

### **Suggestion of Maintenance Level for Deterioration of Cement Asphalt Mortar of Slab-Track**

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Frost damage occurs in the cement asphalt mortar (hereinafter referred to as the CA mortar) for slab-track laid in some sections of the Shinkansen. A repair of CA mortars is performed when the depth of deterioration has reached a criterion value. This criterion value has been decided so that a stress generated in the track-slab should be smaller than the permissible stress. On the other hand, a stress generated in the CA mortar will increase by the expansion of the deterioration range. Therefore the dynamic displacement of the track-slab may increase by progress of a plastic deformation. Therefore, in order to establish a criterion value intended for the slab-track of various shapes, it is necessary to examine the significant factor of the track-slabs and the CA mortar. So, we investigated for a cracking strength of the track-slab and compressive fatigue strength of the CA mortar, and based on the investigation results, we proposed a new criterion value for CA mortar.