

عنوان مقاله:

THE PERFORMANCE OF INTEGRAL AND SEMI INTEGRAL PRE-TENSIONED CONCRETE BRIDGES UNDER THERMAL LOADS DEPENDING ON VARIOUS DECK TO PIER CONNECTIONS

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خلاصه مقاله:

The usage of integral bridges due to their considerable benefits (including lower cost, faster construction and better seismic performance) compared to traditional bridges has become more popular during recent years. However, limited studies have been carried out on integral and semi-integral bridge behavior, hence there are no specific and suitable indices for the design of these bridges. This study aimed to investigate the effects of deck to abutment continuous connection in integral and semi -integral types on the deformation of abutments. Also, it induces pressure in abutment backfill soil in different deck to middle pier connections. Results show the better soil-structure interaction behavior of semi-integral bridges compared to integral bridges, due to the lower transmission of force from abutment to deck.

کلمات کلیدی:

Integral bridges, Semi-integral bridges, Soil-Structure interaction, Thermal load

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