Autodesk® Robot™ Structural Analysis Professional 2010

# Service Pack SP2 Enhancement List
for:
**Autodesk® Robot™ Structural Analysis 2010 software**
**Autodesk® Robot™ Structural Analysis Professional 2010 software**

This Service Pack corrects the following issues in both of the products:

## General:

- Centurion 1.1 Maintenance Release #1 has been included (problems with network licensing have been fixed).
- Problem with side-by-side Autodesk Robot software and AutoCAD® Structural Detailing 2010 software installation/un-installation has been fixed.
- Multiple round-tripping Revit® Extensions for Autodesk® Revit® Structure 2010 link while using reinforcement transfer has been enabled.
- Filtering in Inspector dialog box for objects and selections has been fixed.
- Positions of text (attributes/maps/values descriptions) have been fixed.

## Model definition:

- Entering points in the Section definition module (after contour deletion) has been fixed.
- Definition of story base level of a nonzero Z position has been enabled.
- Unjustified modification of lists in load tables has been fixed.

## Analysis:

- Load to mass conversion errors have been fixed.
- Mass eccentricity definition using the Add/subtract nodal masses option has been corrected.
- Mass eccentricity definition method has been fixed for modal analysis with automatic definition of seismic cases.
- Mass eccentricities are now taken into account when not all dynamical directions are active in the Simplified approach (that is load to mass conversion is not performed on all directions).
- Problems encountered during dynamic/seismic analysis for larger models (more than 30,000 nodes) have been corrected.
- Calculations of mass moments of inertia for rigid diaphragms have been corrected.
- Seismic analysis according to UNI EN 1998-1:2005 for the ground type E or envelope has been corrected.

## Results:

- Incorrect diagrams for footfall analysis results have been corrected.
- Lack of and unjustified low deflections for parts of cracked slabs have been fixed.
- Default (normalized) size of diagrams for British regional settings has been fixed.
- Presentation of result maps, when working with background plans, has been fixed.

## Steel design:

- Wrong plastic modulus calculations for beams of unsymmetrical box shape have been fixed.
- EC3 section class calculation method for double-I profiles has been changed as proposed by CTICM Institute.

- Abnormalities in steel connections definition dialog behavior, changing connection types, and connection generation have been fixed both in structure definition and stand-alone modules.

## Timber design:

- Fire resistance for columns according to CB71 has been fixed.

## Concrete design:

- Unjustified stop in slab deflection calculations has been fixed.
- Behavior of control for slab reinforcing against cracking for SNIP code has been fixed
- Transferring a set of panels to provided reinforcement layout has been enabled.
- Slab punching reinforcement calculation according to Eurocode has been corrected.
- Self weight participation in reduced shear force calculation for beams according to BAEL code has been fixed.
- Calculations of spread footing depth for punching requirements according to BAEL code have been fixed.