

KorFin® Sonic

Noise immission calculation in the overall model

KorFin® is a 5D platform with 3D real-time planning for road, rail, line and cable infrastructure. The platform provides a real-time environment for efficient generation of dynamic, spatial overall models for as-built data, integrated planning, visualization and coordination in applications with high model accuracy. KorFin® integrates GIS, construction process management (4D) and model-based cost calculation (5D).

KorFin® dynamically calculates, displays, and evaluates sound immissions directly in the overall model and makes them available for further workflow.

You can examine any number of variants in the current status and in the same project. During the immission calculation, the rule-compliant emissions are tracked in the real 3D model – consisting of all specialist objects and all specialist models. As a noise planner, you have extensive intervention options of the parameterization of emissions and immissions.

CALCULATION FOR ROAD AND RAIL

For railroad lines, you calculate the sound with the average level according to 16. BImSchV Anlage 2, Schall 03. The input parameters include additions and deductions for special nuisance effects, train speed and track conditions. For the calculation, you assign adjustable train configurations to the routes. The trains are composed with the corresponding train types in any length.

The intensity of road traffic noise is calculated according to RLS19 or RLS90. The emissions result from your set road conditions and the expected average daily traffic.

You define the setting for both rail and road on a range-by-range basis.

EVALUATION OF A CALCULATION

Your results of the sound immission calculation are displayed directly in the overall model. The calculated grid map as well as the limit value areas derived from it are modeled as areas and isophones according to the 16. BImSchV and DIN 18005. Of course, you can export this result as IFC.

In addition, you evaluate the affectedness in a development of the track or road or as a 2D map. In doing so, you determine the affectedness on a resident-specific basis using publicly available data and always on the basis of the current noise calculation. The analysis results in the calculation of a specific noise indicator.



Noise evaluation for rail, example project "Kassel Curve" near Vellmar



Noise evaluation for road, example project A1 Bremen near Hemeligen



Building-specific noise evaluation in 2D