liquids.

Division 2. Wholesale and retail stores, office buildings, drinking and dining establishments having an occupant load of less than 100, printing plants, municipal police and fire stations, factories and workshops using materials not highly flammable or combustible, storage and sales rooms for combustible goods, paint stores without bulk handling. (See Section 402, for definition of Assembly Buildings.)

Division 3. Air craft hangars where no repair work is done except exchange of parts and maintenance requiring no open flame, welding, or the use of highly flammable liquids.

Group G Occupancies shall be:

Ice plants, power plants, pumping plants, cold storage, creameries.

Factories and work shops using incombustible and non-explosive materials.

Storage and sales rooms of incombustible and non-explosive materials.

Section 2. This Ordinance shall be published once in full within fifteen (15) days of its passage and adoption in the Independent Journal, a newspaper of general circulation in the City of San Anselmo and it shall become effective thirty (30) days from and after its final passage and adoption.

The foregoing Ordinance was introduced at a regular meeting of the San Anselmo City Council held on Tuesday, January 23, 1967, and was thereafter duly passed and adopted at a regularly 14, 1967 meeting of the City Council held on Tuesday, February 14, 1967, by the following vote:

AYES: COUNCILMEN: Scott, Capurro, Ragan, Smith, Reichmuth

NOES: COUNCILMEN: None

ABSENT: COUNCILMEN:

---

MAYOR JOHN M. REICHMUTH

ATTEST:

ANITA GANNON  
CITY CLERK