

B AUTODESK®
BIM 360™

Document Management



Introduction

Document management may not be the most exciting part of the construction process, but making sure project teams have access to the right information at the right time is essential to completing a successful project.

Harnessing the power of a cloud-based repository will increase efficiency, improve quality, and reduce risk, not only saving time and money but leading to happier clients at the end of the project. Don't fall victim to the old way of doing

things. Start using the best document management practices today!

The following guide introduces the BIM 360 suggested document management workflow and gives context to the different capabilities built into the product, including step-by-step starter guides.

Autodesk BIM 360

BIM 360 improves the process of construction by supporting informed decision making throughout the project lifecycle. It does this by centralizing all project data in a single data repository and connecting project stakeholders and workflows—from design to construction to operations, from the field to the office and back.

Visit BIM 360 Site 

Please note that the capabilities outlined in this guide are reflective as of December 2019 and will continue to undergo improvements. Additionally, some capabilities are only available in certain countries. For more information on product updates and capabilities please visit the [BIM 360 Product Release Notes](#).



Table of Contents

1 Suggested Workflows

- Document Management
- Approvals
- Design Review
- Bid Management

2 Document Management Capabilities

- Folder Management
- Document Distribution
- Publish Drawings
- Document Compare
- 2D & 3D Viewing
- Markups
- Issue Management
- Desktop Connector & Offline Sync

3 Prediction & Analytics Capabilities

4 Additional Capabilities

- Account Admin
- Mobile Access
- Integration Partners



Suggested Workflows

Document Management Workflow

Teams can maximize the benefit of cloud-based file sharing by enforcing a best practice workflow. The graphic below outlines the suggested document management workflow using BIM 360.

Why follow this workflow?

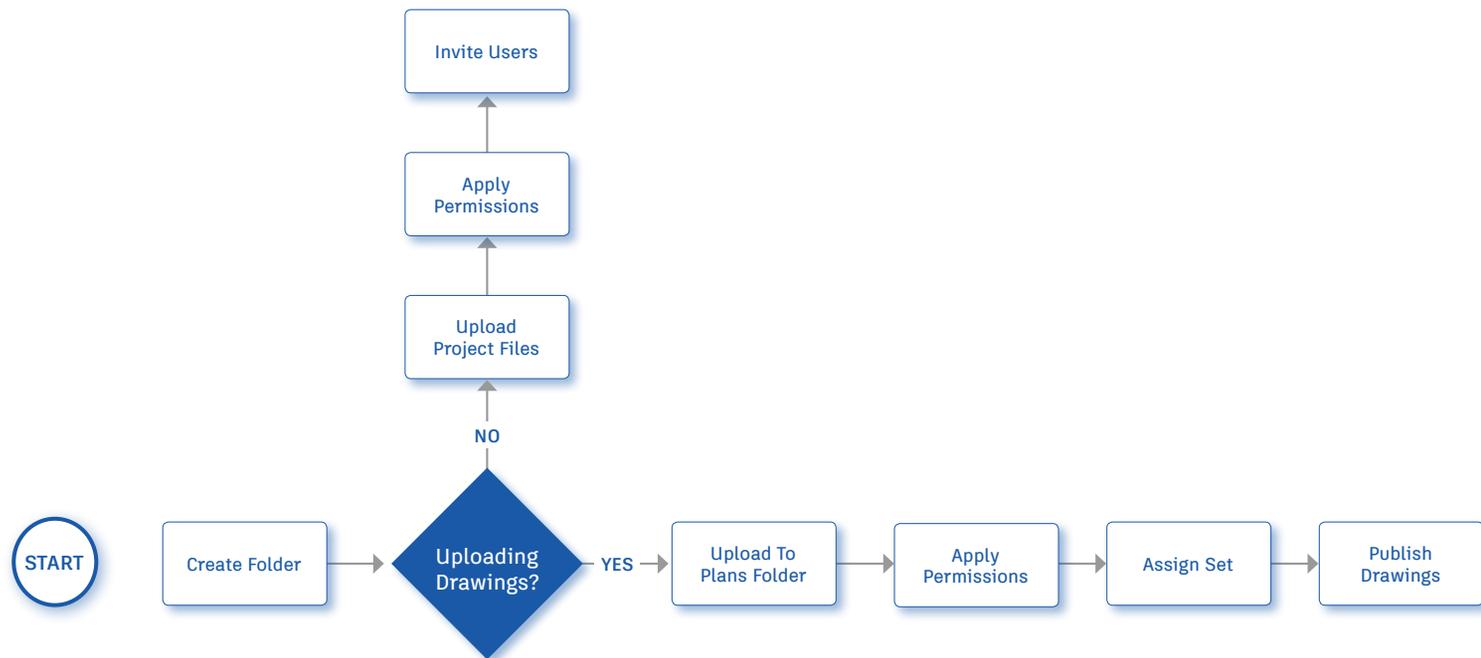
- Streamline file organization
- Save time and maintain consistency
- Control sharing of information with the entire project team

BIM 360 capabilities used

- File management
- Document distribution
- Publish drawings



DOCUMENT
MANAGER



Approvals Workflow

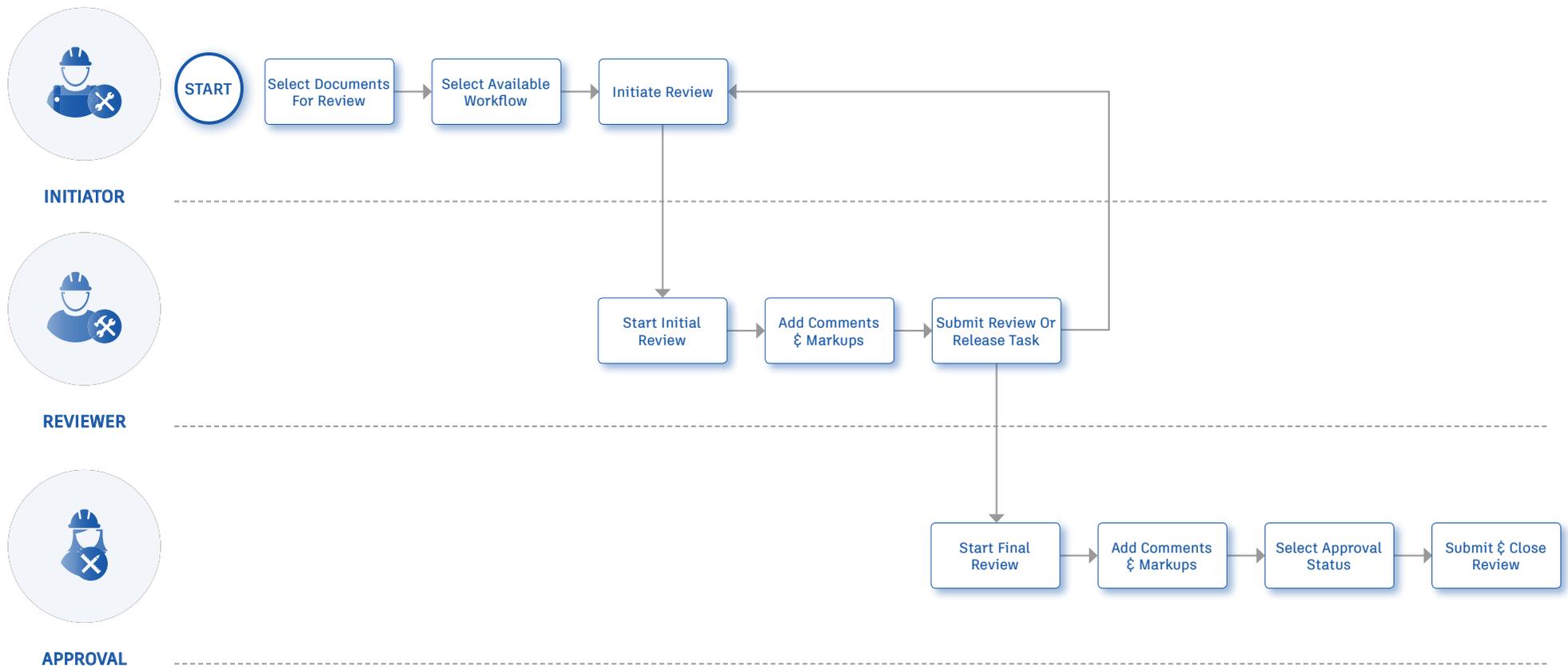
Keep the whole team involved in the review of information prior to it being distributed to a broader group with BIM 360's customizable approvals workflow. The graphic below outlines the approvals workflow.

Why follow this workflow?

- Tightly controls and organizes the flow of project information
- Ensurs all information paths follow an agreed upon and consistent process
- Moves from tracking "what was looked at" to a true status of documents to drive accuracy and transparency

BIM 360 capabilities used

- Approval workflow
- Markups



Design Review Workflow

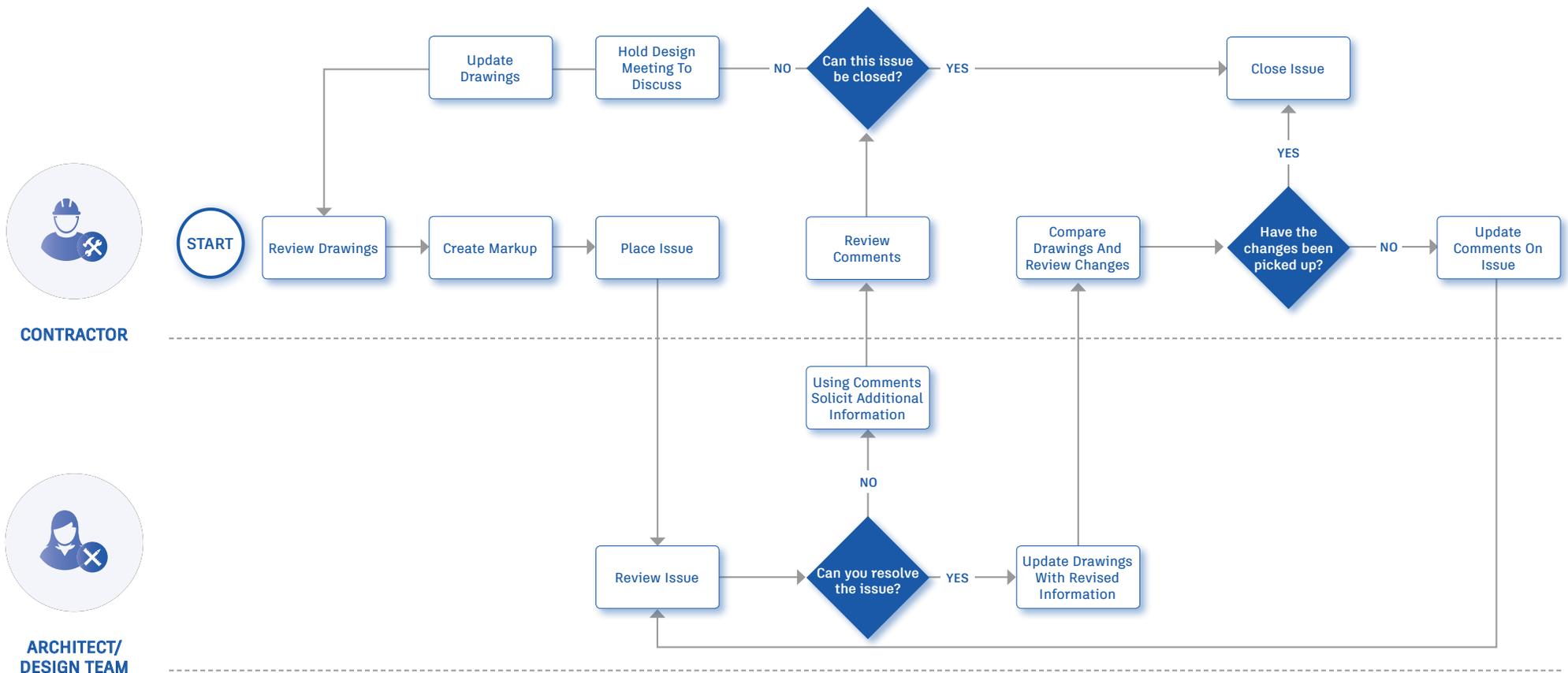
Easily collaborate with the team during the design review process by implementing a streamlined workflow. The graphic below outlines the suggested design review workflow using BIM 360.

Why follow this workflow?

- Streamline design reviews across team members anytime, anywhere
- Aggregate comments and markups in a single location
- Easily compare versions for both 2D & 3D drawings

BIM 360 capabilities used

- 2D & 3D viewing
- Document compare
- Markups
- Issue management



Bid Management Workflow

Consolidate the bid management process by organizing files and controlling distribution to bidders. The graphic below outlines the suggested bid management workflow using BIM 360.

Why follow this workflow?

- Centralize the location for all bid related files
- Easily invite and share documents with bidders
- Control visibility permissions by individual or company

BIM 360 capabilities used

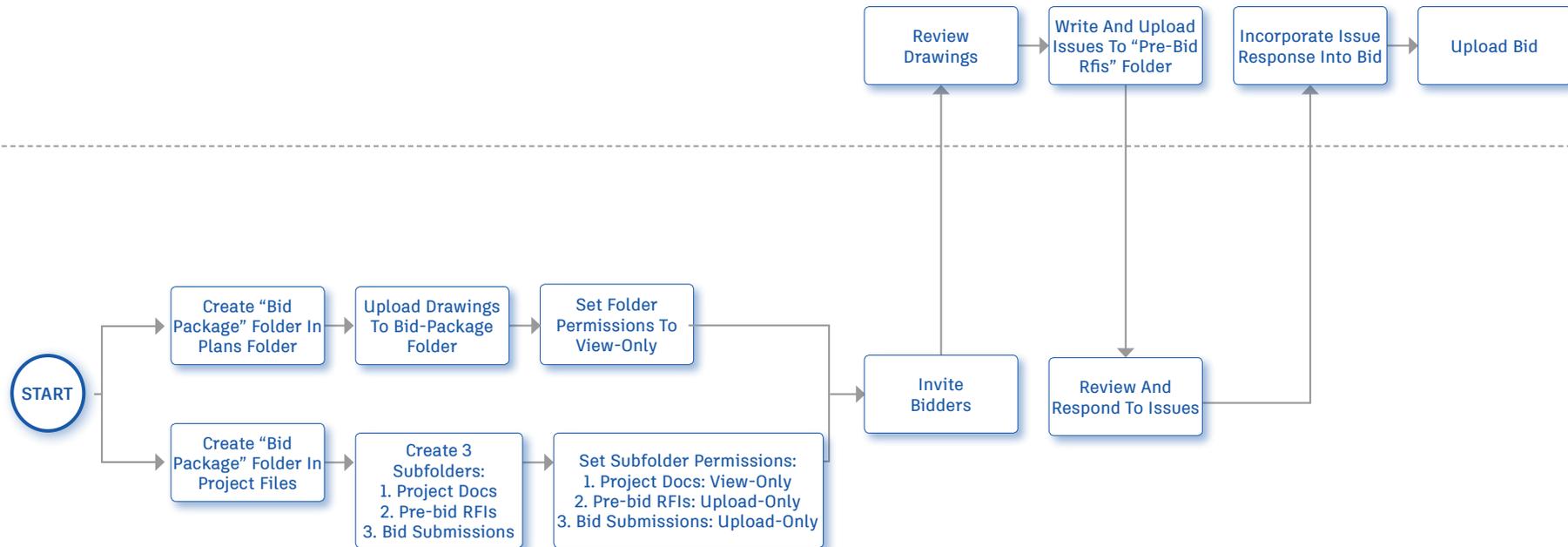
- File management
- Document distribution



BIDDER



BID COORDINATOR



Document Management Capabilities

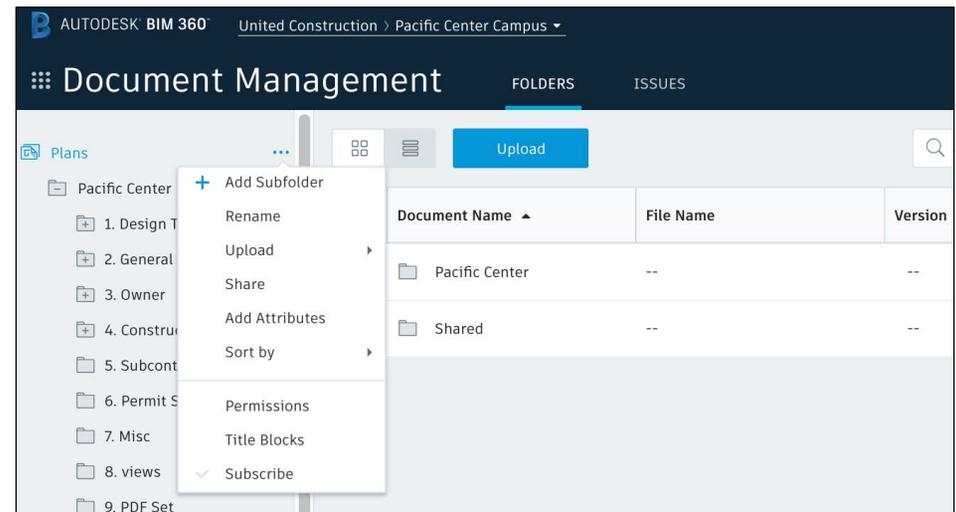
Folder Management

Using cloud-based software for document management enables remote teams working on-site to easily connect with those working in the office. This connectivity helps to prevent rework, as all documents are stored in one central location, and promotes a more streamlined process for distributing and sharing files. When folder structures are set up in an organized way and users can subscribe to folder updates, teams spend less time finding documents and more time monitoring the project and solving problems.



1 Setting up folders

- There are two areas where you can create folder structures:
 - **Plans**
 - Design documents (2D drawings & 3D models)
 - Files are viewable and capture details from the original source files
 - OCR capabilities and title block information captured
 - Version control and automatic slip sheeting for markups and issues
 - Automatic detail callout hyperlinking for 2D drawings
 - **Project files**
 - Other project-related documents (e.g., contract documents, photos, specifications, bids, etc.)
 - Original file format remains intact
 - Similar to other cloud-based document storage solutions
 - PDF viewing and searching capabilities
 - Supports design files used in Design Collaboration module
- Choose the folder area that is best suited for your documents, click the three-dot icon to the right of the name, and “Add Subfolder.”



PRO TIP: Admins can copy folder structures from an existing project or create a template project to standardize all project folders. To copy folder settings go into the Project Admin module under the Services tab when you are first setting up a new project.

PRO TIP: Users can easily drag and move folders around to change the folder structure.

Project Setup



Setup Folders

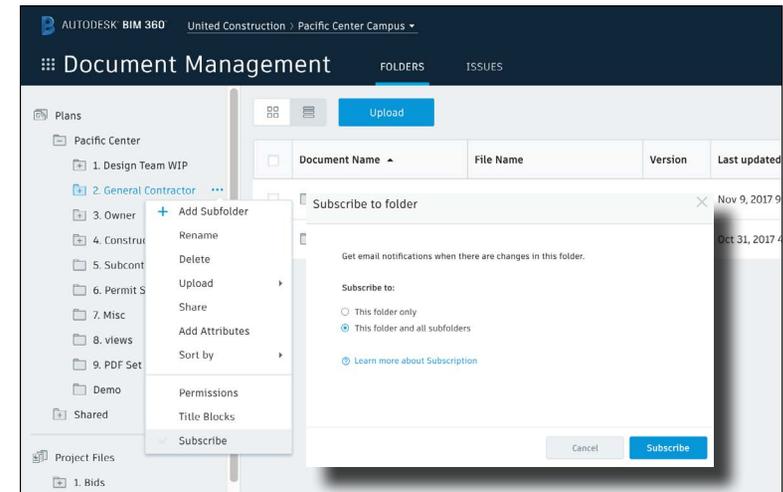


Folder Management

2 Subscribe to folders

- Team members can click the three-dot icon next to specific folders and select the “Subscribe” option.
- Select the option for “This folder and all subfolders” to get notifications for subfolders, even those added later.
- By subscribing, the team member will be notified via email any time an update is made to this folder (like when a new version of a file is uploaded).

Document Management



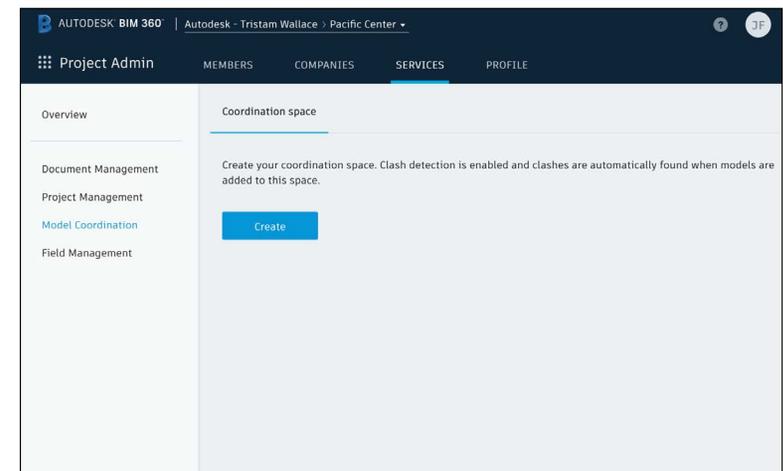
3 Shared folders for additional modules

- When using other BIM 360 modules, such as Design Collaboration and Model Coordination, all models will be managed within Document Management.
- Admins can activate these spaces from within Project Administration.

Model Coordination
Document Sharing



Design Collaboration
Document Sharing

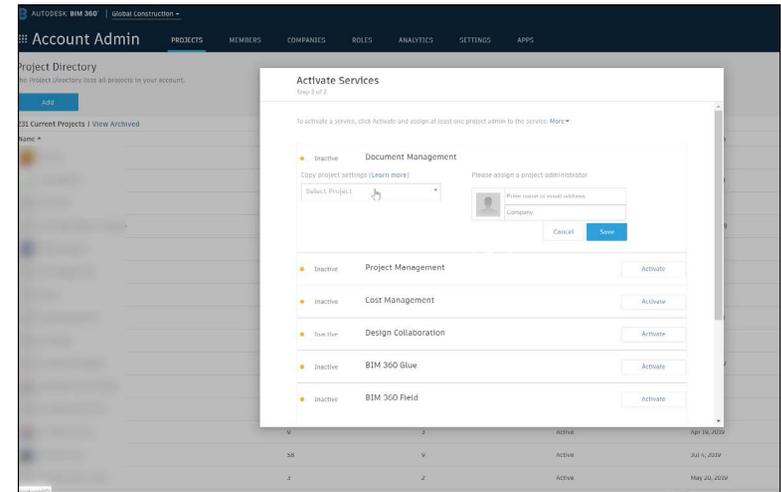


PRO TIP: Setting up the file structure in Document Management for viewing in other modules can be set up by the project admin. The [Autodesk Knowledge Network](#) has other articles and forums to help set this up.

Folder Management

4 Project Templates

- Teams can reuse folder structure templates from previous projects when creating a new project. This means that the file structure as well as all of the role based permission settings will copy over.
- In the “Account Admin” module go to the “Projects” tab and select the “Add” button to start creating a new project
- For step 1 add the project name and other relevant details
- For step 2, in the BIM 360 Document Management activation menu, you will see “Copy Project Settings.” Select the project you want to copy, add one or more project admins, and activate your project.
- The folder structure and any Role-based folder permissions will be automatically created for the new project.



Copy Project Settings 

PRO TIP: Users can save a ton of time with the ability to copy a project template and can configure other workflows besides Document Management including Issues and Cost Management.

Document Distribution

Uploading and sharing project files is the first step in establishing a successful document management process for your project. It is essential to assign permission levels appropriately to ensure the right people have access to the right information. With batch uploading functions and the ability to set standardized permission controls, distributing and sharing construction documents has never been easier.



1 Uploading documents

- Select or create a folder where you want to add a file.
- Click “Upload” and select the file or simply drag the file into the required folder.
- To upload Autodesk® Revit®-linked files and Autodesk® AutoCAD® xrefs, follow these steps (note: you cannot drag linked files):
 - Click “Upload” and select “Linked Files.”
 - Select the parent file.
 - In the linked files box, select “Add Files” and choose additional child files if necessary.

Document	File Name	Version	Last updated
1. Design Team WIP	--	--	Oct 19, 2017 4:...
2. General Contractor	--	--	Oct 19, 2017 4:...
3. Owner	--	--	Oct 19, 2017 4:...
4. Construction Manag...	--	--	Oct 19, 2017 4:...
5. Subcontractors	--	--	Oct 19, 2017 4:...
6. Permit Set	--	--	Nov 8, 2017 8:...

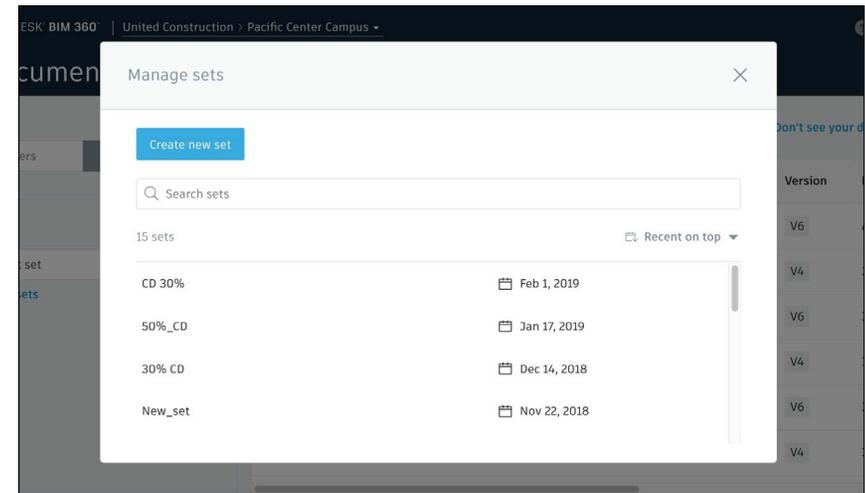
PRO TIP: To select multiple files, press Shift+Click or Ctrl+Click.

Add Documents

Document Distribution

2 Creating document sets

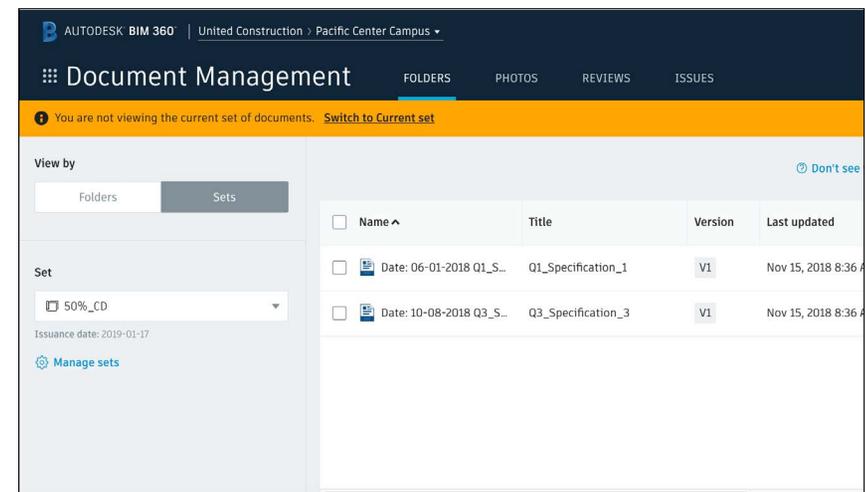
- Create a Set or add documents to an existing Set when uploading to any Plans folder.
- In the Folders tab, select “Sets” on the left side panel
- Select “Manage Sets” to create new Sets or edit existing set names or issuance dates.
- When creating a new set, you can give it a unique name and an “Issuance Date” (which can be different from the upload date) and select “Continue.”
- Click the drop down Set list to select different Set packages to view
 - NOTE: If you select a previous set you will see a yellow bar indicating you are not viewing the current Set.
- When uploading new documents, you can choose to add it into a new set by selecting the “Set Not Specified” section of the upload screen and choosing to “Publish to a new set” (project admins only) or “publish to an existing set” (project admins and members with control permission).
- You can also add previously-uploaded documents to a Set from the Folder view, or edit the contents of a Set from the Folder or Sets view.



Creating Sets



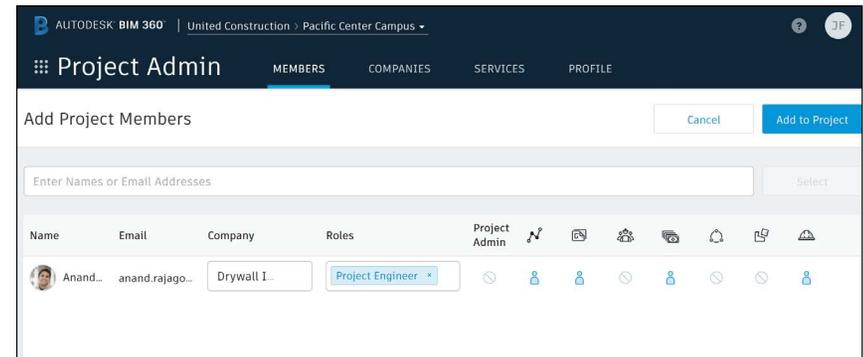
PRO TIP: It is recommended that you name sets in a way that communicates to the project team what a given collection of documents represents, i.e. “50% CD”.



Document Distribution

3 Adding members

- Click the module selector for Project Admin.
- Click the Members panel and select the blue “Add” button.
- Search the directory by typing a name or adding a new email into the search field and click “Select.”
- Assign default company and role(s). If the company does not already exist, create a new company. Click to modify module access.
- Click “Add to Project” and they will receive a Welcome to BIM 360 email with a link to access the project.

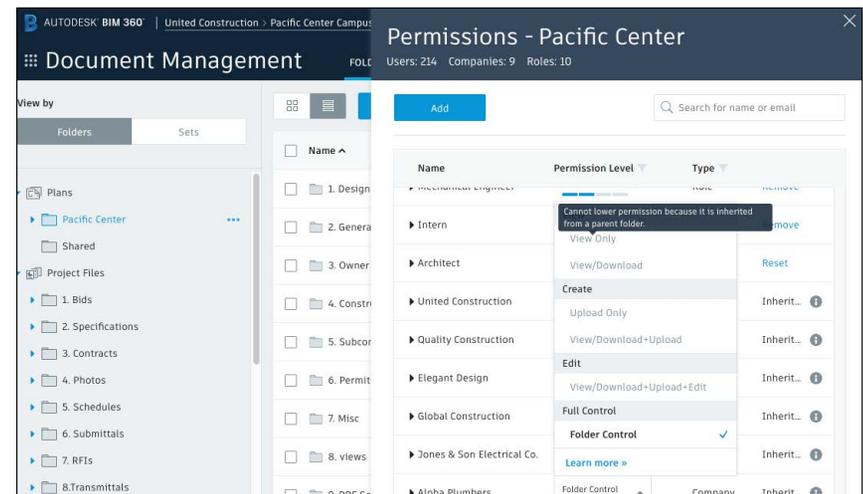


PRO TIP: You can add one or multiple members at a time.



4 Setting permissions

- Select the folder and right-click “Permissions” or select from the three-dot folder menu.
- Choose the permission level you want to assign to the folder.
- There are six permission levels to choose from, and you can preset permission levels based on role, company, or user.
- Permission levels can be drilled down further within subfolders.



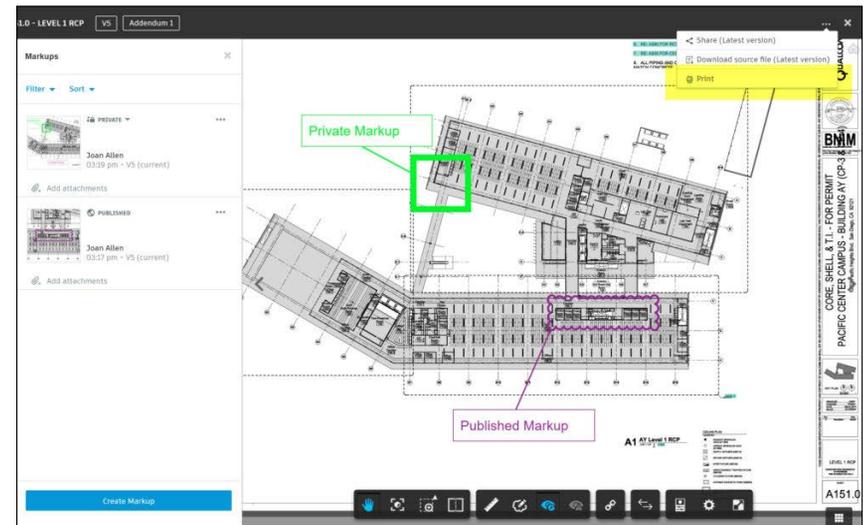
PRO TIP: It is a best practice to start assigning permissions based on a role or company level first.



Document Distribution

5 Printing documents

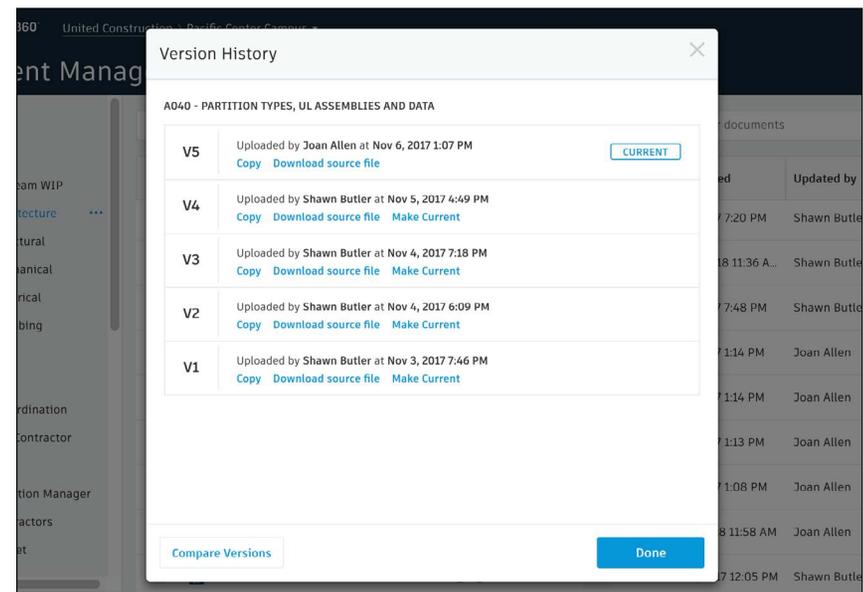
- When viewing a 2D drawing or 3D model, click on the three dots on the top right and select “Print”.
- Select the printer and paper size or choose to print as a PDF.
- This allows teams to print versions of drawings that include both private and public markups.



6 Version control

- Open the folder and find the document you want to view.
- Click on the version number.
- A Version History dialog box will pop up with details about when the file was updated and by whom.
- Similar to the above workflow, you can click “Compare Versions” to choose which versions you want to compare, using either overlay or side-by-side view.

PRO TIP: You can also view an export of a Document Log by clicking the icon in the top right of the Folders tab.

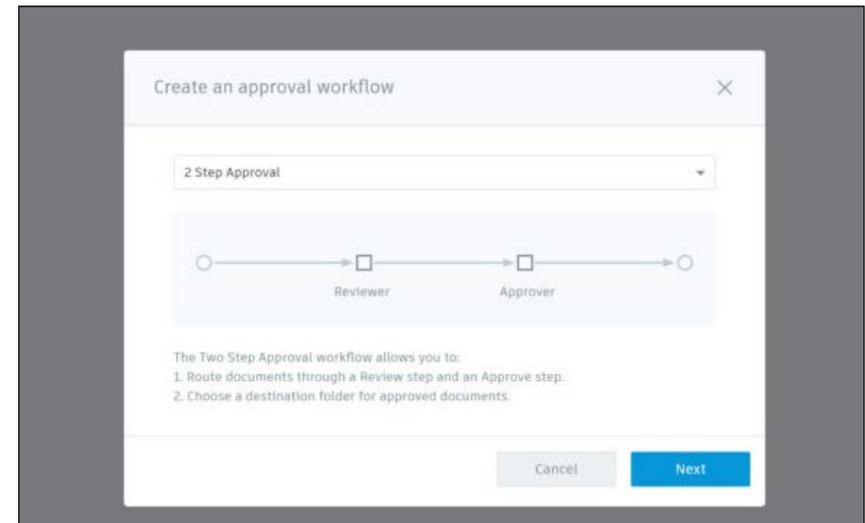


Document Distribution

7 Reviews and Approvals

- Create one or more workflows by clicking into “Project Administration” under “Document Management” and “Reviews”.
- Choose from several workflow templates and customize the workflow by name, participants (users / roles / companies), durations, status labels, and action after approval.
- Team members with “initiate” permissions can select one or more documents and choose the “Submit for review” option. NOTE: depending on the workflow configuration rules, project members can choose between multiple workflows including the option to initiate group reviews.
- An email notification will be sent to the next participants in the workflow. You can also choose to notify other project team members.
- If using a “multiple reviewer” workflow, teams can have groups of individuals as designated reviewers and can simultaneously review and approve to speed up the process.
- The assigned team members will then go through the review process, with the ability to add markups from within the viewer and add comments for each document.
- The Approver can set the approval status on a document-by-document basis.

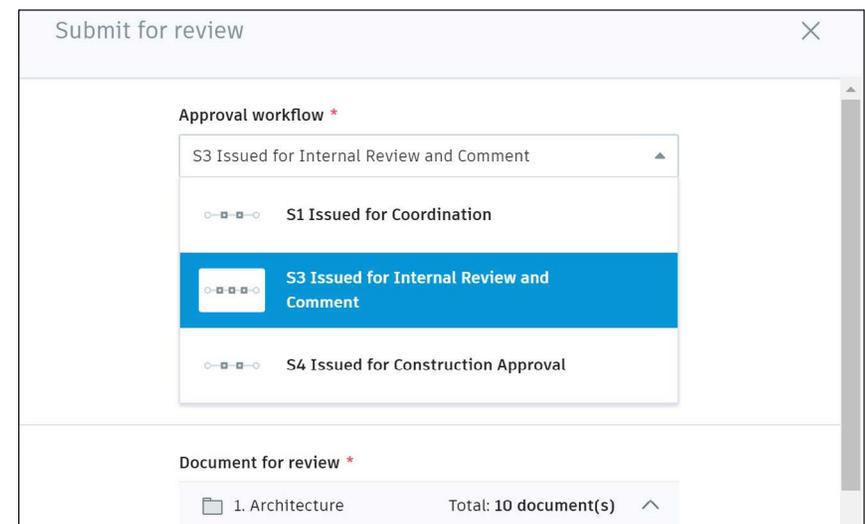
PRO TIP: All documents will remain in their original folders, however, Project Admins do have the option to configure workflows so documents can be copied into another folder once approved so that they can be shared with a broader group.



About Reviews



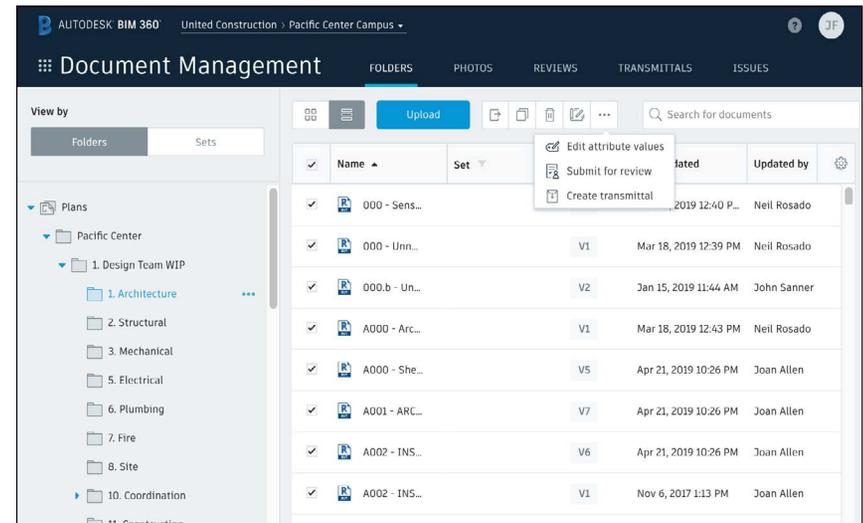
Approval Workflows



Document Distribution

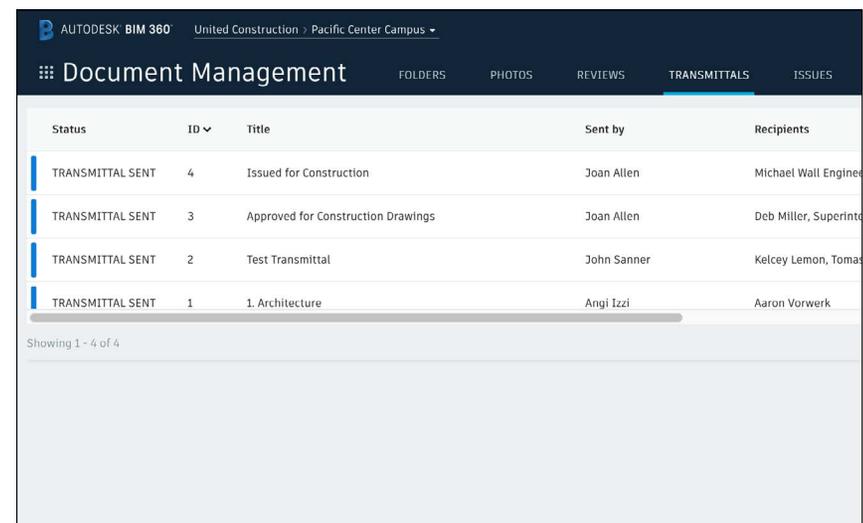
8 Document Transmittals

- From the Folders tab in Document Management, select the files or plans that should be included in the transmittal.
- Click the 3 dots for “More Actions” on the top panel and then select “Create Transmittal”.
- Type in a custom title for the transmittal name and then select the recipients by User, Role, or Company.
- An email will be sent to each recipient when the transmittal is ready to be viewed.
- To view a list of all transmittals click on the “Transmittal” tab on the top menu bar.
- Click into different transmittals to view details.
- Recipients can easily view project documents directly from within BIM 360 as well as download a zipped file of all transmittal documents.



[Document Transmittal Blog](#)

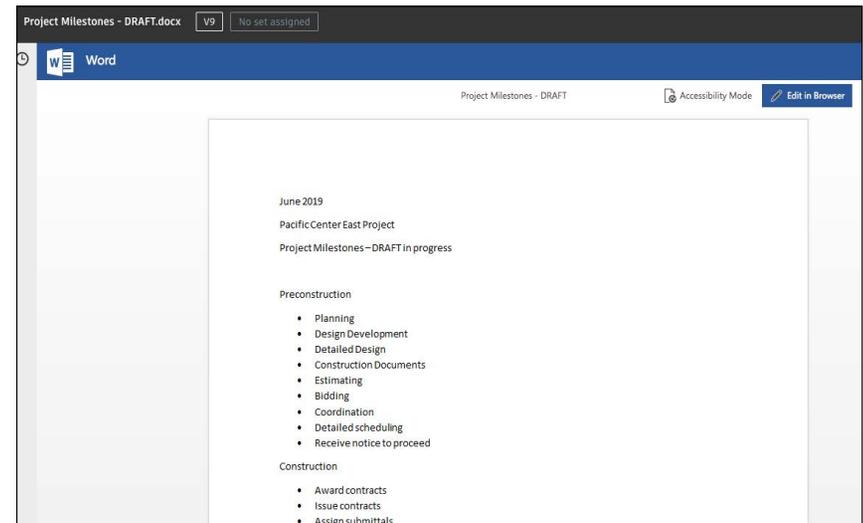
[About Transmittals](#)



Document Distribution

9 Microsoft 365 Integration

- Project members with upload and edit permissions can view and edit Microsoft files (Word, Excel, PowerPoint, Visio) directly from within Document Management.
- To edit a file, select a file in Document Management.
- Click Edit in Browser.
- Sign in with your Microsoft® Office 365 credentials or sign up for an account.
- Make the desired changes. The status bar at the top must state “Saved to Autodesk BIM 360” before exiting a file or changes may be lost.
- End the editing session by doing one of the following:
 - Click Return, to return to the viewer or list view.
 - Click BIM 360, to return to the BIM 360 Document Management home page.



Working with MS Files



Integration Blog



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P						
1	Budget	Contract	Original	Bu	Internal	Adj	Approved	Revised	Bu	Pending	Or	Projected	Orig.	Comr	Approved	Pending	CR	Reserves	Forecast	Fi	Variance	Final
2	84720010:	Fees/Legal, Bonds, Insi	193633	-	-	-	193633	-	193633	-	193633	-	193633	-	-	-	-	-	2000000	-	0	-
3	84720010:	Risk Contir	4015410	-	-	-	4015410	-	4015410	-	4015410	-	4015410	-	-	-	-	-	4015410	-	0	-
4	84720010:	Ch&P	3686228	-	-	-	3686228	-	3686228	-	3686228	-	3686228	-	-	-	-	-	3686228	-	0	-
5	84720010:	Site Manag	5590416	-	-	-	5590416	-	5590416	-	5590416	-	5590416	-	-	-	-	-	5590416	-	0	-
6	84720010:	Post Const:	159671.5	-	-	-	159671.5	-	159671.5	-	159671.5	-	159671.5	-	-	-	-	-	159671.5	-	0	-
7	84720010:	Architects	3060719	-	-	-	3060719	-	3060719	-	3060719	-	3060719	-	-	-	-	-	3060719	-	0	-
8	84720010:	Consulting	3164936	-	-	-	3164936	-	3164936	-	3164936	-	3164936	-	-	-	-	-	3164936	-	0	-
9	84720010:	Accommod	21449.14	-	-	-	21449.14	-	21449.14	-	21449.14	-	21449.14	-	-	-	-	-	21449.14	-	0	-
10	84720010:	Site Accom:	473622.7	-	-	-	473622.7	-	473622.7	-	473622.7	-	473622.7	-	-	-	-	-	473622.7	-	0	-
11	84720010:	Enabling V:	36051.06	-	-	-	36051.06	-	36051.06	-	36051.06	-	36051.06	-	-	-	-	-	36051.06	-	0	-
12	84720010:	Client Team	32082.05	-	-	-	32082.05	-	32082.05	-	32082.05	-	32082.05	-	-	-	-	-	32082.05	-	0	-
13	84720010:	Offsite Acc:	54997.8	-	-	-	54997.8	-	54997.8	-	54997.8	-	54997.8	-	-	-	-	-	54997.8	-	0	-
14	84720010:	Hoarding a	11894.19	-	-	-	11894.19	-	11894.19	-	11894.19	-	11894.19	-	-	-	-	-	11894.19	-	0	-
15	84720010:	Site Hoardi	81411.41	-	-	-	81411.41	-	81411.41	-	81411.41	-	81411.41	-	-	-	-	-	81411.41	-	0	-
16	84720010:	Concrete S	5604960	-	-	-	5604960	-	5604960	-	5604960	-	5604960	-	-	-	-	-	5604960	-	0	-
17	84720010:	RC Frame	4934352	-	-	-	23000	-	4937352	-	4937352	-	4937352	-	0	23000	-	0	4937352	-	0	-
18	84720010:	Supply onli	1924927	-	-	-	1924927	-	1924927	-	1924927	-	1924927	-	-	-	-	-	1924927	-	0	-
19	84720010:	Internal Bl	40643.37	-	-	-	40643.37	-	40643.37	-	40643.37	-	40643.37	-	-	-	-	-	40643.37	-	0	-
20	84720010:	Steelwork	3584126	-	-	-	3584126	-	3584126	-	3584126	-	3584126	-	-	-	-	-	3584126	-	0	-
21	84720010:	Steel Stair	1314429	-	-	-	1314429	-	1314429	-	1314429	-	1314429	-	-	-	-	-	1314429	-	0	-
22	84720010:	Metalwork	794511.4	-	-	-	794511.4	-	794511.4	-	794511.4	-	794511.4	-	-	-	-	-	794511.4	-	0	-

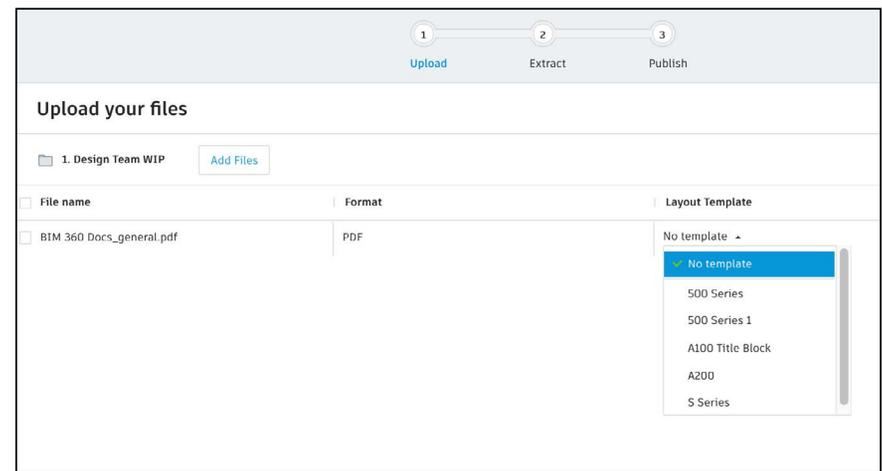
Publish Drawings

Another great time-saving benefit of BIM 360—in addition to version control and hyperlinking within sheets—is the ability to publish multiple-page drawing sets, break them apart into organized single sheets, and use the automated title block feature. Teams can now easily access the correct single sheet drawings by floor or trade rather than sorting through multi-page PDF documents or needing access to hefty design files like Revit or AutoCAD.



1 PDF publishing –defining title block

- Follow the steps to upload a document.
- If this is your first time uploading the drawings, select “No template” (you will define it in the next step).
- If this is a new version of a previously uploaded set of drawings, choose from an existing template.
- Select “Define” to create a new layout template or title block.
- Use the sheet displayed or select another sheet at the top drop-down list.



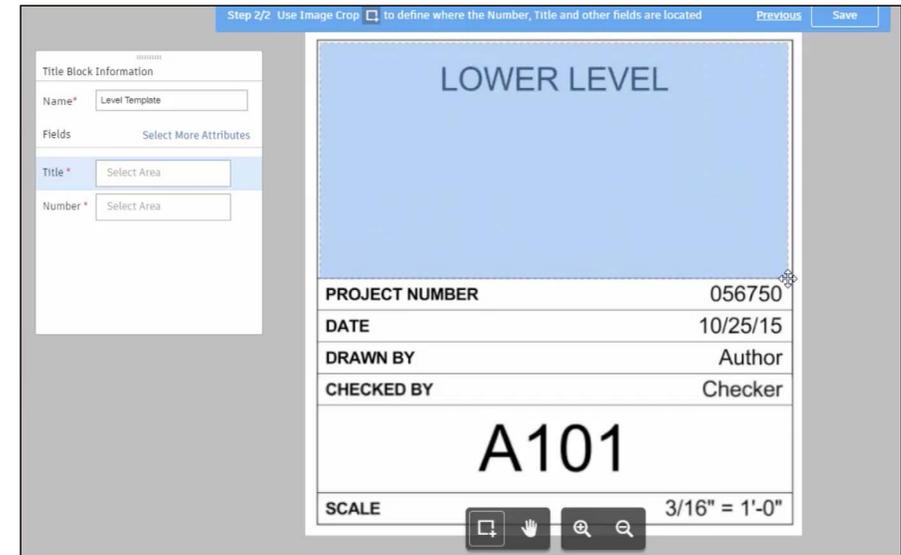
PRO TIP: Generally the cover sheet is not the best sheet to use as a representative title block; be sure to choose a sheet that is similar to all of the others.

Publish Drawings

2 PDF Publishing

- Drag-using the image crop tool to the area that holds the project information for the layout template and click “Continue.”
- Define the layout template fields by dragging your cursor over the area for the title and number.
- Select “Save” and view the multiple page drawing document split into individual sheets with the appropriate title and drawing number associated with each.
- Select “Publish All” to view an overview of the published documents.
- Select “Show” to view all of the broken-out sheets.

Add Documents



PRO TIP: Select as large an area box as possible when defining where the title and number will be pulled.

PRO TIP: You can always go back and edit or review information that was extracted into the OCR.

PRO TIP: Want to capture data from the title block? First create custom attributes from the list view and then “Select more attributes” in the Title Block Information menu.

Document Compare

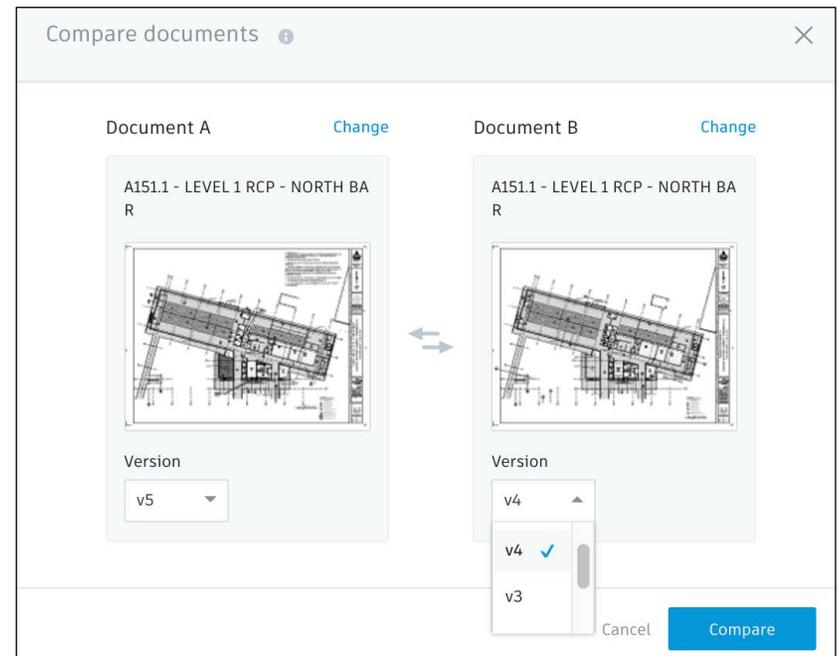
Tracking multiple iterations of documents and visualizing edits from one version to the next can be time-consuming. With the document compare and version control features built into BIM 360, teams can ensure they are viewing the latest version and quickly compare one version to the next to gain insight into how changes impact scope, schedule, and budget. The ability to instantly conceptualize changes helps ensure teams are all on the same page, maximizing time and minimizing rework.



1 Compare 2D drawings

- Once you are viewing a drawing, click the “Compare” icon in the toolbar at the bottom.
- Use the version drop-down list to select the two versions you want to compare and click “Compare.”
- By default, drawings are overlaid on top of one another with differences shown in blue and red.
- To compare side by side, click the “Overlay” icon, change the view to “Side-by-Side,” and drag the slider bar to see difference.

Compare 2D Drawings 



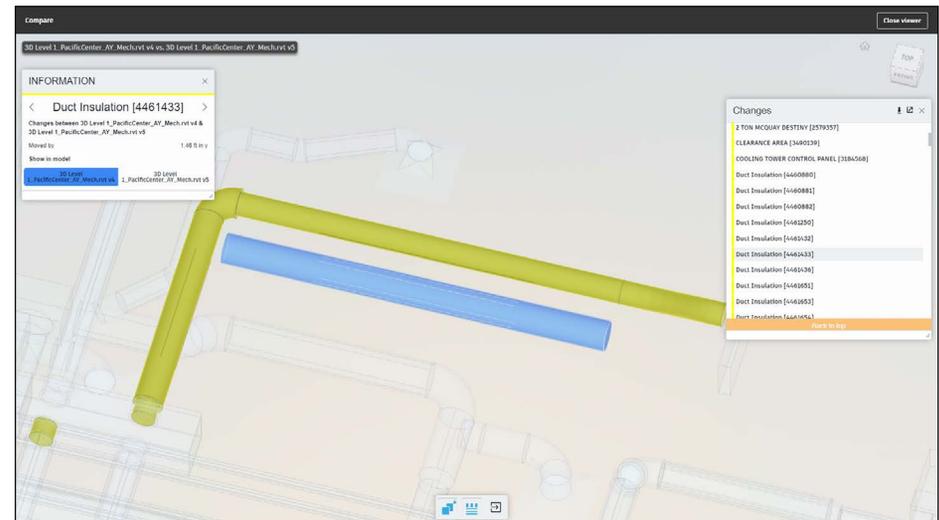
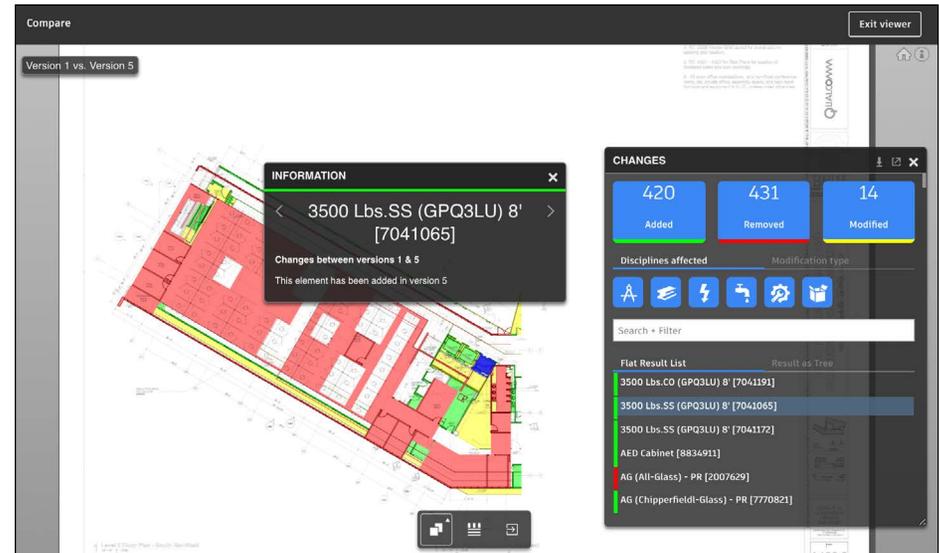
PRO TIP: With 2D compare, you can compare two versions of the same drawing or model or two entirely different drawings. For example, you could compare drawings from two different disciplines.

Document Compare

2 Compare Revit files—2D & 3D

- When comparing Revit files, you can view object-level information, like what has been added (green), removed (red), or modified (yellow).
- Turn on or off different filters to view specified changes.
- Select specific version changes to get more details behind the change.

Compare 3D Drawings



2D & 3D Viewing

Construction teams can now easily access thousands of 2D drawings without carrying around heavy sets of paper. When it comes to 3D viewing, teams have access to models anytime, anywhere, including all embedded rich metadata, without needing expertise in Revit or Autodesk® Navisworks® software. With an easy-to-use toolbar, the entire project team can gain visibility into design details and view both 2D and 3D models simultaneously.

1 Viewing 2D & 3D files

- Within the Document Management module, open the file you want to view. Note: Revit files can be viewed in both 2D and 3D formats, and PDFs can be viewed in 2D.
- View files from a desktop or via mobile in the field using the iOS or Android apps.
- Use the viewer toolbar to zoom, pan, add hyperlinks, measure, mark up, etc.

Viewer Toolbar



PRO TIP: You can change the settings by folder to improve viewing Project Files outside of BIM360. You can also search for text within the document, download, and print from PDF's. Additionally you can use the PDF Deep Zoom functionality to get precise views.

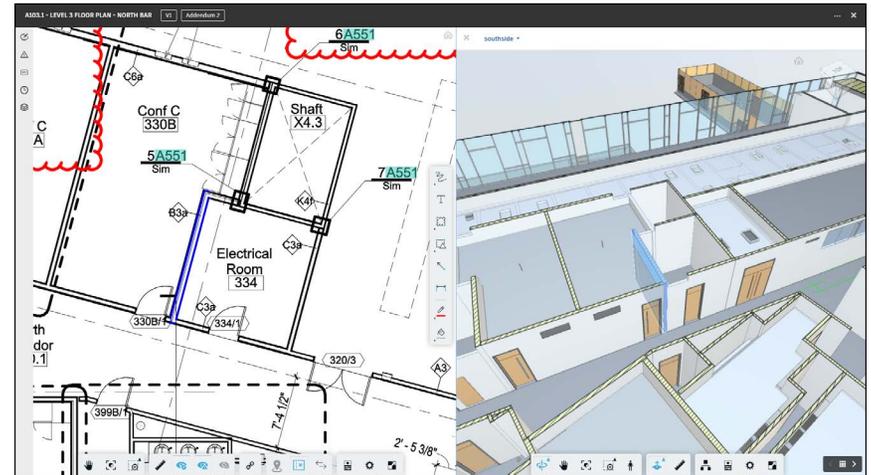
PDF Viewing



2D & 3D Viewing

2 Split screen views

- When viewing a Revit model or extracted sheet, you can click the “Split View” mode in the toolbar to see both views at the same time.
- Select an element in the 2D sheet to see it highlighted in the 3D model.
- See detailed properties of the item selected by clicking the “Properties” icon at the bottom of the 3D view panel.



PRO TIP: In the 3D view panel you can select the drop-down list to see any other view that was published from the Revit model.

PRO TIP: Teams who are used to working in 2D drawings can now access rich model object data.

3 3D viewing orientations

- Click the “ViewCube” on the top of the 3D view panel.
- Choose from three view orientations:
 - **Orthographic.** shows the building model in a 3D view where all components are at the same depth.
 - **Perspective.** Orients the view to a perspective view that portrays height, width, and depth.
 - **Perspective with Ortho Faces.** Orients the view to a perspective view.
- To define a view as the home view, click the “ViewCube” and set it to “Current View as Home.”



Markups

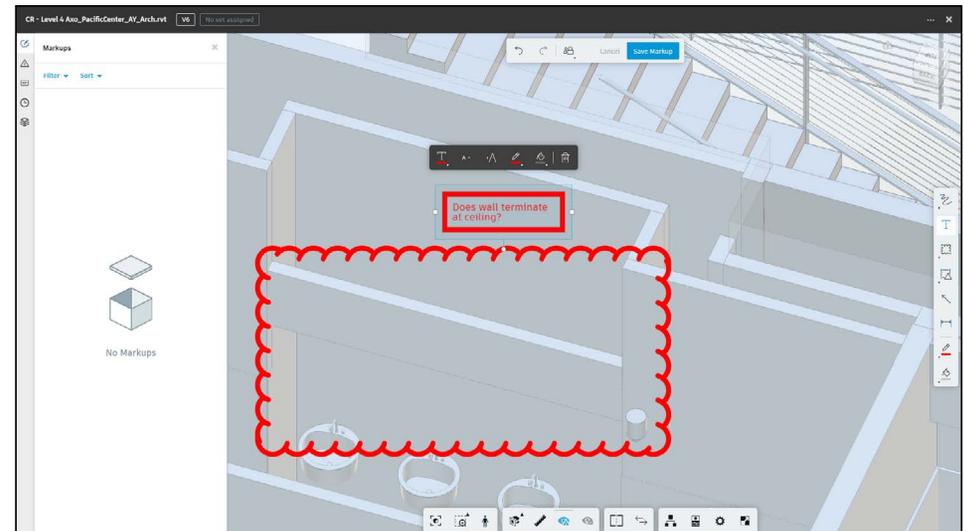
Markups speed up the decision-making process with the ability to instantly communicate questions, changes, and other information regarding the project drawings and models. The measurement tools enable project team members to accurately verify dimensions and areas. Document managers can organize project drawings and link them to other project drawings or documents, ensuring that the project team has a complete and easy-to-navigate package of construction documents.



1

Create a markup

- Within the Document Management module, open a 2D document or 3D model.
- Use the “Add New Markup” tool in the toolbar to create a markup using shapes and text fields.
- Before you click “Done,” be sure to check off if you want the markup to be public (shared with everyone) or private (only visible to you) using the lock/globe icons.

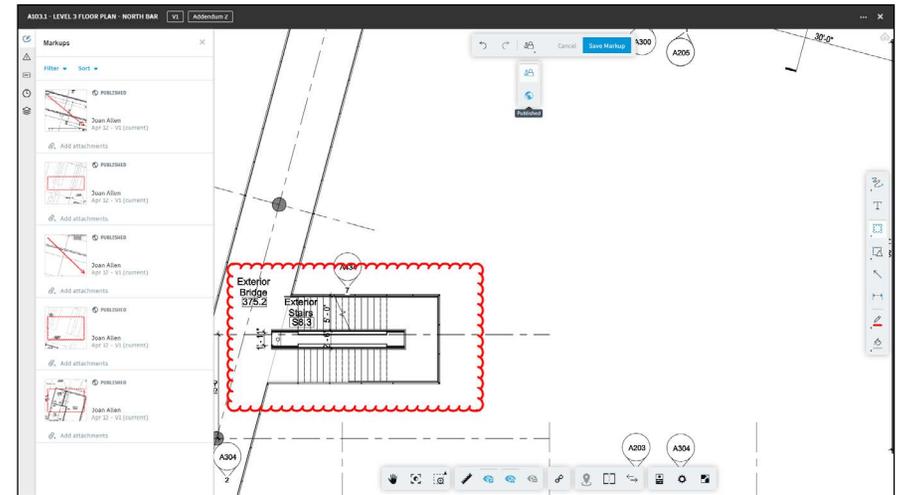


PRO TIP: Use the Markup Callout tool to easily and quickly annotate or markup drawings.

Markups

2 Publish/edit/delete markups

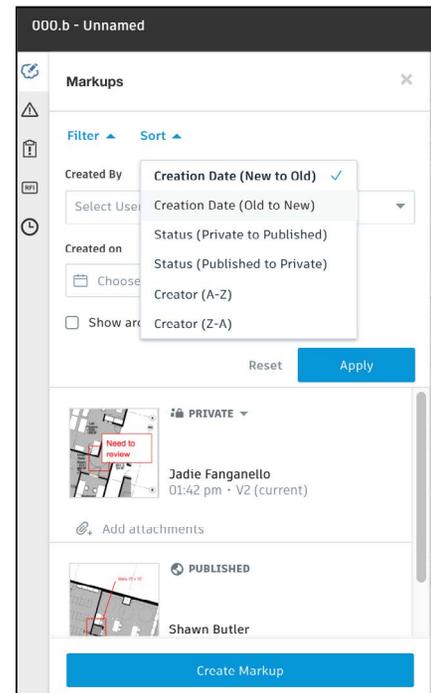
- Change the viewing status from private to public by clicking the markup icon on the left panel to view all markups and using the drop-down list at the top of the listed markup.
- From the markup panel on the left, click the three-dot icon next to the markup to edit or delete.
- Add an attachment to the associated markup by clicking the “Add Attachments” paperclip in the markup panel on the left.



3 Review markups

- Click the markup icon on the left panel to see a list of all markups for a particular drawing.
- Use the filter/sort functions to change the list view and narrow down the relevant markups to review.

Adding Markups



PRO TIP: In addition to creating markups, you can measure and calibrate distances as well as add hyperlinks in a 2D drawing or 3D model.

Measurements



Adding Hyperlinks



Issue Management

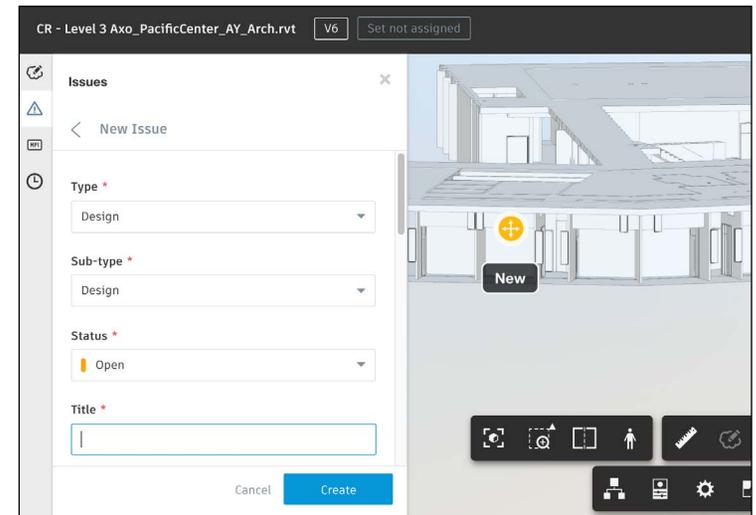
Don't let problems slow you down. The ability to create, assign, track, and respond to issues on any device is critical to making sure your project is completed on time and on budget. Put context around the issue resolution by dropping pins on designs, adding photos in the field, and collaborating on comment threads. With a central view of all project issues, tracking status and analyzing root causes has never been easier.



1 Creating document or model based issues

- In the Document Management module, open a 2D document or 3D model and select the Issue icon on the left sidebar.
- In the Issue panel, select “Create Issue” and click where you want to place the issue. An issue push-pin will appear.
- Enter a title and complete all desired fields including Issue Type, Sub-type, Location, and Root Cause. NOTE: Custom attributes are also available if configured through Project Admin
- Select “Create” to save.

PRO TIP: All Issues are unified meaning the same Issue added via the Document Management module can also be viewed in Field Management.

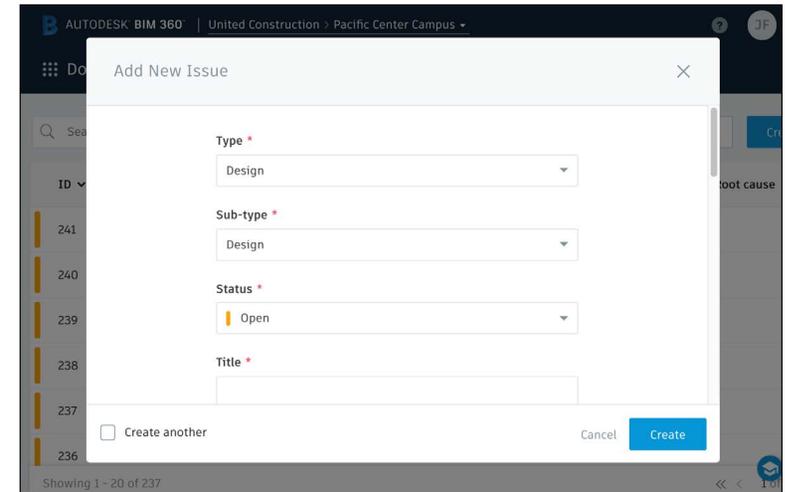


Creating Issues 

Issue Management

2 Creating project-level issues

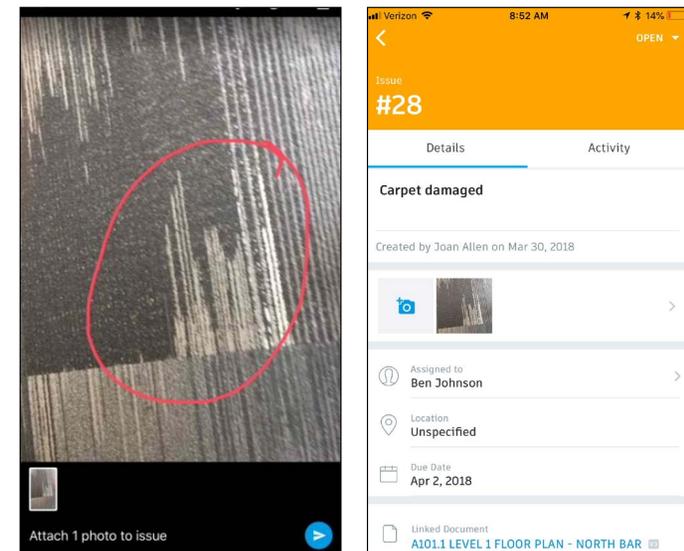
- Project-level issues are issues not associated with a specific drawing or model.
- In the Document Management module, select the Issues tab to display a list of all project issues.
- Click the blue “Create Issue” button
- Once the “Create Issue” box pops up, enter a title and complete all necessary fields.
- By default, the status will be set to Draft. When ready to assign, set to Open. Select “Create” to save.



PRO TIP: You can create and assign document based issues from your mobile device on or offline.

3 Add photo to issues

- Tap “Issue” then “Docs Issue.”
- Select the issue to open and tap “Add photo” to take or select a photo from your photo library.
- Add markups to the photo to provide more context.
- Tap the arrow to attach the photo to the issue.



Working with
Issues on iOS



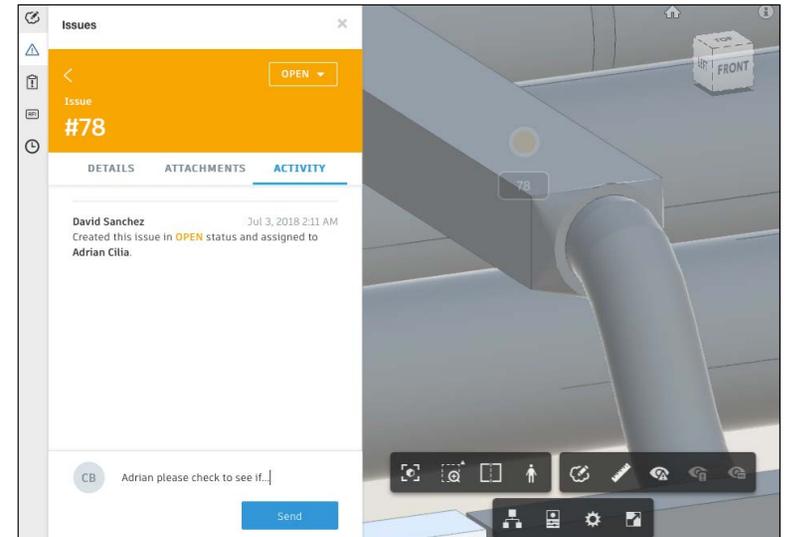
Working with
Issues on Android



Issue Management

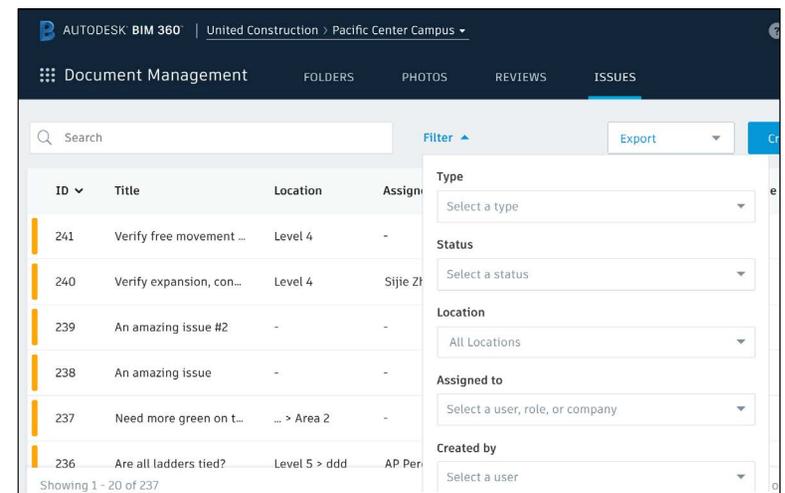
4 Review & responding to issues

- If you're the assignee, open the email notification and select "View the Issue."
- Or within the Document Management module, select the Issues tab and search for the issue.
- Once in the issues panel, select "Activity" and respond to the issue using the comment box.
- For document- or model-based issues, click the link under "Document" to view the associated documents.
- Only the issue creator or project admin can set the issue as closed.



5 Filter/sort/export issues

- In the Document Management module, select the Issues tab to display a list of all project issues.
- To filter select one or more criteria using the filter drop-down lists.
- To sort, click the column headers.
- To export, select the "Export" drop-down lists.
- Use the "Search" bar to do a keyword search.
- On your mobile device, you can filter document-based issues by status, assignee, or due date.



PRO TIP: You can filter, sort, and export directly from a 2D document or 3D model via the Issues panel.

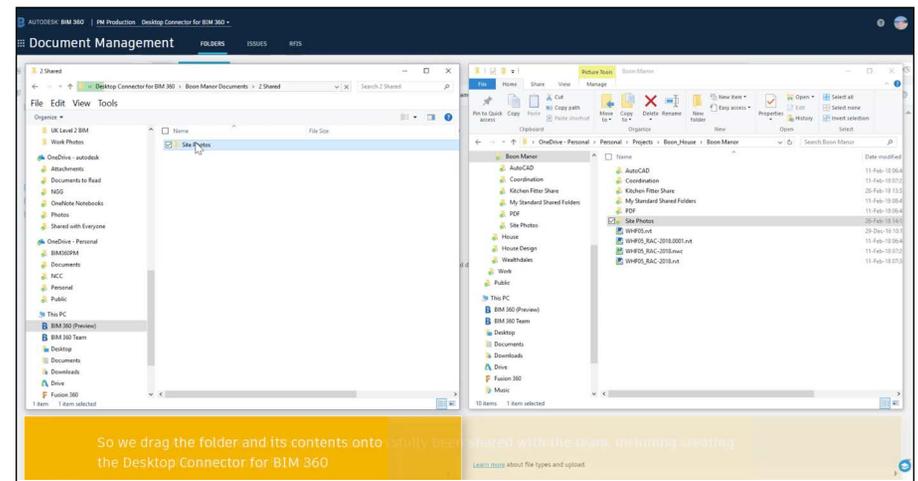
Desktop Connector & Offline Sync

Managing files between the site and the office can be a pain and often leads to duplicate files and rework caused by utilizing noncurrent versions. With the Desktop Connector for BIM 360, users can open, save, move, rename, and delete 2D and 3D files from your cloud-based BIM 360 projects just as you would any other files or folders saved locally. Changes made from your desktop are automatically synced to BIM 360. In addition, with Work Offline mode, users can access files and work remotely, then sync once they get back online to ensure the latest versions are available to the rest of the team.



1 Using the Desktop Connector

- Visit the [Autodesk Knowledge Network](#) to download the Desktop Connector BIM 360 plug-in (currently available for Windows only).
- Once you have set up the plug-in, you will see the project folder structure mirrored on your finder/explorer window.
- Upload documents directly through the BIM 360 app or drag files into your finder/explorer window to add them into BIM 360.
- Open and edit files from within the BIM 360 folder structure without having to download and re-upload files.
- All edits are automatically synced.



Getting Started with Desktop Connector 

Desktop Connector Blog 

PRO TIP: The Desktop Connector supports multiple file types including comprehensive support for AutoCAD Xrefs within BIM 360.

Desktop Connector & Offline Sync

2 Offline sync

- To enable Work Offline mode, right-click on the tray icon and select “Work Offline.”
 - Note: The tray icon will change to blue when you are offline.
- Open, edit, and create any files in the connected drive that were opened within the past 72 hours.
- Changes are uploaded when you put Desktop Connector back online.



Offline Mode



Online Mode



Work Offline Guide 

Prediction & Analytics Capabilities

Prediction & Analytics

At its core, BIM 360 is built to help construction teams better visualize and take daily action to minimize project risk. Whether it is risk associated with safety, quality, or project controls, BIM 360 allows teams to streamline workflows to improve project outcomes.

The prediction and analytics ecosystem enhances the BIM 360 platform with a deeper understanding of project performance, prioritized daily activities, and instant visibility into project risk, giving teams the information they need to avoid costly mistakes and further improve risk mitigation.



1 Project Home

- Project members can see a snapshot of a real-time “to do” list as well as leverage risk prediction assistance through the Project Home module.
- Dashboard cards can be personalized depending on your project role by selecting “Customize” on the top left and clicking on the “Card Library.”
- Click any of the links to drill down and get more information on a specific item and take immediate action.
- Use the expand arrows to open the card to full screen to see more information.

PRO TIP: Interact with your projects plans or models through the Project Design card. This card allows you to markup or create and view issues from directly inside the card view and it integrates back to the original file in Document Management.

ID	Title	Type	Due Date
1	Flashing at joint	Quality	Feb 15, 2019
5	Updater meetings with new field	Design	Feb 16, 2019
13	Please verify the dimensions and edge details for the elevator shaft...	Coordination	Feb 22, 2019
17	Missing handrails on floor 2	Safety	

Subcontractor	Risk Today
CC Concrete	High
Drywall Inc.	High
Joe's Plumbing	High

[Project Home Overview](#)



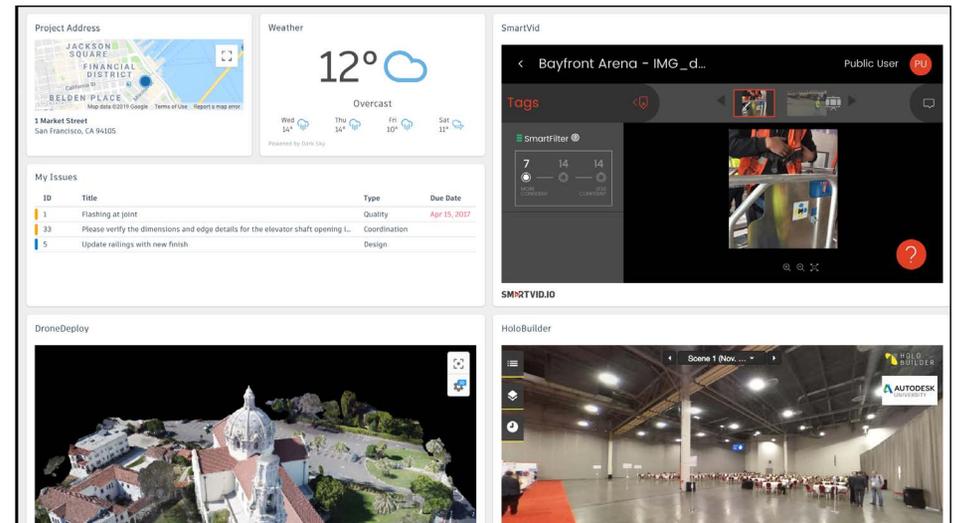
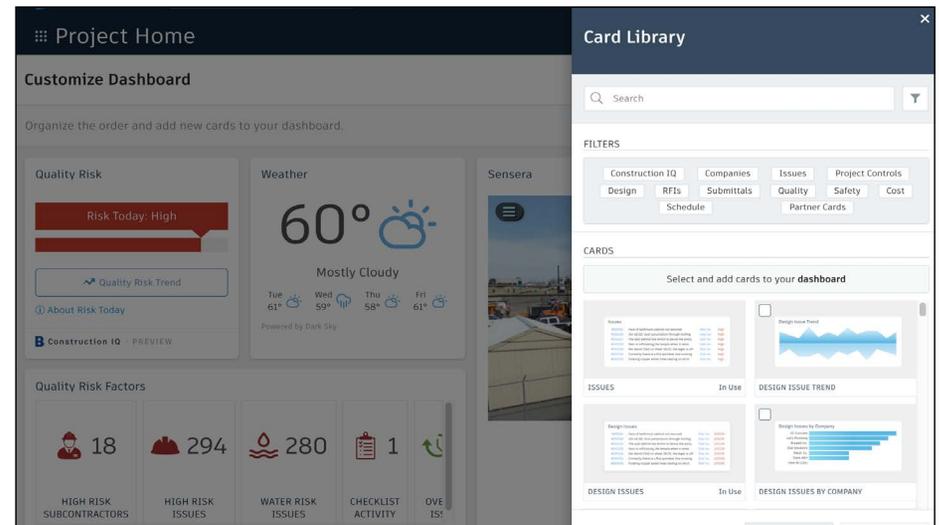
[Project Home Blog Post](#)



Prediction & Analytics

2 Card Library & Partner Cards

- The Card Library gives users the ability to show information that is personalized for them.
- Click on the “Customize” icon on the top left to see a view of the Card Library.
- Filter, view, and select cards to be added to your dashboard.
 - Filter by Partner Cards to add data from any of the selected integration partners filter for a single view of all project information.
 - To view and add Construction IQ specific cards filter by Construction IQ.



Partner Cards



Prediction & Analytics

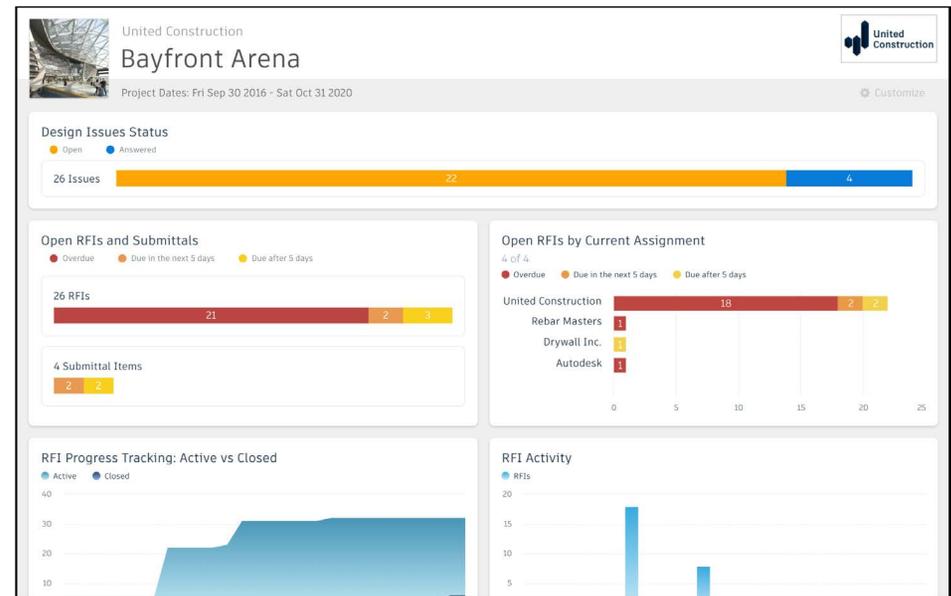
3 Quality Analytics

- BIM 360 helps predict quality related issues by visualizing high risk areas through Construction IQ and providing visibility to project data.
- Quality data is visualized on the Quality tab within the Insight module as well as through select cards in the Card Library in Project Home.
- The Risk Tab in the Insight module shows a summary of subcontractors who have the highest risk based on outstanding issues, a list of high risk issues, water related risk issues, checklist activity, and overdue Issues.
- Click on each of these quality risk factors to drill down and get more detail.

Insights Setup



Insight Blog



Insight | RISK | QUALITY | SAFETY | COST | PROJECT CONTROLS | REPORTS

Quality Risk Factors

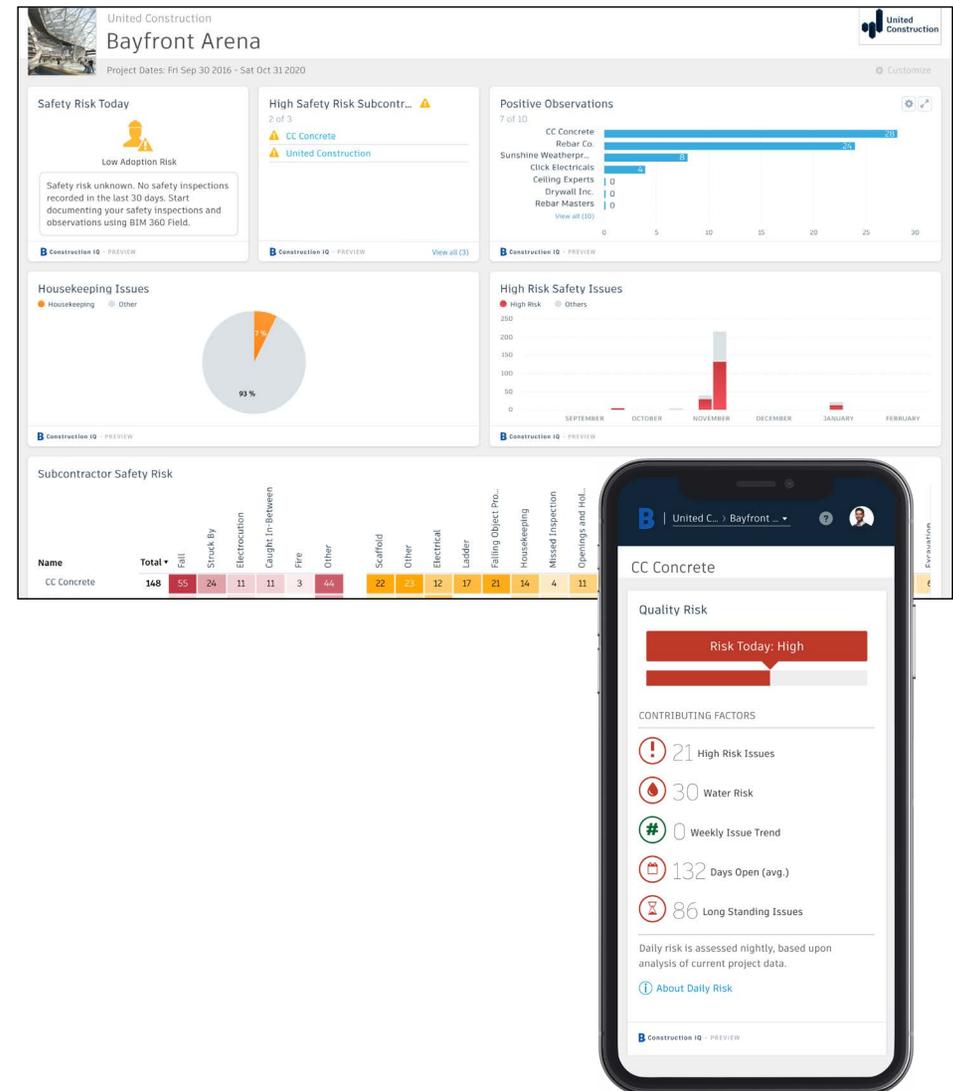
- High Risk Subcontractors: 11
- High Risk Issues: 159
- Water Risk Issues: 139
- Checklist Activity: 0
- Overdue Issues: 4

Company	Company Type	Today's Risk	High Risk Issues	Water Risk	Overdue Issues
United Constructi...	General Contractor	High	34	18	0
CC Concrete	Concrete	High	22	31	4
Star Elevators	Conveying Equipm...	High	20	8	0
Rebar Co.	Metals Structura...	High	17	19	0

Prediction & Analytics

4 Safety Analytics

- BIM 360 tracks safety related data like near misses and at-risk behaviors through logged Issues, RFIs, Checklist items, etc.
- Construction IQ analyzes this data as leading indicators and helps predict safety issues before they become serious incidents.
- Data is visualized on the Safety tab within the Insight module as well as through select cards in the Card Library in Project Home.
- Integration Partner Cards also show safety related data insights through site cameras or their own AI based technology.
- **Highlighted Safety Cards:**
 - **Houskeeping Issues** - many safety incidents can be avoided by keeping a clean jobsite.
 - **Fatal Four Safety Issues** - 60% of all construction deaths are due to one of these four issues; fall, caught between, electrocution, struck by. See jobsite Issues that fall into these categories.
 - **Subcontractor Safety Risk** - highlights subcontractors that have issues relating to the “fatal four.”
 - **Subcontractor Risk Summary** - shows subcontractors with the highest risk and drill down to see what those Issues are.



Prediction & Analytics

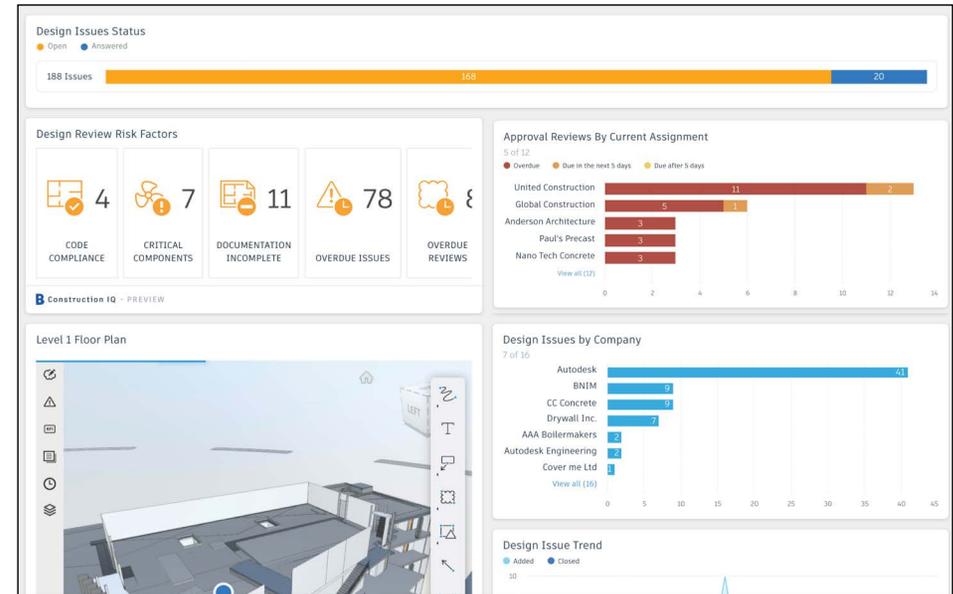
5 Design Analytics

- BIM 360 surfaces design issues through the Design tab in the Insight module
- Through this tab, users get visibility into key design issues and take immediate action to resolve.
- Design Review Risk Factor Card:
 - Powered by Construction IQ
 - Surfaces code compliance design issues
 - Identifies design issues that involve critical building components
 - Highlights documentation errors and omissions
 - Highlights overdue issues and reviews as well as who is responsible
- Approval Reviews by Current Assignment Card:
 - Highlights the status of design reviews by company

Design Risk Blog



Design Risk Demo Video



Issue #29 (OPEN)

Need stair spec

spec not found for ext stair

Created by Neil Rosado on Apr 11, 2018

Assigned To: David Sanchez | Type: Design

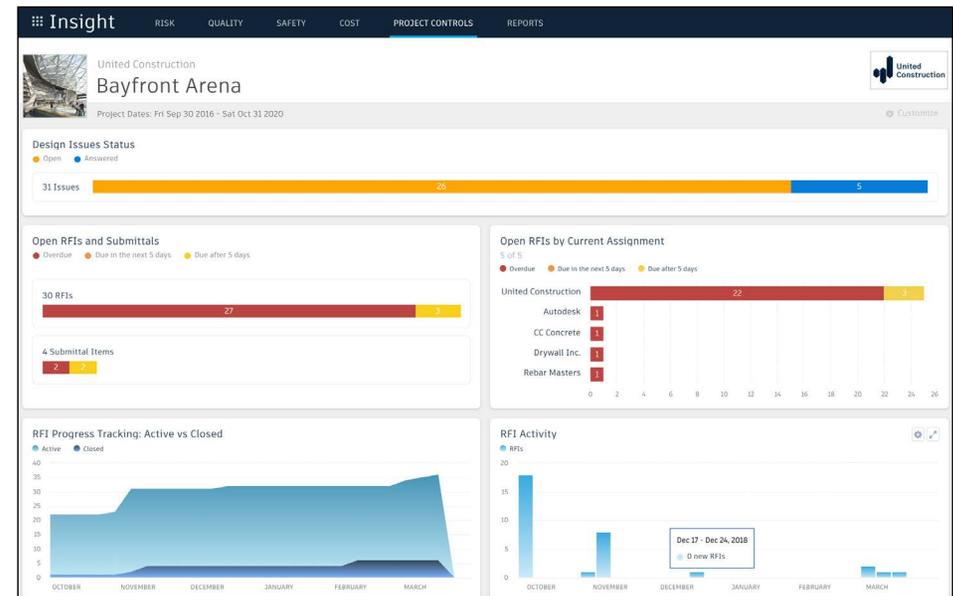
Due Date: Oct 31, 2019 | Location: Stairs

Building Components: Stairs (critical components)

Root Cause: Code Compliance, Design Coordination, Constructability, Documentation Incomplete, Documentation Conflict, Other

6 Project Controls Analytics

- The Project Controls tab in the Insight module gives visibility into managing a projects RFIs and Submittals as well as oversight of any Design Issues.
- **Highlighted Project Control Cards:**
 - **Open RFIs and Submittals** - gives a summary of the number of overdue as well as upcoming RFIs and Submittals.
 - **Open RFIs by Current Assignment** - shows a list of subcontractors and how many overdue and upcoming RFIs they have.
 - **Design Issues** - shows a summary of open Issues that are design related as well as the number of answered Issues.
- Click on each of these cards to drill down and get more detail.



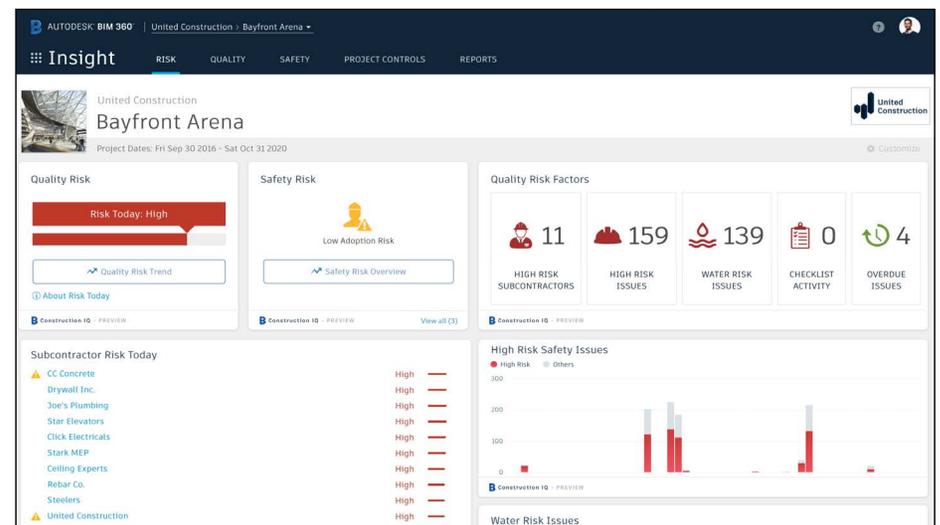
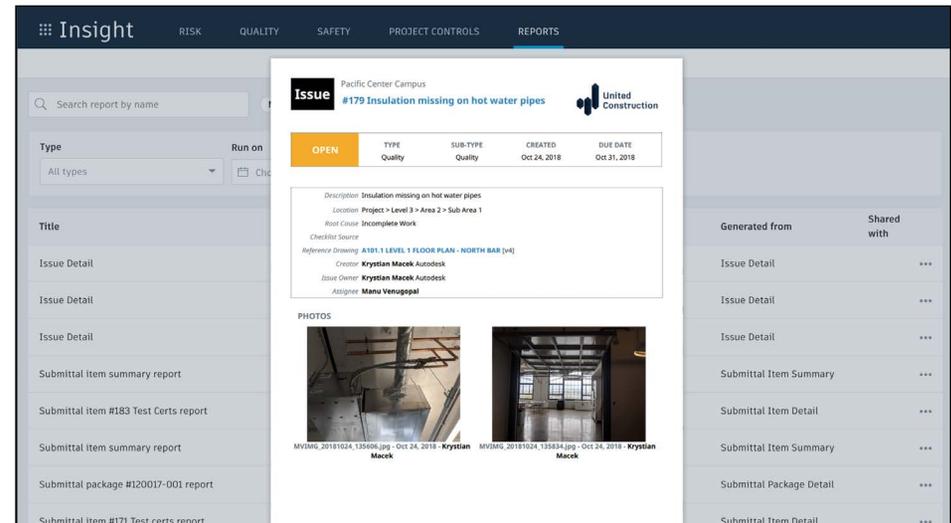
Prediction & Analytics

7 Reporting

- The Report tab within the Insight module shows an aggregated list of generated reports related to Issues, Checklists, Documents, Submittals, and RFIs.
- Filter reports based on type, date, or creator.
- Download or share reports with other team members.
- Create and schedule reports based on your filter criteria.

8 Construction IQ

- Construction IQ is a built-in machine learning and AI functionality that leverages data across the entire BIM 360 platform.
- Construction IQ sifts through millions of data points from your construction documents, issues, checklists, related meta-data and historical data, and analyzes it to identify and prioritize risks.
- Construction IQ automatically classifies items and flag issues as “High Risk.”
- “High Risk” issues are items that if left open, will likely lead to bigger more costly issues down the road.
 - EXAMPLE: if flashing was marked as missing on a window, the Issue would be flagged as “High Risk” to avoid bigger water leaking Issues.
- View Construction IQ data through the “Risk” tab within the Insight module as well as by selecting cards tagged as “Construction IQ” in the Card Library.



About Construction IQ



Prediction & Analytics Blog

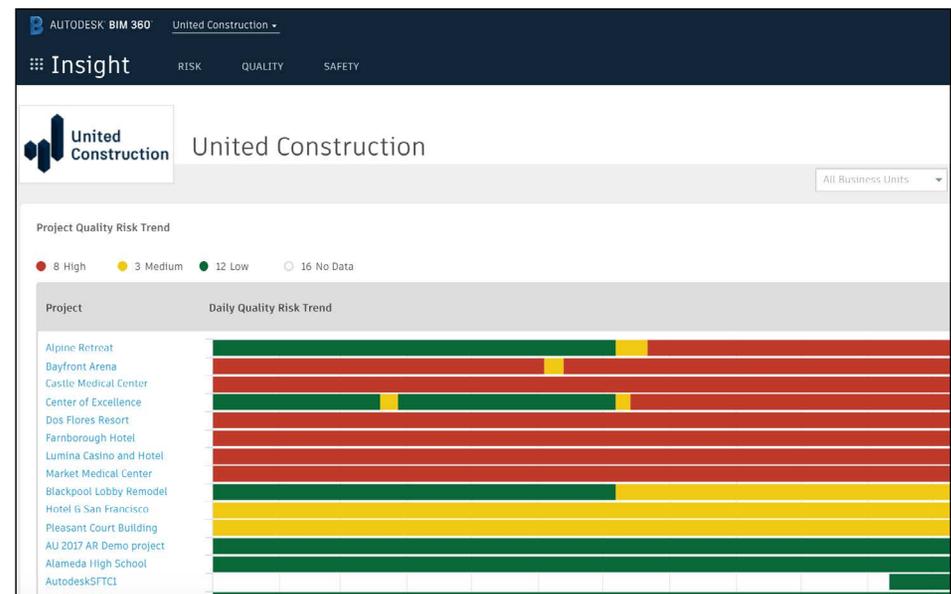
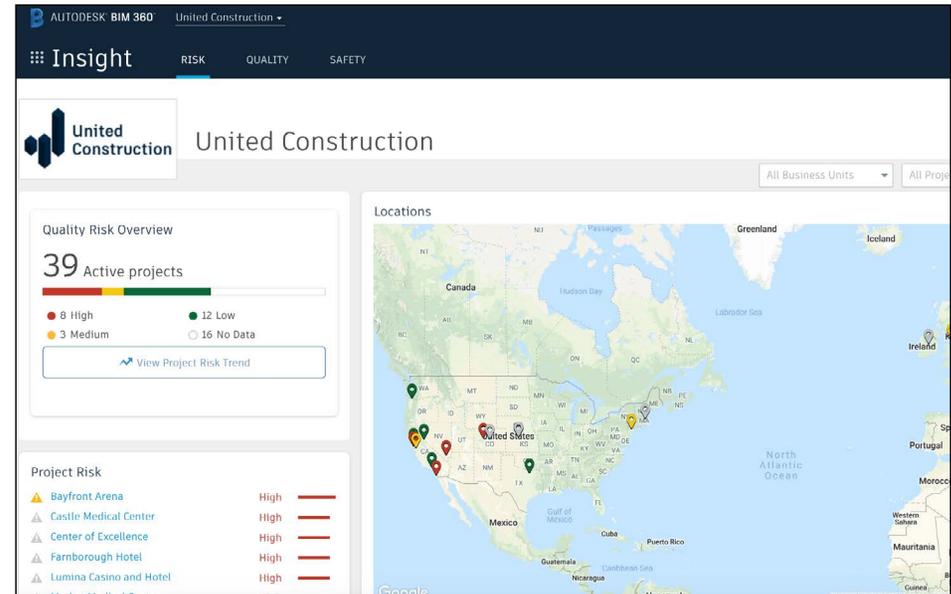


Prediction & Analytics

9 Executive Insight

- With the ability to view company-wide performance data across multiple project, executives and cross-project leaders can make more informed business decisions and gain visibility into overall risk assessment for current as well as future projects.
- Invite users with “executive overview” permission to access this view. This is a separate Insight view geared towards Executives and cross project leaders only.
- **View cross project health across tabs:**
 - **Risk** - shows projects with higher risk scores based on project data and Construction IQ capabilities.
 - **Quality** - overview of quality related checklist activity and conformance.
 - **Safety** - overview by project of safety related issues.

PRO TIP: Through the Risk tab in the Insight module, executives can get instant visibility into which projects have the highest risk levels each day. Assess the project risk overtime to see which projects remained in a “high risk” category over longer periods to determine which projects need executive level support.



Additional Capabilities

Account Admin

With the project administration tools in BIM 360, you can rest assured that your project information is in the right hands. Project admins can easily invite team members to the project and define their access levels on a project-by-project basis with a simple click. BIM 360 has two levels of administration to ensure security and control across your projects: Account admins and project admins. Only account admins can create new projects and assign additional account admins and project admins. Project admins can add and remove members, set permissions, and adjust project details.



1

Create a project

- In the Account Admin module, select the Projects tab and click “Add.”
- Enter project information and click “Save & Continue.”

Getting Started Guide 

Create a Project 

Create Project Profile

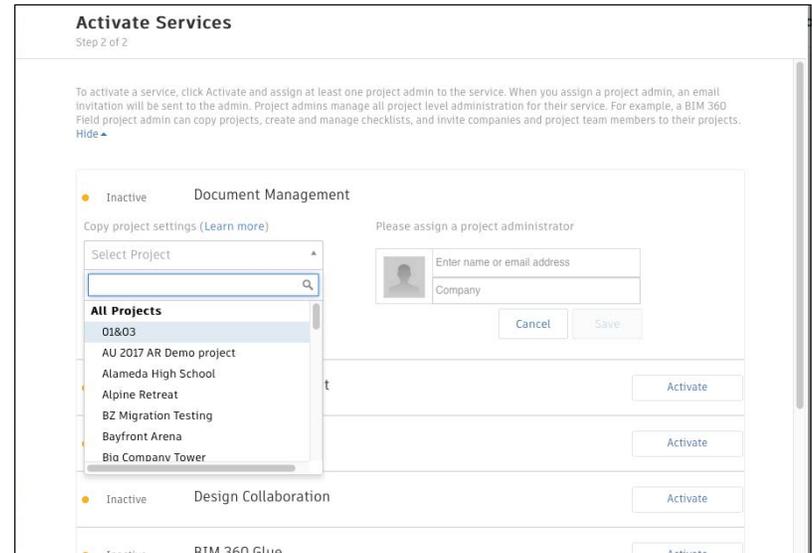
Step 1 of 2

<p>* Project Name</p> <input type="text" value="Oakwood Medical"/> <p>Project name is valid.</p>	<p>Project Image</p>  <p>Select image to upload JPEG, GIF, PNG, or BMP file (4MB max)</p> <p>Browse</p>
<p>* Project Type</p> <input type="text" value="Hospital"/>	
<p>Construction Type</p> <input type="text" value="New Construction"/>	<p>Project Address</p> <input type="text" value="560 Dockside Avenue"/>
<p>* Project Value</p> <input type="text" value="87000000"/> <input type="text" value="USD"/> <p>Project value is valid.</p>	<p>Address Line 2</p> <input type="text" value="Boston"/> <input type="text" value="Postal Code"/>
	<input type="text" value="Massachusetts"/>

Account Admin

2 Activating modules

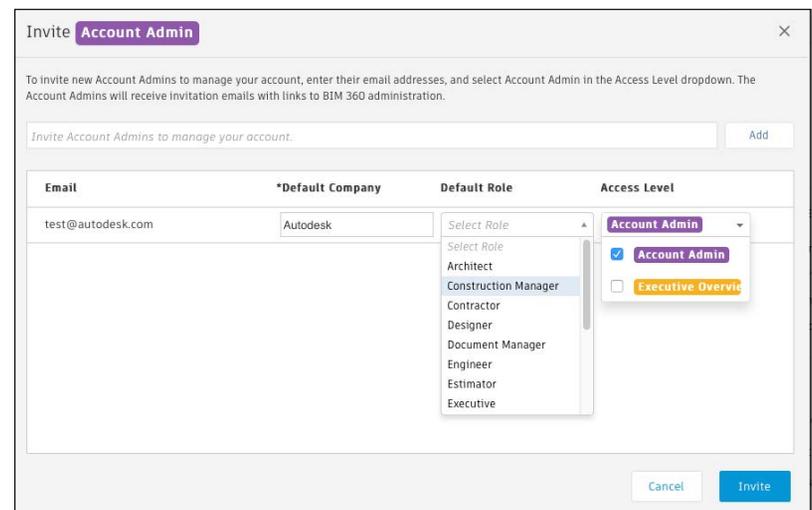
- Click “Activate” for the desired BIM 360 service.
- Assign a project admin for each service. You can add multiple admins.
- (Optional) For Document Management and Field you can copy existing project settings.
- An email invitation will be sent to the assigned project admin(s). They will need to click the link to join the project.
- Click “Finish.”



PRO TIP: You have to activate Document Management first, before you can activate other next-gen services.

3 Add members to directory

- In the Account Admin module select the Members tab and click “Add.”
- To add an individual member, select “Add People to the Member Directory.”
- To add an account admin, select “Invite Account Admins.”
- To import members from a list, select “Import Members by Spreadsheet.” For a first-time import, download and complete the member list template.



PRO TIP: You can change the default company and role later if necessary.

Account Admin

4 Adding members to a project & assigning access levels

- In the “Project Admin” module, select the “Members” tab.
- Click “Add” and use the search bar to search the member directory.
- When you find the member, select them and click “Select.”
- Add their company and role. Note: Role determines their access level to all BIM 360 services.
- Click the icon(s) to overwrite the access level granted by their project role.
- Click “Add to Project.”
- Update existing access levels by clicking the grayed out icon(s).

The screenshot shows the 'Add Project Members' interface. At the top right are 'Cancel' and 'Add to Project' buttons. Below is a search bar labeled 'Enter Names or Email Addresses' with a 'Select' button. The main area is a table with the following columns: Name/Email, Company, Roles, and Project Admin. The Project Admin column contains icons for different access levels: a person icon (active), a grayed-out person icon (disabled), and a person icon with a lock (locked).

Name/Email	Company	Roles	Project Admin
Rick Nichols	Aesthetik Interiors	Owner	Person icon, Grayed-out person icon, Person icon with lock
Ben Johnson	General Construction	Construction Manager	Person icon, Grayed-out person icon, Person icon with lock
bim360user7@yahoo.com	Ace Property Holdings	Construction Manager	Person icon, Grayed-out person icon, Person icon with lock
bim360user6@yahoo.co...	Sparxx Electrical	Engineer	Person icon, Grayed-out person icon, Person icon with lock
bim360user8@yahoo.oc...	General Construction	Superintendent	Person icon, Grayed-out person icon, Person icon with lock

Members & Access Levels 

Setup Roles 

PRO TIP: You can choose from a list of preset roles or create your own custom roles as well as configure the permission and access levels by each role.

Mobile Access

Construction doesn't happen behind a desk. Teams need access to project documents and project management tools anytime, anywhere. With the BIM 360 mobile app, teams can execute construction quality and safety workflows, including creating or editing checklists, viewing RFIs, adding or tracking issues, and managing or creating drawing markups, directly from an Android or iOS device.

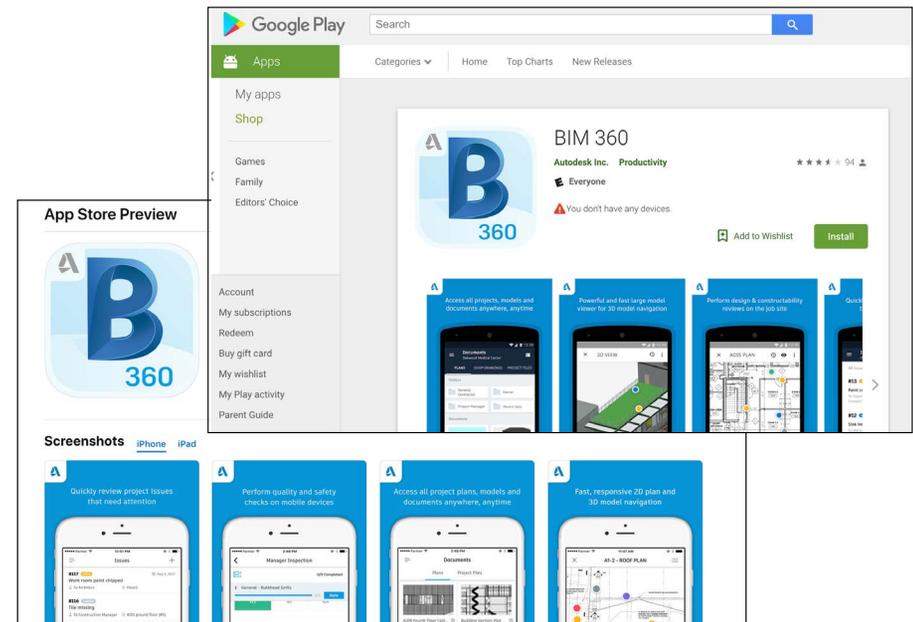


1 Download the BIM 360 app

- Go to the App store or Google Play store on your mobile device to download the BIM 360 app.
- The BIM 360 mobile app works with all other modules, including Document Management.

Get the iOS App 

Get the Android App 



PRO TIP: Stay up to date on mobile capabilities through the Autodesk Knowledge Network.

Mobile Access

2 Mobile workflows

- Several workflow capabilities can be accomplished using the BIM 360 mobile apps, including Checklists, Issue Management, RFI Tracking, Daily Logs, and Markups.
- To see the differences in workflow capabilities for the BIM 360 and BIM 360 Docs apps, click the “BIM 360 Mobile Capabilities” link below.

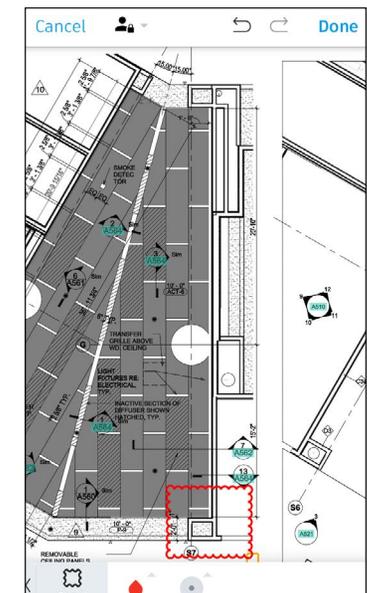
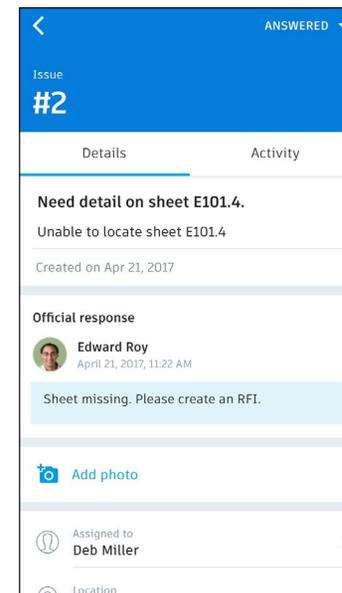
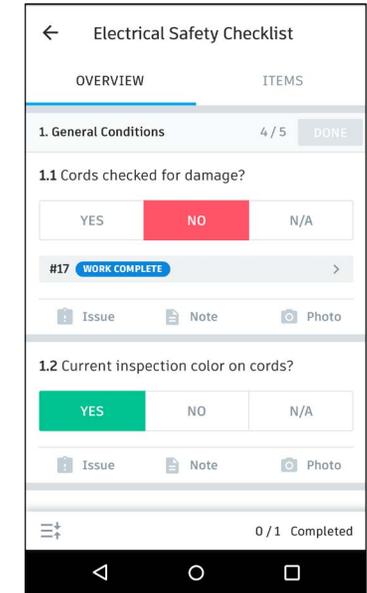
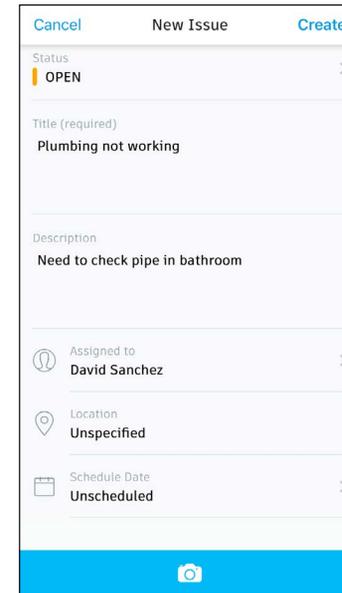
[BIM 360 Mobile Capabilities](#) 

[About the iOS App](#) 

[About the Android App](#) 

3 Offline sync

- Teams are able to work on-site without Internet access.
- Teams can also download individual documents and add markups and comments when working offline. Once back online, all changes will be synced back to the cloud.



Integration Partners

Get the most out of construction technology by integrating the software you already use with BIM 360. Built on an open and secure API platform, BIM 360 enables users to easily integrate with various other construction softwares, including drone technology, estimating and bid management, as well as safety management tools.



Reality Capture

Cost Management

Estimating

Construction Management

Takeoff

Design Checking

Field Management

Layout

Bid Management

Scheduling

Accounting

Data Transfer

Learn More



3DR

SIGMA
ESTIMATES

eSUB
construction software

Pype

SMARTBID™

EGNYTE

hsbcad

STRATUS

SITEAWARE

assemble

ManufactOn

triax™

hsbshare

SMARTVID.IO

RM
EX RHUMBIX

HOLO
BUILDER
Winning by Knowing

BECKTECH
INNOVATION IN ALL DIMENSIONS

PRO ProjectReady®



AUTODESK[®] BIM 360[®]

autodesk.com/bim-360