



## **European Parking Association**

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## **EUROPEAN STANDARD PARKING AWARD 2010**

The Parking Standard is instituted by the European Parking Association to improve the quality of service, provided by the parking industry to its customers. It must be clear that car parks, compliant to the Parking Standard invite visitors to enter and leave their car in a trustworthy environment. The Parking Standard is granted to public car parks that meet a set of requirements of quality to provide safe and comfortable parking service to the customers. Car parks that do not meet the Parking Standard requirements are not disqualified for operation, but will not be honored with the plaque to demonstrate compliance to the Parking Standard.

To be able to assess whether a car park meets the standards a set by the EPA, the attached checklist has been set up. In order to qualify for the standard car park first of all must fulfill a set of basic requirements, outlined in chapter 1. Once the basic requirements have been fulfilled, a minimum of 160 points of the total list is required and defined minimum scores at each chapter 2 through 11. A car park that achieves the total score but does not achieve the minimum score in each section, does not qualify for the standard.

To obtain an objective and balanced judgement the criteria are split up. The total of minimum scores to pass each category adds up to 120 points. This enables compensation if a car park just meets the minimum requirements on certain subjects. Extra bonus/minus points can be of decisive influence to reach the required 160 points.

The European Parking Association has delegated the judgement and presentation of the ESPA - Award to the national parking associations. A national parking association is granted the authority to increase the number of points, required to obtain the standard. However a decrease of the number of points (either the total of 160 or a lower pass mark per category) to qualify is not allowed

The Award is granted as long as the car park meets the defined standards. It is up to the national parking association to require a re-assessment after a period of time to check, whether the car park is still compliant to the requirements. On the ESPA-Award plaque will show the year when the award was first issued.

EPA claims the right to withdraw the Award (through the national organisation) if the car park no longer meets the necessary requirements to deserve the European Standard Parking Award.

## Explanation of the checklist

As the checklist has been set up as compact as possible, some explanations might be necessary to avoid any confusion for entrants and assessors. Reference will be made to the chapters and sections of the checklist.

### 1. Mandatory Minimum conditions

1.1 Car parks must be for public use, dedicated car parks for subscribers only cannot qualify.

1.3 Public car parks with only one combined lane for entrance and exit do not qualify

1.5 70% of the parking bays must be at least 2.30 meters wide. The increase from the old checklist reflects the increase of width of the cars during the last 10 -15 years and the effect that doors must be opened wider due to side impact protection within the doors. To prevent many older car parks from exclusion on forehand and keep stimulating renovation of older car parks, an exemption has been made for renovated car parks, over 10 years old: in those cases bay widths between 2.25 and 2.30 meters are allowed with a penalty of 5 points, to be compensated elsewhere (i.e. better lighting or better marking).

1.6 The width of the ramps can be measured easily; radius often cannot be measured directly. This can be calculated from measuring the chord of the circle:

1.7 For the minimum radius of 8 meters the chord over 4 meters length must be maximum 25cm. If this is more, the radius is less than 8 meters and the car park does not qualify.

1.8 It seems to be obvious that the car park must meet the national fire safety standards; otherwise it should not be allowed to be in operation.

### 2. Lighting

At multi storey car parks (MSCP) with open facades it must be safeguarded to measure the light without influence of sunlight. If the car park is equipped with daylight compensation facility, this should be honored with bonus points.

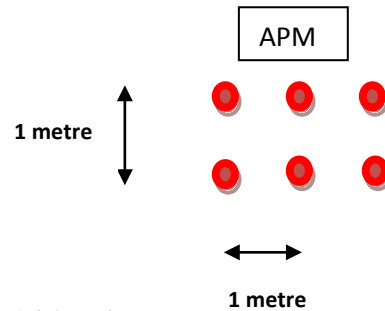
Experience of light levels is partly based on the light level on the spot, but also on the evenness of light levels. Measured light levels relate very strong to the relation between measure point and light source.

The measurement of light levels at the parking bays should be done in the absence of parked vehicles.

Following guideline is to be followed to obtain reliable light level results:

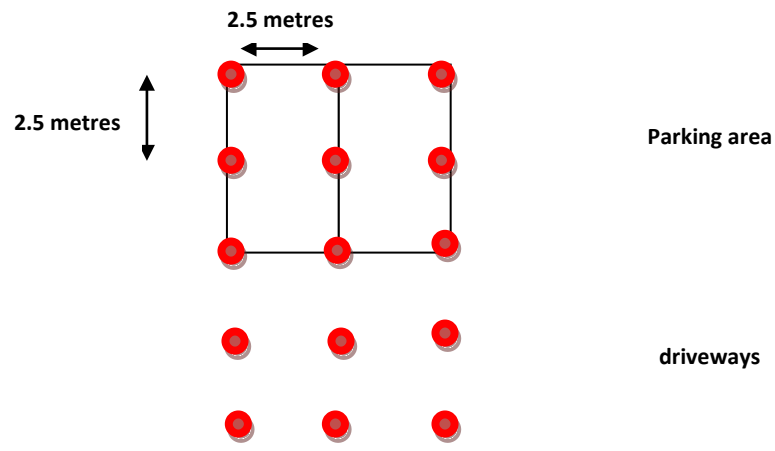
Through a 6-point grid for exits, entrances, APM, stairs, the lift and pay station):

The 6-point grid is comprised of an orthogonal mesh with points 1 metre from each other. An example for an area where there is a pay station (the points in red are the measurement points):



Through a 15-point grid for the parking area:

On the parking floor (parking area + driveway) developed from a corner of the car park (the most distant from the driveway) in an orthogonal mesh with 2.5-metre spaces. The grid should be positioned in an area, which is representative of the car park.



### 3. Entry/exit for the cars

3.5 This item assures that the driver can easily drive along the ticket machines at the entry or exit, to reach easily to take or present tickets or cards.

3.6 This item deals with slopes at the entry and exit, eventually to use the brake while taking or presenting tickets or cards.

### 4. Parking area

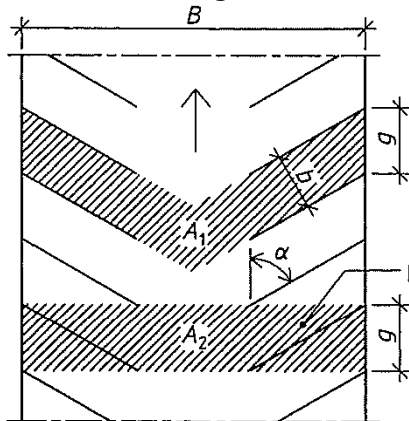
4.3 However it may not be necessary or obliged to have signage in car parks conform to national road code signs, it is seen as beneficial, as every road user will know the signs and this will contribute to unambiguous signage.

4.8 Width of bays is to be measured between center of the separation lines

between bays. In case of angled parking the bay width is to be measured at right angle to the direction of the bay (not the angled front along the aisle)

4.9 Recognizing the complex correlation of angled parking, bay width and aisle width for the comfort of use of the car parks, there is a need for simplification to compromise a reasonable assessment.

The effective aisle width depends on the depth of bays: if bays are only 4.50 meters, parked cars will impact the aisle width. To get along, the total unit of two parking bays and the aisle width (measure B) will be assessed. Parking bay width is to be measured along "b".



Comfortable measures "B" depending on bay width and parking angle are based on a driving curve simulation tool, using a normative car of 4.72 meters long and 1.77 meters wide (refers to cars like Audi A4, Ford Mondeo, Honda Accord, Peugeot 407, Renault Laguna, Toyota Avensis and Volkswagen Passat, also smaller cars like Peugeot 308, Renault Megane and Opel Astra are 1.80 meters wide). For the maximum score the normative car can just turn into the parking bay without reversing, when using the ideal driving line. For lower scores reverse has to be used to get into the parking bay.

Parking angles can be measured directly with a gradient device or estimated from the tangent at the front side of the parking bay: 90°: 0,00 ; 85°: 0,09 ; 80°: 0,18 ; 75°: 0,27 ; 70°: 0,36 ; 65°: 0,47 ; 60°: 0,58 ; 55°: 0,70 ; 50°: 0,84 ; 45°: 1,00

4.14 With a radius of 8 meters the chord over 4 meters length is 25cm. This can be measured with a line of 4 meters long with a marking point at the middle. At a radius of 10 meters the chord over 4 meters length is 20 cm. If this is less, the radius is more than 10 meters.

## 5. Pedestrian routes

## 6. Elevators and stairwells

This section deals with public stairwells and elevators. Dedicated elevators for specific user groups (i.e. residents) and emergency exits should not be considered here. In case of more public accessible stairwells and/or elevators the average is to

be assessed. If there is a clear hierarchy of main stairwells and secondary facilities, this can be compensated in the last item of the bonus/minus section

## **7. Safety & security**

7.2 This surveillance concerns follow-up of the CCTV and intercom alerts.

7.5 This item refers to recognizable company dressed staff in the car park, to assist customers.

7.6 Refers to locked entries/exits after opening hours. Fast closing gates during opening hours are included in chapter 3

## **8. Outside of the car park**

However some issues, addressed here are generally outside the scope of the car park operator and can barely be influenced, those are part of the total service package to the customers.

## **9. Comfort & miscellaneous**

9.2 Payment options refer to car parks with barriers (with pay stations) and to car parks with Pay & Display systems.

## **10. Wayfinding**

10.2 Identification of floor levels and sections is of special importance for larger car parks. In smaller car parks it is usually easier to find the way in the car park.

## **11. Energy & Environment**

11.2 Refers to switchable light, depending on movements in the car park or in sections of the car park

11.3 Refers to light adaption to outside light conditions, i.e. different light levels at the entry/exit at daylight or night situations

11.6 Refers to use of semi clean water (not drinking quality) for cleaning purposes etc.

## **12. Bonus/Minus points**

Extra bonus and/or minus points can be awarded for issues not covered in the chapters before.