

Accessibility in the Fortress of São José da Ponta Grossa - Brazil

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Abstract. This paper summarizes a study of the accessibility conditions held in the Fortress of São José da Ponta Grossa (Florianópolis, SC, Brazil), in early 2010, where the goals were analyze the components of accessibility and identify possible solutions to the problems found there. Were used several methods, that complement one with others, to confirm the need for interventions in the fortress and helps the identification of barriers and to making recommendations.

Keywords: accessibility, historical heritage, Fortress of São José da Ponta Grossa

1. Introduction

As being a set of buildings listed as National Artistic Heritage since 1938 by the Institute of Historic and Artistic National (IPHAN) and restored from 1991 by the Federal University of Santa Catarina (UFSC), was investigated the spatial accessibility conditions offered to visitors of the Fortress of São José da Ponta Grossa, in order to know the characteristics of the buildings, identify the existing architectural barriers and develop a route that offers better access to the Fortress. The study is justified by the fact that the removal of barriers provides social inclusion, attracting more tourists, benefiting many sectors of Florianópolis, ensuring citizens' rights by continuing cultural events, recognizing the contribution of forming groups of Brazilian society by stimulating historical and perpetuating the cultural identity of the local community (see Picture 1)



Picture 1
Traditional Lacemaker

2. Methods and results

It was used the accompanied walk method, spreadsheets accessibility evaluation of the Public Ministry (SC), informal interviews with members of the UFSC and IPHAN, obtaining information that contributed to the effectiveness of the research. It was noted that the historic site does not provide satisfactory access, demonstrating critical issues related to communication, displacement, spatial orien-

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tation and use. Analyzing the components of accessibility individually, was found that: in the communication, there is no appropriate support for information and assistive technology equipment; the use, positively exceeded expectations despite the lack of equipment such as telephones, adapted water fountains, primarily, handrails and guardrails; the displacement, was impaired due to lack of continuity, comfort and safety - a reflection of uneven sidewalks, ramps too steep, slippery floors, lack of alternative systems of displacement,

such as elevators and etc.; the spatial orientation is insufficient, especially regarding lighting and signaling, but through the characteristics of the environments and users' attention, it is possible to identify where we are, what we can do and where to go. From the information collected was elaborated a sketch of the fortress, containing components of spatial accessibility, and recommendations to make the site accessible, as is observed in the following table (Table 1).

Table 1

Recommendations to make the fortress accessible

Site	Recommendation
Recreational Area/ Rest Area	Build nearby the walls, a plaza with street furniture appropriate for the rest and contemplation, as there should be in the gazebo (a place that needs revitalization) and near the ramps. Installing an elevator in one of the corners of the wall, behind the house of the commander.
Bathrooms	Near the playground, at the courtyard of the Escola do Mar (next to the parking lot) and adequacy of the existing bathroom at the house of the commander, as the elimination of the step of the entry, the inadequate toilet seat and faucet.
Sidewalks	With 1.60 m width, minimum height of 2.10 m, anti-slip floor, firm, leveled and stable, directional track or tactile floor installed in order that does not harm the displacement of a person in a wheelchair, from the Escola do Mar to the area surrounding the fortress, maintaining the same pattern and colors of material, preferably concrete or similar. Inside the Fortress should be removable wooden decks and matting, however, maintaining the functionality of the outside sidewalks and allowing the use of electric vehicles to transport people with mobility restrictions.
High tracks for pedestrians	In the easements of José C. de Oliveira and of Carioca, and nearby to area to maneuver.
Guardrails and handrails	Essential items on all ramps and stairs, which can be attached to the ground so that they function as removable elements, if necessary.
Lighting	In sufficient quantity, with photovoltaic sensors, for ensuring the safety and comfort of users, including the employees.
New route	Smoother ramps and rest areas, floor safe and better oriented, keeping the natural difference in levels and expanding the rest areas.
Paving	Of the boarding and landing area, with the creation of vacancies for people with restricted mobility, with minimum of four vacancy (two in the area of boarding and landing and two at the Escola do Mar)
Ramps of wood or metal	To assist in the transposition of the stairs located inside the fortress and are removable.
Signs	Appropriate signs (pictorial, tactile and sonorous) and tactile floor in the ramps and stairs.



Picture 2
Aerial view of the Fortress of São José da Ponta Grossa

3. Final Considerations

However, it is believed that the solution in the medium to long term, to the problems of accessibility is in the development and training of professionals who think about the key issues for our society since the design stage, through implementation and supervision, until the evaluation of use, for the technique and specifications in agreement to be used.

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