



Layout Toolkit for exercise yards in penal institutions

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This document was drafted for and translated in English by
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Introduction

From April 2018, the Environmental Psychologist has done research into spatial users' needs in exercise yards of penal institutions (PIs) at PI Middelburg and PI Heerhugowaard. In this research, the spatial needs of inmates and ward staff were examined, supplemented by scientific knowledge of the influence of the environment on behaviour. We had also done this earlier at PI Krimpen aan den IJssel. Based on the needs emerging from this research, we have conducted a study of materials. We have identified suitable materials that can be used to allow the layout of the exercise yards to be as well in line as possible with the needs of inmates and ward staff.

This Layout Toolkit is the result of this study. It describes the broad guidelines of the different layout elements in the exercise yards that help to create a positive living and working climate. DJI can use this document in the future as a basis for reorganising different exercise yards in penal institutions in the Netherlands. Ideally, this document will be used in combination with the needs report for exercise yards of PIs and the document containing draft designs of the exercise yards units at PI Heerhugowaard and PI Middelburg.

Structure of the document

The report comprises two chapters:

- Chapter 1 describes the general starting points for advice on materials
- Chapter 2 describes the material options for each layout element

The pages containing material options consist of reference illustrations with a description of the main aspects that need to be reflected in the final choice of materials. The reference illustrations show which appearance we think should be approached. For the purchase and development of the materials, DJI can cooperate with its own partners.

Ch 1. Starting points for advice on materials

At one exercise yard, more of an accent may be placed on sport and games, and at another somewhat more on rest and stress reduction by way of nature. The general needs and wishes regarding exercise yards in penal institutions are nonetheless largely the same.

General starting points:

- More and varied fitness equipment
- Walking and/or running track
- Combination sports field for football, basketball and/or volleyball
- Gaming tables
- Experience of nature by a variety of trees, plants and flowers, view of greenery, organic design
- Friendly appearance by way of different pavement, furniture made of natural materials, colour or art
- Separation/zoning of active and quiet activities
- Protection against weather conditions for both prison officers and inmates
- Sufficient seating possibilities for inmates that facilitate contact as well as seclusion.
- Good sightlines across the entire exercise yard and particularly from the prison officers' posts
- Comfortable seating possibilities for both prison officers and inmates
- Good lighting

General requirements set by DJI

- Resistant to wilful damage
- Maintenance friendly
- Minimum possibility to hide contraband
- No escape possibilities
- As few obstacles as possible for prison guards

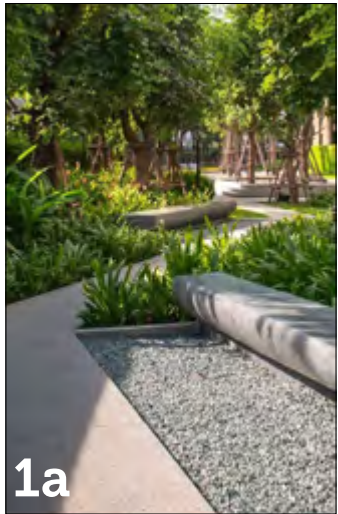
Additional needs for specific exercise yards

- Telephone booths
- Cooling
- Cleaning of exercise yards
- Screened-off passageways
- Removing gravel from or adding gravel to the exercise yard
- Toilet or urinal in the exercise yard

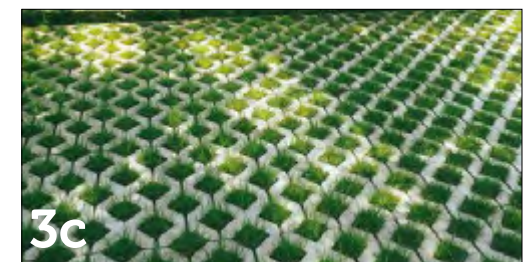
Ch 2. Proposals for materials

Pavement

1. Make room in the exercise yard for natural greenery (grass, plants) in order to achieve a natural appearance and a stress-reducing effect in the exercise yard. Variation is important to achieve a stress-reducing effect. This can be achieved for example with winding paths along low cover (a), undulating shapes (b) or different heights (c).



2. Different types of pavement (a, b) and round shapes (c) in the pavement give a more playful, friendlier and more organic appearance.
3. With grass concrete tiles (a, b, c), a natural appearance is combined with a heavy loadability of the subgrade. This is especially important for example for heavy equipment used for maintenance of the building.



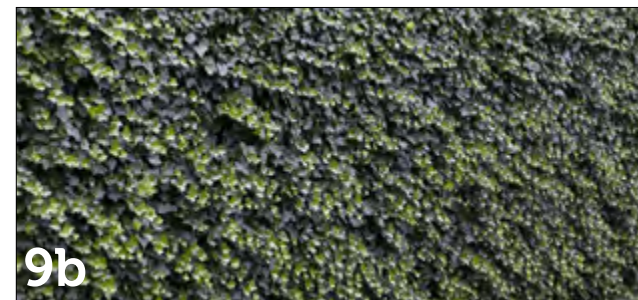
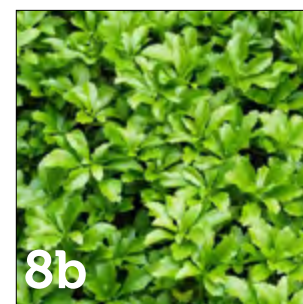
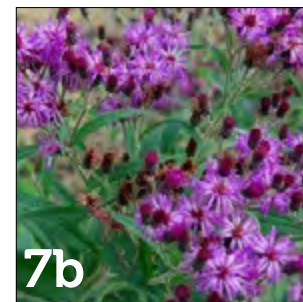
Outdoor plants (1)

4. Provide for diversity in plant species and heights. For sunny parts, for example grasses (a) and flowers (b) are suitable, and for shaded parts hostas (c) and ferns (d).
5. For the taller plants, choose 'airy' species such as grasses, and plants standing at a considerable difference from one another, so that they impede the sight of the prison officers as little as possible.
6. Add natural fragrance by planting fragrant flowers such as lavender (a) or herbs such as mint (b) and rosemary (c).



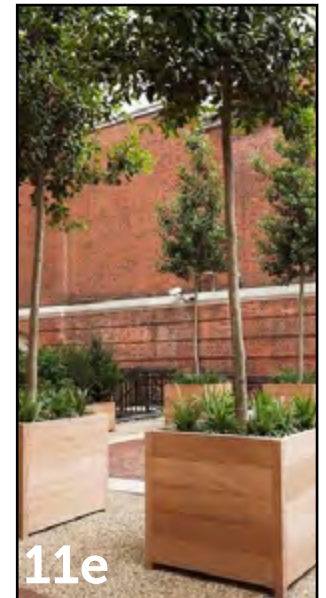
Outdoor plants (2)

7. Make the seasons visible by adding perennial summer bloomers such as Foamflower (Tiarella) (a) or Vernonia (b), and autumn colouring plants such as Japanese Maple (c) or Liquidambar (d). These also add colour to the exercise yard.
8. Combine these with perennial green plants such as perennial shrubs, for example a Photinia (a) or Pachysandra (b) that remain low, so that the exercise yard will remain green in the winter as well.
9. Climbing plants along walls, fences and/or passageways add a green view and lessen the chance of conflicts with inmates walking by. Choose species that remain green in the winter, such as Tuscan Jasmine (a) or Hedera (b).
10. Wall paintings of natural distant views can contribute to the stress-reducing effect of the exercise yard, as they enable the inmates to 'escape psychologically' for a moment from day-to-day prison life.



Zoning elements

11. Use plants and planters made of concrete (a, b), bricks (c), corten steel (d) or wood (e) to create natural partitions between active and quiet zones (f) or back support for seats (g). These elements can also be used to add colour to the exercise yard (h). The edge of the pots can be designed in such a way that it can serve as a seat (b). It is a pleasant seat because the tree provides some form of back support.



Furniture (1)

12. With movable chairs, inmates can create their own more secluded places or create group arrangements, and choose whether they want to sit in the sun or shade. If these are constructed in varnished steel they can add colour to the exercise yard.
13. With different models, inmates will have a choice between a relaxed or active posture.
14. Place sufficient fixed benches with back support in different arrangements (a, b, c, d).



Furniture (2)

15. Wooden furniture (a, b) provides for a natural and friendly appearance. Use for example treated hardwood (untreated wood does not dry fast enough, which is annoying to inmates who cannot sit after a rain shower without getting wet). All furniture is constructed in variations with small hardwood slats/beams. The idea behind this is that the narrow slats see to it that it is less easy for inmates to scratch large texts in the benches and the benches therefore stay attractive longer. Practice must show whether this is effective.

16. Place benches with back support in several places in the centre, where inmates can sit on both sides and can choose which view they have.

17. Give the furniture rounded and undulating shapes (a, b, c) and combine it with plants (d) for a friendlier and more organic appearance.

18. If the use of wood is very undesirable in the exercise yard, benches can possibly be made of metal (a) or recycled plastic (d). In that case use colour and/or rounded shapes.



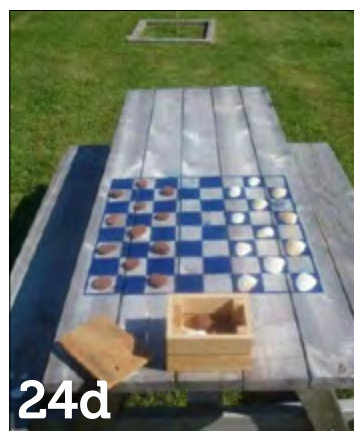
Roofs

19. Make large roofs with 2 or 3 transparent plexiglass walls so that inmates can look in the distance and feel less 'incarcerated'. The frame can be made of wood (a, b) as well as metal (c). Wood provides for a more natural, less hard appearance. It is important that the walls do not contain cracks, so that the wind cannot blow under them. In placing walls, take account of the dominant wind direction (southwest).
20. Give the shelter for staff the same appearance and qualities as the roofs for inmates. This shelter should be suitable for 2-4 persons, so that the prison officers can sit together in it. It can also be used for (personal, informal) conversations between prison officers and inmates. The shelter should have a bench with back support.
21. Possibly make the roof and the wall on the sun side of opaque material to provide better shade in the summer.
22. Provide for a green roof for insulation and a natural appearance.
23. Concrete benches under the roofs of the inmates provide a bit of extra comfort without too much loss of space.



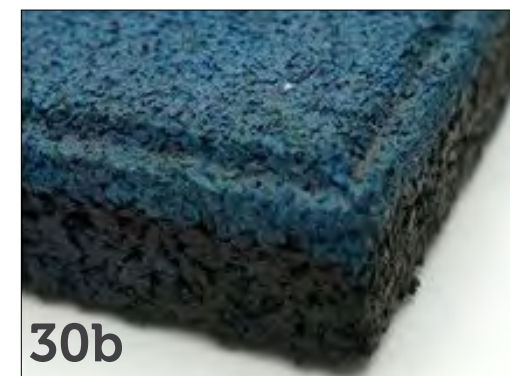
Facilities for groups/games

24. Fixed tables with seats on 4 sides (a, b) or picnic benches (c) are also suitable for card games. Choose treated hardwood to give the tables a more natural, warmer appearance. Place some of these tables under a roof, where games can also be played in bad weather. A checkerboard or chessboard can also be integrated (d).
25. Should it be judged that functionality may be at the expense of a pleasant appearance, picnic tables of perforated steel (a, b) can also be used. This makes it more difficult to write on/scratch the tables. Tables made of perforated steel also dry fast. This is particularly nice for people who want to play cards on them. Other options are picnic benches made of recycled plastic (c) or concrete/stone, whether or not in combination with a metal top.



Facilities for sports/play

26. Place robust fitness machines for a variety of muscle groups and/or with cardio devices, ideally with adjustable weights that cannot be removed from the machines (for example 'Professional SportPoint' by Denfit in a special prison version).
27. 'Standard' fitness machines can be supplemented by several street workout machines for a freer and more playful manner of training.
28. If the fitness machines are coated with a colour, they also add a colour element to the exercise yard.
29. Combination field for football, basketball and volleyball. During the year, the inmates can practise different ball sports on a field of approximately 7 by 15 metres. Separated by a metal fence, approximately 1 metre high on the long side and approximately 3.5 metres high on the short side.
30. Rubber granulate walking track. A walking/cinder track of one or a few tracks of cushioning material (a, b) invites movement, adds colour and reduces the chance of injuries.



Cooling

31. Place an outside tap (a) or water fountain for drinking and cooling.

Calming element

32. A water element resistant to wilful damage such as a fountain made of a millstone adds a naturally calming element to the exercise yard.

Telephone

33. In some PIs, an additional possibility to make phone calls is desired. In that case, place at least 2 telephone booths in each exercise yard.

Toilet/urinal

34. Consider whether it is necessary and possible to place an outdoor toilet or urinal.



Vegetable garden

35. Especially for long-term inmates, for example a vegetable garden (a) or keeping several animals (b) on the exercise yard can be a valuable daytime activity

Lighting

36. The lighting should be in line with the natural design of the rest of the exercise yard, because the design refers to nature. For example lampposts that are reminiscent of reeds or grass culms (a, b, c)



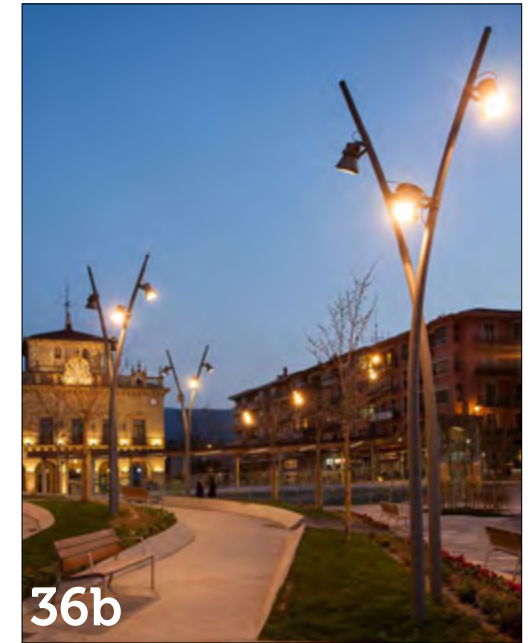
35a



35b



36a



36b



36c



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Building user experience

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