

DRAFT

DEPARTMENT OF AGRICULTURE

No. R.

AGRICULTURAL PRODUCT STANDARDS ACT, 1990
(ACT No. 119 OF 1990)

**REGULATIONS RELATING TO THE GRADING, PACKING AND MARKING OF
WHEAT PRODUCTS INTENDED FOR SALE IN THE REPUBLIC OF SOUTH AFRICA**

The Minister of Agriculture, acting under section 15 of the Agricultural Product Standards Act, 1990 (Act No. 119 No. 1990) --

- (a) made the regulations in the Schedule;
- (b) determined that the said regulations shall come into operation on the date of publication thereof;
- (c) read together with section 3(2) of the said Act, repealed the regulations published by Proclamation No. R. 576 of 15 March 1991 and Government Notices Nos. R. 577 of 15 March 1991 and R. 2133 of 30 August 1991 with effect from the said date of commencement.

SCHEDULE

Definitions

1. In these regulations, unless inconsistent with the context, any word or expression, to which a meaning has been assigned in the Act, shall have a corresponding meaning, and --

"brown bread" means wheat bread which complies with the requirements prescribed in regulation 8(1)(b);

"brown bread wheat flour" means wheat flour which complies with the requirements prescribed in regulation 4(11);

"cake wheat flour" means wheat flour which complies with the requirements prescribed in regulation 4(7);

"chlorinated flour" means wheat flour which has been treated according to the regulations promulgated under Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972);

"composite cereal flour" means a flour which complies with the requirements prescribed in regulation 4(15);

"confectionery" means all products containing wheat flour produced in a bakery with the exclusion of bread;

"cracked wheat, crushed wheat, cut wheat" means whole wheat kernels that have been processed by cutting, coarse milling or rolling to produce a broken kernel;

"flour improver" means a product or mixture approved for inclusion in flour under the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act 52 of 1972) which improves the processing quality of flour when added to it in small quantities;

"fortification" means the addition of one or more micronutrients by means of a fortification mix to wheat products as prescribed in the Regulations Relating to the Fortification of certain foodstuffs under the Foodstuffs, Cosmetic and Disinfectants Act, 1972 (Act 54 of 1972);

"high bran wheat flour" means flour which complies with the regulations prescribed in regulation 4(12);

"industrial wheat flour" means wheat flour which has a darker colour than white wheat flour as it contains small particles of bran and germ and complies with the requirements prescribed in regulation 4(8);

"milling" is a process through which the components of a wheat kernel (endosperm, bran and germ) are separated and the particle size of the endosperm or starch component is milled or ground down to flour fineness'

"percent" means percent calculated mass per mass on "as is" basis in the case of bran and germ, and on a moisture free basis in the case of ash;

"prescribed mass of bread" means bread with a mass as prescribed under the Trade Metrology Act, 1973 (Act No. 77 of 1973);

"screening" means all material that passes through a standard sieve contemplated in regulation 6(1)(a);

"self-raising wheat flour" means wheat flour which complies with the requirement prescribed in regulation 4(9);

"separation" means the separating of the various components of the wheat kernel through milling process;

"sieve" means a square aperture standard wire mesh sieve with aperture dimensions of 212 microns;

"soft wheat flour" means wheat flour which complies with the requirements prescribed in regulation 4 (6);

"speciality bread" means wheat bread which comply with the requirements prescribed in regulation 8(2);

"stabilised wheat products" means wheat products which comply with the requirements prescribed in regulation 7;

"the Act" means the Agricultural Product Standards Act, 1990 (Act No. 119 of 1990);

"wheat" means made from wheat and the adjective "wheat" can be interchanged with the clause "made from wheat" for the marking of wheat products;

"wheat ash" means the remaining portion of the flour after a sample has been carbonised at 600°C and represents the mineral content which is mainly found in the bran;

"wheat bran" means a product obtained from the milling of wheat consisting mainly of the outer layers of wheat kernels;

"wheat bread" means a baked or partially baked product consisting mainly of wheat products and which --

- (a) is normally sold as bread or under the designation of bread, or which is intended to be used as bread;
- (b) is of any form, size or shape; and
- (c) has a mass of more than 100 g;

Provided that wheat products which are intended to be used as confectionery shall not be regarded as bread, notwithstanding the fact that they may have descriptive designations which include the word "bread" or "loaf";

"wheat flour" means a product obtained from the milling of cleaned wheat to which no wheat bran, wheat germ or wheat semolina has been added;

"wheat germ" means a product obtained from the milling of wheat consisting mainly of the seed embryo;

"wheat products" means wheat products obtained from the milling, rolling or crushing of cleaned wheat including baked or partially baked products which consists mainly of wheat meal or wheat flour;

"wheat semolina" means a coarse granular endosperm product obtained from the milling of wheat;

"white bread" means wheat bread which complies with the requirement prescribed in regulation 8(1)(a);

"white bread wheat flour" means wheat flour which complies with the requirements prescribed in regulation 4(10);

"whole and/or processed wheat kernels" means wheat kernels which comply with the regulations prescribed in regulation 6(3);

"whole wheat" means cleaned wheat kernels in their natural form;

"whole-wheat bread" means wheat bread which complies with the requirements prescribed in regulation 8(1)(c);

"whole-wheat brown bread" means wheat bread which complies with the requirements prescribed in regulation 8(1)(d);

"whole-wheat brown flour" means wheat flour which complies with the requirements prescribed in regulation 4(13);

"whole-wheat flour" means wheat flour which complies with the requirements prescribed in regulation 4 (14).

Restrictions on sale of wheat products

2. (1) No person shall sell any wheat product in the Republic of South Africa --
- (a) unless the wheat product concerned is sold according to the classes set out in regulation 3;
 - (b) unless the wheat product concerned complies with the standards for the classes set out in regulations 4, 5, 6, 7, and 8;
 - (c) unless the containers in which the wheat product concerned is packed comply with requirements set out in regulation 9;
 - (d) unless the wheat product concerned is packed in accordance with the packing requirements set out in regulation 9; and
 - (e) unless the wheat product concerned is marked in accordance with the marking requirements set out in regulations 10, 11 and 12.

(2) The Executive Officer may exempt a person in writing entirely or partially and on such conditions as he or she may deem necessary, from the provisions of subregulation 1.

QUALITY STANDARDS***Classes for wheat products***

3. The classes for wheat products shall be as follows:

- (a) White wheat flour, which are divided into --
 - (i) white bread wheat flour or white bread flour made from wheat;
 - (ii) cake wheat flour or cake flour made from wheat;
 - (iii) soft wheat flour or soft flour made from soft wheat;
 - (iv) industrial wheat flour or industrial flour made from wheat; and
 - (v) self-raising wheat flour or self-raising flour made from wheat.
- (b) Brown wheat flour, which are divided into --
 - (i) brown bread wheat flour or brown bread flour made from wheat;
 - (ii) whole-wheat brown flour; and
 - (iii) High bran wheat flour or high bran flour made from wheat.
- (c) Whole-wheat flour.
- (d) Wheat bread, which are divided into --
 - (i) White bread;
 - (ii) Brown bread;
 - (iii) Whole-wheat bread;
 - (iv) Whole-wheat brown bread;
 - (v) Speciality bread.
- (e) Composite cereals flour or composite flour made from cereals.
- (f) Stabilised wheat products or stabilised products made from wheat.
- (g) Wheat semolina or semolina made from wheat.
- (h) Wheat non-flour products which are divided into --
 - (i) Wheat bran or bran made from wheat;
 - (ii) Wheat germ or germ made from wheat; and
 - (iii) Whole and/or processed wheat kernels.

Standards for white wheat flours, brown wheat flours, whole-wheat flours and composite cereal flours

4. Subject to the provisions of regulation 2 these wheat flours --

- (1) shall have a moisture content not exceeding 14 percent;

- (2) shall contain the fraction of the milled wheat below the sieve when sieved through a 212 micron wire mesh sieve, and therefore shall contain no separated wheat semolina;
- (3) shall contain a fraction of wheat bran above the 212 micron sieve in the case of flour classes with a defined wheat bran content;
- (4) may contain flour improvers;
- (5) be pure and sound;
- (6) in the case of soft wheat flour --
 - (a) be a white wheat flour milled from a soft wheat; and
 - (b) not contain separated wheat bran, wheat germ or wheat semolina.
- (7) in the case of cake wheat flour --
 - (a) have an ash content not exceeding 0,60 percent; and
 - (b) shall not contain separated wheat bran, wheat germ or wheat semolina;
- (8) in the case of industrial wheat flour --
 - (a) have an ash content of not less than 0,85 percent;
 - (b) contain a maximum of 1,0 percent wheat bran with a particle size greater than 212 micron;
 - (c) be fortified as prescribed in terms of the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972); and
 - (d) shall not contain separated wheat bran, wheat germ or wheat semolina.
- (9) in the case of self-raising wheat flour --
 - (a) contain a raising agent which has been added according to the regulations promulgated in terms of the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972); and
 - (b) contain wheat flour which complies with the applicable requirements in subregulations 4(6), (7), (8), (9), (10), (11), (12), (13), (14) and (15).
- (10) in the case of white bread wheat flour --
 - (a) have an ash content of not less than 0,60 percent and not exceeding 1,0 percent;
 - (b) be fortified as prescribed in terms of the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972) and
 - (c) contain no separated wheat bran, wheat germ or wheat semolina.
- (11) in the case of brown bread wheat flour --
 - (a) have an ash content of not less than 0,60 percent and not exceeding 1,0 percent obtained from the flour fraction that passed through a 212 micron sieve;
 - (b) have a wheat bran content of not less than 10 percent and not exceeding 15 percent;

- (c) be fortified as prescribed in terms of the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972); and
 - (d) contain no separated wheat germ or wheat semolina.
- (12) in the case of high bran wheat flour --
- (a) have a wheat bran content of not less than 15 percent; and
 - (b) contain no separated wheat germ or wheat semolina.
- (13) in the case of whole-wheat brown flour --
- (a) contains all the components present in a wheat kernel including one or more of the following ingredients which shall be in the flour at a level not less than 10 percent; whole wheat, cracked wheat, crushed wheat and cut wheat;
 - (b) have a wheat bran content of not less than 10 percent;
 - (c) may contain wheat germ; and
 - (d) contain no separated wheat semolina.
- (14) in the case of whole-wheat flour --
- (a) includes all the components present in a wheat kernel obtained through the milling of the whole wheat kernel.
- (15) in the case of composite cereals flour --
- (a) contain wheat flour which has been blended with non-wheat flours and/or grains and/or seeds; and
 - (b) have a wheat flour component made up of wheat flour(s) which complies with the applicable requirements in subregulations 4(6), (7), (8), (9), (10), (11), (12), (13), (14) and (15).

Standard for wheat semolina

5. Subject to the provisions of regulation 2 wheat semolina shall --
- (a) have a minimum of 50 percent of the total white endosperm particle content that does not pass through a 212 micron sieve; and
 - (b) have a moisture content of not more than 15 percent.

Standards for wheat non-flour products

6. Subject to the provisions of regulation 2 wheat non-flour products shall --
- (1) in the case of wheat bran --
 - (a) consist mainly of the bran fraction of wheat, provided that it may contain a quantity of ground screenings and vegetable matter other than wheat; and
 - (b) have a moisture content of not more than 15 percent.

- (2) in the case of wheat germ --
 - (a) consist mainly of the seed embryo; and
 - (b) have a moisture content of not more than 15 percent.
- (3) In the case of whole and/or processed wheat kernels --
 - (a) consist of cleaned kernels in intact or processed form; and
 - (b) have a moisture content of not more than 15 percent.

Standard for stabilised wheat products

- 7. Subject to the provision of regulation 2 stabilised wheat products --
 - (a) shall have been subjected to further processes such as heat treatment in order to inactivate enzymes and/or modify (denature) wheat proteins;
 - (b) or chemical treatment such as chlorination treatment to lower the pH of the dough;
 - (c) a wheat product component included in the classes for wheat products; and
 - (d) have a moisture content of not more than 14 percent.

Standards for wheat bread

- 8. (1) (a) Subject to the provision of subregulation 2, white bread shall consist of a dough made from white wheat flour and water, with or without other ingredients, that has been fermented by yeast or otherwise leavened, baked in any form, size or shape and which has been treated, prepared and processed in such a manner that the bread, if it is of a prescribed mass specified in column 2 of the Table, contains the applicable minimum dry solids mass specified opposite thereto in column 3 of the Table.
 - (b) Subject to the provision of subregulation 2, brown bread shall consist of a dough made from brown wheat flour and water, with or without other ingredients, that has been fermented by yeast or otherwise leavened, baked in any form, size or shape and which has been treated, prepared and processed in such a manner that the bread, if it is of a prescribed mass specified in column 2 of the Table, contains the applicable minimum dry solids mass specified opposite thereto in column 3 of the Table.
 - (c) Subject to the provision of subregulation 2, whole-wheat bread shall consist of a dough made from whole-wheat flour and water, with or without other ingredients, that has been fermented by yeast or otherwise leavened, baked in any form, size or shape and which has been treated, prepared and processed in such a manner that the bread, if it is of a prescribed mass specified in column 2 of the Table, contains the applicable minimum dry solids mass specified opposite thereto in column 4 of the Table.
- (2) Notwithstanding the provision of paragraphs (a), (b) and (c) of subregulation 1, white bread, brown bread and whole wheat bread shall be deemed to comply with the applicable requirements set out in the paragraph concerned of that subregulation in the case of a requirement relating to the dry solids content, deviates with not more than 1% from the minimum prescribed for white bread, brown bread or whole-wheat bread, as the case may be: Provided on average the minimum dry solid content complies with the prescribed minimum dry solid.

(3) Speciality bread shall consist of dough made of wheat flour or composite cereals flour and may contain ingredients providing specific sensory characteristics and/or nutritional value as well as whole or crushed grain kernels and/or seeds, that has been fermented by yeast or otherwise leavened, baked in any form, size or shape.

PACKING AND MARKING REQUIREMENTS

Requirements for containers

9. (1) Wheat products shall, where appropriate, be packed in containers which --
- (a) are intact, clean, dry, suitable and strong enough for packing and normal handling of wheat products;
 - (b) shall not impart an undesirable taste or odour to the contents thereof; and
 - (c) shall properly be closed in a manner permitted by the nature of the container and the contents thereof.
- (2) If the containers are packed in outer containers, such containers shall be clean and intact.
- (3) Subject to the provisions of subregulation 1 the specifications for the different containers for different wheat products shall be as prescribed in the Trade Metrology Act, 1973 (Act No. 77 of 1973).

Marking requirements for white wheat flour and brown wheat flour

10. A container containing white wheat flour or brown wheat flour shall be clearly and legibly marked with the following particulars:
- (a) The name of the product;
 - (b) The class of the product;
 - (c) The name and physical address of the manufacturer thereof, or if the product has been packed for a person other than the manufacturer thereof, the name and physical address of such other person;
 - (d) The mass of the contents as prescribed in terms of the Trade Metrology Act, 1973 (Act No. 77 of 1973); and
 - (e) the names and quantities of nutrients as identified in the food fortification programmes as prescribed in terms of the Foodstuffs, Cosmetics and Disinfectant Act, 1972 (Act No. 54 of 1972).

Marking requirements for wheat bran

11. A container containing wheat bran shall be clearly and legibly marked with the following particulars:
- (a) The name of the product;
 - (b) The name and physical address of the manufacturer thereof, or if the product has been packed for a person other than the manufacturer thereof, the name and physical address of such other person; and
 - (c) The mass of the contents as prescribed in terms of the Trade Metrology Act, 1973 (Act No. 77 of 1973).

Marking requirements for wheat bread

12. (1) Every wheat bread shall be clearly and legibly marked with the following particulars:
- (a) The class of the wheat bread;
 - (b) the name and physical address of the manufacturer of the wheat bread or the name and physical address of the person on whose behalf the wheat bread was baked; and
 - (c) the mass of the wheat bread.
- (2) The provisions of subregulation 1 shall not apply to --
- (a) wheat bread packed by the manufacturer thereof: Provided that the particulars referred to in subregulation 1 shall be clearly and legibly marked on the packing material of each bread thus packed; and
 - (b) wheat bread presented for sale at a point where a notice in type of not less than 30 mm high clearly and legibly indicates the particulars referred to in subregulation 1.
- (3) Wheat bread which complies with the requirements of subregulation 1 and is packed in a transparent container by the manufacturer thereof is exempted from the requirements of subregulation (2)(a).

METHODS OF ANALYSIS FOR WHEAT PRODUCTS**General**

13. (1) In order to determine whether a wheat product complies with the requirement for such product, the product shall --
- (a) be analysed in duplicate;
 - (b) where necessary, be ground to such a fineness as to allow all the material to pass through a round hole sieve with aperture of 2 mm;
 - (c) be mixed thoroughly before any determination is made;
 - (d) be measured out in grams accurately to the fourth decimal place unless where otherwise specified; and
 - (e) in the case of baked products, be treated in such a manner that, except in the case of the determination of the dry solids mass, the crust is first separated from the product and the remaining portion (called "the crumb" in the baking trade) is then cut into thin slices and, when air-dry, ground to such a fineness as to allow the sample to pass through a 1,0 mm sieve.

Determination of the dry solids content of bread

14. The dry solids content of bread shall be determined as set out below:
- (1) The apparatus used for the determination of the dry solids contents of bread, is as follows:
- (a) Hot-air oven, the temperature of which may be regulated at 105°C (with a variation not exceeding 5°). The oven must be so constructed that the hot air passes evenly and horizontally through the oven over the drying trays. The oven must be provided with vents to allow moist air to escape;

- (b) drying trays made from stainless steel and covered with gauze which is sufficiently fine to prevent any crumbs from passing through; and
 - (c) laboratory mass meter which can measure accurately to 0,1 g.
- (2) The method that is used in the determination of the dry solids content of bread, is as follows:

Measure the mass of the whole bread unit accurately to 0,1 g. In the case of uncut bread, cut into slices of approximately 10 to 15 mm thick. Place and spread the slices as well as any crumbs, onto the drying tray. Set the vent of the oven in order to allow the moist air to escape without the temperature variation exceeding 5°C and so that the bread will dry to constant mass after six hours. Place the drying trays with bread into the oven and increase the temperature within 45 minutes to 105°C (with a variation not exceeding 5°C). Remove the bread from the oven after six hours, allow to cool for three minutes and measure the dry mass of the bread and crumbs accurately to 0,1 g. Where more than one loaf of bread is analysed, report the average dry solid mass. Any fraction of a gram is increased to the next whole gram).

Determination of the bran content of brown wheat flour

15. The bran content of brown wheat flour shall be determined as set out below.

(1) The apparatus used for the determination of the bran content of brown wheat flour is as follows:

- (a) An electrically driven laboratory plansifter fitted with an automatic time switch. This sifter must have a throw of 75-77 mm and the drive must run at a speed of 180-190 r.p.m. The sieving motion must be horizontal and circular when sieving and the sieves must not have a precession action;
- (b) A round sieve, 200 mm in diameter covered with a 212 micron stainless steel wire mesh. The sieve must be fitted with a tight-fitting lid and receiver in order that no material is lost during sieving; and
- (c) Nylon cubes with 13 mm to 18 mm sides.

(2) The method that is used in the determination of the bran content of brown wheat flour, is as follows:

- (a) Fit the 200 mm round sieve into the receiver. Place 200 g (with a variation not exceeding 0,1 g) of a representative sample of brown wheat flour and two nylon cubes into the sieve. Cover the sieve with the lid and mount in the plansifter. Sieve for five minutes. Remove the sieve, lid and receiver from the plansifter. Remove the lid and brush any material adhering to it back into the sieve. Tap the sieve lightly five to ten times with the palm of the hand so that any material adhering to the bottom of the sieve will drop back into the receiver. Remove the sieve from the receiver and determine the mass of the material remaining above the sieve to the nearest 0,1 g. Record this mass (A grams). Measure the mass of the material in the receiver to the nearest 0,1 g. Record this mass (B grams). The total mass of the material recovered (A + B) must equal 200 g (with a variation not exceeding 0,2 g). If the total mass of the material recovered falls outside the tolerance of 200 g (with a variation not exceeding 0,2 g) the test must be repeated; and

- (b) Calculate the percentage material which remains on the sieve as follows:

$$\text{Bran percentage} = \frac{A}{2}$$

Take the average of the duplicate percentages thus obtained as the bran percentage (m/m) of the brown wheat meal and report it to the nearest 0,1. Repeat the determination if the duplicate percentages differ by more than 0,4.

Determination of the Ash content

16. The ash content shall be determined by means of the glycerol-alcohol method.

- (1) The apparatus which is used for the determination of the ash content is as follows:

- (i) Flat-bottom silica ashing dishes of a diameter or diagonal of approximately 70mm.
- (ii) Vacuum desiccators with glass taps. Silica gel should be used as desiccant in the desiccators.
- (iii) Aperiodic, automatic, analytical balance.
- (iv) Muffle furnace provided with a pyrometer and control unit by means of which the temperature may be controlled.

- (2) The reagents used for the determination of the ash content are as follows:

- (i) Redistilled glycerol and 96 per cent (v/v) ethyl alcohol, mixed in equal volumes. After ignition at 600°C the mixture must leave no residue.
- (ii) Ethyl alcohol, 80 per cent (v/v). Dilute 83 ml 96 per cent (v/v) ethyl alcohol to 100 ml with distilled water.

- (3) The method that is used in the determination of the ash content, is as follows:

Place a clean flat-bottom silica ashing dish in a cold muffle furnace and increase the temperature to 600°C. Heat the dish for at least 15 minutes at 500°C (with a variation not exceeding 15°C), cool in a desiccator and measure its mass when it has reached room temperature. Measure 5 g (with a variation not exceeding 0,1 g) of the air-dry sample into the dish. Add to the material in the dish 7,5 ml of the glycerol-alcohol mixture so that all the material becomes wetted thoroughly and leave for 10 minutes. Heat the dish until the contents start to froth slightly and ignite. Place the dish in the furnace at approximately 350°C after the material has been carbonised and increase the furnace temperature to 600°C (with a variation not exceeding 15°C). Keep the ashing dish in the oven for not less than six hours. Cool the dish with contents in a desiccator and then carefully add 3 ml 80 per cent (v/v) ethyl alcohol to the ash in the dish. The ash must be wetted thoroughly and any carbon particles present must be exposed to the air. Ignite the alcohol in the dish and allow all the alcohol to burn away. Replace the dish containing the ash in the cold furnace and increase the temperature to 600°C (with a variation not exceeding 15°C). Ash at this temperature for one hour. Cool the dish in a desiccator and measure the mass. Repeat the ashing process until a constant mass is attained. Deduct from this mass the mass of the empty dish and express the difference in mass as a percentage of the air-dry sample. Convert this result to a moisture-free basis by means of the result obtained from the moisture determination as described in paragraph 1. Take the average of the duplicate percentages thus obtained as the ash percentage (m/m) of the moisture-free sample. Repeat the determination if the duplicate percentages differ by more than 0,04 percentage units in the case of wheaten meal with an ash content greater than 1,0 per cent.

Determination of the moisture content

17. The moisture content of a consignment of wheat products may be determined according to any suitable method: Provided that the results thus obtained are in accordance ($\pm 0,3$ per cent) with the results obtained by means of the 72 hour oven dried method (AACC Method 44/15A/1981).

Tolerances for the moisture bran and ash contents for the various classes of wheat products

18. The following tolerances shall apply where applicable:
- (a) A moisture content tolerance of not more than 0,2 percentage units above the maximum moisture content prescribed.
 - (b) A bran content tolerance of not more than 0,5 percentage units from the minimum or maximum bran content prescribed.
 - (c) An ash content tolerance of not more than 0,05 percentage units from the minimum or maximum ash content prescribed.

OFFENCES AND PENALTIES

19. Any person who contravenes or fails to comply with the provisions of these regulations shall be guilty of an offence and upon conviction be liable to a fine or imprisonment in terms of section 11 of the Act.

TABLE 1

MINIMUM DRY SOLIDS MASS FOR WHEAT BREAD

Class of wheat product	Prescribed mass of bread (g)	Minimum dry solids mass (g) (White bread and Brown bread)	Minimum dry solids mass (g) (Whole wheat bread)
1	2	3	4
White bread, brown bread and whole wheat bread	400	232	200
	500	290	250
	600	348	300
	700	406	350
	800	464	400
	1 200	696	600
	1 600	928	800