

PENNDOT e-Notification

Bureau of Business Solutions and Services
Highway/Engineering Apps Division



STLFRD

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May 26, 2009

Release of Version 1.7.0.0

The Department's LRFD Steel Girder Design and Rating Program (STLFRD) has been revised as described on the attached Summary of April 2009 Revisions – Version 1.7.0.0.

The new program has been placed on PENNDOT servers for use by the Districts. Consultants and others, who have a current license agreement for STLFRD Version 1.6.0.0, can obtain the updated version for a license update fee of \$500 for private organizations and \$50 for local governmental agencies and educational institutions. Updates for STLFRD Version 1.5.0.0 or earlier require an additional fee documented on the STLFRD update fee details page (<http://penndot.engrprograms.com/home/Ordering/STLFRD.htm>). No update fee is required for Federal and State Transportation Agencies. The forms for Software Update Request and Request for PennDOT's Engineering Software License can be downloaded from the web site at <http://penndot.engrprograms.com>.

Please direct any questions concerning the above to:

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Attachment

Archived copies of all previously distributed e-Notifications can be obtained from the PENNDOT LRFD and Engineering Programs website at <http://penndot.engrprograms.com/home> and clicking on "e-Notification" and then "Mailing List Archives."

SUMMARY OF APRIL 2009 REVISIONS - VERSION 1.7.0.0

Since the release of STLRFD Version 1.6.0.0 several revision requests and user requested enhancements have been received. This release of STLRFD Version 1.7.0.0 contains the following revisions and enhancements.

Input Revisions

1. A warning has been added to the program output when the user enters negative distributed dead loads to indicate that negative values indicate an upward sense to the loads. A similar advisory has also been added to the program User's Manual (Request 343).
2. A typographical error in an error message concerning shear connectors has been corrected (Request 375).
3. A check has been added so that if the user enters 0.0 for either the thickness or width of a flange plate for built-up sections or for the cover plate of a rolled beam, the other dimension must also be entered as 0.0. The program will stop with an error so the user must enter both the width and thickness as 0.0. Previously, the program would permit one dimension to be 0.0, which could lead to a program crash (Request 385).

Specification Related Revisions

4. When designing a rolled beam, the minimum depth to overhang ratio was using an incorrect value for beam depth. The program now properly uses the actual beam depth when computing this ratio (Request 374).
5. A program crash caused by error codes on the output report for uncured slab flange checks has been resolved (Request 376).

Output Revisions

6. Input information for the SPLRFD program has been added to the end of the STLRFD output at field splice locations. This provides all of the possible SPLRFD input information in a single location (Requests 351, 372).
7. Analysis points located at the symmetry point will no longer print twice and will not have the "L" or "R" designation (Request 353).

8. Section holes will now print properly in the formatted input echo when the section hole ranges overlap with section loss ranges (Request 367)

Girder Analysis Revisions

9. CBA version 3.6.0.0 has been incorporated into the program (Requests 361).
10. Two new noncomposite dead loads, DC1S and DC1C, have been added to allow the user to distinguish between noncomposite loads associated with the girder (DC1S) that are not computed by the program (like stiffener loads) and noncomposite loads that are not associated with the girder itself (DC1C). This revision allows the user to more easily break out the components of beam camber (Request 377).

Cross Section Revisions

11. Consecutive ranges of increasing or decreasing girder depth can now be entered. Previously, the user had to enter an artificial range of decreasing depth after a range of increasing depth (or vice versa) to continue increasing the girder depth (Requests 240, 327).

User's Manual Revisions

12. The calculation of the wind load on the girder for the permanent case has been clarified in Chapter 3 (Request 381).
13. The Bureau name for program revisions has been updated on the revision request form in Chapter 9 (Request 390).