

CHAPTER 210

STANDARD WEIGHTS AND MEASURES

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210.1 Standard established.

The weights and measures which have been presented by the department to the United States national institute of standards and technology and approved, standardized, and certified by the institute in accordance with the laws of the Congress of the United States shall be the standard weights and measures throughout the state.

[C51, §937; R60, §1775; C73, §2037; C97, §3009; S13, §3009-c; C24, 27, 31, 35, 39, §3227; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §210.1]

[90 Acts, ch 1045, §3](#)

Referred to in [§210.2](#), [210.4](#), [210.5](#), [210.6](#)

210.2 Length and surface measure.

The unit or standard measure of length and surface from which all other measures of extension shall be derived and ascertained, whether they be lineal, superficial, or solid, shall be the standard yard secured in accordance with the provisions of [section 210.1](#). It shall be divided into three equal parts called feet, and each foot into twelve equal parts called inches, and for the measure of cloth and other commodities commonly sold by the yard it may be divided into halves, quarters, eighths, and sixteenths. The rod, pole, or perch shall contain five and one-half such yards, and the mile, one thousand seven hundred sixty such yards.

[C51, §937; R60, §1775; C73, §2038 – 2040; C97, §3010; S13, §3009-d; C24, 27, 31, 35, 39, §3228; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §210.2]

210.3 Land measure.

The acre for land measure shall be measured horizontally and contain ten square chains and be equivalent in area to a rectangle sixteen rods in length and ten rods in breadth, six hundred and forty such acres being contained in a square mile. The chain for measuring land shall be twenty-two yards long, and be divided into one hundred equal parts, called links.

[C73, §2041; C97, §3011; S13, §3009-d; C24, 27, 31, 35, 39, §3229; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §210.3]

210.4 Weight.

The units or standards of weight from which all other weights shall be derived and ascertained shall be the standard avoirdupois and troy weights secured in accordance with the provisions of [section 210.1](#). The avoirdupois pound, which bears to the troy pound the ratio of seven thousand to five thousand seven hundred sixty, shall be divided into sixteen equal parts called ounces; the hundred-weight shall consist of one hundred avoirdupois

pounds, and twenty hundred-weight shall constitute a ton. The troy ounce shall be equal to the twelfth part of a troy pound.

[C51, §938; R60, §1776; C73, §2042, 2043; C97, §3012; S13, §3009-e; C24, 27, 31, 35, 39, §3230; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §210.4]

210.5 Liquids.

The unit or standard measure of capacity for liquids from which all other measures of liquids shall be derived and ascertained shall be the standard gallon secured in accordance with the provisions of [section 210.1](#). The gallon shall be divided by continual division by the number two so as to make half-gallons, quarts, pints, half-pints, and gills. The barrel shall consist of thirty-one and one-half gallons, and two barrels shall constitute a hogshead.

[C73, §2044, 2045; C97, §3013; S13, §3009-g; C24, 27, 31, 35, 39, §3231; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §210.5]

210.6 Dry measure.

The unit or standard measure of capacity for substances not liquids from which all other measures of such substances shall be derived and ascertained shall be the standard half-bushel secured in accordance with the provisions of [section 210.1](#). The peck, half-peck, quarter-peck, quart, pint, and half-pint measures for measuring commodities which are not liquids, shall be derived from the half-bushel by successively dividing the cubic inch capacity of that measure by two.

[C73, §2046, 2047; C97, §3014; S13, §3009-f; C24, 27, 31, 35, 39, §3232; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §210.6]

210.7 Bottomless measure.

Bottomless dry measures shall not be used unless they conform in shape to the United States standard dry measures.

[SS15, §3009-j; C24, 27, 31, 35, 39, §3233; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §210.7]

210.8 Sales of dry commodities.

All dry commodities unless bought or sold in package or wrapped form shall be bought or sold only by the standard weight or measure established in [this chapter](#), or by numerical count, unless the parties otherwise agree in writing, except as provided in [sections 210.9 through 210.12](#).

[SS15, §3009-j; C24, 27, 31, 35, 39, §3234; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §210.8]

[2021 Acts, ch 80, §102](#)

Referred to in [§210.9](#)

210.9 Drugs and section comb honey exempted.

The requirements of [section 210.8](#) shall not apply to drugs or section comb honey.

[SS15, §3009-j; C24, 27, 31, 35, 39, §3235; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §210.9]

Referred to in [§210.8](#)

210.10 Bushel measure.

When any of the commodities enumerated in [this section](#) shall be sold by the bushel or fractional part thereof, except when sold in a United States standard container or as provided in [sections 210.11](#) and [210.12](#), the measure shall be determined by avoirdupois weight and shall be computed as follows:

<i>Commodities</i>	<i>Pounds</i>
Apples	48
Apples, dried	24
Alfalfa seed	60
Barley	48

Beans, green, unshelled	56
Beans, dried	60
Beans, lima	56
Beets	56
Blue grass seed	14
Bran	20
Bromus inermis	14
Broom corn seed	50
Buckwheat	48
Carrots	50
Castor beans, shelled	50
Charcoal	20
Cherries	40
Clover seed	60
Coal	80
Coke	40
Corn on the cob (field)	70
Corn in the ear, unhusked (field)	75
Corn, shelled (field)	56
Corn meal	48
Cucumbers	48
Emmer	40
Flaxseed	56
Grapefruit	48
Grapes, with stems	40
Hempseed	44
Hickory nuts, hulled	50
Hungarian grass seed	50
Kaffir corn	56
Lemons	48
Lime	80
Millet seed	50
Oats	32
Onions	52
Onion top sets	28
Onion bottom sets	32
Oranges	48
Orchard grass seed	14
Osage orange seed	32
Parsnips	45
Peaches	48
Peaches, dried	33
Peanuts	22
Pears	45
Peas, green, unshelled	50
Peas, dried	60
Plums	48
Popcorn, on the cob	70
Popcorn, shelled	56
Potatoes	60
Quinces	48
Rape seed	50
Redtop seed	14
Rutabagas	60
Rye	56
Salt	80

Sand130
 Shorts 20
 Sorghum saccharatum seed 50
 Soybeans 60
 Spelt 40
 Sweet corn 50
 Sweet potatoes 50
 Timothy seed 45
 Tomatoes 50
 Turnips 55
 Walnuts, hulled 50
 Wheat 60
 All root crops not specified above 50

[C51, §940; R60, §1778, 1781 – 1784; C73, §2049; C97, §3016; S13, §3009-h; C24, 27, 31, 35, 39, §3236; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §210.10]

Referred to in [§210.8](#), [717A.1](#)

210.11 Sale of fruits and vegetables by dry measure.

Blackberries, blueberries, cranberries, currants, gooseberries, raspberries, cherries, strawberries, and similar berries, also onion sets in quantities of one peck or less, may be sold by the quart, pint, or half-pint, dry measure.

[SS15, §3009-i; C24, 27, 31, 35, 39, §3237; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §210.11]

Referred to in [§210.8](#), [210.10](#)

210.12 Sale of fruits and vegetables in baskets.

Grapes, other fruits, and vegetables may be sold in climax baskets; but when said commodities are sold in such manner and the containers are labeled with the net weight of the contents in accordance with the provisions of [section 189.9](#), all the provisions of [chapter 191](#) shall be deemed to have been complied with.

[C24, 27, 31, 35, 39, §3238; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §210.12]

[2007 Acts, ch 126, §41](#)

Referred to in [§210.8](#), [210.10](#)

210.13 Berry boxes and climax baskets.

Berry boxes sold, used, or offered or exposed for sale shall have an interior capacity of one quart, pint, or half-pint dry measure. Climax baskets sold, used, or offered or exposed for sale shall be of the standard size fixed below:

1. Two-quart basket: Length of bottom piece, nine and one-half inches; width of bottom piece, three and one-half inches; thickness of bottom piece, three-eighths of an inch; height of basket, three and seven-eighths inches, outside measurement; top of basket, length eleven inches, and width five inches, outside measurement; basket to have a cover five by eleven inches, when a cover is used.

2. Four-quart basket: Length of bottom piece, twelve inches; width of bottom piece, four and one-half inches; thickness of bottom piece, three-eighths of an inch; height of basket, four and eleven-sixteenths inches, outside measurement; top of basket, length fourteen inches, width six and one-fourth inches, outside measurement; basket to have cover six and one-fourth inches by fourteen inches, when cover is used.

3. Twelve-quart basket: Length of bottom piece, sixteen inches; width of bottom piece, six and one-half inches; thickness of bottom piece, seven-sixteenths of an inch, outside measurement; top of basket, length nineteen inches, height of basket, seven and one-sixteenth inches, width nine inches, outside measurement; basket to have cover nine inches by nineteen inches, when cover is used.

[SS15, §3009-i; C24, 27, 31, 35, 39, §3239; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §210.13]

210.14 Hop boxes.

The standard box used in packing hops shall be thirty-six inches long, eighteen inches wide, and twenty-three and one-fourth inches deep, inside measurement.

[C73, §2051; C97, §3018; C24, 27, 31, 35, 39, §3240; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §210.14]

210.15 Milk and cream bottles or containers.

The standard bottle or container used for the sale of milk and cream shall be of a capacity of one gallon, one-half gallon, three pints, one quart, one pint, one-half pint, one-third quart, one gill, filled full to the bottom of the lip.

[S13, §3009-k; C24, 27, 31, 35, 39, §3241; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §210.15]

210.16 Flour.

The standard weights of flour when sold in package form shall be as follows: Two, five, ten, twenty-five, fifty, or one hundred pounds.

[C24, 27, 31, 35, 39, §3242; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §210.16]

210.17 Mason work or stone.

The perch of mason work or stone shall consist of twenty-five feet, cubic measure.

[C51, §939; R60, §1777; C73, §2050; C97, §3017; C24, 27, 31, 35, 39, §3243; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §210.17]

210.18 Sales to be by standard weight or measure — labeling.

1. All commodities bought or sold by weight or measure shall be bought or sold only by the standards established by [this chapter](#), unless the vendor and vendee otherwise agree. Sales by weight shall be by avoirdupois weight unless troy weight is agreed upon by the vendor and vendee.

2. All commodities bought or sold in package form shall be labeled in compliance with the general provisions for labeling provided for in [section 189.9](#) and [sections 189.11 through 189.16](#), unless otherwise provided for in [this chapter](#).

[SS15, §3009-j; C24, 27, 31, 35, 39, §3244; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §210.18]

[2021 Acts, ch 80, §103](#)

210.19 Standard weight of bread.

The standard loaf of bread shall weigh one pound, avoirdupois weight. All bread manufactured, procured, made or kept for the purpose of sale, offered or exposed for sale, or sold in the form of loaves, shall be one of the following standard weights and no other, namely: Three-quarters pound, one pound, one and one-quarter pound, one and one-half pound, or multiples of one pound, avoirdupois weight; and provided further, that the provisions of [this section](#) shall not apply to biscuits, buns, crackers, rolls or to what is commonly known as “stale” bread and sold as such, in case the seller shall, at the time of sale, expressly state to the buyer that the bread so sold is “stale” bread. In case of twin or multiple loaves, the weight specified in [this section](#) shall apply to the combined weight of the two units.

[C27, 31, 35, §3244-b1; C39, §3244.01; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §210.19]
Referred to in [§210.21](#), [210.23](#), [210.24](#)

210.20 Wrapper.

There shall be printed upon the wrapper of each loaf of bread in plain conspicuous type, the name and address of the manufacturer and the weight of the loaf in terms of one of the standard weights herein specified.

[C27, 31, 35, §3244-b2; C39, §3244.02; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §210.20]
Referred to in [§210.21](#), [210.23](#), [210.24](#)

210.21 Violations.

It shall be unlawful for any person to manufacture, procure, or keep for the purpose of sale, offer or expose for sale, or sell bread in the form of loaves which are not of one of the weights specified in [section 210.19](#) or violate the rules of the secretary of agriculture pertaining thereto. Any person who, in person or by a servant, or agent, or as the servant or agent of another, shall violate any of the provisions of [sections 210.19](#), [210.20](#), [this section](#), and [sections 210.22 through 210.25](#), shall be guilty of a simple misdemeanor.

[C27, 31, 35, §3244-b3; C39, §3244.03; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §210.21] [2021 Acts, ch 80, §104](#)

Referred to in [§210.22](#), [210.23](#), [210.24](#)

210.22 “Person” defined.

The word “person” as used in [section 210.21](#) shall be construed to import both the plural and the singular, as the case demands, and shall include corporations, companies, societies, and associations.

[C27, 31, 35, §3244-b4; C39, §3244.04; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §210.22]

Referred to in [§210.21](#), [210.23](#), [210.24](#)

210.23 Exception.

Any person engaged in operating a home food processing establishment as defined in [section 137D.1](#) is exempt from the provisions of [sections 210.19 through 210.22](#).

[C27, 31, 35, §3244-b5; C39, §3244.05; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §210.23] [2021 Acts, ch 80, §105](#); [2022 Acts, ch 1129, §11](#); [2023 Acts, ch 64, §31](#)

Referred to in [§210.21](#), [210.24](#)

210.24 Enforcement — rules and regulations.

The secretary of agriculture shall enforce the provisions of [sections 210.19 through 210.23](#), [this section](#), and [section 210.25](#). The secretary shall make rules for the enforcement of the provisions of said sections not inconsistent therewith, and such rules and regulations shall include reasonable variations and tolerances.

[C27, 31, 35, §3244-b6; C39, §3244.06; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §210.24] [2021 Acts, ch 80, §106](#)

Referred to in [§210.21](#)

210.25 Weighing bread.

Bread when weighed for inspection shall be weighed in the manufacturer’s plant when said bread is wrapped ready for delivery, and bread coming into the state from an adjoining state when weighed for inspection shall be weighed in the packages, containers, vehicles, or trucks of the manufacturer at the time when said bread crosses the state line, or at the first point of stop for sale or delivery of said bread after crossing the Iowa state line, and the weight shall be determined by averaging the weight of not less than fifteen loaves picked at random from any given lot.

[C35, §3244-f1; C39, §3244.07; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §210.25]

Referred to in [§210.21](#), [210.24](#)

210.26 Measuring saw logs.

The Scribner decimal “C” log rule is hereby adopted as the standard log rule for determining the board-foot content of saw logs; and all contracts hereafter entered into for the cutting, purchase and sale of saw logs shall be deemed to be made on the basis of such standard rule unless some other method is specifically agreed upon.

[C62, 66, 71, 73, 75, 77, 79, 81, §210.26]