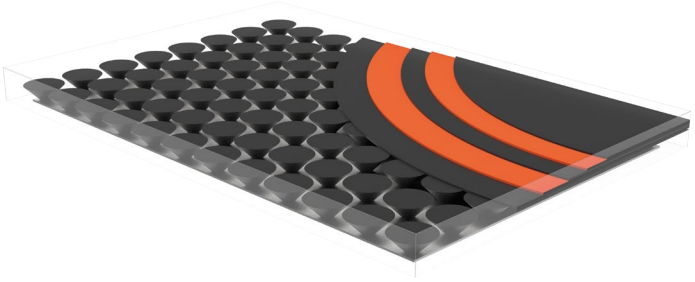
CALENBERG



CIMAX®
Vibration protection
for buildings in groundwater

A LISEGA Group Company

WITH CALENBERG

REDUCE VIBRATIONS

AND INCREASE LIVING COMFORT

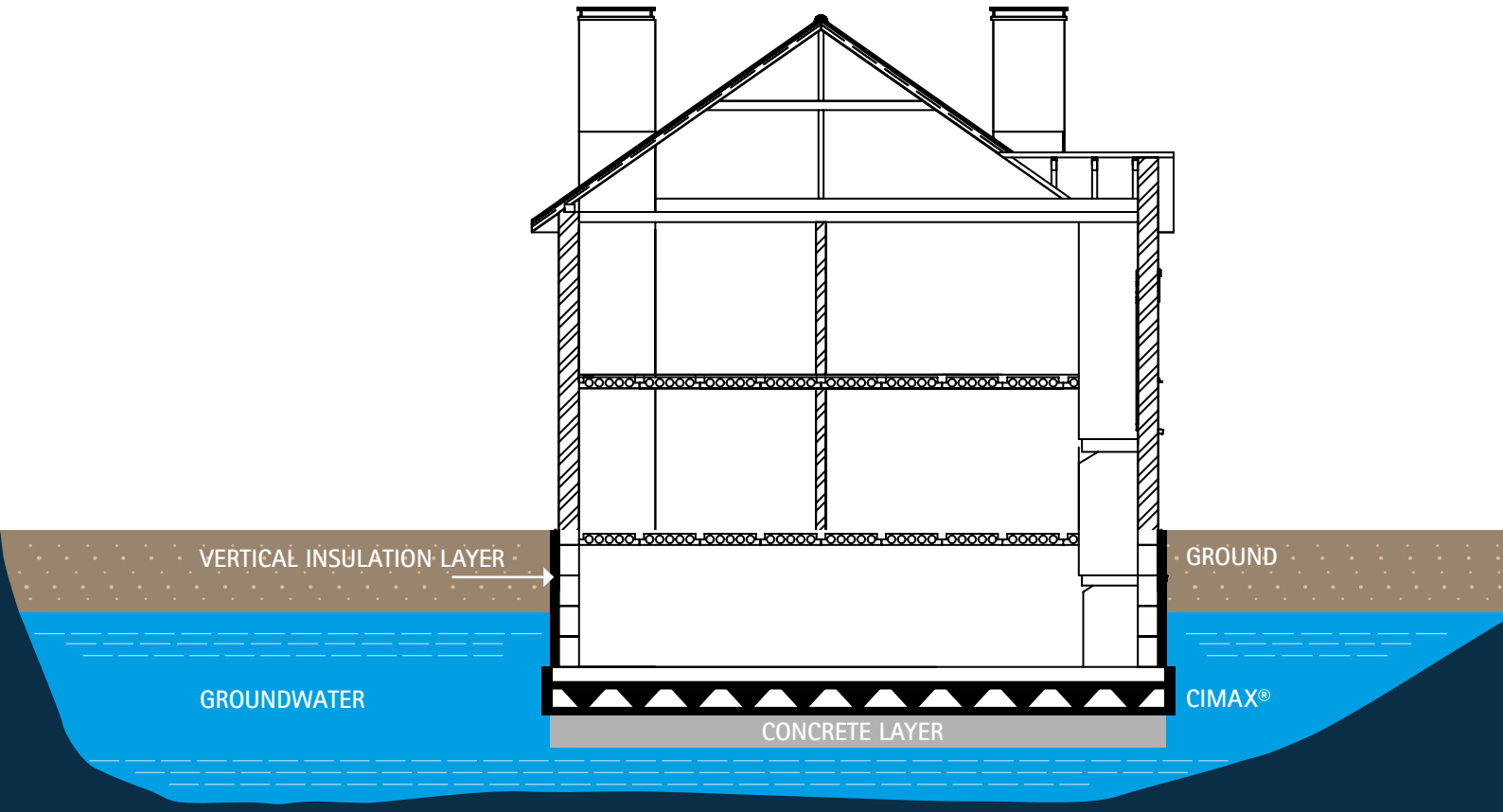
Approved by building authorities, Cimax® has been developed to protect buildings in groundwater against vibrations.
The bearing component guarantees constant low natural frequencies and an optimum insulation effect over a wide range of compressive stress levels (0.02 N/mm² - 0.5 N/mm²).

KNOW HOW

Reducing vibrations and noise

The increasing shortage of construction space has resulted in a more compact use of the available space. In congested urban areas this has resulted in railway lines, roads, residential areas and adjacent industrial zones moving ever closer together. External sources of disturbance, such as railways, generate vibrations and structure-borne noise that can disturb residents and affect adjacent buildings. Effective measures to protect against vibrations and structure-borne noise are thus essential.

Elastomeric bearings with their insulating properties have proven their worth wherever people and buildings require protection from vibrations. This means that the foundations of buildings often lie beneath the water table. With Cimax®, Calenberg offers an ideal solution for elastic bearings for buildings in groundwater. In successful use for decades, Cimax® provides buildings and people with permanently effective protection against vibrations.



Advantages

Increasing the quality of living and working and the value of buildings:

- Reduction of noise and tremors
- Reduction of airborne and structure-borne sound

Costs are reduced thanks to:

- Simple installation with standard components
- No installation plan is required
- Elements do not need to be glued
- Simple outdoor storage exposed to all weathers

Reliable planning thanks to:

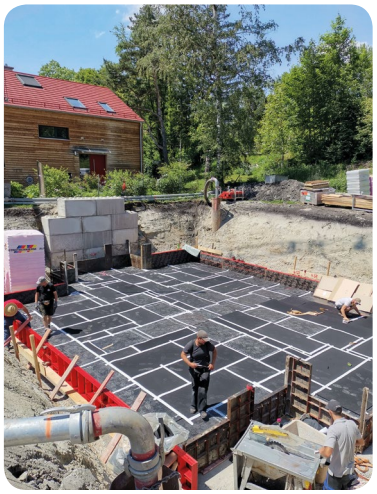
- Constant natural frequency over a wide load range
- Guaranteed effectiveness even if load assumptions vary
- High-quality rubber-based materials
- Developed for use in groundwater
- Proven effective over several decades
- Building authority approval

Cimax®

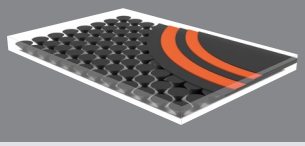
Produktbeschreibung

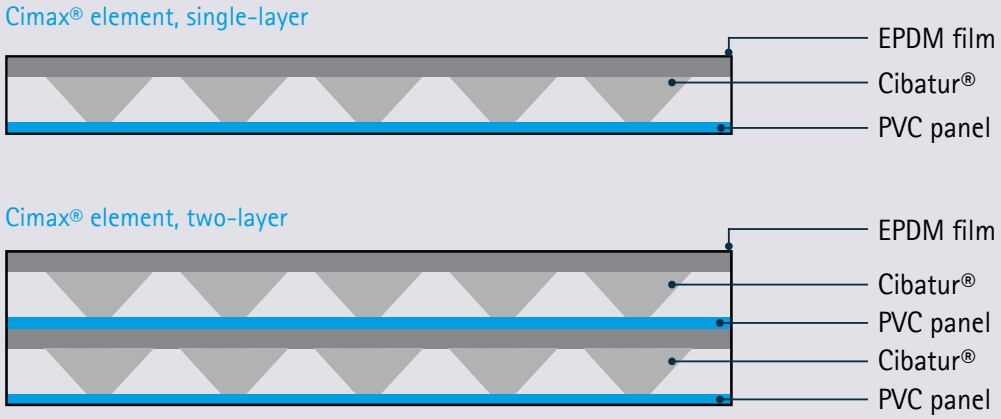
Cimax® elements are made of Cibatur® mats measuring about 1 x 1.50 m which are sealed in a highly mechanically resistant, waterproof EPDM film. Cibatur® comprises a highly rigid, fabric-reinforced face layer and truncated cone-shaped rubber studs, which offer ductility at a constant volume to ensure elasticity. Cibatur® is placed on a rigid PVC panel to protect against water pressure before it is sealed.

Two-layer Cimax® elements contain two Cibatur® layers on the inside plus an additional intermediate PVC panel.



SCHEMATIC DIAGRAM





Building authority approval

The approval for use as a bearing in building construction is regulated by the standard building authority certification Z-16.32-495, issued by the German Center of Competence in Civil Engineering.

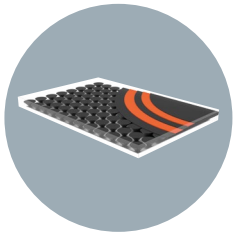
Proven effectiveness

Reliable vibration protection

Different vibration measurements have proven how effective Cimax® elements are.
Cimax® has been successfully used in a variety of projects for decades, reliably ensuring permanent protection against vibrations.

Its effectiveness is documented in:
Association of German Engineers (VDI) report no. 1941, 2006, Elastic building bearing in groundwater, Dr Norbert Breitsamter, imb-dynamik, Inning-Buch, Germany; Helmut Schmitz, Calenberg-Ing. GmbH, Salzhemmendorf, Germany; Holger Molzberger, Frank Müller-Boruttau, imb-dynamik, Inning-Buch, Germany
File note N6681601, 10.07.2014, Dr N. Breitsamter, IMB Dynamik

Extract from our client reference projects



CIMAX®

- Residential building, Fasanenweg, Gröbenzell, Germany
- Semi-detached house with basement in Petershausen, Germany
- New hotel building, Ingolstädter Strasse, Munich, Germany
- Hotel Hampton by Hilton, Frankfurt am Main, Germany
- Office and medical centre building, Moosach, Munich, Germany
- Augustenhöfe residential complex, Munich, Germany
- ABW III, new office building, Berlin, Germany
- Lenbach Gärten residential district, Munich, Germany

Augustenhöfe residential complex, Germany

Lenbach Gärten residential district, Germany

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