

MecaWind Revision History

<u>Version</u>	<u>Date</u>	<u>Revision Description</u>
2.3.4.8	7/27/2020	Internal upgrades and fixes: Version control, Anal Output cleanup & Sync, Output optimization ASCE 7-16 Rooftop Equipment correct nomenclature to use L instead of h. ASCE 7-10 was already correct.
		L-Shaped Building wasn't setting roof type for each end correctly, and so C&C wasn't calculated. ASCE 7-10 & ASCE 7-16
2.3.4.9	7/28/2020	Made correction that caused error when Reactions calculated
2.3.5.0	8/18/2020	Reactions had a sign issue. On Wall and Roof we changed sign to negative for Reaction, but on walls it was still positive Help/Tooltips on Main Menu dropdown buttons was too short in duration Text on triangular region of gabled roof for along ridge loads had label upside down Due to some round-off error, the leeward roof pressures could be listed twice in Reaction table Rlr = 0.6 was being used for all regions of freestanding wall calculation Load Case C
2.3.5.1	8/27/2020	Corrections to A716, Ch 30 Part 4 Corrections to Parapet calculations Corrections to a dimension used for Ch 28 Pt 1, to start at corner of building (Not OH) [A705/A710/A716] Corrections to Overhang for Hipped roof on All MWFRS calculations, so MWFRS graphics show up correctly Remove limitation of height on Rooftop equipment in A716 (Limit still shown in A710).
2.3.5.2	9/22/2020	Internal cleanup of code and version used for Meca testing.
2.3.5.3	10/1/2020	Corrections to C&C Summary for ASCE 7-10 and ASCE 7-16 for Ch 30 Pt 5 to pick up right pressures for each area range Added option to select printer when printing MWFRS graphics
2.3.5.4	10/12/2020	Fixed bug when you double click input file the data was not loading Changed A716 Canopy to not use 1/3 rule, since it doesn't appear to be included in the Eff Area definition Fix bug in A710 and A716 for Ch 30 Pt 3 special requirement with parapet, should have been ≥ 3 rather than > 3 ft Minor fixes to report an error feature, license id wasn't included and log file getting reset if cancelled from form.
2.3.5.5	10/21/2020	Removed all Arraylists and did check Remove OHS when there is no Overhang Soffit Fix bug with MWFRS graphics not working correctly for a specific L-Shaped Building
2.3.5.6	10/22/2020	Fix bug with Domed roof looking for Overhang data (ASCE 7-16 only)
2.3.5.7	10/26/2020	Fix bug with canopy and parapet that was due to removing arraylist Update Graphics Library to Latest
2.3.5.8	10/30/2020	Fix problem with ASCE 7-16 Ch 30 Pt 4 where Table 30.6-2 wasn't working correctly Fixed problem with some Wind maps no longer visible Resolved some errors due to type of List not being consistent Internal cgs: Conslidated ML into MSF, added new Report save functionality
2.3.5.9	11/2/2020	Fix wording problem with help on Categories, make all xml references static, fix bug with selecting A716 Ch 28 Pt 2
2.3.6.0	11/16/2020	Fix error with ASCE 7-10 Chimney, and working on printing images in output
2.3.6.1	11/30/2020	Cleanup and fix misc errors
2.3.6.2	12/7/2020	Fix bug with A716 Sec 29.4.3

2.3.6.3	12/10/2020	Fix problem with random abort of software on Windows 7
		Fix bug where OH pressures for table summary on C&C A716 Ch 30 Pt 4 (Fig 30.4-1) were showing as minimum
v2.3.6.4	12/24/2020	Fix issues with solar panels where zone 2 didn't exist in roof, and added check to see if panel in Overhang region
v2.3.6.5	12/25/2020	Fix issue where null company info caused error
v2.3.6.6	1/7/2021	Add Parapet to Summary tables for C&C (ASCE 7-10/16), Ch 30 Pt 4 and Pt 6.
		Corrections to the Solar Panel Calculations
		Fix bug where MWFRS Graphical printout didn't include all pressures
		Fix bug where Overhang value was changed when using metric units
v2.3.6.7	1/11/2021	ASCE 7-16 Fix Monoslope Roof with Slope < 7 deg to show 1' C&C zone (Ch 30 Pt 1)
v2.3.6.8	1/14/2021	More corrections to Ch 30 Pt 4 for Monoslope roof. Redirect to Ch 30 pt 2 (And use Gable for Slope > 7 Deg)
		Resize forms where buttons being pushed off of form and not visible
		Resolve problem where you have to open file twice
v.2.3.6.9	1/19/2021	Fix Project Info where Client Information was missing
		Fixed Populate C&C form where units were always Metric
		Security Menu Updates
		Attempt to fix LinearDim and High DPI monitor issues
v2.3.7.0	1/21/2021	Fix ASCE 7-16, Ch 30 Pt 1, Monoslope, Zones 4 and 5 not showing up in options
		New Output Form
v2.3.7.1	1/25/2021	Fix resolution error
		Add new forms for Report a Bug and Error (Requires input file)
v2.3.7.2	1/26/2021	Fix issue with Output form, and TOC entries getting re-checked after print/save
v2.3.7.3	1/28/2021	New forms created for Overhang, Parapet, ArchedRadius, TopoMenu
		New DPI scaling setting to try to resolve hi-res monitor issue
v.2.3.7.4	2/7/2021	For buildings > 60 ft the C&C zones for roofs need to follow Fig 30.3-2A-2I and Fig 30.3-5A, 5B
		Remove unnecessary page breaks in print outs and saved files
v.2.3.7.5	2/15/2021	Resolved LinearDim Error
		Improved Report Windows
		Improved Help Windows
		Improved numerous windows, tool tips, and help screens
v2.3.7.6	2/18/2021	Fix problem with Overhang none being changed to "0"
		Fix bug with Chimney shape type mismatch
		Add new Map form and UpdateVersion
		Refactor the 29.4.4 method for solar panel
v2.3.7.7	2/25/2021	Fixed Calc_Kw to use Absolute value for mode shape
		Fixed numerous bugs and Issues
		Fixed File IO issue
		Added "Live Validator" Feature to application; providing realtime feedback on forms.
v2.3.7.8	3/7/2021	Fix issue with open structures where MWFRS graphics had Leeward and Windward reversed for Wind Dir 180 deg

		Improvements to Overhang Menu to allow change of overhang width on main form
		Fix issue where Calculating natural frequency for concrete masonry wasn't working
v2.3.7.9	3/25/2021	New form for Calculate natural frequency, fix image issue with Overhang_Building, New MWFRS & C&C forms
v2.3.8.0	4/1/2021	Fix MWFRS type reference to be Ch 29 for Other Structures
		OHS section 30.9 the GCPI was always showing as 0 even when there is a Soffit
		Address issue with MWFRS Graphic Vector Density and Text size
		Fix issue with long descriptions in C&C that get auto-wrapped
v2.3.8.1	4/23/2021	Redesigned the Calculate Nat Freq for additional options, Fix issue with FBC 2020 when selecting certain C&C methods, fix ASCE 7-16 C&C Ch 30 Part 3 to include zones 4 and 5. Changed from Lambda to EAF designation to more closely match references in code.
v2.3.8.2	5/10/2021	Fix issue for ASCE 7-16 Tank with Domed Roof > 10 Deg Slope
v2.3.8.3	5/17/2021	New C&C Database form, Fix issue with Company Info error, Simplified Solar Sec 29.4.3 to be like 29.4.4
v2.3.8.4	5/21/2021	Fix add entries to C&C Database option, Fix some issues with Gabled roof Mean Ht, zone width 'a' showing zero on ASCE 7-10 option.
v2.3.8.5	5/24/2021	Fix bug with Exposure Adjustment Factor with ASCE 7-10 and 16. Refactoring of other code internally.
v2.3.8.6	6/2/2021	Fix bug with clone on flexible nat freq calc options. Correct note on hipped roof angles for ASCE 7-16.
v2.3.8.7	6/9/2021	Fix missing Open Sign input grid, fix bug with Chimney, fix move open bldg dimension structure, start setting up input for other strucs for new UI.
v2.3.8.8	6/23/2021	Fix issue with A716 Ch 30 Pt 4 and Pt 3a zones not being correct, Fix FBC load factor not working, Other minor issues.
v2.3.8.9	6/28/2021	Fix bug with Ch 27 Pt 2 not showing valid, and a L-Shaped building with no overhang causing error.
v2.3.9.0	7/1/2021	Fix bug with A716 Ch 30 Pt 3 for Monoslope > 10 deg, using wrong figure and zones, Refine Tank analysis
v2.3.9.1	7/15/2021	Fix bug with Vult not being retained in FBC20. Correct validation for Ch 30 Pt 4 when Partially Enclosed. Fix problem where altitude wasn't retained.
v2.3.9.2	7/21/2021	Fix Calc_a dimension min issue
v2.3.9.3	7/22/2021	Fix Calc_a dimension min issue #2
v2.3.9.4	8/24/2021	Issues with Parapet, Add URL link for Wind Speed help, Fix issues with overhang on Monoslope, Mansard and Arched roofs, Fix Wizard sizing issue on hires displays
v2.3.9.5	8/27/2021	Fix issue with Selecting methods throwing object error
v2.3.9.6	8/31/2021	Fix issue with Lambda calc for h < 15 ft per ASCE 7-16 Fig 30.4-1, fix issue with ASCE 7-05 open C&C selection
v2.3.9.7	10/21/2021	Corrections to nomenclature for Gust factor calc, Require solidity to be >= 70% for a solid sign, Fix misc typos, Update calc for A716 'a' to be per criteria in Fig 30.5-1, Fix Hip Roof -Y surface not showing in MWFRS graphics, A716 Zone 1' sometimes not showing up for monoslope, Solar panel handles case when Parapet entered.
v2.3.9.8	11/29/2021	ASCE 7-16 Fig 28.3-1 Fix units problem, Fix issue with qz being called wrong in some places in code due to refactor
v.2.3.9.9	12/2/2021	Fix metric units problem with Canopy, ASCE 7-05 references for Arched roof were for A716, C&C Ch 28 Pt 1 additional parameters not being retained.
v2.4.0.0	12/14/2021	Fix &C Part 7 error occurring at startup, add Single User Activation to permit install for a non-administrator.
v2.4.0.1	1/11/2022	Fix Missing Panel on Hipped roofs when Hipped value is set to 0

v2.4.0.2	1/31/2022	Chimney Diameter not converting correctly for metric units. Fix bug when no C&C entered. Fix ASCE 7-10/16 Ch 28 Pt 1 MWFRS graphics had the +GCPI and -GCPI reversed, and also OH_Bottom not being calculated consistently, Changed designation from OHx to OH_End and OHy to OH_Side.
v2.4.0.3	2/3/2022	Overhang entry in metric units got converted to English
v2.4.0.4	4/13/2022	In some instances flex gust factor used even when rigid specified (Other Struc = Chimney, even though a Building selected)
		Change Q calc in flex gust to use B rather than min of B or L
v2405	5/9/2022	Fix association with *.wnd files when double clicked to open file (Not default file)
		Fix ASCE 7-16 Fig 30.5-1 when roof slope is > 7 degrees to use values from Fig 3-2 and incl all zones