

Sonneville AG
Industriezone 2 | CH-3225 Müntschemier

Tel. +41 32 312 98 50 | Fax +41 32 312 98 88
mail@sonneville.com | www.sonneville.com

**LOW VIBRATION TRACK SYSTEM –
LVT**

Track Renewal – Block Replacement

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1. Special cavity LVT

Substitution of old wooden ties or blocks embedded in concrete with special cavity LVT supports:



Track geometry re-adjustment



Grout placement

Special cavity LVT supports, first installed on Amtrak in early 2000, were primarily designed to replace existing ties or blocks encased in concrete. Their relatively smaller size allows them to be retrofitted in the cavities left by the removed ties or blocks, adjusted and sealed in place with flowable cementitious grout. The trapezoidal shape of the concrete blocks, resilient pads and rubber boots equalizes the pressure per area on the field and gauge sides under combined vertical and lateral loads and further prevents long term migration towards the gauge side when the LVT supports are installed adjacent to an existing central trough. In the meantime these kind of supports have also been installed at New York City Transit and Metro Moscow.