



# Health & Safety Department

## (Registration & Permits Section)

Document Title	Technical Guidelines for Approval of Swimming Pool Plans
Document Code	DM-HSD- GU34-ASPP2
Version #	V 4.0
Issue Date	4 <sup>th</sup> May 2024
Superseded Issue Date	11 <sup>th</sup> March 2022

حکومے دیے۔ GOVERNMENT OF DUBAI	Organization Unit:	Health & Safety Department	الوحدة التنظيمية:	
	Document title:	Technical Guidelines for Approval of Swimming Pool Plans	اسم الوثيقة:	بطدية دبس Dubai Municipality
	Doc Ref:	DM-HSD-GU34-ASPP2	رمز الوثيقة:	

#### **Document History Log**

Version #	Date	Prepared/reviewed by	Modifications summary
3.2	11 <sup>th</sup> March 2022	Registration and Permits Section	Issue – Version # 3.2
4.0	4 <sup>th</sup> May 2024	Registration and Permits Section	Adding the new logo of both Dubai Government & Dubai Municipality

Issue Date: 4 <sup>th</sup> May 2024   Superseded Issue Date: 11 <sup>th</sup> March 2022	سانات مفتوحة / OPEN DATA	Version #: 4.0	
		Page 2 of 12	

	Organization Unit:	Health & Safety Department	الوحدة التنظيمية:	
حکومے دیے GOVERNMENT OF DUBAI	Document title:	Technical Guidelines for Approval of Swimming Pool Plans	اسم الوثيقة:	بطدید دبس Dubai Municipality
	Doc Ref:	DM-HSD-GU34-ASPP2	رمز الوثيقة:	

## Table of Content

1.	Purpose	
2.	Scope	
3.	Responsibilities	
4.	General Rules	
5.	Technical Requirem	e <b>nts</b>
	5.1 Stairs, Ladders and F	Recessed steps
	5.2 Swimming pool show	vers7
	5.3 Towers, platforms, d	iving boards and slides
	5.4 Lighting / electricity	7
	5.5 Depth Marking	
	5.7 Deck area	
	5.8 Swimming pool wate	r filtering9
	5.9 Disinfecting equipme	ent
	5.10 Children's pools	
	5.11 Jacuzzi pool	
	5.12 General requiremer	nt11
6.	References	

lssue Date: 4 <sup>th</sup> May 2024 سانات مفتوحة / OPEN DATA بيانات مفتوحة / OPEN DATA	Version #: 4.0
Superseded Issue Date: 11 <sup>th</sup> March 2022	Page 3 of 12

حکومےۃ دیـــــي GOVERNMENT OF DUBAI	Organization Unit:	Health & Safety Department	الوحدة التنظيمية:	
	Document title:	Technical Guidelines for Approval of Swimming Pool Plans	اسم الوثيقة:	بطديدة دبس Dubai Municipality
	Doc Ref:	DM-HSD-GU34-ASPP2	رمز الوثيقة:	

### 1. Purpose

This document aims to clarify how to apply for obtaining permit for swimming pool plans for individual uses, and the technical requirements that must be met in the design for approval under local order No.61/1991 and No. 11/2003 regarding regulations for planning, building, maintenance and safety of swimming pools.

## 2. Scope

This document applied on all public and private swimming pools that located within the geographical boundaries of the Emirate of Dubai

## 3. Responsibilities

The responsibility of preparing, reviewing work instructions and technical guides, determining the standard reference, method for implementing permits and approving the designs lies with the Registration and Permits Section- Health & Safety Department – Dubai Municipality.

## 4. General Rules

• For Development areas authority clients must register with Dubai Municipality e-service (request to approve public and private swimming pool plans ) for the purpose of submitting the application and blueprints online

Registration in the Dubai Building Permits System for areas under Dubai Municipality authorities and the application is submitted within the building permits transactions (DUBAI BPS).

Pool category / type must be clearly indicated.

Types of swimming pools:-

- $\circ$  Private: individual residence ( private villa )
- o General, includes:
  - Residential complex

Issue Date: 4 <sup>th</sup> May 2024	سانات مفتوحة / OPEN DATA	Version #: 4.0
Superseded Issue Date: $11^{th}$ March 2022	שטט מעפט (סרוא סרוא סרוא סרוא סרוא סרוא סרוא סרוא	Page 4 of 12

حکومے دیے GOVERNMENT OF DUBAI	Organization Unit:	Health & Safety Department	الوحدة التنظيمية:	
	Document title:	Technical Guidelines for Approval of Swimming Pool Plans	اسم الوثيقة:	بطديدة دبس Dubai Municipality
	Doc Ref:	DM-HSD-GU34-ASPP2	رمز الوثيقة:	

- Residential building
- Hotel
- School
- Sport Club
- Other
- Fees for swimming pool permits must be paid as determined by the policy of the Dubai Municipality's Revenue Department.
- The drawings/plans must be submitted electronically in the format of MULT-SHEET DWF FORMAT (one file) stating the following:
  - The project front page includes the owner's signature.
  - Sitting out plan (showing the pool location on site)
  - $\circ$   $\;$  Swimming pool details plan shown the deck area around the pool and shows:
    - Stairs, Ladders and Recessed steps.
    - Showers and Feet showers.
    - Toilet facilities and dressing rooms (if available)
    - Towers, platforms, diving boards and slides (if available)
    - lifeguard platform position / Lifebuoy ring position
    - Swimming pool lighting
    - Depth marks
    - The location of the fence around the pool
    - Deck area / swimming pool area
    - Surface slope around the pool
  - Swimming pool cross section to demonstrate base slope (shown all dimensions).
  - Pipe fitting Layout for Swimming Pool and Pump Room.
  - Electricity diagram for pool and pump room.
  - SCHEMATIC DIAGRAM for the pool.
  - Water drainage scheme that includes (surface floor slope or floor trap (FT), Showers and Feet showers, and backwash water method of disposal).
  - Pump room layout sterilization and disinfection systems and water turnover calculations.
  - Details of the equipment used Including the following:-
    - Pumps and hair strainer.
    - Filter and filtering devices.
    - Sterilization and disinfection systems
    - Details of water inlets and outlets

Issue Date: 4 <sup>th</sup> May 2024	بيانات مفتوحة / OPEN DATA	Version #: 4.0	
Superseded Issue Date: 11 <sup>th</sup> March 2022		Page 5 of 12	

حکومے دیے GOVERNMENT OF DUBAI	Organization Unit:	Health & Safety Department	الوحدة التنظيمية:	
	Document title:	Technical Guidelines for Approval of Swimming Pool Plans	اسم الوثيقة:	بطديدة دبس Dubai Municipality
	Doc Ref:	DM-HSD-GU34-ASPP2	رمز الوثيقة:	

- Details of drain outlet
- Skimmers details (if available)
- Stairs and ladders (if available)
- Dive Board Details slides -foot Bridge (if available)
- Deck box layout, underwater lights, and roof deck details
- The design of the pool should include public health and safety matters:
  - Water filtering system and pool water recirculation.
  - Swimming pool water disinfection system.
  - $\circ$   $\;$  Other safety and health control measures taken at the design stage and operating time.

## 5. Technical Requirements

#### 5.1 Stairs, Ladders and Recessed steps

- Stairs and ladders must be provided if the depth exceeds (60) cm.
- At least one ladder must be provided for every (30) m of pool circumference.
- Swimming pool ladders must be corrosion resistant and equipped with anti-slip steps, and should have a clearance of (10) cm away from the wall.
- If Recessed steps are provided, they should have non-slippery treads and self-draining, with a minimum tread of (15) cm and a minimum riser of (35) cm.
- Side handrails must be provided on each side of each ladder or Recessed steps and extend above the pool surface and return to the horizontal surface of the pool.
- Steps (without handrail) can only be installed in swimming pools if the pool is shallow, and the depth does not exceed (1) m.
- The dimensions of the steps inside the pool must be the minimum width for the tread is (280) mm and the maximum height for the riser is (250) mm.
- Handrails must be provided for the stairs/steps if the depth is more than (1) m and less than (1.4) m. stairs/steps must be connected steps.
- Handrails must be at a height not less than (90) cm. If the width of the stairs exceeds (2.1) m, an additional separator shall be placed in the middle (one or more as needed).
- Stairs are not allowed if the pool depth is more than (1.4) m, it should be equipped with side ladders that extend over the surface of the pool and return to the horizontal surface of the pool.

In case there is a seating area or a relaxing area inside the pool, it must be in the shallow area of the pool and the depth should not be more than (35) cm and must be separated from the pool with a separator higher than the height of the pool water.

Issue Date: 4 <sup>th</sup> May 2024		Version #: 4.0
Superseded Issue Date: 11 <sup>th</sup> March 2022	- بيانات مفتوحة / OPEN DATA	Page 6 of 12

	Organization Unit:	Health & Safety Department	الوحدة التنظيمية:	
حکومے دیے GOVERNMENT OF DUBAI	Document title:	Technical Guidelines for Approval of Swimming Pool Plans	اسم الوثيقة:	بطدید دبس Dubai Municipality
	Doc Ref:	DM-HSD-GU34-ASPP2	رمز الوثيقة:	

#### 5.2 Swimming pool showers

- Head and feet Showers should be provided at a rate of (1) for each (25) m of the circumference of the pool and a minimum of (1) of each type.
- Signboards should be posted to instruct swimmers to take a shower before using the pool.

#### 5.3 Towers, platforms, diving boards and slides

- A clear space must be provided above the diving board or tower, at least (5) m, for head movement.
- Diving boards or platforms must be completely covered with non-slip materials.
- The minimum depth of water under any diving board located (1) m or less than the surface water must be not less than (2.5) m. And the depth of the water must be increased for the diving boards above (1) m height by (30) cm depth for each (1) m or a part of it more than that.
- A horizontal distance of (3) m must be provided between the adjacent diving boards and between any diving boards and the side wall.
- It is prohibited to change the design of the swimming pools, or to add a diving board or change its location unless referring to the Health and Safety Department in Dubai municipality.
- It is prohibited to add a bridge crossing the pool or change its location except after referring to Health and Safety Department in Dubai Municipality and attaching the detailed plans.
- It is prohibited to add slides to the pool or change its location except after referring to the Health and Safety Department in Dubai Municipality and attaching the detailed plans.

#### 5.4 Lighting / electricity

- Swimming pools must be provided with adequate lighting (underwater or overwater) to provide lighting for all the pool including the pool bottom without causing any reflections, glare, burns, electric shocks or bodily injuries.
- The general lighting intensity should not exceed (50) LUX.
- Each electrical circuit must have an earth circuit breaker and must be clearly illustrated in drawings.
- Low voltage underwater light to be used.
- There must be an emergency stop button on the Jacuzzi pool for emergency use.

Issue Date: 4 <sup>th</sup> May 2024	سانات مفتوحة / OPEN DATA	Version #: 4.0
Superseded Issue Date: 11 <sup>th</sup> March 2022		Page 7 of 12

	Organization Unit:	Health & Safety Department	الوحدة التنظيمية:	
حکومــة دبـــي GOVERNMENT OF DUBAI	Document title:	Technical Guidelines for Approval of Swimming Pool Plans	اسم الوثيقة:	بطديدة دبس Dubai Municipality
	Doc Ref:	DM-HSD-GU34-ASPP2	رمز الوثيقة:	

#### 5.5 Depth Marking

Markers indicating the depth of the water must be placed either on the edge of the surface or on the pool wall at the minimum and maximum depth and at the slope points and must be indicated in the drawings.

#### 5.6 Toilets and changing rooms facilities

All public swimming pools should be provided with toilets and changing room facilities in proportion to the size of the pool and not less than what is shown in the table below:

#### $\circ \quad \text{Residential building} - \text{Residential complex}$

FEMALE				MALE				
wc	WB	SHOWER	CHANGIN G ROOM	wc	WB	URINAL	SHOWER	CHANGING ROOM
1	1	1	1	1	1	1	1	1

#### • Hotels – Schools – Clubs- Others:

		FEMALE				MALE			
AREA	wc	WB	SHOWER	CHANGING ROOM	wc	WB	URINAL	SHOWER	CHANGING ROOM
Less than 150 m <sup>2</sup>	1	1	2	1	1	1	1	2	1
151m <sup>2</sup> - 300 m <sup>2</sup>	2	2	2	2	2	2	2	2	2
301 m <sup>2</sup> -900 m <sup>2</sup>	2	2	3	2	2	2	2	3	2
901 m <sup>2</sup> and above	2	2	3	2	2	2	2	3	2

#### 5.7 Deck area

• Free area must be provided around the pool as shown below:

Issue Date: 4 <sup>th</sup> May 2024	سانات مفتوحة / OPEN DATA	Version #: 4.0	
Superseded Issue Date: 11 <sup>th</sup> March 2022		Page 8 of 12	

	Organization Unit:	Health & Safety Department	الوحدة التنظيمية:	
حکومے دیے Government of dubai	Document title:	Technical Guidelines for Approval of Swimming Pool Plans	اسم الوثيقة:	بطديدة دبس Dubai Municipality
	Doc Ref:	DM-HSD-GU34-ASPP2	رمز الوثيقة:	

- Private pool: individual residence (private villa): At least (1) m must be provided around the pool.
- General pool: At least (1.5) m must be provided around the pool.
- In case of the swimming pool is connected a wall and there is no clear space, handrails must be provided along the area. And the wall area must not be more than half of the pool circumference.
- The pool area must be secured when not in use by closing the pool area with a fence with a height of not less than (1.2) m with a self-closing door / gate. This is to prevent people from entering the pool in case the pool is closed.
- The deck area must be equal to or greater than the pool area.
- The deck area is the area between the pool and the location of (fence, wall, etc.).
- The swimming pool must be surrounded by non-slippery flat surfaces with (1:40) towards the opposite side of the pool, as well as providing these surfaces with the appropriate drainage drains.

#### 5.8 Swimming pool water filtering

- One water inlet must be provided for each (45) cubic meters.
- At least (2) outlet drains must be installed at the base of the pool to drain accumulated dirt, and to completely drain the pool for maintenance purposes.
- Skimmers:
  - Purpose: to remove dust, debris, floating tree leaves and delicate oil layers.
  - $\circ$   $\,$  If scrapers are used, two skimmers must be installed for each pool.
- Hair strainers and light dirt
  - Purpose: to catch hair or large particles to avoid accumulation and clogging of pumps, pipes, and filtration system.
- Filtration/ filtering devices:
  - The filter device removes the insoluble and suspended material from the recycling water.
  - $\circ$   $\;$  There are three main types of filter devices for swimming pools: -
    - Diatomaceous earth filtering device
    - Rapid sand filtering device
    - High rate sand filtering device

Issue Date: 4 <sup>th</sup> May 2024	سانات مفتوحة / OPEN DATA	Version #: 4.0	
Superseded Issue Date: 11 <sup>th</sup> March 2022		Page 9 of 12	

	Organization Unit:	Health & Safety Department	الوحدة التنظيمية:	
حکومــة دبـــي Government of dubai	Document title:	Technical Guidelines for Approval of Swimming Pool Plans	اسم الوثيقة:	باديە دېس Dubai Municipality
	Doc Ref:	DM-HSD-GU34-ASPP2	رمز الوثيقة:	

- Full details of the filtration equipment must be indicated on the drawings, including the location of the various valves, the inlet points, air release valve, the pressure gauge, sight glass, sampling taps at inlet, filter device outlet pipes, and chemical tank.
- The number of filter devices for the swimming pool / pools which are using connected water system must not be less than:-
  - One filter / filtering device (for private villa)
  - Two Filtration devices (for the public swimming pool)
- In case of there are several pools with a separate water system, filter / filtering devices must be provided for each pool according to the type of pool as shown below:
  - One filter / filtering device (for private villa)
  - Two Filtration devices (for the public swimming pool)
- $\circ$   $\;$  Two pumps must be provided for each swimming pool.
- $\circ$   $\;$  The swimming pool water turnover must not exceed than 4 hours.

#### 5.9 Disinfecting equipment

- Swimming pools must be provided with appropriate equipment capable of adding disinfectants, coagulants, and chemicals.
- In public swimming pools, free chlorine / bromine injecting devices must be installed or automated injection devices (DOSING SYSTEM) or any automatic system for feeding disinfectants and sterilizers. Manual chemical injecting or adding is not accepted.
- In private pools, it is required to install a CHLORINE FEEDER or install a free chlorine / bromine injection devices or automated injection devices (AUTOMATIC DOSING SYSTEM) or any automatic system for feeding disinfectants and sterilizers.
- Safety precautions must be taken against the potential hazards of the chlorine gas leak.

#### 5.10 Children's pools

- The depth of the children's pool water must not exceed (50) cm.
- In case there is a children's pool adjacent to the general pool used by adults, a barrier or a fence must be placed with height (1.2) m from the surface to prevent children moving from their pool to adult pool. Children must not use adult pools. Children pool must be seated near to the shallow area of the adult pool.

Issue Date: 4 <sup>th</sup> May 2024	سانات مفتوحة / OPEN DATA	Version #: 4.0
Superseded Issue Date: 11 <sup>th</sup> March 2022		Page 10 of 12

	Organization Unit:	Health & Safety Department	الوحدة التنظيمية:	
حکومے دبے GOVERNMENT OF DUBAI	Document title:	Technical Guidelines for Approval of Swimming Pool Plans	اسم الوثيقة:	بــــلديـــة دبـــي Dubai Municipality
·	Doc Ref:	DM-HSD-GU34-ASPP2	رمز الوثيقة:	

- In case there is a children's pool near the public pool, a barrier, or a fence with height of (1.2) m must be provided, to prevent children moving from their pool to adult pool.
- Install at least (2) drains at the base of the children's pool to drain the accumulated dirt and to facilitate the complete discharge of the children's pool for maintenance purposes.
- Filters for the children's pool must be installed according to the pool type previously mentioned (5.8 Swimming pool water filtering).
- If skimmers are used, two skimmers must be installed in the children's pool.

#### 5.11 Jacuzzi pool

- The depth of the Jacuzzi must not exceed 90 cm.
- There must be an emergency stop button on the Jacuzzi pool for emergency use. And it must be clarified in the drawing.
- Install at least (2) drains at the base of the Jacuzzi to drain the accumulated dirt and to facilitate the full discharge of the Jacuzzi for maintenance purposes.
- Filters for the Jacuzzi must be installed according to the pool type previously mentioned (5.8 Swimming pool water filtering).
- If skimmers are used, two skimmers must be installed in the Jacuzzi.

#### 5.12 General requirement

- The position of lifeguard highchair must be provided in Hotels/ Schools/ Sport Clubs/ Other public buildings, and is not required for Private Villa/ Residential Building/ Residence Complex.
- Enough safety equipment must be provided such as lifeboats and hoists for people who use the pool and show it in the drawing.
- A signboard should be provided for the swimming pool and placed in a prominent place for easy reading; the signboard must be in Arabic and English.
- Ensure that the pool floors are light color ceramic and smooth surface, to withstand frequent cleaning procedures.
- In the occasion of an inside pool, sufficient ventilation must be provided.

Issue Date: 4 <sup>th</sup> May 2024	سانات مفتوحة / OPEN DATA	Version #: 4.0
Superseded Issue Date: 11 <sup>th</sup> March 2022	יאזאט אעפט איין אואט איין איין איין איין איין איין איין אי	Page 11 of 12

	Organization Unit: Health & Safety Department		الوحدة التنظيمية:	الوحدة	
حکومـــة دبــــي GOVERNMENT OF DUBAI	Document title:	Technical Guidelines for Approval of Swimming Pool Plans	اسم الوثيقة:	بطدية دبس Dubai Municipality	
	Doc Ref:	DM-HSD-GU34-ASPP2	رمز الوثيقة:		

- The swimming pool area in the pool must be free from any obstructions or foreign objects that hinder the swimmers or may cause injury to them, such as wires, pipes, additional fountains, or other sharp objects.
- Swimming pool floor slope must be not less than (1:3)
- Swimming pools must be provided with a board (no diving).
- Pool floors must be light color

## 6 References

 Local orders No.61/1991 and No. 11/2003 regarding regulations for planning, building, maintenance and safety of swimming pools.

For (suggestions, comments, and complaints)		For further information	
•	Unified interactive platform that connects	•	⊠ <u>HSPERMITS@dm.gov.ae</u>
	Dubai Government and its customers:	•	Dubai Municipality - Call Center (24/7):
	The 04 Platform <u>https://04.gov.ae/</u>		800900
-	Dubai Municipality - Call Center (24/7):		
	800900		

Issue Date: 4 <sup>th</sup> May 2024	- مفتوحة / OPEN DATA	Version #: 4.0
Superseded Issue Date: 11 <sup>th</sup> March 2022		Page 12 of 12