

ABSTRACT

The city of Bandung has a university that has been attracted by students from all over Indonesia. Some of the favorite universities in the city of Bandung are Institute of Technology Bandung, Padjadjaran University, University of Education of Indonesia, Telkom University, Parahayangan Catholic Univeristy, Maranatha Christian University, Islamic University Negeri Bandung, Bandung State Polytechnic, Institute of Internal Governance, social Welfare high school and many other universities in Bandung. Thus each year the city of Bandung visited by newcomers from all over Indonesia to continue their studies in the city of Bandung.

Facilities provided by the University to assist the region's students by providing dormitory facilities. However, the many dormitories in the city of Bandung that do not have elevator facilities but the average dorm in the city of Bandung has 3-5 floors, it will be very difficult to move the goods. In case studies at Telkom University dormitories who have a certain period to enter and exit the dorm, which is the first 1 year compulsory dorm and the next year should be out of the hostel. Any transfer of big items such as suitcases, large bags, gallons of water, and other dormitory occupants items often experience pain in some parts of the body because it carries considerable weight in a sloping position or climbing stairs.

From these problems researchers try to find a solution of problems that occur during the transfer of heavy goods through stairs so that the transfer process is more effective and efficient. One of them is the redesign of the ladder trolley in accordance with the ergonomics of Indonesian society. In addition it takes innovation on the size and also the shape of the trolley wheels. This innovation is suggested based on the results of the study of the ergonomics of Indonesian society.

Keywords: *Trolley stairs, ergonomics, handles, dormitory*