

LUSAS V23.0 Error Fix and Modification Release Notes

This document lists modifications, other than the New Features in V23.0, that have been made since LUSAS V22.0-1c3 and is correct as of **24 Oct 2025**.

Kit Version 23.0-0c3

LUSAS Modeller 23.0.1603.54227

LUSAS Solver 23.0.1602.8318

LUSAS Tank r6081

MBW r675

Issues fixed in all products

The following critical, major, minor or speed issues are fixed:

20279	Piecewise linear elastic material does not trigger error in eigenvalue analysis	Modeller
22928	Variation function limits with loading should not tabulate anything outside those limits	Modeller
25184	IMD: Damping correction formula for Eurocode disagrees with EC8	Modeller
25447	Many operations (create, delete, modify, tabulate, etc) take a very long time when using lots of very sharp variation limits	Modeller
26853	Contours of stress on mixed material section is incorrect	Modeller
28275	Invalid displacements error if surface normal is reversed using TF3 elements under gravity load	Solver
28965	Configuration utility Graphics tab to have facility for changing or pointing to Windows setting as shown in the referenced html file	Modeller
29662	Editing a beam shell slice utility that has DMI assignments corrupts the DMI Analysis	Modeller
33157	Beam/shell slice resultants differ by 14.1% when a slice is taken at a 45 degree angle to a strut longitudinal axis (slices taken at 90 degrees to this axis give the expected resultant force)	Modeller
33792	Cannot use copied arbitrary sections when creating a multiple varying section.	Modeller
33848	Structure with no stress fails to converge	Solver
34251	"Create Discrete Loads" on a tendon attribute adds duplicate discrete load assignments to the original analysis	Modeller
34451	Tapered section properties retabulated unnecessarily	Modeller
34785	Modeller takes longer than usual to apply changes made in the Tendon Properties dialog	Modeller
34850	Two-phase results: Issues with Reaction 'Vflo'	Modeller
34898	Hygro-thermal quadratic elements should be available	Modeller

34969	Coupled analysis: Checkerboard thermal stress in quadratic elements	Solver
35057	Thermal+radiation surface+deactivation/activation – gives wrong results (Solver)	Solver
35087	Importing IFC with cable tuning analysis doubles the cable loadcases	Modeller
35155	User assigning a load that for any reason isn't tabulated in a NL loadcase can result in unexpected inheritance from a different loadcase	Modeller
35232	Sign of moment load about hinge nodes in semiloof shells is not consistent	Modeller
35367	Issue with moving a line that defines a curved surface	Modeller
35442	Tank - 3D shell model without piles set creates duplicate base slab surfaces	Design
35443	Graph wizard export overwrites its own files	Modeller
35465	Tank - Additional line at metallic wall location results in inefficient narrow elements	Design
35502	Embodied Carbon Factor dialog values do not get retained after entering and then saving a model.	Design
35537	Copying and pasting an orthotropic material from one analysis to another seems slow for a model with 25000 QTS4 elements	Modeller
35545	Crash if mesh attribute changed whilst attribute contours are showing, and some elements are invisible	Modeller
35560	Model crashes when a new surface is created from 4 perimeter lines, using the "new surface" option from the surface quick menu	Modeller
35619	Memory allocation issues when generating contour plots	Modeller
35626	The default viscosity coefficient for the "Liquid Flexible" joint material attribute generated using the default settings for a 2D Seismic Tank is equal to the default elastic spring stiffness value and therefore incorrect	Design
35634	Model becomes corrupted when some geometry features are moved	Modeller
35654	in 64-bit version Cannot create a report. Crystal Reports might not be installed.	Modeller
35656	Error: Cannot create load attribute for traffic load "Design Truck".	Modeller
35657	Selection in isometric view is not as fast as it could be	Modeller
35674	Eccentricity in joint geometric properties isn't producing moments for the joint.	Solver
35693	Visualisation of Beam Projected Pressure loads is slow	Modeller
35701	Error assembling supports when converting a model from v21 to v22	Modeller
35703	Repeated crashes when clicking on elements or resizing	Modeller
35705	Cannot merge faceted surfaces that share points and lines	Modeller
35709	Assignments fail on a single BMI line element	Modeller
35713	Discrete loading distribution over a Search Area - load leaks from a bay	Modeller
35747	Selecting VLO optional code settings for MOMRA causes error messages to appear	Modeller
35806	Variation based on prior results gives error for rigid zones	Modeller
35812	OCCT - Point By Intersection creates 1 point instead of 2 when new geometry is set to unmergable	Modeller
35820	Crash when copying geometry with results loaded	Modeller
35835	Modeller fails to tabulate a temperature load in a structural analysis	Modeller
35851	Bill of Materials and Embodied Carbon Calculator help buttons not working	Modeller
35855	Modeller gives incompatible error when using Modified Cam Clay with 2D QAX Elements	Modeller
35873	Influences on slices in branched DMI - Can't deassign Envelope influence	Modeller

35891	Error in slab design calculations: "Unable to extract specified value" and "An item with the same key has already been added."	Design
35907	Nonlinear cable tuning - No results entities are offered when results are loaded	Modeller
35931	Tank - Add seismic loading does not assign acceleration on ringbeams	Design
35943	Graph through 2D shows N/A for all results when drawing a slice path through Mx shell contours for a smart combination that includes TLO envelopes	Modeller
35956	Modeller crashes changing drawing layer properties when "colouring by" group, attribute or similar	Modeller
35958	PontiEC4 cannot find standalone licence	PontiEC4
36011	Plastic hinge - Error writing material attributes	Modeller
36064	Contours drawn along a section fibre do not account for modular ratio of ASPC	Modeller
36066	Averaged values (values layer) do not account for modular ratio of ASPC	Modeller
36099	Smart combinations not appearing in Design combinations	Design
36112	Issues with Trimmed surfaces in BIMExport. Issue with Create with surfaceFromMap	Design
36136	Chinese version of LUSAS displays an error message preventing the masonry example bridge from being generated	Design
36218	Invalid beam section shape in varying bridge deck (grillage) section	Modeller

The List of fixes for cosmetic issues, documentation issues, installation issues, and development requests is also provided. Users with a reference number provided by LUSAS Customer Support may identify these from the following list:

2873, 7932, 8819, 8907, 9517, 10572, 11200, 12218, 12802, 13454, 14519, 16375, 17051, 23477, 24340, 24451, 25210, 25928, 26954, 29539, 30963, 31027, 31814, 31983, 32113, 32337, 32407, 32441, 32498, 32545, 32558, 32698, 32754, 32986, 33034, 33045, 33319, 33673, 33790, 34000, 34272, 34390, 34392, 34668, 34707, 34800, 34871, 35106, 35204, 35266, 35272, 35304, 35349, 35361, 35372, 35400, 35432, 35434, 35455, 35463, 35473, 35498, 35499, 35519, 35524, 35525, 35531, 35559, 35566, 35620, 35622, 35623, 35625, 35664, 35682, 35692, 35697, 35716, 35719, 35730, 35743, 35760, 35762, 35767, 35769, 35789, 35793, 35801, 35802, 35813, 35818, 35825, 35833, 35834, 35836, 35837, 35885, 35889, 35893, 35902, 35918, 35923, 35953, 35976, 35977, 35980, 35988, 36012, 36016, 36073, 36074, 36090, 36103, 36115, 36129, 36168, 36211