

Release Notes for Lateral3 V4.2.1

New/Changed Features in V4.2.1

- ASCE 7-05 Supplement No. 2 changed Eq. 12.8-5. **LATERAL3** now uses the new equation.

Bugs Fixed in V4.2.1

- 235 When you (e.g.) click on File > Open while you have unsaved modifications, the "Save current problem?" dialog that you get now has a CANCEL option.
- 345 If you select the Save-changes option when reloading a problem file which has unsaved changes, you will get a File > Save-As dialog so you can change the name of the file.
- 369 No longer crashes if Rayleigh period method is selected for an SDC A problem.
- 370 For IBC 2006 with "Extreme Torsional Irregularity" selected, the program will not run the calculations since the ELF method is not valid for this condition. See Table 12.6-1 of ASCE 7.
- 397 Example 1 (4-story office bldg, IBC-03) now has building dimensions and accidental eccentricities in the example problem file that agree with the text in the Help file.
- 254 Now handles files accessed with the [\\server\share\file](#) syntax without crashing.
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- 411 You can now save a newly created (i.e. empty) problem file. Previously the program wouldn't let you save a file until some change was made.
- 419 The Demo Mode message no longer displays for every window resizing.
- 426 The Disclaimer text is better positioned based on the height of the Input Data window.
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- 471 You no longer get the misleading warning about accidental eccentricities being too small because they are rounded to two decimal places.
- 483 When a wall in the Variable Wall Sections table is not defined for all stories, the program now displays the message "Wall #n not defined to top of structure" instead of the misleading message "Wall #n missing". Along with this, any section of a wall in the Variable Wall Sections table can have its Up-To-Floor value set to the top floor and the remaining sections for that wall can be left blank. This effectively means that all walls can now be defined in the Variable Wall Sections table and none need be defined in the Constant Wall Sections table. Simply put the top story value in the Up-To-Floor column for the first section.

New/Changed Features in V4.2.0

- IBC 2006 code option added. Actually, almost all of the material comes from ASCE 7-2005 which is referenced from IBC 2006. Some items of note:
 - Alternate approximate period calculation by Eq. 12.8-9.
 - Either Eq. 12.8-7 or Eq. 12.8-9 can be used to determine upper bound for Rayleigh period.

- The default value for the seismic stiffness factor for IBC 2006 and IBC 2003 was changed to 0.7 to reflect recommendations in Cleland and Ghosh, reference #20.

Bugs Fixed in V4.2.0

- 55 Changed the table which displayed Max. Shear and Max. Overturning Moment to now display the Shear that coincides with the Max. O.T. Moment and the O.T. Moment that coincides with the Max. Shear. They are usually the same but not always.
- 59 Added a check for consecutive wall numbers. Previously the program crashed if a wall number was missing.
- 235 The "Save current problem?" dialog that you get when when you click (e.g.) on File > Open while you have unsaved modifications now has a Cancel option.
- 274 The [F1] key will now display the Help from the Wind Parameters I page of IBC 2003.
- 291 The function key hints in the status bar are correct.

Unresolved Issues

- 136 In the BOCA 96 code, values such as Aa and Av are rounded to two place decimals (what you see is what you get). Would like to be able to enter three place decimals.
- 146 When an application hits a dead end during calculations, it should pass a flag back to the UI so the user can be notified instead of having to look for a ">>>WARNING" in the output.
- 149 There should be a context menu to insert/delete rows in the data entry grids. You shouldn't have to enter zeros to clear a row.
- 150 Wall labels must be integers starting with 1 to <however many walls there are>. Can't skip numbers or analysis won't run. Labels should be just that, labels, not indexes into an array or some other internal thing.
- 152 Wants a flexible diaphragm option.
- 300 Variable first story wall height.
- 310 Add a button to the Toolbar that displays context-sensitive Help.
- 338 Short period waiver should be disabled when any of the known criteria are not satisfied.
- 361 Shield wind load on lower part of building. That is, be able to specify wind load to start at some level other than the ground.
- 362 Finish variable first story height. Enable constant section walls for this.
- 365 Origin of the wall layout must be in the lower left corner. I.e., all walls must be entirely in the first quadrant.
- 392 Update for Vista.
- 408 There should be a command line option to print a file.
- 418 Add a table of keyboard shortcuts to the Navigating with the keyboard page in Help.
- 472 Wind analysis crashes in this SBC94 example.
- 486 Remove code options for all before IBC 2000.