# ESCOMBLOCK (Block Based on Debris)

Rodríguez Cuevas, Yosselin

The debris is a waste material that lacks regularization in practically the whole country; the objective of the project is to design a piece of masonry that poses resistance and adhesion, as for firm firmness in the climatic conditions of Hermosillo, Sonora (heat, exposure to water, without collapse). World reference for innovation design; exists in Colombia a piece of low cost masonry, on the other hand in the United Kingdom it is investigated the addition debris in the amalgam of materials. In Mexico there is only one waste recycling company that sells as low cost material for land leveling. ESCOMBLOCK is proposed as a theoretical reference, which allows to verify the technical viability of the use of the debris. Regarding the tests performed on the mortar; So far the results obtained on the basis of NMX-C-061-ONNCCE_2001 were as follows: 7 days 59 f 'c kg / cm2, 14 days 67.45 f'c / cm2 and at 28 days 150 f'c kg / cm2 . On the other hand in the piece ESCOMBLOCK obtained 127 f'c kg / cm2. Thermal conductivity tests were also carried out, resulting in a result of 0.25 ° cm2 / w compared to the traditional concrete block of 0.63 ° cm2 / w.

**Awards Won:**