

Session ID: ASR-6

Title

REPAIR & STRENGTHENING OF RC STRUCTURES: BEHAVIOUR, MODELLING AND DESIGN OF INTERFACES

Convenors

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Description

Interfaces occur in repaired/strengthened RC members between existing and added concrete layer or structural element. Those interfaces between concretes cast at different times are requested to ensure monolithic behaviour of the composite member (e.g., a jacketed column, an added shear wall and the surrounding existing RC elements, etc.). This Session presents experimental results related to the behaviour (monotonic and, mainly, cyclic) of interfaces, including the effect of influencing parameters (e.g., roughness, embedment length, reinforcing percentage, type of interface reinforcement, etc.), the development of models (design models included), as well as experimental and numerical data on the behaviour of interfaces within repaired/strengthened members or subassemblies. Comparisons between experimental results and current design Codes, proposals for Code improvements are also presented.

Invited Speakers

S. Cattaneo ², J. Silva ³, N. Randl ⁴, T. Tassios ¹, P. Crespi ², G. Thermou ⁵

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