

CDM

CDM-ISO-RAILPAD/STRIP

CDM designs and manufactures resilient railpads and railstrips to meet any performance requirements. Following are the standard basic types:

The CDM-ISO-SRP, or simple railpad is placed immediately under the rail.

- 1 CDM-ISO-SRP reduces vibrations generated by trams, trains, underground and cranes
- 2 Isolation improvements between 3 and 6 dBV
- 3 CDM-ISO-SRP can be designed to fit any rail type and fixing method
- 4 Easy to install under existing and new-built tracks
- 5 CDM-ISO-SRP increases the life of both rail and sleeper

The CDM-ISO-DPHI is a double flapped railpad. The flaps act as a sound-stop between railfoot and fastener and add damping, thus limiting the noise radiating length of the rail.

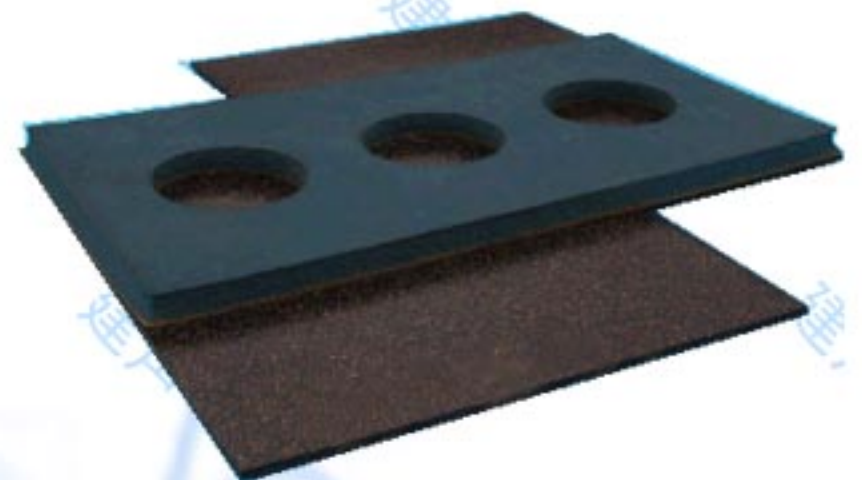
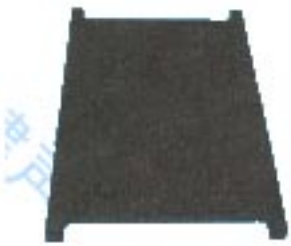
Extra advantages (with respect to CDM-ISO-SRP):

- 1 Improvements of up to 8dBV (insertion loss)
- 2 Reduction of reradiated noise
- 3 The CDM-ISO-DPHI railpad can be custommade to satisfy project requirements

The CDM-ISO-SRS or simple railstrip provides a continuous support for the rail, thereby resulting in significant reductions of the reradiated noise and reducing rail corrugation effects.

The pad consists of two components:

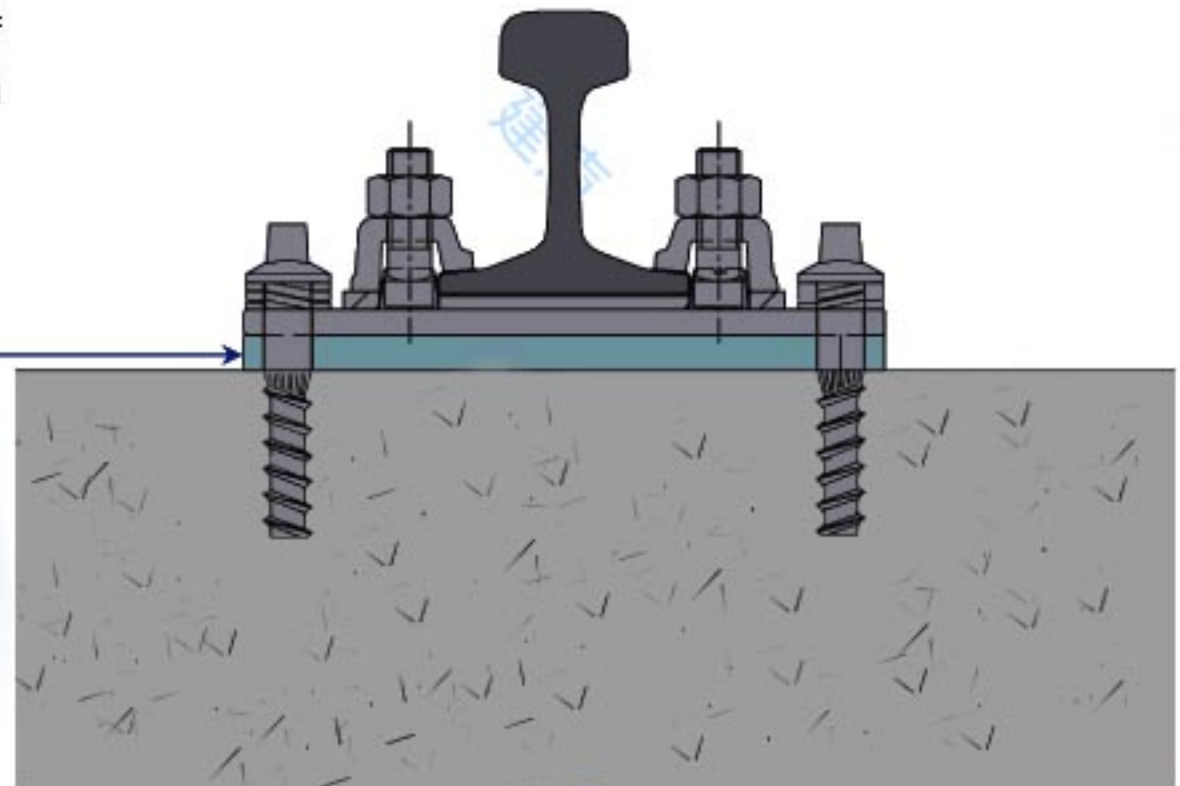
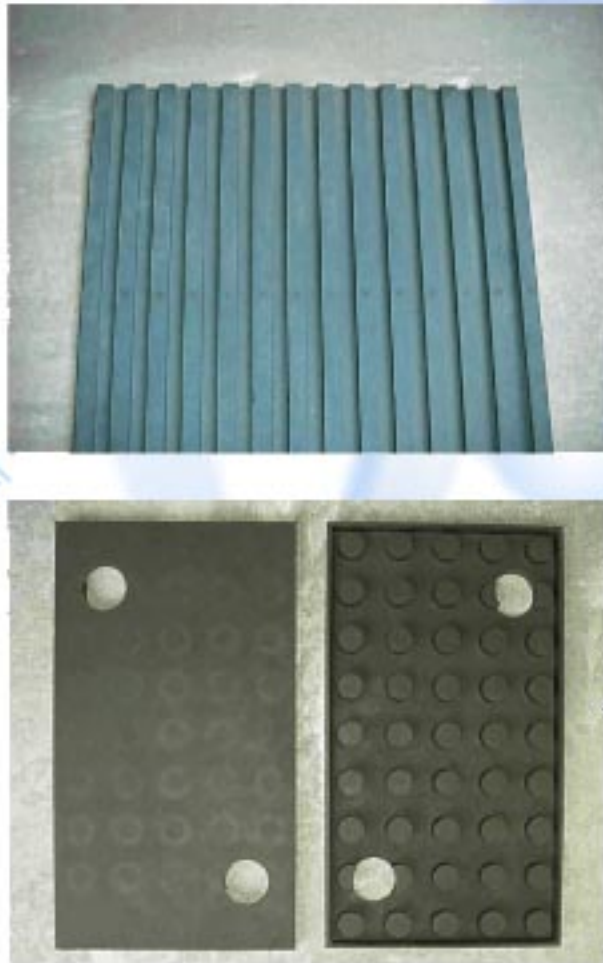
- 1 The flaps, made of a high-tensile compound
- 2 A high resilient pad



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CDM-ISO-UBP

The CDM-ISO-UBP Under-Baseplate-Pad is designed to reduce the transmission of vibration, generated by trams and trains, from the rail into the ground.



Components:

The type of high resilient material used, the size, shape, thickness and profile of the CDM-ISO-UBP Under-Baseplatepad is dependent on project specific requirements, such as dynamic to static stiffness ratio and maximum allowable deflection.

The fixings can be decoupled from the base-plate by means of an isolating washer.

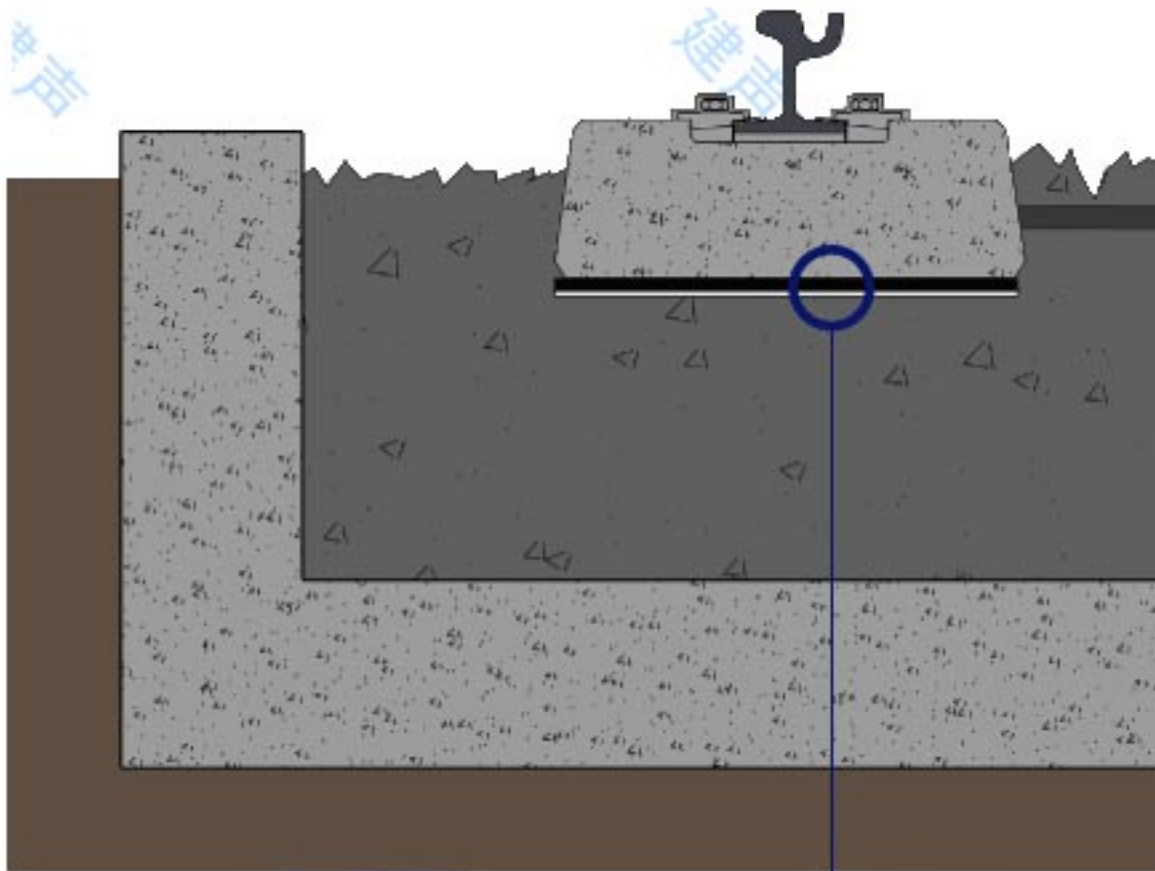
Advantages:

- 1 CDM will design the CDM-ISO-UBP Under-Baseplate-Pad to meet the requirements of each specific job
- 2 The CDM-ISO-UBP achieves isolation insertion losses of between 8 and 12 dBV
- 3 The use of CDM-ISO-UBP increases the life of the rail support structure
- 4 Straightforward installation

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CDM-ISO-USM

The CDM-ISO-USM Under-Sleeper-Mats are placed under the sleepers of an existing or newly built ballasted track, to ensure isolation against vibrations due to rolling stock, specially in the important frequency range (31.5-125 Hz).

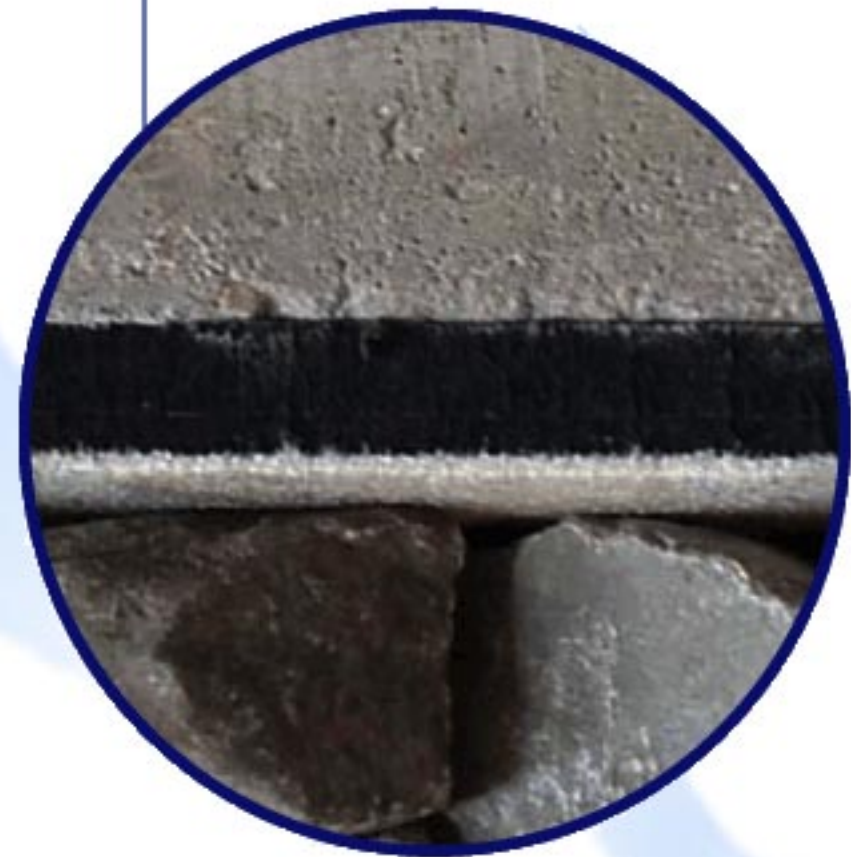


Advantages:

- 1 CDM will design CDM-ISO-USM Under-Sleeper-Mats to meet the specific requirements of each job
- 2 CDM-ISO-USM guarantees isolation improvements of between 10 and 15 dBV, when compared to the nonisolated track
- 3 CDM-ISO-USM is extremely easy to install
- 4 CDM-ISO-USM does not cause any additional airborne noise.

Components:

- 1 An isolation layer, selected from CDMs large range of materials, to fulfill the specific isolation needs of the project. This layer is glued to the underside of the sleeper
- 2 A protection layer, that ensures the protection of the isolation layer against the ballast. This layer is glued to the above mentioned
- 3 It is important to notice that the CDM-ISO-USM system can be custom made to meet the complexity of the situation



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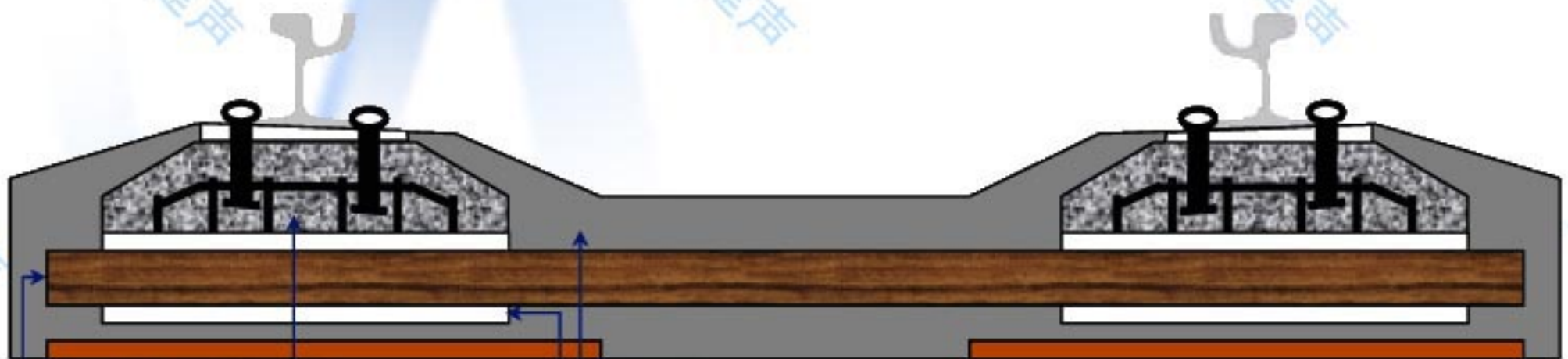
CDM-ISO-SILENTSLEEPER



The CDM-ISO-SILENTSLEEPER[®] is a new resilient sleeper designed to reduce the vibration transmission of rolling stock (trams and trains). The classic concrete sleeper is replaced by a flexible sleeper, which is designed to accommodate the large incident forces and also add a considerable amount of damping to the track.



Changeable geometry:
twin block



Design:

Reinforced Concrete platform
reinforcement welded on steel plates
high strength concrete
in compression when loaded

Steel plates
Bending stiffness under rail

Wooden beam

Recycled rubber mantle

PU-mortar under rail

Advantages:

1. The CDM-ISO-SILENTSLEEPER[®] system provides significantly better dynamic properties of the rail track in comparison to a traditional concrete
2. Changeable geometry, adaptable to the project specific requirements
3. Ballast is not required when using the CDM-ISOSILENTSLEEPER[®]
4. Particularly useful in bridges, tunnels, stations, slab track
5. The CDM-ISO-SILENTSLEEPER[®] reduces noise radiated from the track
6. Straightforward installation
7. The bearing structure is encapsulated making it last longer than traditional concrete sleepers