

The Design Method of Temperature Cracking of Cut and Cover Tunnel

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In the performance verification design method, it is assumed that there is no occurrence of initial cracks that affect the required performance of the structure. However, cut and cover tunnels have sometimes thermal cracks. These cracks are caused by temperature stress due to hydration of cement during construction work and large and wide cracks derived from them may cause leakage at such cracked place. So, they may cause problems for maintenance of cutting tunnel. Therefore, in this paper, by comparing the site data with the analysis data, we confirmed the validity of thermal stress analysis, and also by the parameter analysis, we showed the occurrence tendency of thermal cracks in the cutting tunnel.