

	PROTOCOLO DE GENERACIÓN DE PUBLICACIONES EN GTED-UC REGISTRO DE PUBLICACIÓN	Fecha: 19-06-2013
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TÍTULO ARTÍCULO (En Inglés)	MECHANICAL BEHAVIOR OF ANCHORAGES FOR REINFORCING MARINE STONE STRUCTURES SUBJECTED TO SEA WAVES		
TÍTULO ARTÍCULO (En Español)	COMPORTAMIENTO MECÁNICO DE ANCLAJES PARA REFUERZO DE ESTRUCTURAS DE PIEDRA MARINAS SOMETIDAS A LA ACCIÓN DEL OLEAJE		
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ABSTRACT (En inglés)

This study shows the results of a research project conducted to study the technical feasibility of the reconstruction of a real marine structure of natural rock. The experimental campaign enables the analysis of the behavior of stainless steel anchorages adhered with polymeric adhesives for strengthening the stone structure. To this end, mechanical tests were carried out to characterize the adhesive-steel-stone system and to verify the static effectiveness of anchorages, both in situations of nonimmersion and immersion in seawater. Tensile tests in anchorages under cyclic loading were performed in addition to other trials to estimate the bond stress under shear of epoxy polymer adhesive with the stone substrate and bending tests to evaluate the performance of stones reinforced with epoxy polymer mortar and stainless steel. The results obtained provide for an advance in the difficult field of the selection of materials potentially applied to the reinforcement of structures subjected to complex and varied mechanical actions, particularly in highly aggressive environments, such as seawater.

Keywords (En inglés)

Adhesive bonding; Anchorage; Fatigue; Marine environment; Mechanical characterization; Polymer mortar; Reinforcement; Reinforcing stainless steel; Stone structure

RESUMEN (En español)***Palabras clave (Español)***

* Caso de estar publicado en revista de lengua española.