

## REGULATIONS

### COMPILING SANITARY REGULATIONS NUMBERS 3, 12, 15 AND 28, ENTITLED "CONSTRUCTION AND RAT-PROOFING OF BUILD- INGS AND OUTHUSES IN PORTO RICO

Article 1.—Sanitary Regulations numbers 3, 12, 15 and 28, "Construction and Rat-proofing of buildings and outhouses in Porto Rico," promulgated by Administrative Bulletins numbers 45, 58, 61 and 83, are hereby compiled to read as follows:

Article 2.—From and after the approval of these regulations no building of any kind shall be constructed or reconstructed in the Island of Porto Rico without first submitting to the Department of Health triplicate copies of plans for the same. Upon approval of the plans one copy shall be filed with the sanitary engineer and one copy in the office of the local health officer, or his proper representative, the third copy to be returned to the owner, who shall keep said plan on the premises while the building is in course of construction, available to the department engineer or his representative during working hours.

The Department of Health shall approve said plans or make any changes which may be required by the sanitary regulations within a reasonable time. No work shall be commenced before the plans are approved. All plans must be forwarded through the local health officer or his proper delegate and must be approved by him as to local conditions.

#### NEW CONSTRUCTIONS

Article 3.—When frame construction is authorized the building may rest (a) upon a foundation wall; (b) upon posts. (a) When the building is supported upon a foundation wall this wall shall be of impenetrable material and inaccessible to rats. The space below the floor shall have a wall around the entire building, shall extend not less than two feet beneath the surface of the surrounding soil, and upward flush with the under surface of the floor of the house. Floor joists shall be embedded in this wall. The space between the joists and the floor shall be filled and perfectly closed up to the floor level. (b) When constructed upon joists, the spaces between the joists and the ground shall not be less than two feet. If one or more parts of the lower floor of an office or house are less than two

feet above the ground or street, such parts of the floor shall rest on a concrete wall extending two feet in the ground to upper part to be flush with the floor of the office, or house.

Article 4.—All openings made in masonry wall of buildings to admit plumbing or other pipes, and all incidental openings which may give access to rats shall be closed with concrete to the full depth of the wall. The outlet of all drains, ventilating or other openings which may admit rats must be covered with rat-proof metal gratings. If openings are made for basement doors, such doors must fill the openings perfectly when closed.

Article 5.—All decayed wood must be replaced. Sidewalks, court-yards and passage-ways must not be covered with wooden floors which may serve as a refuge for rats.

Article 6.—The owner or tenant, as the case may be, shall always keep the ground space under the first floor clean and free from trash, boxes or other materials which may serve as harboring places for rats.

The yards, gardens, passage-ways and alleys shall always be kept free of garbage and other refuse from the house as well as of any other substances which may serve as food for rats.

Article 7.—When basements are ceiled, the ceilings shall be constructed in such a way as to prevent the harboring of rats.

Article 8.—In the construction of roofs the use of Spanish tiles is authorized, subject to the following condition, viz: "The space between the beams and scantling of the roof shall not exceed  $4 \times 4$  inches."

Article 9.—If the natural slope of the ground is greater than one in eight, the entire lower floor of the building may be made of wood, provided that the portion of the floors which is less than two feet above the ground shall be entirely surrounded by a concrete or masonry wall extending two feet in the ground and which shall be constructed according to the provision of section 3; *Provided*, That nothing in this section shall be interpreted as in any way modifying the requirements of section ten, subdivision (a) prescribing the construction of concrete floors in certain classes of buildings.

#### CONCRETE OR TILE FLOORS

Article 10.—The foundation walls of all masonry buildings shall be of concrete or stone laid in cement mortar, and shall rise at least one foot above the ground and sink two feet below. Said wall should be at least four inches thick, and where necessary openings are made

for ventilating or for other purposes, such openings shall be made rat-proof by screening with strong metal mesh, which will not allow of the passage of rats.

(a) All buildings intended for piers, markets, meat shops, milk depots, slaughter houses, bakeries or wholesale provision storehouses shall necessarily have the floor of the lower story of concrete or tile, as shall also all buildings in which the lower floor is below the level of the ground or street.

(b) Except as otherwise provided in this regulation, the lower floor of buildings intended for any other use shall also be made of concrete or tiles.

(c) All concrete or tile floors must be surrounded by a wall of concrete or stone laid in cement mortar, extending at least two feet into the ground and one foot above the floor, the walls of the building to rest flush on top of said concrete or stone wall.

(d) All concrete floors referred to in these regulations shall be at least four inches thick; *Provided*, That the floors of buildings used for piers, wholesale storehouses and slaughter houses shall be at least six inches thick; *Provided, however*, That the thickness of reinforced-concrete floors may be one inch less than the above dimensions if they have sufficient strength to carry the loads to be imposed.

Article 11.—Lots and ground not built upon within the city limits shall be subject to such of the preceding regulations as may be applicable.

Article 12.—Barnyard fowls shall not be kept within the city limits of any town except under the following conditions:

A rat-proof henhouse shall be constructed which must have a concrete floor as well as walls of the same material, which shall be sunk in the ground to a depth of two feet and raised one foot above the level floor. This surface must be surrounded by wire netting which shall have a half-inch mesh and be six feet high. Food intended for the fowls must be kept within these henhouses so that it shall not be accessible to rats, and it will not be permitted in any case to deposit it outside.

Article 13.—Buildings intended partially for dwelling and partially for commercial purposes must have the two portions of the building completely separated, with no communication. If they are located on the same floor they must be separated by a wall free from racks or shelves on either side; this wall must be of concrete for a distance extending two feet below the ground and at least two feet

above the floor; when the upper portion of said wall is of wood, it must be single thickness; *Provided, however,* That, if the lower floor of the entire building is of concrete or tiles, the above-mentioned separating wall may be constructed entirely of wood or of other suitable material.

Article 14.—All masonry walls surrounding yards, court-yards or buildings, which are not in good condition shall be made rat-proof by being reinforced on the inner side with a concrete wall to a depth of two feet below the surface of the ground and to a height of one foot above the level of the same. Walls surrounding buildings in which the lower floor is below the level of the ground or street shall extend at least one foot above the level of the surrounding ground.

Article 15.—Roofs, garrets, yards, outyards, alleys, cellars and any other open space belonging to houses or buildings must be kept free from food, garbage, forage or other material which may serve as food or refuge for rats. All garrets or other enclosed spaces must be provided with doors for the purpose of inspection and cleaning. Double walls and ceiling shall be constructed in such a way as to prevent the harboring of rats.

Doors and windows provided with grates, the interstices of which may permit the entrance of rats, shall be protected with a metal sheet or other adequate material at least two feet high.

All counters in stores shall be open in front and the shelves must be at least one foot from the floor. Sufficient space shall be provided to insure perfect cleaning. The opening shall be covered with glass or wire screens.

Article 16.—Concrete must be mixed in the following proportions: One part of portland cement to three parts sand and six parts broken stone; in all that portion of the walls which is one foot above the level of the surrounding ground the stone may be replaced by hard-burned broken bricks. The portland cement must be sound and able to withstand a stress of 400 pounds to the square inch after setting seven days, the sand must be clean and not too fine, the broken stone or brick must not be larger than  $1\frac{1}{2}$  inch in any dimension; they must be clean and so hard that they cannot readily be crushed under foot. Richer mixtures of concrete may be required where it is necessary to obtain greater strength. All tile floors must necessarily be laid on concrete. When stone masonry is used in the foundation walls it must be made of hard stone mixed with cement.

Article 17.—When solid rock is encountered in making excavation

as required by these regulations, it will not be necessary to go deeper than the surface of said rock with walls and foundations.

Article 18.—In no dwelling house or building shall food, remnants of food or other matter be kept, except when placed in pantries, storerooms or receptacles constructed so as to be inaccessible to said rodents. Furthermore, when in the opinion of the Commissioner of Health it is necessary for the public health, any person occupying said houses or buildings, whether tenant, owner or lessee, shall supply the same with one or more rat-traps of the pattern approved by the Commissioner of Health which traps must be set and baited, the bait to be changed twice each week. The aforesaid traps shall be inspected daily by the owner or lessee and all rats captured therein sent to the Department of Health, or they may be delivered to an authorized employee thereof, who may also inspect the said traps between the hours of 6 a. m. and 6 p. m.; *Provided*, That the, owner or lessee may destroy the said rats by fire when not collected by the employees of the Department of Health within a period of twenty-four hours from and after the capture thereof.

Article 19.—Sinks, drains, gutters and culverts shall be kept strictly clean and public and private sewers shall be kept in good working condition.

Cocoanut palms, mango and fruit trees which serve as harboring places for rats and which are situated in gardens or orchards of any house or building within the city, shall be kept free of rats, first exterminating those already existing and protecting the trunk of the trees with a band of tin or zinc or other suitable means to render the trees inaccessible to rodents.

Article 20.—Provisions and other articles in storehouses or on sale at wholesale or retail shall be kept stacked, the area of which stacks shall not exceed  $6 \times 10$  meters, surrounded at their base by sheets of galvanized iron two feet high and fitting close to the floor, and arranged in rows, leaving free spaces between them to permit of easy cleaning or sanitary inspection. The floor shall be kept free of provisions spilled either through breakage or through handling of the containers.

Groceries, small shops and other establishments which sell at retail shall have all the provisions for daily consumption in lockers or cupboards placed in such a way that they shall be inaccessible to rats.

Article 21.—Stables and stalls within the city must fulfill the following conditions:

(1) Each horse cared for shall have space of not less than 5 square meters.

(2) The floor shall be of concrete and with an adequate slope, not less than one-eighth of an inch per foot, and with a wall of concrete or stone extending 2 feet below the surface of the grounds it shall be provided with a drain to empty into an impervious tank which shall be emptied as may be specified by the Department of Health.

(3) Upon this concrete floor may be placed planks for a floor for the horses, this is to be made in sections so that it may be easily raised.

The boards which form the floor shall be separated from each other by at least 2 inches.

(4) The sections or parts of the floor must be raised once a week in order to do the necessary cleaning.

(5) Each stable shall be provided with a well, lined with cement, in which to deposit the manure, the well to have a capacity of at least one-fourth of a cubic meter for each horse. Said receptacle shall have a tight-fitting cover divided in two sections.

(6) The manure shall be placed in said receptacles and carefully covered. The cleaning of said wells or receptacles shall be done once a week and the manure carried to a suitable place approved by the Commissioner of Health.

(7) The stable, stall and manger and their surroundings must be kept strictly clean.

(8) Grain to be used as food for the livestock shall be kept in a rat-proof box.

(9) Each manger shall be placed at a minimum distance of two feet from the wall of building and its sides shall have a slope of two inches toward the bottom. Said manger shall be at least 18 inches deep to avoid the spilling of food.

#### RECONSTRUCTION OF BUILDINGS WHICH ARE NOT RAT-PROOF

Article 22.—When buildings which are not rat-proof are reconstructed or repaired to such an extent as to include the renewal of floors, ceilings, etc., the structural conditions applicable to newly constructed buildings shall be required.

Article 23.—These conditions must be fulfilled within a period of time which the Commissioner of Health in each case shall fix in accordance with the importance of the work and the means available in that locality.

Article 24.—Any violation of these regulations shall be punished by a maximum fine of one hundred dollars and the Department of Health shall have the necessary work done at the expense of the owner, in accordance with the Law of Sanitation in force, when the proprietor, after due notification, fails to make the necessary repairs within such reasonable time as may be granted for the purpose; *Provided*, That if a house located in the city, the value of which does not exceed one hundred dollars according to the official assessment, is the property of its owner, only those modifications indispensable to protect the health of the tenants can be required, the amount of which shall not exceed 10 per cent of the property value. If any building constitutes an immediate and evident menace to the public health, the closure and, within a reasonable time, the destruction thereof may be ordered by the Commissioner of Health, if the owner cannot put same in such sanitary condition as not to endanger the public health; *Provided*, That none of the provisions of this regulation is applicable to houses located in the country, the value of which does not exceed one hundred dollars.

Article 25.—Sanitary Regulations numbers 3, 12 15 and 28 are hereby repealed. This regulation shall take effect from and after its approval by the Executive Council and after promulgation and publication as provided by section 13 of "An Act to Reorganize the Service of Sanitation," approved March 14, 1912.

I HEREBY CERTIFY: That the rules and regulations entitled "Regulation pertaining to regulations of Sanitation numbers 3, 12, 15 and 28, entitled "Construction and rat-proofing of buildings and out-houses in Porto Rico" were approved in 3rd reading by the Insular Board of Health in the meeting held April 8, 1920; and complying with section 13 of "An act to reorganize the Service of Sanitation", approved March 14, 1912, I do hereby issue this certificate in San Juan, P. R., this 19th day of June, 1920.

OFFICE OF THE EXECUTIVE COUNCIL OF PORTO RICO,  
SAN JUAN, P. R., *November 16, 1920.*

I hereby certify that the foregoing sanitary regulations were approved by the Executive Council this 16th day of November 1920.

(Signed) P. DE CASTRO,  
*Secretary, Executive Council.*