
**Supermarket - Hygiene and Environmental Health
requirements**

Foreword

This Ethiopian Standard has been prepared under the direction of the Technical Committee for Sanitation, Hygiene and Health Related Service (TC 205) and published by the Ethiopian Standards Agency (ESA).

Draft of the standard has been presented by ministry of health. Acknowledgment has been made for the organization for its concern to contribute to the effort of national standardization.

Supermarket - Hygiene and Environmental Health requirements

1. Scope

This Ethiopian standard specifies hygiene and environmental health standards for all new and existing supermarkets handling, storage, transportation and fully or partially preparation of food products.

2. Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ES ISO 22000:2018, food safety management system – requirements for any organization in food chain.

ES 588: 2001, hazard analysis critical control point (HACCP) systems and guidelines for its application.

3. Terms and definition

3.1.

Supermarket

An establishment that organizes and displays a variety of foods, beverages and different kinds of household usable products to serve the public.

3.2.

Environmental health

Public health concerned with monitoring or mitigating those factors in the environment that affect human health and disease.

3.3.

Hygiene

Conditions or practices conducive to maintaining health and preventing disease, especially through cleanliness

3.4.

Solid waste

Any waste that comes from residential, commercial, factory and industrial areas and can pollute the environment. Any solid waste must be collected from the source.

3.5.

Food

Any substance, whether processed, semi-processed or raw, which is intended for human Consumption, and includes drinks, chewing gum and any substance which has been used in Manufacture, preparation or treatment of "food" but does not include cosmetics or tobacco or Substances used only as drugs

3.6.

Food establishment

Any building or area in which food is handled and the surroundings under the control of the same Management.

3.7.

Contamination

The occurrence of any substance not intentionally added to the food, which is present in such food as a result of the production, manufacture, processing, preparation, treatment, packaging, transport or Holding of such food or because of environmental contamination.

The term shall include insect, Fragments, rodent hairs and other extraneous matter.

3.8.

Cleaning

Removal of soil, food residues, dirt, grease or other objectionable matter.

3.9.

Guest satisfaction

Guest's perception of the degree to which the guest's requirements have been fulfilled.

3.10.

Food grade material

Materials that are free from hazardous substances to human health and may permitted to meet food.

3.11.

Ready-to-eat

Products that are intended to be consumed without any further treatment.

3.12.

Personal protective equipment

Special equipment or clothing to protect from harm against safety hazards.

3.13.

Approved water supply

Source of water that has been inspected and approved by the competent authority for human consumption.

3.14.

Safe water

Water that is free from physical, chemical, and/or biological substances in concentrations that could cause illness or injury to consumers.

3.15.

Water quality

The chemical, physical and biological characteristics of water in respect to suitability for human consumption.

3.16.

Treated water

Water that has undergone through processes such as flocculation, coagulation, sedimentation, filtration and disinfection.

3.17.

Potable water

Water that is safe and suitable for human consumption.

3.18.

Drinking water

Potable water intended for human consumption.

4. Requirements

4.1. General requirements

4.1.1. All staff shall be trained and certified by recognized body for their intended field of work.

4.1.2. A training program shall be designed, implemented and periodically reviewed by management to improve staff competence, according to the identified needs.

4.1.3. All staff is responsible for the quality of customer service in related with hygiene and environmental health.

4.1.4. Premises shall have hand washing facilities that are located where they can be easily accessed;

4.1.5. The premises shall be equipped with sufficient number of appliances so that at all times, the temperature and humidity may be maintained at a level so as to provide comfortable and healthy condition.

- 4.1.6. Premises shall have a lighting system that provides natural or artificial light for the activities conducted.
- 4.1.7. Floors Walls and ceilings shall be designed and constructed in a way that is appropriate for the activities conducted on the food premises.
- 4.1.8. The management shall responsible for the pest control prevention system at the premises.
- 4.1.9. The supermarket Establishment shall provide the adaptation of the workplace if it employs a person with any kind of disability.
- 4.1.10. The buildings, facilities and equipment shall pose no risks to customer or staff.

4.2. **Specific requirements**

4.2.1. **Delivery and delivery system of food and beverage and other products**

- 4.2.1.1. A separate delivery room shall be set up with a separate door for both customer and staff access to the vehicle service.
- 4.2.1.2. The landing area shall be directly connected to the warehouse.
- 4.2.1.3. The landing area shall not be infested with insects and rodents.
- 4.2.1.4. Delivery of food and beverages temperature range shall be kept as follows:
- 4.2.1.5. For those which need a normal temperature range shall be from 10 degree Celsius to 21 degree Celsius;
- 4.2.1.6. For those need moderate cooling, the temperature shall be between 2°C and 8°C.
- 4.2.1.7. For those need a deep freeze, the temperature shall be -18°C and above.
- 4.2.1.8. The imported food and beverage shall be in the correct composition, texture, color and physical condition. There shall be documents that verify this.
- 4.2.1.9. An imported food and beverage products shall be clearly indicated the manufacturer and its expiry date.
- 4.2.1.10. There shall be a description of products imported into the supermarket, both domestically and internationally.
- 4.2.1.11. Food / Beverage Safety Professional shall be present at the reception.
- 4.2.1.12. A thermometer shall be available to check food temperature.
- 4.2.1.13. Clean and easy to clean carts shall be available to transport goods to a warehouse.

4.3. **Meat, poultry, and fish processing department**

- 4.3.1. The super market shall have an appropriate section for its meat, poultry and fish products.
- 4.3.2. The area shall be at least 30 square meters (5 m x6 m square) and the ceiling height of the room shall be at least 2.4 meters and above the floor.

- 4.3.3. The room shall be dustproof and equipped with air conditioning to control the temperature of the room.
- 4.3.4. The room temperature shall be between 15 °C and 18 °C.
- 4.3.5. Depending on the type of products (meat, poultry and fish) prepared by the super market, chopping board shall be in a variety of colors, not cracked, easily cleanable and made of polypropylene (for meat-red, chicken-yellow, fish-blue color, vegetables and fruits – green, Cheese and milk products – white and brown for cooked foods).
- 4.3.6. There shall be a colored knives and a cleaning towels corresponded to chopping board as described in clause 7.5.
- 4.3.7. There shall be a meat grinder as per it is needed.
- 4.3.8. There shall be an electric machine for bone cutting.
- 4.3.9. All food containers shall be made of food graded materials.
- 4.3.10. Prepared products shall have a description of the super market with general information on the appropriate packaging.
- 4.3.11. There shall be a refrigerator or freezer for storing prepared food.
- 4.3.12. All refrigerators shall be having a digital outdoor and indoor thermometer that reads the temperature.
- 4.3.13. Once the meat, poultry, and fish are being prepared, the super market must label them and store them at the appropriate temperature.
- 4.3.14. Appropriate hand washing facilities shall be in the room (wall mounted sink / with running hot and cold water, soap, sanitizer, and hand dryer).

4.4. Vegetable and Fruit Room

- 4.4.1. Super market shall be having a room for fruit and vegetable products.
- 4.4.2. The area shall be at least 30 square meters (5 m x 6 m).
- 4.4.3. The ceiling height shall be at least 2.4 meters and above the floor.
- 4.4.4. The super market shall have a table made of easily cleanable, non-cracked materials (marble, factory wood or similar material) for the fruit and vegetable products it processes.
- 4.4.5. For the fruits and vegetables processed by the super market, there shall be a color-coded, non-cracked, easy-to-clean, and polypropylene green cutter.
- 4.4.6. There shall be a knife and sponge that matches the color of vegetables and fruits.
- 4.4.7. Three-compartment sink for cleaning vegetables and fruits shall be provided with cold and hot running tap water.
- 4.4.8. There shall be a vegetable and fruit cleaner and it shall not be change the content of the food during cleaning.

- 4.4.9. Vegetables and fruits shall be labeled with general information on their packaging if necessary.

4.5. **Cafe service**

- 4.5.1. If there is café, service refers standards prepared for café.

4.6. **sales room**

- 4.6.1. The company shall be having section for different types of products it sells.
- 4.6.2. The area shall at least be 1,200 square meters and the ceiling height shall be at least 4 meters from the floor.
- 4.6.3. Shelves shall be made of stainless and easily clean materials. The layout shall be 40 cm from the floor, 20 cm from the wall, 60 cm from the ceiling and 1 meter between the shelves
- 4.6.4. Products stored in the room shall be registered and classified.
- 4.6.5. For products need refrigeration, there shall be refrigerators that maintain the desired temperature.
- 4.6.6. All refrigerators in the room shall have digital outdoor and indoor thermometers.
- 4.6.7. Temperature gauges of refrigerators shall be calibrated twice annually by the relevant legal authority.
- 4.6.8. Refrigerator temperature in the room recorded on a temperature-monitoring chart twice a day for 12 hours at a time and shall be documented.
- 4.6.9. Products that last 2 years shall be removed from the shelves.
- 4.6.10. For products with a shelf life of two years or more, they shall be notified to the consumer 3 months before the expiration date.
- 4.6.11. Products that their expiration date is less than two years shall be removed from the shelf and stored in a separate storage area and shall be notified to the customers.
- 4.6.12. Products that have a shelf life of three months or less shall be removed from the shelf within 24 hours of expiration.
- 4.6.13. The super market shall be have a warning system in place, when it is about to register its expiration date.
- 4.6.14. There shall be an adequate ventilation and light in the room.

4.7. Product storage / storage condition

- 4.7.1. shall have at least 500 square meters (25 m x 20 m) of floor space and the ceiling height shall be at least 4 meters and above the floor.
- 4.7.2. The temperature in the storage room shall be varying according to the type of products that the super market receives from both the manufacturer and the distributor as follows:
- 4.7.3. Storage of food and beverages that require normal temperature cooling shall be between 10°C and 21°C.
- 4.7.4. Refrigeration room shall be between 2°C and 8°C (for vegetables, eggs, milk, etc.).
- 4.7.5. The deep freeze shall be -18 °C and above (for meat, fish, poultry and refrigerated products).
- 4.7.6. Warehouse doors shall be at least 4 meters wide.
- 4.7.7. A shelf shall be made from stainless or non-corroded and easily cleanable.
- 4.7.8. Shelf shall be placed 40 cm above the floor, 20 cm far from the wall, and 60 cm from the ceiling.
- 4.7.9. There shall be ventilation and temperature control system.
- 4.7.10. Products stored in the room shall be properly registered and classified.
- 4.7.11. Sanitary products and other chemicals shall be stored separately from food and beverage products in the main storage area.
- 4.7.12. Imported products shall be follow FIFO and FEFO principles.
- 4.7.13. Expired or damaged products shall be properly counted, recorded and stored in a separate room from the main storage until it disposed.
- 4.7.14. There shall be a non-rusted and easy-to-clean cart that can be transport items from place to place.
- 4.7.15. Hygrometer shall be available in the storage room to measure relative humidity.
- 4.7.16. All refrigeration units or refrigerators shall have digital outdoor and indoor thermometer that indicates correct temperature reading.
- 4.7.17. The temperature shall be recorded twice a day at 12 hours interval with a temperature monitoring chart posted on the room or refrigerator.
- 4.7.18. There shall be a ladder designed for the purpose of stack and unload products.

4.8. Bread and cake bakery.

- 4.8.1. If super market bake bread and cake shall based on the bread, cake kukies bakery Ethiopian standard.

4.9. The environmental conditions of the organization

- 4.9.1. It shall be 30 meters away from residential, school, health facilities and kindergartens;
- 4.9.2. It shall not be exposed to floods, swamps and mudslides
- 4.9.3. It shall not be exposed to insects, rodents, solid waste, bad odors, chemicals, or any toxic substances that may contaminate food in general and endanger human health and safety.
- 4.9.4. It shall be within 50 meters of any service provider or manufacturer that does not comply with the service and poses a risk of contamination.
- 4.9.5. There shall be available of electricity, water, and roads.

4.10. Premises

4.10.1. The design and construction condition

- 4.10.1.1. The building shall be constructed from stone, blocket or clay using of cement, mortar and smooth and fire-resistant materials.
- 4.10.1.2. The size of the room shall be enough to provide service that does not cause any contamination, poisoning and mix of inferior substances.
- 4.10.1.3. The structure of various parts of the building, doors and windows shall be waterproof, free of pests, insects and predators.
- 4.10.1.4. Windows and doors shall be easy to open and close.
- 4.10.1.5. There shall be a ramp for wheelchair users.

4.10.2. Floor

- 4.10.2.1. Floors shall be made of non-cracked and standard building materials (cement, concrete, ceramic, or other similar building material) clean and tidy.
- 4.10.2.2. It shall be non-slip and easy to wash.
- 4.10.2.3. The floor shall not be exposed to floods, rain and accumulate water on its surfaces and easy to maintain.
- 4.10.2.4. The floor shall be leveled and waterproof.

4.10.3. Wall

- 4.10.3.1. It shall be made of standard building materials (cement, concrete, ceramic or other similar building materials) painted with white paint and suitable for easy.

4.10.4. Ceiling

4.10.4.1. Must be made of heat-resistant building materials (concrete slab, epoxy or other similar building material) non-cracked, clean and painted with white paint

4.10.5. Air circulation and lighting conditions.

4.10.5.1. There shall be ventilation in the rooms of the establishment. That means window shall be 10% of the area of the room.

4.10.5.2. There shall be light to provide a service.

4.10.5.3. At a time when there is no electric light alternative power generator shall be available

5. Hygiene of food contact equipment

5.1. Dishwasher

5.1.1. There shall be washing basin for the equipment.

5.1.2. The area shall be comfortable for work.

5.1.3. A three-compartment sink or machine compatible with washing equipment shall be equipped with hot and cold tap water.

5.1.4. Pressurized water line shall be provided for washing equipment's.

5.1.5. Soap and chemicals for washing shall be in close proximity.

5.1.6. Utensils drying rack shall be made of plastic or corrosion-resistant materials.

5.1.7. Sewage from washing sinks or machines shall be connected with an approved sewer line or sewer.

5.1.7.1. If a washing machine is ready, the washing water shall be at 55°C and rinsed at 85-90°C.

6. Requirements and services for Employees

6.1. Employees health

6.1.1. Workers who have a direct contact with any of food products shall be tested for infectious diseases before starting work.

6.1.2. Employees who have direct or indirect contact with the products shall be checked every three months and shall have certificate.

6.1.3. Any worker who has direct or indirect contact with the products shall not be on duty until the end of treatment if he or she develops any infectious disease during work, such as diarrhea, fever, vomiting, and so on.

6.1.4. Workers shall receive health care training before and during work, especially on basic food handling and safety, nutrition characteristics, food borne illnesses.

6.2. Occupational safety and hygiene equipment

6.2.1. Employees shall wear personal safety equipment during working hours.

The equipment shall include:

6.2.2. The management is responsible for ensuring that the proper safety measures are defined and put in place.

These shall include the management of:

6.2.3. risk and accident prevention;

6.2.4. safety of people, assets, buildings and facilities;

6.2.5. Fire protection and management of emergencies.

6.2.6. Safety measures of all devices and equipment used especially the electrical devices and equipment, drainage systems and installations (e.g. outlets, electrical dividers ...) shall be implemented.

6.2.7. Equipment (e.g. regular and emergency lighting, switches, power sources, tap fixtures) shall operate correctly, safe and have no damage.

6.2.8. Safety equipment shall be duly signposted and shall be operative, visible and accessible

6.2.9. White gown (double sheets), Hair covering, Mouth and nose mask (as needed), Safety shoes.

6.2.10. Shall have gloves (different and modified);

6.2.11. There shall be a coat for workers working in the cold room;

6.3. Staff room and dining

6.3.1. There shall be room that met standard building requirement for dining.

6.3.2. A room shall have at least nine square meter (3 m x 3 m) area accommodating 10 employees at a time.

6.3.3. There shall be chairs, tables, balconies, and shelves that are not cracked, rough, and easy to wash with water.

6.4. Uniform dressing room

6.4.1. There shall be separate room for male female employees.

6.4.2. A room shall have at least nine square meter (3 m x 3 m) area accommodating 10 employees at a time.

6.4.3. There shall be at least 40 cm by 40 cm of storage box for each employee with key and door.

6.5. Personal hygiene

All food handlers shall meet the following personal hygiene conditions:

- 6.5.1. shall be clean, have clean hands, and clean and trimmed fingernails;
- 6.5.2. hair shall be clean and covered and long hair should be tied back;
- 6.5.3. they shall wash their hands before starting to work and after each break;
- 6.5.4. Shall not wear visible rings, earrings or piercings, bracelets or watches. When it is not possible to temporarily remove them, these items shall be adequately protected by a food grade plaster;
- 6.5.5. Shall have clean protective clothing.
- 6.5.6. Protective clothing shall not be worn outside the food handling area.
- 6.5.7. Personal garments shall not be worn over the protective clothing.
- 6.5.8. Shall cover cuts, sores or grazes with a colored waterproof dressing.
- 6.5.9. Shall not smoke, consume food, chew gum, and lick your fingers, cough or sneeze where ice-cream is being prepared or served.
- 6.5.10. Shall not serve if suffering from diarrhea, vomiting, jaundice, fever, sore throat with fever, infected skin lesions/cuts

6.6. Educational status of employees

- 6.6.1. All workers of the supermarket at least shall be able to read and write, especially over all technical leaders shall have to complete high school according to previous or current educational curriculum.
- 6.6.2. The management shall identify and document, the chart and the job descriptions for hygiene and environmental health related jobs.

There shall be a person/department responsible for:

- 6.6.3. Monitoring the provision of the services; like assign personnel supervising the cleanliness of the toilet,
- 6.6.4. Identifying and recording any incident related to the provision of the services;
- 6.6.5. Initiating actions to ensure customer satisfaction in compliance with hygiene and environmental health
Additional Training program
- 6.6.6. The training program shall meet the following requirements:
- 6.6.7. After recruitment of the new member of staff, a training or orientation period shall be provided
Training, such as environmental management, good hygienic practices, and safety issues;

6.6.8. Other emergency training (e.g. what to do in an emergency, evacuation plan) and basic life support (BLS) or first aid training shall be included.

All staff shall be trained according to their role in night club. Training shall include

- Customer satisfaction;
- Emergency preparedness and provision of first aid.
- Safety of the foods and beverages;
- Non conformity in any service according to the duties of the staff.

7. Service requirements

7.1. Bathroom

- 7.1.1. The height of bathroom shall at least be 2.4 meters.
- 7.1.2. The area shall have area at least 1.2x1.2 meter squares.
- 7.1.3. Shall have a fresh air vent 20 centimeters below the ceiling and open down at 45°.
- 7.1.4. The floor shall not accumulates any waste water on its slab and be clean and tidy.
- 7.1.5. Shall be separated from the restroom.
- 7.1.6. Door shall be easy to open and close from inside.
- 7.1.7. Safety slippers shall be made of plastic.
- 7.1.8. One bathroom shall be provided per 20 employees and isolated for men and women.
- 7.2. There shall be cloth hanger in the room.

7.3. Water supply

- 7.3.1. Water distribution lines installed shall be free of unnecessary leaks or leaks
- 7.3.2. Reservoirs shall be made of plastic or fiberglass;
- 7.3.3. The reservoir tank shall be able to hold for at least two days or more during a water shortage.
- 7.3.4. Reservoirs shall be cleaned every three months and treated with water treatment chemicals.
- 7.3.5. Information about cleaning process of the reservoir tank shall be recorded and available for at least three years.
- 7.3.6. Water used from storage tanks shall be inspected at least twice a year by an authorized government body.
- 7.3.7. Information stated in clause 19.6. Shall be documented by the organization for three years.
- 7.3.8. The sample of water to be tested shall be from the following areas of use: in late to the organization, storage tank, dishwashing sink, bathroom, hand washing sink, kitchen.

7.4. Toilet

- 7.4.1. The floor and walls of the room should be made of a building material that shall be washed, cleaned, waterproof, and soft.
- 7.4.2. The toilet must be at least 10 meters away from the organization's premises.

- 7.4.3. The room shall be clean.
- 7.4.4. In the toilets; floor, walls and seats or around it, shall be free from liquid and solid waste.
- 7.4.5. It shall be free of bad odors.
- 7.4.6. The door of the room shall be easy to open and close from the inside.
- 7.4.7. There shall be flusher with water for feces drainage.
- 7.4.8. The room shall get light.
- 7.4.9. The toilet should have a temporary dust bin with a cover that can be opened and closed on foot (made of rust-resistant materials, easy to move, easy to clean and unable to drain or drain).
- 7.4.10. There shall be wall-fitted functional sink with water flow at least three meters from toilet.
- 7.4.11. There shall be solid or liquid soap for hand washing
- 7.4.12. The toilet shall be open to the customer throughout the service.
- 7.4.13. There shall be a manhole in the toilet after the drain is out of the toilet Solid waste management, collection, and disposal.

7.5. Fire extinguisher and first aid kit

- 7.5.1. Fire extinguisher
 - 7.5.1.1. Depending on the service and size of the company, there should be fire extinguisher not less than 2 kilogram by weight and filled with carbon dioxide.
 - 7.5.1.2. Fire extinguishers should be placed in a clear and user-friendly manner in the serving room, warehouse, staff dining room, and at important place of the building.
 - 7.5.1.3. The fire extinguisher shall be renewed annually.
 - 7.5.1.4. There shall be fire extinguisher not less than 2 kilogram by weight and filled with carbon dioxide.
 - 7.5.1.5. Fire extinguishers shall be placed in a clear and user-friendly manner in the serving room, warehouse, staff dining room, and at important place of the building.
 - 7.5.1.6. The fire extinguisher shall be renewed annually.
 - 7.5.1.7. Employees of the organization shall receive training on the use of fire extinguisher.
- 7.5.2. First aid kit
 - 7.5.2.1. There shall be first aid kit according to the size of the organization and the number of employees in it.

7.5.2.2. It shall be placed in a clear, user-friendly manner and where necessary.

7.5.2.3. Materials that shall contain in first aid kit are cotton, alcohol, savlon, GV, scissors, glove, wound plaster, bandage, ointment, and other important.

7.6. Prevention and control of pests, insects and predators

7.6.1. There shall be no pests, insects, and predators in the organization.

7.6.2. The organization shall ensure the absence of pests, insects, and predators and ensure its controlling mechanism.

7.6.3. The organization shall provide professional based pest, insect, and insect repellent service at least twice a year.

7.6.4. The management is responsible for the pest control and prevention system at the premises.

7.6.5. Pest control plan shall be defined and documented by qualified staff (internal or subcontracted), according to the needs and facilities of the supermarket.

7.6.6. Treatment records as well as a copy of the authorization and sanitary registration of the products used shall be retained.

8. Waste management

8.1. Solid waste management

8.1.1. There shall be a temporary storage container with a lid that can be opened and closed on foot and comparable to the amount of waste generated (made of rust-resistant materials, easy to move, easy to clean, and leak proof)

8.1.2. Solid Waste generated shall be segregate, collected and generally controlled as per ES xxx

8.1.3. Each solid waste container shall be identified indicating the type of waste and shall be duly closed.

8.1.4. The waste bags shall be removed whenever necessary and at least once a day (e.g. external collector, waste room).

8.1.5. Solid waste collection area shall be kept clean and free from pests, insects and predator

8.1.6. Garbage bins shall be located at different places in the organization.

8.1.7. The organization shall collect and dispose of solid waste by its type and characteristics (perishable and non-perishable).

8.1.8. When the garbage bin is three-quarters full, it shall be disposed into the organization's general collection pool.

- 8.1.9. There shall be final dry waste collection site within the organization's premises (protected from animal and human contact and within 10 meters of the main work area).
- 8.1.10. There shall be transportation means of the garbage collected from each workroom to the final solid waste collection point.
- 8.1.11. The final / general solid waste collection site shall have a container that can be opened and closed (made of rust-resistant materials, easy to move, easy to clean, leak proof and different container for different types of waste).
- 8.1.12. The final collected waste shall be disposed of in a manner authorized by the relevant body.

8.2. Liquid waste management

- 8.2.1. Liquid Waste generated shall be managed as per ES xxx
- 8.2.2. There shall be a plan for liquid waste disposal.
- 8.2.3. Liquid waste shall be disposed in septic tank or with the system of municipal liquid waste disposal line.
- 8.2.4. Shall not be disposed liquid waste with rainy water.
- 8.2.5. Shall be avail all documents related to waste disposal.
- 8.2.6. The organization shall have constructed sewer line (planned, covered, leak proof)
- 8.2.7. Any sewage from the services provided by the organization (dish and hand washing and sinks, bathroom, laundry room, toilet, etc.) shall be connected to an approved sewer line.
- 8.2.8. If the septic tank is used by the organization to collect sewage, it shall pump half a meter before it is filled:
- 8.2.9. No sewage shall be discharged into the rainwater drainage line.
- 8.2.10. Sewage disposal information shall be provided when requested by the concerned body. (Whether it is connected to an approved sewer line or accumulated sewage, etc.).

Annex A

Any dishwasher must go through the following cleaning procedures□

1. Pre-wash: remove excess food and grease.
2. Dry cleaning: Wash grease and dirt using hot soapy water and chemicals; soak in washing chemicals for 2-3 minutes if necessary.
3. Flushing Cage- Rinse the remaining debris and foam with running water.
4. Cleansing Pages- Cleansing with a chemical that kills pathogens.
5. Final rinsing: Decontamination of pathogens with running water.
6. Drying - Drying on a rack or drying machine by air

Organization and Objectives

The Ethiopian Standards Agency (ESA) is the national standards body of Ethiopia established in 2010 based on regulation No. 193/2010. ESA is established due to the restructuring of Quality and Standards Authority of Ethiopia (QSAE) which was established in 1998.

ESA's objectives are:-

- ❖ Develop Ethiopian standards and establish a system that enable to check whether goods and services are in compliance with the required standards,
- ❖ Facilitate the country's technology transfer through the use of standards,
- ❖ Develop national standards for local products and services so as to make them competitive in the international market.

Ethiopian Standards

The Ethiopian Standards are developed by national technical committees which are composed of different stakeholders consisting of educational Institutions, research institutes, government or organizations, certification, inspection, and testing organizations, regulatory bodies, consumer association etc. The requirements and/or recommendations contained in Ethiopian Standards are consensus based that reflects the interest of the TC representatives and also of comments received from the public and other sources. Ethiopian Standards are approved by the National Standardization Council and are kept under continuous review after publication and updated regularly to take account of latest scientific and technological changes. Orders for all Ethiopian Standards, International Standard and ASTM standards, including electronic versions, should be addressed to the Documentation and Publication Team at the Head office and Branch (Liaisons) offices. A catalogue of Ethiopian Standards is also available freely and can be accessed in from our website.

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More Information?

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