

Version 18.0

Build	Module	Description	ID
17.05.18	Design	When generating the interface file for the design with NaZwei it could happen, that the file path was read-only (installation directory) and that this caused the termination of the design.	12612
25.04.18	Output document	The elastic resistance moment is internally always calculated and logged for user-defined girder section, even if a calculation according to the elastic-plastic method is admissible.	12518
19.03.18	Analyses	In the slip circle analysis, support forces due to stiffenings are now treated as the same load group as the anchor forces.	12403
19.03.18	Analyses	Shear force transfer in the lock jaw of a sheet pile The hitherto approach for the calculation of the necessary number of grouting points for the shear force transfer in the lock jaw of a sheet pile was based on the dimensioning with the maximum shear force. With the new, more efficient, analysis method, the allotted total shear force per shear area with the same sign is determined by integrating the shear force to a resultant and distributing it onto all grouting points which results in the necessary number of grouting points. Thus, the plastic redistribution of the grouting point forces is being considered.	12286
19.03.18	Calculation	The numeric calculation of the earth resistance according to Gudehus has been incorporated.	11799
19.03.18	Calculation	Up to 1000 circles can now simultaneously be calculated in the slip circle analysis.	11741
19.03.18	Design	Consideration of the thickness reduction due to corrosion in the design of sheet pile walls The hitherto approach, in which the resistance moment and the cross-section area of the sheet piles are reduced proportionally to the average value of the wall thickness losses was too far on the safe side for many cases. With the new approach, the reduction of the stiffnesses is calculated by subtracting the areas, respectively, the resistances of the rusted subareas. This causes more efficient design results.	12279
19.03.18	Design	Individual sheets can now be designed for the sheet pile sections. For this, an individual sheet can be added via the user-defined section input by defining the geometrical and static values manually. Then the option "Design as individual sheet" can be selected under "Wall properties" in the design options. Additionally, the sheet width to be designed has to be specified in order to reduce the design stress resultants (which are usually calculated per running meter of the wall) for the individual sheet.	12131
19.03.18	Design	The result list for the design of sheet pile wall cross-sections has been extended with the bearing capacity analysis from shear force action effects. The analysis with interaction of bending and shear force can only be performed, if the shear force analysis is fulfilled.	12094
19.03.18	Design	An arbitrary number of single loads can now additionally be applied onto the bracing.	11601
19.03.18	Design	The design of the bracing can be carried out under the consideration of an additional user-defined normal force.	11599
19.03.18	Input	The infilling piles of a secant pile wall can now also have a different diameter than the main piles.	11711
19.03.18	Input	The user-defined specification of the wall dead load is possible again.	11709
19.03.18	Output document	The calculated pile reinforcement from the results of the bending design has to be interpreted as total reinforcement per pile cross-section and is thus issued with cm ² as unit.	12142
19.03.18	Calculation	The embedment depth could not be zeroized for an unconstrained base.	11053
19.03.18	Design	In the analysis of the shear force transfer in the sheet pile wall locks, the shear force to be transferred was determined from the decisive design stress resultants for the maximum utilization in the sheet pile wall design. This did not always result in the highest shear force. Now, the maximum shear force over all nodes of the stage design is used for this analysis.	12095

Build	Module	Description	ID
19.03.18	Design	The section-by-section design sometimes malfunctioned for a negative origin of the z-ordinate.	11852
19.03.18	Design	The calculation of the shear force bearing capacity without shear reinforcement $V_{Rd,ct}$ in the shear force design of circular cross-sections has been adjusted to the literature recommendations by "Bender + Mark" by applying $0,5 \cdot A_{s,tot}/A_c$ for the longitudinal reinforcement ratio. The static effective height d is hereby relating to the tensile force centroid and the value d in eq. (6.2) of the EN is replaced by the inner lever arm z . An increase of the limit load due to compression forces is still calculated via the concrete stress as in eq. (6.2) of the EN.	11743
19.03.18	Design	The normal force graph was wrongly dimensioned at the maximum positions.	11376
19.03.18	Input	The user-defined input of the moment of inertia, the area as well as of the shear area is possible again.	11708
19.03.18	Input	In the section-by-section input of the cross-sections did the elevation in the input not correspond with the displayed values.	11707
19.03.18	Input	The partial safety factors for the point-bearing pressure and the skin friction can now be specified for the analysis of the transfer of the vertical forces.	10606
19.03.18	Output document	The bedding stress values A_{px} were sometimes set to zero in the earth static analysis for a horizontally displaceable wall with bedding and the selected option "Earth resistance in front of the base as beg. loading onto the structural system". This option does not make sense with an existing bedding and is now automatically inactive.	10608
19.03.18	User interface	The dialog "Design options" can now be enlarged / reduced and the selected size will be saved.	12118
19.03.18	User interface	The z-ordinate was incorrectly stated in the design options for a shifted coordinate system and an upward facing z-axis.	12037
19.03.18	User interface	Was the geometry of an anchor retroactively modified, then the selected anchor properties were lost.	11980
19.03.18	User interface	Instead of "z-Pos" the wrong labeling "y-Pos" appeared at several places.	11866
19.03.18	User interface	Were special characters such as '<', '>' in the project name, then no graphs were generated in the dialog "Design options" and in the result list.	11721

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Build	Module	Description	ID
05.07.17	Design	The stress resultants and reinforcement amounts were gradually increased and superimposed with the previous results when repeatedly calling the design preview from the design dialog. The design is now restarted completely after each call of the design preview, there is no more interaction with the previous calls.	11573
05.07.17	Design	In the design of the bracing, the span lengths and cantilever lengths of the continuous beam can now be specified by the user or be modified. This is also possible, if user-defined coordinate systems are being used.	11572
03.07.17	Calculation	For some static systems the normal forces from permanent loads were calculated into the normal forces from variable loads. Thus, the cross-sections were over-dimensioned. The stress resultants from live loads were sometimes no longer graphically issued in the output document, even though the table of values was always calculated and displayed correct. In this cases in could happen, that those parts had no influence on the design stress resultants.	11340
29.06.17	Design	The result list for the design of steel cross-sections has been extended with the bearing capacity analysis from shear force action effects. The analysis with interaction of bending and shear force can only be performed, if the shear force analysis is fulfilled.	11536
29.06.17	Input	Double U-sections are now possible for the bracing.	11286
29.06.17	Output document	An envelope of the maximum required reinforcements amounts can be issued for the design of reinforced concrete cross-sections. It corresponds with the run of the maximum reinforcement amount over all construction states.	11466
29.06.17	Output document	Instead of the separation of the required reinforcement amounts into the earth (as1) and air (as2) side a total reinforcement, which has to be distributed evenly over the entire pile cross-section, is now issued in the design of bored piles.	11283
29.06.17	Analyses	Twice the section width of a U-section is now applied for the determination of the spatial earth pressure in the calculation of the earth resistance in front of small compressed areas for girders with a double U-section.	11540
29.06.17	Analyses	In the analysis of the vertical load transfer of soldier pile walls, the full definite girder cross-section is used by default for the calculation of the contact area according to EAB. Alternatively, the contact area can be specified by the user.	11508
29.06.17	Calculation	The cross-section values of wired anchors have been corrected.	11436
29.06.17	Design	Are single anchor layers positioned at the same support over several construction states, then the bracing design is carried out analogously to the anchor design via the automatic determination of the design relevant construction state. Then only the maximum resulting anchor force or the shear force offset from all construction states is offered as design force for the analysis of the bracing.	11507
29.06.17	Design	The stability analyses are calculated between bracing point, earth support and free end for all spans with the corresponding stress resultant combinations and supposed fork support. The decisive span with the corresponding maximum utilization level is issued. Euler case 1 is applied as decisive buckling length for restrained walls.	11477
29.06.17	Design	For staggered cross-sections (or wall types) all cross-sections were designed at the same design node.	11438
29.06.17	Design	In the output of the required reinforcement amounts the sides were interchanged. The earth side was issued as soil side and vice versa.	11363
29.06.17	Design	Cross-section values were not always saved after a modification.	11362
29.06.17	Output document	Modified height levels were not transferred to the list of the design results.	11284
29.06.17	User interface	The input menu could no longer be displayed and edited for a contiguous bored pile wall with a curved bracing.	11341
29.06.17	User interface	The lowermost soil layer was no longer issued and displayed after a calculation.	11307

Build	Module	Description	ID
06.04.17	Analyses	The parameters "Limit skin friction" and "bearable point-bearing pressure" can no be specified for each soil layer in the analysis of the transfer of the vertical load into the subsoil, so that no longer the average has to be determined and entered for stratified soils.	9288
06.04.17	Design	<p>The design module has been revised and renewed completely. The external design program WWdim has been disestablished and been replaced by an internal design module. This considerably enhanced the handling for the design. An interaction between settings and results on the one side as well as the design settings and results on the other side is now possible at any time, without having to subsequently open an external design program. The scope of work corresponds with the one from WWdim, enhanced with some new innovative functions:</p> <ol style="list-style-type: none"> 1. revised section database according to the current manufacturer's tables for sheet pile walls and steel section girders 2. user-defined materials, sections and cross-sections can be defined easier 3. automatic suggestions of a sections with internal design for the quick cross-section selection 4. analysis of the steel and concrete cross-sections according to the current standards (EC 2 and EC 3) 5. ULS and SLS analyses for horizontal timber sheeting, sheet pile, bored pile and diaphragm walls 6. graphic display and output pf the selected wall types with the relevant geometry and design data 7. wall type and wall geometry can be varied and designed with the depth (e.g. combination of in-situ concrete wall with put on horizontal timber sheeting) 8. stage design for all points of support and construction states 9. chord design with variable static systems (one to seven-span girder, lever arms), variable span lengths for the simulation of the anchor failure and variable load modeling optionally for each anchor position 10. revised anchor database corresponding with the specifications of the common manufacturers, variable anchor selection and design possible for each anchor layer 11. only the decisive design spots and results with the highest utilization are issued due to a smart design filter 12. the simplified stability analyses have been replaced by the common, standardized and precise analyses (buckling, flexural and lateral torsional buckling) 13. cross-section weakening due to rusting can be considered for all steel components 14. crack width analysis for concrete cross-sections optionally by direct calculation or with the indirect method 	11216
06.04.17	General	<p>Update of the material database</p> <p>The steel types for <i>hot-rolled sheet piles according to DIN EN 1993-5</i> have been added to the material database.</p>	6211
06.04.17	Output document	Favorably acting single loads onto the wall through live loads were not listed in the vertical analyses.	9872
06.04.17	User interface	Earth pressure options can either be defined separately for each construction state or matched over all construction states via an additional option.	9179
06.04.17	Calculation	The design stress resultants for a bedding with a horizontally fixed base were sometimes incorrect.	10232
06.04.17	Design	The option "Laterally NOT fixed" was not considered for a bracing with the property "Spring" or "Rotation spring".	9178
06.04.17	Output document	The dimensioning of the system graph was misleading for varying wall lengths in the different construction states.	9988

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Build	Module	Description	ID
01.12.16	Calculation	<p>The hydraulic base failure can now also be calculated without the active option "parallel circulation". Hence, both the combination 'static water pressure + hydraulic base failure' and the combination 'dynamic water pressure + hydraulic base failure' are optionally analyzable.</p> <p>The partial safety factor for the stabilizing actions of the hydraulic base failure have wrongly been in the category EQU and could not be edited.</p> <p>The partial safety factors for the limit state of safety against displacement (EQU) have been removed from the dialog, because they are not necessary. The partial safety factors for the hydraulic base failure (HYD) are now displayed in a separate dialog.</p>	10592
01.12.16	Calculation	The vertical part of a negative horizontal C force was applied incorrect in the vertical analysis.	9893
09.02.16	Analyses	The anchor properties have been extended with the manual input of the limit force. The design value of the pull-out resistance of the anchor is to be considered as limit force. Is no manual input made, the design value of the pull-out resistance is still calculated with the skin surface of the grouting body and the limit skin friction of the present soil layer.	9289
09.02.16	Calculation	<p>If the ground inclination on the earth side exceeds the friction angle of the present soil, an earth pressure calculation according to DIN 4085 is no longer possible by definition. In such cases the earth pressure calculation can lead to implausible and unrealistic results, which is why a warning message is now issued at the beginning of the calculation.</p> <p>Hereupon the earth pressure distribution should be reviewed critically. It is suggested to compare with the numerical earth pressure distributions according to the CULMANN method in these cases.</p>	9287
09.02.16	General	Program modifications for the compatibility with Windows 10 .	9537
09.02.16	Input	The range of the permeability coefficients for soil layers has been extended to 10^{-8} .	9142
09.02.16	Analyses	The vertical part of inclined bracings was not considered in the vertical analyses for walls with restraints.	9264
09.02.16	Calculation	The support forces of the bracers were not considered in the slip circle analysis.	9422
09.02.16	Calculation	<p>For the handling of the pre-deformations a control section has been added to the calculation options. This is called "apply pre-deformations for live loads".</p> <p><u>Case 1: Option has been enabled:</u></p> <p>The pre-deformations from permanent and variable actions are calculated separately. In the subsequent construction state these are added as pre-deformations to the deformations calculated in the current construction state, by still differing strictly between permanent and variable situation. Pre-deformations from permanent actions are thus only superposed with the current deformations from the permanent actions. The same applies for the variable situation.</p> <p><u>Case 2: Option has not been enabled:</u></p> <p>The pre-deformations from permanent and variable actions are calculated separately. In the subsequent construction state these are added as pre-deformations to full load and are only superposed with the deformations from permanent actions in the current construction state. The part of the deformations from variable actions is hence never superposed with parts of the pre-deformation from previous construction states.</p> <p>!!! Please note:</p> <p>This case distinction is necessary for the case, that the calculation is carried out with elastically prestressed anchors. Since the prestressing force is specified as full load, a distinction between permanent and variable action is not possible there. Therefore a partition of the pre-deformations in permanent and variable parts and their separate consideration is no longer possible. Thus, case 2 has to be selected at all times when the calculation is to be carried out with elastically prestressed anchors. In all other cases a partition of the pre-deformations into the permanent and variable situation can be done and case 1 can be applied.</p>	9360
09.02.16	Calculation	Were soil layers modified in only one construction state, then the wrong delta.p was used for the earth resistance calculation in the analysis for the safety against heaving of the anchorage soil.	9298

Build	Module	Description	ID
09.02.16	Calculation	The automatic selection of soil layers to the left and to the right of the sheeting wall at the same time has been disabled, since errors in the earth pressure calculation could occur if soil layer parameters were only adjusted in one construction state. Are soil layers provided with different parameters in different construction states, this is displayed separately in the tree view.	9297
09.02.16	Calculation	For a live line load without any additional permanent loads sometimes the program terminated.	9123
09.02.16	Calculation	In the vertical analysis according to EB 9 "Analysis of the vertical components of the activated earth resistance" the vertical part of earth pressures, anchors and supports (bracers) due to live loads was also applied if these were acting favorable (upward). In the analysis according to EB 84 / 85 "Transfer of vertical loads in the subsoil" no differentiation was made between favorable (upward) and unfavorable (downward) actions.	7553
09.02.16	Input	In a special soil layer model the soil was not separated correctly at a polygonal soil layer boundary, whereat this only occurred after saving and reopening the file.	9324
09.02.16	Output document	An alternative analysis like with a horizontally displaceable foot cannot be carried out for an unsupported foot in the vertical analysis. Contradictory information in the output document when exceeding the utilization level has been removed.	9456
09.02.16	Output document	Was only a bracing entered and not an anchor, then no bracing forces were issued in the output document.	9301

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Build	Module	Description	ID
26.05.15	WWDim	Now, also the design with glass fiber reinforcement is possible.	6897
26.05.15	Calculation	The standard earth pressure calculation with a 90° slope was incorrect.	9049
26.05.15	Calculation	If the ground level was above the crest (e.g. for a slope), an existing cohesion was possibly considered incorrectly in the earth pressure calculation.	9031
26.05.15	Calculation	If the ground level was below the crest on the right side, then it was wrongly redistributed up to the crest for an earth pressure calculation according to Culmann.	9027
26.05.15	Calculation	The calculation of Edu (Earth resistance in front of closed wall) as comparison for the calculation of the earth resistance in front of small compressed area is no longer carried out with a reduced 'c' for cohesive soils.	9011
26.05.15	Calculation	The reduction of the equivalent widths for the friction force (bsR), the cohesion (bsK) and the critical compressed wall width (bkR) can now be switched off for the earth resistance in front of small compressed areas, whereby the earth resistance is increased.	9010
26.05.15	Calculation	If a retreating state and an infinite permanent line load but no block load existed, then the horizontal loading for permanent and live loads was not superimposed below the base for Blum in the previous construction state. This caused different results in the design stress resultants and therefore also in the design.	9005
20.04.15	Design	The vertical analysis according to EB 84/85 is now also carried out for a horizontally fixed wall.	8947
20.04.15	Calculation	The cohesion in the ground offset was possibly not considered for a slope on the side of the earth resistance with cohesion, so that too small earth resistance values resulted.	8958
20.04.15	Calculation	The water pressure above the ground level was applied incorrectly (too small) for a free water level on the right and pervious soil at the same time, as if there was also a soil layer with the permeability coefficient $k > 0$.	8618
20.04.15	Calculation	A restraint in direction of the section was also applied when selecting the wall top support "hinged" and not only a hinged section as expected, so that unexpected normal force could arise there.	8491
20.04.15	Output document	Was BS-T/A(2/3) selected as design load cases, a wrong text was issued under <i>results construction state headline</i> in the result list.	8938

Build	Module	Description	ID
20.04.15	Output document	Even if no anchor analysis was required it was still issued incorrectly in the result list.	8937
20.04.15	Output document	Specified kh values were not issued in the result list for soil layers only adjusted in one construction state.	8291
20.04.15	User interface	The associated settings in the calculation options were not adjusted when deleting a construction state.	8847
04.03.15	Analyses	The analysis of the terminated cracking under CSN EN standards is performed on the basis of the general EN 1992-1-1 again, whereupon the coefficient k3 for the calculation of the crack spacing $s_{r,max}$ is calculated according to a change (2015) in the national annex of the CSN EN.	8831
04.03.15	Output document	The height notation of the excavation depth was missing in the CAD output.	8639
04.03.15	Calculation	There were problems for earth pressure at rest and active, respectively, increased earth pressure when changing the type of earth pressure redistribution. A selection of the different options was possible, however the option "Redistribution up to the base of excavation" was always used for the calculation.	8559
04.03.15	Calculation	Vertical analysis according to EB 84/85 The vertical substitute force C_v was applied in the wrong direction for the affecting forces (V_d). In contrast, C_v has been doubly used for the design value of the resistance.	8421
04.03.15	Calculation	The deformations were calculated from full load (g+p) and not separately for permanent and non-permanent loads when applying column settlement.	8255
04.03.15	Calculation	The transfer of the soil engineering standard to the slip circle analysis malfunctioned. The slip circle was always calculated according to DIN 1054:2005 independently from the standard settings in the program.	8142
04.03.15	Calculation	The vertical bedding stresses on the excavation side were not considered in the vertical analysis for horizontal timber sheeting walls.	7552
04.03.15	Output document	An infinite constant load was displayed with differing heights in the system plot when a slope existed. Furthermore, a load classified as live load was issued as dead load (g=...).	8727
04.03.15	Output document	The texts of the soil layers were outside of the soil body in the CAD output.	8721
04.03.15	Output document	Sometimes incomplete images were generated in the result lists, which caused a termination of RtPrint or large grey spots in RtConfig.	8416
04.03.15	Output document	The unit of the line loads has been corrected to kN/m.	8415

Version 14.0

Build	Module	Description	ID
23.06.14	Analyses	Only a value between 10 and 80 kN/m ² could be entered in the calculation options for the skin friction in the vertical analysis. This limitation has been removed.	8118
23.06.14	Calculation	In the analysis of the "Resistance of the earth support" "Analysis fulfilled" has been displayed for a difference < 3% between $E_{ph,d}$ and $U_{h,d}$, although the analysis was not fulfilled.	8054
23.06.14	Output document	If more than one user-defined profile had been entered in the userprof.dat, these were imported incorrectly in RTwalls.	8087
23.06.14	User interface	The display of the value of the height notation for bracings became incorrect in the lower input menu and the dialog, if the z-coordinate pointed upward.	8051
26.03.14	Analyses	There were errors in the analysis of the safety against raise of the anchorage soil: - the option "set delta.a = 0" had no effect - there is now the new option for the earth resistance "set delta.p=0" - block loads were not considered	7602
26.03.14	Calculation	The horizontal analysis was incorrect for a user-defined earth resistance, which is defined below the base point of the wall, and selected foundation modulus method.	7874
26.03.14	Calculation	The earth pressure due to block loads was not considered for the horizontal analysis in the earth pressure calculation according to Culman.	7860

Build	Module	Description	ID
26.03.14	Calculation	In the earth pressure calculation according to Culman with an additional user-defined earth pressure, the user-defined earth pressures were not considered in the horizontal and vertical analysis.	7858
26.03.14	Calculation	In the earth pressure calculation with live loads according to Culman, the part of the earth pressure due to live load has not always been calculated correctly.	7848
26.03.14	Calculation	If the ground level was below the crest, the bend in the earth pressure distribution was missing for an existing slope.	7815
26.03.14	Calculation	The earth pressure due to the slope was calculated for an embankment.	7555
26.03.14	Input	The corresponding earth pressure as well as redistribution options for the active earth pressure and the earth pressure at rest were only adjusted in the options for the construction state after closing and reopening the dialog.	7742
26.03.14	Input	Are soil layer edges present in construction state '0', which basically hover in a different construction state due to a lower surface level, the calculation was incorrect. Now, these soil layers are being ignored in the calculation.	6881
26.03.14	Output document	An incorrect "/2.00" was issued in the result list for the earth resistance in front of small compressive areas if the new standard was selected and the clear blank spacing was smaller than the embedment depth. The calculation was correct.	7808
23.01.14	Calculation	When switching to earth pressure at rest the option for the redistribution is automatically changed. Now, the previous redistribution condition is restored when switching back.	6848
23.01.14	Analyses	For complex systems with retreating states in which anchors are removed, it could occur that the analysis of the safety against pulling out provided incorrect results.	6914
23.01.14	Calculation	For Deltap == Default, deltap was set to 0 in the calculation of the earth resistance according to Gudehus.	7427
23.01.14	Calculation	If the origin of the coordinate system was above ~800m, the slip circle analysis malfunctioned.	7426
23.01.14	Calculation	In the analysis of the transfer of the vertical forces according to EAB 85, the effective contact area was calculated incorrectly for pile walls.	7228
23.01.14	Calculation	Earth pressure at rest coefficient according to DIN 4085-100 was incorrect, if the wall friction angle delta was greater than the surface inclination beta.	7222
23.01.14	Calculation	Vertical, negative slopes have no longer been considered for earth pressure and earth resistance.	7215
23.01.14	Calculation	Earthquake There is a new option: Consider water - yes / no. Furthermore, the polygonal distribution of the loading due to water and earthquake is simplified as triangle.	7092
23.01.14	Calculation	If the direction of the z-ordinate is upwards, the z-ordinate was issued incorrectly when selecting the result drawings in the user interface.	7065
23.01.14	Calculation	Problems in the FE kernel could occur, if sections were selected in the database whose cross-section values were 0. Thus, the database has been edited.	6836
23.01.14	Design	The amount of lines on one page could not be changed in WWDim. Therefore, the printout was limited to one page and thus incomplete.	7226
23.01.14	Output document	All misleading dimension information with the text "per running meter" have been removed.	6953
23.01.14	User interface	The option "soil layer lense" has been removed from the context menu "soil layer edge". This option had no influence on the calculation.	7064
23.01.14	WWDim	The cross-section areas for the ARCELOR Sheet pile wall profiles PU 12, PU 12-10/10, as well as all cross-section values of the PU 28+1 profile were corrected in the profile database.	7281

Version 13.0

Build	Module	Description	ID
05.11.13	WWDim	For the design of the anchor systems in WWDim, a database with prevalent anchor systems has been added. Now, an anchor with the stored anchor data can be selected for the design from the database.	7174
05.11.13	Calculation	Ag,k Aq,k and E,d were no longer displayed or were equal to 0 in the analysis for the safety against pulling out of a grouted anchor.	7182
05.11.13	Output document	In the CAD Plot <i>Loading, characteristic the redistributed earthpressure</i> according to Blum was issued with the partial safety factor (design value).	7179
05.11.13	Output document	The design results were missing in the system plot in the CAD output.	7149
04.09.13	Output document	When opening RTprint in WWDim, special characters and umlaut were not displayed correctly.	7043
30.07.13	Analysis	Vertical analysis according to EAB Eb 84, 85: - if the bored pile diameter was specified for a bored pile wall, this wasn't logged in the list - if a contiguous bored pile wall was defined and previously a sheet pile wall or a soldier pile wall with a specified cross-section had been selected, the specified cross-section remained - for 1*U-sections the developed skin surface was calculated wrong. Now: Skin surface = Web + 3*Flange - the unit for the result of the characteristic point-bearing pressure was wrong	6254
30.07.13	Calculation	In the 5th edition of the EAB, the contact area of sheet pile walls can no longer be calculated with the angle alpha, but the steel area has to be used. Now, either a user-defined Ab or the area of the selected section from the database is used.	6644
30.07.13	Analysis	The printout was incorrect, if live loads existed only on the side of the earth resistance.	6563
30.07.13	Calculation	If a live load existed in one construction state and no longer in the consecutive construction state, then the live load portion was wrongly taken into account.	6948
30.07.13	Calculation	In the calculation of the earth resistance coefficient for earthquakes, kvEQ was specified as (1+kvEQ) instead of (1-kvEQ) in the formula. This resulted in slightly increased coefficients and a too high earth resistance.	6847
30.07.13	Calculation	Earth pressure for vertical slopes malfunctioned.	6800
30.07.13	Calculation	If "Consider dead load" under "Options->Loading->Earth pressure" was disabled, while the earth pressure calculation according to Culman was enabled, then the horizontal force analysis was wrong.	6786
30.07.13	Calculation	The earth resistance was increased instead of reduced when earth resistance and ground inclination > phi.	6785
30.07.13	Output document	In the scaled plot output for the new and old standard, only the corresponding plots are issued.	5418
30.07.13	WWDim	In WWDIM it is possible to open and edit the user-defined section file via the function "File->Show user-defined section file". But wrongly the file in the installation (c:\Programme\rib\ribtec\win\Grund\Rtwalls\WWDIM) has been used. Now, the correct file "userprof.dat" from the user directory is used.	6288
09.04.13	Analyses	The analysis of the pull out resistance can now be carried out optionally in LC1, even if the corresponding load case is calculated in a different load case.	6153
09.04.13	Analyses	A point of zero shear force can now be specified for the analysis in the deep sliding joint (Options -> Anchor). In the case of a double zero point, the lower value is used for the analysis in the deep sliding joint by default -> the result is on the safe side, but sometimes provides too long anchors.	6152
09.04.13	Calculation	The different deformation behavior of soldier piles and soil in the calculation of soldier pile walls is now also considered for partially restrained walls according to BLUM by the matching coefficient (eta,Ep) according to EB 25.	6338

Release Notes

RTwalls



Build	Module	Description	ID
09.04.13	Calculation	The application of negative wall friction angles for the earth pressure calculation is now possible and is considered in the vertical analysis.	6147
09.04.13	Calculation	The design with WWDim is now also possible if only one construction state out of multiple construction states has been calculated.	5486
09.04.13	Calculation	It is now possible to specify different earth pressure options, such as earth pressures (active, increased active, earth pressure at rest), in different construction states.	5360
09.04.13	General	Now, the release notes are available in English .	6448
09.04.13	General	Program modifications for the compatibility with Windows 8 .	6359
09.04.13	WWDim	In WWDim, the wooden infilling is now designed based on EN 1995 . Specifically, these are: <ol style="list-style-type: none"> 1. Bending, where applicable with normal force 2. Shear force 3. Bearing stress 	6141
09.04.13	Analysis	Incorrect calculation of the buckling length for the design with WWDim if the origin of the coordinate system is unequal to 0 in the y direction.	6472
09.04.13	Calculation	The function to edit soil layers for each construction state did not always work, if the origin of the coordinate was moved in z-direction.	6558
09.04.13	Calculation	Earth pressure calculation for block loads with vertical step of the ground. The load remains unchanged, but the earth pressure due to the load changed a bit, although the ground was not within the area of influence.	6160
09.04.13	Calculation	If several loads were exactly the same, all but one have been eliminated after the calculation.	5493
09.04.13	General	Problems with the data path (a path length > appr. 130 characters led to an abnormal termination when opening the result list).	6171
09.04.13	User interface	When editing the ground level by <i>clicking the dimension line</i> , the ground level is changed in <i>all construction states</i> without inquiry.	6162
09.04.13	User interface	No earth layer data or incomplete earth layer data had been provided In the bottom menu. The bottom menu for the wall properties has been extended .	5516
09.04.13	User interface	After opening the result list and if the z-direction of the coordinate system was upward, then the direction of the coordinate system was inverted according to the display of the height notation. It was just a refresh problem.	5484
09.04.13	WWDim	For a sheet pile wall design according to EC3 the design was not listed in the plot output! (maxM=minM=maxQ=0)	6178
09.04.13	WWDim	2xU-section is now handled correctly.	5517