

Advance Concrete 2011 SP1 What's new



This document describes the improvements and fixes that are included in SP1.

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Overview

→ There are two main targets of SP1:

- The first target is compliancy with AutoCAD 2012.
- The second is the performance improvement and stability of Advance Concrete. The "Performance" section contains some examples of these improvements.

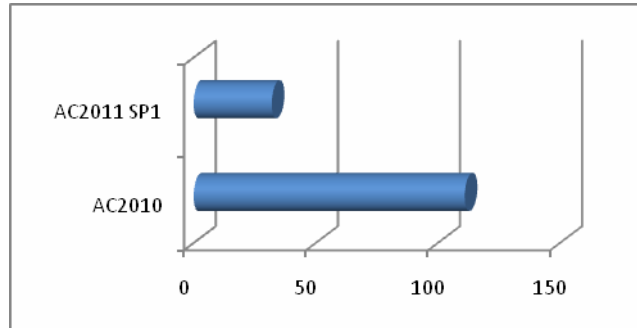
AutoCAD 2012 compliancy

→ Service Pack 1 is compatible with Autodesk AutoCAD 2012 and Autodesk Architecture 2012.



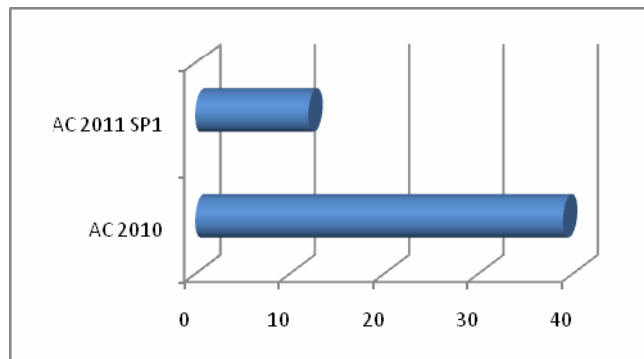
Performance - Start up speed

→ The Startup speed is significantly improved. With SP1, Advance Concrete starts **~3.5 times faster** than Advance Concrete 2010.



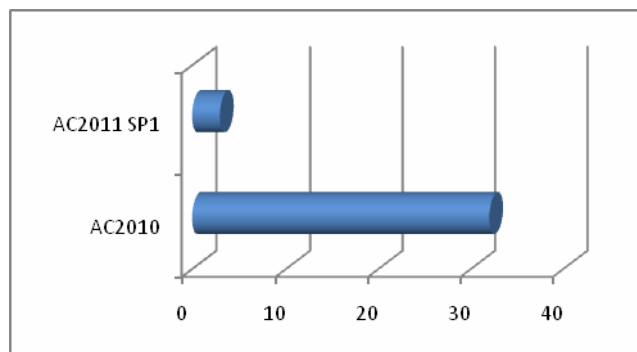
Performance - Loading files

→ The time to load an existing file decreased with SP1. The time to load a file is **2 to 3 times faster** than in Advance Concrete 2010 (the effect is even more visible with large files!).



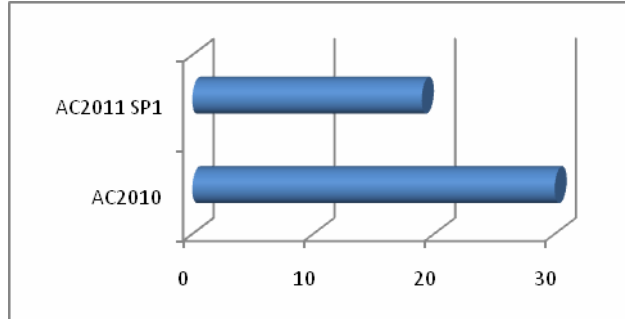
Performance - Creating a new Advance Concrete DWG file

→ The time to create a new empty Advance Concrete DWG file is **~10 times faster** than Advance Concrete 2010.



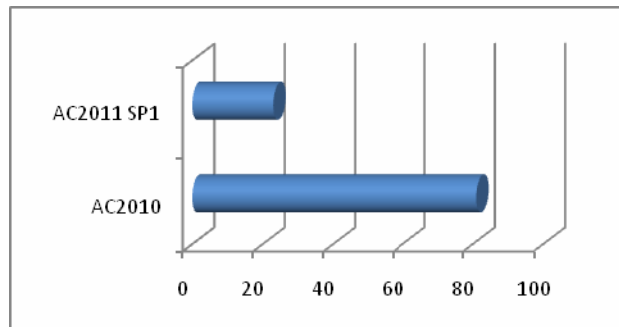
Performance - Changing properties structural objects (3D model)

→ With about 700 structural members in the model, you can select and access the properties of selected members **~1.5 times faster** than in Advance Concrete 2010.



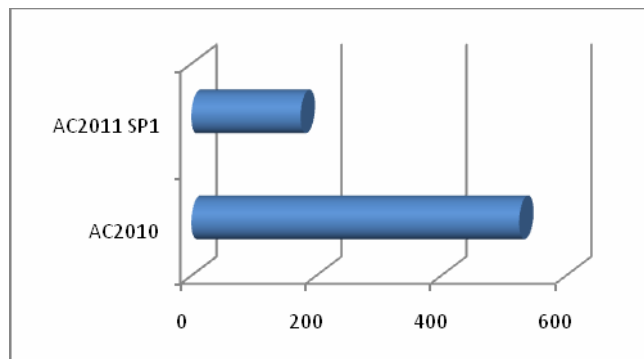
Performance - Creating reinforcement drawings

→ The reinforcement drawing creation is **~3.5 times faster** than in Advance Concrete 2010.
→ The performance test was performed with several basic structural elements with predefined reinforcement style.



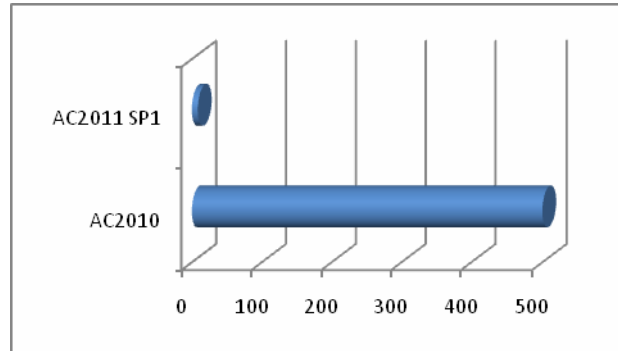
Performance - Reinforcement list update

→ The reinforcement list update speed is **~3 times faster** than in Advance Concrete 2010.



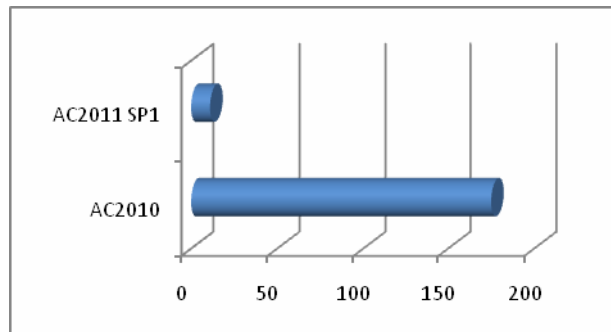
Performance - Symbol update

- The symbol update speed is **incredibly ~60 times faster** than in Advance Concrete 2010!
- The update speed was tested with a straight bar with 250 distributions. The performance test was performed by changing the diameter. Since every distribution has a symbol an update would be required.



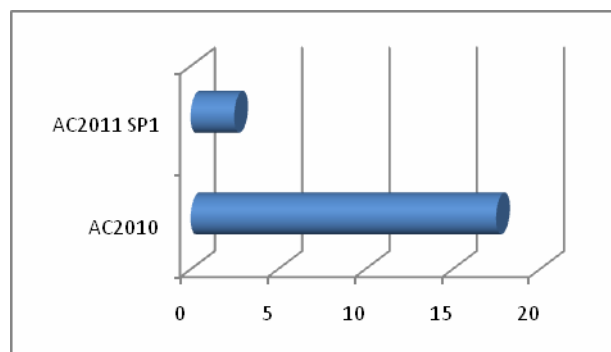
Performance - Distribution update

- The distribution update speed is **~15 times faster** than in Advance Concrete 2010.
- The update speed was tested with a straight bar with 250 distributions. The performance test was performed by rotating the bars by 90° so that all distributions require an update.



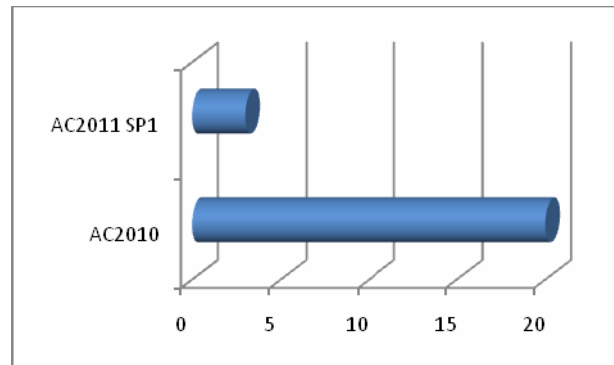
Performance - Reinforcement renumbering

- The renumbering of reinforcement elements is **~7 times faster** than in Advance Concrete 2010.



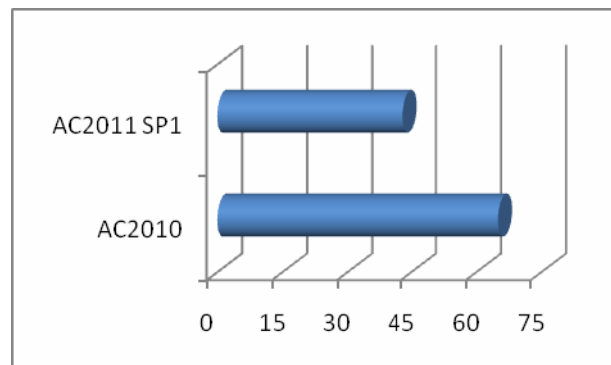
Performance - automatic rebar symbols in a drawing

- The automatic creation of reinforcement symbols is **~6.5 times faster** than in Advance Concrete 2010.
- The test was performed with a reinforcement drawing without any symbols by starting the automatic rebar symbol creation.



Performance - Export drawings to DWG

- Plane views, top views, bottom views, sections, elevations, isometric views, reinforcement views, almost 20 views, export all views. It's **~1.5 times faster** than in Advance Concrete 2010.

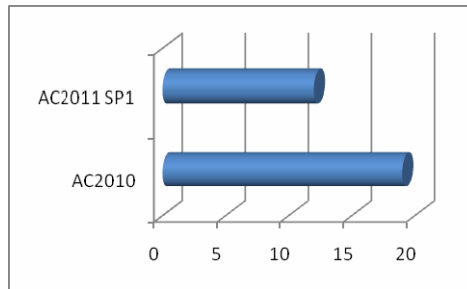


Important notice:

For a significant performance improvement of the "Export to DWG" functionality, we decided on exploding the dimension lines to simple AutoCAD objects. In the next update, Advance Concrete will provide an option to choose the explode result to either benefit from the performance improvement or keeping the AutoCAD dimension lines.

Performance - Export layouts to DWG

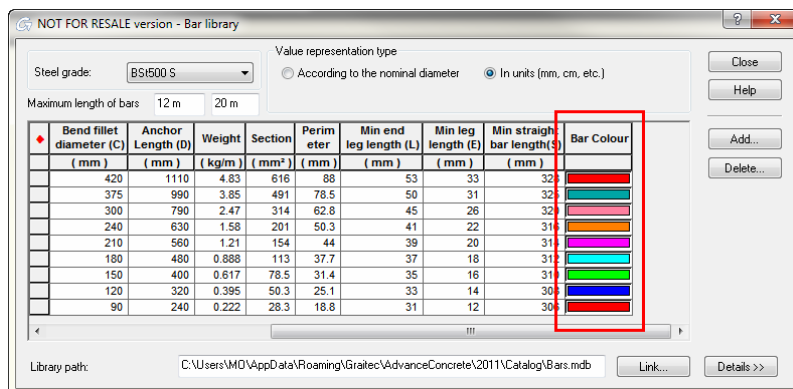
→ Building with 5 levels, almost 20 layouts, export layout. The export is ~1.5 times faster than in Advance Concrete 2010.



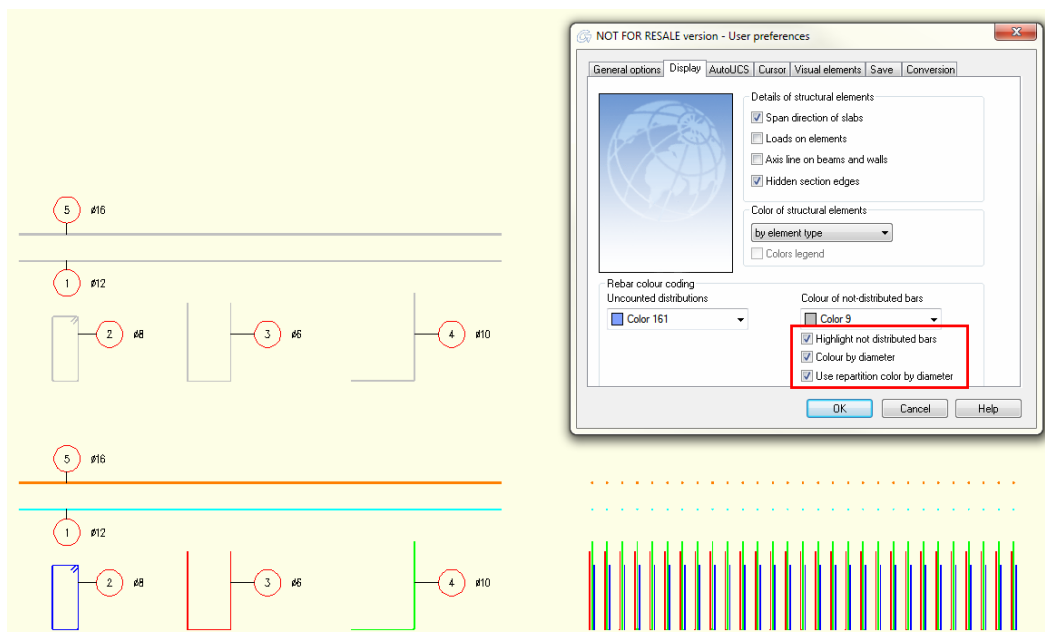
User preferences: color by diameter

- [28367] Can use "Others..." from the Bar Colour column of the Bar library.
- [28492] Can use the "color for non distributed bars" and "color by diameter" options at the same time.
- [28493] Distributions also get the color from the bars.mdb (not only the definition).

→ Bar library to define the color by diameter:



→ User preferences with the new options:



DWF Export - object properties

→ Advance Concrete exports object properties with the DWF Export command for:

- [30198] 3D rebar cages (3D model of rebar objects)
- [30209] Structural members (3D model)

New "Crash Manager"

→ If a crash of Advance Concrete happens, the new "Crash Manager" collects all the required data and files from the customer system and the user can send a detailed report to our development team. This data provides the information required to reproduce and fix the crash.

Fabrics / Bent fabrics

- [28730] Mesh cut reference is also copied and does not use the original fabric as a reference.
- [28854] Bending detail bent mesh symbol (show all the bar marks) - fixed
- [29005, 29402, 31321] "Simple mesh outline" concrete cover issues - fixed
- [29132] openings in simple mesh outline - fixed
- [30418] Renumbering mesh row with characters (a,b,c,...) - fixed
- Several localization issues fixed (e.g. wrong short cuts)

3D Power!

- [28625] Missing hooks when using automatic reinforcement style with 3d power - fixed.
- [29141] Top view was moved the bars from elevation disappeared - fixed.
- [29157] "Move" command affects the uncounted bars from sections - fixed.
- [29664] 2 distributions for the same bar are counted at the same time - fixed.
- [30320] Bars generated in top view with wrong concrete cover - fixed.
- [31207] Bars from drawing with 3d power disappear after removing 3d power - fixed.
- Some other small corrections and improvements

3D Viewer

- [29291, 29355] Orientation of 3D rebar cages
- [28889, 29018, 29190, 29807] Display corrections for specific bars in the 3D viewer
- [29152] Crash exporting 3D rebar cage to DWG - fixed
- [30769] Rectangular frames in reinforcement drawing for beam are not visible in 3d viewer

Reinforcement list / BBS

- [28851] List generator issue - fixed
- [28927] wrong bending detail for U-bars - fixed
- [29010, 29384] Linear meter behavior - fixed
- [29098] Blank row with quantitative distribution - fixed
- [29271] display "####" in list - fixed
- [29288, 31090] list update - fixed
- [29521] Sub entities issue - fixed
- [29606] Additional bar list for US
- [30434, 30451] Crash printing list - fixed
- Several cosmetic issues fixed (e.g. text style)

Reinforcement styles

- [28625] missing hooks using reinforcement style with 3D power - fixed
- [28891] reinforcement style for wall applied to a beam - fixed
- [29470] missing reinforcement styles for columns - fixed
- [29651] wrong reinforcement styles for beams - fixed
- [31337] missing distribution with reinforcement style - fixed
- Several localization and translation issues fixed

AutoCAD Architecture issues

- [29100] No more crashes when creating a section through an ADT wall
- [30130] Solved crashes at closing of Advance Concrete and ADT
- [30610] Advance Concrete grid display correct on ADT
- [31351] ADT elements in reinforcement drawings - neighbor objects - fixed
- [31417] Crash creating a reinforcement drawing for ADT wall / slab - fixed

Localization / Translation

- [27929, 29082, 29460, 30182, 30252] Several improvements in the shape code libraries (US / UK)
- [29049] Nominal diameter for length calculation (UK)
- [29413] Hook table for ACI Standard (US)
- Soule output improvements (Reference numbers in chapter "Hofixes")
- Several translation corrections

Reinforcement symbols

- [28738] Target grip point for 3D bars
- [29167] Target of rebar symbol to the center of point bars (FR)

Multiuser

- [29003] Connect to a remote SQL server
- [29028] Correction: behavior of roofs / ramps in database
- [29058] Fixed crash connecting to a database
- [31297] Wall hatches overlapping openings
- Several Cosmetic issues (GUI corrections)

Unit management

- [28878] Unit management for trailing zeros in Symbols improved
- [30188] Start wizard: input units not kept fixed

Hotfixes included in SP1

→ All hotfixes made between the release and the Service Pack are included in the SP1.

- [29069] ACIS converted to structurals acquired unwanted aprox markings
- [29167] Rake symbol pointing near point bars center
- [29245] Hook length linked to bend class and hook type
- [29245] Unfold hook length measured complete hook arcs
- [29321] Slowness after adding 3d powered reinforcement (aka 30003)
- [29331] Bar marks not updated by size changes
- [29333] Incorrect spiral bars length
- [29355] Inverted bars exported by 3d viewer
- [29369] Shapes not recognized when switching to longitudinal fillets
- [29371] Soule export: fails for special bends
- [29384] Curved bars not showing in imperial bar list
- [29407] Overall length reported incorrectly for custom shapes
- [29525] Some bars not visible in 3d viewer
- [29605] 3D power makes point distributions multiply quantities
- [29956] Crash on print list
- [30007] Drawing corrupted after adding sections to rebar views with no autorebar

- [30142] Zero quantities in materials manager
- [30143] Rebar view image entity symbols reconnect to different views on update
- [30200] Deleted orders fail to unlock bars after dwg rename
- [30244] Soule export: for varying bars and soule lengths rounding
- [30246] Soule export: for varying bars length calculation
- [30247] Soule export: dimensions and rounding
- [30249] Soule export: extra row for varying bars fixed
- [30455] Bar marks change when opening 2010 DWG (group shape codes not set)
- [30687] Qreps multiplied twice in soule orders
- [30713] Alternate shape definition not applied to leg measurement