

Abstract

The population in Indonesia is recorded at the Central Statistics Agency (BPS) as having a population of 27,536 million in 2022, which includes 17.5 million people with disabilities. According to The Disability Services Act in 1993, disability is a person's limitations both physically and mentally which limits movement to interact. Brakes are useful to be able to slow down or stop the movement of the wheels. When the movement of the wheels slows down, the movement of the vehicle will automatically slow down. The brake system in the wheelchair cannot hold the wheelchair in a certain tilt position. In carrying out accessibility, it is not only influenced by infrastructure factors, but also environmental factors such as residences that are at an altitude where the place has uphill access and long. So from these problems, a study was conducted which aimed to help facilitate accessibility by persons with physical disabilities who use manual wheelchairs independently. The methods used in this study include interviews, observation, literature studies, purposive sampling, and design thinking.

Keywords: *Physical Disability, Accessibility, Environment, Manual Wheelchair, Brakes*