# Guidelines of Application Procedures and Technical Requirements for Licensing and Modification Works of "Hotel" Establishments





Macao Government Tourism Office of the Macao Special Administrative Region of the People's Republic of China



Land, Public Works and Transport Bureau of the Macao Special Administrative Region of the People's Republic of China

# Contents

3	Introduction			
5	Flowchart of General Application Procedures			
6	Flowchart of the Licensing Process			
7	I. Site Selection			
9	II. Basic Requirements for Hotel Establishments			
9	1. General Requirements for Hotel Establishments			
12	2. The Classification and Requirements of Hotel Establishments			
19	3. Services in Hotel Establishments			
21	III. Project Planning and Notices			
21	1. Architectural Specialty			
25	<ol> <li>Civil Engineering (Water-supply Specialty, Drainage Specialty, and Structure Specialty)</li> </ol>			
28	<ol> <li>Electromechanical Engineering (Power-supply Specialty, Air Conditioning and Ventilation Specialty, Smoke Extraction System Specialty, Gas/Fuel Supply System Specialty, and Elevator Equipment Specialty)</li> </ol>			
34	4. Firefighting Specialty			
41	5. Environmental and Sanitary Conditions			
48	6. Technical Advice and Requirements for Health Clubs installed in Hotel Establishments			
50	IV. Application for Approval for the Project of Modification Work			
52	V. Application for the Work Permit			
54	VI. Application for the Opening of Hotels/Modification of Facilities			
57	VII. Construction			
58	VIII. Inspection			
61	Appendix I Table I Table of Minimum Dimensions and Areas Table II Number of Sanitary Facilities for Clients Table III Specification of Grease Interceptors (Provided by IAM)			
66	Appendix II List of monuments, architecture, architectural complexes and sites with			
74	artistic value Appendix III Related Legislation Contents			
79	<ul> <li>Appendix IV Guidelines for controlling environmental pollution</li> <li>1. Guidelines for controlling environmental pollution in hotels and other similar establishments</li> <li>2. Guidelines for the pollution control of black fumes and particulate</li> </ul>			

	emission from boiler or stove 3. Guidelines for controlling light pollution originating from advertising panels, decorative illuminations and electronic monitors in the exterior of the building 4. The minimum requirements for sound insulation/elimination devices
89	Appendix V Licensing List of Construction/Extension Projects
91	Appendix VI Occupational Safety and Health Checklist for Hotel Establishments

## Introduction

Since the establishment of hotel establishments in the Macao Special Administrative Region (SAR) is regulated by the local laws and regulations, in order to assist the applicants to better understand the provisions and requirements, the Guidelines for Application Procedures and Technical Requirements for Licensing and Modification Works of Hotel Establishments (hereinafter referred to as the "Guidelines") is compiled jointly by the Macao Government Tourism Office (MGTO) and the Land, Public Works and Transport Bureau (DSSOPT). In the Guidelines, there are also technical opinions and informative recommendations provided by other administrative authorities, such as the Municipal Affairs Bureau (IAM), the Labour Affairs Bureau (DSAL), the Fire Services Bureau (CB), the Health Bureau (SS), the Cultural Affairs Bureau (IC) and the Environmental Protection Bureau (DSPA), which could enable the applicants to understand the essence of the licensing process.

The Guidelines, based on the existing legal provisions regulating the hotel industry in the fields of construction, firefighting, hygiene and sanitation, environmental pollution and noise control, is divided into eight chapters: I - Site Selection, II - Basic Requirements for Hotel Establishments, III - Project Planning and Notices, IV - Application for Approval for the Project of Modification Work <sup>[1]</sup>, V - Application for the Work Permit, VI - Application for the Opening of Hotels/Modification of Facilities, VII - Construction, and VIII - Inspection. The relevant legislation contents are attached to the Guidelines for further understanding of the procedure. For suggestions or questions about the Guidelines, please contact MGTO or DSSOPT by telephone, fax, letter, e-mail or heading to the premises of the respective bureaus. Your suggestions will contribute to the improvement and optimization of the licensing procedure.

Administrative Licensing:

Macao Government Tourism Office service counter: Alameda Dr. Carlos d'Assumpção, n.ºs 335-341, Edifício "Hot Line", 18º andar, Macau Office hours: Monday to Thursday: 9 a.m.-1 p.m., 2.30 p.m.-5.45 p.m. Friday: 9 a.m.-1 p.m., 2.30 p.m.-5.30 p.m. Email: dl@macaotourism.gov.mo Telephone: (853) 2831 5566 Fax: (853) 2833 0518

Project Licensing: Land, Public Works and Transport Bureau Service Center: Floor 13, Estrada de D. Maria II No.33, Macao Office Hours: Monday to Thursday: 9:00-17:45 Friday: 9:00-17:30 Email: cc@dssopt.gov.mo Telephone: (853) 8590 3800 Fax: (853) 2834 0019

Applicants are reminded that the technical sections of the present Guidelines have summarized the legal provisions and technical requirements for the related areas, as well as frequently asked questions, for a better understanding and observation by the applicants. In case of conflict, the prevailing laws

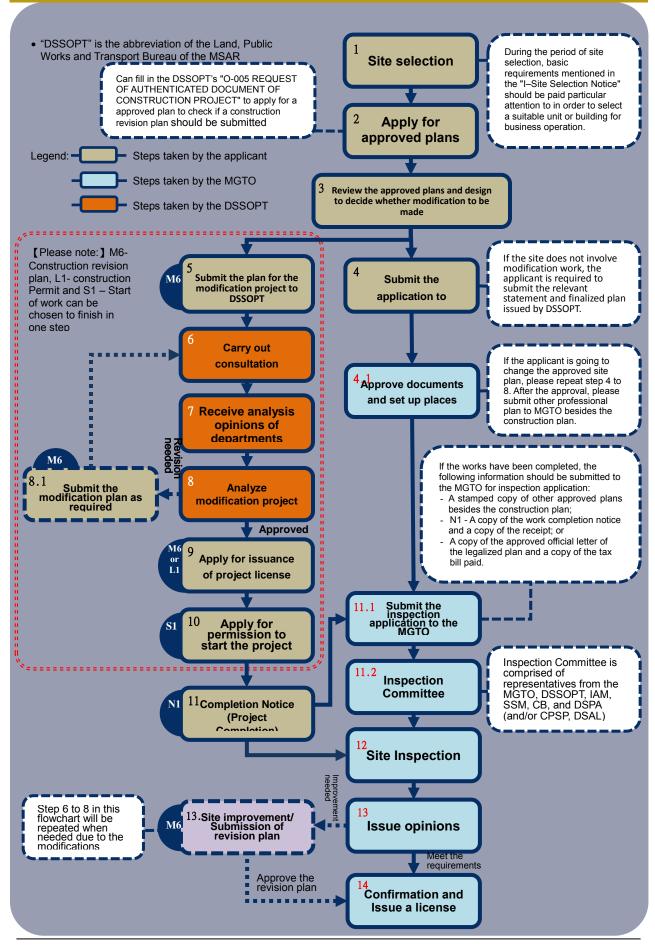
and regulations shall prevail. In addition to obeying the requirements specified in the Guidelines, the issuance of the work permit also depends on all the legal requirements for this type of project and venue in management, firefighting, safety, environmental protection and health. Please note that the result of the examination of the DSSOPT of the modification works will be considered as the official opinion and this is only considered definitive after the issuance of the work permit. In addition, the hotel establishment licensing will also depend on the opening application plan that is submitted to the MGTO. And it is possible that changes and adaptations may be required to be made to the design of the hotel establishment according to the opinions provided by the involving departments.

The latest version of the Guidelines can be accessed via the official websites of the MGTO (http://industry.macaotourism.gov.mo) or the DSSOPT (http://www.dssopt.gov.mo).

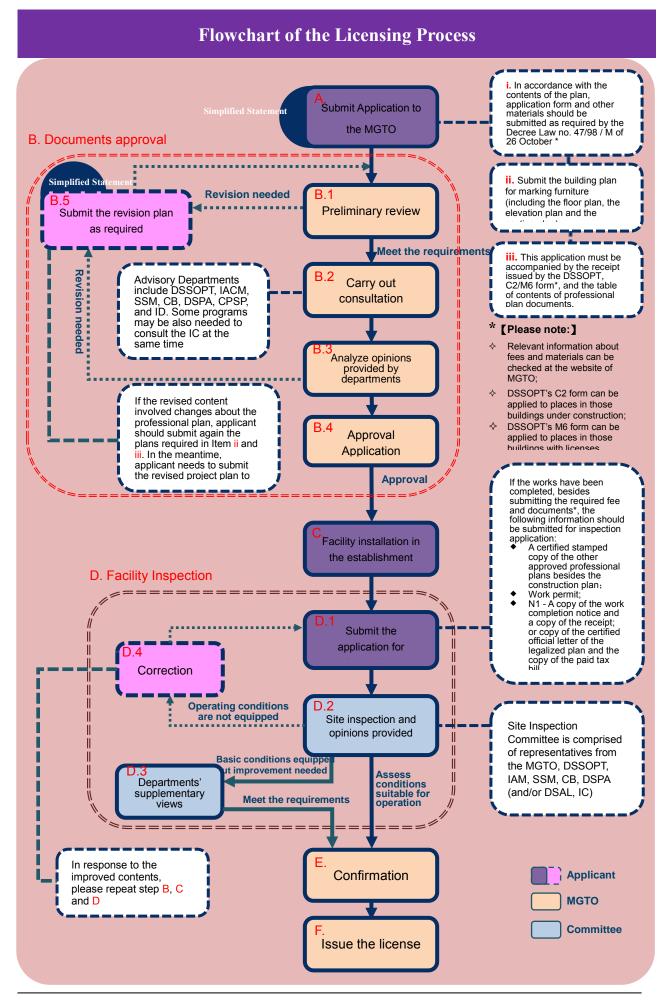
#### <u>This English translation is for reference only. Should there be any discrepancy between the English</u> <u>translation version and the original in Chinese, the latter shall prevail.</u>

<sup>[1]</sup> The Guidelines aim to enable applicants who intend to open hotel establishments in Macao to gain a clear understanding of the licensing procedure as well as the application process for the modification works of the hotels. At the stage of design or construction of a building, if the applicant plans to install a hotel establishment in the building and wants this establishment to be ready to open to the public after the completion of the construction/expansion, as well as the inspection by the DSSOPT and the granting of the operating license, the applicant must submit the building construction projects which include the work of the future hotel establishment, whose contents should be integrated into the work permit application indicating that project on the construction/expansion of the building to the DSSOPT for approval. Thus, "Chapter IV - Application for Approval for the Project of Modification Work" of the Guidelines is not applicable to the above mentioned situation, whose licensing can be referred to in the construction work guidelines issued by the DSSOPT in Appendix V of the Guidelines.





Guidelines of Application Procedures and Technical Requirements for Licensing and Modification Works of Hotel Establishments (VER\_Hotel\_E032021)



Guidelines of Application Procedures and Technical Requirements for Licensing and Modification Works of Hotel Establishments (VER\_Hotel\_E032021)

#### 1 Site:

Before opening a hotel establishment, the applicant must meet the conditions laid down in the existing legislation concerning the suitability of the site for exercising the hotel establishment activities, in order to avoid unnecessary losses arising from the selection of inappropriate site. The applicant should be aware of the following conditions:

- 1.1 The establishment can be established in hospitality establishments such as hotels, guest houses or other places for hotel purposes. The information about the purpose of the unit or building can be found in the Operating License or Real Estate Registration Certificate (If the establishment is to be located in buildings under construction, efforts must also be made to check whether the site/unit is intended for the above-mentioned purpose);
- 1.2 The permission must be sought from the property owner for legal renovation;
- 1.3 The site to be selected does not involve illegal buildings, occupation or change of public parts of the building, such as the occupation of the patio on the ground floor adjacent to the store, etc. At the same time, there shall be no increase in the unit area or increase in the number of floors (with the exception of adding mezzanine [cok-chai] or semi-mezzanine [semi-cok-chai]);
- 1.4 A power supply must be available;
- 1.5 A water supply and well-equipped drainage and sewage systems must be available;
- 1.6 Sufficient fire escapes must be available;
- 1.7 The floor area must be large enough to set up catering area, operation area, storage area and sanitary facilities etc. in accordance with legal requirements, and it must be consistent with the maximum capacity of customers;
- 1.8 For 5-star or 4-star hotel establishments, the net height, or the height from the floor to the ceiling, should be not less than 3.5 meters in the restaurants or other chambers for the use of clients. For hotel establishments with other ratings, the net height, or the height from the floor to the ceiling, should be not less than 3 meters in the restaurants or other chambers for the use of clients;
- 1.9 The net height, or the height from the floor to the ceiling, in the lodgings of all hotel establishments should be not less than 2.4 meters;
- 1.10 The establishment must be sufficiently far away from any animal rearing area or other place that may affect its hygienic conditions;
- 1.11 The establishment may not be located in a unit for the following use: residential use, office buildings, industrial use, warehouse, social service facilities and parking lots;
- 1.12 If the establishment is to be located within the vicinity of memorial sites, buildings of architectural value, complexes, sites or their protection zones within the meaning of Article 117 of Law No. 11/2013, the Macao Government Tourism Office, and the Land, Public Works and Transport Bureau shall consult with the Cultural Affairs Bureau about the project plan. For details, please refer to Appendix II of the Guidelines.

#### 2 Distance of evacuation:

- 2.1 Exits located on the ground floor<sup>[1]</sup>:
  - a. The distance of evacuation should not exceed 30m when there is no alternative (single exit);
  - b. The distance of evacuation should not exceed 45m when there is alternative (multiple exits).
- 2.2 Exits located on floors other than the ground floor (leading to the escape staircase): The distance of evacuation for indoor common passages with or without natural or mechanical ventilation systems is, respectively:

Ventilation Conditions	No alternative exit of	With alternative exit of
	evacuation	evacuation
With Ventilation System	18 m	40 m
Without Ventilation System	15m	30 m

- 2.3 The ventilation conditions and related facilities shall comply with the requirements of Article 22 and Article 36 of the revised "Fire Safety Regulations";
- 2.4 As for buildings existing before the "Fire Safety Regulations" came into effect, the calculation of the distance of evacuation shall take into account whether the conditions after the change are worse than those before the change. Under the precondition that at a minimum the original distance of evacuation is maintained, the Land, Public Works and Transport Bureau may accept relevant changes.

<sup>[1]</sup> As for a unit for commercial use located on the ground floor, connected with the mezzanine or the first floor or the basement, its distance of evacuation shall comply with this provision.

## **II - Basic Requirements for Hotel Establishment**

In accordance with Clause 1 of Article 2 and Article 5 of Decree-law No. 16/96/M of April 1, the MGTO issues licenses for the hotel establishments as defined in the Decree-law.

1. Hotel establishments are classified in the following groups and categories:

- Group 1 Hotels: five, four, three and two stars;
- Group 2 Apartment hotels: four and three stars;
- Group 3 Tourism complexes: five and four stars;
- Group 4 Guest houses: three and two stars.
- 2. The classification of deluxe may be granted to five-star hotels which meet the requirements defined by regulation.
- 3. Group 1 comprises establishments which offer lodging and food and beverage as main services, together with complementary services.
- 4. Group 2 comprises establishments which are made of a group of furnished apartments, located within a separate building, and operated as a hotel.
- 5. Group 3 comprises establishments which are made of a group of interconnected and adjacent installations, which are the object of an integrated tourist operation, and which are intended to provide lodging to their users, together with complementary services and with sports and entertainment facilities, namely those designated in international practice as 'resort'.
- 6. Group 4 comprises hotel establishments which, by their installations and facilities, do not meet the standards required for a classification as hotel, but which meet minimum requirements set out by regulation.

After the applicant has gained some basic knowledge of the venue of the establishment to be opened, he/she needs to draft a plan for the classification and rank of the hotel establishment. Different requirements apply to different classifications and ranks; for example, a five-star deluxe hotel must meet higher requirements than lower-tier hotel establishments. According to current laws and regulations, the requirements are as follows.

#### 1. General Requirements for Hotel Establishments

#### (A) General Provisions

- 1. A hotel establishment shall occupy the totality or a fully independent part of a building; its installations shall form a homogeneous whole, and shall have direct access to the floors for exclusive use of clients.
- 2. All applicable safety measures shall be observed in the construction, installation and operation of hotel establishments, namely against fire. Similarly, all sanitation, food hygiene and cleanliness rules shall be observed.
- 3. Electric and electro-mechanic installations and equipment shall comply with all technical rules on maintenance and safety.
- 4. Legislation on architectonic barriers and other processes for easing access and circulation shall also be complied with.
- 5. Hotel establishments shall use the public water supply, shall be connected to the public sanitation network, shall have electricity and shall have a telephone line connected to the

general network for use of clients.

- 6. Hotel establishments shall have a safety lighting system.
- 7. The pavements shall have devices or a configuration that enables the easy draining of water.
- 8. Sanitation installations shall be considered as common when to be used by clients in general and private when put to the exclusive use of a lodging.
- 9. Hotel establishments shall have sanitation facilities adapted to physically impaired persons
- 10. Sanitation installations shall have running water and direct or artificial ventilation, with continuous recirculation of the air.
- 11. Sanitation installations shall be composed of and named in following manner:
  - a. Sanitation installation provided with a toilet and a wash basin;
  - b. Shower installation provided with a shower and a wash basin;
  - c. Simple bathroom installation provided with a shower or a mini bath-shower, a wash basin and a toilet;
  - d. Complete bathroom installation provided with a bathtub equipped with a shower arm, a wash basin and a toilet;
  - e. Special bathroom installation made of two compartments, provided with a bathtub equipped with a shower arm, a wash basin and a toilet.
- 12. Showers and bathrooms shall have hot and cold running water.
- 13. It is forbidden to use combustion devices for water heating, if installed in sanitation installations.
- 14. With the exception of Sanitation mentioned in item a) of Paragraph 11, sanitation installations shall also have the following equipment:
  - a. A light and a mirror over the wash basin;
  - b. A space for placing toileries;
  - c. A power supply, mentioning the voltage, in accordance with applicable safety rules;
  - d. Guards in bath areas;
  - e. Bath areas with nonslip materials;
  - f. Towel-racks;
  - g. Bell or telephone in the bath areas.
- 15. Common sanitation installations are not required to have wash basins in the sanitaries and showers, provided that the common sanitation installations are equipped with basins.
- 16. The common sanitation installations shall have lavatories in a minimum proportion of one for each two toilets, one for each three urinals and one for each three showers.
- 17. The common sanitation installations cannot communicate directly with areas intended for kitchen, preparation of foods or service of food or beverage, and shall be separated by gender.
- 18. Common sanitation installations whose access door does not allow the necessary isolation from the outside shall be fitted with a double door with vestibule or antechamber.
- 19. Showers which are part of common sanitation installations shall be organized in separate cabins, with an antechamber, and with the necessary isolation from the outside.
- 20. Common sanitation installations shall also have disposable towels or hand dryers, as well as necessary articles of personal hygiene and lighted fixed mirrors.
- 21. In hotel establishments the areas for customers and the general public shall have climate control (climate control means the existence of adjustable air conditioning systems), and other areas shall have direct or artificial ventilation.
- 22. Artificial ventilation shall have a minimum output of 17 cubic meters per hour and shall have an air inlet and an air outlet located in different points of each compartment of the establishment.
- 23. In the installation of equipment, lifts, and water and refuse ducts, appropriate technical means shall be deployed so as to minimize noise, vibration, and bad smells.
- 24. Installations where music is played shall have technical mechanisms of construction which limit the passage of the noise outside.
- 25. Hotel establishments shall have water tanks with sufficient capacity to satisfy running consumption needs in case of temporary lack of normal supply, as well as the needs of the firefighting system.
- 26. Hotel establishments shall have an emergency power generator capable of covering any interruptions of the normal energy supply and of ensuring the effective operation of essential services.
- 27. The area of the halls shall be proportional to the capacity of the hotel establishment, and shall

allow easy access to its dependencies.

- 28. Saloons for conferences or parties shall be supported by a space for cloakroom and sanitation installations.
- 29. Swimming pools shall have sanitation installations segregated by gender, and equipped with showers, lavatories and toilets.
- 30. Swimming pools shall have dedicated devices for the renewal, disinfection and filtering of the water.
- 31. In hotel establishments classified as five or four stars, the minimum net height of restaurants and other chambers for the use of clients shall be 3.50 meters. In hotel establishments other than those mentioned in the previous sentence, the minimum net height of restaurants and other chambers for the use of clients shall be 3.00 meters. (For the purposes of this regulation the net height of establishments shall be measured from the pavement to the lower face of the ceiling slab).

## (B) Vertical Access

- 1. The vertical access routes of hotel establishments shall be the main staircases, the service staircases, the emergency staircases, the elevators, the freight elevators, and the light goods elevators.
- 2. The organization and composition of the various means of access depend upon the classification of the establishment and shall be determined taking into account the architecture layout adopted and the number of lodgings and floors.
- 3. The existence of elevators is compulsory whenever a hotel establishment is located in a building with three or more floors.
- 4. At least one of the elevators shall be equipped in a manner that enables the movement of physically impaired persons.
- 5. The number of staircases, their dimensions and location shall be determined in accordance with the number of floors occupied by the establishment and with the number of lodgings per floor, as well as by the architectural layout of the building, and its horizontal distribution system.

## (C) Lodgings

- 1. Lodgings shall be designated as rooms, suites or apartments, in accordance with their respective characteristics.
- 2. Lodgings shall be identified by means of a number placed on the outside of the entrance door.
- 3. In lodgings located above the ground floor, the initial digits shall indicate the number of the floor and the following the number of order of the lodging.
- 4. All lodgings shall have a window or a balcony facing directly towards the outside. The area of the opening towards the outside cannot be less than 1.2 square meters.
- 5. Windows or balconies shall have a system for filtering the entry of light.
- 6. Lodgings shall be the object of technical construction solutions so as to enable the privacy of the environment and to limit the passage of noise.
- 7. Rooms shall have the following minimum equipment:
  - a. Single or double bed, separated or not, with dimensions in accordance with international standards;
  - b. Bedside tables or an equivalent support solution;
  - c. Seat or chair and table;
  - d. Specific place for suitcases;
  - e. Wardrobe with drawers and hangers in a sufficient number;
  - f. Bedside lights with a switch reachable by hand;
  - g. Telephone connected to the general network and to the internal network of the establishment;
- 8. Rooms which do not have private sanitation installations shall have a lavatory connected to the sewage network, with hot and cold water, lighted mirror, shelf, and power supply mentioning

the voltage, in accordance with safety regulations. The walls and floor surface close to the lavatory shall be waterproof.

9. A suite is a group made of, at a minimum, an antechamber, a sleeping room, a special bathroom and a living room, all adjacent to each other.

## (D) Service Areas

- 1. The service areas shall be separated from the areas for the use of clients.
- 2. Kitchens shall have sufficient lighting and ventilation, direct or artificial.
- 3. Kitchens shall be equipped with equipment for the efficient renewal of the air and for the collection and extraction of smoke and smells.
- 4. The pavement, the walls and the ceiling of kitchens and of the respective complementary installations shall be coated with resistant, waterproof, imputrescible and easily cleanable materials.
- 5. The pavements of such areas also shall be anti-slip, and kitchens and pantries shall have devices or a configuration that enables the easy draining of water.
- 6. Walls shall be flat, coated to the ceiling, and their connection with the pavement or with other walls shall have a rounded form.
- 7. There shall be lavatories for staff at the entrance of kitchens.
- 8. The connection of the kitchens with dining rooms shall be effected in a manner that enables rapid circulation.
- 9. If the kitchen is not located on the same floor of the dining room, the connection shall be ensured by means of a light goods elevator or a freight elevator.
- 10. There shall be pantries adjacent to the dining rooms.
- 11. Hotel establishments shall have fridge installations for the conservation and refrigeration of food and beverage, in accordance with their classification, capacity and characteristics.
- 12. Freezing chambers shall be equipped with temperature control and alarm systems.
- 13. Hotel establishments shall keep garbage in a separate and closed compartment.

## 2. The Classification and Requirements of Hotel Establishments

## 2.1 Hotels

Hotels are classified in the following categories: deluxe, five, four, three and two stars.

#### **2.1.1** Characteristics of Five-star Deluxe Hotels

#### (A) General Requirements:

- 1. Five-star deluxe hotels should meet the requirements and stipulations for hotel establishments in terms of general provisions, vertical access, lodgings, and service areas, as mentioned in Subsection 1.
- 2. For a hotel to be classified as five-star deluxe, it shall be located in an urban area with convenient traffic and shall offer maximum comfort and convenience, with deluxe installations, furniture and equipment, as well as a refined appearance and environment.
- 3. Five-star deluxe hotels shall have an entrance at street level to be used by clients, separate from service entrances.
- 4. For the minimum dimensions and areas of staircases, main corridors, and rooms in Five-star deluxe hotels, please refer to Table I (Table of minimum dimensions and areas) in the Guidelines.

#### (B) Areas for clients shall have:

- 1. Hall with porter, reception, cloakrooms and telephones for internal and external communication.
- 2. Area for individual safe deposit boxes for storage of valuables, except if they are available in the rooms.

- 3. Living areas and meeting rooms.
- 4. Restaurant compatible with the level of the establishment and its capacity.
- 5. Bar installed in a separate room or in the living area; in the latter case, the areas reserved to it shall be separate from the other parts.
- 6. Saloon can be converted into conference or party rooms, provided with appropriate equipment.
- 7. Hairdressing installations.
- 8. Lodgings provided with private bathrooms and antechambers.
- 9. A number of suites making up at least 10% of the total lodgings.
- 10. Lodgings with an area of no less than 20 square meters.
- 11. Televisions, radios and other sound systems in all lodgings.
- 12. Telephones connected to the general network and to the internal network of the establishment in all areas for clients.
- 13. Parking lots in accordance with applicable laws.
- 14. At least 50% of the total lodgings not classified as suites shall have a special bathroom, and the remaining shall have a complete bathroom.
- 15. A heated swimming pool, internal or external.
- 16. Restaurants specializing in Oriental, Portuguese and/or Macanese and international cooking.
- 17. Health club.
- 18. Travel agency and foreign exchange services.

### (C) The service area shall have:

- 1. Entrances for staff, luggage and merchandise, different from client entrances.
- 2. Luggage deposit.
- 3. Work places for administrative staff and heads of units.
- 4. Kitchens, pantries and complementary installations provided with all necessary elements, in accordance with the level and capacity of the establishment.
- 5. Areas for storage, separated so as to ensure the isolation of the areas for food and beverage.
- 6. Freezer chambers.
- 7. Areas for staff, segregated by gender, made of dressing rooms and simple bathrooms.
- 8. Dining room for staff.

## **2.1.2 Characteristics of Five-Star Hotels**

#### (A) General Requirements:

- 1. Five-star hotels should meet the requirements and stipulations for hotel establishments in terms of general provisions, vertical access, lodgings, and service areas, as mentioned in Subsection 1.
- 2. For a hotel to be classified as five-star, it shall be located in an urban area with convenient traffic and shall offer maximum comfort and convenience, with deluxe installations, furniture and equipment, as well as a refined appearance and environment.
- 3. Five-star hotels shall have an entrance at street level to be used by clients, separate from service entrances.
- 4. For the minimum dimensions and areas of staircases, main corridors, and rooms in five-star hotels, please refer to Table I (Table of minimum dimensions and areas) in the Guidelines.

#### (B) Areas for clients shall have:

- 1. Hall with porter, reception, cloakrooms and telephones for internal and external communication.
- 2. Area for individual safe deposit boxes for storage of valuables, except if they are available in the rooms.
- 3. Living areas and meeting rooms.
- 4. Restaurant compatible with the level of the establishment and its capacity.
- 5. Bar installed in a separate room or in the living area; in the latter case, the areas reserved to it shall be separate from the other parts.
- 6. Saloon can be converted into conference or party rooms, provided with appropriate equipment.
- 7. Hairdressing installations.
- 8. Lodgings provided with private bathrooms and antechambers.
- 9. A number of suites making up at least 5% of the total lodgings.

- 10. Televisions, radios and other sound systems in all lodgings.
- 11. Telephones connected to the general network and to the internal network of the establishment in all areas for clients.
- 12. Parking lots in accordance with applicable laws.
- 13. At least 80% of the total lodgings not classified as suites shall have a special bathroom, and the remaining shall have a complete bathroom.
- 14. A swimming pool, internal or external.
- 15. Travel agency and foreign exchange services.

#### (C) The service area shall have:

- 1. Entrances for staff, luggage and merchandise, different from client entrances.
- 2. Luggage deposit.
- 3. Work places for administrative staff and heads of units.
- 4. Kitchens, pantries and complementary installations provided with all necessary elements, in accordance with the level and capacity of the establishment.
- 5. Areas for storage, separated so as to ensure the isolation of the areas for food and beverage.
- 6. Freezer chambers.
- 7. Areas for staff, segregated by gender, made of dressing rooms and simple bathrooms.
- 8. Dining room for staff.

### **2.1.3** Characteristics of Four-star Hotels

### (A) General Requirements:

- 1. Four-star hotels should meet the requirements and stipulations for hotel establishments in terms of general provisions, vertical access, lodgings, and service areas, as mentioned in Subsection 1.
- 2. For a hotel to be classified as four-star it shall provide convenience, with a good level of installations, furniture and equipment, offering a comfortable general aspect and atmosphere.
- 3. Four-star hotels shall have an entrance at street level to be used by clients, separate from service entrances.
- 4. For the minimum dimensions and areas of staircases, main corridors, and rooms in four-star hotels, please refer to Table I (Table of minimum dimensions and areas) in the Guidelines.

#### (B) Areas for clients shall have:

- 1. Hall with porter, reception, cloakrooms and telephones for internal and external communication.
- 2. Area for individual safe deposit boxes for storage of valuables, except if they are available in the rooms.
- 3. Living areas and meeting rooms.
- 4. Restaurant compatible with the level of the establishment and its capacity.
- 5. Bar installed in a separate room or in the living area; in the latter case, the areas reserved to it shall be separate from the other parts.
- 6. Saloon can be converted into conference or party rooms, provided with appropriate equipment.
- 7. Lodgings provided with private bathrooms and antechambers.
- 8. The lodgings cannot have sanitation installations of a level lower than those of a complete bathroom.
- 9. A number of suites making up at least 3% of the total lodgings.
- 10. Televisions, radios and other sound systems in all lodgings.
- 11. Telephones connected to the general network and to the internal network of the establishment in all areas for clients.
- 12. Parking lots in accordance with applicable laws.
- 13. A swimming pool, internal or external.
- 14. Travel agency and foreign exchange services.

## (C) The service area shall have:

- 1. Entrances for staff, luggage and merchandise, different from client entrances.
- 2. Luggage deposit.
- 3. Work places for administrative staff and heads of units.

- 4. Kitchens, pantries and complementary installations provided with all necessary elements, in accordance with the level and capacity of the establishment.
- 5. Areas for storage, separated so as to ensure the isolation of the areas for food and beverage.
- 6. Freezer chambers.
- 7. Areas for staff, segregated by gender, made of dressing rooms and simple bathrooms.
- 8. Dining room for staff.

### 2.1.4 Characteristics of Three-star hotels

#### (A) General Requirements:

- 1. Three-star hotels should meet the requirements and stipulations for hotel establishments in terms of general provisions, vertical access, lodgings, and service areas, as mentioned in Subsection 1.
- 2. For a hotel to be classified as three-star it shall provide convenience, with a good level of installations, furniture and equipment, offering a comfortable general aspect and atmosphere.
- 3. Three-star hotels shall have an entrance at street level to be used by clients, separate from service entrances.
- 4. For the minimum dimensions and areas of staircases, main corridors, and rooms in three-star hotels, please refer to Table I (Table of minimum dimensions and areas) in the Guidelines.

#### (B) Areas for clients shall have:

- 1. Hall with porter, reception, cloakrooms and telephones for internal and external communication.
- 2. Area for individual safe deposit boxes for storage of valuables, except if they are available in the rooms.
- 3. Living areas and meeting rooms.
- 4. Restaurant compatible with the level of the establishment and its capacity.
- 5. Bar installed in a separate room or in the living area; in the latter case, the areas reserved to it shall be separate from the other parts.
- 6. Lodgings provided with private bathrooms and antechambers.
- 7. Complete bathrooms in at least 50% of the lodgings. Other lodgings cannot have sanitation installations of a level lower than those of a simple bathroom.
- 8. A number of suites making up at least 3% of the total lodgings.
- 9. Televisions, radios and other sound systems in all lodgings.
- 10. Telephones connected to the general network and to the internal network of the establishment in all areas for clients.
- 11. Parking lots in accordance with applicable laws.
- 12. Travel agency and foreign exchange services.

## (C) The service area shall have:

- 1. Entrances for staff, luggage and merchandise, different from client entrances.
- 2. Luggage deposit.
- 3. Work places for administrative staff and heads of units.
- 4. Kitchens, pantries and complementary installations provided with all necessary elements, in accordance with the level and capacity of the establishment.
- 5. Areas for storage, separated so as to ensure the isolation of the areas for food and beverage.
- 6. Freezer chambers.
- 7. Areas for staff, segregated by gender, made of dressing rooms and simple bathrooms.
- 8. Dining room for staff.

## 2.1.5 Characteristics of Two-star hotels

## (A) General Requirements:

- 1. Two-star hotels should meet the requirements and stipulations for hotel establishments in terms of general provisions, vertical access, lodgings, and service areas, as mentioned in Subsection 1.
- 2. For a hotel to be classified as two-star it shall have installations, furniture and equipment offering a sufficient level of convenience and comfort.
- 3. For the minimum dimensions and areas of staircases, main corridors, and rooms in two-star

hotels, please refer to Table I (Table of minimum dimensions and areas) in the Guidelines.

## (B) Areas for clients shall have:

- 1. Hall with porter, reception, cloakrooms and telephones.
- 2. Individual safe deposit boxes for storage of valuables.
- 3. Living areas.
- 4. Restaurant.
- 5. Bar installed in the living area.
- 6. Complete bathroom in at least 20% of the lodgings, with the remaining equipped with a simple bathroom.
- 7. Radios and other sound systems in all lodgings.

### (C) The service area shall have:

- 1. Kitchens, pantries and complementary installations.
- 2. General store-rooms for food and beverage.
- 3. Freezer facilities.
- 4. Areas for staff, segregated by gender, made of dressing rooms and simple bathrooms.
- 5. Dining room for staff.

### 2.2 Apartment Hotels

Apartment hotels are classified in the following categories: four and three stars.

Apartment hotels should meet the requirements and stipulations for hotel establishments, as mentioned in Subsection 1. In addition, apartment hotels should meet the following requirements:

## (A) General Provisions

- 1. The rental of apartments on a daily basis, or for agreed periods of time, together with the provision of cleaning and tidying-up services, is considered to be an operation under a hotel regime.
- 2. Reception-porter with telephone.
- 3. Restaurant.
- 4. Areas for staff, segregated by gender, made of dressing rooms and simple bathrooms.
- 5. If the establishment is made of several blocks of apartments, the reception may be common to all, but there shall be a management office in each one.
- 6. In apartment hotels the restaurant shall be a complementary service independent from lodging, which cannot be included in the price of lodging.
- 7. It is forbidden for clients:
  - a) To transfer the use of the apartment, at any title, without registration;
  - b) To use appliances which substantially increase the normal consumption of water and electricity.

## (B) Lodgings

- 1. Apartments shall be made of, at a minimum, the following compartments: bedroom, common room, bathroom, and small kitchen ('kitchenette').
- 2. They shall have complete furniture, ceramic ware, glasses, tableware, bed and bath linen, bathrobes and bathroom slippers, tablecloths and napkins, kitchen and cleaning utensils, in an amount and quality appropriate to the capacity of the apartment and to the category of the establishment.
- 3. In apartments, the use of combustion equipment is prohibited.
- 4. The lodging capacity of apartments is determined by the number of beds in bedrooms and by the number of convertible beds.
- 5. The number of convertible beds cannot exceed 50% of the beds in bedrooms, except if the apartment has only one room and one common room, in which case the number of convertible

beds may be the same as that of beds in the bedroom.

- 6. Convertible beds can only be installed in bedrooms or in common rooms.
- 7. A bedroom is considered as a compartment exclusively destined for such purpose.
- 8. A bedroom may have a number of beds proportional to its area; each single bed shall correspond to a minimum area of 6 square meters and each double bed to 10 square meters.
- 9. If the beds are bunk beds, the area corresponding to each of them is decreased to 4 square meters.
- 10. Only single beds can be installed in a bunk bed system, which cannot exceed two beds.
- 11. The common room, which shall have an area proportional to the capacity of the apartment, may function as living room and dining room, and shall have furniture appropriate for this double purpose.
- 12. The common room shall have a window or a balcony facing directly towards the outside, with an opening of no less than 2 square meters.
- 13. An apartment shall have one or two compartments. The bedroom, the common room and the kitchen may be integrated in only one compartment, provided that its shape and size and the characteristics of the furniture allow it.
- 14. The kitchen shall be equipped with freezer, stove, exhaust of smoke and smells, appliances for disintegration of food scraps, kitchen sink and closets for provisions and utensils.
- 15. The kitchen shall have efficient ventilation, direct or artificial.
- 16. All apartments shall have, for client use and without consumption limitations, the following:
  - a) Drinkable running water in the kitchen and in the sanitation installations;
  - b) Electric light in all rooms with light points and power sockets with voltage indication.

#### 2.2.1 Four-star Apartment Hotel

#### (A) General Requirements:

- 1. Four-star apartment hotels should meet the requirements and stipulations for apartment hotels in terms of general provisions and lodgings, as mentioned in 2.2.
- 2. For an apartment hotel to be classified as four-star it shall be installed in a building with good location. It shall have tasteful furniture and decoration, and equipment and utensils of compatible quality.
- 3. For the minimum dimensions and areas of staircases, main corridors, and rooms in four-star apartment hotels, please refer to Table I (Table of minimum dimensions and areas) in the Guidelines.
- 4. Complete bathroom in each apartment.
- 5. Television, radio or other sound systems in each apartment.
- 6. Telephone connected to the general network and to the internal network of the establishment in each apartment.
- 7. Swimming pool and recreation area for children.
- 8. Hairdressing saloon.
- 9. Apartments with a capacity of more than four beds shall have one additional simple bathroom.

#### 2.2.2 Three-star Apartment Hotels

#### (A) General Requirements:

- 1. Three-star apartment hotels should meet the requirements and stipulations for apartment hotels in terms of general provisions and lodgings, as mentioned in 2.2.
- 2. For an apartment hotel to be classified as three-star it shall have comfortable furniture, tasteful decoration, and equipment and utensils of compatible quality.
- 3. For the minimum dimensions and areas of staircases, main corridors, and rooms in three-star apartment hotels, please refer to Table I (Table of minimum dimensions and areas) in the Guidelines.
- 4. Complete bathroom in each apartment.
- 5. Television, radio or other sound systems in each apartment.
- 6. Apartments with a capacity of more than four beds shall have one additional simple bathroom.
- 7. Apartments with a capacity of fewer than four beds may have only a simple bathroom.

#### 2.3 Tourism complexes

Tourism complexes are classified in the following categories: five and four stars.

Tourism complexes should meet the requirements and stipulations for hotel establishments, as mentioned in Subsection 1. In addition, tourism complexes should meet the following requirements:

#### (A) General Provisions

- 1. All land used by a tourism complex shall be demarcated, with natural or artificial means, so as to make the whole autonomous, and to ensure the isolation of the establishment.
- 2. The types of lodging that integrate a tourism complex may correspond to the categories set out in Groups I and 2 of Clause I of Article 5 of Decree-law No. 16/96/M of April 1 (hotels and apartment hotels), and the complementary services may comprise establishments set out in Groups 1, 2 and 3 of Article 6 of the same law (restaurants, night clubs, and bars).
- 3. A tourism complex shall have parking lots in accordance with the applicable legislation to resorts.

#### 2.3.1 Five-star tourism complexes

#### (A) General Requirements:

- 1. For a tourism complex to be classified as five-star it shall have a main hotel unit with five-star characteristics, as well as diverse and high-quality complementary equipment for entertainment and sport.
- 2. In five-star tourism complexes the lodgings that consist of apartments shall not exceed 50% of the total lodging capacity of the tourism complex, and shall be a complementary operation of the main hotel unit.
- 3. The provision of the previous paragraph does not prevent the apartments from being located in separate blocks, adjacent to the nucleus of the main hotel unit, in accordance with the architecture layout adopted.
- 4. The main hotel unit, with the necessary adaptations, should meet the requirements for five-star deluxe hotels. For details, please refer to the introduction of five-star deluxe hotels in the Guidelines.
- 5. The requirement for the existence of meeting rooms may be exempted if the tourism complex offers individualized areas for this purpose.
- 6. The requirements for four-star apartment hotels apply to lodgings which are apartments in fivestar tourism complexes (for details, please refer to the introduction of four-star apartment hotels in the Guidelines), with the necessary adaptations, except in the following cases: The installation of bunk beds is not allowed in apartments integrated in five-star tourism complexes. There shall be a special bathroom in the apartments in five-star tourism complexes, if the capacity is of more than four persons.

#### **2.3.2** Four-star tourism complexes

#### (A) General Requirements:

- 1. For a tourism complex to be classified as four-star it shall have a main hotel unit with four-star characteristics, as well as complementary equipment for entertainment and sport.
- 2. The requirements for four-star hotels apply to the main hotel unit, with the necessary adaptations. For details, please refer to the introduction of four-star hotels in the Guidelines.
- 3. The requirements for three-star apartment hotels apply to lodgings which are apartments, with the necessary adaptations. For details, please refer to the introduction of three-star apartment hotels in the Guidelines.

## 2.4 Guest Houses

Guest houses are classified in the following categories: three and two stars.

Guest houses shall comply with the characteristics stated in Subsection 1.

## 2.4.1 Three-star Guest Houses

#### (A) General Requirements:

- 1. For an establishment to be classified as a three-star guest house, it shall have furniture and equipment of compatible quality.
- 2. For the minimum dimensions and areas of staircases, main corridors, and rooms in three-star guest houses, please refer to Table I (Table of minimum dimensions and areas) in the Guidelines.
- 3. Three-star guest houses shall have:
  - 3.1 Porter with telephone;
  - 3.2 Living area;
  - 3.3 Dining area (The dining area and the living area may be integrated in a multifunction room, provided that the areas reserved to each of them are differentiated);
  - 3.4 Bathroom in all rooms;
  - 3.5 Kitchen and store-room;
  - 3.6 Areas for staff, comprising dining space, dressing room and simple bathroom.

### 2.4.2 Two-star Guest Houses

#### (A) General Requirements:

- 1. For an establishment to be classified as a two-star guest house, it shall have furniture and equipment of acceptable quality.
- 2. For the minimum dimensions and areas of staircases, main corridors, and rooms in two-star guest houses, please refer to Table I (Table of minimum dimensions and areas) in the Guidelines.
  - Two-star guest houses shall have:
    - 3.1 Porter with telephone;
    - 3.2 Living area;

3.

- 3.3 Dining area (The dining area and the living area may be in the same area);
- 3.4 Bathroom in all rooms, but at least 30% of the rooms shall be equipped with a simple bathroom;
- 3.5 Simple common bathrooms on each floor, in a proportion of one bathroom for each five rooms, or less, without a simple bathroom;
- 3.6 Kitchen and store-room;
- 3.7 Areas for staff, comprising dining space, dressing room and simple bathroom.

#### 3. Services in hotel establishments

#### (A) General Provisions

- 1. The nucleus of client relations for the purpose of service, information and assistance is made of the management of the establishment and of the reception and porter services.
- 2. The reception and porter shall have the following functions:
  - 2.1 Reservation of lodging;
  - 2.2 Registration of the check-in and check-out of clients;
  - 2.3 Message recording and notification;
  - 2.4 Safekeeping of correspondence and objects of clients;
  - 2.5 Reception and delivery of luggage;
  - 2.6 Safekeeping of lodging keys, except if access to lodgings is processed by means of a codified system;
  - 2.7 Wake up service;
  - 2.8 Cashier service.
- 3. The reception and porter services shall function permanently so as to answer any request from clients.
- 4. The management of hotel establishments is liable for personal objects or valuables of clients in

accordance with the respective internal security conditions.

- 5. Hotel establishments shall inform clients of the terms of liability of the management for the objects, valuables or luggage of clients, deposited in the establishment or entrusted to it for safekeeping.
- 6. A receipt for the objects, valuables or luggage mentioned in the previous paragraph shall be issued.
- 7. Invoices to be presented to clients for the settlement of expenses made shall mention, besides the daily rate, all other consumptions and expenses, as well as the taxes and fees imposed.
- 8. Lodgings shall be prepared and clean in the moment of being occupied by clients.
- 9. Lodgings shall be cleaned and tidied up daily in all establishments.
- 10. The bed sheets, bath linen, bathrobes and bathroom slippers shall be replaced daily in hotel establishments of five, four and three stars (including five-star deluxe hotels, five-star hotels, four-star hotels, three-star hotels, four-star apartment hotels, three-star apartment hotels, five-star tourism complexes, four-star tourism complexes, and three-star guest houses).
- 11. In the establishments mentioned in the previous paragraph the lodging shall be again tidied up in the late afternoon.
- 12. In other establishments the change of bed sheets, bath linen, bathrobes and bathroom slippers shall be made at least three times a week.
- 13. Hotel establishments, with the exception of apartment hotels, shall be prepared to provide a breakfast service.
- 14. There shall be information in the lodgings regarding the various services available to clients and the respective costs, as well as on the prices of products available to them in the lodgings.
- 15. All information on services to be provided shall be written at least in Portuguese, Chinese and English.
- 16. Hotel establishments, with the exception of guest houses, shall be able to provide laundry and ironing services.
- 17. In hotel establishments the staff shall wear clothes appropriate to the service provided, and present themselves with the maximum politeness and cleanliness.
- (B) Services in five- and four-star hotel establishments (including five-star deluxe hotels, five-star hotels, four-star hotels, four-star apartment hotels, five-star tourism complexes, and four-star tourism complexes)
- 1. Five- and four- star hotel establishments shall comply with the general provisions as listed in 3 (A).
- 2. In five- and four- star hotel establishments the reception shall have experienced staff, separate for each of the services. The porter shall also be experienced and separate for each of the services.
- 3. The porter shall provide luggage moving and storage service.
- 4. In five- and four-star hotel establishments there shall be a unit providing permanent room service, so as to serve meals.
- 5. The service of similar establishments (restaurants, night clubs, and bars) existing in five- and fourstar hotel establishments shall be compatible with the level of the unit of which they are part.
- (C) Services in three- and two-star hotel establishments (including three-star hotels, twostar hotels, three-star apartment hotels, three-star guest houses, and two-star guest houses)
- 1. Three- and two-star hotel establishments shall comply with the general provisions as listed in 3 (A).
- 2. In three- and two-star hotel establishments the reception shall have experienced staff, separate for each of the services. The porter shall also be experienced and separate for each of the services.
- 3. The porter shall provide luggage storage service.
- 4. Room service may have specific working hours.

## **III – Project Planning and Notices**

During the design, the applicant must meet the basic requirements of various classes of hotel establishments mentioned in the "Chapter II - Basic Requirements for Hotel Establishments". In addition, the standards for facilities and safety equipment for the architecture, structure, the firefighting and environmental sanitation are regulated by the relevant laws and regulations of the Macao SAR Government and all matters are subject to the supervision by the related authorities. And the introduction of the respective standards and requirements are in conformity with the current laws, which can be found in Appendix III of the Guidelines.

Meanwhile, in order for better prevention, surveillance and control of environmental pollution, and to ensure the compliance with the environmental laws and regulations, the Environmental Protection Bureau provides the applicant with the Guidelines for Controlling Environmental Pollution; the related guidelines can be found in Appendix IV of the Guidelines.

If the hotel establishment is established in the area of classified heritage or protected area, the architecture design should give priority to the universal value of the heritage and should be well integrated with the landscape of the protected area.

#### 1. Architectural Specialty

#### (1) Requirements on Drawings and Documents

- 1. Design description;
- 2. The Location Plan of the establishment at a scale of 1:1000, indicating the street names near the building and the northern orientation;
- 3. The building's plan, elevation and section at a scale of 1:100, including:
  - 3.1 Approved drawings;
  - 3.2 Overlaid drawings (Red parts are the rectified parts and the yellow parts are the eliminated parts);
  - 3.3 Rectified drawings;
  - 3.4 The elevations should include the status of all elevations in each position of the establishment;
  - 3.5 The section should include at least one vertical sectional drawing and one horizontal sectional drawing, and one of them should indicate the stairs, kitchen and smoke exhaust pipe etc. (if any).
- 4. When modifications are being made to lodgings of hotel establishments, the plans must have the following:
  - 4.1 Bed, bedside table or equivalent, seat or chair, table, specific place for luggage, wardrobe, sanitary facilities, all windows, light-filtering system, and so on.
- 5. When modifications are made to areas for the use of clients, the plans must have the following:
  - 5.1 Porter, reception, main hall, resting areas, restaurant, staff-only areas;

- 5.2 The net height of the corridor, the area opening to public and customers, kitchen (if any) and staircase;
- 5.3 The purpose and area of each compartment;
- 5.4 The position of the projection/billboard/air conditioning compressors, to ensure the compliance with the requirements on projections on the exterior wall;
- 5.5 All inbound and outbound access and the inner path (e.g. entrance for customers, entrance for operations and fire escapes);
- 5.6 The layout of counters, seats, and other equipment;
- 5.7 Sanitary facilities;
- 5.8 Storeroom;
- 5.9 All windows, air-extraction/smoke-extraction/ventilation shaft/smoke emission flue/electronic ventilation flue and air-conditioning facilities;
- 5.10 The places used for food cooking, preparing and processing, as well as the layout of these facilities (e.g. kitchen, pantry);
- 5.11 The places used for cleaning, disinfecting, drying and storing foods;
- 5.12 The positions of all large fixed equipment, including food manufacturing and cooking machine, stove, sterilizer, dishwasher, freezer and refrigerator, fixed sideboard, washbasins and sinks, drying racks and water tanks, etc.;
- 5.13 Waste storage and treatment equipment;
- 5.14 The specific facilities to be established according to the classes of the establishment (e.g. dressing rooms for staff).

- 1. The modification project should not involve any increase in the construction area;
- 2. If the establishment is located in a separate unit of the building registered on horizontal property regime, it should not occupy the common area of building;
- 3. If the function of part of the hotel establishment is changed into another, the plan should include the calculation book of parking lots so as to clarify the impact the change will have on the demand for parking lots, in order to ensure the change complies with current laws/regulations or the calculation guidance for parking lots, as well as the terms in the original authorization of the use of the land;
- 4. In restaurants and other similar facilities, barbershops, beauty salons, and places where crowds may gather in hotels establishments (Fire Safety Regulations V, C, VII), the exit doors should open outward, but should not occupy pavement space (public road/corridor);
- 5. If the customer capacity of the establishment is less than or equal to 50, the width of the exit door should not be less than 90cm;
- 6. If the customer capacity of the establishment is more than 50 but less than 100, there should be at least two exit doors. The width of each door and the total width of these two doors should not be less than 85cm and 180cm respectively;

- 7. If the customer capacity of the establishment is more than 100 but less than 200, there should be at least two exit doors. The width of each door and the total width of these two doors should not be less than 90cm and 180cm respectively;
- 8. If a twin-door is installed, the width of each door should not be less than 60cm;
- 9. The establishment must have a direct and clear passageway access to public roads and the width of the passageway (in terms of the main one) should comply with Table VI of Article 12 of the Fire Safety Regulations. For the establishment with the customer capacity not exceeding 100 and more than 100, the width of the passageway should not be less than 100cm and 110cm respectively;
- 10. As for the requirements on the distance of evacuation, please refer to Section 2 of Chapter I Site Selection;
- 11. Between the only entrance and exit of the establishment located in the building of Class M or P and the only entrance and exit of its adjacent building, there should be a wall for the purpose of separation with no less than 1m;
- 12. Installation of projections on the exterior wall:
  - 12.1 Regulation on the signboard on the facade of the ground floor: The signboard must be located in the respective scope of the exterior wall. When the height in relation to the pavement is less than 2.7m, the projections should not exceed 10cm; when the height in relation to the pavement is 2.7m-3.5m, the projections should not exceed 50cm; when the height in relation to the pavement is higher than 3.5m, the projections should not exceed 75cm. The projections on the exterior wall independent of the height must not exceed 10cm in NAPE;
  - 12.2 The modification of the exterior wall of the unit (including the modification of the doorway or window opening or installation of projections etc.) must comply with the provisions under Law No. 14/2017.
- 13. Installation of air conditioning compressors:
  - 13.1 The regulation on the relationship between the maximum height and the projections extension length is the same as that in 12.1. In addition, measures should be taken in the installation to try to minimize the impact on the other units in terms of vibration and hot air emission. So, it is not recommended to install the air conditioning compressor and the exhaust duct in the patio;
  - 13.2 For the unit above the ground floor, the air conditioning compressor should be installed in the space provided at the time of construction of the building; if such space is not provided, the air conditioning compressor can only be installed within the scope of the exterior wall, and the regulation of the installation is the same as that in 12.1;
  - 13.3 The drainage of the air conditioner system should be connected to original drainage system, and the related connection status should be reflected in the Drainage Plan.
- 14. Regulations on the net height of the establishment:
  - 14.1 For 5-star or 4-star hotel establishments, the net height, or the height from the floor to the ceiling, should be not less than 3.5 meters in the restaurants or other chambers for the use of clients. For hotel establishments with other ratings, the net height, or the height from the floor to the ceiling, should be not less than 3 meters in the restaurants or other chambers for the use of clients;
  - 14.2 The net height, or the height from the floor to the ceiling, should be not less than 2.4 meters in the lodgings of all hotel establishments;

- 14.3 The net height of staircase for public access should not be less than 2.2m;
- 14.4 The net height of corridor and sanitary facilities (toilet) should not be less than 2.2m.
- 15. The requirements for lighting:
  - 15.1 All lodgings shall have a window or a balcony facing directly towards the outside. Windows or balconies shall have a system for filtering the entry of light. The area opening towards the outside cannot be less than 1.2 square meters;
  - 15.2 In apartment hotels, the living room shall have a window or a balcony facing directly towards the outside, with an opening of no less than 2 square meters;
  - 15.3 The length of compartments in lodgings shall not exceed twice the width.
- 16. Requirements for the kitchen (if any):
  - 16.1 The kitchen should be built by materials and floor slabs with fire resistance efficiency of no less than one hour (CRF 60) (e.g. brick walls), separated from the other parts by the solid and self-closing wooden door 4.5cm thick with fire resistance efficiency of no less than half an hour (CRF 30);
  - 16.2 The area of opening (the port on the wall for transporting food) between the kitchen and the dining area should not exceed 0.2 m<sup>2</sup> and should be protected by manual or automatic closing isolation door with fire resistance efficiency of no less than half an hour (CRF 30);
  - 16.3 The air-extraction/smoke-extraction/ventilation duct should be built and installed with noncombustible materials and mustn't obstruct the operation of automatic sprinkling and firefighting system. If the duct needs to cross compartments or units for different purposes, the construction materials should have the fire resistant efficiency no less than that of such compartment components;
  - 16.4 If the kitchen intended only for preparing soup noodle or porridge is located next to the only exit of the establishment, only electric stove can be used;
  - 16.5 If the stoves in kitchen are only used for cooking soup noodle or porridge and the fuels used is less than 20 liters of kerosene or oil residual, or electricity is used, the requirements in 16.1 and 16.2 will not be applicable.
- 17. Installation of suspended ceiling <sup>[1]</sup>:
  - 17.1 The suspended ceiling should be made of materials without weight bearing. In case the weight-bearing materials are used, the distance between the suspended ceiling and the floor should not be greater than 1.2m;
  - 17.2 The installation of the suspended ceiling should not affect the ventilation and lighting of the mezzanine or cover the mezzanine;
  - 17.3 As for the installation of the suspended ceiling in a unit with existing fire service sprinklers, in case the distance between the suspended ceiling and the floor slab equals to or is greater than 0.8m, the fire service sprinklers should be installed in both the upper space and the lower space of the suspended ceiling;
  - 17.4 When it is inevitable to install continuous suspended ceiling, the upper space of each compartment should not be connected with that of its adjacent compartment.
    - <sup>[1]</sup> For hygiene reasons, such decorations as suspended ceiling etc. that will obstruct the inspection and cleaning in the area of the establishment are not suggested and encouraged by the Health Authorities. At the establishment that the hygiene of facilities can be guaranteed, and such decorations to be

installed in kitchen, storage room or other areas, it should be stated clearly in applying for the license. And the Health Authorities will issue the opinions accordingly.

- 18. Regulations for the additional construction of mezzanine:
  - 18.1 The ground floor of unit should be for commercial purpose;
  - 18.2 The height of the floor should be 4.2m or more;
  - 18.3 The area of the mezzanine (excluding stairwell) should not be greater than half the area of the ground floor whose net height is over 4m;
  - 18.4 The minimum net height of below the mezzanine is 2m;
  - 18.5 The space with the height less than 2.6m may not be opened to the public, except the toilets (the regulations on toilets, please see Item 14.4);
  - 18.6 The mezzanine should not be enclosed and should ensure the good ventilation condition.
- 19. Regulations on the staircase:
  - 19.1 The staircase in the establishment should not be made in the arc form and its width should not be less than 1.0m. Each tread of the staircase should be no less than 23cm, with a height not exceeding 18cm; Each span of the staircase should not be more than 16 steps and should not be less than 2 steps; All steps should have the riser, but the staircase to the mezzanine which is only used for storing in the commercial unit on the ground floor is not subject to this provision. However, when conditions permit (the net height, lighting and ventilation meet the requirements), if the mezzanine is changed into the space opened to the public, the staircase should meet the above-mentioned regulations.
- 20. If the performance held in establishment is classified as group C or above by the Performance Classification Committee of the Cultural Affairs Bureau, the effective isolation of the building should be made to prevent the minors from watching, whose open area should be isolated from the area where the performance of group C or above are being performed.

#### 2. Civil Engineering

(A) Water-supply specialty:

#### (1) Requirements on Drawings and Documents

- 1. Design description;
- 2. Plan of water supply at the scale of 1:100;
- 3. Vertical diagram;
- 4. Detail drawing: Proper scale, e.g.1:20;
- 5. Hydraulic performance calculation (In case of major alteration).

#### (2) Technical Requirements

The drawing should clearly indicate the following information:

1. Materials used, diameter, and waterflow direction of the pipes;

- 2. Description of the water supply position of watermeters and the connection to all water facilities in the establishment;
- 3. Water supply system diagram should comply with the plans;
- 4. Pipeline connection with the water supply system;
- 5. Description of the cold and hot water systems in different ways;
- 6. Attention to the clarity of the text appeared;
- 7. The symbols of the water supply system can be found in the Appendix XII of Macao Water Supply and Drainage Regulations.

#### (B) Drainage specialty:

#### (1) Requirements on Drawings and Documents

- 1. Design Description;
- 2. Plan of rainwater and sewage at the scale of 1:100;
- 3. Diagram of rainwater and sewage system;
- 4. Detail drawing of grease interceptor at the scale of 1:20: Top view plan, floor plan and sectional plan.

#### (2) Technical Requirements

The drawing should clearly indicate the following information:

- 1. Materials used, diameter, waterflow direction and inclination rate of the pipes;
- 2. Elevation of the manhole of rainwater and sewage;
- 3. The connection to the public drainage network;
- 4. The sewage system cannot be connected to the rainwater system;
- 5. The design of the curves of the drainage pipes should be carried out with transitory curves, and manholes or inspection and repair chambers should be deployed;
- 6. The drainage of water from air-conditioning facilities must be connected to the water drainage system in the establishment;
- 7. The water drainage system drawing should comply with the plan; if the wastewater system of the establishment is connected to the existing water drainage system of the building, the pipe diameter, number or manhole etc. should be indicated;
- 8. Manholes must be closed with appropriate methods to prevent the escaping of smell in subsequent use and ensure that the cover of manhole can be opened at any time after lying floor finishes;
- 9. The minimum diameter of the draining branch pipes of all drainage equipment must comply with the provisions in Appendix XVIII of "Macao Water Supply and Drainage Regulations";

- 10. The specification, installation method, location, water inlet and outlet and pipe connection of the grease interceptor (if applicable);
- 11. Attention to the clarity of the text appeared;
- 12. The symbols of the water drainage system can be found in the Appendix XVII of Macao Water Supply and Drainage Regulations.

### (C) Structure specialty:

#### (1) Requirements on Drawings and Documents

- 1. Design description;
- 2. Floor plan: At the scale of 1:100;
- 3. Sectional plan: At the scale of 1:10 or 1:20;
- 4. Detail drawing: Proper scale, e.g.: 1:20;
- 5. Calculation book.

- 1. The live load to be withstood by the structure of the establishment is determined by Annex IV Table 7 of Decree Law No. 56/96/M. If changes are to be made to the building structure of the establishment, the structural plan shall be submitted by a registered civil engineer to prove its safety in use;
- 2. Structure plan should include design description, drawings (floor plan, sectional plan and detail drawing) and calculation book;
- 3. All newly-built metal structure components should be inspected and maintained annually;
- 4. If the modification of the staircase is involved, the draft structure plan of staircase should be submitted, and the following situations should be paid attention to:
  - 4.1 When there is amendment to the stairwell (new opening, closing, widening or narrowing), further explanation should be made;
  - 4.2 When there is new opening or widening of the stairwell, the reinforcing methods nearby should be considered;
  - 4.3 When there is closing or narrowing of the existing stairwell, the structure pattern of new floor slab should be described;
  - 4.4 The detail drawing of the combination of the new structure components and the existing structure components must be delivered;
  - 4.5 Regulations on the staircase can be found in Item 19 of (2) Technical Requirements of "(I) Architectural Specialty".
- 5. When building a steel structure cockloft or mezzanine floor for people to use directly, the fireproofing design of the steel structure materials shall be provided;
- 6. If the floor of the establishment is to be lifted, the construction method of the lifted floor should be described, and if necessary, the security calculation of the supporting and power transmission

components should be provided;

7. If the mezzanine is set up and the level of suspended ceiling is equal to that of mezzanine, the structure framework should be non-weight bearing (e.g. suspended metal bracket), and the detail drawing of structure framework of suspended ceiling and related information should be submitted for approval.

### 3. Electromechanical Engineering

(A) Power-supply Specialty:

#### (1) Requirements on Drawings and Documents

- 1. Design Description;
- 2. Drawing contents: The whole set of plan should be listed out, including number and edition of the drawings; the altered parts in plan should be indicated with the zigzagging line for identification;
- 3. Equipment system plan: Describing the structure of the system and the floor distribution etc. (e.g. power supply and distribution, earthing, lightening protection and telecommunications etc.);
- 4. Floor Plan of the General Framework of the electrical installations: At the scale of 1:100;
- 5. The information on the equipment specifications of the power supply system;
- 6. The detail drawing of the electrical equipment.

- 1. Hotel establishments shall have an emergency power generator capable of covering any interruptions of the normal energy supply and of ensuring the effective operation of essential services and firefighting facilities;
- 2. The power of the electric meter and the power supply method should comply with "Regulation of Reimbursements for Connection to the Electrical Grid", approved by the Administrative Regulation: No.11/2005, as well as the requirements of CEM;
- 3. The conductors, protection elements, control elements, circuits, phases, expected power and purposes between upper stream and downstream should be compatible;
- 4. In case of using three phase power supply, the load of the single-phase should be distributed on each phase as much as possible, to achieve the effect of three phase balance;
- 5. The electrical tubes/equipment unrelated to the escape staircase or the fire insulation chamber should not be installed in the escape staircase or the fire insulation chamber;
- 6. Luminaires for emergency lighting and the directional exit signs should be maintained for at least two hours after the loss of normal power;
- 7. It is better to primarily make use of the energy conservation equipment (e.g. lamps, etc.);
- 8. The floor plan should clearly describe the circuit design, locations of from electrical boxes to each power supply station and equipment, layout of pipes and cables as well as the source of power

supply lines;

- 9. The power distribution box and the related facilities involved in the project should be marked and described accordingly in the Floor Plan. In the single-line diagram of the power distribution box, the specification of each circuit conductor/bus bar, earthing/protection conductor and protector as well as the source of the power supply, load information, circuit number, phase and expected power etc. should be described;
- 10. During the process of design, construction and operation of the establishment, the following items should be paid attention to:
  - 10.1 All electrical facilities in the establishment should be installed in the ways neither causing fire nor spreading fire;
  - 10.2 The equipment used at the counter for preparing food/drinks should be of the electric type and should operate in accordance with the safety specifications;
  - 10.3 The electric meter must be installed in the isolated metal box, which should be kept clean both inside and outside;
  - 10.4 The power cutting and isolating equipment must be installed in the appropriate positions of the electrical circuits, such as: Circuit Breaker, Fuse and Automatic Circuit Breaker etc..;
  - 10.5 All electrical equipment must be grounded; the shells of all electrical boxes should be grounded properly and the parts with electric current should be covered properly to avoid being contacted by the staffs;
  - 10.6 All electrical installations (including electrical cables, electrical wires, plugs and sockets, etc.) must be kept in good order, clean and tidy.

#### (B) Air Conditioning and Ventilation Specialty:

- (1) Requirements on Drawings and Documents
- 1. Design Description;
- 2. Calculation book (If any);
- 3. Equipment specifications (If any);
- 4. Drawing contents: The whole set of plan should be listed out, including number and edition of the drawings; the altered parts in plan should be indicated with the zigzagging line for identification;
- 5. Equipment system plan (if any): displaying the structure of the system and the floor distribution etc;
- 6. Equipment floor plan: displaying the installation position of the equipment and the complete layout of pipelines, with the maximum scale of 1:100;
- 7. Detail drawing and sectional plan of the equipment installation: proper scale should be adopted so as to indicate the details clearly. (Usually, the detail drawing for the pipes going through fire-insulation components and the drawings of the height for the pipes and the equipment etc. should be submitted).

- 1. The characteristics of the installations and materials to be used as well as the description of methods to be used should be specified;
- 2. If the air conditioning units to be installed in the establishment are the large units (such as the refrigerating machine, cooling tower and multi-couple units etc.), the draft of the air-conditioning and ventilation plan should be submitted. If the air conditioning units to be installed are only the split-type, they should be listed respectively in the architectural drawings;
- 3. The place of installation of the air-conditioning and ventilation units etc. should comply with the requirements as stated in "Fire Safety Regulations";
- 4. The projections on the exterior wall should comply with the requirements in Article 7 of the Administrative Guidance No. 01/DSSOPT/2009 "Regulation of Conditions Relating to the Height of Buildings and the Constructability of Site". In addition, the cooling tower must not be installed on the exterior wall of the building;
- 5. If the establishment is located in the NAPE area, the air conditioning outdoor units cannot be installed in the arcades or the exterior walls;
- 6. The installation of the air conditioning and ventilation equipment (e.g., cooling towers, water pumps, as well as the heat-dissipating units and the outdoor units of the air conditioners, etc.) should cause less impact to the surrounding inhabitants and should be kept with adequate distance from the sensitive places (such as residential buildings, nursing homes, convalescent homes, hospitals and schools etc.). The equipment should be facing to the open area which facilitates the dissipation of noise and heat. If the hot air/humid air/vibration/noise produced by the equipment may influence the others, preventive measures should be taken (such as noise barriers, anti-vibration equipment etc.) to avoid conflicts between neighbors. The noise caused by the operation of the air conditioning and ventilation equipment should be complied with the requirements of Law No.8/2014 "Prevention and Control of Environmental Noise";
- 7. The air conditioning and ventilation ducts should be made of and installed with non-combustible materials (class M0);
- 8. The air conditioning and ventilation ducts unrelated to the escape staircase or the fire insulation chamber should not be installed in the escape staircase or the fire insulation chamber;
- 9. When going through fire-insulation components, the fire-insulation device should be installed between the ducts and the fire-insulation components, and the fire resistance class (CRF) of the device should not be lower than that of the fire-insulation components;
- 10. The fire-insulation devices activated by smoke detectors should be installed at the outdoor air inlet;
- 11. The clearance height of the floor after installing the air conditioning and ventilation ducts/facilities must comply with Article 101 of the General Regulation on Urban Constructions approved by Legislative Regulation No. 1600 and revised by the Decree-Law No. 4/80/M;
- 12. The air conditioning equipment must be supported in a stable way;
- 13. The energy-efficiency equipment is preferred.

#### (C) Smoke extraction system specialty:

- (1) Requirements on Drawings and Documents
- 1. Design Description;

- 2. Calculation book;
- 3. Equipment specifications: Specifications and certificates of conformity of the materials of the fan coil units, fire/ smoke dampers (FD/FSD) and ducts, among others. Such specifications shall comply with the relevant requirements stipulated in "Fire Safety Regulations";
- 4. Drawing contents: The whole set of plan should be listed out, including number and edition of the drawings; the altered parts in plan should be indicated with the zigzagging line for identification;
- 5. Equipment system plan: displaying the structure of the system, fire safety compartment and floor distribution etc;
- 6. Equipment plan: Installation locations of the equipment and the complete arrangement of the ducts should be indicated on a plan at a maximum scale of 1:100;
- 7. Detail drawing of the equipment:
  - 7.1 Displaying the distribution of units and pipelines in each floor, the location of extraction/insufflation mouths, in appropriate scale and clear indication in principle;
  - 7.2 Displaying the detail drawing for the pipes going through fire-insulation components and the drawings of the height for the pipes and the equipment.

- If the establishment is located in the basement with total area greater than 300 m<sup>2</sup>, the natural ventilation or mechanical ventilation equipment shall be installed to enable the evacuation of fumes and gases to the outside;
- 2. The fire resistance class of the equipment and pipes of smoke extraction system should comply with the provisions of Article 36 of the Fire Safety Regulations;
- 3. The smoke extraction/insufflation ducts and smoke extraction/insufflation mouths in all fire safety compartments must be installed independently;
- 4. The smoke extraction/insufflation fans and pipes should not be installed in the fire insulation chamber and the escape staircases;
- 5. The smoke extraction/insufflation fans should be installed in compartments separated from other parts of the building;
- 6. The installation height and location of the smoke extraction/insufflation mouths must be appropriate without interfering other persons;
- 7. Make-up air and smoke exhaust ducts should be protected by walls with a fire endurance rating of CRF120. Also, these ducts should be equipped with their own make-up air units and smoke exhaust fans to ensure independence of the smoke exhaust systems in different fire compartments;
- There should be enough horizontal distance between the smoke/ exhaust outlets and any makeup air/ fresh air inlet or building entrance, so that no heat or smoke of outside fire can spread into the building. Also, fire protection devices that are switched on by smoke detectors should be installed;
- 9. The air intake inlets, discharge outlets and smoke extraction/insufflation fans should not interfere other persons. For example, the installation of silencers, sound insulation devices or anti-vibration

devices (e.g. vibration-proof springs) should comply with the related requirements of Law No. 8/2014: Prevention and Control of Environmental Noise;

- 10. The clearance height of the floor after installing the smoke extraction/insufflation ducts/facilities must comply with Article 101 of the General Regulation on Urban Constructions approved by Legislative Regulation No. 1600 and revised by the Decree-Law No. 4/80/M;
- 11. In order to avoid the smoke return, the mouths of the smoke extraction system should be located at a distance greater than 5m from the air intake or building inlets. The smoke cannot enter any fire escape or open-air staircase used by firefighters. The height from the bottom part of the smoke extraction mouths should not be less than 3m. The smoke must not be vented downward if the height is less than 6m. No smoke extraction mouths should be set up under the eaves;
- 12. The operation modes of the equipment under normal circumstances or during a fire should be explained in details;
- 13. During a fire, the various units of the smoke exhaust system should be switched on by the emergency power supply if normal electricity supply is not available. In the proposal, measures of emergency power supply should be specified or indicated for the various units of the smoke control and exhaust systems.

#### (D) Gas/Fuel supply system specialty (if applicable):

#### (1) Requirements on Drawings and Documents

- 1. Design description;
- 2. Usage calculation book;
- 3. Specifications of the equipment: including pipes, fittings, throttle valves, probes, stoves, etc.;
- 4. Drawing contents: The whole set of gas/fuel supply system plan should be listed out, including number and edition of the drawings; the altered parts in plan should be indicated with the zigzagging line for identification;
- 5. Equipment system plan: displaying the system structure (including legend description), layout of pipelines and the pressure distribution etc.;
- 6. Floor plan of equipment: displaying the installation position of the equipment and the complete layout of pipelines, with the maximum scale of 1:100;
- 7. The detail drawing and sectional plan of installation: appropriate scale should be adopted and the related details should be displayed clearly (including the distance between stoves, routines of elevation of pipes, installation height of throttle valve, types of protection facilities and ventilation conditions etc.).

- 1. The design of the establishment should comply with the provisions of "Fire Safety Regulations";
- The storage capacity of the fuel gas should comply with the Administrative Regulation No. 12/2009 Revised "Volume of 200 m<sup>3</sup> or Less Single Container of LPG Storage Facility Safety Regulations". If the portable gas stoves or related equipment are used, their storage capacity should be calculated together with other capacity of fuel gas in the establishment;

- 3. The installation of the fuel gas system should comply with the provisions of Administrative Regulation No. 30/2002 "Technical Regulation on Gas Line Supply Facilities in Building";
- 4. The fuel system should be installed in accordance with the "Regulation of the Security of Combustible Product Facilities" approved by Decree-Law No. 19/89/M and "Storage Facilities and Supply Network for Type-3 Liquid Fuels Used Inside a Building" set out by the Combustibles Security Committee;
- 5. If the unit power of each fuel gas stove in the establishment exceeds 35 kW or the total power of the stove exceeds 70 kw, the Administrative Regulation No. 11/2009: Revised "Security Regulations on Installation of Gas Equipment with High Power" should be observed;
- 6. It is forbidden to use combustion devices for water heating, if installed in sanitation installations;
- 7. It is forbidden to use combustion devices within the lodgings in apartment hotels;
- 8. If the related facilities of the fuel gas system have been pre-reserved in the establishment, the related system should give priority to be connected or used, so does the fuel system;
- 9. During the process of design, construction and operation of the establishment, the following items should be paid attention to:
  - 9.1 All flammable materials such as: liquefied petroleum gas and gasoline, shall be stored in nonflammable compartment with protection and adequate ventilation, and the storage area should be far away from the heating sources, sparks, naked flame and the electrical equipment;
  - 9.2 The materials involving high risks of fire must not be stored in the store room in the establishment (such as: liquefied petroleum gas, gasoline or diesel etc.). And any activity with obvious fire crisis is not allowed to be carried out in the area;
  - 9.3 The switch signs of the fuel supply system must be clear;
  - 9.4 Liquefied petroleum gas (LPG) and liquid fuels (kerosene or diesel) used in the establishment. Under no circumstances shall the amount of LPG stored be greater than 4 full or empty gas cylinders with a total volume exceeding 120 dm<sup>3</sup> (equivalent to 4 13kg gas cylinders for domestic use). Gas cylinders and stoves should be effectively placed in separate locations. The total amount of liquid fuels (diesel/ kerosene) stored shall not exceed 20 L and should be far away from heat sources, open flame or locations where sparks are produced. Besides, the containers should be placed in storage tanks with sufficient separation;
  - 9.5 For the kitchen located in the basement, the use of the liquefied petroleum gas is prohibited;
  - 9.6 Unless otherwise specified, whether the central gas or the central fuel system is adopted in the kitchen, the related laws and regulations should be observed;
  - 9.7 The liquefied petroleum gas equipment must be suitable for making use of the natural gas;
  - 9.8 In the open kitchen, fire cannot be used as the heat sources. However, the use of portable LNG cylinders should be treated differently;
  - 9.9 In case of using portable LNG cylinders, attention should be paid to the size of the stoves and cooking utensils, and the indoor dining area should have sufficient ventilation;
  - 9.10 In the spaces/kitchens where gas-burning devices are used, it is advised to install gas detectors.

#### (E) Elevator equipment specialty:

### (1) Requirements on Drawings and Documents

- 1. Design description;
- The traffic flow calculation book of the equipment installation is (To confirm the number of elevators, rated load and moving speed etc. The calculations can be referred to the technical guidance recognized internationally, such as the related guidance of the Chartered Institution of Building Services Engineers (United Kingdom), Chinese National Standards, etc.);
- 3. Equipment specifications and types;
- 4. Related drawings (such as: location plan, detail drawing and sectional plan of the equipment installation as well as the electrical diagram of the electrical circuit and the driving force, etc.)

### (2) Technical Requirements

- 1. The existence of elevators is compulsory whenever a hotel establishment is located in a building with three or more floors;
- 2. If lifting equipment for passengers (such as lifts, escalators and travellators) are to be installed inside the establishment, the lifting equipment plan shall be submitted. For dumb waiters carrying food or dinnerware, they only have to be indicated in the architectural drawings;
- 3. The characteristics of the equipment and the materials to be used as well as the description of methods to be used should be specified;
- 4. Before the plan of the modification project is submitted, the owner of the project should hire technicians with relevant qualifications to design the project and verify whether the construction plan complies with the related conditions of elevators;
- 5. Before the conclusion of the construction, the "Installation Record of the Elevator Equipment" (Monthly Report of Installation Record) signed by the registered professional technicians, as well as the "Preliminary Inspection Report of the Elevator Equipment" and "Preliminary Inspection Security Operation Certificate of the Elevator Equipment" signed for installation quality confirmation should be delivered.

## 4. Firefighting Specialty

## (1) Requirements for Drawings and Documents

- 1. Location Plan at the scale of 1:1,000;
- 2. The building's plan, section, and elevation at a scale of 1:100;
- The design drawing of the firefighting system, installations and equipment at the scale of 1:100 (layout plan and elevation plan), the firefighting system drawing should be made according to Article 46 of Fire Safety Regulations and the pipe diameters should be indicated in different colors;
- 4. In the case of a project modifying the architecture and the firefighting system, it should be clearly stated in the memorandum, which should be submitted together with the overlapping drawing

of the architecture and the firefighting system (red-yellow drawing), or with the modified drawing of the architecture and the firefighting system with the modified parts indicated by zigzagging lines.

- 5. If a smoke extraction system is required in the establishment, the related drawing at the scale of 1:100 should be submitted;
- 6. The drawings of architecture design, the firefighting system and smoke extraction system etc. should not be shown in the same drawing.

#### (2) Documents that should be submitted:

- 1. Statement of responsibility for project (it must be signed by an engineer or a technician having relevant qualifications for civil engineering and urban planning, who is registered at the DSSOPT);
- 2. Memorandum of description and illustration of the project;
- 3. If certified fire-resistant materials are used in the establishment, relevant documents about these materials and products (such as the fire resistance testing report, the design description, and the order form) should be submitted for analysis.

### (3) The firefighting system:

- 1. As for fire safety issues, a plan of the firefighting system shall be submitted, which is drafted by qualified technicians according to Article 46 of the "Fire Safety Regulations." The plan shall clarify all tools and devices to be used.
- 2. The types and numbers of firefighting systems installed in the establishment or in part of the establishment shall be determined by the height, number of floors, area, and compartment capacity of the establishment, conforming to the requirements stated in Articles 46-57 of the "Fire Safety Regulations." In addition, the technical features of the firefighting systems shall comply with Articles 58-62 of the "Fire Safety Regulations."
- 3. The firefighting system should be constructed according to the related provisions of the "Fire Safety Regulations," and the system should be installed maintained by qualified personnel so as to ensure the normal operation of the system. And the Fire Services Bureau should be notified to conduct the inspection and testing, and a valid certificate of sound operation should be submitted to the Fire Services Bureau.
- 4. If the firefighting system (fixed automatic sprinkler fire extinguishing system, automatic fire detection system or fire hydrants etc.) has been already installed, it should be maintained by the qualified personnel to ensure the system can output the specified pressure and flow, and the certificate of sound operation of the system should be submitted every 12 months.
- 5. The design and implementation of the firefighting system should be performed by registered civil, electric/mechanical engineers and technicians or registered engineering companies according to the technical provisions of the Fire Safety Regulations, and should be inspected and

tested by the personnel from the Fire Services Bureau to verify if the project has been executed in accordance with the approved plan. (Article 63 of the "Fire Safety Regulations.")

- 6. A calculation book should be submitted, which summarizes situations of pressure loss between the control valve of the sprinkler and all the more disadvantaged points (Article 16/18 Sprinkler).
- 7. If there is a boiler chamber, it should be protected by a fixed automatic fire extinguishing system.
- 8. The cold storage chamber should be protected by a fixed automatic sprinkler fire extinguishing system, which should not be a "water-filled device". In the pipeline network of the system, there should be pressured air on the top of the alarming valve, and high-pressure water below the valve.
- 9. Special fire doors should be installed in the corridors between all levels of the parking lot to the staircase or the front halls of the elevator. The doors should be able to be shut both automatically and manually. (Article 56 of the "Fire Safety Regulations.")
- 10. If the estimated capacity exceeds 50 people, the alarm and fire warning system should be installed in the establishment. (Article 54 of the "Fire Safety Regulations.")
- 11. If independent compartments are installed in the establishment and the estimated capacity exceeds 20 people, a sound alarm system should be installed in such compartments. (Article 54 of the "Fire Safety Regulations.")
- 12. The pipes of the air conditioning system should be made of inflammable materials. The design and the installation of the pipes should not impede the normal functioning of the fixed automatic sprinkler fire extinguishing system.

# (4) Fire Safety Design:

- A. Architectural Design:
  - 1. For establishments apporved before the "Fire Safety Regulations" were issued, if their intended functions remain unchanged, the original fire safety conditions should not be jeopardized when modification projects are planned.
  - 2. If a new establishment is planned to be built, its design should comply with the requirements for easy entry and accessibility as stated in Article 8 of the "Fire Safety Regulations." In addition, there should be road(s) that allow firefighting vehicles with hydraulic ladders to approach the establishment, and to park, move around and maneuver close to the establishment, in order that firefighting vehicles are able to access the independent units on each floor directly from outdoors or via the horizontal public passages facing the façade of the establishment. To further facilitate ambulance and firefighting activities, a certain portion of the façade and the circumference of the establishment should be accessible. (Article 8 of the "Fire Safety Regulations.")
  - 3. Roads for firefighting vehicles as prescribed by Article 8 of the "Fire Safety Regulations" should be clearly marked on the plans.

- 4. The width of the evacuation routes and exits of the establishment should comply with Table VI of Article 12 of the "Fire Safety Regulations." The number and width of exits on each floor, determined by the estimated capacity of the establishment, should comply with Articles 11-12 of the "Fire Safety Regulations," and related documents and calculations should be submitted for evaluation.
- 5. The maximum length of the evacuation route from any point on any floor to public roads, open space, or protected staircases, should not exceed that prescribed by Article 13 of the "Fire Safety Regulations."
- 6. The minimum number of staircases should comply with Table IX of Article 14 of the "Fire Safety Regulations."
- 7. Staircases on the ground floor should have independent exits to public roads or via open space to public roads; staircases may terminate in the front hall on the ground floor, but the front hall should be spacious and insulated by decorations made of materials of sufficient fire-resistant capacities and materials of class M0 by fire. Under all circumstances, if staircases as previously stated terminate in the front hall, the distance between the lowest tread of any stair (the riser) to the exit to open space should not exceed 10 meters. (Article 17 of the "Fire Safety Regulations.")
- 8. Staircases should directly reach the rooftop of the establishment. (Article 17 of the "Fire Safety Regulations.")
- 9. No elevator should be installed in the staircases inside the establishment. No pipelines for electricity, gas, water, waste and rubbish should be installed in the staircases. (Article 19 of the "Fire Safety Regulations.")
- 10. The connections between horizontal public passages and staircases should be appropriately protected according to Article 21 of the "Fire Safety Regulations."
- 11. To prevent fire from spreading, there should be suitable horizontal and vertical fire insulations in the establishment. The area, volume, and number of floors of each fire insulation should not exceed those prescribed by Article 26 of the "Fire Safety Regulations."
- 12. The fire-resistant capabilities of insulations between buildings with different functions or parts with different functions in a building shall comply with Item 8, Article 27 of the "Fire Safety Regulations."
- 13. In traditional buildings, the distance between openings on adjacent floors in the outer walls shall exceed 1.2 meters.
- 14. The outer walls of non-traditional buildings, especially glass walls, shall be insulated and protected from fire according to Article 28 of the "Fire Safety Regulations."
- 15. Special attention should be paid to reserving easily identifiable entry points that are of suitable number and size in glass walls, so that in the event of fire, fire fighters may enter the building via these points.
- 16. The rooftop of an A/MA class building should be seen as a refuge floor in the event of fire. Any building construction around or above it is illegal. Electrical devices are exceptions to the previous rule, but they shall not occupy over 15% of the total area of the rooftop, and suitable measures should be taken so that the devices remain unseen from the outside. (Article 29 of the "Fire Safety Regulations" .)

- 17. A/MA class buildings shall be equipped with an emergency power generator. (Article 32 of the "Fire Safety Regulations".)
- 18. It is advised that the substation in the building be installed on the ground floor and that it have access to the outside. If there is an independent exit to the outside, the substation may be installed on the lower level first floor. (Article 33 of the "Fire Safety Regulations".)
- 19. If the substation, as part of the building, has a transformer whose power exceeds 1600KVA and which uses flammable liquids as dielectric, it shall be protected by a fixed automatic sprinkler fire extinguishing system using CO<sub>2</sub>, dry chemical power, or other suitable fire extinguishing agents. (Article 33 of the "Fire Safety Regulations".)
- 20. According to Article 39 of the "Fire Safety Regulations," buildings should have a suitable number of fire elevators protected by fire insulation rooms, in accordance with Table XXIX.
- 21. If there is a basement in the building, the passage(s) from the basement to fire elevators/elevators/staircases shall comply with Article 68 of the "Fire Safety Regulations." Depending on the number of floors in the basement, the passage(s) should be protected by fire-resistant fire doors/rooms that can be automatically shut and can prevent gas/smoke from leaking.
- 22. The basement should have a ventilation system, either direct or artificial, for the purpose of smoke extraction. (Article 68 of the "Fire Safety Regulations".)
- 23. If there is a boiler room, it should comply with Article 44 of the "Fire Safety Regulations."
- 24. Cold rooms shall comply with Article 45 of the "Fire Safety Regulations."
- 25. If the building has more than 30 floors, or its height exceeds 90.0 meters, there should be refuge floors in the building. The maximum distance between two refuge floors is 15 floors, dependent on the larger of the number of floors in the building and the height of the building.
- 26. Refuge floors should always remain empty, and should not be used for any purpose other than safety, and should not be used to install any devices or mechanical devices (elevators, air-conditioning, heating, or similar devices). (Appendix V of the "Fire Safety Regulations".)
- 27. All fire safety measure should be taken according to Article 67 of the "Fire Safety Regulations."
- 28. The electric/mechanical devices on the ground floor should be protected from storms and flooding, in order to prevent damage to the facilities inside the ground floor.
- B. Firefighting equipment and measures that should be adopted:
  - 1. Compartments should be constructed with non-combustible materials (e.g. brick walls, etc.). If the partition walls, ceilings or decorations are built with flammable materials, such parts must be protected properly with qualified and certified fire resistant products (F.R.P.) so as to increase the fire-resistance capacity and to decrease the combustibility. (Article 3 of the "Fire Safety Regulations".)

- 2. If an electrically-operated door/sliding door is installed in the establishment, the door must provide an easily-operated manual opening way, and in case of fire/electricity interruption, the exit door must be ensured to be always open.
- 3. All evacuation exits and routes should be kept unhindered. (Article 10 of the "Fire Safety Regulations".)
- 4. All exits (evacuation paths) must have long-term working safety signs (see Appendix I of the "Fire Safety Regulations" -- green background, white symbols or letters) and emergency lighting; the indication should be clear and in an eye-catching place so that users can get to the exit without any error. (Articles 23 and 24 of the "Fire Safety Regulations".)
- If the pipes of the smoke extraction system and the air conditioning system are made of flammable materials, they should be covered with inflammable materials. (Article 36 of the "Fire Safety Regulations".)
- 6. All electrical facilities in the establishment should be installed in ways neither causing fire nor spreading fire. (Article 32 of the "Fire Safety Regulations".)
- 7. There must be an appropriate number of fire extinguishers in the establishment (at least 2 fire extinguishers in one establishment), and there should be one fire extinguisher every 200 square meters. The fire extinguishers should be placed in a proper way that the distance from any position to the nearest fire extinguisher should be less than 15 meters. (Article 55 of the "Fire Safety Regulations".)
- 8. All personnel in the establishment must clearly understand the measures to be taken in fire alarm use and the correct method for using the fire extinguishers. (Article 55 of the "Fire Safety Regulations".)
- 9. The substances stored in the storage chamber should not be of high fire risk, and activities with obvious fire risk should not be carried out in the storage chamber. Especially, the containers storing liquid or gaseous fuels are prohibited to be placed in the chamber. (Article 83 of the "Fire Safety Regulations".)
- 10. All exits (evacuation paths) and lodgings must have safety signs clearly indicating the locations of evacuation paths. (Articles 23 of the "Fire Safety Regulations".)
- If the establishment is decorated with mirrors, the size and location of the mirrors should not impede the easy recognition and identification of exits or evacuation paths. (Article 66 of the "Fire Safety Regulations".)
- 12. A set of contingency plans for emergencies should be drawn up, exercised periodically and reviewed.
- (5) If the establishment is located in a building designed with application of non-local existing laws (e.g. IBC), the building design drawing/firefighting system design drawing should be first evaluated by a third-party certification body. And the related evaluation report must be submitted, indicating the number and date of the certified drawings.

# 【Notes】:

 This suggestion is only valid for ordinary hotels, apartments, or similar establishments. For establishments with special conditions, such as huge size, the shape of the building, or special environmental conditions, suggestions will only be given according to the documents formally submitted for the application.

- 2. The articles in the draft of the "Fire Safety Regulations" that is currently under revision may be less strict than the opinions given above. The actual implementation of the opinions is at the discretion of authorities.
- 3. When other venues or complementary facilities, such as venues for food and drinks, are to be installed in hotel establishments, these venues/facilities need to be licensed by authorities. The Fire Services Bureau will not express its opinions on relevant fire safety issues until it receives the specific plans for these venues/facilities from the aforesaid authorities.
- 4. Before the optimization of the aforementioned application procedure is carried out, the Fire Services Bureau should be notified by means of official correspondence for the sake of better cooperation.

## (6) Material Certification:

- 1. If fire-resistant materials (such as the fire-resistant glass or fire door etc.) that should be certified are used in the establishment, the fire resistance testing report of these materials and products should be submitted, which must meet the following requirements:
  - i. The testing report to be submitted should be issued by qualified institutions in accordance with the "Fire Safety Regulations", and should be the original or the certified true copy of original.
  - ii. The design description should be prepared by technicians, which should list clearly the information such as the materials used, product name and model, location of use, fire resistance class and quantity of use, etc.
  - iii. The applicant should attach the order form, delivery note or receipt, etc., to confirm that the materials or products installed on site are consistent with those in the report.
  - iv. As for the recognition of the fire-resistant glass, the Statement signed by the technician stating that the fire resistance performance of the materials or products used on site is not lower than that of traditional brick masonry or concrete walls, should be submitted;
  - v. As for the recognition of the fire door, the Statement signed by the technician stating that the fire resistance performance of the fire door used on site is not lower than that of the CRF60 or CRF30 fire door or steel glass that is required to be used by law, should be submitted;
- 2. If carpets or curtains are to be installed in establishment, their samples should be submitted to the Fire Services Bureau for examination and approval of the quality. Otherwise, fire resistance treatment is required (with fire-retardant paint applied by a qualified firefighting company and a valid certificate provided).

## (7) Notes on future operation:

- 1. All evacuation exits and routes should be kept unhindered (Article 10 of the "Fire Safety Regulations");
- 2. All personnel in the establishment must clearly understand the measures to be taken in fire alarm use and the correct method of using the fire extinguishers (Article 55 of the "Fire Safety Regulations");
- 3. The substances stored in the storage chamber should not be of high fire risk, and activities with obvious fire risks should not be carried out in the storage chamber. Especially, the containers storing liquid or gaseous fuels are prohibited to be placed in the chamber (Article 83 of the "Fire Safety Regulations");
- 4. A set of contingency plans for emergencies should be drawn up, exercised periodically and reviewed;
- 5. The storage of materials should not impede the operation or application of any firefighting facilities;
- 6. The flammable or chemical materials should be stored in appropriate containers, and on the

outside of the containers, the material names and reactions in water etc. should be clearly indicated;

7. The equipment for fume-removal, oil and smoke filtering and odor elimination should be cleaned regularly so as to reduce the fire risks.

## 5. Environmental and Sanitary Conditions

## (A) Kitchens (if applicable):

- 1. The area must be equipped with sufficient lightings and a system of direct or artificial ventilation;
- 2. The area must be equipped with the system and devices that can renew air, extract and treat the oily fumes and odors;
- 3. The walls, suspended ceilings, and floors, as well as the surface of the auxiliary facilities in all compartments in the kitchen, should be covered with the materials that are firm, inflammable, waterproof, anti-corrosive and easy to clean and disinfect;
- 4. The kitchen and pantry floors must be coated with the materials that are smooth, anti-slippery, firm, impermeable, non-flammable, anti-corrosive, easy to clean and disinfect, smooth and seamless, and should be equipped with effective drainage systems;
- 5. The walls of the kitchen and the areas of the path access to the kitchen should be paved with tiles, marble or any other smooth, waterproof, light-colored materials with a height of not less than 1.50m. And the connection between walls and floors or other surfaces must be arch shaped;
- 6. The staffs in charge of the preparation of food should always keep their hands clean. Therefore, washbasins for staff should be provided at the entrance of the kitchen or at the proper position inside the kitchen (at least 1 washbasin for 20 workers), and siphon traps should be properly installed and connected to the public drainage network. Meanwhile liquid soap, disposable paper towels or the electric dryer should always be available;
- The kitchen must have specific spaces used to place kitchen utensils, containers, knives and forks (Suggestion: in the kitchen, every 1m<sup>2</sup> space should have 0.02m<sup>3</sup> space for installation of cabinets for dishes);
- 8. The area must be equipped with the refrigeration facilities that are equipped with temperature monitoring and alarm system for storing food and beverages, in accordance with its characteristics and the maximum customer capacity;
- 9. The containers, equipment or tool surface that will have contact with the food must be made of the materials that are plane and smooth, firm, non-flammable, non-absorbent, anti-corrosive and easy to be cleaned and disinfected (e.g. stainless steel), in accordance with its activities and maximum customer capacity;
- 10. It is suggested to install a pantry to store tablecloths, dishes, knives, forks and other utensils for customers in accordance with its maximum customer capacity. If conditions are not available, the special cabinet should be installed. The cabinet should be kept closed and covered with waterproof materials, ventilated, easy to clean, in order to prevent the invasion of dusts, rats and cockroaches;
- 11. If the establishment undertakes the processing of raw seafood, special compartment or speciallyappointed position should be set up and the identifiable and special utensils should be used to prepare raw seafood products so as to prevent seafood products from being polluted by other food and the environment;

- 12. The work environment and floor should always be kept clean and free from accumulation of water; the area floor must be coated with anti-slippery materials, instead of paving or temporarily paving the carpet, mat or similar substitutes made of absorbent materials. And it is not suggested to install the floor made of wooden boards or other materials;
- 13. Personal belongings, including clothing, shoes, socks, luggage, rain gear and toiletries etc., should not be stored in the kitchen or the food storage room;
- 14. There should be no ornaments which can obstruct the inspection, cleaning and disinfection, such as wall liners;
- 15. There should be areas used for the storage of food and beverages and glass bottles according to the characteristics and maximum customer capacity of the establishment;
- 16. The workplace environment should be kept clean and the paths should not be obstructed;
- 17. Drinking water must be provided;
- 18. There should be a first-aid kit with sufficient medicines placed in the eye-catching or easilyaccessible place. The list of the first-aid kit managers with the contact information in Chinese and Portuguese should be prepared; And the first-aid kit managers should periodically check the number and the expiry date of medicines so as to ensure its safe use;
- 19. The suitable protection devices and equipment should be used, and meanwhile, the operation and safety instructions should be posted in eye-catching place;
- 20. Specific space should be set for placing cutting tools, of which the blades should be covered properly;
- 21. The chemicals should be placed in appropriate places;
- 22. The containers containing the chemicals should be well sealed with a lid and properly labeled;
- 23. The mechanical aid equipment should be equipped to help staffs carry heavy materials.
- 24. The kitchen must have enough space for its intended functions: processing and storing food, cleaning kitchenware, utensils, and equipment, the installation of sanitary facilities, and the installation of other auxiliary facilities and equipment.
- 25. The kitchen must have enough rubbish containers with lids. The volume and number of these containers should correspond to the customer capacity of the venue.
- 26. The food processing area should be properly organized. It is advised that food is processed in a single direction (reception storage cooking packaging/serving transportation retailing). The entry and exit points for food should be separated.

## (B) Food storage chamber:

- 1. There should be a storage area for food, drinks, and empty dinnerware. The area should be coated with smooth, anticorrosive and easily cleaned materials, and equipped with shelves/cupboards at a suitable distance from the floor, for storing food, drinks, bottles, and cans.
- 2. There should be a storage room/area coated with smooth, anticorrosive and easily cleaned materials, and equipped with shelves/cupboards at a suitable distance from the floor, for storing food, drinks, bottles, and cans.
- 3. The food storage chamber, walk-in cold room, rubbish disposal area, and other slippery areas

should not be covered with carpets, mats or similar substitutes made of absorbent materials for paving or temporarily paving. Nor is floor made of wooden boards or other materials allowed in such places.

## (C) Sanitary facilities:

- 1. All sanitary facilities should always be kept clean and in good working condition;
- 2. All sanitary facilities must be equipped with the running water and its operating area should be suitable and free from danger;
- 3. The doors of the sanitary facilities should have self-closing system;
- 4. The toilets should have direct or artificial ventilation facilities to ensure the constant renewal of the air;
- 5. The walls, floors and ceilings of the sanitary facilities shall be covered with the materials that are waterproof, anticorrosive and easy to be cleaned and disinfected;
- 6. The walls of the sanitary facilities and the paths access to the sanitary facilities should be paved with tiles, marble or any other smooth, waterproof, light-colored materials with a height of not less than 1.50m; And the connection between walls and floors or other surfaces must be arch shaped;
- 7. There should be no ornaments which can obstruct the inspection, cleaning and disinfection, such as wall liners;
- 8. There should be effective drainage systems;
- 9. The liquid soap, disposable paper towels (or instead, the electric dryer) as well as the necessary personal-care products, lightings and the fixed mirror should always be available in the toilet, and the tissue paper should be always available for all lavatory compartments;
- 10. The sanitary facilities should not have direct connection with any area used for storing, reserving and preparing food, and also should be properly installed so as not to open directly to the customer area;
- 11. As for the customers, the minimum number of the sanitary facilities can be found in Table II of Appendix I of the Guidelines;
- 12. As for the staffs, there should be at least 1 lavatory and 1 hand-washing basin for every 40 male staffs or 30 female staffs;
- 13. The Health Services Authorities does not recommend the situation that the toilets for customers and staffs are not installed in the establishment. If the establishment to be opened cannot provide toilets, but the public toilets for staffs and customers are available in the commercial building or the shopping malls where the establishment is located, the applicant should clearly state the situation in the business license application. And the Health Services Authorities will issue its opinion depending on the situations;
- 14. If the public toilets in commercial building or the shopping malls need to be used by the establishment, such public toilets have to be located on the same floor, and can only be used by the staffs and the customers of the establishment exclusively.

## (D) Refrigeration warehouse:

1. Proper lighting should be provided;

- 2. All venues for food and drinks must be equipped with refrigeration facilities that correspond to the maximum consumer capacity and characteristics to preserve food and drinks. The facilities must include a temperature detector and an alarm system;
- 3. The ceiling and the floor of the cold room must be made of hard, waterproof, anticorrosive, antislip, and easily cleaned materials. The shape of the floor should allow water to drain easily, and the floor should be equipped with a drainage system, in order to keep the floor clean and prevent water accumulation

## (E) Food elevator:

- 1. The food elevator should be fully made of the materials that are smooth, firm, nonabsorbent, anticorrosive and easy to be cleaned and disinfected (e.g. stainless steel), and all partitions must be easy to be cleaned and disassembled;
- 2. If there is only one food elevator:
  - The food elevator can only be used to transport food and clean dishes; or
  - The food elevator should be divided into upper and lower parts for placing clean foods and dishes in the upper part, and placing the remains of meals and unclean dishes in the lower part.
- 3. If there are more than one food elevators, the specific purpose of each food elevator should be indicated clearly. For example, the warnings of "Exclusive use of foods and clean dishes" or "Exclusive use of unclean dishes" etc. should be indicated clearly in eye-catching places of the elevator;
- 4. The Safety Operation Instructions of the food elevator have to be posted in eye-catching place;
- 5. The food elevator must be equipped with the safety signal system to facilitate the contact with different floors;
- 6. The food elevator must be equipped with the safety devices with the interlocking design.

## (F) Lighting and ventilation system:

- 1. All establishments must have adequate lightings and ventilations; natural ventilations and lightings are preferable, but artificial lightings and ventilation equipment and devices can also be used to improve the environmental conditions;
- 2. If the natural ventilation is insufficient or impossible, the establishment must be equipped with an enforced artificial ventilation system to renew the air constantly. It is suggested that the location of the fresh air inlet and the exhaust air outlet should be set outside of the establishment with a height of no less than 2.5m;
- 3. The enforced artificial ventilation must have a minimum capacity of 17m<sup>3</sup>/hour/person, and the independent air inlet and outlet should be set up in different positions of each compartment in the establishment;
- 4. In order to prevent refluent of the exhaust air, the fresh air inlet and the exhaust air outlet must not be too close;
- 5. The installation of all air ducts should be able to prevent rats from entering;
- 6. The ventilation system should not be installed in the positions that may disturb or cause inconvenience to the public.

## (G) Grease interceptor:

- 1. The type of the grease interceptor is set according to the amount of the grease contained in the food sold in the establishment. However, if the establishment does not prepare food on site or only sells drinks and light meals etc. that produce small amounts of grease such as snacks, the grease interceptor will not be required;
- 2. If the establishment mainly sells drinks, and also sells food that produce low-level of grease, the grease interceptor of type A must be installed (For more details, please refer to the Table III of Appendix I of the Guidelines);
- 3. If the establishment mainly sells food, such as the food that produce high-level of grease, the grease interceptor of type B must be installed (For more details, please refer to the Table III of Appendix I of the Guidelines);
- 4. The grease interceptor is a manhole with the filtering, storing and cooling functions. In order to facilitate cleaning and inspection, the grease interceptor with light-type well-cover should be built and the well-cover should be of appropriate intensity and to be opened easily, which mainly have two types:
  - Underground type: installed under the floor;
  - Surface type: installed on the floor surface.
- 5. In general, the underground grease interceptor is preferable. When the underground grease interceptor is not possible because of the underground basement, car park or structure, the surface type of grease interceptor can only be installed with the assent of the competent technical authorities;
- 6. The grease interceptor should be installed within the establishment, in the suitable place for the ease of cleaning and inspection. Except for the special situations, the grease interceptor cannot be installed in public areas (public areas in the building or public streets) so as not to affect other owners or the public;
- 7. The grease interceptor should be installed in the washing zone and far away from the zones for food preparation and storage;
- 8. Adequate space should be available for installing sufficient volume and number of grease interceptors;
- 9. All the sewage with kitchen grease collected from the establishment, including the sewage from the sink, galvanized dish-washing basins, stove and sewer etc., must be piped to grease interceptors for filtration, precipitation and cooling, and then the sewage can be drained to the public sewage network in the building;
- 10. The connection of the grease interceptor to the public sewage network of the building should not affect the drainage of the existing sewer and its use by the residents;
- 11. If the volume of the grease interceptor is too large to be installed in the establishment, with the assent of the competent technical authorities, more than one small-volume grease interceptors can be installed. However, the total volume of the small grease interceptors must be larger than that of the previous grease interceptor planned to be installed, and the specification of the small-volume grease interceptor; should not be lower than the minimum Type A grease interceptor;
- 12. If the surface grease interceptor is installed under the galvanized dish-washing basin, as the height of the grease interceptor is equal to or higher than 0.9m, the normal use of the basin will be affected. So, the installation of grease interceptor should be closely against the floor (with the removal of the furnishing layer). Moreover, the work floor level needs to be raised, so that the users can use the basin safely.

Note: The above-mentioned requirements on the grease interceptor are provided according to the standard of the One-stop Licensing Service for Food and Beverage Establishments issued by the Municipal Affairs Bureau (IAM).

## (H) Air-extraction equipment:

1. The air extractor must be equipped with the protective cover (outer cover for the fan).

## (I) Oily fumes control system and odors treatment equipment:

1. The oily fumes control system and the odors treatment equipment should be installed in the kitchen and the areas for preparing food, and their operation should not cause inconvenience or damage to the third parties.

## (J) Sewage system:

1. The sewage in the establishment should be drained directly to the public sewage network and all sewage drainage equipment (such as: sinks, washbasins, toilets, urinals and bathtubs) should be installed with the siphon trap.

## (K) Drainage system:

1. The floors of the kitchen, bar counter, pantry and sanitary facilities must be tilted slightly to the side of the drain mouth which has the cover or similar devices.

## (L) Water supply system:

1. The hotel should be equipped with the public tap water supply system.

## (M) Solid waste storage facilities:

- 1. There should be independent compartment space for solid waste storage in all establishments; or garbage containers with lids, the number and capacity of which shall be commensurate with the consumer occupancy capacity and frequency of the establishment;
- 2. Solid waste produced by the establishment shall be sent to the Taipa incineration plant for disposal, so as to ensure the hygienic conditions within the establishment and in public places;
- 3. Solid waste produced by business operation may not be left in or near garbage rooms or bins in a public place; the collection times of garbage containers of the establishment shall be arranged with the cleaning service company, to avoid leaving such containers in the street, where they might affect the environment and block the way of pedestrians.

## (N) Noise control:

- 1. Such recommendations aim to put forward the minimum requirements for sound insulation and absorption in the establishment and to avoid the emission of disturbing noises in operation. The noise produced during the operation of the machinery and the equipment has to comply with the relevant provisions in Law No. 8/2014 Prevention and Control of Environmental Noise and should not cause inconvenience or damages to the third parties. Since noise belongs to illegal activity and making noise will be filed and fined.
- 2. If necessary, the noise elimination equipment should be installed on the noise source in places that are liable to be influenced by noise. For example, install sound insulating boards, sound insulation enclosures, silencers or sound insulating blinds.
- 3. Recommendations for sound insulation and coatings for acoustic correction:
  - 3.1 The suspended ceiling with a thickness no less than 3cm made of the plasterboard should

be installed 30cm from the underside of the structural ceiling. On the suspended ceiling, the glass wool with a thickness of no less than 10cm and the specific gravity of no less than 50kg/m<sup>3</sup> should be covered;

- 3.2 The walls should be covered with sound absorption materials.
- 4. Recommendations for the facades
  - 4.1 If the facades are glass, the thickness of the glass should not be less than 5mm, the cracks of frame should be tiny as much as possible and the cracks of the frame that can be closed and opened should be covered with rubber sheets. A layer of sound absorption material, such as the glass wool, should be added in curtains or roller shutter grooves;
  - 4.2 The opaque facades must be made of single layer of brick wall with the thickness of 22cm or double layers of brick wall (11cm + 7cm), and both sides of the wall should be plastered;
  - 4.3 The doors leading to the outside should be kept closed;
  - 4.4 The double-layer doors should be used.
- 5. Recommendations for other walls:
  - 5.1 If the neighbors are different kinds of establishments, the walls should be covered with sound-absorbing materials.
- 6. Recommendations for the audio-video equipment:
  - 6.1 The speakers, "woofers" or similar equipment (such as video-screen with built-in speaker) should not be fixed or suspended directly on the structure of the building (e.g. ceiling slabs, beams and columns);
  - 6.2 The fixed accessories should be able to reduce the influence caused by the sound vibration, and such accessories can be found in the specialty stores;
  - 6.3 Speakers and woofers cannot be placed outside the establishment, even if tables and chairs are put outside;
  - 6.4 The sound volume of woofers should be lowered after the midnight.

## (O) Disease vectors preventive measures:

- 1. All compartments must be equipped with barriers to prevent disease vectors (rats, cockroaches, etc.) from breeding, reproducing and entering from windows, doors, ducts or other openings of floors, walls and ceilings;
- 2. The electrical deinsectization system should be set up in the kitchen, other areas for preparing and cooking foods and even in the customer area, and the number should be suitable to the target area.

## (P) Storage chamber, passages or any other compartments:

- 1. Ceilings, walls and floors should be covered with the materials that are firm, nonflammable, anticorrosive and easy to clean.
- 2. The ornaments which can obstruct the inspection, cleaning and disinfection, such as wall liners should not be installed.

# 6.Technical Advice and Requirements for Health Clubs installed in Hotel Establishments

## 1. Applicable area

This recommendation applies to fitness room open to the public in a hotel establishment.

## 2. Fitness room definition

A fitness room should be equipped with suitable facilities for sports activities and physical training, and relative auxiliary facilities (such as changing room, sanitation facilities and first-aid room).

## 3. Minimum requirements for facilities

Without interfering with the regulations of the building, safety, business operation and facilites usage, the fitness room should meet the following requirements:

## 3.1 Requirements for sports activities and physical training area:

## 3.1.1 - Maximum number of people in the venue

The maximum number of people using the fitness room should be calculated on the basis of a minimum area of  $5m^2$  per person using the sports activities and physical training.

## 3.1.2 - Place floor height

a) If the fitness room is located in a hotel, the height of the location should not be less than 3 metres. If the fitness room is located in a five-star or four-star hotel, the height of the location should not be less than 3.5 metres;

b) To meet the requirements recommended, the height of the location measures from the floor to the ceiling. If there is a suspended ceiling, the height of the location measures from the floor to the suspended ceiling.

## 3.1.3 - Indoor air quality

a) The indoor air quality in the fitness room must not be lower than what is stipulated in the Guidelines for Indoor Air Quality in General Public Places in Macao issued by the Environmental Protection Bureau;

b) The minimum volume of artificial ventilation must be 17m<sup>3</sup> per hour. Air inlets and air outlets must be installed in every compartment of the venue.

## 3.1.4 - Lighting quantity

The floor-level illumination of the fitness room must be no less than 200 LUX.

## 4. Dressing rooms and sanitation facilities

The auxiliary facilities for males and females must include changing room, and other sanitation facilities including lockers, shower room, sinks, toilets, urinals (for males) and suitable sanitation facilities for people with disabilities.

## 5. Emergency room

5.1- If the customer capacity of the fitness room is 50 or exceeds 50, a room providing first-aid services (first-aid room) should be set up. The first-aid room should be in the area connecting the place for sports activities or physical training and the exit.

5.2- If the customer capacity of the fitness room is no more than 50, a first-aid kit containing first-aid items is the minimum requirement of the fitness room.

## 6. Fitness equipment

6.1- The fitness equipment should be set up in accordance to the manufacturers' installation requirements. Appropriate safe distance should be set between the fitness equipment.

6.2- Weight lifting equipment should be installed in a specific area and sufficient safe distance should be set between the weight lifting equipment and other fitness equipment.

## 7. Fitness room design plan

Without interfering with the building and safety regulations, the fitness room design plan should include comprehensible text, charts and information so that different departments can understand the content. The design plan should be signed by a legal plan designer. The design plan should include but should not be limited to the following documents:

7.1- A memorandum of the overall design explanation;

7.2 – A location plan indicating the location of the hotel or the apartment hotel (in a ratio of 1:1000 or a suitable ratio);

7.3- A floor plan indicating the location of the fitness room, its entrance and exit, and the size and usage of each room on the floor plan (in a ratio of 1:100 or a suitable ratio);

7.4- A section plan indicating the location's height and the ground level in altitude (in a ratio of 1:100 or a suitable ratio);

7.5- A floor plan indicating the layout of the fitness equipment including the location, the name and the safe distance of the fitness equipment (in a ratio of 1:100 or a suitable ratio);

7.6- The design plan of ventilation in the fitness area, the sports activities area and the auxiliary facilities area (such as changing room and toilet) (in a ratio of 1:100 or a suitable ratio);

7.7- Formulate the venue's regulations, such as the customer capacity and the opening hours, in official languages. When the venue is open to the public, the regulations need to be posted in prominent places.

The applicant may personally go to the Land, Public Works and Transport Bureau and the Macao Government Tourism Office to submit the modification work and the application of the hotel establishment license respectively, after preparing hotel establishment plan by referring to the Chapters I to III of the Guidelines.

# **IV** Application for Approval of the Project for the Modification Work

- 1 The application for approval of the project for the modification work should be submitted to the Land, Public Works and Transport Bureau.
  - 1.1 Documents that should be submitted:

(1)	"M6-Application for approval of the project for the modification (change) work" (For establishment license issued by the Macao Government Tourism Office) (U068C)
(2)	The original or certified copy of the Written Information of Real Estate Registration
(3)	In the case of a lessee, submit the original or certified copy of the statement of consent by the owner(U038C)
(4)	In the case of an attorney, submit the original or certified copy of the power of attorney
(5)	Statement of responsibility for project planning <sup>[1]</sup> (U002C)
(6)	Project description (for each specialty, the relevant project description must be submitted individually, along with the copy of the statement of responsibility for project planning)
(7)	<sup>[1]</sup> Location Plans
(8)	<sup>[1]</sup> Approved Drawings
(9)	<sup>[1]</sup> Overlaid Drawings
(10)	<sup>[1]</sup> Drawings to be Altered
(11)	<sup>[1]</sup> Water Supply Drawings / Calculation Book <sup>[2]</sup>
(12)	<sup>[1]</sup> Water Drainage Drawings / Calculation Book <sup>[2]</sup>
(13)	<sup>[1]</sup> Structure Drawings / Calculation Book <sup>[2]</sup>
(14)	<sup>[1]</sup> Firefighting Drawings / Calculation Book <sup>[2]</sup>
(15)	<sup>[1]</sup> Power Supply Drawings / Calculation Book <sup>[2]</sup>
(16)	<sup>[1]</sup> Air Conditioning / Ventilation / Smoke Extraction Drawings / Calculation Book <sup>[2]</sup>
(17)	<sup>[1]</sup> Gas/Fuel Supply System Drawings / Calculation Book <sup>[2]</sup>
(18)	<sup>[1]</sup> Elevator Equipment Drawings / Calculation Book <sup>[2]</sup>

<sup>[1]</sup> Documents must be signed by an engineer or a technician registered in the Land, Public Works and Transport Bureau;

<sup>[2]</sup> Documents involved in the project that are required to be submitted.

- 1.2 Number of copies: The submission of the application, should include one original copy as well as the number of copies according to the amount indicated in the notes column "Documents to be submitted" from pages 3/5 to 5/5 of the form in "M6-Application for approval of the project for the modification (change) work" (For establishment license issued by the Macao Government Tourism Office) (U068C).
- 1.3 Pagination made by the applicant: The pagination of documents must be made by the applicant himself with the application form as the first page.

- 2 The application for work permit issuance can be made at the time of completion of "M6-Application for approval of the project for the modification (change) work" (For establishment license issued by the Macao Government Tourism Office) (U068C) with the simultaneous submission of the "S1-Application for starting work", details of which can be found in Chapter V Application for Work Permit and Chapter VII Construction.
- 3 In choosing the "legalization" item in the form of "Application for approval of the project for the modification (change) work", the following situations should be paid attention to: The statement of the technician and builder/construction company should indicate that the project performed on site is consistent with the submitted project plan.
- 4 Taxes (involving the Land, Public Works and Transport Bureau):
  - 4.1 The planning of each specialty plan: MOP 600.00; (should be paid when the plan is submitted);
  - 4.2 Taxes for the legalization of the project should be charged by three times of the value of the standard taxes (excluding taxes for project planning, direction of the project and execution of the project) (should be paid when the plan is approved).
- 5 Application examination period: 75 days.

The above-mentioned period includes 15 days for document preparation, 30 days for advisory opinions from other agencies, and 30 days for examination by the Land, Public Works and Transport Bureau. (The period of examination by the Land, Public Works and Transport Bureau starts from the time receiving the last response of opinion, that is, the procedure for the examination by the Land, Public Works and Transport Bureau does not begin until receiving the last piece of response of opinion.)

- 6 Other relevant applications, e.g.:
  - 6.1 Application for the approval of the changed plan: When change of the project content is made according to the opinions advised by the administrative authorities or by the applicant on its own initiative, the applicant must submit an application for approval of the project of modification before the issuance of the work permit and prior to the completion of the project, and should submit the documents basically consistent with the list in section 1.1;
  - 6.2 Before the issuance of the work permit, the application for the replacement of the technician responsible for planning the project must submit the following documents:
    - 6.2.1 The application;
    - 6.2.2 Statement of the previous technician for abdicating the relevant responsibility, indicating the date of resignation;
    - 6.2.3 Statement of the new technician for taking the relevant responsibility, indicating the date of taking responsibility. (U002C)

# V - Application for the Work Permit

- 1 The application for the work permit should be submitted to the Land, Public Works and Transport Bureau.
  - 1.1 The application for the work permit can be made along with the completion of the" M6-Application for approval of the project for the modification (change) work" (For establishment license issued by the Macao Government Tourism Office) (U068C);
  - 1.2 In a case not belonging to the situation indicated in section 1.1, the application should be made independently by completing form "L1 Application for the issuance of work permit";(U011C)
  - 1.3 The basic conditions for obtaining work permit issuance are as follows:
    - a. The project was approved or conditionally approved (not including the issuance of the feasible opinion);
    - b. Responsibility statements for the direction and execution of the project by qualified person or company has been submitted;
    - c. The insurance policy for work accidents and occupational disease consistent with the provisions of the Decree-Law No. 40/95/M (hereinafter referred to as "labor insurance") has been submitted. Special attention should be paid to the following:
      - The policyholder should be the owner of the project or the builder/construction company responsible for executing the project;
      - The policy should indicate the nature of the project (consistent with the description in the application);
      - The policy should indicate the location of the project (consistent with the description in the application);
      - The policy should indicate the beginning and termination of the term of the labor insurance;
      - The policy should indicate the coverage of the labor insurance;
      - The policy should indicate the relevant applicable laws;
      - The labor insurance policy should not be cover note.
  - 1.4 Required Documents
    - a. "M6- Application for approval of the project for the modification (change) work" (special for establishment with license issued by the Macao Government Tourism Office) (U068C) or "L1 - Application for the issuance of work permit" (U011C);
    - b. Formal insurance policy for work accidents and occupational diseases, and cover note shall not be accepted;
    - c. Statement of responsibility by the technician directing the project;(U019C);
    - d. Statement of responsibility by the builder/construction company responsible for executing the project. (U020C).
- 2 Taxes (involving the Land, Public Works and Transport Bureau):
  - 2.1 The direction of each project: MOP 600.00; (should be paid when the work permit is issued);
  - 2.2 The execution of each project: MOP 600.00; (should be paid when the work permit is issued);
  - 2.3 The term of the work permit, for every 60 days or a fraction thereof: MOP 1,200.00. (Should be paid when the work permit is issued).
- 3 Application examination period: 15 days.

- 4 Other relevant applications, e.g.:
  - 4.1 Revalidation and renewal of the work permit
    - a. In the case of modification project: Filling in the form "L2 Application for revalidation/renewal of the work permit" (U012C), and deliver the documents listed in the form as well as compliance with the Notes in the form.
  - 4.2 After the issuance of the work permit, the application for the replacement of the technician or builder must submit the following documents:
    - a. The application;
    - b. Statement of the previous technician or builder for abdicating the relevant responsibility, indicating the date of resignation;
    - c. Statement of the new technician or builder for taking the relevant responsibility, indicating the date of taking responsibility; (U002C / U019C / U020C)
    - d. The original copy of the work permit for the purpose of registration.

# VI - Application for the Opening of Hotels/Modification of Facilities

- 1 Application for the opening of hotel establishments/modification of facilities should be submitted to the Macao Government Tourism Office.
  - 1.1 Documents that should be submitted:

(1)	The form of application for Opening /the form of application for modification of facilities							
(2)	Questionnaire for hotel establishments							
(3)	If the applicant is a company, the application forms must be signed by the legal representative of the company in accordance with the signature on his or her identification document, along with a copy of the identification document (front and back on the same page)							
(4)	If the applicant is an individual, the application forms must be signed by the applicant in accordance with the signature on his or her identification document, along with a copy of the identification document (front and back on the same page)							
(5)	If the application is made by a person appointed by the applicant, the origina or certified copy of the power of attorney with signature notarized shall be submitted, along with a copy of the authorized person's identification document (front and back on the same page)							
(6)	Certificate of Business Registration of the company issued by the Commerce and Movable Property Registry in the past 3 months. <sup>[1]</sup>							
(7)	A copy of the form "M/1 - Application for Starting Business" from the Financial Services Bureau <sup>[1][2]</sup>							
(8)	Memorandum of description and illustration of the project							
(9)	Photographs of building frontage in format 18 cm x 24 cm <sup>[3]</sup>							
(10)	Internal regulations and staffing table of the company							
(11)	Architectural specialty design, see "(I) architectural specialty" of Chapter III o the Guidelines							
(12)	Statement of simplified procedure for license application							
(13)	If the establishment is equipped with audio system, the design for sound insulation and sound absorption devices, including a detailed description of the design, drawings, technical characteristics and manuals of relevant materials to be used, should be submitted. a. If there is an audio equipment such as speakers, karaoke machines, etc., the							
	following information must be submitted:							
	(a) Floor plan of the equipment;							
	<ul> <li>(b) Sound frequency spectrum characteristics produced by the equipment;</li> </ul>							
	<ul> <li>(c) Drawings and information regarding the measures, devices and materials etc. for insulation and sound absorption;</li> </ul>							
	b. If there is an audio equipment for outdoor music or shows (for example devices for outdoor light shows, music fountains and other equipment fo outdoor events etc.), the relevant drawings and information must be submitted.							

(14)	If there are advertising signs, decorative lights and/or LED panels on the outside								
	of the establishment, the relevant drawings and information should be								
	submitted.								

[1] Applied to the application for Opening business;

[2] Submitted when applying for inspection;

[3] Applied to the application for Opening business and when the establishment is to be installed in a building that has been granted with operating license.

1.2 Number of copies: When the application is submitted, in addition to an original copy, there should be 6 copies in the case of the establishment to be opened in a building under construction <sup>[4]</sup>; or 4 copies in the case of the establishment to be installed in a building that has been granted with operating license <sup>[4]</sup>.

<sup>[4]</sup> If the establishment is installed in the monuments, or the buildings or architectural complex with artistic value or in the buffer area specified in Article 117 of Law No.11/2013, the Macao Government Tourism Office may request the submission of an extra copy, in order to consult with the Cultural Affairs Bureau.

- 1.3 Memorandum of description and illustration of the project, including:
  - a). Architectural characteristics of the building;
  - b). Total area of land;
  - c). General layout, reserved space, entries and exits, volume and weight capacity of the building;
  - d). Estimated total area of the building;
  - e). Area of parking lot;
  - f). Areas for entertainment and flexible space;
  - g). Estimated number of lodgings and beds;
  - h). The functioning of all departments, reservation system, communication, horizontal and vertical passages, and the air conditioning system;
  - i). Materials used for facing and decoration;
  - j). General characteristics of the establishment, special characteristics of the public and service areas;
  - k). Anticipated dates of starting and completion for the project;
  - I). Relevant information about kitchen devices and the layout description of the kitchen;
  - m). Information related to the exhaust system, among others, the design of gas hood and exhaust pipes and the exhaust velocity thereof etc.;
  - n). Information related to oily fumes treatment devices, among others, the oily fumes treatment efficiency, technical specification document etc.;
  - o). Types of fuels used for cooking etc;

- p). If there are grease interceptors in the establishment, the specifications of such devices to be installed and the plan of installation should be described. In the case of sharing the use of grease interceptors with other establishments, information concerning these establishments, including their names and numbers of seat, should be provided.
- 1.4 The name of the hotel establishment to be used should be put down on the Form of application for opening business. According to Article 34 of Decree-Law 16/96/M of April 1, the names of the establishment should be both in Chinese and Portuguese. Names in English or other languages may be added if necessary but please note that the meaning of these names should be basically consistent.
- 1.5 In the process of examining the application, the Macao Government Tourism Office should consult with the relevant departments responsible for various fields, including: the Land, Public Works and Transport Bureau, the Fire Services Bureau, the Municipal Affairs Bureau, the Health Bureau, and the Environmental Protection Bureau (if the establishment is located in the monuments, or the buildings or architectural complex with artistic value or in buffer area specified in Article 117 of Law No. 11/2013, the Cultural Affairs Bureau should be consulted). The period of consultation is 30 days. If the application meets all the requirements, the Macao Government Tourism Office approves the project and sends the notification to the applicant within 25 working days after receiving the last opinion in favor from the agencies involved.

# VII - Construction

- 1 With the approval of the project by the Macao Government Tourism Office, and having obtained the work permit and approval of the application for starting the project granted by the Land, Public Works and Transport Bureau, the applicant can begin the works in accordance with the approved plan.
  - 1.1 The application for starting the project should be submitted to the Land, Public Works and Transport Bureau.
    - a). The application for starting the project can be made along with the submission of the form "M6-Application for approval of the project for the modification (change) work" (For establishment license issued by the Macao Government Tourism Office) (U068C), through the form "S1 Application for starting the project", and submit the documents listed in the form as well as compliance with the Notes in the form; (U017C)
    - b). The application for starting the project can be made along with the submission of the form "L1-Application for the issuance of work permit", through the form "S1 -Application for starting the project", and submit the documents listed in the form as well as compliance with the Notes in the form; (U017C)
    - c). In cases other than situations in section 1.1 a) or 1.1 b), the application for starting the project can be made independently through the form "S1 Application for starting the project", and submit the documents listed in the form as well as compliance with the Notes in the form. (U017C)
  - 1.2 Application examination period: 8 days.
  - 1.3 Under Law No. 8/2014 of August 25, the execution of any modification, maintenance and repair project that produce disturbance or noise is not allowed on Sundays and holidays, as well as in the period between 7 p.m. and 9 a.m. of the next day in the remaining days of the week.
- 2 The decoration and equipment installation projects must be carried out within 6 months. If the establishment is located in a building under construction, these works should be done within 18 months.
- 3 During the execution of decorative works or modification if there is any amendment to the approved project, the applicant must submit the project amendment to the Macao Government Tourism Office and the Land, Public Works and Transport Bureau.
- 4 During the construction, the contractor shall comply with the provisions provided for in Decree-Law No. 44/91/M "Regulation of Health and Safety in the Civil Construction Work" and Law No. 3/2014 "Regime of Occupational Safety Card in Construction".

# VIII - Inspection

- 1 When the project is completed, a completion notice should be submitted to the Land, Public Works and Transport Bureau:
  - 1.1 The form "N1 Project completion notice" should be submitted (U033C), along with the following documents:
    - a. Statement by the technician directing the project (U036C);
    - b. Statement by the builder/construction company responsible for carrying out the project (U037C);
    - c. Record book of the project;
    - d. If the project involves the installation of new elevator equipment, the project completion notice of new elevator equipment should be submitted according to the requirements prescribed by "Private projects Instructions for Approval, Inspection and Operation of Elevator equipment." Please go to the website of the Land, Public Works and Transport Bureau (www.dssopt.gov.mo) to view and download the aforesaid instructions.
  - 1.2 If you need to submit the plan for modification project along with the form "N1 Project completion notice", the plan should be submitted as prescribed by Chapter III "Project Planning and Notices". In the "Other Information" column of the form "N1 Project completion Notice," the following information should be provided that "the plan for the modification project was also submitted on DD-MM-YY" (However, it is advised that the applicant should submit the plan 30 days prior to the project's completion, so as not to hinder the preparations for the inspection).
- 2 The applicant should apply for the inspection of facilities within 18 months after receiving the notification from the Macao Government Tourism Office about the approval of the project. The applicant should understand that failing to meet the deadline for the application for inspection may result in the revocation of the approval of the project, and in this case, the applicant must resubmit the plan for the opening of business/changing facilities to the Macao Government Tourism Office for reconsideration.
- 3 The inspection is organized by the Macao Government Tourism Office, and will be conducted along with the acceptance of the project and the facilities of the establishment. The applicant must submit the following documents to the Macao Government Tourism Office to arrange an inspection:
  - 3.1 Application form for establishment inspection;
  - 3.2 Photocopy of Form "M/1-Application for Starting Business of the establishment"<sup>[1]</sup>;
  - 3.3 The work permit, copies of the "N1 Project Completion Notice" and its receipt, or copies of the approval letter on the project legalization and receipt of tax payment issued by the Land, Public Works and Transport Bureau;
  - 3.4 Verified and stamped copy of the approved plan (the architectural specialty has already been submitted by the applicant to the Macao Government Tourism Office and does not need to be resubmitted);
  - 3.5 The internal regulations and staffing table of the company<sup>[1]</sup>;
  - 3.6 Charges for inspection: MOP\$500 each time;

- 3.7 Charges for licensing<sup>[1]</sup>:
  - a. Five-star deluxe Hotels: MOP\$25,000 (plus 10% stamp duty);
  - b. Five-star hotels, five-star tourism complexes: MOP\$22,500 (plus 10% stamp duty);
  - c. Four-star hotels, four-star tourism complexes, four-star apartment hotels: MOP\$20,000 (plus 10% stamp duty);
  - d. Three-star hotels, three-star apartment hotels: MOP\$17,500 (plus 10% stamp duty);
  - e. Two-star hotels: MOP\$15,000 (plus 10% stamp duty);
  - f. Three-star guest houses: MOP\$12,500 (plus 10% stamp duty);
  - g. Two-star guest houses: MOP\$10,000 (plus 10% stamp duty);
  - h. In addition to the above charges for licensing, charges for publishing the license extract in the MSAR Gazette, amounting to MOP\$1,000 (The balances will be paid to either side as the case may be).

<sup>[1]</sup> Applicable to the case of application for Opening business.

- 4 The inspection will be carried out within 14 working days of receipt of the application for inspection by the Macao Government Tourism Office, with prior notification of the date and time of the inspection to the applicant for preparation. On the day of inspection, the Macao Government Tourism Office and representatives of relevant agencies, as a committee, come to the establishment to make verification, and the applicant or their representative together with the related technicians of the project must be present at the inspection. Upon the completion of the inspection, a joint inspection record will be issued immediately, and a copy of the record will be given to the applicant for information and compliance.
- 5 If it is verified by the inspection committee that the project fully complies with the approved plan, duly fulfilling the opinions of the agencies involved, and the facilities and equipment of the establishment legally meets required standards, the Macao Government Tourism Office (MGTO) will issue the license within 15 days from the passing of the inspection. The hotel establishment must also comply with the license issued by the Land, Public Works and Transport Bureau (DSSOPT) for the buildings involved when applying for opening business, and the opening plan of bars, restaurants, and health clubs (in certain hotel establishments) in the establishment must also be approved by the MGTO, and pass the inspection of the committee. After all the appropriate conditions have been verified, the MGTO will issue the license for the hotel establishment.
- 6 If the establishment does not pass the inspection, the applicant should make improvements in accordance with the recommendations given by the committee within the granted period of time. Upon completion of the improvements, the applicant must inform the committee to carry out a new inspection.
- 7 The establishment can only be opened for business after obtaining the license issued by the Macao Government Tourism Office and completion of the registration of opening for business in the Financial Services Bureau.

## Notes:

- If the establishment has more than 30 employees, the representative of the Labour Affairs Bureau will take part in the inspection of the establishment. For information on occupational safety and health, see Appendix VI of the Guidelines.
- ♦ Charges for hotel establishment license renewal:
  - a). Five-star deluxe hotels: MOP\$12,500 (plus 10% stamp duty);
  - b). Five-star hotels, five-star tourism complexes: MOP\$11,250 (plus 10% stamp duty);
  - c). Four-star hotels, four-star tourism complexes, four-star apartment hotels: MOP\$10,000

(plus 10% stamp duty);

- d). Three-star hotels, three-star apartment hotels: MOP\$8,750 (plus 10% stamp duty);
- e). Two-star hotels: MOP\$7,500 (plus 10% stamp duty);
- f). Three-star guest houses: MOP\$6,250 (plus 10% stamp duty);
- g). Two-star guest houses: MOP\$5,000 (plus 10% stamp duty);
- ☆ The license renewal must be made annually during the month of October. Under the provisions of Article 131 of Order No. 83/96/M of April 1, the renewal after the deadline is subject to payment of a charge equal to twice as those mentioned in the previous point.

# **Appendix I**

Table I	_	Table of Minimum Dimensions and
		Areas
Table II	_	Number of Sanitary Facilities for
		Customers
Table III	_	Specification of Grease Interceptors
		(Provided by IAM )

# **Appendix I**

## <u>Table I</u>

Table of minimum dimensions and areas

Classification of the establishment	Staircases	Main corridors Width (b)	Rooms	s (c) (d)	Divisions of rooms, suites, apartments and lodging units					
			Double	Single	(e)					
	Hotels									
Five stars		1.75 m	18.00 m <sup>2</sup>	14.00 m <sup>2</sup>	12.00 m <sup>2</sup>					
Four stars		1.60 m	15.00 m <sup>2</sup>	12.00 m <sup>2</sup>	10.00 m <sup>2</sup>					
Three stars		1.40 m	13.00 m <sup>2</sup>	10.00 m <sup>2</sup>	9.00 m <sup>2</sup>					
Two stars	Two stars		12.00 m <sup>2</sup>	9.00 m <sup>2</sup>	8.00 m <sup>2</sup>					
		Apart	ment hotels							
Four stars	a)	1.60 m	15.00 m <sup>2</sup>	12.00 m <sup>2</sup>	14.00 m <sup>2</sup>					
Three stars		1.40 m	13.00 m <sup>2</sup>	10.00 m <sup>2</sup>	12.00 m <sup>2</sup>					
		Touris	m complexes							
Five stars		1.75 m	16.00 m <sup>2</sup>	13.00 m <sup>2</sup>	16.00 m <sup>2</sup>					
Four stars	Four stars		14.00 m <sup>2</sup>	11.00 m <sup>2</sup>	14.00 m <sup>2</sup>					
	Guest houses									
Three stars		1.20 m	9.00 m <sup>2</sup>	7.5 m <sup>2</sup>	7.5 m <sup>2</sup>					
Two stars		1.20 m	9.00 m <sup>2</sup>	7.5 m <sup>2</sup>	7.5 m <sup>2</sup>					

Notes:

- a) The number and width of the staircases shall comply with the provisions of the Fire Safety Regulations, approved by Decree-Law No. 24/95/M, of June 9;
- b) The required width of corridors may be lowered by 0.20 m if there are rooms only on one side of the corridor;
- c) Room areas do not include the areas of antechambers and corridors; however, the space occupied by built-in wardrobes is included;
- d) The areas of rooms of apartment hotels and of lodgings of tourism complexes are calculated without prejudice to the provisions regarding the areas corresponding to each bed;
- e) If a suite has more than one room, it is sufficient that one of them meets the minimum areas required in this table.

## <u>Table II</u>

Number of Sanitary Facilities for Customers in the Hotel:

Consumer Capacity	Sanitary Facilities						
(Number of customers)	Women	Men	Common				
Less than25	_	—	1 Toilet				
25-100	1 Toilet +1 hand-washing basin	_					
101-200	2 Toilets +2 hand-washing basins	1 Toilet +1 hand-washing basin + 2 Urinals	_				
201-300	3 Toilets +2 hand-washing basins	2 Toilets +2 hand-washing basins + 3 Urinals	_				
More than300	4 Toilets +3 hand-washing basins	3 Toilets +3 hand-washing basins + 4 Urinals	_				

# <u>Table III</u>

Tune A Chesses listeness	+ / ff l	1	- +
IVNE A Grease Intercen	tor icottee shons	Ice-cream nariour	s tea roomsi
Type A Grease Intercep	tor (conce shops)	, ice creatil parloar.	<i>s</i> , tea rooms <i>j</i>

Type A Grease Interceptor (coffee shops, ice-cream parlours, tea rooms)								
Grease	Number of	Volume of	Internal Size (cm)		Total	Тор	Water Inlet	
Intercepto	Seats	Minimum	Tatal	\ <b>A</b> /:d+	Dent	Dept	Heigh	and Outlet
r	(people)	Grease	Total	Widt	Dept	h	t	Diameter(cm
Level		Intercepto	Lengt	h	h	(cm)	(cm)	)
		r	h					
		(liter)						
1	No. of people ≤10	300	100	60	60	90	30	10
2	10 <no. of<br="">people≤15</no.>	360	120	60	60	90	30	10
3	15 <no. of<="" td=""><td>450</td><td>150</td><td>60</td><td>60</td><td>90</td><td>30</td><td>10</td></no.>	450	150	60	60	90	30	10
_	people≤20							-
4	20 <no. of<="" td=""><td>1100</td><td>150</td><td>70</td><td>70</td><td>105</td><td>35</td><td>10</td></no.>	1100	150	70	70	105	35	10
	people≤50			_	_			-
5	50 <no. of<="" td=""><td>1700</td><td>170</td><td>80</td><td>80</td><td>120</td><td>40</td><td>10</td></no.>	1700	170	80	80	120	40	10
	people≤80							
	80 <no. of<="" td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></no.>							
6	people≤10	2015	180	80	80	120	40	10
	0							
	100 <no. of<="" td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></no.>							
7	people≤12	2300	200	90	90	135	45	10
	0							
	120 <no. of<="" td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></no.>							
8	people≤16	3100	220	105	90	135	45	15
	0							

Type B Grease Interceptor (congee and noodle shops and food establishment)

Grease	Number of	Volume of	Internal Size (cm)			Total	Тор	Water Inlet
Intercepto	Seats	Minimum				Dept	Heigh	and Outlet
r	(people)	Grease	Total	Widt	Dept	h	t	Diameter(cm
Level		Intercepto	Lengt	h	h	(cm)	(cm)	)
		r	h					
		(liter)						
1	No. of	300	120	60	60	90	30	10
-	people ≤10						30	
2	10 <no. of<="" td=""><td>450</td><td>150</td><td>60</td><td>60</td><td>90</td><td>30</td><td>10</td></no.>	450	150	60	60	90	30	10
-	people≤15	430	150	00	00	50	50	
3	15 <no. of<="" td=""><td>1100</td><td>150</td><td>70</td><td>70</td><td>105</td><td>35</td><td>10</td></no.>	1100	150	70	70	105	35	10
	people≤30	1100	100	70	70	105		10
4	30 <no. of<="" td=""><td>1700</td><td>170</td><td>80</td><td>80</td><td>120</td><td>40</td><td>10</td></no.>	1700	170	80	80	120	40	10
	people≤50	1700	1/0	00	00	120	-10	10
	50 <no. of<="" td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></no.>							
5	people≤10	3100	220	105	90	135	45	15
	0							
	100 <no. of<="" td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></no.>							
6	people≤15	4500	250	115	110	165	55	15
	0							
7	150 <no. of<="" td=""><td>5400</td><td>250</td><td>120</td><td>120</td><td>180</td><td>60</td><td>15</td></no.>	5400	250	120	120	180	60	15
,	people≤30	5400	230	120	120	100	00	13

	0							
8	300 <no. of<br="">people≤50 0</no.>	7300	280	125	120	180	60	15
9	500 <no. of<br="">people≤90 0</no.>	13000	300	130	120	180	60	15x2

# **Appendix II**

List of monuments, architectures,

architectural complex and sites with artistic value

## List of monuments, architectures, architectural complex and sites with artistic value

## List of monuments

## A. Macao

- St. Augustine's Church (St. Augustine)
- St. Antonio's Church and the square (St. Antonio)
- St. Dominic's Church (St. Dominic)
- St. Lazarus'Church and the square
- St. Lawrence's Church and the square
- Cathedral
- Seminary and St. Joseph's Church, the square and stone stairs
- The Ruins of St. Paul's, the square and stone stairs
- Mong Ha Fortress
- Fortress of Our Lady of Bom Parto
- Guia Fortress and Lighthouse
- Fortress of Our Lady of Penha
- São Tiago da Barra Fortress
- Dona Maria II Fortress
- St. Francisco Barracks
- Border Gates
- Chief Executive's Office (former Government House)
- IAM Building (former Leal Senado Building)

## B. Taipa

- Church of Our Lady of Carmel
- Kun Iam Tong Temple
- Kun Iam Small Temple
- I Leng Temple
- Pek Tai Temple

## C. Coloane

- Church of São Francisco Xavier
- Tam Kong Temple
- Tin Hau Temple
- Kun Iam (Ka Ho) Temple

- Holy House of Mercy
- A-Ma Temple
- Bazaar Temple
- Kun Iam Tchai Temple
- Kun lam Tong Temple
- Lin Fong Temple
- Na Tcha Temple on Calçada das Verdades
- Na Tcha Temple, near Ruins of St. Paul's
- Pao Gong Temple
- Lin Kai Temple
- Lou Pan Si Fu Temple
- Tin Hau Temple
- Sam Kai Vui Kun Temple
- Tou Tei Temple
- Section of the Old City Walls
- Camões Grotto
- Stone plaque at Lin Fong Temple
- Engraved Plaque at the steps leading up to Mong Ha Housing Estate

- Tin Hau Temple
- Sam Po Temple
- Kuan Tai (Cheoc Ka)Temple
- Taipa Fortress, at the quay
- Sam Seng Kong Temple
- Tai Wong (Hac Sa) Temple
- Kun Iam (Coloane) Temple

## List of architectures with artistic value

## A. Macao

- Santa Sancha Palace
- Chapel of Our Lady of Penha and Bishop's
   Palace
- St. Joseph's Seminary building
- Casa do Jardim da Gruta de Camões
- Sir Robert Ho Tung Library building
- Military Club building
- Moorish Barracks building
- Fire Services Bureau building
- Post Office Building
- Red Market Building
- Lou Lim lok Pavilion
- BNU Head Office
- Pedro Nolasco da Silva Government Primary
   School
- Leng Nam School at Estrada dos Parses
- Pui Tou School at No. 107, Rua da Praia Grande
- Pui Cheng School (Lou Lim lok Pavilion)
- Ricci School, at Rua da Praia Grande do Bom Parto
- Dom Pedro V Theatre
- St. Raphael Hospital and Garden
- Bela Vista Hotel building
- Convent of the Precious Blood building

- Caixa Escolar
- Chinese Pharmacy at No. 146, Rua 5 de Outubro
- Building cornering Praça de Ponte de Horta and Rua das Lorchas
- Court Building
- Lok Kok Restaurant at No. 159, Rua 5 de Outubro
- Mandarin's House at Travessa de António da Silva
- Cathedral Square at Nos. 1, 3, 5, Largo da Sé
- Lou Kau Mansion at No. 7, Travessa da Sé
- House on Estrada do Engenheiro Trigo at
   No. 4, Estrada do Engenheiro Trigo
- House at No. 83, Avenida Praia Grande
- House at No. 29, Rua do Campo
- Company of Jesus Square at No. 4 and No. 6
- House on Rua Pedro Nolasco da Silva, nos 26-28
- Casa Jardines
- House at No. 6, Avenida da República
- Pawnbroker's Tower at No. 64, Rua 5 de Outubro
- Pawnbroker's Tower at No. 6, Rua de São Domingos
- Pawnbroker's Tower at Rua de Camilo
   Pessanha
- Pawnbroker's Tower at No. 3, Travessa das Virtudes
- Building at Avenida Horta e Costa, nos.
   14 and 16

#### B. Taipa

- Museum of Taipa and Coloane History (former Island Council building)
- Pawnbroker's Tower at No.1, Rua da Felicidade

## C. Coloane

- Coloane Library building

## List of classified architectural complex

## A. Macao

- Avenida de Almeida Ribeiro/Largo do Leal Senado/Largo de S. Domingos
- St. Lazarus Quarter
- Avenida do Conselheiro Ferreira de Almeida, from the building cornering Estrada do Cemitério up to No. 95G
- Lilau Square and Beco do Lilau

## B. Taipa

- Largo do Carmo / Avenida da Praia

## C. Coloane

 Largo Eduardo Marques/Rua dos Megociantes/Largo do Presidente Ramalho Eanes

- St. Augustine's Square
- Travessa de São Paulo
- Travessa da Paixão
- Rua and Beco da Felicidade
- Camões Square/Rua dos Negociantes

## List of classified sites

## A. Macao

- Coronel Mesquita Sports Ground
- Barra Hill
- Penha Hill
- Guia Hill
- Dona Maria II Hill
- Mong Ha Hill
- Green Island Hill
- Lou Lim lok Gardens
- Camões Park
- Sun Yat Sen Municipal Park

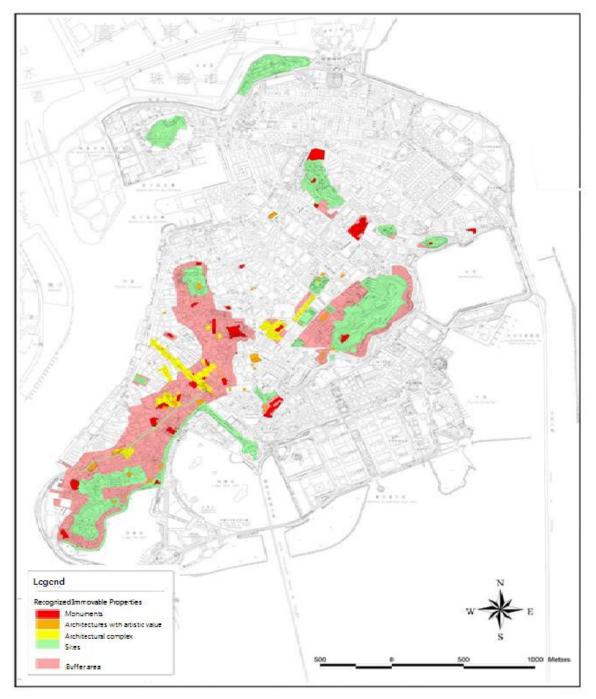
- Montanha Russa Park
- São Francisco Gardens
- Vitória Park
- Vasco da Gama Park
- Coast road from Macao-Taipa Bridge, to São Tiago da Barra Fortress
- Rua Central/Rua de São Lourenço/Rua do Padre António/Rua da Barra/Calçada da Barra
- Ponte e Horta Square
- Parsee Cemetery

## B. Taipa

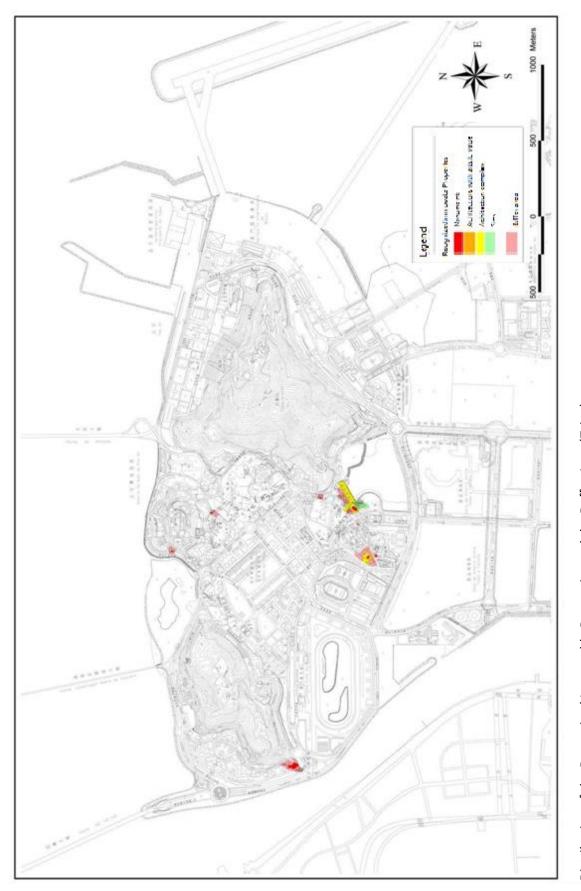
- Municipal Park

## C. Coloane

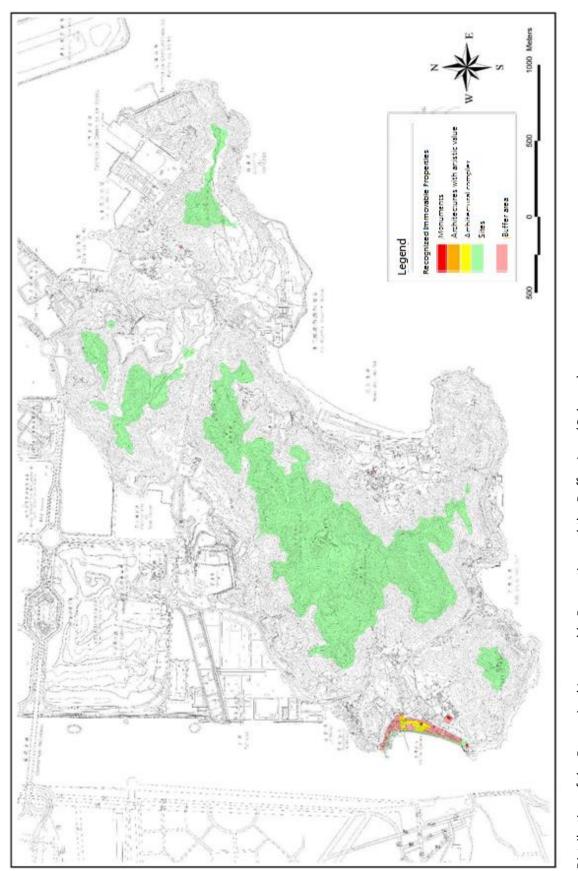
- Avenida 5 de Outubro, Coloane
- Coloane Island, 80 metres above sea level



Distribution of the Recognized Immovable Properties and the Buffer Area (Macao Peninsula) In accordance with Article 115 and Clause 2 of Article 117 of No.11/2013 "Cultural Heritage Protection Act"







# In accordance with Article 115 and Clause 2 of Article 117 of No.11/2013 "Cultural Heritage Protection Act" Distribution of the Recognized Immovable Properties and the Buffer Area (Coloane)

# **Appendix III**

**Related Legislation Contents** 

## **Appendix III**

#### **Related Legislation Contents**

- Administrative Regulation No. 31/2018, of November 19
   List and graphic delimitation of classified real estate and their protection zones
  - Law No. 9/2018, of August 2 The establishment of the Municipal Affairs
- Law No. 8/2014 of August 25
- Law No. 11/2013 of September 2
- Law No. 5/2013 of April 22
- Law No. 5/2011 of May 3
- Administrative Regulation No. 12/2009 of May 4
- Administrative Regulation No. 11/2009 of May 4
- Administrative Regulation No. 28/2004 of August 16
- Law No. 2/2004 of March 8
- Administrative Regulation No. 38/2003 of December 1
- Administrative Regulation No. 3/2003 of March 10

- Bureau (IAM)
- "Prevention and Control of Environmental Noise";
- "Cultural Heritage Protection Act";
- "Food Safety Law";
- "Regime of Tobacco Prevention and Control";
- Revised "Volume of 200 m<sup>3</sup> or Less Single Container of LPG Storage Facility Safety Regulations";
- Revised "Security Regulations on Installation of Gas Equipment with High Power";
- General Regulations of Public Area;
- Law on Infectious Disease Prevention and Control;
- Fuel Safety Commission was Established;
- "The Conditions for Project Preparation, Management and Implementation of Gas Networks, Installation and Maintenance of Gas Equipment";

- Administrative Regulation No. 31/2002 of December 16
- Administrative Regulation No. 30/2002 of December 16
- Administrative Regulation No. 28/2002 of December 16
- Administrative Regulation No. 26/2002 of December 16
- Executive Order No. 7/2002 of March 4
- Dispatch of the Chief Executive No. 218/2001 of October 29
- Law No. 6/99/M of December 17
- Decree-Law No. 81/99/M of November 15
- Decree-Law No. 40/99/M of August 3
- Ordinance No. 173/97/M of July 21
- Decree-Law No. 46/96/M of August 19

- Approved Technical Regulations for Gas Distribution Network;
- Approved "Technical Regulation on Gas Line Supply Facilities in Building";
- Approved "Volume of 200m<sup>3</sup> or Less Single Container of LPG Storage Facility Safety Regulations";
- Approved "Security Regulations on Installation of Gas Equipment with High Power";
- Revised Regulations for Activities of Hotel and the Similar Industry, approved by Ordinance No. 83/96/M of April 1, and revised by Ordinance No. 173/97/M of July 21;
- Republished the full content of "Stamp Duty Regulations" and the relevant overall table approved by the Law No. 17/88/M on June 27;
  - Regulations of Using Urban Real Estate;
  - Restructuring the structure of Macao Health Services and cancellation of the Council of Health – Several items Repealed;
    - Revised Decree-Law No. 16/96/M of April
       1;
    - Revised Ordinance No. 83/96/M of April 1;
  - Approved "Macao Water Supply and Drainage Regulations";

- Decree-Law No. 56/96/M of September 16 Approved the "Regulations of Safety and Building and Actions in Bridge Structures"---Repealed Ordinance No. 19053 of March 1, 1962, extended to Order No. 44041 of November 18, 1961;
- Law No. 6/96/M of July 15 Approved the Legal Regime of activity to offense against public health and economy. -Several items Repealed;
- Decree-Law No. 16/96/M of April 1
- Ordinance No. 83/96/M of April 1
- Decree-Law No. 40/95/M of August 14
- Decree-Law No. 24/95/M of June 9
- Decree-Law No. 34/93/M of July 12
- Decree-Law No. 83/92/M of December 31
- Ordinance No. 62/91/M of April 1
- Ordinance No. 7/91/M of January 14

- - Approved the regime of hotel and the similar industry;
  - Approved the new regime of hotel and the similar industry;
  - "Legal Regime of Reparation for Damage Arising from Accidents at Work and Occupational Diseases";
  - Approved "Fire Safety Regulations";
  - "Legal Regime Applicable to Occupational Noise";
- Revised the List of Monuments, Architectural Complex and Classified sites, attached to Decree-Law No. 56/84/M of June 30 and Ordinance No. 90/89/M of May 31;
  - The period prescribed in Article 3 of Ordinance No. 2/89/M of Jan 9 extended for two years (Fees to be charged on the occasion of issuing licenses for works and performing inspections);
- Regulated the fees to be charged under the General Regulation of Urban Construction. - Repealed Ordinance No. 150/85/M of August 21;

- Decree-Law No. 37/89/M of May 22
- Decree-Law No. 19/89/M of March 20
- Decree-Law No. 79/85/M of August 21
- Decree-Law No. 56/84/M of June 30

- Approved "General Regulations of Health and Safety in Commercial Establishments, Offices and Services";
- Approved the Regulation of Security in Installation of Fuels Products—Several items Cancelled;
- Approved "General Regulation of Urban Construction." - Repealed regulation relating to the administration, the Legislature Regulation No. 1600 of July 31, 1963;
  - Established Committee of Defense in Architectural Heritage, Landscape and Cultural. Repealed Decree-Law No. 34/76/M of August 7 and Decree-Law No. 52/77/M of December 31;
- Law No. 9/83/M of October 3
   Established the standards of suppression of architectural barriers;
- Decree-Law No. 4/80/M of January 26
   Revised paragraph e) of Article 73 and Article 101 of the General Regulation of Urban Construction, approved by Legislative Regulation No. 1600 of July 31, 1963.

# **Appendix IV**

## Guidelines for controlling environmental pollution

- 1. Guidelines for controlling environmental pollution in hotels and other similar establishments
- 2. Guidelines for the pollution control of black fumes and particulate emission from boiler or stove
- 3. Guidelines for controlling light pollution originating from advertising panels, decorative illuminations and electronic monitors in the exterior of the building
- 4. The minimum requirements for sound insulation/elimination devices

## <u>1. Guidelines for controlling environmental pollution in hotels and other similar</u> <u>establishments</u>

- "General guidelines for controlling noise pollution", "Guidelines for controlling oily fumes, black fumes, and bad smells pollution in the catering industry and similar establishments", "Guidelines for controlling light pollution originating from advertising panels, decorative illuminations and LED monitors in the Exterior of the Building", and "Guidelines for controlling sewage pollution" are applicable to general establishments such as cafés and restaurants, etc.
- 2. "General guidelines for controlling noise pollution", "Special guidelines for controlling noise pollution", "Guidelines for controlling oily fumes, black fumes, and bad smells pollution in the catering industry and similar establishments", "Guidelines for controlling light pollution originating from advertising panels, decorative illuminations and LED monitors in the Exterior of the Building", and "Guidelines for controlling sewage pollution" are applicable to general establishments equipped with open-air performance or heavy hi-fi equipment (continuous output power of loudspeakers exceeds 150 watts), such as cafés and restaurants etc.
- 3. "General guidelines for controlling noise pollution", "Special guidelines for controlling noise pollution", "Guidelines for controlling oily fumes, black fumes, and bad smells pollution in the catering industry and similar establishments", "Guidelines for controlling light pollution originating from advertising panels, decorative illuminations and LED monitors in the Exterior of the Building", and "Guidelines for controlling sewage pollution" are applicable to karaoke lounges, discos, nightclubs, ballrooms and bars equipped with open-air performance or heavy hi-fi equipment (continuous output power of loudspeakers exceeds 150 watts).
- 4. Meanwhile, if there are boilers or stoves in the above-mentioned establishments, the "Guidelines for the pollution control of black fumes and particulate emitted from boiler or stove" are applicable.

#### General guidelines for controlling noise pollution

- It is recommended that proper environmental assessment of the area chosen for the setup of the establishment should be carried out, in order to avoid possible complaints resulting from disturbances of places nearby sensitive to noise (e.g. residential buildings, nursing homes, convalescent homes, hospitals and schools).
- 2. The operation of the establishment should comply with the requirements of Law No.8/2014 "Prevention and Control of Environmental Noise".
- 3. The establishment must take into consideration about the impact caused by the sound produced by speakers on the surrounding residents. If necessary, sound insulation/elimination of noise and anti-vibration devices must be installed in order to comply with the requirements of Law No. 8/2014 "Prevention and Control of Environmental Noise".
- 4. To avoid disturbing nearby residents, loudspeakers must not be used outside.
- 5. The establishment must take into consideration about the impact caused by the noise produced by air-conditioning, ventilation equipment on the surrounding residents. If necessary, sound insulation/elimination of noise/anti-vibration devices must be installed in order to comply with the requirements of Law No. 8/2014 "Prevention and Control of Environmental Noise".

- 6. The installation of air conditioning and ventilation equipment, cooling system and ventilation outlet of the engine room in establishments must take into consideration about the impact caused by the noise on the surrounding residents. Thus the appropriate distance must be kept in relation to areas sensitive to noise (e.g. residential buildings, nursing homes, convalescent homes, hospitals and schools), and the relevant equipments or systems should be installed in the open area faced by the establishment as much as possible to facilitate the diffusion of noise and heat, minimizing the impact on the surrounding environment caused by noise and heat produced; the installation of such equipment in the yards, narrow roads, or places with little noise diffusion must be avoided.
- 7. It is recommended that periodic inspection, repairs, and maintenance of air conditioning systems, water towers and ventilation inlet and outlet should be carried out, in order to comply with the requirements of Law No. 8/2014 "Prevention and Control of Environmental Noise".

#### Special guidelines for controlling noise pollution

- 1. The choice of the location of the establishment shall take into consideration about possible disturbances by noise in the sensitive surrounding areas (e.g. residential buildings) in order to lower the likelihood of complaints. The karaoke lounges, bars, discos, ballrooms or other relevant establishments those are most likely to produce disturbing noises and other disturbances originating from human conducts with impacts on the surrounding environment. Thus, it is recommended that these establishments should not be located in residential buildings, but in hotels, buildings dedicated for entertainments, or commercial buildings, to reduce the likelihood of disturbances and possible complaints.
- 2. Attention should be paid to the surrounding environment to avoid noise problems resulting from numerous similar establishments in the district, including disturbing noises and other disturbances originating from human.
- 3. Establishments must install sound insulation/elimination of noise and anti-vibration materials so that operation may meet requirements of Law No.8/2014 "Prevention and Control of Environmental Noise".
- 4. The establishment must make an acoustic evaluation of the surrounding environment and adopt effective measures to ensure that the sound of speakers perceived by the residents of the nearby buildings is minimal, especially the sound of outdoor speakers or outdoor concerts, as well as sounds of low frequency rhythms.
- 5. Main door of an establishment must open inwards. If main door opens outwards, proper design is required (e.g. double doors with a buffer zone in between). Signage must be positioned in eye-catching place at the entrance to remind customers not to make any noise when leaving the establishment at night.
- 6. When selecting sound insulation or noise elimination materials, the establishment must use materials with different ranges of sound insulation capability that can effectively dampen sound frequency emitted from loudspeaker. Submitted information must include ranges and coefficients of sound insulation materials of different frequencies, as well as highest sound pressure for different frequency of loudspeakers.

- It is not suitable to directly install hi-fi equipment on building structures. It is recommended that vibration isolation materials with transfer ratio (T) of 0.01-0.05, isolation efficiency (η) at 95% 99%, and at frequency ratio (f/fo- the ratio of driving frequency of the vibrating facilities to the fixed frequency of vibration isolation system) of 5.5-15 should be used.
- 8. During the installation of windows in establishment, the use of glasses with high efficiency insulation (e.g. double glazing or insulated glass) should be considered to reduce the spread of noise to the outside (especially low frequency noise), or take other effective and feasible measures to have better sound insulation effect, in order to comply with the requirements of law No. 8/2014 "Prevention and Control of Environmental Noise" to minimize the impacts on surrounding objects (e.g. residential buildings, nursing homes and schools).
- 9. Doors and windows should be closed during the operations of an establishment in order to avoid the impact of noise from speakers on the surrounding environment, particularly places likely to be affected by noise.

#### Guidelines for controlling sewage pollution

- Establishments must install proper equipment to ensure the water quality of sewage that discharged into sewage drainage conforms to requirements of Decree-Law No. 46/96/M of 19 August, Macao Water Supply and Drainage Regulations.
- 2. Periodical inspection, clearance, maintenance and repair of relevant pollution controlling equipment must be carried out to ensure equipment efficiency.
- 3. To avoid environmental pollution, establishments must not discharge sewage and waste oil into rain pipes or nearby streets, and must gather and handle waste oil in a proper and effective way.
- 4. When it is feasible, it is recommended that water saving equipment, such as water saving tap, defroster, toilet, etc., should be installed; water saving measures, such as avoiding prolonged opening of the tap for cleaning food or thawing, taking advantage of the water used in cleaning food and thawing etc., should be adopted in order to conserve water and reduce costs.

## 2.Guidelines for the pollution control of black fumes and particulate emission from boiler or stove

#### 1. General principles

- Black fumes emission from boiler or stove must neither exceed 6 minutes in any 4 hours; nor continue for more than 3 minutes at one time. Emitting black fumes is defined as discharging smoke which is consistent with the black color shown in Ringelmann Chart Shade No.1 or even darker than that color.
- Exhaust emission of carbon black particles from the boiler or stove should be controlled at a level lower than 22mg/m<sup>3</sup>.
- According to the principles of pollution prevention, suitable approaches should be adopted to avoid possible conflicts with existing places (such as residential buildings etc.) and residents prior to the setup of the boiler or stove and of the chimney discharging waste gas. Assessment of the surrounding environment and effective control measures should be considered and incorporated at the planning stage. Pollutants discharged from the boiler or stove should be minimized to ensure the air quality of the surrounding area.
- 2. The design of pollution control facilities
- The combustion of industrial diesel and fuel with high impurities could easily lead to the discharge of pollutants and adversely affect air quality. Thus, it is recommended to install effective black fumes and particulate pollution control facilities at the relevant establishments to reduce the discharge of pollutants. Meanwhile, it is necessary to maintain proper functioning of the relevant pollution control facilities during operation.
- 3. The design of chimney or exhaust outlet
- The treated waste gas should emit through a dedicated venting system. Appropriate distance between exhaust outlet and sensitive objects (such as residential buildings) and residents should be set so that the exhaust gas can be properly diffused in open area.
- In general, the exhaust outlet should be set above the top of the building. However, consideration should be given to relative height of surrounding buildings for the purpose of minimizing the adverse effect to the neighboring sensitive objects. Regarding to the exhaust outlet which locates above the top of building, it is recommended that it should be situated at least 3m higher than the topmost point of the building or surrounding buildings. Generally the waste gas should be expelled in a vertical upward direction.
- 4. The operation and management of pollution control facilities
- The boiler and stove should be maintained in good operating condition during daily operations in order to avoid carbon debris deposited inside the pipes.
- The jet burner of boiler or stove should be inspected and cleaned frequently. A correct ratio between air and fuel should be maintained according to the relevant operating manual. The blower filter screen should always keep unblocked.
- Operation and functioning of the boiler or stove should be conducted in accordance with the appropriate procedure or the procedure recommended by the manufacturer to prevent any air pollution caused by improper operation.
- It is recommended to regularly monitor the efficiency of pollution control facilities and the emission of black fumes and particulate from the chimney or exhaust outlet. Appropriate maintenance measures such as regular cleaning of the chimney and relevant exhaust ducts and particulate control facilities should be taken. Inspection, repair and maintenance of related facilities should be conducted by professionals so as to ensure the treatment efficiency. Besides, it is necessary to record the relevant inspection, repair and maintenance information and the above records should be kept properly.

- If any particulate pollution control facilities are installed, it is recommended to conduct the cleaning and inspection at least twice every week. Meanwhile, it is also recommended to examine the chimney or exhaust outlet at least once every day (especially when the boiler reaches its maximum load). The frequency of cleaning of the chimney or exhaust duct should depend on the actual operation of the boiler or stove. It is recommended to conduct the cleaning, inspection or maintenance at least once every three months.
- Clear procedures and guidelines with detailed information of relevant operation, cleaning, maintenance and routine inspection of boiler or stove should be developed and available to all involved staff for the ease of their execution.
- 5. Fuel usage
- In order to reduce the impact on the environment, appropriate use of environmentally friendly fuels, such as liquefied petroleum gas (LPG), natural gas, diesel and gasoline of which the sculpture content is equal or lower than 0.5%, is highly recommended to reduce the possibility of discharging black fumes and particulate through the boiler or stove exhausts.
- 6. Secondary pollution control
- The byproducts including ash particles and sewage produced during the process of cleaning or maintenance of relevant pollution control facilities should be collected and treated properly to prevent secondary pollution.
- 7. Complaint handling mechanism
- It is recommended to develop a complaint handling mechanism for environmental pollution issues. In case any environmental pollution complaint is noted, the above developed procedures or mechanism should be followed so as to improve the situation as soon as possible.

## <u>3.Guidelines for controlling light pollution originating from advertising panels,</u> decorative illuminations and electronic monitors in the exterior of the building

- 1. The use of illuminated advertising panels, such as light boxes advertising and neon light advertising, LED advertising, and electronic monitors etc., is subject to the general guidelines for controlling light pollution from illuminated advertising panels and similar equipment;
- 2. The use of decorative spotlights, which are designed for illuminating facades of establishments or the advertising panels, should comply with not only the general guidelines for controlling light pollution from illuminated advertising panels and similar equipment, but also the guidelines for controlling light pollution from decorative spotlights;
- 3. The use of LED lights as the decorative lights of advertising panels should comply with not only the general guidelines for controlling light pollution from illuminated advertising panels and similar equipment, but also the guidelines for controlling light pollution from LED light advertising;
- 4. The use of electronic monitors in an establishment should comply with not only the general guidelines for controlling light pollution from illuminated advertising panels and similar equipment, but also the guidelines for controlling light pollution from electronic monitors.

## General guidelines for controlling light pollution from illuminated advertising panels and similar equipment

- 1. The application of the proper amount of decorative lights serves can not only beautify the advertising panels, but also prevent light pollution and save energy. The head of an establishment must have a thorough knowledge and assessment of the site before installing illuminated advertising panels. Moreover, the simultaneous operation of similar lighting facilities effectively contributes to the illumination of the area's environment, even leading to excessive lighting. Therefore, the head of an establishment must take these factors into consideration before such installation and take effective measures to avoid light pollution in the future.
- 2. The installation of lighting devices should be designed to prevent the light from directly hitting the residential buildings and similar sites that are easily affected by lighting. Meanwhile, the positions and angles of lighting devices should be adjusted to ensure that the vertical illumination projecting over the windows or doors of the neighboring residential houses is not more than 4 lx.
- 3. It is suggested that advertising panels or decorative lighting should be set to a lower intensity level or turned off in the period between 23 p.m. and 6 a.m. the next day. Avoid projecting highlights or dynamic images that blink or change very frequently. Moreover, all the lighting equipment used in advertising panels or for decorative purposes should have the function of adjusting light levels. It is recommended to set a lighting adjustment mechanism for common days and public holidays, in order to reduce the environmental impact on the surrounding areas and save energy.
- 4. It is suggested that an establishment should properly store the lighting data and technical information of all the lighting equipment, for the information of the competent authorities as required.

#### Guidelines for controlling light pollution from decorative spotlights

- 1. Before the installation of spotlights, it is essential to properly define the position and angle of the spotlight, as well as consider about taking suitable measures, such as installing cover or baffle to ensure that light is actually projected at the indicated points.
- 2. The number of spotlights and their positions should be planned properly in order to avoid the situation that there are many lights lighting the same point.
- 3. Avoid installing spotlights or floor lights with elevation angle, to prevent the emission of light that can reach the neighboring residential buildings, and to reduce the impact on the sky at night, especially on astronomical observations.
- 4. Avoid the focus of lighting directly on materials with high levels of reflection (such as metal or stainless steel).

#### Guidelines for controlling light pollution from LED light advertising

- 1. Since the LED lights are highly focused, resulting in great contrast lights that may cause discomfort to residents, the lighting level of this type of advertising lights at night should not exceed 400 cd/m<sup>2</sup>.
- 2. It is recommended that the interval between two blinks of the LED lights should be no less than 1 second. It is also recommended to use less red and white lights.
- 3. It is recommended to install a suitable insulation board upon advertising panels, for example, plastic plate with low transparency, or other optical dispersion devices in order to avoid dazzling lights.
- 4. For LED advertising installed close to residential buildings or sensitive objects, it is recommended to make a full consideration and evaluation before installation, and adopt effective measures to avoid the impact by the lights on the surrounding sensitive objects.

#### Guidelines for controlling light pollution from electronic monitors

- 1. Given the fact that frequent change of pictures of electronic monitors may lead to light pollution and have been the subject of complaints, it is recommended that before the installation of monitors due consideration and evaluation should be made. The lighting level of monitors at night should not exceed 400 cd/m<sup>2</sup>.
- 2. For electronic monitors installed near residential buildings or sensitive objects, it is suggested that the monitors should be turned off in the period between 23 p.m. and 6 a.m. the next day.
- 3. Electronic monitors equipped with speakers should comply with the requirements of Law No.8/2014 "Prevention and Control of Environmental Noise". Appropriate measures should also be taken to ensure residents of neighboring buildings or places that are more susceptible to noise, are not affected by disturbing noises emitted by the speakers, especially the low-frequency sounds.

### 4.The minimum requirements for sound insulation/elimination devices

These recommendations aim to provide practitioners in the hotel industry and other related industries with the minimum requirements for soundproofing and sound absorption so as to prevent noises from being produced during business operation. According to the Noise Law, noise creation is an offence and the offender can be charged. In order to avoid violations and prevent the establishment from becoming the subject of complaint, license holder of the establishment should make sure that the premise strictly adheres to the relevant laws and regulations at all times during the normal business hours and in particular, more emphasis should be placed on the sound level during business operation.

#### 1. Recommendations for sound insulation and coatings for acoustic correction

- 1.1 The suspended ceiling with a thickness no less than 3cm made of the plasterboard should be installed 30cm from the underside of the structural ceiling. On the suspended ceiling, the glass wool with a thickness of no less than 10cm and the specific gravity of no less than 50kg/m<sup>3</sup> should be covered;
- 1.2 The walls should be covered with sound absorption materials.

#### 2. Recommendations for the facades

- 2.1 If the facades are glass, the thickness of the glass should not be less than 5mm, the cracks of frame should be tiny as much as possible and the cracks of the frame that can be closed and opened should be covered with rubber sheets. A layer of sound absorption material, such as the glass wool, should be added in curtains or roller shutter grooves;
- 2.2 The opaque facades must be made of single layer of brick wall with the thickness of 22cm or double layers of brick wall (11cm + 7cm), and both sides of the wall should be plastered;
- 2.3 The doors leading to the outside should be kept closed;
- 2.4 The double-layer doors should be used.

#### 3. Recommendations for other walls

3.1 If the adjacent premises are similar establishments or if the establishment is located in a hotel, there are no specific requirements for the walls. Otherwise, the recommendations set out in 1.2 should be considered.

#### 4. Recommendations for the audio-video equipment

- 4.1 The speakers, "woofers" or similar equipment (such as video-screen with built-in speaker) should not be fixed or suspended directly on the structure of the building (e.g. ceiling slabs, beams and columns). Such equipment should be installed on brick walls or placed on the floor.
- 4.2 The fixed accessories should be able to reduce the influence caused by the sound vibration, and such accessories can be found in the specialty stores;
- 4.3 Speakers and woofers cannot be placed outside the establishment, even if tables and chairs are put outside;
- 4.4 The sound volume of woofers should be lowered after the midnight.

#### 5. Soundproofing Design Plan as well as Final Inspection and Monitoring

- 5.1 Before installing the soundproofing equipment, the establishment should submit the related designs, including the design details, the design plans, the technical indicators related to the materials, specifications of the soundproofing ability and the manuals, as well as the planned quantity of audio equipment, the technical parameters and the manuals.
- 5.2 The current special regulations should be considered during both the planning phase and the construction phase in the later period. In particular, special attention should be paid on the General Regulations of Urban Construction and the Fire Safety Regulations.
- 5.3 After installing the soundproofing equipment, an application for inspection should be made, which should include sound level and vibration tests at a closest residential unit to determine whether the equipment is effective.
- Notes: The contents related to the environmental protection legislation and pollution control guidance of Macao contained in the Guidelines, may be timely revised, updated and adjusted according to the concrete situations, so it is suggested that applicants consult, if necessary, the website of the Environmental Protection Bureau (www.dspa.gov.mo), for the latest information.

# **Appendix V**

Licensing List of Construction/Extension Project

- 1. Instruction for Approval Criteria and Administrative Procedure of the Construction/Extension Plan
- 2. Regulation of Conditions Relating to the Height of Buildings and the Constructability of Site (Executive guideline No.01/DSSOPT/2009)
- 3. Notices for Completing Description of the Separate Unit
- 4. Instructions for Preparing the Technical Softcopy
- 5. Instructions for Preparing the Spreadsheet Softcopy of Areas of Each Floor
- 6. Net Floor Area and Utilization Ratio ----Definitions and Concept
- 7. Private Projects Instructions for Approval, Inspection and Operation of Elevator Equipment
- 8. Instructions for the Preparation of Construction/Extension Plan Architecture
- 9. Instructions for the Preparation of Construction/Extension Plan Electromechanical Engineering
- 10. Instructions for the Preparation of Construction/Extension Plan Gas/Fuel
- 11. Instructions for the Preparation of Construction/Extension Plan Civil Engineering
- 12. Instruction for Approval and Inspection System of Large Entertainment Facilities
- Note: The architectural project guidelines and instructions in this appendix might be revised, altered or changed according to the concrete situations, so it is suggested that applicants refer to the website of DSSPOT (http://www.dssopt.gov.mo) for the latest information.

# **Appendix VI**

Occupational Safety and Health Checklist for Hotel Establishments

	Workplace	
	1	Keep the workplace clean, tidy and dry.
	2	Clear corridor or passageway of obstructions.
	3	Fire escape routes and emergency exits must be kept clear.
	4	Goods must be stacked tidily and not too high.
	5	Should not work or store objects in public areas.
	6	Walls should be easy to clean and painted in non reflective and soft colors.
	7	Wall surface should be laid with waterproof ceramic tiles.
	8	Install a good drainage system in kitchen.
	9	Floor surface should be laid with non-slip tiles.
1	10	Repair uneven floor.
1	11	Water and spilled oil should be cleared up.
1	12	Remove broken utensils immediately.
	13	Rubbish, broken glass, metal containers and food dregs should be disposed in durable,
	13	easy to clean and covered rubbish bins.
1	14	Drinking water must be provided.

First Aid Equipment		
15	Provide first aid box which contains specified quantities of first aid items in sufficient number.	
16	The names and contact numbers of persons responsible for the first aid box should be affixed to that facility. Such information should be written in Chinese and Portuguese. The responsible persons should regularly check the quantity and expiration date of items in the first aid box.	
17	First aid box should locate in a prominent location or easy of access.	

		Electrical Safety
	18	Install/replace the electric plug/socket/cover.
	19	Waterproof plug should be used.
	20	Should not use adaptors with cracks or overheating signs.
	21	Avoid overloading the socket.
	22	Should not use electrical appliances which are over 220 volts in moist areas inside kitchen.
	23	All electrical appliances should be earthed.
	24	All electrical installations including electric cable, electric wire, socket (plug) and wall-
	24	mounted socket etc should be in good condition, clean and tidy.
	25	Ammeter should install in insulating metal case. Ammeter case should keep clean and tidy.
	26	Outer cover of electric cases should be earthed and properly covered the bare area so as
'	20	to prevent electrical hazard.
	27	Apparatus which can cut and isolate voltage effective, such as circuit-breaker, fuse,
	21	automatic circuit breaker, etc, should be suitably located in the circuit.
	28	Mal-functioning appliance or damaged electric switch/wire should be taken out of
	20	service, put on warning sign and replaced or removed immediately.
	29	Electrical installations should be regularly checked and repaired. Have the records on file.

Machinery Safety	
30	Install suitable machine guarding in dangerous parts (such as revolving shafts, calendar drums, the rotating parts of machinery, projections on revolving parts, cutting tools, press tools and dies and grinding wheels, etc).
31	Operating instructions and safety guidelines should be displayed prominently.
32	Machines should be turned off and unplugged during cleaning, checking and repairing.

	Warning sign should be put up.
33	Only people who have been formally trained and authorized, should be allowed to operate the machines.
34	Machines should be regularly checked and repaired. Have the records on file.

Work at Height	
35	Use suitable work platforms when working at height.
36	Use safe ladders appropriately.
37	Use mobile elevating work platforms appropriately.
38	Use safety belt when working at height.

Gas Cylinders	
39	Gas cylinders should be put straight up and tighten.
40	Replace the gas tube and pressure gauge.
41	Gas cylinders should be appropriately labeled or painted in different colors.
42	Check whether the liquefied petroleum gas-fired equipment is properly installed.
43	All gas cylinders and accessories should be checked daily and keep record.

Fire Prevention		
44	Inflammable materials, clothes and paper should be stored appropriately and away from sources of heat.	
45	Switches of the fuel supply system should be clearly labeled.	
46	All fire service installation and equipment should be regularly checked and repaired by qualified person. Have the records on file.	
47	The fuel supply system must be checked and maintained regularly. Have the records on file.	
48	Provide sufficient and appropriate fire extinguishers.	
49	Smoke lobby doors , emergency doors and fire escape routes must be kept clear.	
50	Smoke lobby doors should be closed at all the times, but not locked. Do not lock the emergency doors.	

Cold Rooms	
51	Cold rooms should have sufficient interior lighting.
52	Cold rooms should incorporate safety design so that they can be opened from inside. Emergency call equipment should be fitted such as an alarm for contacting persons on duty.
53	If employees need to work inside the cold room for long periods, they must wear sufficient clothing and gloves to withstand the low temperatures.
54	The floor of cold rooms should be kept clean and dry.

	Food Elevators
55	Restaurants should develop safety guidelines for the use of food elevators - these guidelines should be displayed prominently.
56	There should be a safety signaling system for communication between different floors.
57	The food elevator should have an interlock safety device, that is, the elevator can only be activated when door is closed.
58	The door of food elevators should be kept closed at all times except when handling food.
59	The food elevator should be checked and repaired regularly. Have the records on file.

Use and Store of Knives

60	Knives should be placed on a suitable knife shelf when not in use.
61	Knives should be placed properly. Edge of Knives should be covered.
62	Knives should not be washed together with other utensils or instruments.
63	Employees should wear protective clothing (gloves/aprons).
64	Cutting should be done on a suitable cutting board placed on a firm table.

	Hot Objects	
	65	Containers for hot objects should not be overfilled. Containers should be properly placed
		and avoid putting near the passageway.
	66	Saucepan handles should be kept away from aisles or out from hot stoves.
	67	Chefs should wear appropriate protective work clothes, aprons, shoes and gloves.
	68	Microwaves and ovens should be checked daily.

Ventilation	
69	Install ventilation fan for better ventilation.
70	Install ventilation system in poor ventilation area.
71	Install local ventilation system to remove the interruptive or harmful pollutants in air.
72	The hot environment (especially kitchen) should have an efficient ventilation system.
73	Install local exhaust ventilation alongside stoves and ovens to facilitate heat removal.
74	Install machine guarding at ventilator.
75	Clean exhaust ventilation and exhaust pipe regularly.

Chemical Use	
76	Chemicals should be properly stored.
77	Containers should be covered securely.
78	Labels showing the chemicals' names, their hazard classification and symbols, the hazardous conditions, and the safety measures must be affixed to the containers holding the chemicals.
79	Use chemicals in well-ventilated area.
80	Wear suitable personal protective equipment (mask/gloves) when using chemicals.
81	Places where chemicals are stored should be away from high temperature or heat sources.
82	No eating, drinking or smoking in places where chemicals are used or stored.

Lighting	
83	Sufficient lighting must be provided.
84	More electronic lighting equipment must be installed.
85	Broken lighting equipment must be repaired.
86	Lighting equipment must be installed with protective covers.
87	The lighting equipment protective covers must be kept clean.

Noise	
88	Use quieter kitchen appliances.
89	Isolate noisy machines and working procedures.
90	Install muffler to the exhaust system.
91	In accordance with Decree-Law No. 34/93/M, carry out the assessment of noise exposure
	at workplace.

#### Personal Hygiene Facilities

92	Install ventilation fan at washroom.
93	Install hand basin/toilet bowl.
94	Repair hand basin/toilet bowl.
95	Do not place other items in washroom.
96	Washroom must be kept clean and dry.
97	Covered rubbish bins, liquid soap, paper towels or hand-dryer must be provided.

	Provide Suitable Personal Protective Equipment and Put Up Safety Signs	
98	Provide suitable respirators.	
99	Provide suitable masks.	
100	Provide suitable eye protectors.	
101	Provide suitable ear protectors (earmuffs/earplugs).	
102	Provide suitable protective gloves.	
103	Provide suitable safety footwear.	
104	Provide suitable safety belts.	
105	Put up safety signs.	

Occupational Health Medical Examination		
	106	In accordance with Decree-Law No. 34/93/M, should provide pre-employment and
		periodic medical examinations to workers who work in areas involving exposure to
		excessive noise.

In case of any discrepancy between English and Chinese versions of contents, the Chinese version shall prevail.