STRENGTH OF THE CORNER JOINTS OF THE WINDOW FRAME

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ABSTRACT

The window as a product used in construction aims to provide natural light and the possibility for ventilation in the building where it is placed but at the same time to protect the room from external influences such as wind and rain and to prevent uncontrolled cooling or heating of the building in which it is built in. Given the purpose, a quality window is one that protects against air permeability, water permeability and provide wind resistance. The window is a complex product that is composed of different parts that can be made of different materials. This research is focused on the area of frame joining and joint strength. This research will cover windows made from the same PVC profile but manufactured in different production facilities. The windows will be measured for air permeability, water permeability and wind resistance, and corner samples will be taken afterwards. The samples are prepared according to the standard EN 514:2018 Plastics - Poly (vinyl chloride) (PVC) based profiles - Determination of the strength of welded corners and T-joints.

Keywords: construction carpentry, window, air permeability, water permeability, wind resistance, PVC profiles.