

## VIBRATION ASSESSMENT OF SLEEPER SOFFIT PADS MONUMENT LANE TUNNEL: BIRMINGHAM

This report describes the use of a special track form to reduce ground borne vibrations.

Due to the building of the Birmingham Convention Centre above Monument Lane Tunnel, a vibration isolated track form was specified to minimise the rail vibration input to the concert hall above.

The vibration isolated track was installed with a resilient layer, known as a sleeper soffit pad, fixed to the underside of the sleeper. This system was previously tested by BR Research on a section of line at Mold Junction near Chester.

The relaying of the tracks in Monument Lane provided an opportunity for an accurate measurement of the vibration isolation achieved by this system. The results agree very well with data (for an overground railway) obtained at Mold Junction.