

**Reducing Effect of Absorbing Materials Covering the Inner Walls of
the Tunnel Entrance Hood on Noise from a Tunnel Portal of Shinkansen**

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Railway noise measured at points near a tunnel portal of Shinkansen consists of the noise from the tunnel portal generated while a train is running in the tunnel and the noise from the open section where the train is running. This leads to the increase of noise level compared with the usual case where the total length of the train is in an open section. The aim of this paper is to examine the reducing effect of absorbing materials covering the inner walls of the tunnel entrance hood on the noise from the tunnel portal by model acoustic experiments. Because the reducing effect observed by the model experiments is approximately consistent with that observed by a field test on a Shinkansen line, it has been confirmed that the model experiment is valid in predicting Shinkansen noise.