ABSTRACT

Nowadays, building industry offers a wide range of frameworks to choose in building sites. Based on the experience and the knowledge, is very important to choose the best option of framework in keeping with its building site in order to get good results at the end of the process.

In this way, this dissertation is based on the analysis and the evaluation of different kind of frameworks with lengths ranged from 5 to 7 metres. We have considered to this evaluation several economic costs taking into account direct, indirect and financial costs.

These different frameworks are apply to two different kind of building sites; the first one, situated on Av. Portar de l'Àngel of Barcelona and the second one, in Gandía. In addition to this, we analyze other outstanding factors, like social and environmental ones, to make our final results complete. Our last objective is to find the most feasible option, adjusted to our necessities.

First of all, we explain the main meaning of framework with its characteristics and functions. Then, we concentrate our attention to each kind of framework we have considered more suitable for the evaluation. In one hand, we make the economic analysis : we calculate the direct cost of each solution and besides this, we consider the deadlines and their influence on them. At last, we analyze the repercussion of the reduced deadlines in prefabricated.

On the other hand, we evaluate the social and environmental factors. From each option, we have chosen many indicators with a strong influence in the surroundings of building site.

Finally, we use the AHP method to find the weight of each indicator and then, we apply an evaluation model to obtain the most appropriated solution.

Our final objective is to choose the best solution depending on our priorities and determining factors. To sum up, we want to emphasize the importance of doing a previous study about our particular situation to get good results in the future.