

Method for Repairing Track Slabs with Frost Damage

Takatada TAKAHASHI Masaru HOJO Narita TAKAHASHI

We have clarified the deterioration mechanism of cross-sectional repair sections in track slabs laid in open sections in cold regions. We also evaluated the residual strength of rail fastening systems on track slabs simulating frost damage. Furthermore, we confirmed the effectiveness of silane/siloxane type surface penetrants in suppressing the progression of frost damage by freezing and thawing tests. Based on these results, we proposed a method for repairing track slabs laid in open sections in cold regions.