

# Example of engineering report

[Environment](#), [Water](#)



This paper gives a report on the experiment performed on the deformation of bars under bending. During the experiment, the deflection of bars was observed when external pressure was exerted on them. The data obtained represented the quality of the bars which were used in the experiment. Hence, it can be used in determining the quality of their work as recommended. The production of quality work can be of a great benefit to all the users of these bars. Meaning, such experiments should be conducted to gauge and determine their performance. Only the high performing bars should be used.

## **Pericopsielata**

This is one of the major types of lumber which is used projects that require water contacts. It should be untreated for it to be in a position of performing its duties with optimal performance. One of its major qualities is that it is acid resistant. Besides, it has a brown color with 12% moisture content and a density of 770 kg/m<sup>3</sup>. This enables it to be effective for use in exterior especially given that it does not require the use of preservatives. Moreover, it is suitable for making garden furniture, decking, chemical tanks, and naval constructions and in joinery (Davidge, R. W., 2006).

Because of these properties, pericopsielata has a good nail holding capacity. Hence, it is easier to be planned, sawn and finished. This explains why it is highly recommended to be used in the construction work. Its strength makes it to possess a high degree of decay and wear resistibility. This implies that it should be used in performing such functions because it can turn out to produce quality and durable projects which can last longer than any other.

## **African padauk**

This type of lumber is suitable for use in water contact projects. Just like the pericopsielata lumber, it is used untreated. At the same time, it does not require the use of preservatives particularly when used for the construction of exterior projects. Some of the areas in which it is majorly used include naval construction, decking and joinery. It is a highly flexible lumber which can perform dynamic roles in the above mentioned areas. Therefore, it is crucial to make right decisions on how it should be used in order to ensure that it does not go to waste.

It has a moisture content of 12% with a total density of 737 kg/m<sup>3</sup>. It can perform excellently because of its ability to resist compression strength of up to 62 Mpa. Hence, its modulus rupture is estimated to be at 106 Mpa making it to demonstrate a good holding capacity. As a result, it is easier to plan, glue and saw. It should be chosen for the recommended and appropriate projects. After all, it has a very high level of decay and wears resistance. It can generate a high quality work if used for the right purpose. Therefore, constructors should make a right choice to ensure that the intended project is completed without any problem.

## **Iroko**

Iroko is a type of lumber which is used for permanent in ground contact projects. However, when using it, it is recommended that it should not be untreated. This makes it differ from the above discussed lumber types which need untreatment when getting used in their respective appropriate projects. However, when using it for exterior projects, it does not need the use of preservatives. This is recommended when using it in naval

construction, joinery, boardwalk, chemical tanks, decking, chemical tanks, boardwalk and beams. It has a moisture content of 12% with a golden brown color. Besides, it has a density of 673 kg/m<sup>3</sup> and a compression Strength of up to 57 Mpa. This makes it have a modulus of elasticity and modulus capacity of 11, 200 Mpa and 80 Mpa respectively (O'Conner, J., 2010).

Because of these qualities, Iroko has become a very good lumber to be used in the construction of the relevant projects. After all, it has a good nail holding and easier sawing and planning potentials. Moreover, it has a very high degree of decay and wears resistance. Just like the other types of lumber, iroko is a good one to be used in the construction work. Its resistance is good making it stand a better chance of producing high quality work which can last for a very long time.

In conclusion, I would like report that these bars generated different results depending on their qualities. Hence, when the external force was exerted on them, they emerged to be efficient in their products. Meaning, a right choice should be made to ensure that the best lumer is selected. This will enable the construction work to be effectively done without any challenge. Only quality bars which can produce durable construction work should be used by the constructors. However, it is upon the engineers to conduct a lot of research so as to come up with new inventions and innovations which can be used to make work of engineers better.

## **References**

Davidge, R. W. (2006) Mechanical Behavior of Ceramics. Cambridge Solid State Science Series.

O'Conner, J. (2010). A Synthesis of Research on Wood Products and Greenhouse Gas Impacts.

FPIinnovations.