





MINISTRY OF HOUSING AND LOCAL GOVERNMENT

PLANNING GUIDELINES FOR ELECTRIC VEHICLE CHARGING BAY (EVCB)



Perancangan Melangkaui Kelaziman Planning : Beyond Conventional

Department of Town and Country Planning (PLANMalaysia)

SEPTEMBER 2023



PLANMalaysia

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MALAYSIA

SEPTEMBER 2023

FIRST PUBLISHED 2023

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Published in Malaysia by Department of Town and Country Planning (PLANMalaysia) Ministry of Housing and Local Government Blok F5, Kompleks F, Presint 1, Pusat Pentadbiran Kerajaan Persekutuan 62675 PUTRAJAYA MALAYSIA Tel: 03-8091 0000 https://www.planmalaysia.gov.my

NOTICE

This Guideline has been approved by the 42nd National Physical Planning Council num.2/2023 on 18th September 2023.

This Guideline does not supersede, under any bylaws, subject matter or content of any other guidelines.

The implementation and enforcement of the planning guidelines contained in this guideline need to be coordinated with any development plan enforced. It has to be referred together with other policies, circulars and standards enacted and enforced by the authorities based on the scope of authority provided by law, as well as other planning guidelines prepared by the Department of Town and Country Planning (PLANMalaysia).

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ELECTRIC VEHICLE CHARGING BAY ((EVCB)

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Abbreviations

AC	Alternating Current
BP	Building Plan
ССС	Certificate Of Completion And Compliance
CFO	Certificate of Fitness for Occupation
CCTV	Closed Circuit Television
СРО	Charging Point Operator
DC	Direct Current
DO	Development Order
EC	Energy Commission
EV	Electric Vehicle
EVCB	Electric Vehicle Charging Bay
EVCP	Electric Vehicle Charge Point
EVCS	Electric Vehicle Charging System
JBPM	Fire and Rescue Department of Malaysia
KKR	Ministry of Works
LA	Local Authority
LLM	Lembaga Lebuhraya Malaysia
МС	Management Committee
MGTC	Malaysian Green Technology and Climate Change
NRECC	Ministry of Natural Resources, Environment and Climate Change
PHEV	Plug-in Hybrid
PSP	Principal Submitting Person



- SP Submitting Person
- TLK Parking Bay
- TNB Tenaga Nasional Berhad
- UBBL Uniform Building By-Law
- VFB Vehicle Fire Blanket



1.0 OBJECTIVE

This document is prepared as a guidance for State Authorities (PBN), local authorities (PBT), and all stakeholders in planning, designing, and providing electric vehicle charging bays (EVCB).

2.0 BACKGROUND

Global warming and its effect on climate change due to petrol and diesel consumption as well as petrol price hikes have driven car manufacturing companies to produce low-carbon alternatives such as hybrid vehicles and electric vehicles (EV) commercially.

In line with the Sustainable Development Goals (SDG13), adapting to using electric vehicles instead of conventional cars is one of the initiatives to reduce the effects of climate change by controlling greenhouse gas emissions and promoting the adoption of renewable energy.

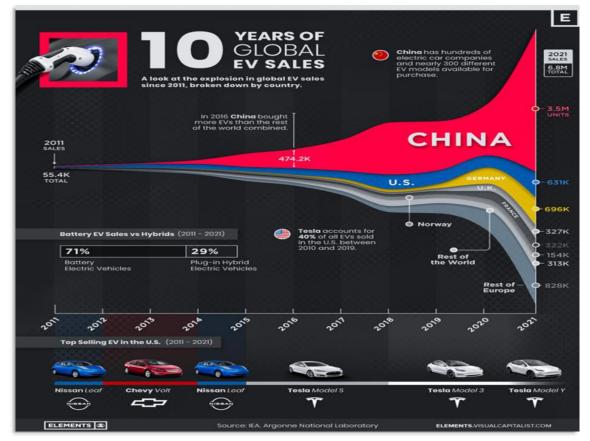
2.1. EV Industry Development

The EV industry was established more than 10 years ago starting from Europe and the United States. In 2021, China became the largest EV user in the world, dominating 51.7% of the global EV market segment, followed by Germany (10.2%) and the United States (9.3%) as shown in Figure 1.

Malaysia, in putting itself on the EV industry globally, has expressed, in 2021, its commitment for zero carbon emissions by 2050 during the United Nations (UN) Climate Change Conference, (COP26), in Glasgow, Scotland. The Malaysia Government through the Ministry of Natural Resources, Environment and Climate Change (NRECC) has then set a target of 15% of EV usage by 2030 (Malaysian Green Technology Corporation - MGTC, 2022).



Figure 1: EV Segment Global Market Trends 2016 - 2024



Source : <u>https://www.goldsteinresearch.com/report/eletric-vehicle-market-outlook-2024</u> global-opportunity-and-demand-analysis-market-forecast-2016-2024

2.2. Related Policies and Guidelines

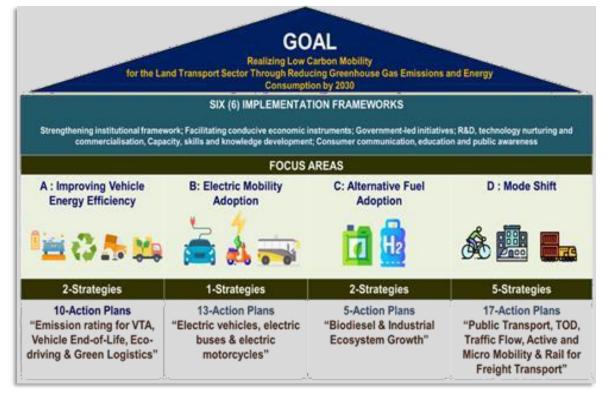
In boosting the drive and easing the transition towards a more environmentally friendly mode of transportation, various policies and guidelines related to the use of Electric Vehicles have been formulated. The said policies and guidelines are as follows:

- a. Twelfth Malaysia Plan;
- b. National Physical Plan 4;
- c. National Energy Policy 2022 2040;
- d. National Transport Policy;
- e. National Automotive Policy 2020;
- f. Malaysia Smart City Framework;
- g. Malaysia Renewable Energy Roadmap; and
- h. Low Carbon Mobility Blueprint 2021-2030.



The government has outlined specific policies on the use of more efficient and renewable energy sources in low-carbon transport in the framework of Low Carbon Mobility Blueprint in Figure 2.





Source: Malaysian Green Technology and Climate Change Corporation (MGTC), 2022

In addition to that, NRECC through the Energy Commission (ST) has prepared a Guide on Electric Vehicle Charging System (EVCS), 2022. This guide outlines the minimum requirements and specifications for designing, installing, inspecting, testing, supervising, operating and maintaining EV infrastructure in Malaysia. This guide also serves as a main reference throughout the preparation of this planning guidelines.

Furthermore, Fire and Rescue Department of Malaysia (JBPM) has simultaneously come up with Fire Safety Guidelines for the Installation of Electric Vehicle Charging Stations on Premises. The guidelines outline the fire safety components for EVCB installations, either at outdoor, indoor and on open or unenclosed rooftops.



3.0 SCOPE OF PLANNING GUIDELINES

This document contains 2 main scopes namely:

- a. EVCB planning and design guidelines that includes the requirements of the Fire Safety Guidelines for Electric Vehicle Charging Bay (EVCB) on Premises provided by JBPM.
- b. EVCB development application and approval procedures for the existing and new developments that have been aligned with the OSC 3.0 Plus Manual.

4.0 **DEFINITIONS**

- a. Electric Vehicle (EV)
 A vehicle powered by an electric motor that draws electricity from a rechargeable energy storage system.
- Electric Vehicle Charging Bay (EVCB)
 A parking lot that is equipped with electric vehicle charge point, a charging device to supply electricity to electric vehicles.
- c. Electric Vehicle Charge Point (EVCP)A device used to charge EV batteries.
- Charge Point Operator (CPO)
 A CPO is a Charge point operator that installs and maintains electric vehicle charging bays for public to charge their electric vehicles. A CPO can either own and operate a set of charging bays, or act as a third party to operate the charging bays.



5.0 PLANNING AND DESIGN GUIDELINES

This planning and design guide are prepared as a guidance for the provision of EVCBs in both existing and new developments, which differs according to the type of charging device.

- a. Existing Development
 - development that have obtained their Certificate of Completion and Compliances (CCC) or Certificate of Fitness for Occupation (CFO) and have installed EVCB; or
 - ii. Development with CCC or CFO where EVCBs are yet to be installed.
- b. New Development
 - Any new development, including amended plans, where applications for planning permission (KM), engineering plans (PK), and building plans (PB) are yet to be submitted to PBT; or
 - ii. New development where KM, PK, and PB applications have been submitted to local authority but yet to be approved.
- c. Type of Charging Device

There are 2 types of charging devices, namely alternating current devices (AC) and direct current (DC) devices. Installation and use of both type of devices must comply with the provisions as stipulated in the Guide on Electric Vehicle Charging System (EVCS), published by Energy Commission in 2022.

5.1. EVCB Location and Placement

EVCB can be provided at the following locations:

- a. Residential area, both strata and non-strata;
- b. Non-residential area, including commercial, industrial, and institution;
- c. Petrol station; and
- d. Rest and service area (R&R).



EVCB can be located outdoors, indoors, or at the open or unenclosed rooftop level. EVCB should also be installed away from stairways and emergency exits to prevent obstruction in the event of a fire or emergency.

5.2. Provision of EVCB by Device Type and Location

The type of charging device to be installed is dependent on the suitability of the location intended in existing and new developments. Different type of charging devices requires different electric power supplies and pose different fire risks. DC-type devices use more electricity and therefore have a higher fire risk compared to AC-type devices. It is crucial to install charging devices based on location suitability to minimise risk of fire and better fire safety management. (Table 1 and Figure 2).

Type of	Device Types by Location		
Development	AC (≤ 22 kW)	DC (>22 kW)	
Existing	Outdoor	Outdoor	
New	Open rooftop or unenclosed	Open rooftop or unenclosed	
	All levels in multi-storey	Indoor at the following 4 levels	
	building	only	
		Ground Level;	
		1) 1 Level above ground level (1 st	
		floor);	
		2) 2 Level above ground level	
		(2 nd floor); and	
		3) 1 Level below ground level	
		(basement 1)	

Table 1: EVCB Provision by Device Type and Location

Existing and New Development Open Root Top I Cope EVCB with DC Charger (> 22 kW) EVCB with AC Charger (≤ 22 kW) i. Indoor: i. All level indoor (including **1**€≥ A4 A4 Level 2. basement). Level 1. A3 A3 10 Ground Level. ii. Open roof-top level and Basement 1 only. A2 unenclosed. A2 10 21 ii. Open roof-top level and unenclosed. iii. Outdoor. A1 A1 iii. Outdoor. 7 G G IC.EVCB **EVCB Size** 2 2.5 m x 6 m - New B1 **B**1 . 3.5 m x 6 m - Disable IC friendly **C**≥ B2 B2

Figure 3: Provision of EVCBs by Charging Device Type and Location

5.3. Number of EVCB

All Existing and new developments should consider providing charging bay to provide and meet the demand of EVs in the future. The number of EVCBs are determined as in Table 2.

Type of Development	Number of Bays
Existing	 The amount needed is according to demand. Any parking lot that has been converted into an EVCB is not required to be substituted.
New	 For landed housing development (strata and non-strata), the provision of EVCB is on a demand basis. For the development of multi-storey strata housing: A minimum of 2% EVCB from the total number of parking bay that needs to be provided, and if only one EVCB is required, it is to be provided at visitor parking. EVCBs that are to be provided at the visitor parking area are encouraged to be disabled-friendly to accommodate disabled drivers (refer to Table 3 for parking lot sizes).



c. It is encouraged to provide a minimum of 1 EVCB for
motorcycles.
3. For development other than housing:
a. A minimum of 2% of EVCB from the total numbers of
parking bay that needs to be provided.
b. From the total number of EVCBs that need to be
provided, a minimum of 1 EVCB is encouraged to be
disabled-friendly.
c. It is encouraged to provide a minimum of 1 EVCB for
motorcycles.
4. Providing EVCBs beyond the minimum requirement is
allowed and encouraged.

5.4. Bay Size

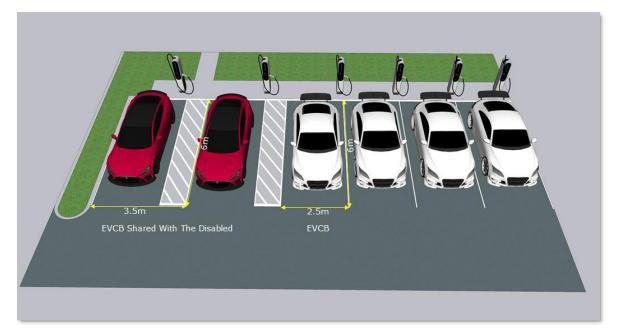
EVCB shall be provided according to the following the size and measurement shown in Table 3.

Table 3: EVCB Size

Type of development	Lot Size
Existing	Maintain the existing parking lot size.
New	 Minimum size of EVCB is 2.5 m x 6 m. Minimum size of EVCB shared by the disabled is 3.5 m x 6m. Bigger parking sizes can accommodate disabled drivers.



Figure 4: EV Charging Bay Size in New Development



5.5. EVCB and Non-EV Parking Bay Separation

EVCBs need to be separated from non-EV parking bays to minimise fire risks. There are two ways to isolate the bays which are either by separation distance or fire separation wall.

Three factors determined the suitable separation methods between EVCB and non-Ev bays in existing and new developments which are:

- a. Charging device type; DC type devices are subjected to stricter separation requirements than AC type.
- Total floor area of the EVCB, whereby a total EVCB area of more than 216 m² is subjected to stricter separation requirements. 216 m² roughly covers 14 EVCBs measuring 2.5 m x 6.0 m each.
- c. The location of the EVCB; either indoor or outdoor, where the EVCB inside the building is subject to stricter requirements than the EVCB located outside.

The details on the EVCB and non-EV bay separation are in Tables 4 and 5.



Table 4: Separation of EVCB with AC Charger from Non EV Bay Parking

	Separation Distance			
Development	AC (≤22 kW)			
Туре	Outdoor, Open rooftop	Indoor		
туре	Level, R&R, and Petrol			
	Station			
Existing	no separation is required.			
New	Minimum distance of 2.5 m on both sides of the EVCB (Figure 5).			
	The separation can be in the form of walkways, road reserves,			
	and perimeter plantings.			
	EVCBs are encouraged to be grouped.			

Figure 5: EVCB with AC Charger Located Outdoor in New Development should be Separated by a Distance of 2.5m from Non-EV Parking Bay





Table 5: Separation of EVCB with DC Charger

	Separation Distance		
Development	DC (>22 kW)		
Туре	Outdoor, Open Rooftop	Indoor	
	Level, R&R, and Petrol Station		
Existing	Minimum 2.5 m on the left and	EVCB floor area exceeding 216	
	right of the EVCB (Figure 6).	m² -	
	Separation can be in the form	Fire separation wall minimum of	
	of walkways, road reserves,	1.5 m in height with a minimum of	
	and perimeter planting.	2-hour fire resistance (Figure 7).	
	EVCBs are encouraged to be	EVCB floor area less than 216 m ² -	
New	grouped.	A minimum distance of 5 m on	
		the left and right sides of the	
		EVCB.	
		or	
		A fire separation wall minimum of	
		1.5 m in height with a minimum of	
		2 hours fire resistance	

Figure 6: EVCB with DC Charger Located outdoors should be Separated with a Distance of 2.5 m from Non-EV Parking Bay



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Figure 7: Indoor EVCB that exceeds 216 m² Floor Area should be Provided With a 2-Hour Fire Rated Wall with a Minimum Height of 1.5m

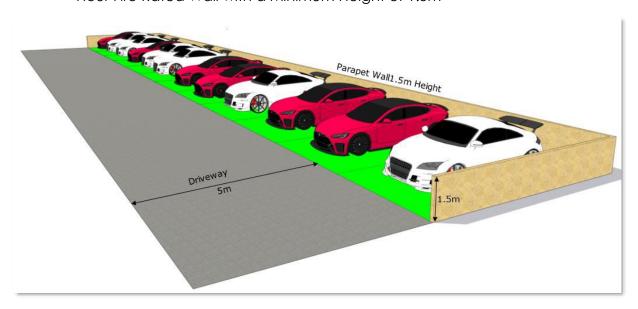


Figure 8: Indoor EVCB with DC Charger with Less than 216m² Floor Area Needs to Be Separated from Non-EV Parking Bay with a Distance of 5 m.

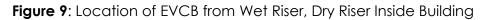


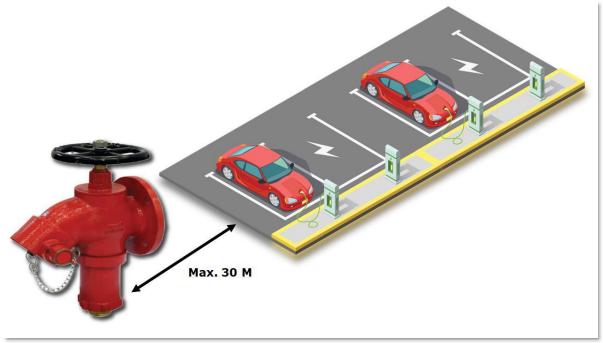
5.6. Wet Riser, Dry Riser, or Fire Hydrant Position

As a safety measure, EVCB should be located near a water source, especially for EVCB that is equipped with a DC charger (Table 6).

Development	EVCB Distance from Water Source				
Туре	AC (≤22 kW)	DC (>22 kW)			
Existing	No distance limit.	1. Indoor and open or			
New	 The position of EVCB in the building and at open rooftop level shall not exceed 30 m from the landing valve of the wet riser or dry riser. EVCB located outside building, at petrol stations, and R&R should not be more than 90 m from fire hydrants. 	unenclosed rooftop EVCB shall not exceed 30 m from the landing valve for wet riser or dry riser. 2. EVCB located outdoors, including at petrol stations and R&R should not be more than 90 m from fire hydrants.			

Table 6: Location of EVCB from Wet Riser, Dry Riser, or Fire Hydrant







5.7. Automatic Sprinkler System Requirements

Automatic sprinkler system serves as one of EVCB fire safety measures. Details for setting up this are provided in Table 7.

Development	Automatic Sprinkler System			
Туре		AC		DC (>22 kW)
		(≤22 kW)		
Existing	То	follow	UBBL	EVCB located outdoors at ground level and
	requir	ements.		above (including multi-storey housing):
				To provide at least an automatic fire
				detection system or
				multi-sensor detection system in buildings
				that do not have automatic sprinkler system
				installed.
				EVCB located at basement 1 (including
				multi-storey housing):
				To provide an automatic sprinkler system,
				water mist system, or deluge system, or water
				monitor that works continuously.
New	Follow the same requirement for the installation of DC-type EVCB in			
	existing developments.			

m Requirements
m Requirement

5.8. Main Isolation Switch

EVCB facilities should be equipped with main isolation switch to serve as a fire safety measure. The guide for setting up isolation switches for both existing and new developments are as follows:

a. Each EVCB shall be equipped with an automatic and manual main isolation switch. This switch should be located at least 3 metres away, and not exceed 15 metres from the EV Charging Point (EVCP). (Figure 10)



b. The main isolation switch can be shared by several EVCPs as long as the required distance is adhered to. Activation of any of the isolation switches will disconnect the power source to all EVCPs. (Figure 11)



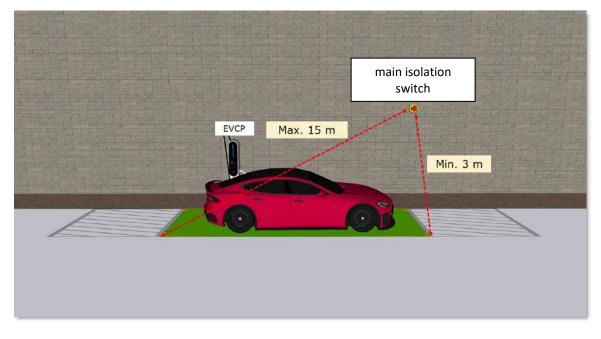
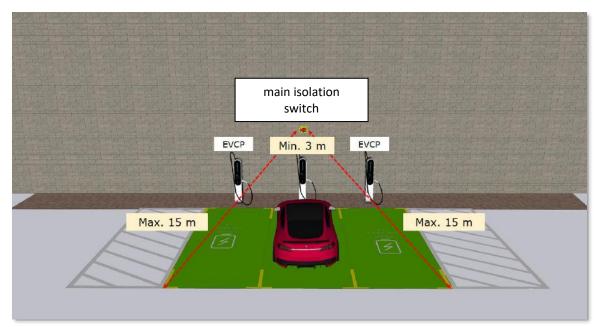
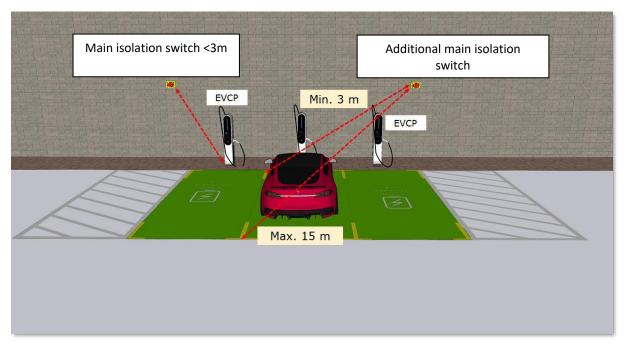


Figure 11: Main Isolation Switch Usage Sharing





c. If the main isolation switch is located at a distance of less than 3 metres from the EVCP, an additional main isolation switch has to be installed. This additional switch has to be located at least 3 metres away from the EVCP and not exceed 15 metres. (Figure 12)





- d. Connect the EVCB main isolation switch with the fireman switch.
- e. The position of the main isolation switch shall be between 800 mm to 1200 mm above ground and shall be visible and easily accessible.
- f. Label all isolation switches and include operating instructions.
- g. If the main isolation switch is not visible or not within eyesight from the EVCP and charging bay, additional signage should be provided to direct the user to its location.

For AC chargers in existing development, a main isolation switch is necessary if the EVCB is for public use. A public EVCB is intended for public consumption and involves CPO services.



5.9. Vehicle Fire Blanket Requirements

EVCB needs to be equipped with a vehicle fire blanket (VFB) to prevent fire originating from electric vehicle from spreading before emergency assistance arrive. Both existing and new developments have the same requirements which are shown in Table 8.

Table 8: Vehicle Fire Blanket (VFB) Requirements

Type of development	Number of EVCB	Number of VFB
Existing and	1	1
New	2 to 10	2
	11 to 15	3
	Additional 1 VFB for every subsequent 1 to 5 EVCBs.	

Photo 1 : Vehicle Fire Blanket (VFB)



Source : <u>https://t-iss.com/shop/fire-isolator-concept/ev-fire-blanket/concept/ev-fire-blanket</u>

5.10. EVCB At Petrol Stations

- a. Fire hydrant shall be located not more than 90 m from the EVCB.
- b. EVCB has to be located at least 12 m away from refilling points and vent pipes.
- c. EVCB has to be located at least 6 m away from a designated oil tanker parking area.





- d. A minimum distance of 8 metres shall be maintained between EVCB and fuel dispensing unit.
- e. EVCP can be installed with a height of 500 mm from the floor level. No electrical installation or connection is allowed along the EV charging point and floor.
- f. EV charging Points must be fully enclosed unless the opening is at least 1 m above floor level.
- g. Maintain a separation distance of 2.5 m on the left and right of the EVCB.
- h. This separation area must be marked with yellow hatching and equipped with parking barriers to prevent unwanted activity.

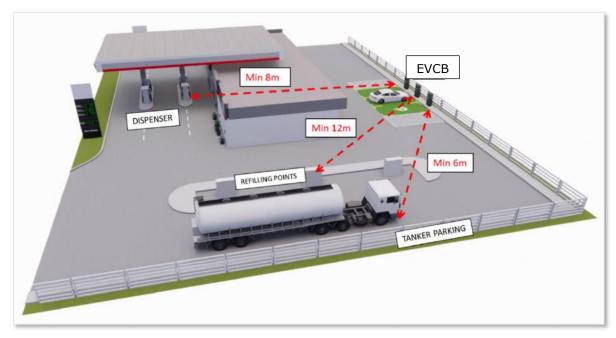
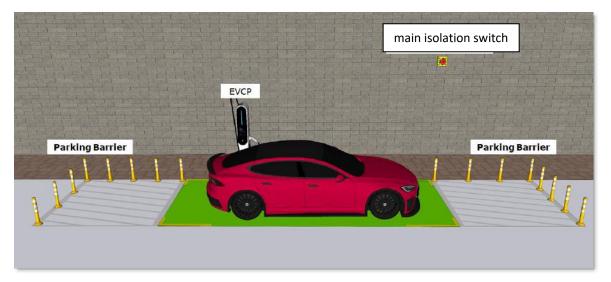


Figure 13: Placement of EVCBs at Petrol Station



Figure 14: Parking Barrier Position of EVCB at Petrol Station



5.11. EVCB in Rest and Service Area (R&R)

- a. Fire hydrant shall be located not more than 90 m from the EVCB.
- b. Create a separation distance of 2.5 m on the left and right of the EVCB.
- c. Mark the clear area with yellow hatching and equip it with parking barriers to prevent unwanted activity.

5.12. EVCB at Open or Enclosed Rooftop Level

- a. EVCB shall be located not more than 30 metres from the fire hydrant or wet or dry riser landing valve.
- b. Maintain a separation distance of 2.5 m on the left and right of the EVCB.
- c. Mark the clear area with yellow hatching and equipped with barriers to prevent any activity.

5.13. Electric Motorcycle Charging Bay

a. The minimum requirements for an electric motorcycle charging bay are similar to non-electric motorcycles bay, that is. 1 m x 2 m as per the Planning Guidelines for Parking by PLANMalaysia (2018), or follow the existing parking requirements by the local authorities.



- b. A minimum of 1 EVCB for electric motorcycles shall be provided in each development.
- c. Battery swapping station must not block any pedestrian paths, and access and parking allocation for the disabled.

Photo 2: Electric Motorcycle Charging Station in Penang



Source: <u>https://paultan.org</u>



Photo 3: Battery Swapping Technology



Source: https://www.webbikeworld.com/charging-vs-swapping-electric-motorcycles/

5.14. Electric Bus Charging Bay

The electric bus charging bay shall follow and adhere to the minimum requirements for a non-electric buses parking bay. Its size is outlined in Planning Guidelines for Parking by PLANMalaysia (2018) or follow the latest local authorities' requirements.

Table 9: Proposed Electric Buses Charging Bay sizes

Bus Type	Minimum Size
Bus *	3m x 12m
Small / Mini Bus **	3m x 7.5m

Note:

* Bus refers to the number of passengers exceeding 25 people.

** Small / Mini Bus refers to the number of passengers not exceeding 25 people.



Photo 4: Electric Bus Charging Bay



Source: https://chargedevs.com/wp-content/uploads/2021/12/PHOTO-2020-08-27-09-59 42.jpg

5.15. Electric Lorry Charging Bay

The minimum EVCB size for an electric lorry follows the non-electric lorry parking bay. The requirements are outlined in Planning Guidelines for Parking by PLANMalaysia (2018) or to follow the latest local authority requirements.

Lorry Type	Minimum Size
Small Lorry	3m x 12m
Big Lorry	3m x 7.5m
Trailer	4m x 18m



Photo 5: Electric Lorry Charging Bay



Source: https://rmi.org/wp-content/uploads/2020/06/electric-truck.jpg

6.0 EVCB COMPONENTS RECOMMENDATION

To improve the safety and comfort of EV users, road users, and the public, EVCB shall be encouraged to be equipped with the following components:

- a. Closed circuit cameras (CCTV);
- b. A comfortable waiting area that are integrated with other facilities such as cafes, kiosks, 'wakaf' and benches;
- c. The EVCB design that conforms to universal design requirements. For example, a larger sized bay to accommodate disabled users;
- d. Information panel to display price, payment methods, user guidance, and digital applications;
- e. Wheel stop;
- f. Roof; and
- g. Adequate lighting





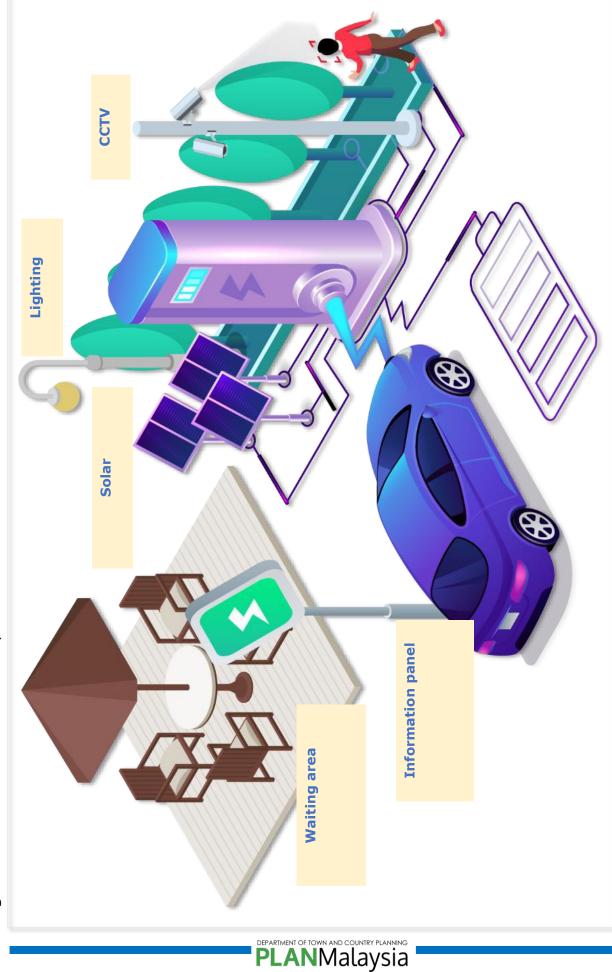


Figure 15: Recommended EVCB Components

Photo 6: Recommended EVCB Components



Solar Roof Panels



Lighting



Wheel Stop



Landscape Elements



Integrated waiting area with facilities such as cafes, kiosks and benches.



7.0 Procedure OF DEVELOPMENT APPLICATION AND APPROVAL

The application and development approval procedure for the installation of EVCB explains the requirements to be complied with by the applicant, as well as the process that will be undertaken at the local authority level to obtain the approval for the provision of EVCB in existing and new developments.

7.1. Existing Development

7.1.1.Type of EVCB Application

The application and development approval procedure for the installation of EVCB explains the requirements to be complied with by the applicant, as well as the process that will be undertaken at the local authority level to obtain the approval for the provision of EVCB in existing and new developments.

- Building Plan (Addition/Alteration)
 Pursuant to subparagraph 70(16)(b)(ii) of the Street, Drainage and
 Building Act 1974 [Act 133], CPOs or applicants seeking to install EVCBs
 on alienated land shall obtain Building Plan Approval for addition or
 alteration from local authorities.
- ii. Permit

Local authorities can issue Permits for the installation of EVCBsunder by Laws 18 of the Uniform Building By-Laws (UBBL, 1984). This application applies to alienated land.

iii. Temporary Permit

Local authorities can issue Temporary Permits for the installation of EVCBs under by Laws 19 of the Uniform Building By-Laws (UBBL, 1984). These permits are granted for a limited defined period under certain conditions for the erection of temporary buildings and activities including those outlined in by Laws 19(2), UBBL. This application



typically pertains to government reserve land (road reserve/government land).

Local authorities reserve the right to assess the specifics of each application and decide on the most appropriate approval types, whether they be building plans for addition or alteration or permits, during the application submission on alienated lands.

7.1.2. Application Process

Applications for EVCB installation in existing developments are required to be submitted through the OSC 3.0 Plus OnlineSystem. The Local Government Department, Ministry of Housing and Local Government (KPKT) has integrated a dedicated module into the system to facilitate a streamlined application process, to provide a special lane for this purpose.

The EVCB development application process in the existing development is synchronised with the OSC 3.0 Plus Manual involving the following process:

- i. Process 1: Pre-Consultation;
- Process 2: Submissions, Consideration, and development approval (EVCB Development);
- Process 3: Notice of Commencement of Work, Process 4: Construction
 Site Monitoring and Interim Inspection Notification and Process 5:
 Notification of Final Inspection Stage I and II; and
- iv. Process 6: CCC Deposition / Letter of Work Completion by PSP.

7.1.3. Process 1: Pre-Consultation

Before initiating the application process at the One Stop Centre Unit (OSC) of local authorities, CPOs or applicants are required to obtain Verification Letter from Tenaga Nasional Berhad (TNB) or Public Distribution License Holder for electrical safety and capacity considerations.



Depending on the location, if the proposed EVCB is situated in a highway area, CPOs or applicants shall obtain a consent from the Malaysian Highway Authority (LLM) and the Ministry of Works (KKR). This step is crucial for projects situated within highway zones (refer Table 11).

If the proposed EVCB development requires the construction of a compact substation or feeder pillar on the land under the jurisdiction of the Federal Commissioner of Lands (Pesuruhjaya Tanah Persekutuan), the Department of Director General of Lands and Mines (JKPTG) will issue a temporary entry permit to the applicants for the construction of the compact substation or feeder pillar. The applicant should concurrently address the land-related matters, such as lease or rent agreements.

 Table 11: Checklist for TNB, Public Distribution Licence, Malaysian Highway Authority

 (LLM) and Ministry of Works (KKR)

AGENCY	APPROVAL	DURATION	CHECKLIST	
	DOCUMENT			
	TNB Verification	14 days	Mandatory Documents:	
TNB / Public	Letter / Public		i. Official Application Letter;	
Distribution	Distribution		ii. Estimated Maximum Load	
License	Licensee		Calculation;	
Operator*	Verification		iii. Layout/Building Plan; and	
	Letter		iv. Copy of Electricity Bill (existing	
			premises) (optional).	
LLM / KKR	Consent Letter	40 days	Туре А:	
	for Upgrading		Development of EVCB in Existing	
	Work		Buildings (Petrol Station, R&R)	
			i. Obtain a design technical review	
			from the Concession Company;	
			and	
			ii. Application Checklist Form.	



AGENCY	APPROVAL	DURATION	CHECKLIST	
	DOCUMENT			
	Conditional	90 days	Туре В:	
	concept		Development of EVCB at R&R	
	Approval Letter		parking areas, R&R green areas and	
			new development sites	
			i. Obtain a design technical review from the Concession	
			Company; and	
			ii. Application Checklist Form; and	
			iii. Approval from the Minister of Works (KKR).	

*Note: For areas under the regulation of the Public Distribution Licensee, TNB will only issues letter stating that this application is under the regulation of the Public Distribution Licensee and TNB have no objections.

> In situation where an application involves the provision of a compact substation and necessitates the surrendering of land to the state/TNB, the CPOs or applicants are required to apply for a planning permission to subdivide the land. However, if the compact substation is intended to be leased to TNB, the CPOs or applicants are exempted from obtaining the planning permission. Instead, they are required to apply for a Building Plan (Addition/Alteration) or Permit or Temporary Permit as deemed appropriate by local authorities. Type of application for compact substation or feeder pillar as in **Table 12**.

Table 12: Preparation of Compact Substation or Feeder Pillar

l	DEVELOPMENT TYPE	TYPE OF APPLICATION		
1.	Constructing additional compact substations in existing public or private buildings.	Compact Substation leased to TNB Option 1 1. Building Plan (Addition/Alteration) 2. CCC deposition or Option 2 1. Permit 2. Letter of Work Completion by PSP Handover of Land to TNB 1. Application for Planning Permission (land subdivide)		
2.	Additional provision of a compact substation in privately owned parking lot/ On Street Parking.	Compact Substation lease to TNB Option 1 1. Building Plan (Addition/Alteration) 2. CCC deposit or Option 2 1. Permit 2. Letter of Work Completion by PSP Land surrender to TNB 1. Application for Planning Permission (land subdivide)		
3.	Additional provision of a compact substation in the public parking lot or On Street Parking (road reserve).	 Compact Substation lease to TNB 1. Temporary Permit 2. Letter of Work Completion by PSP 		
4.	Pillar Feeder Required	PBT Dredging Permit (approval within 7 days, subject to the current enforced procedure at PBT)		

	DEVELOPMENT TYPE	TYPE OF APPLICATION
	TNB Substation Required	Planning Permission Application, Engineering Plan, Building Plan, CCC
5.	*Note The development of EVCB in built-up	Deposit
	areas is not allowed if it requires the provision of a substation.	Procedures and duration are as stated in the OSC 3.0 Plus Manual

7.1.4.Process 2: Submissions, Consideration and Development Approval (EVCB)

i. Approval Time

EVCB development proposals are to be approved in either 7 or 14 days as follow:

- a. 7 days (AC at outdoor, indoor or open/unenclosed Rooftop); and
- b. 14 days (DC outdoor, indoor or open/unenclosed Rooftop).

If the application for EVCB include both AC and DC type charger, then the approval period is 14 days. If the proposed EVCB development (AC or DC) involve a construction of roof structures or solar roofs; alteration of layout in existing parking spaces; construction of a compact substation or feeder pillar (on lease); or the need for review from the Land Office on government-owned land; or involve areas under LLM administration; then the approval period is 14 days (Figure 16 and Figure 17).

ii. Technical Department Comments

Application that has an approval period of 7 days, does not require comment from technical department. However, for application that falls under 14-day approval timeframe, PBT must obtain comments from the department or agency as follows:



- a. Building Department or Engineering Department of local authority (processing department);
- b. Planning Department of local authority;
- c. Engineering Department of local authority;
- d. Building Commissioner (if relevant);
- e. Fire and Rescue Department of Malaysia (JPBM) (if related to DC type EVCB development only);
- f. Malaysian Highway Authority (LLM) (if under LLM's administrative area; or
- g. State Land Administrator (if related to Temporary Occupancy License or provision of compact substation and feeder pillar on lease).

iii. Self Compliance Declaration Form

The self compliance declaration form **must be completed and declared by the Principal Submitting Person (PSP) and attached to the proposed EVCB development application during submission at the local authorities**. The self compliance declaration form is seen as self regulatory or a self assessment for development GPP EVCB and Fire Safety Guidelines for Electric Vehicle Charging Bay (EVCB) on Premises by JBPM (Appendix 1). The applicant is deemed to have adhered to professional ethical standards when completing the form.

iv. Document Checklist

The checklist for Building Plans (Additions/Alteration) is in **Table 13**, Construction Permits in **Table 14** and Temporary Permits is in **Table 15**.

v. Application Consideration and Decisions

Decentralize the power to the Building Department or Engineering Department at the local authorities to approve/endorse EVCB applications. However, these decisions must be recorded and notified to the local authorities' OSC Committee.



vi. Development Application Fee

Development plans submitted to local authorities for approval are subject to prescribed fees as specified in Rules of General Planning Control and UBBL.

In cases where work has commenced or been completed before the building plan is approved or a permit is obtained, a penalty in the form of a multiplier times fee, as part of the whitening program for unregulated activity, will be falls within the purview of the local authorities by the regulations outlined in the UBBL.

vii. Public Distribution License Application to the Energy Commission (ST) The CPO has the option to apply for a public distribution license to the Energy Commission (ST) concurrently with the EVCB development application at local authorities. Following this, the Energy Commission will issue a Pre- Conditional Approval. It is important to note that the installation of EVCB is also subject to compliance with other pertinent legislation.

The CPO is required to engage the services of a qualified individual registered with the ST when applying for a public distribution license. This individual may be an Electrical Wireman (PW4), an Electrical Supervisor, a Competent Electrical Engineer, or an Electrical Service Engineer. This requirement is provided under Regulation 65 of the Electricity Regulations 1994.

7.1.5.Process 3: Notification of Work Commencement, Process 4: Site Monitoring and Interim Inspection Notification and Process 5: Notification of Final Inspection Stage I and II

The execution of Processes 3, 4 and 5 for EVCB development within the existing development should adhere to the guidance provided in the OSC 3.0 Plus Manual.



7.1.6. Process 6: CCC Deposition or Letter of Work Completion by PSP

i. CCC deposition

Any building proposal that obtains approval under the Building Plan (Alteration/Addition), and subsequently completes construction according to the approved plan, necessitates the issuance of a Certificate of Completion and Compliance. This certificate is to be issued by the Principal Submitting Person (PSP), under the provision of by Laws 25, the Uniform Building Bylaws 1986, and subsection 70(20) of the Street, Drainage, and Building Act, 1974 [Act 133].

The PSP must issue a complete CCC (Forms G1-G21 and Form F.) All forms should be duly completed and certified before the issuance of CCC. The relevant forms for the issuance of CCCs for EVCB type DC development are as follows:

- a. G7: Internal Electrical (TNB);
- b. G8: Fire Fighting (passive) (JBPM);
- c. G9: Fire Fighting (active) (JBPM); and
- d. G16: External Electrical Supply System (TNB).

For development of an EVCB with type AC devices that do not require comments from JBPM, the following forms needs to be deposited:

- a. G7: Internal Electrical (TNB); and
- b. G16: External Electrical Supply System (TNB).

PSP must deposit CCC to local authorities within 14 days after the issuance of CCC. One of the purposes of issuing the CCC for the EVCB is to enable the CPO to establish a safeguarding element when procuring insurance.



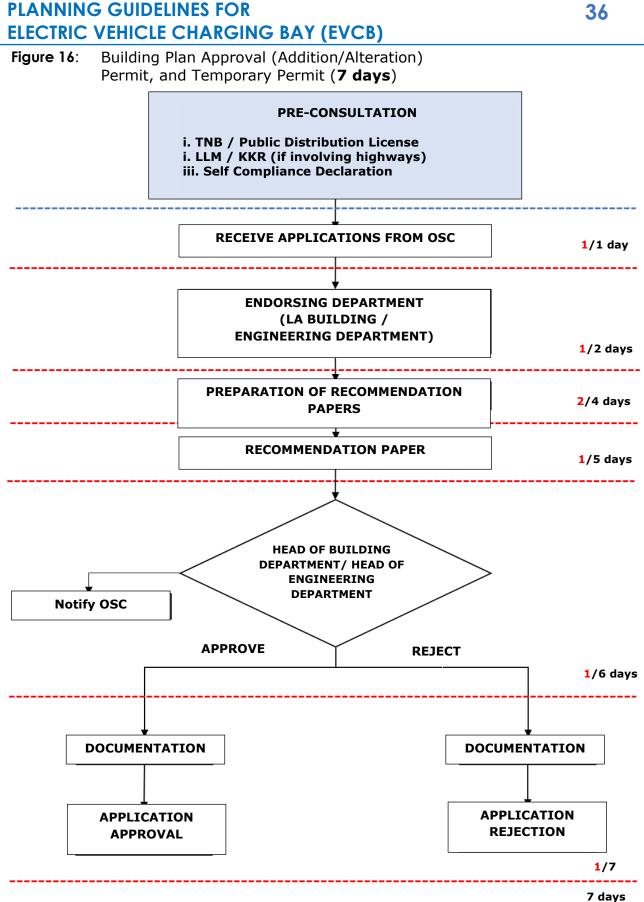
ii. Letter of Work Completion by PSP

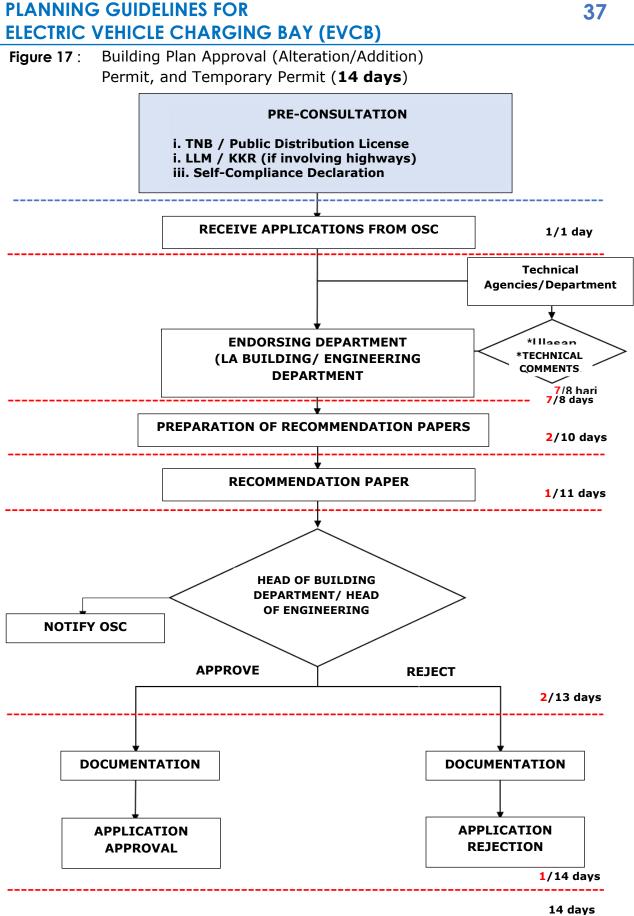
Upon the completion of the construction and installation of the EVCB, the PSP is required to provide a Letter of Work Completion for Permit/Temporary Permit applications. This letter must be submitted to the local authorities. The application for development plans should include details of the development, as it is to be supervised and submitted by the PSP, with further reference to Appendix 2.

7.2. New Development

In the case of new development, the installation of EVCBs will be incorporated as either an integral element within the proposed development or as a dedicated site specifically designated for EVCBs, and this necessitates obtaining planning permission. This submission must align with the guidelines outlined in the OSC 3.0 Plus Manual and adhere to the GPP EVCB, as well as the Fire Safety Guidelines for EVCB on Premises by JBPM.







PLANMALaysia

 Table 13: Building Plan Checklist (Addition/Alteration)

	DOCUMENTS	NOTES
Α	ALL TECHNICAL AGENCIES / DEPARTMENTS	
1	OFFICIAL APPLICATION LETTER AND FORM A	Refer to the Second
1.	(Certification of Demolition/buildings, structural plans)	Schedule of UBBL 1984
	CERTIFICATE OF FITNESS FOR OCCUPANCY (CFO) or	
2.	CERTIFICATE OF COMPLETION AND COMPLIANCE (CCC)	
3.	SITE PLAN / LAYOUT	
4.	JMB / MC CONSENT LETTER (if relevant)	
5.	TNB/PUBLIC DISTRIBUTION LICENSE HOLDER VERIFICATION LETTER	
	CONSENT LETTER FOR UPGRADING WORK OR	
6.	CONSENT LETTER FOR CONDITIONAL CONCEPT	
	(highway alignment)	
7.	SELF COMPLIANCE DECLARATION FORM	
	BUILDING PLAN includes;	
	i. Location plan	
	ii. Floor Plan	
	iii. Cross Section	
8.	iv. Side Plan	Refer UBBL 1984
0.	v. 1 set of perspective drawings	
	 Plan Scale Should be 1:100 or 1:200 (Other Scale with 	
	Permission)	
	 Certified by Registered Professionals 	
	 Plan Preparation in Metric Scale 	
В	BUILDING DEPARTMENT	
	LAND TITLE/ LETTER OF BANK APPROVAL/ SALE PURCHASE	
9.	AGREEMENT/ CERTIFICATE OF SEARCH	
	(Caveat Mortgage Or Privatization Agreement)	
	COMPANY REGISTRATION DOCUMENTS *	
10.	[Memorandum and Articles (M&A), Form 24 and Form 49	
	together with a letter of Power of attorney if the signing	
	nominee are not listed in Form 49A]	



	DOCUMENTS		NO	ES	
11.	QUIT RENT PAYMENT RECEIPT/				
	(Current Tax Receipt)				
12.	ASSESSMENT TAX RECEIPT				
12.	(Current Tax Receipt)				
13.	BUILDING PLAN FEE PAYMENT RECEIPT	Refer	to	the	First
13.	(Together with Fee Calculation)	Schedu	ule of	UBBL	1984
14.	IMAGE OF CURRENT SITE				

Table 14: Permit Checklist

BIL.	DOCUMENTS	NOTES
Α	ALL TECHNICAL AGENCIES / DEPARTMENTS	
1.	FORM A (Second Schedule UBBL 1984)	*The application refers to Clause 18, Temporary Permit, Uniform Building By-laws 1984
2.	PAYMENT FOR PLANPROCESSING according to UBBL 1984	
3.	ADDITION/CHANGE PLAN	To adhere to the prescribed format, it is necessary to include the signature and identification card number of the legal owner, as well as the architect/draughtsma n/ engineer involved in the project. Additionally, each plan should bear the practice stamp of the



BIL.	DOCUMENTS	NOTES
		respective professional on each plan (covering letter).
4.	OFFICIAL APPLICATION LETTER	
5.	JMB / MC CONSENT LETTER (if relevant)	
6.	TNB/PUBLIC DISTRIBUTION LICENSE HOLDER VERIFICATION LETTER	
7.	CONSENT LETTER FOR UPGRADING WORK OR CONSENT LETTER FOR CONDITIONAL CONCEPT (highway alignment)	
8.	SELF COMPLIANCE DECLARATION FORM	
9.	COPY OF THE LATEST ASSESSMENT RATE or verification from the Department of Valuation and proof of transfer of ownership	
10.	Latest copy of Quit Rent	
11.	COPY OF PROPERTY TRANSFER has been made (if the property rate has not been renamed)/ a copy of the sale and purchase agreement/ power of attorney document	
12.	COPY OF LATEST LAND TITLE (GRANT)	
13.	COPY OF FORM 49 (if the applicant a company)	
14.	COPY OF IDENTIFICATION CARD (if individually owned)	
15.	Latest COPY OF THE COMPANIES COMMISSION OF MALAYSIA (if the application is in the name of Enterprise/Trading)	
16.	SITE PHOTOS (COLOUR)	



Table 15: Temporary Permit Checklist

BIL.	DOCUMENTS	NOTES
А	ALL TECHNICAL AGENCIES / DEPARTMENTS	
1.	OFFICIAL APPLICATION LETTER	
2.	PROPOSED DEVELOPMENT PLAN	
3.	TEMPORARY PERMIT PROCESSING FEE PAYMENT	
4.	TEMPORARY PERMIT FEE PAYMENT	
5.	JMB / MC CONSENT LETTER (if relevant)	
6.	TNB/PUBLICDISTRIBUTIONLICENSEHOLDERVERIFICATION LETTER	
7.	CONSENT LETTER FOR UPGRADING WORK OR CONSENT LETTER FOR CONDITIONAL CONCEPT (highway alignment)	
8.	SELF COMPLIANCE DECLARATION FORM	
9.	COPY OF LAND OWNERSHIP DEED WITH LATEST ASSESMENT/QUIT RENT RECEIPT (if relevant)	
10.	PLANS, SITE PHOTOS and DRAWINGS	
11.	COPY OF IDENTIFICATION CARD AND FORM 49	
В	STATE LAND ADMINISTRATION	
12.	COPY OF THE LATEST PROPERTY TAX RECEIPT or property tax confirmation (if relevant)	
13.	TEMPORARY OCCUPANCY LICENSE (TOL) (if applicable)	

8.0 CONCLUSIONS

This Electric Vehicle Charging Bay (EVCB) Planning Guidelines provides fundamental insights into the interpretation of both existing and new developments for EVCBs. This document comprehensively covers aspects such as locations, design guidelines, component recommendations, and implementation mechanisms for the installation of EVCBs.

The adoption of this planning guidelines holds significance as it ensures that various levels of authorities/agencies and stakeholders have clear and consistent guidelines for planning and implementing a comprehensive EVCB infrastructure. This clarity is crucial forfostering the EV ecosystem in the country.



Appendix 1

SELF COMPLIANCE DECLARATION FORM (AC- OUTDOOR / INDOOR / OPEN ROOF LEVEL)

REMINDER : ALL PRINCIPAL SUBMITTING PERSONS (PSP) ARE ADVISED TO COMPLY WITH ITEMS CONTAINED IN THE CHECKLIST.

1. **PROJECT DETAILS**

PROJECT TITLE (filled by PSP)

.....

NAME / ADDRESS OF LOT / BUILDING OWNER:

(PROJECT TITLE)

ORIGINAL APPROVED BUILDING PLAN DATE:

.....

DATE OF CERTIFICATE OF COMPLETION AND COMPLIANCE (CCC):

.....

NUMBER OF PROPOSED DEVELOPMENT OF AC TYPE DEVICES

(Specify):

3. AC PLACEMENT

- A. OUTDOOR
- B. INDOOR
- C. OPEN ROOF LEVEL

(Open Roof Top Level) OR Unenclosed

NUMBER OF UNITS





	ANNING GUIDELINES FOR 4 ECTRIC VEHICLE CHARGING BAY (EVCB)		
4.	TYPE	OF DEVELOPMENT	
	Α.	BUILDING PLAN (ADDITION/ALTERATION)	
	Β.	CONSTRUCTION PERMIT	
	C.	TEMPORARY PERMIT	
5.	WEI	DULY NOTED THAT EVCB DEVELOPMENT	
	IS EN	ICOURAGED TO BE BUILT OUTDOOR	

6. SELF COMPLIANCE CHECKLIST – AC TYPE DEVICES IN EXISTING DEVELOPMENTS

BIL.	TECHNICAL REQUIREMENTS	PLEASE MARK (√)	LA REVIEW PLEASE MARK (√)
1.	Size of the EVCB is according to the size of the existing TLK.		
2.	EVCB should be provided away from stairs or safety exits, or any exit areas that could cause them to be obstructed in the event of a fire / emergency.		
3.	Charging Bay layout is either vertical (90°), parallel (180°) or angled (30°/45°/60°). State the bay layout :		
4.	Provide access to fire equipment as required by UUKBS 140.		
5.	Provide dry powder fire extinguishers (APA) as per MS 1539 – Specification for Portable Extinguisher.		
6.	Provide Vehicle Fire Blanket(s) (VFB) based on the number of charging bays. State the number of VFB :		
7.	Provide fire safety marking as prescribed by JBPM.		
8.	Provide a natural or mechanical smoke control system.		



Г

	TECHNICAL REQUIREMENTS	PLEASE MARK (√)	LA REVIEW PLEASE MARK (√)
Provic	de main isolation switch		
(EVCE	3 for public use).		
	Each EVCB shall have an automatic and		
	manual main isolation switch. The switch		
i.	should be located at least 3 metres from the		
	charging bay and EVCP but not more than		
	15 metres away.		
	The EVCB's main isolation switch can be		
	shared by several EVCPs by observing a		
ii.	predetermined distance. Activation of any		
	electrical isolation switch will disconnect the		
	electrical power source to all EVCPs.		
	If the position of the main isolation switch is		
	less than 3 metres from the EVCP, another		
iii.	main isolation switch should be provided and		
	located at least 3 metres away from the		
	EVCP but not more than 15 metres.		
iv.	Connect the EVCB Main Isolation EVCB with		
1.	the fireman switch.		
	the main isolation switch should be located		
M	between 800mm to 1200mm above floor		
۷.	level and in a clearly visible and easily		
	accessible location.		
	All main isolation switches must be labelled		
vi.	and include clear operating instructions.		
	If the main isolation switch is not clearly visible		
、 <i>.</i> ::	from the EVCP and parking lot, additional		
VII.	signage should be provided to direct to its		
	location.		
	i.	i.manual main isolation switch. The switch should be located at least 3 metres from the charging bay and EVCP but not more than 15 metres away.ii.The EVCB's main isolation switch can be shared by several EVCPs by observing a predetermined distance. Activation of any electrical isolation switch will disconnect the electrical power source to all EVCPs.iii.If the position of the main isolation switch is less than 3 metres from the EVCP, another main isolation switch should be provided and 	Provide main isolation switch (EVCB for public use). Each EVCB shall have an automatic and manual main isolation switch. The switch should be located at least 3 metres from the charging bay and EVCP but not more than 15 metres away. ii. The EVCB's main isolation switch can be shared by several EVCPs by observing a predetermined distance. Activation of any electrical isolation switch will disconnect the electrical power source to all EVCPs. iii. If the position of the main isolation switch is less than 3 metres from the EVCP, another main isolation switch should be provided and located at least 3 metres. iv. Connect the EVCB Main Isolation EVCB with the fireman switch. iv. Connect the EVCB Main Isolation EVCB with the fireman switch. v. The main isolation switch should be located between 800mm to 1200mm above floor level and in a clearly visible and easily accessible location. vi. All main isolation switchs must be labelled and include clear operating instructions. vii. If the main isolation switch is not clearly visible from the EVCP and parking lot, additional signage should be provided to direct to its

BIL.	TECHNICAL REQUIREMENTS	PLEASE MARK (√)	LA REVIEW PLEASE MARK (√)
	Provide Heat Detection System or Automatic		
10.	Sprinkler System at EVCB (for buildings other than		
	housing)		





(Stamp, Name and LAM Registration No.)

(Appointed Consultant) Details of qualified persons: NAME :

ADDRESS :

REGISTRATION NO.:

(Stamp, Name and BEM Registration No.)

.....

(Appointed Consultant) Details of qualified persons: NAME : ADDRESS: REGISTRATION NO.:



SELF COMPLIANCE DECLARATION FORM (DC -INDOOR / OUTDOOR/ OPEN ROOF LEVEL)

REMINDER : ALL PRINCIPAL SUBMITTING PERSONS (PSP) ARE ADVISED TO COMPLY WITH ITEMS CONTAINED IN THE CHECKLIST.

1. PROJECT DETAILS

PROJECT TITLE (filled by PSP)

.....

NAME / ADDRESS OF LOT / BUILDING OWNER:

(PROJECT TITLE)	
	• • • • • • • • • • • • • • • • • • • •

ORIGINAL APPROVED BUILDING PLAN DATE:

.....

DATE OF CERTIFICATE OF COMPLETION AND COMPLIANCE (CCC):

.....

NUMBER OF PROPOSED DEVELOPMENT OF DC TYPE DEVICES

(Specify):

3. AC PLACEMENT

- A. OUTDOOR
- B. INDOOR
- i. Level 1
- ii. Level 2
- iii. Ground floor
- iv.Basement Level (basement 1)

OPEN ROOF LEVEL

(Open Roof Top Level) or Unenclosed

NUMBER OF UNITS

47



ELE	CIRIC VEHICLE CHARGING BAY (EVCB)		
4.	TYPE OF DEVELOPMENT	_	
	A. BUILDING PLAN (ADDITION/ALTERATION)		
	B. CONSTRUCTION PERMIT		
	C. TEMPORARY PERMIT		
5.	WE DULY NOTED THAT EVCB DEVELOPMENT	Г	
•••	IS ENCOURAGED TO BE BUILT OUTDOOR		
6.	SELF COMPLIANCE CHECKLIST – DC TYPE DEVICE		
BIL.	TECHNICAL REQUIREMENTS	PLEASE MARK	LA REVIEW
		(√)	PLEASE MARK
			(√)
EVCB C	GENERAL FIRE SAFETY GUIDE REQUIREMENTS (MUST CO	OMPLETE)	
1.	Size of the EVCB is according to the size of the		
1.	existing TLK.		
	EVCB should be provided away from stairs or		
2.	safety exits, or any exit areas that could cause		
۷.	them to be obstructed in the event of a fire /		
	emergency.		
	Charging Bay layout is either vertical (90°),		
3.	parallel (180°) or angled (30°/45°/60°).		
0.			
	State the bay layout :		
4.	Provide access to fire equipment as required by		
4.	UUKBS 140.		
5.	Provide dry powder fire extinguishers (APA) as per		
5.	MS 1539 – Specification for Portable Extinguisher.		
	Provide Vehicle Fire Blanket(s) (VFB) based on the		
,	number of charging bays.		
6.			
	State the number of VFB :		
7	Provide fire safety marking as prescribed by		
7.	JBPM.		

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8.	1	ide a natural or mechanical smoke control		
0.	syste	em.		
9.	Prov	ide main isolation switch		
/.	(EVC	CB for public use).		
		Each EVCB shall have an automatic and		
		manual main isolation switch. The switch		
	i.	should be located at least 3 metres from the		
		charging bay and EVCP but not more than		
		15 metres away.		
		The EVCB's main isolation switch can be		
		shared by several EVCPs by observing a		
	ii.	predetermined distance. Activation of any		
		electrical isolation switch will disconnect the		
		electrical power source to all EVCPs.		
		If the position of the main isolation switch is		
		less than 3 metres from the EVCP, another		
	iii.	main isolation switch should be provided		
		and located at least 3 metres away from		
		the EVCP but not more than 15 metres.		
	iv.	Connect the EVCB Main Isolation EVCB with		
	iv.	the fireman switch.		
		the main isolation switch should be located		
		between 800mm to 1200mm above floor		
	۷.	level and in a clearly visible and easily		
		accessible location.		
	vi.	All main isolation switches must be labelled		
	vı.	and include clear operating instructions.		
		Each EVCB shall have an automatic and		
		manual main isolation switch. The switch		
	vii.	should be located at least 3 metres from the		
		charging bay and EVCP but not more than		
		15 metres away.		
OUTDC	OR		I	

1. The position of the fire hydrant not exceeding 90 metres from the EVCB. 2. EVCB is located at least 12 metres away from refilling points and vent pipe. 3. EVCB is located at least 6 metres away from designated oil tanker parking area 4. EVCB is located at least 8 metres away from fuel dispensing unit. 5. EVCP can be installed with a height of 500mm from the floor level. No electrical installation or connection allowed along the EV charging point and floor. 6. EV charging point must be fully enclosed unless the opening is at least 1m above floor level. 7. provide a separation distance with a width of 2.5m on the left and right of the charging bay. 8. The spaced areas must be marked with yellow hatching and installed with parking barriers to prevent any activity in the area. b. Rest and Service (RnR) Areas, Outdoor or Open Car Parks	
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prevent any activity in the area.	
b. Rest and Service (RnR) Areas, Outdoor or Open Car Parks	
Locate Fire hydrant within a distance of not more	
1. than 90 metres with EVCS.	
Provide a separation distance with a width of	
2. 2.5m on the left and right of the charging bay	
3. That above said area must be marked with	
yellow hatching and installed with parking	
barriers to prevent any activity in the area.	
c. EVCB at Open Roof Top Level (Unenclosed / Open Roof Top)	
EVCB should not be more than 30 metres from fire	
1. hydrant or landing valve wet riser or dry riser.	

		NG GUIDELINES FOR C VEHICLE CHARGING BAY (EVCB)		51
2.	Oth	er requirements should follow EVCB rest and		
Ζ.	serv	ice area (RnR), outdoor, or open car parks.		
FIRE SA	FETY	REQUIREMENTS FOR EVCB IN BUILDINGS		
a.	Gro	und Level and Above (eg podium, multi-store)	/ carpark)	
		Direct current (DC) EVCB are be located		
	1.	not more than 30 metres from the landing		
		valve for wet / dry riser / fire hydrant.		
		The location of Direct current (DC) EVCB		
	2.	shall not exceed two levels above the		
	Ζ.	designated floor, which is the ground level,		
		level 1 and level 2.		
		Provide at least 1.5m high fire separating		
	2	wall (wet construction type) with 2-hour fire		
	3.	resistance for EVCB (DC) that exceeds		
		216m² floor area.		
		Provide a space to separate the EVCB with		
		a minimum width of 5 metres on the left and		
		right of the charging bay that does not		
	4.	exceed 216m² floor area, or		
		Provide at least 1.5m high fire separating		
		wall (wet construction type) with 2-hour fire		
		resistance		
		Install automatic fire detection system or		
	F	multi-sensor detecting type in buildings that		
	5.	do not have an automatic sprinkler system		
		installed.		
		The fire detector should be connected		
	6.	directly to the Fire Alarm Panel, PKK system		
		and roller shutter (if any).		
	-	Establish a natural or mechanical smoke		
	7.	management system.		
b.	Base	ement		L

PLA	ANNI	NG GUIDELINES FOR	52
ELE	CTRI	C VEHICLE CHARGING BAY (EVCB)	
		Direct current (DC) EVCB are be located	
	1.	not more than 30 metres from the landing	
		valve for wet / dry riser / fire hydrant.	
		The location of Direct current (DC) EVCB	
	2.	shall not exceed one levels below the	
		designated floor, which is the basement 1	
		Provide at least 1.5m high fire separating	
	3.	wall (wet construction type) with 2-hour fire	
	З.	resistance for EVCB (DC) that exceeds	
		216m² floor area.	
		Provide a space to separate the]EVCB with	
		a minimum width of 5 metres on the left and	
		right of the charging bay that does not	
	4.	exceed 216m² floor area, or	
		Provide at least 1.5m high fire separating	
		wall (wet construction type) with 2-hour fire	
		resistance	
		Install automatic sprinkler system or water	
	5.	mist system or deluge system or water	
		monitor that works continuously.	
	,	Provide/Establish a natural or mechanical	
	6.	smoke management system.	
L	1	1	



(Stamp, Name and LAM Registration No.)

(Appointed Consultant) Details of qualified persons:

NAME : ADDRESS : REGISTRATION NO.:



(Stamp, Name and BEM Registration No.)

(Appointed Consultant) Details of qualified persons:

NAME : ADDRESS : REGISTRATION NO.:



Appendix 2

Date:

EXAMPLE OF LETTER OF WORK COMPLETION BY PSP

Reference :
(Address of the local authority)
То :

Mayor / YDP, Council of

I / we hereby attach the **Approved Plan** and **Self Compliance Declaration Form** for the following development:

(APPLICATION TITLE)
I / We certify that this site has complied with the approved plan and the requirements
of the standards and guidelines as marked on the Self Compliance Declaration Form.





(Stamp, Name and LAM registration No.)

.....

(Appointed Consultant) Details of qualified persons: NAME :

:

ADDRESS

REGISTRATION No.:



(Stamp, Name and BEM registration No.)

.....

(Appointed Consultant) Details of qualified persons: NAME : ADDRESS : REGISTRATION No.:

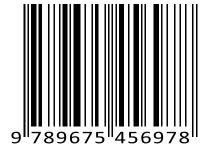




PLANMalaysia Perancangan Melangkaui Kelaziman Planning : Beyond Conventional



ISBN 978 -967-5456-97-8



Department of Town and Country Planning (PLANMalaysia) Blok F5, Kompleks F, Presint 1, Pusat Pentadbiran Kerajaan Persekutuan, 62675 PUTRAJAYA

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