

New Features of CadnaB Version 2024

The new features of CadnaB Version 2023 can be found here.

Note

Besides many new functions, version 2024 also contains bug fixes which may have an influence on calculation results, see below in the section "Bug fixes". Due to these changes, we recommend an update, which is available on our website (after login).

New Features Version 2024

General features:

- ISO 12354: Structural reverberation time in-situ correction for type A elements according to ISO 12354-1 Annex C is available (Calculation configuration | Structural reverberation time).
- DIN 4109: The correction K_T to consider different spatial allocations for impact sound transmission between the sending and receiving rooms can now be manually overwritten in the results dialog.
- Option for manual adjustment of the room volume implemented (Mode: Project | Room dialog).
- DIN 4109: Special entries for lightweight ceilings and double-shell partition walls can be transferred in the results mode using copy (Ctrl + c) & paste (Ctrl + v).
- In the dialog "Room/habitation assignment" it is now possible to create new habitations and rename apartments and rooms (Mode: Project).
- Adjusted output of flanking transmissions for floors and ceilings during horizontal transmission in the results dialog for multi-piece partitions.
- Chinese can be set as the language (Extras | Select language).
- ISO 12354: Change default search method for flanks to 0.5 m according to DIN EN ISO 12354-1:2017-11 Annex J.4.4 (for new projects).

Comprehensive optimization of interoperability:

- ISO 12354: The interoperability calculation now also takes small components into account, which are defined by a element normalized sound level difference D_{n,e}.
- Single wall pieces that are smaller than the couplings distance spacing of the couplings are considered in the calculation.
- Sound levels transferred from CadnaA to CadnaB are now named after the CadnaB walls. The ID is stored under "Supplementary information" in the data for the sound level.
- ISO 12354: Sound levels between CadnaA and CadnaB are only transferred if calculation results are available in CadnaB.



Bug fixes Version 2024

General Bug fixes:

- DIN 4109: Bug fix in the assignment of D_{nf} for horizontal transmission in solid construction from an overlying D_{nf}-specification for the floor (this may influence calculation results).
- Bug fix in naming objects when duplicating storeys.
- Bug fix for junction detection junction type 174.
- Adaptation of the search method for flanks with small offsets (this may influence calculation results).

Interoperability Bug fixes:

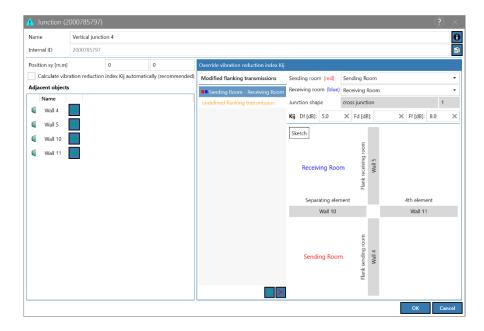
- Bug fix in the correction of areas, multi-part walls or walls with elements (this may influence the calculation results).
- Adaptation of flank assignment of multi-piece separation components in case of horizontal transmission.
- Flanking transmissions of the respective wall are considered at each coupling.



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• Input option of user defined vibration reduction indexes K_{ij} for flexible handling of flanking transmissions. Open the junction dialog and deactivate the option "Calculate vibration reduction K_{ij} automatically (recommended)".



For more information, refer to the chapter 4.8.2 "User defined vibration reduction index" in the Documentation.

- Different vertical and horizontal $D_{n,f}/D_{n,f,w}$ inputs for walls are possible.
- ISO 12354 Display of spectra in the results dialog for spectral evaluation parameters.
- DIN 4109 Optimized automatic requirements detection for DIN 4109-1 and DIN 4109-5.
 - o Requirements only for rooms requiring protection.
 - Room/habitation assignment is considered for the detection of foreign areas for the building types, multi-family, office, and mixed-use buildings as well as row houses.
- Adjusted and extended selection of room usages as well as an improved selection option via the context menu in the "Usage" mode.
 - ⇒ When loading existing projects saved with an older CadnaB version, it is recommended to check the automatically transferred room usages and adjust them if necessary.
- DIN 4109 Option for horizontal impact sound insulation calculation with lightweight separation walls. This option can be activated in the calculation configuration. The calculation method according to DIN 4109-2:2018-01 for heavy separation walls >150 kg/m² is also used for light weight separation walls on solid ceilings/floors if this option is activated.
- Optimized delete logic in the "Constructions" mode. With "Delete" a complete construction including sub-constructions can be deleted. Sub-constructions can be deleted separately via the context menu.
- Improved output in the calculation protocol e.g. information on the use of user defined vibration reduction indexes, DIN4109: indication of K_{ij,min} when applied, ...



• Extended display of issues displayed in the results dialog if the calculation of the respective transmission situation shows deviations from the calculation standard.

Bug Fixes Version 2023

- ISO 12354: Bug fix of horizontal impact sound transmission via multi-part separation components (this may influence calculation results).
- ISO 12354: Bug fix of the flanking transmission of airborne sound transmission from the outside to the inside of facade walls with multiple junctions (this may influence calculation results).
- DIN 4109: Bug fix of flanking transmission across ceilings, when using lightweight partition walls with multiple junctions (this may influence calculation results).
- DIN 4109: The consistency check for separation areas < 10m² with evaluation parameter D_{nTw} is no longer displayed.
- DIN 4109: In the results table, the requirements are updated even after a consistency check is displayed.
- Adjustments to the "Undo/Redo" function in Constructions mode.