## AI AND CLASH DETECTION

The following document contains an Al generated comparison between

Bird Tools – Clash Preventor

(which you may try for free for 30 days here:

https://www.birdtoolsdevelopers.com/shop.html

and several other Clash Detection technologies.

The comparison was generated by several AI services. The study was originally performed by Stefan Pandaciuc (Panda), to be used in an internal presentation at Arcadis. Both Panda and Arcadis are long term users and advocates of Bird Tools – Clash Preventor.

Thank you, Panda!

The original study was reformatted and compiled into the following report by Bird Tools.

# #1 365 COPILOT WEB

365 Copilot - Web					
Criteria	Revit Interference Check	Autodesk Construction Cloud (ACC) Model Coordination	Bird Tools - Clash Preventor	Navisworks Clash Detection	
Primary Function	Basic clash detection within Revit models	Automated clash detection and issue management in a cloud-based environment	Real-time clash prevention and detection within Revit	Advanced clash detection and management for large, complex models	
Integration	Integrated within Revit	Part of Autodesk Construction Cloud suite	Add-in for Revit	Standalone application, integrates with various BIM tools	
Clash Detection Scope	Checks for intersections between selected elements or all elements in the model	Detects clashes automatically when models are uploaded, supports multi- discipline and multi-format models	Prevents clashes in real-time, supports Revit and IFC links	Detects clashes between 3D geometry, point clouds, and other data sources	
Clash Types	Hard clashes (physical intersections)	Hard clashes, soft clashes (clearance issues), and workflow-based issues	Hard clashes, with parametric filtering for more refined detection	Hard clashes, soft clashes, clearance issues, and time-based clashes	
Reporting	Generates a basic interference report	Automatically groups clashes by system, object type, or layer; allows issue creation and tracking	Generates clash reports, supports export to Excel, and imports Navisworks reports	Detailed clash reports with customizable rules and templates, supports HTML export	
Visualization	Highlights clashes in the Revit model	Provides multi- contextual model views and comments for better collaboration	Creates 3D section boxes around clashes, supports tiling views for better visualization	Advanced visualization with options to link to animations and timelines	

		365 Copilot - W	eb	
Criteria	Revit Interference Check	Autodesk Construction Cloud (ACC) Model Coordination	Bird Tools - Clash Preventor	Navisworks Clash Detection
User Interface	Simple dialog within Revit	Web-based interface with collaboration tools	User-friendly interface with real- time clash browser	Comprehensive interface with advanced filtering and selection options
Automation	Manual process, requires user to run checks	Automated clash detection upon model upload	Real-time automatic clash prevention and detection	Supports automated clash detection with customizable rules and templates
Collaboration	Limited to Revit users	Facilitates collaboration among all project stakeholders with issue tracking and assignment	Allows for real-time clash resolution within Revit	Supports collaboration through detailed clash reports and integration with other Autodesk tools
Cost	Included with Revit	Requires subscription to Autodesk Construction Cloud	Paid add-in with a trial version available	Requires a separate license, often included in Autodesk AEC Collection

## #2 365 COPILOT WORK

		365 Copilot - Work		
Criteria	Revit Interference Check	Autodesk Construction Cloud (ACC) Model Coordination	Bird Tools - Clash Preventor	Navisworks Clash Detection
Primary Function	Detects intersections between selected elements or all elements in the model	Automates clash detection in a cloud environment, integrates with other Autodesk tools	Prevents clashes by running clash prevention tests while working in Revit	Identifies, inspects, and reports interferences in a 3D project model
Integration	Integrated within Revit	Integrates with Revit, Navisworks, and other BIM tools	Integrated within Revit, supports Revit Links and IFC links	Integrates with Revit and other BIM tools
Automation	Manual process	Automated clash detection upon model upload	Automatic and manual modes available	Manual process with customizable rules
Filtering Options	Limited to selected elements or categories	Automatically groups clashes by system, object type, or layer	Category and parametric filtering, supports Revit Rule Filters	Customizable clash rules and templates
Visualization	Generates a report with clash details	Allows visualization of clashes in a cloud environment	Creates 3D views with section boxes around clashing elements	Provides detailed clash reports and visualization
Reporting	Generates an interference report	Turns clashes into issues with tracking and resolution workflows	Generates clash reports that can be exported to Excel	Produces detailed clash reports and allows issue assignment
User Interface	Simple dialog within Revit	Cloud-based interface with collaboration features	User-friendly interface with built-in Clash Browser	Comprehensive interface with Clash Detective window
Use Case	Suitable for basic clash detection within a single model	Ideal for large projects requiring real-time collaboration and clash detection	Best for preventing clashes during the design process within Revit	Suitable for detailed clash detection and coordination in complex projects
Additional Features	Limited to interference checking	Includes issue tracking, model coordination, and collaboration tools	Supports Navisworks Report Import mode for easier clash resolution	Supports time- based clash checks and integration with TimeLiner and Object Animation

#### COMPARISON #3 ChatGPT

	C	ChatGPT		ChatGPT					
Criteria	Revit Interference Check	Autodesk Construction Cloud (ACC) Model Coordination	Bird Tools - Clash Preventor	Navisworks Clash Detection					
Platform/Environment	Built directly into Revit; operates solely within the Revit environment	Cloud-based solution integrated within the Autodesk ecosystem (e.g., BIM 360, ACC)	A Revit plug- in designed to work within the native Revit interface	Standalone desktop application used for aggregating models from multiple sources (Revit, IFC, etc.)					
Integration	Seamless with Revit models; ideal for teams working exclusively in Revit	Integrates with multiple Autodesk products; supports real- time data exchange and coordination across teams	Direct integration within Revit; tailored for early design- phase checks	Strong integration with both Autodesk and non- Autodesk products; allows aggregation of multi-discipline models					
Clash Detection Capabilities	Uses Revit's native geometric intersection algorithms; effective for basic interference detection	Offers advanced detection with customizable tolerances; capable of identifying complex clashes in multi- disciplinary models	Focuses on preventative checks to flag potential design clashes early; aims to reduce downstream issues	Industry- standard detection with advanced algorithms, filtering, and robust clash analysis features					
Automation & Customization	Limited customization; relies on built-in settings with mostly manual intervention	Provides rule- based automation and configurable clash criteria; periodic updates help streamline the review process	Automates clash prevention during design iterations; primarily focused on early-stage error reduction	Highly customizable with options for scripting and adjusting detection parameters; allows detailed rule creation					

		ChatGPT		ChatGPT					
Criteria	Revit Interference Check	Autodesk Construction Cloud (ACC) Model Coordination	Bird Tools - Clash Preventor	Navisworks Clash Detection					
Collaboration & Communication	Primarily an internal tool for individual Revit users; lacks built-in collaborative review features	Designed for multi-user collaboration with real-time reviews, mark-ups, and coordination across dispersed teams	Offers basic reporting for detected clashes; limited collaborative features compared to cloud-based solutions	Facilitates team coordination via detailed clash reports, integrated review workflows, and shared project data					
Reporting & Documentation	Generates basic clash identification reports with limited export capabilities	Comprehensive reporting with dashboards, export options, and detailed documentation for tracking clash resolution	Provides essential reports on detected clashes; may require additional tools for in-depth documentation	Delivers detailed clash reports, visualizations, and customizable documentation suited for project stakeholders					
User Interface & Usability	Integrated into the familiar Revit UI; straightforward for basic checks, but less equipped for advanced visualization	Modern, web- based interface with intuitive dashboards; accessible on multiple devices, though may involve a short learning curve	Integrated UI within Revit; user-friendly for teams accustomed to the Revit environment	Powerful 3D visualization tools; the interface is robust but may have a steeper learning curve for new users					
Cost/Licensing	Included with the Revit subscription; no extra cost	Subscription- based pricing model; costs vary based on project size, user count, and selected features	Typically requires separate licensing or an add-in purchase; can be a cost- effective option for early-stage clash prevention	Licensed as a separate product (or part of an Autodesk suite); pricing is generally higher, reflecting its advanced capabilities and scalability					

ChatGPT					
Criteria	Revit Interference Check	Autodesk Construction Cloud (ACC) Model Coordination	Bird Tools - Clash Preventor	Navisworks Clash Detection	
Strengths	Simple and fully integrated within Revit; effective for quick, basic interference checks	Advanced clash detection capabilities combined with robust cloud collaboration; ideal for distributed project teams	Proactive in preventing clashes during the design process; helps minimize errors before detailed coordination	Industry-leading detection accuracy, extensive customization, and comprehensive reporting make it a standard for multi- disciplinary coordination	
Limitations	Limited to Revit elements; lacks multi-discipline support and advanced reporting features	Requires reliable internet connectivity; ongoing subscription costs may be a consideration	Focused scope with limited functionality outside early design-phase checks; less suited for full project coordination	Higher system requirements and a steeper learning curve; model aggregation and extensive customization can be time-consuming	

# #4 ChatGPT 01

		ChatGPT of	o1	
Criteria	Revit Interference Check	Autodesk Construction Cloud (ACC) Model Coordination	Bird Tools - Clash Preventor	Navisworks Clash Detection
Primary Use	Basic tool within Revit to identify physical overlaps or hard clashes between elements in the same or linked Revit models.	Web-based solution (part of Autodesk Construction Cloud) that performs clash checks on aggregated project models for remote coordination and multi-disciplinary reviews.	A Revit add-in that attempts to prevent potential clashes in real time by restricting or warning about conflicting placements during modeling.	Comprehensive desktop clash detection environment used across multiple disciplines and file formats, offering robust clash test configurations and advanced review features.
Integration & File Support	Restricted to Revit projects (RVT). Can check linked Revit and IFC files to some extent, but the workflow is limited compared to specialized clash detection tools.	Integrates natively with Autodesk Docs for model hosting. Supports multiple file formats through model coordination capabilities (primarily RVT, IFC, DWG, and NWC).	Dedicated to Revit environment (RVT). Operates within the Revit model space, so no wide multi- format support.	Works with a wide range of formats (RVT, IFC, DWG, DGN, NWC, NWD, etc.). Can aggregate models from many authoring tools, making it suitable for complex, multi- software projects.
Workflow & Setup	Straightforward: select views/models to compare, run the check, and review the interference report. Limited options for advanced filtering or rule-based checks.	Setup starts in Autodesk Docs. Models are automatically compared using predefined or customizable clash rules. Minimal local setup required, but requires correct file upload and folder structure.	Installs as a plugin within Revit. Continuous or on- demand checks happen as designers place elements. Setup is quick, focusing on user-defined clearance rules and element categories.	More complex to set up. Requires Navisworks for model assembly and rule- based clash tests. Offers advanced filtering, grouping, and tolerance settings.
Clash Types	Hard clash detection only (elements that occupy the same physical space). Limited to geometry-based checks.	Hard clashes, clearance checks, and some level of intelligent grouping (grouping by systems or level). Uses model coordination features to classify and track issues.	Primarily aimed at preventing hard clashes during model creation. Not designed for advanced clearance or system-based checks.	Full range of clash detection: hard, clearance, duplicates, duplicates with tolerance, etc. Can be highly customized with rules-based detection and multi-disciplinary grouping.

ChatGPT o1					
Criteria	Revit Interference Check	Autodesk Construction Cloud (ACC) Model Coordination	Bird Tools - Clash Preventor	Navisworks Clash Detection	
Real- time/Preventative Capabilities	Does not offer real-time or preventative clash detection. Runs only on demand.	No immediate real-time feedback within authoring tools; feedback is gained through cloud-based model coordination after uploads.	Provides in-Revit warnings/blocks when an element is placed too close or intersects another element. Focuses on preventing clashes at the source.	Not real-time inside authoring software. Typically run on aggregated models at scheduled intervals or on demand.	
Collaboration & Issue Tracking	Very basic. You can export reports, but there's no native issue-tracking system. Collaboration typically occurs outside Revit (comments, markups, etc.).	Centralized clash results within Autodesk Docs. Issues can be created, assigned, and tracked within the ACC platform. Users can comment, add screenshots, and notify team members in the cloud.	Limited. May provide immediate notifications in Revit, but doesn't integrate with a robust issue- tracking platform. Usually relies on external methods (emails, markups) to discuss conflicts.	Integrates well with BIM 360/ACC model coordination or 3rd-party issue tracking. Offers a strong viewpoint and markup system for cross- team collaboration. Issues can be exported to an external CDE for tracking.	
Reporting & Visualization	Basic text-based report showing clashing elements and references. Visualization is manual within Revit by clicking each clash.	Cloud-based dashboards, color- coded clash visuals, and automated clash grouping. Generates shareable reports with snapshots directly accessible via browsers.	Focuses on prevention rather than comprehensive reporting. Minimal clash logs; mostly local alerts in Revit's interface.	Rich clash reports, color-coded highlighting of clashes, viewpoint navigation, clash grouping by rules or selection sets. Can export HTML or XML reports and allow advanced sorting/filters.	
Rule-Based Customization	Minimal. Mostly a straightforward compare of geometry. You can filter categories, but advanced rule sets are missing.	Offers some rule- based filtering, but less extensive than Navisworks. Rules revolve around project standards set in ACC.	Basic user-defined allowances (e.g., minimum clearance) for preventing known conflict scenarios. Not as in-depth as separate clash detection engines.	Highly customizable. Users can define complex rules, tolerance thresholds, search sets, and "ignore" rules for specific element types or system interactions.	

ChatGPT o1				
Criteria	Revit Interference Check	Autodesk Construction Cloud (ACC) Model Coordination	Bird Tools - Clash Preventor	Navisworks Clash Detection
Performance & Scalability	Handles small to medium projects effectively. Large, complex models can cause significant performance delays, especially if many elements are involved.	Good scalability in the cloud. Large model sets can be processed, though performance depends on upload frequency and connection.	Operates only while modeling in Revit. Performance depends on the project size within Revit. Usually suitable for medium- sized projects.	Capable of managing large, multi-disciplinary models. Supports advanced caching and referencing methods to handle big data sets.
Licensing & Cost	Included with Revit at no extra cost.	Requires Autodesk Construction Cloud subscription or relevant license (e.g., BIM Collaborate, BIM Collaborate Pro). Cost is subscription- based.	Paid add-in for Revit, though more affordable than full external clash tools. Licensing depends on Bird Tools policies (single license or multi-user).	Comes with Navisworks Manage, which is a separate paid license (unless bundled in an AEC Collection). Standalone is more expensive but also more comprehensive in clash detection.
ldeal Use Case	Quick, on-the-fly interference checks within Revit. Useful for smaller teams or single-discipline checks that don't require extensive coordination.	Mid to large projects requiring centralized model coordination across disciplines. Ideal where teams want web-based issue tracking and a single source of truth in the cloud.	Best for proactive clash avoidance in Revit during design. Reduces rework by warning users instantly, but not a complete coordination tool for large multi- platform workflows.	Large or complex projects needing deep clash analysis and advanced reporting. Often used by BIM coordinators/managers who need to handle multi-format, multi- disciplinary coordination with extensive rule sets.

### COMPARISON #5 ChatGPT o3-mini

ChatGPT o3-mini					
Criteria	Revit Interference Check	Autodesk Construction Cloud (ACC) Model Coordination	Bird Tools - Clash Preventor	Navisworks Clash Detection	
Environment/Platform	Built-in to Revit; operates entirely within the Revit environment without the need for additional software.	Cloud-based solution integrated into the Autodesk Construction Cloud ecosystem; accessible via web and desktop applications.	An add-in for Revit; operates directly within the Revit environment to provide real-time alerts during the design process.	Stand-alone application capable of handling various file formats (Revit, IFC, etc.); used as a central review and coordination tool.	
Detection Capabilities	Performs basic interference checks by identifying overlapping geometries within a single Revit model.	Conducts multi- discipline, multi-model clash detection; merges data from various design sources to identify spatial conflicts across integrated models.	Focuses on preventative measures by alerting designers in real-time to potential issues; helps enforce design standards to avoid downstream clashes.	Offers advanced clash detection capabilities, identifying complex spatial conflicts in large federated models; supports detailed grouping and filtering.	
User Interface/Workflow	Simple interface native to Revit with limited visualization and manual filtering options.	Modern, web- based dashboard with visual markups, integrated issue tracking, and collaboration tools for streamlined resolution.	Embedded within the Revit workflow; provides immediate, context- sensitive alerts to inform design adjustments before model finalization.	Comprehensive review interface with detailed markups, customizable filters, and grouping options; designed for extensive clash review sessions.	

	Cha	tGPT o3-mini		
Criteria	Revit Interference Check	Autodesk Construction Cloud (ACC) Model Coordination	Bird Tools - Clash Preventor	Navisworks Clash Detection
Integration/Interoperability	Fully integrated with Revit; however, it remains limited to single-model checks without broader collaboration features.	Natively integrated within the Autodesk ecosystem, enabling seamless collaboration with other construction and design tools across multiple stakeholders.	Primarily limited to Revit; offers minimal integration with external collaboration platforms beyond the immediate design environment.	Highly versatile with support for multiple file formats and integration with various design platforms, ensuring smooth interoperability across teams.
Automation/Customization	Offers a manual process with basic automation; limited options for rule-based filtering or custom check parameters.	Supports automated clash detection routines, scheduling, and rule-based configurations; customizable criteria help tailor detection to project needs.	Provides automated real-time alerts during design phases; customization centers on enforcing design standards rather than comprehensive rule settings.	Highly customizable detection parameters with support for scripting and automated clash resolution workflows; ideal for repetitive, large- scale reviews.
Reporting/Collaboration	Generates basic reports and visual indicators within Revit; lacks advanced collaboration or centralized tracking features.	Delivers robust reporting with real-time dashboards, comment threads, and integrated issue tracking; enhances team-based communication and resolution workflows.	Minimal reporting features; its primary function is to alert designers rather than generating detailed clash reports.	Produces detailed, exportable clash reports and supports assignment/tracking of clash resolutions; excellent for coordinated team reviews.

ChatGPT o3-mini				
Criteria	Revit Interference Check	Autodesk Construction Cloud (ACC) Model Coordination	Bird Tools - Clash Preventor	Navisworks Clash Detection
Strengths	- Easy to use within Revit without extra licensing.	- Cloud connectivity facilitates real- time collaboration across disciplines.	- Proactive approach to minimize clashes during design.	- Industry- standard with proven accuracy.
	- Quick, simple interference checks for early conflict identification.	- Advanced detection across multiple integrated models.	- Seamless integration with Revit, aiding in early-stage design validation.	- Extensive customization and filtering options.
		- Strong reporting and tracking.		- Suitable for complex, large- scale projects.
Limitations	- Limited to interference checks; does not perform full- scale clash detection.	- Dependent on internet connectivity and subscription models.	- Not a full clash detection system; focuses solely on prevention rather than comprehensive detection and resolution.	- Requires separate licensing and training for optimal use.
	- No multi-model or cloud collaboration capabilities.	- May have a learning curve for teams new to cloud-based workflows.		- Can be resource-intensive with very large datasets.

### COMPARISON #6 ChatGPT4

ChatGPT 4				
Criteria	Revit Interference Check	Autodesk Construction Cloud (ACC) Model Coordination	Bird Tools - Clash Preventor	Navisworks Clash Detection
Integration	Integrated directly into Revit	Cloud-based, integrated with ACC	Revit add-in	Standalone application
Clash Detection Scope	Within a single model	Across models in a project	Within and across models	Across multiple models
User Interface	Basic, within Revit	Web-based, intuitive	In Revit, straightforward	Detailed, customizable
Real-time Clash Detection	No	Yes	Yes	No
Model Link Support	Supports linked Revit models	Supports multiple linked models	Supports different link types	Supports multiple formats
Automatic Clash Updates	Manual refresh required	Automatic as models are updated	Automatic during design	Manual refresh required
Reporting Capabilities	Basic textual reports	Detailed reports, visual tools	Advanced reporting in Revit	Detailed, customizable reports

ChatGPT 4				
Criteria	Revit Interference Check	Autodesk Construction Cloud (ACC) Model Coordination	Bird Tools - Clash Preventor	Navisworks Clash Detection
lssue Resolution Tracking	No	Yes, with issue assignment and tracking	Basic tracking within Revit	Advanced tracking and management
Collaboration	Limited to Revit users	Facilitates broad collaboration	Revit users	Broad, multi- disciplinary
Export/Import of Clash Reports	Limited export capabilities	Comprehensive export/import	Advanced export/import	Comprehensive export/import
Configurability of Clash Tests	Limited	Highly configurable	Highly configurable	Highly configurable
Historical Data Management	Not available	Available	Not available	Available
Cost	Included with Revit	Subscription- based (part of ACC)	Additional cost per license	Standalone or bundle cost
Best Used For	Quick checks within Revit	Large-scale projects with team collaboration	MEP focused, detailed in Revit	Complex projects, detailed analysis

## COMPARISON #7 ChatGPT 40

		ChatGPT 4o		
Criteria	Revit Interference Check	Autodesk Construction Cloud (ACC) Model Coordination	Bird Tools - Clash Preventor	Navisworks Clash Detection
Purpose	Basic clash detection within the active model	Cloud-based model coordination and clash detection	Real-time clash prevention during design	Comprehensive clash detection and management
Workflow Integration	Manual, requires running checks periodically	Integrated with ACC workflow, continuous checking	Real-time within Revit as elements are placed	Separate from Revit, integrated with Navisworks
Cross-Model Clash Detection	Only within the active model	Across multiple linked models in the cloud	Within model and across linked models	Across multiple models and formats
Types of Clashes Detected	Hard clashes only	Hard and soft clashes	Hard and soft clashes, including user- defined	Hard and soft clashes, proximity checks
Level of Detail	Basic element-level clashes	High-level model coordination, detailed clash view	High detail with customizable clash rules	Detailed clash reports with group and filter options
Automation and Real-Time Checking	Manual rerun needed	Automated checks with continuous coordination	Real-time clash prevention as elements are added	Manual rerun needed but supports batch processing
Clash Rule Customization	Limited to category selections	Rules can be configured in the cloud	Highly customizable, element- specific rules	Advanced rule sets and customizable clash tests
Clash Grouping and Management	None	Groups clashes by type and location	Groups by elements and clash types	Advanced grouping, filtering, and management

ChatGPT 4o				
Criteria	Revit Interference Check	Autodesk Construction Cloud (ACC) Model Coordination	Bird Tools - Clash Preventor	Navisworks Clash Detection
Reporting and Export Options	Text-based reports	Detailed reports, issues can be assigned	Export/import clash reports, Navisworks integration	Comprehensive reports in multiple formats (HTML, XML, CSV)
BIM 360/ACC Integration	None	Full integration with ACC	Partial integration (manual export to ACC)	Linked through Navisworks model coordination
Navisworks Integration	None	Linked through ACC	Export clashes to Navisworks	Native integration
Compatibility and File Formats	Revit models only	Multi-format support (Revit, IFC, DWG, NWC, etc.)	Revit models and linked models	Multi-format support (NWC, DWG, IFC, DWF, etc.)
Performance and Speed	Slower, especially on large models	Fast in cloud but depends on internet speed	Fast within Revit, minimal lag during design	Fast but resource- intensive on large projects

ChatGPT 4o				
Criteria	Revit Interference Check	Autodesk Construction Cloud (ACC) Model Coordination	Bird Tools - Clash Preventor	Navisworks Clash Detection
Ease of Use and UI	Basic and outdated interface	Modern and intuitive interface	User-friendly, integrated within Revit's Ul	Advanced but complex UI
Cost and Licensing	Included with Revit	Requires ACC subscription	Paid add-in with various licensing options	Separate license required
Unique Features	Basic and limited	Issue tracking and collaboration in cloud	Real-time prevention, import/export from Navisworks	Advanced clash grouping and viewpoint creation
ldeal Use Case	Small projects or simple clash checks	Cloud-based coordination for large projects	Real-time clash prevention in Revit projects	Comprehensive clash management for complex projects

#### A COUPLE OF COMMENTS

Compared to all the "hallucination" that all the platforms above used to generate back when they first became a trend, the results above are pretty decent and impressive and somewhat accurate.

However, they are not without flaws and contain a couple of inaccuracies.

Here are some comments that we have about some of the aspects listed above:

- ChatGPT 4o/4: both don't mention that even though Bird Tools – Clash Preventor is paid, it's very affordable at the standard price of 20 USDs/User/Year. It's also free to try and offers several discounted plans.
- ChatGPT 4o doesn't mention that IFC is supported by Clash Preventor.
- ChatGPT 4 mentions that ACC Model Coordination is a real-time service, which is completely false as it's not real-time at all, an even though Autodesk keep mentioning that its clash detection process is "Automated", technically it's a manual process as it

requires model publishing to be rerun every time. (ChatGPT o1 gets this right though)

- ChatGPT 3o/ChatGPT: the "Clash Resolution" limitation mentioned for Bird Tools Clash Preventor is completely not true. On the contrary: Clash Preventor also has full model modes if the user wants to use it as a clash detector as well, and for solving clashes, it's the easiest of the three, as with it, the clashes can be found the easiest, as Navisworks doesn't really connect well with Revit and you need Clash Preventor's Navisworks import command to have an easy way to browse its clashes, and the ACC "thing" needs the published C4R model to be up to date which most of the time isn't, as typically, publishing happens once per week. We're not even going to talk about the built-in interference check tool...
- ChatGPT o1: information in the "clash types" category is not accurate: Clash Preventor has a tolerance feature for soft clashes, and the tool's selection based mode is way more efficient for system based checks as systems can be easily selected (ex: TAB key and MEP systems) and a keyboard shortcut can be used for the selection mode to make it easily accessible and instant.
- ChatGPT o1: as far as Bird Tools are concerned, Clash Preventor's Excel reports are as detailed as those of Navisworks, minus some useless data found in those of Navisworks that we've omitted for efficiency and simplicity. There are plans for some really nice "stuff" in the reporting area of the tool (hint: they will include

some exciting AI features) that we are currently considering.

- ChatGPT o1: the entire "performance" comparison is not accurate.
- ChatGPT: within the "Automation and Customization" category, and as far as automation is concerned, Clash Preventor is a real-time tool and the most automated of the three. As far as customization is concerned, Clash Preventor allows the use of parameter filters in a detailed way that exceeds all other 3 solutions.
- 365 Copilot Web: the "Clash Types" category is not accurate: Clash Preventor also has a tolerance mode.
  Point clouds are also supported by the tool, which is not mentioned by any of the AI chatbots.
- 365 Copilot Web: the built-in interference check tool's "highlight feature" is so inefficient to the point where one can consider it non-existent. Visualisation for Navisworks and the ACC "thing" within themselves is great, but when needed within Revit, which is what matters when solving clashes, it's close to non-existent.
- 365 Copilot Web mentions that Navisworks features automated clash detection which is completely false: Navisworks has no automated modes at all and is 100% manual.
- None of the 7 AI bots used mentions a very important topic: user privacy, which, and with the exception of Clash Preventor, is not respected by any of the tools. User privacy is sacred at Bird Tools as per our Privacy Policy.

Looking forward to your thoughts!

Make sure to give Clash Preventor a free trial: <u>https://www.birdtools-</u> <u>developers.com/shop.html</u>

You may find more information about Bird Tools on our website:

https://www.birdtools-developers.com

Find us on LinkedIn for similar content: <u>https://www.linkedin.com/in/bird-tools</u>

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