The innovative noise calculation service for architects, industrial planners and environmental consultants
Modelling sound propagation outdoors is straightforward and easy to learn with noise3D™

Leveraging the 3D modelling application SketchUp® of Trimble Navigation you will create your acoustic model. It will be based on either a ground map in pixel format or a satellite map from Google Earth™ (Google Inc.). The latter can be imported including terrain by just a few mouse clicks. Then you will digitise the obstacles (buildings, screens, foliage, etc.). You will be provided with user-friendly tables for the input of the related acoustical data. In case you have an existing SketchUp model then you can add the acoustical data and use it for the calculation.

The entire process happens in 3D-Mode, you will always have a realistic presentation of your model in front of you. It will not be required to switch from a 2D- into a 3D-presentation and vice versa. As a consequence any geometric input errors will be spotted in process and can be corrected immediately. You will also have help screens, a detailed manual and the intuitive SketchUp Instructor capability.

Calculation of Sound Propagation:
The calculation of noise propagation is based on the international standards DIN ISO 9613-2 and ISO/TR 17534.

The Single Point Calculation can be performed for an unlimited number of receiver points. It generates understandable tables which also show the attenuation parameters like screening, ground absorption, reflection, etc.

In addition coloured noise maps can be generated and presented in the 3D graphics. In general the calculation should be performed frequency depending (in octaves). Should emission spectra not be available then single sound pressure values can be used in a major frequency of choice.

Modellelements

Free point source
Point source in front of building
Point source on top of roof
Line source (incl. moving sources, e.g. trucks)
Vertical area source
Horizontal area source
Building
Noise screen (also sloping)
Bridge
Foliage
Contour lines
Receiver point
Designated land use
Ground effects
Calculation area

Calculation

Reflection (to 3rd order)
Diffraction at barriers, lateral and above
Directivity
Automatic division of area sources and line sources, adaption to the terrain
Attenuation acc. to meteorology
Digital terrain
Consideration of exposure time
Treatment of noise reduction measures
Interpolation of grid noise maps

and many further functions.
Conformity

For noise3D we do have a **declaration of conformity** according to ISO/TR 17534 of Kramer Schalltechnik. noise3D is a complete package for the calculation of industrial and urban noise outdoors. An extension to include traffic noise is in preparation.

Installation

• You have to acquire a SketchUp® License for 3D modelling.
• We will provide the noise3D plug-in for SketchUp and the calculation engine.
• Operating System: Windows®

Pricing

Noise3D is available for rent at low cost (monthly or annual PayPal payment) or you can buy an unlimited license. Please see our web site noise3D.com for details.

Demoversion

When you download noise3D from our homepage then it will fully function in a demo mode. But the results from the calculation engine will be slightly falsified..
noise3D

3D calculation of sound propagation outdoors

Kramer Schalltechnik GmbH
Otto-von-Guericke-Straße 8
53757 Sankt Augustin, Germany
Tel +49-2241-25 773 0

www.noise3d.com info@noise3d.com

Handelsregister des Amtsgerichts Siegburg HRB 3289
Managing Directors: Jörn Latz, Darius Styra, Ralf Tölke

in Cooperation with
Sonja Christiansen Informatik GmbH