

Day 3 | 3:15pm - 5:00pm

AUTODESK







Mark Petrucci Sr. Construction Technologist Applied Software Technology, Inc.

- Civil Engineer, 30 years in the AEC Industry
- Autodesk Certified Instructor
- Technology User → Manager → Consultant
- Autodesk Construction Cloud Elite Partner



AGENDA





AGENDA

- What is Autodesk Takeoff
- Project Setup
 - Classification Systems
 - Sheets and Models
 - Packages
- Takeoff Viewer
- Takeoff(Hands On)
 - Create Package and Takeoff Type
 - Takeoff Sheets Walls, Doors, Flooring
 - Takeoff Model Concrete
- Inventory and Reporting
- Q&A
- Extra Videos Updates and Formulas

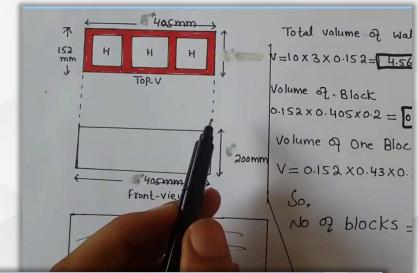


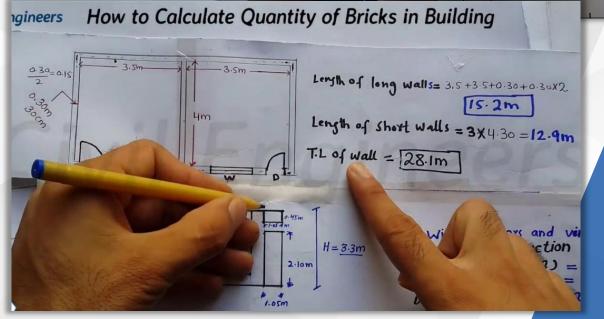




Definitions

- Takeoff
 - AKA Material Takeoff, Quantity Takeoff,
 - How much of each material is needed to complete a construction project
 - A takeoff is the process of counting
 - A takeoff is the amount of a material counted
- Estimating
 - Process of adding cost to materials, including labor and equipment costs

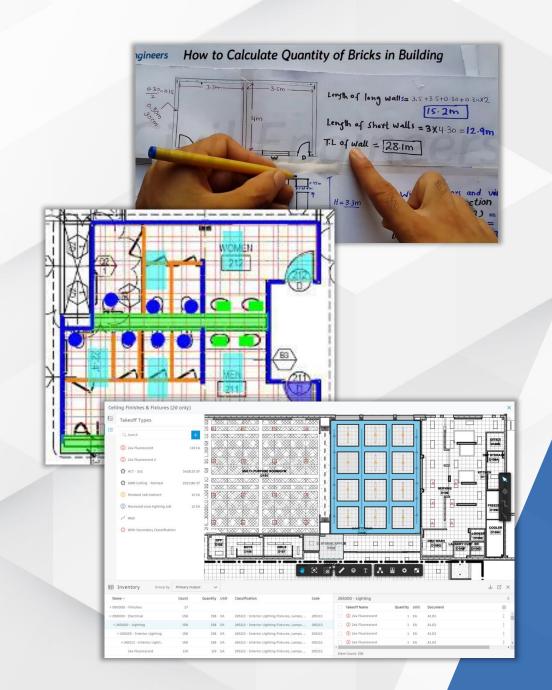






Who and How

- Who does takeoffs
 - Estimators, Contractors
- How do you do takeoffs
 - Paper visually count by highlighting with colored markers
 - PDFs 2D. Visually count by electronically highlighting with colored lines and shapes
 - Model 3D. Count objects based on their properties. BIM! But estimators don't know Revit.
 - Counts, Length, Area, Volume





Autodesk Construction Cloud



Empower BIM experts to improve constructability of models, increase transparency in managing risk, and facilitate more efficient design collaboration



Design Collaboration



Automated Clash Detection



Aggregated Model Coordination



Issues Management

AUTODESK* TAKEOFF

Enable estimators to perform more accurate 2D takeoffs and generate automated quantities from 3D models



2D Takeoff



3D Takeoff



Scope Analysis

AUTODESK* BUILD

Empower builders with a field execution and project management solution to seamlessly collaborate and deliver construction projects on time, on budget



Project Management



Cost Management



Quality
Management



Project Closeout



Safety Management



PlanGrid Build Mobile App



Organize, distribute, and share files on a single, connected document management platform, ensuring all team members have access to the information they need



Document Control



Document Versioning



Document Approvals

INSIGHT

Get up to speed with what's going on in a project, assess trends and patterns in project data, identify any gaps and problems, and use predictive risk data to improve project efficiency

Dashboards

Reporting

Construction IQ

Data Connector



Autodesk Takeoff Project Setup

(Lecture only)



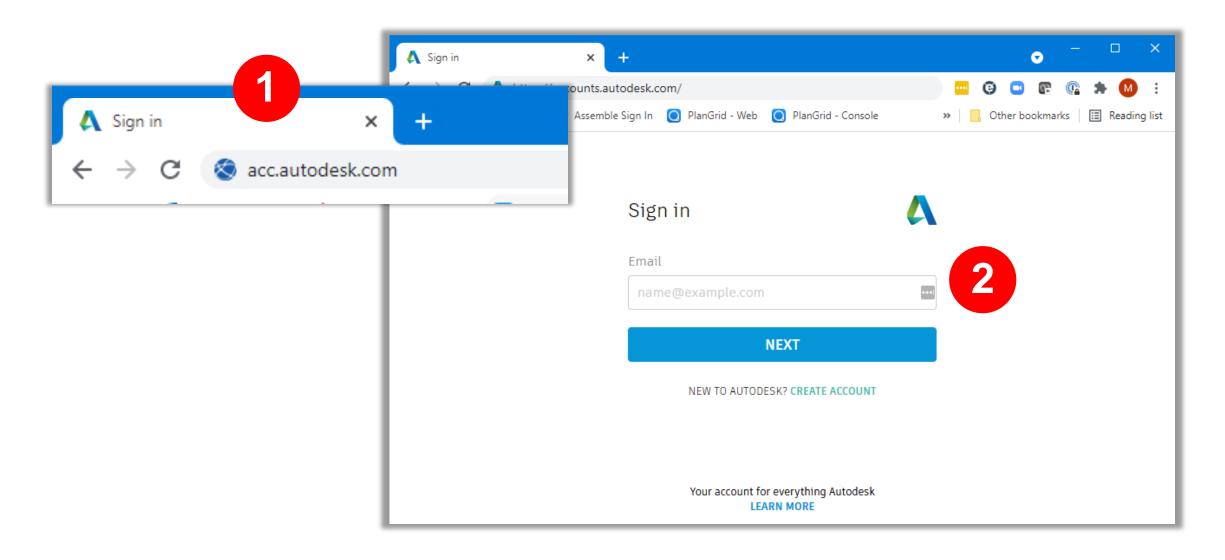
Key Workflow

Key Workflow

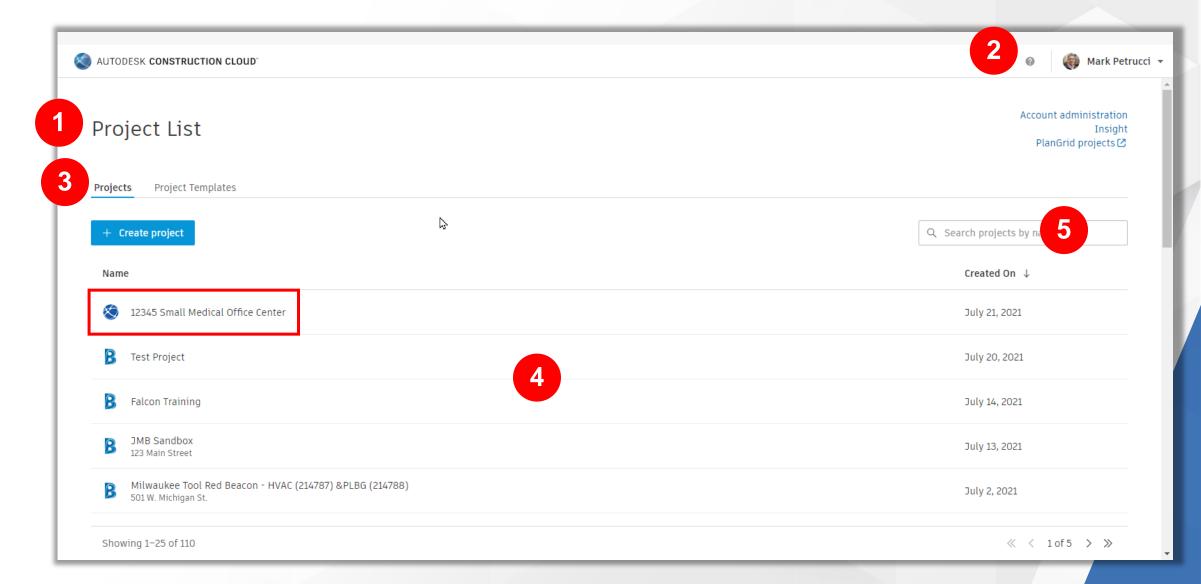
- 1. Login to ACC.Autodesk.com
- 2. Create or select a project
- 3. Add team members to the project
- 4. Configure takeoff settings for the project
- 5. Publish files to Takeoff
 - Publish 2D files as sheets
 - Upload 3D models
- 6. Create takeoff packages
- 7. Perform quantity takeoff
- 8. Export takeoff inventory

Access to Autodesk Construction Cloud

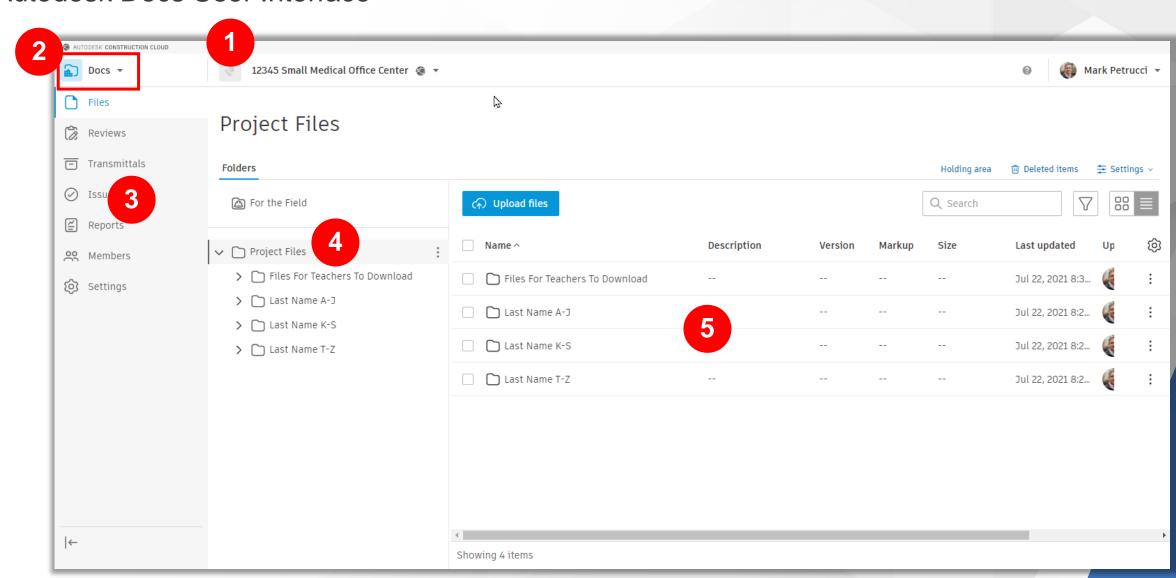
Logging in



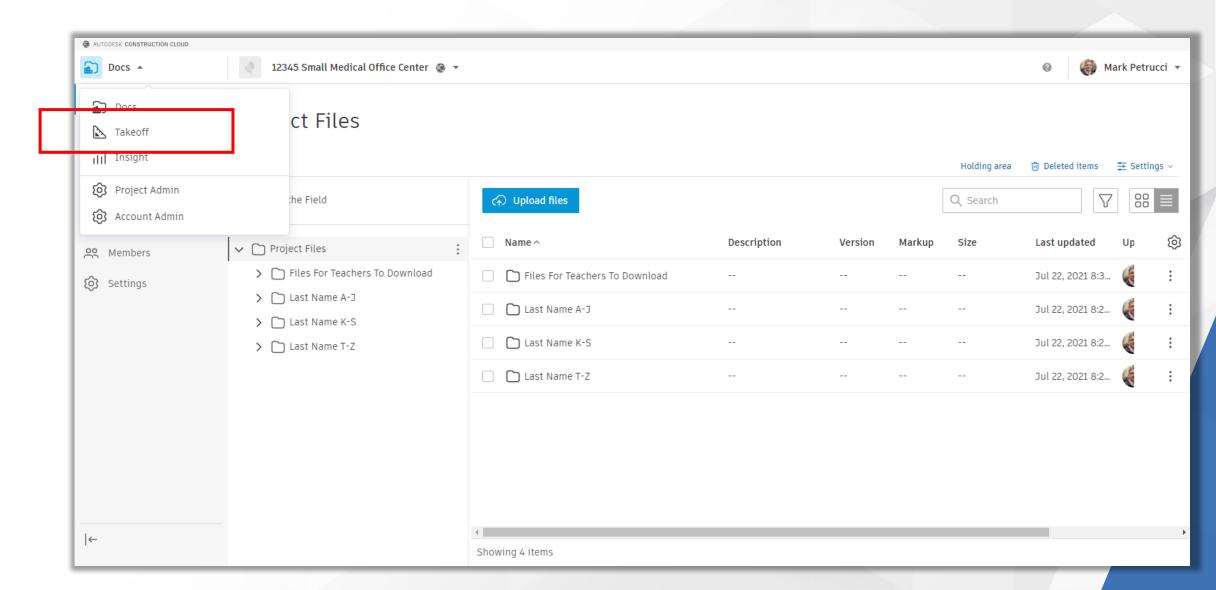
Project List



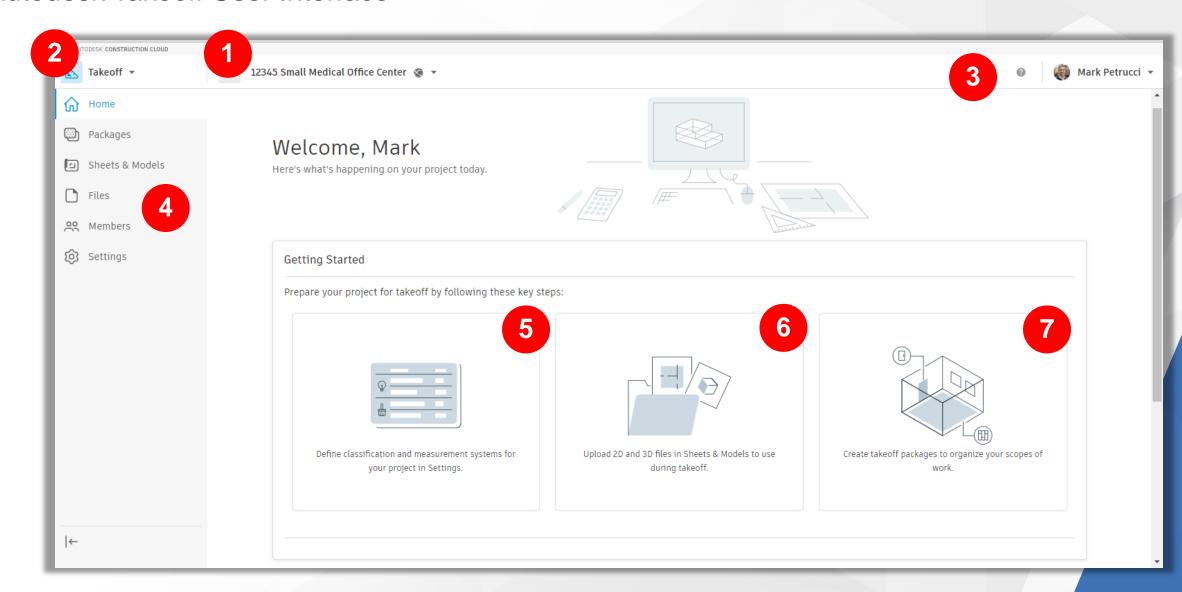
Autodesk Docs User Interface



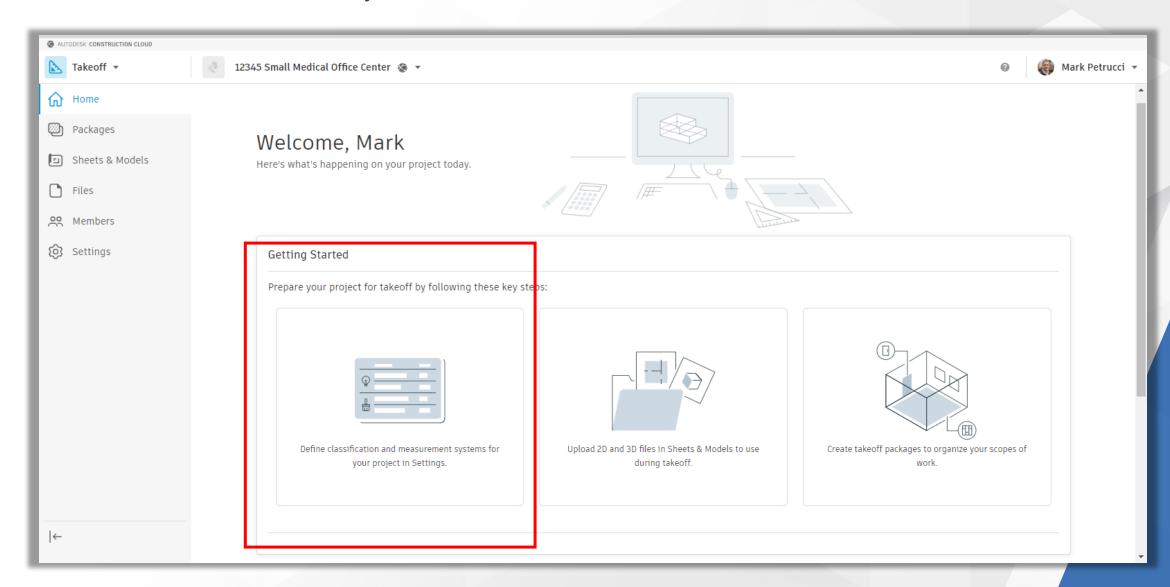
Autodesk Docs User Interface

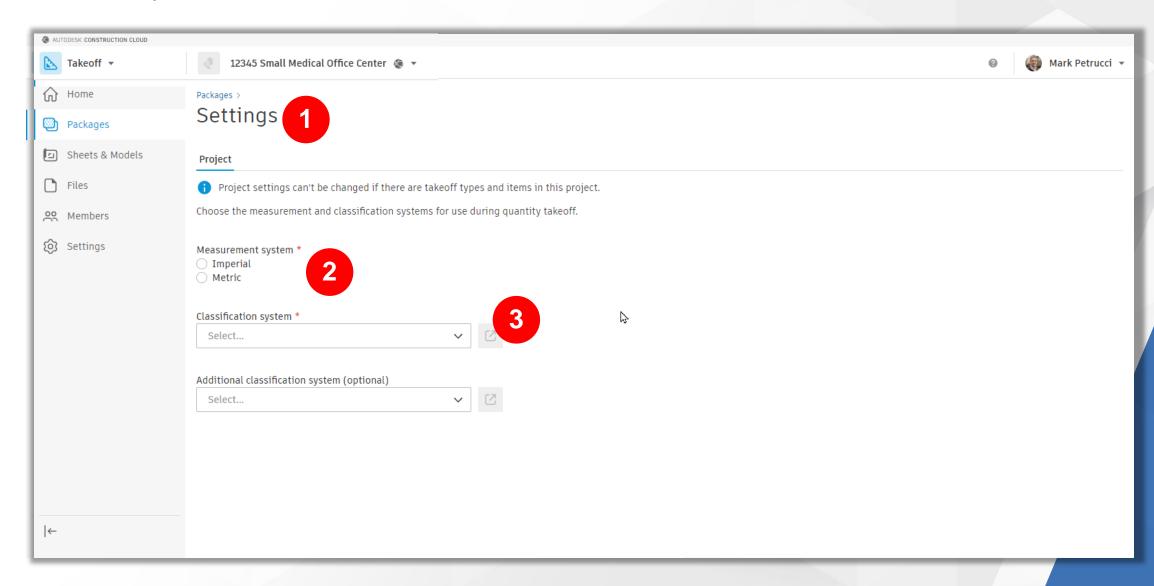


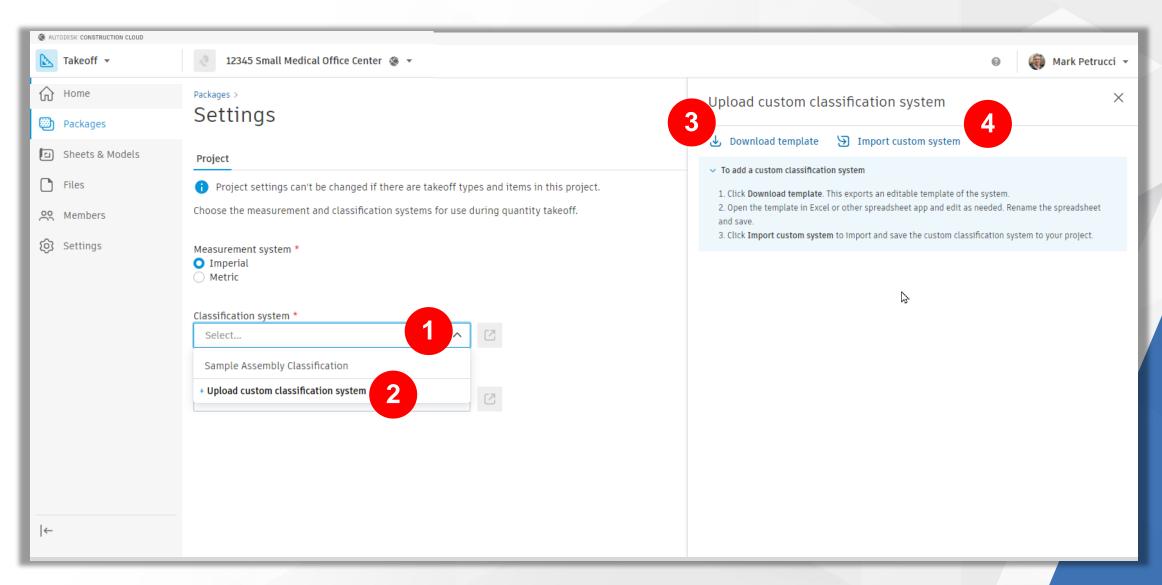
Autodesk Takeoff User Interface

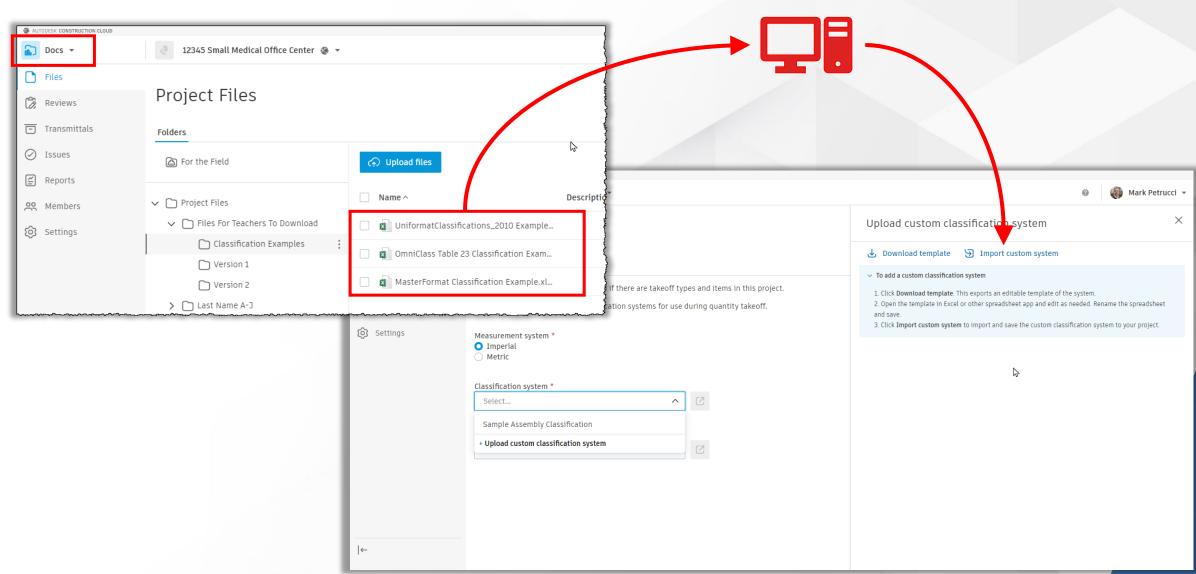


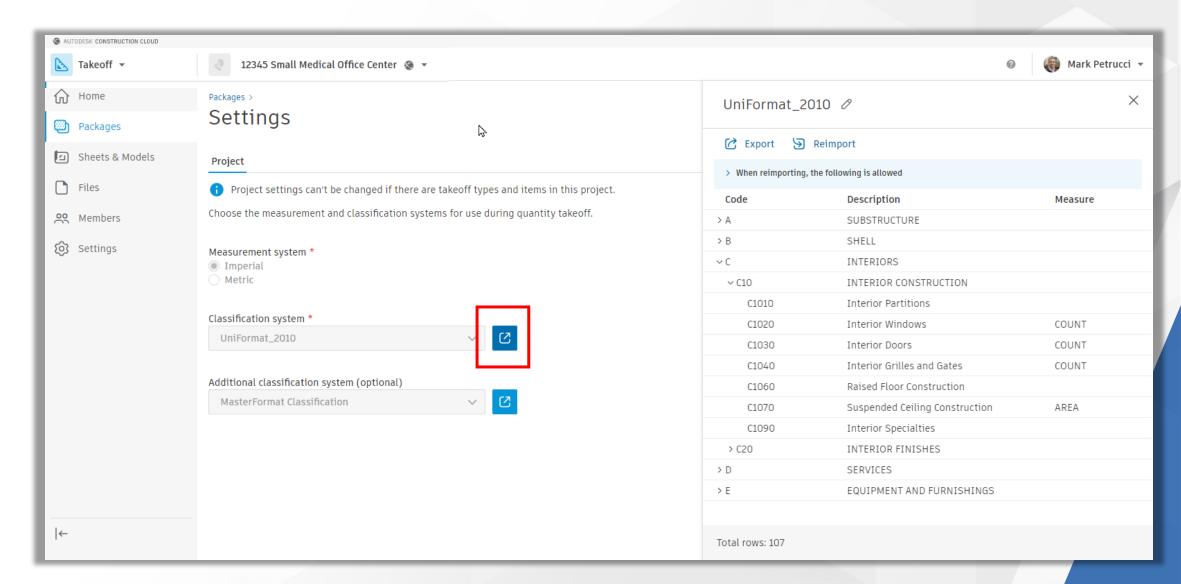
Home Screen - Classification Systems



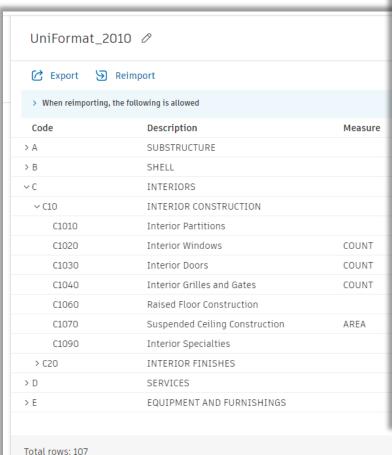


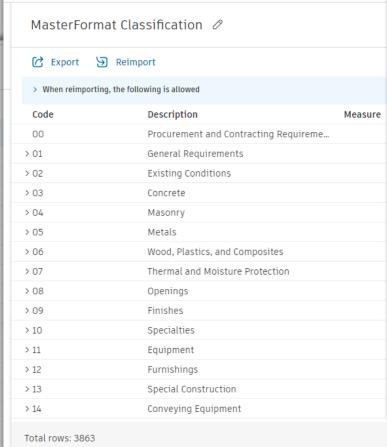


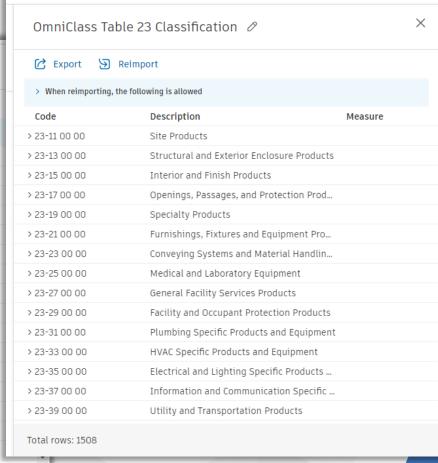


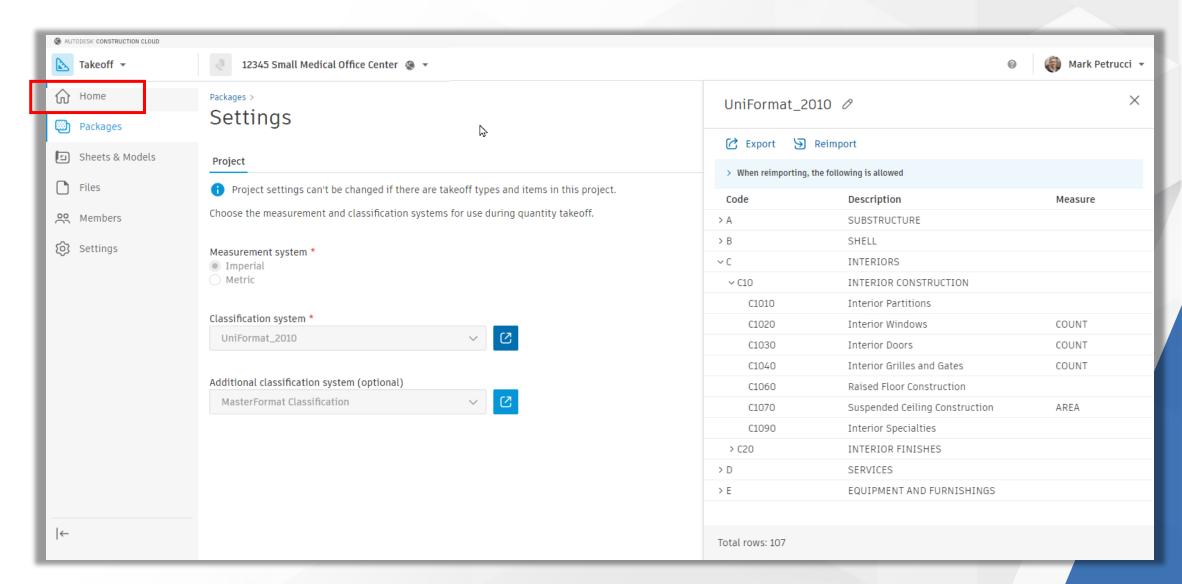


Classification Examples

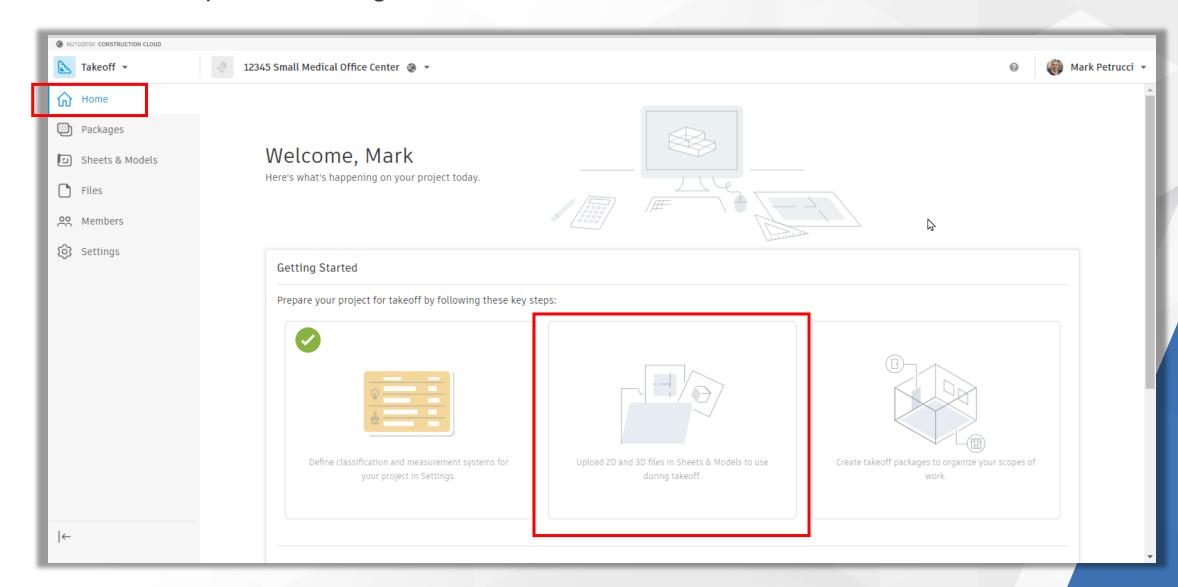




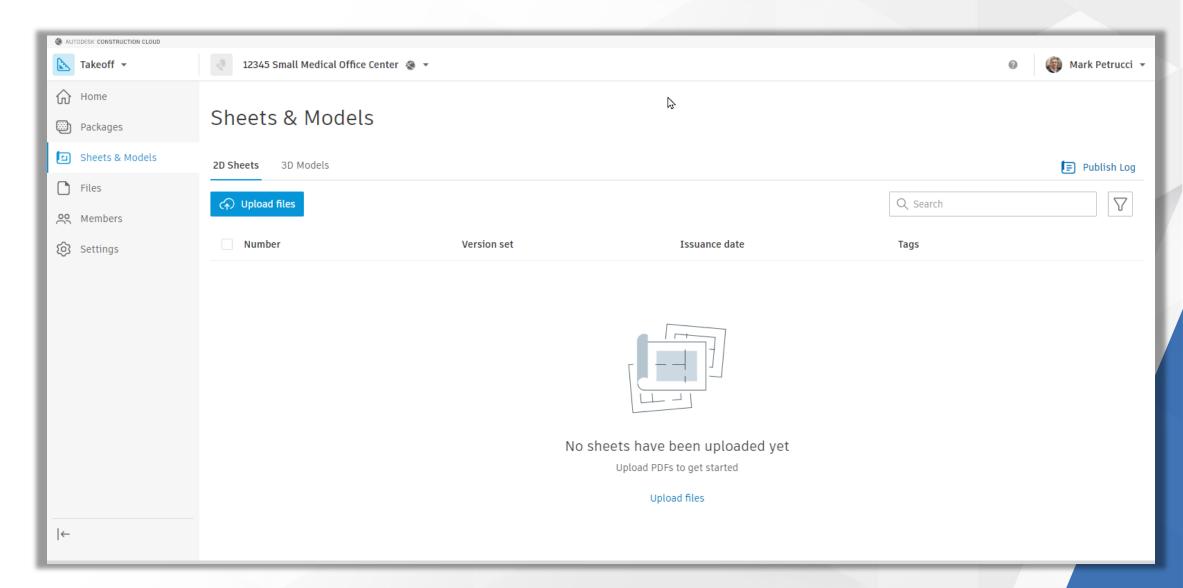




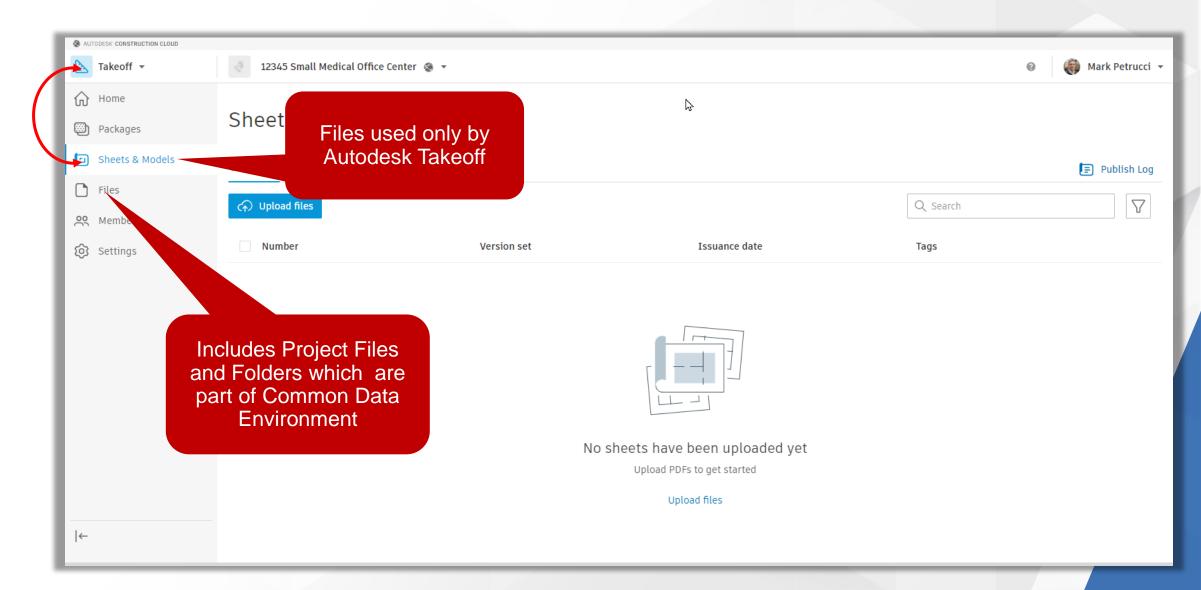
Home Screen – Upload Drawings and Models



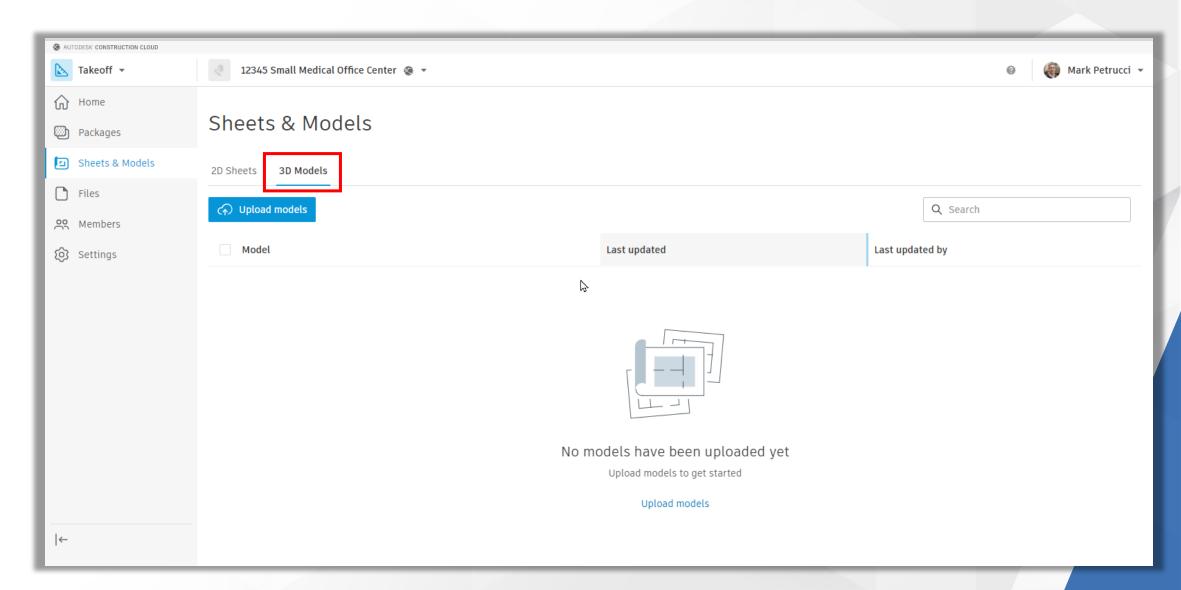
Sheets & Models



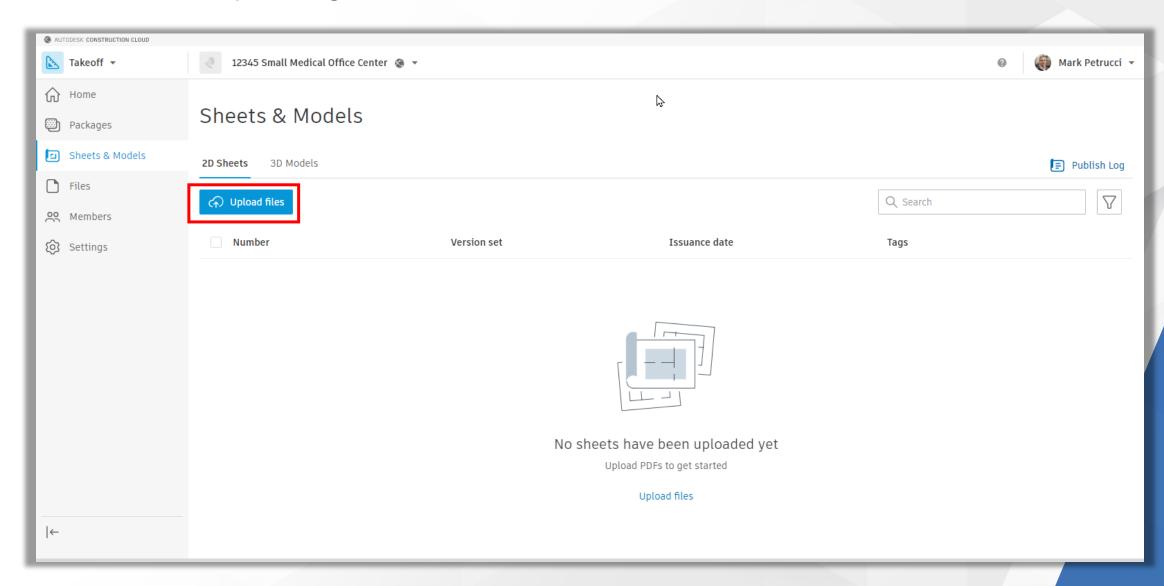
Sheets & Models

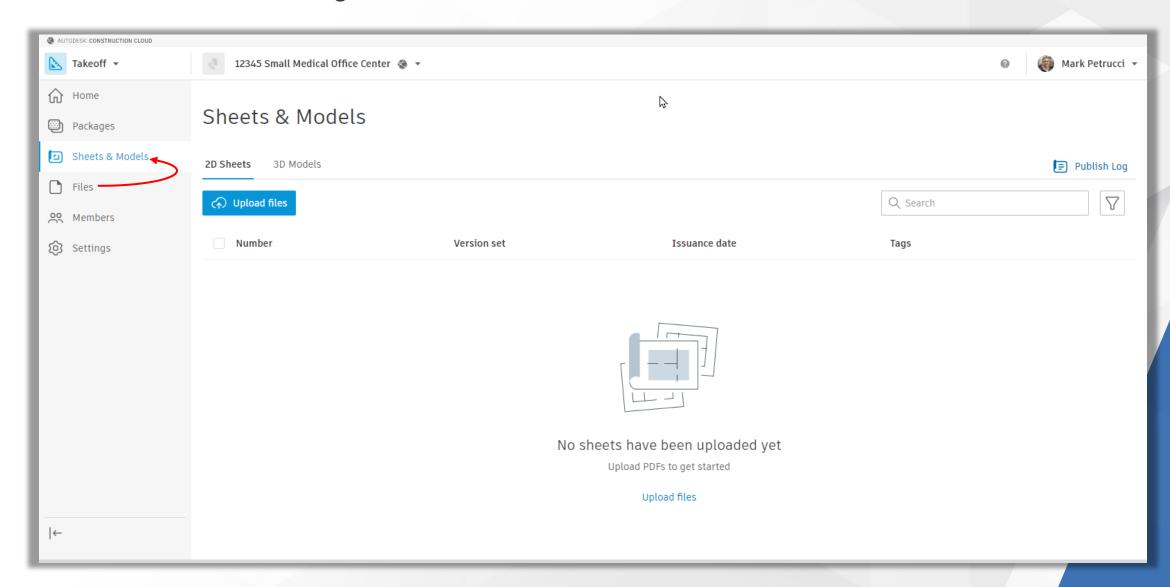


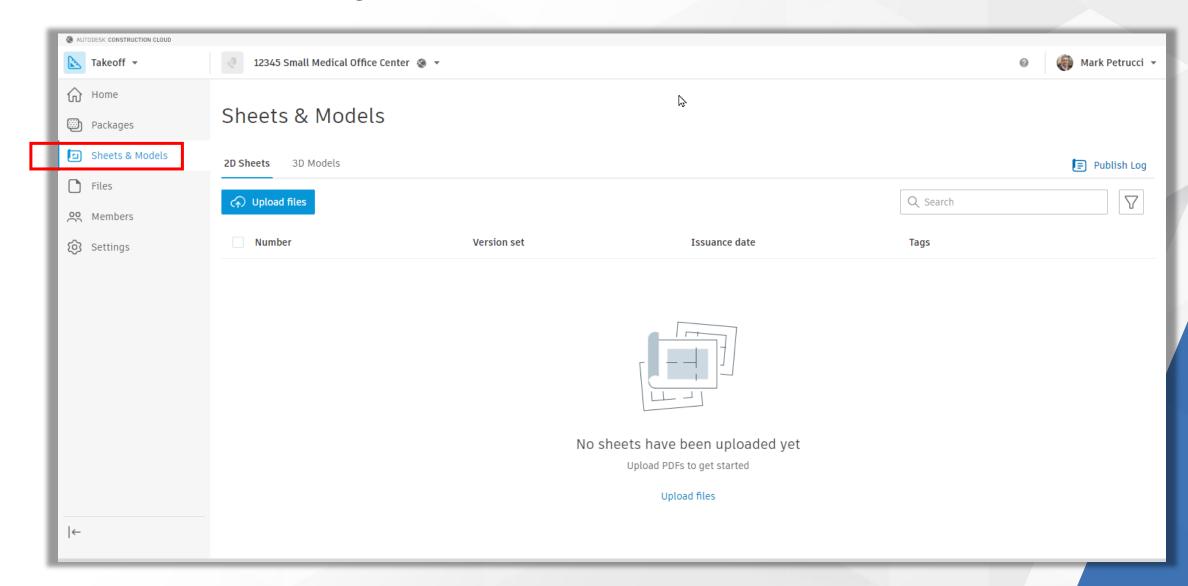
Sheets & Models



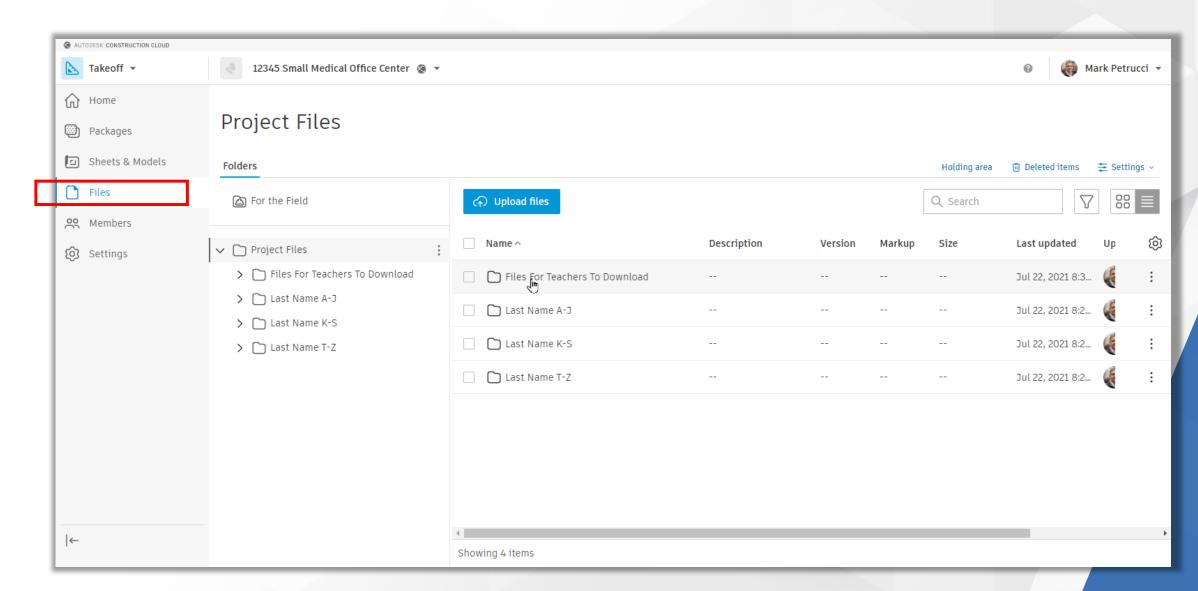
Sheets & Models – Uploading Files



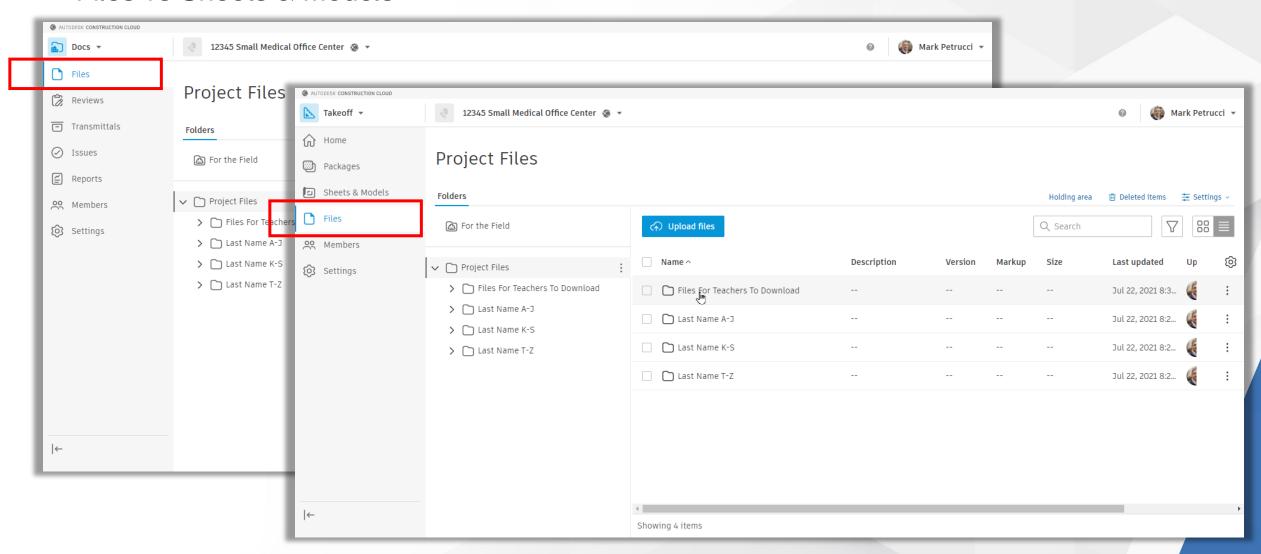


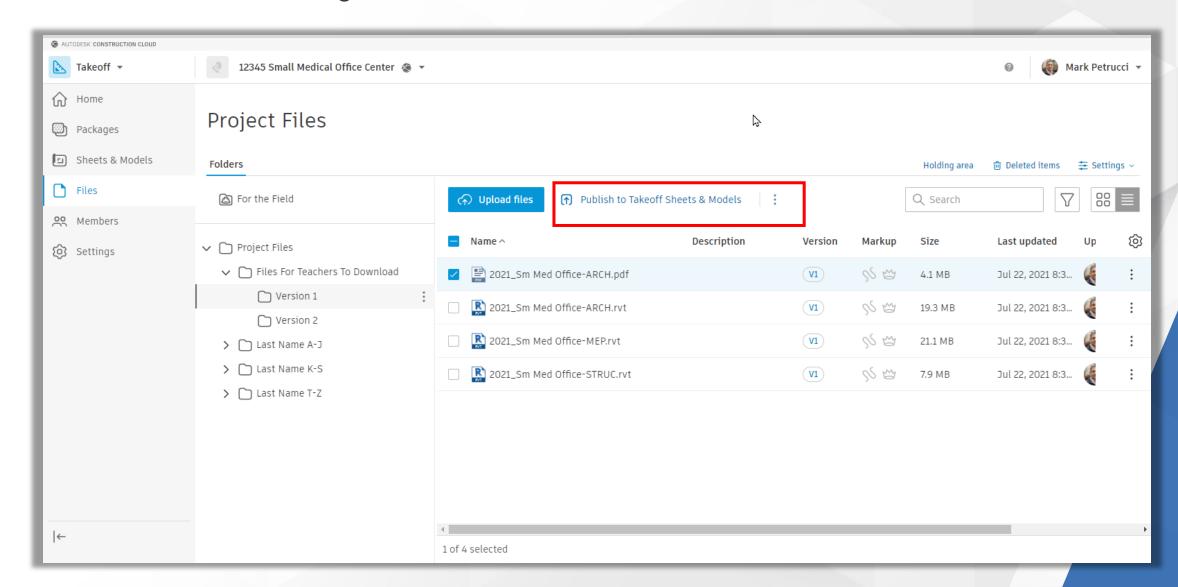


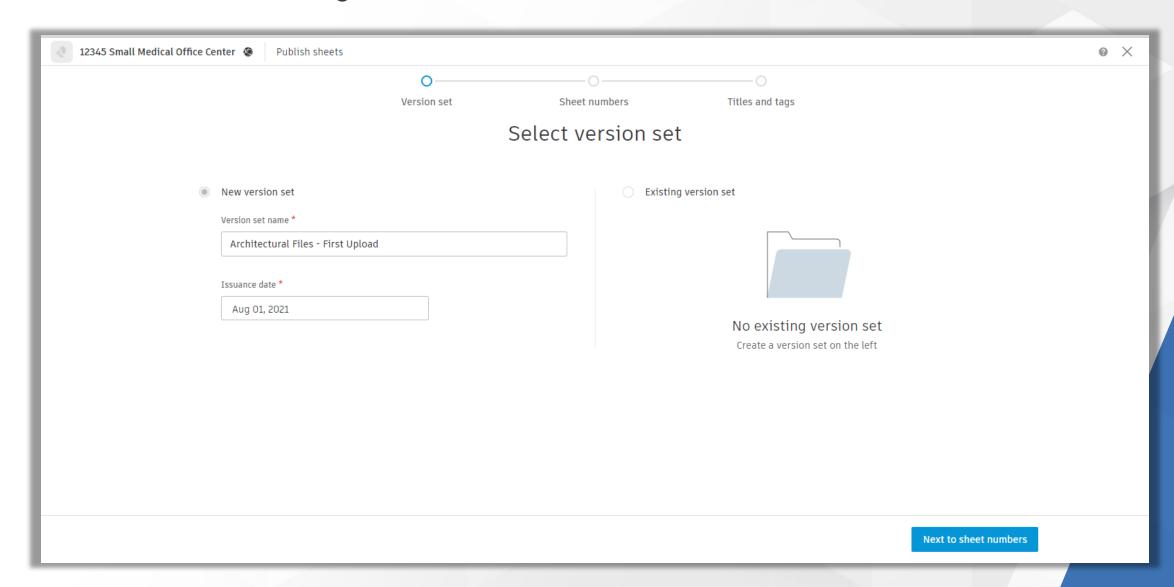
Files vs Sheets & Models

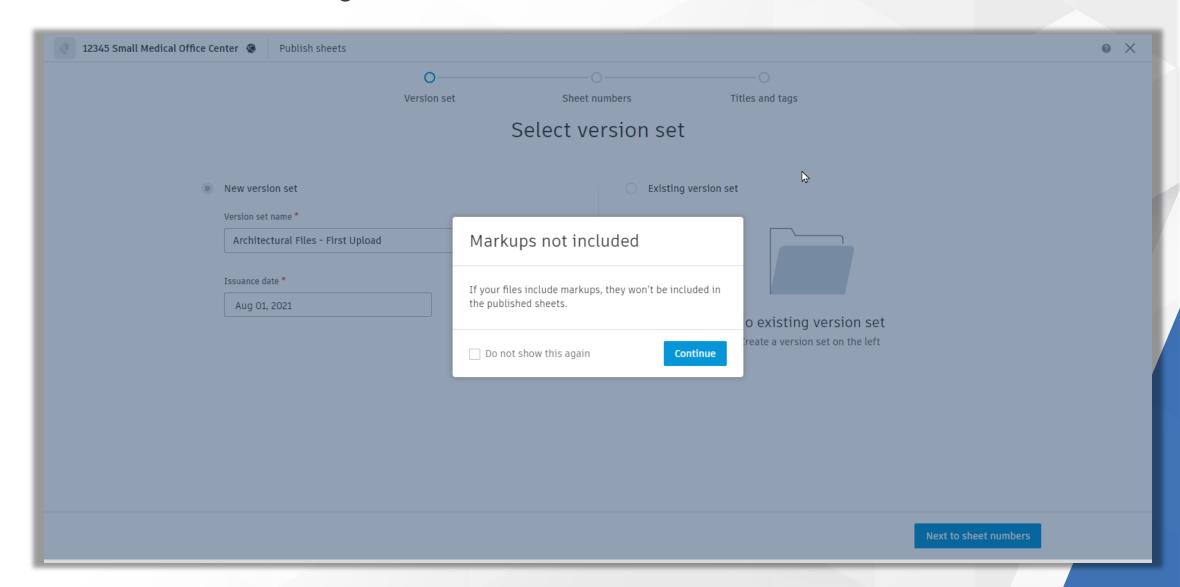


Files vs Sheets & Models

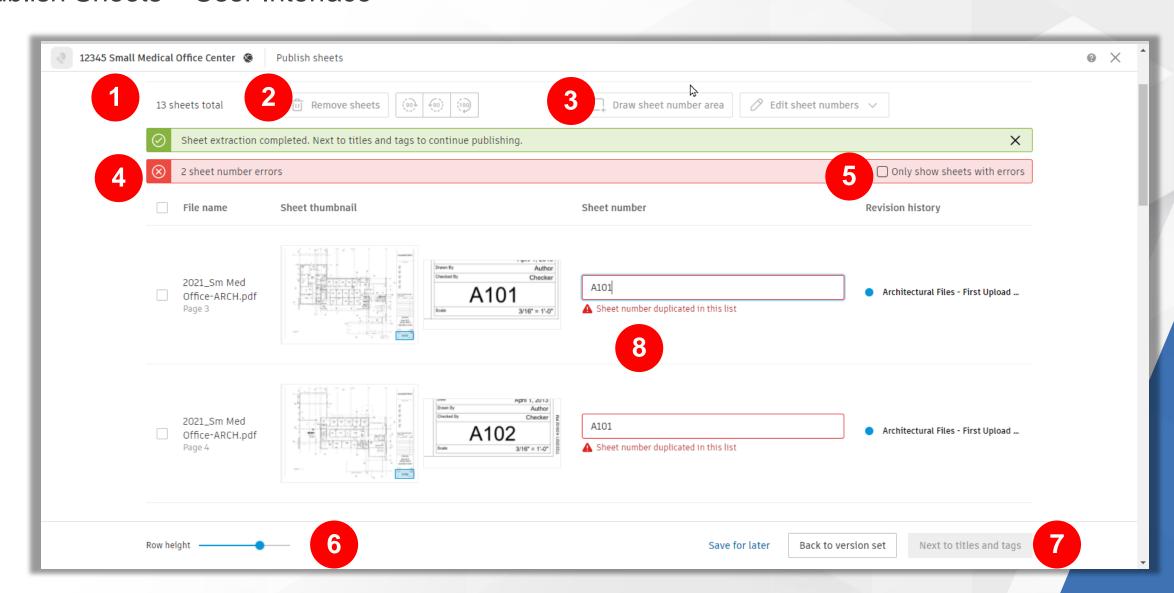




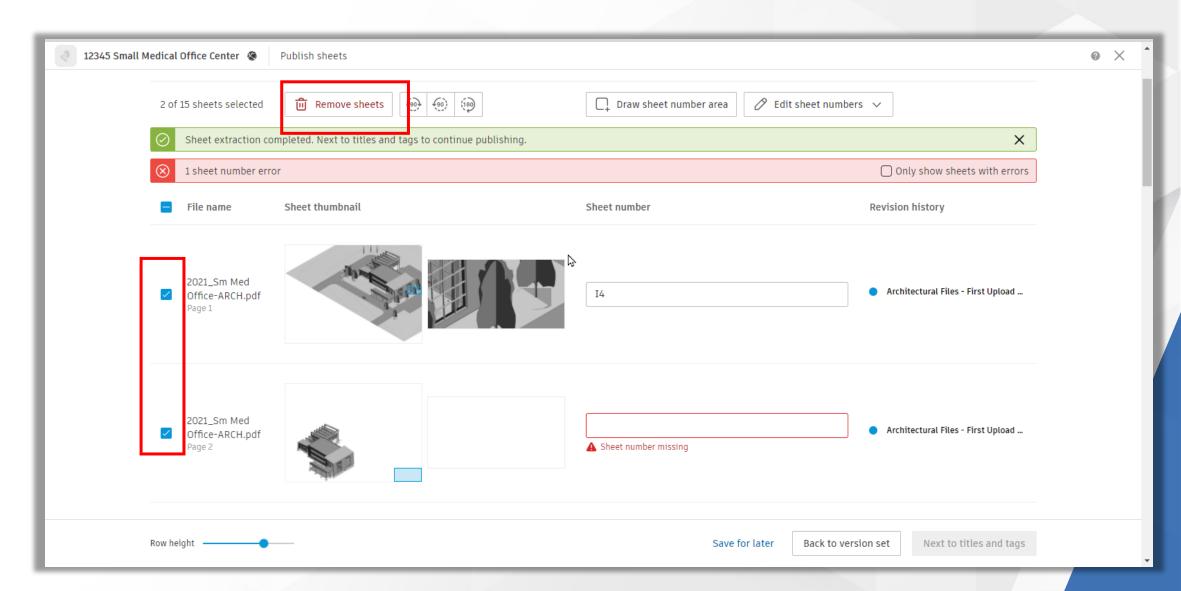




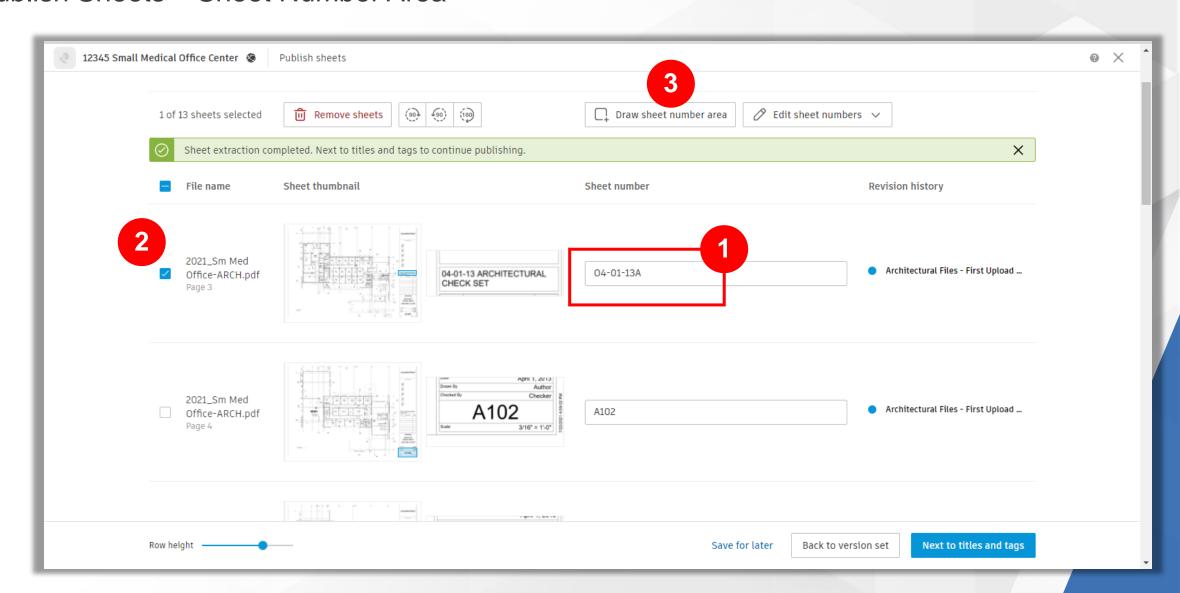
Publish Sheets – User Interface



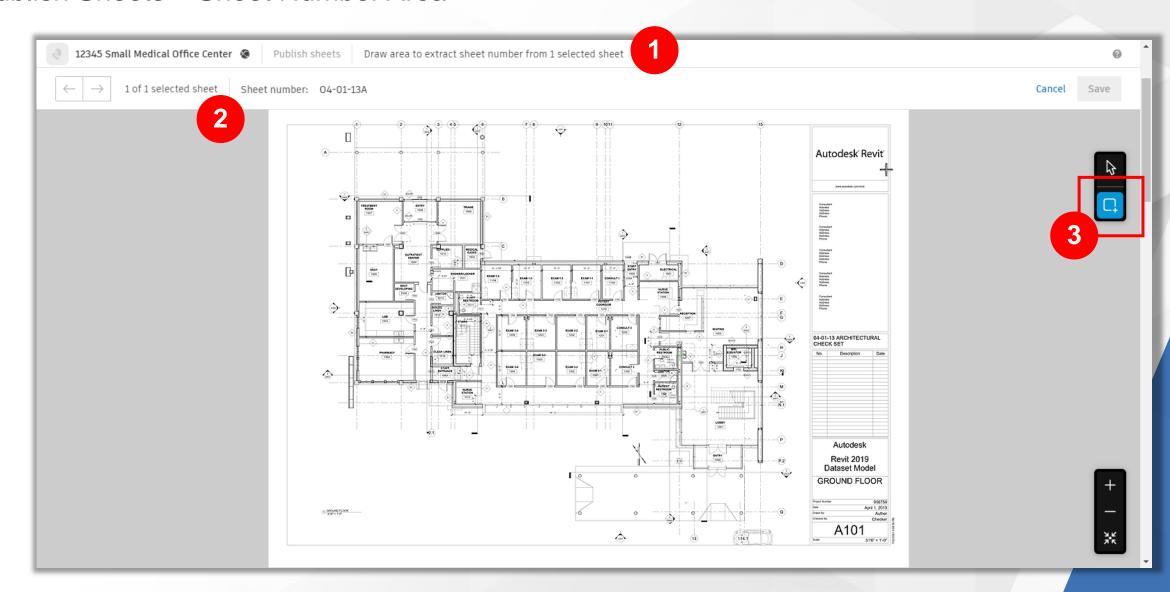
Publish Sheets – Remove Sheets



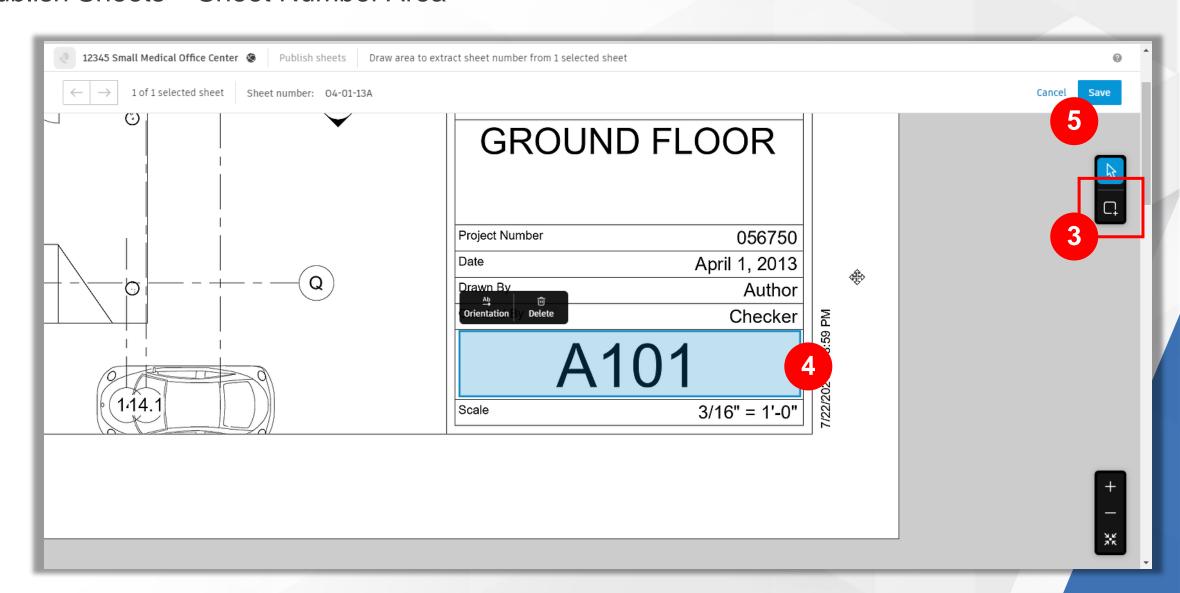
Publish Sheets – Sheet Number Area



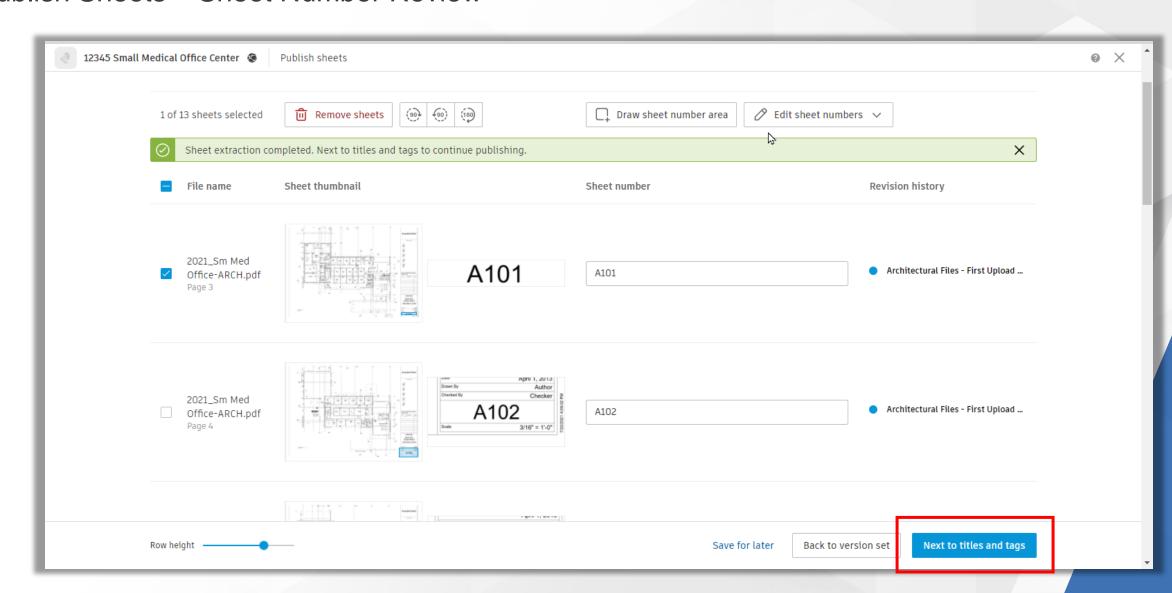
Publish Sheets – Sheet Number Area



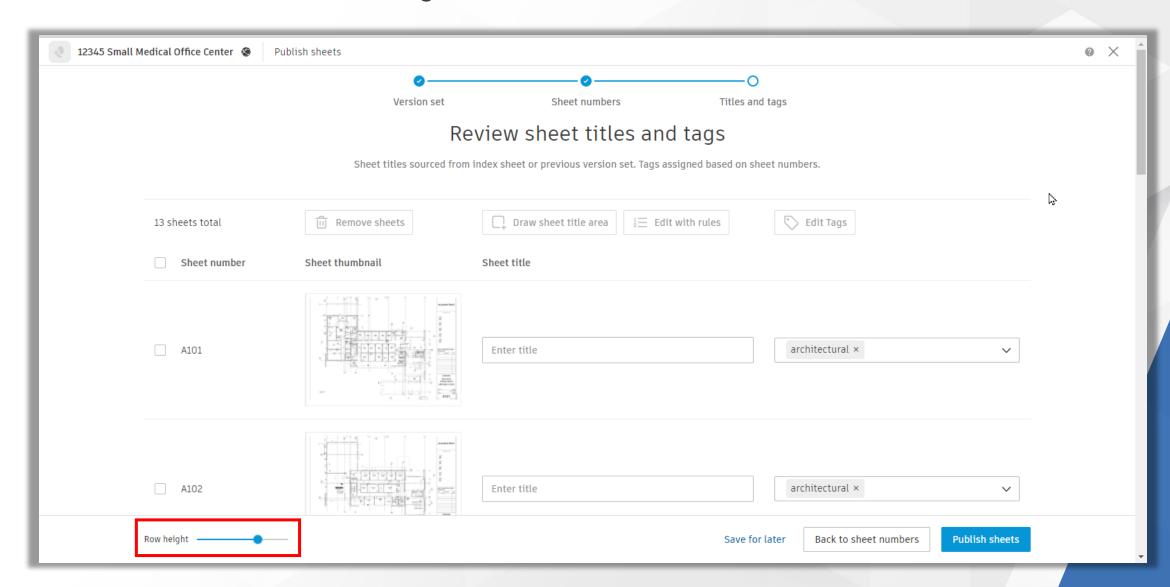
Publish Sheets – Sheet Number Area



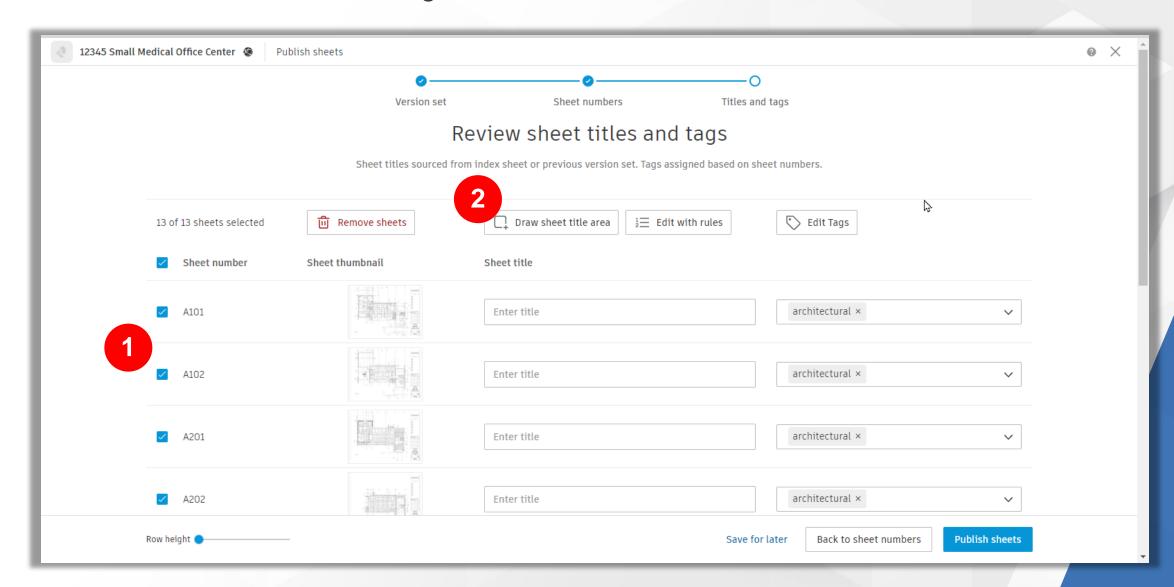
Publish Sheets – Sheet Number Review



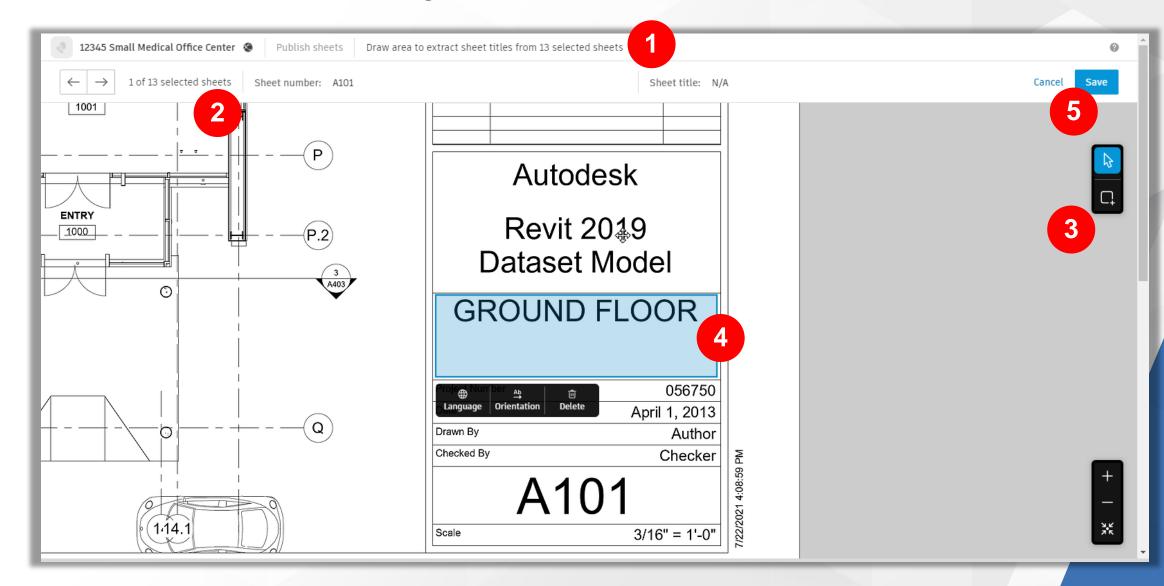
Publish Sheets – Sheet Title and Tags



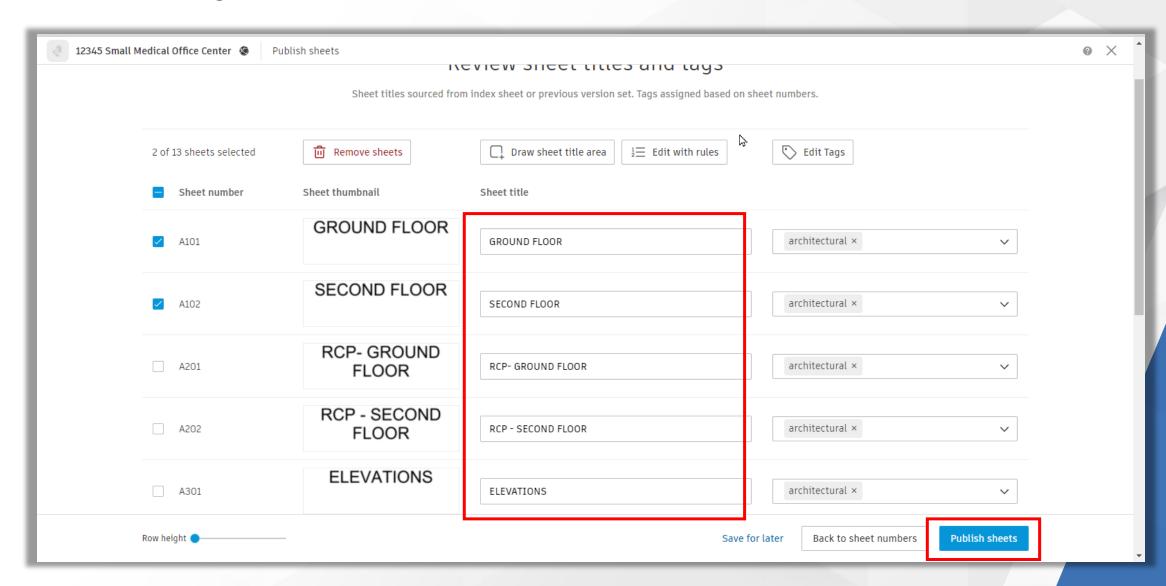
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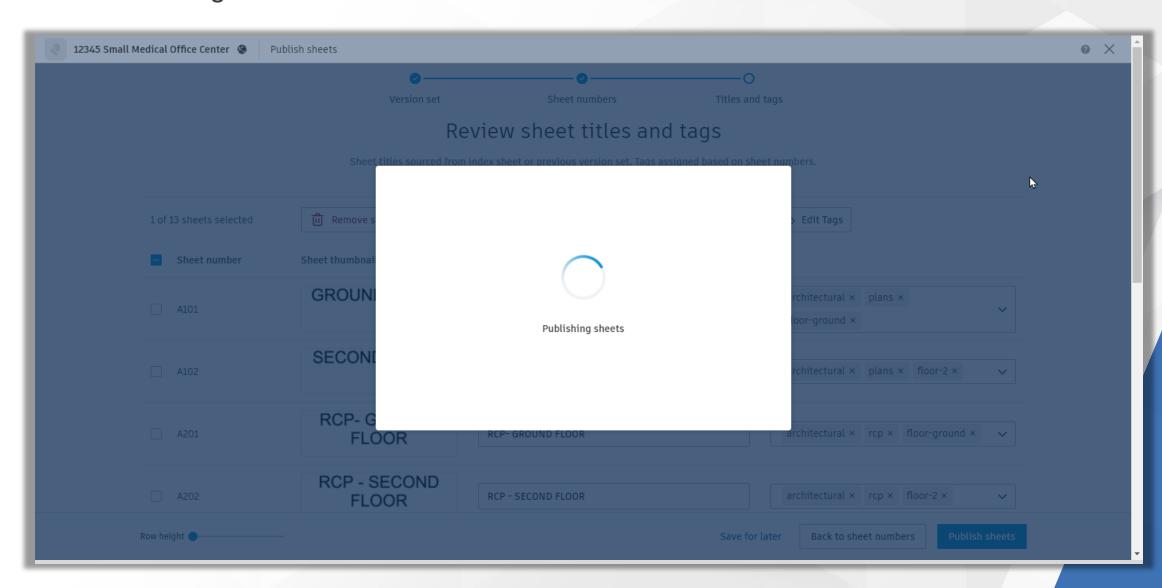
Publish Sheets – Sheet Title and Tags



Publish Sheets –Tags

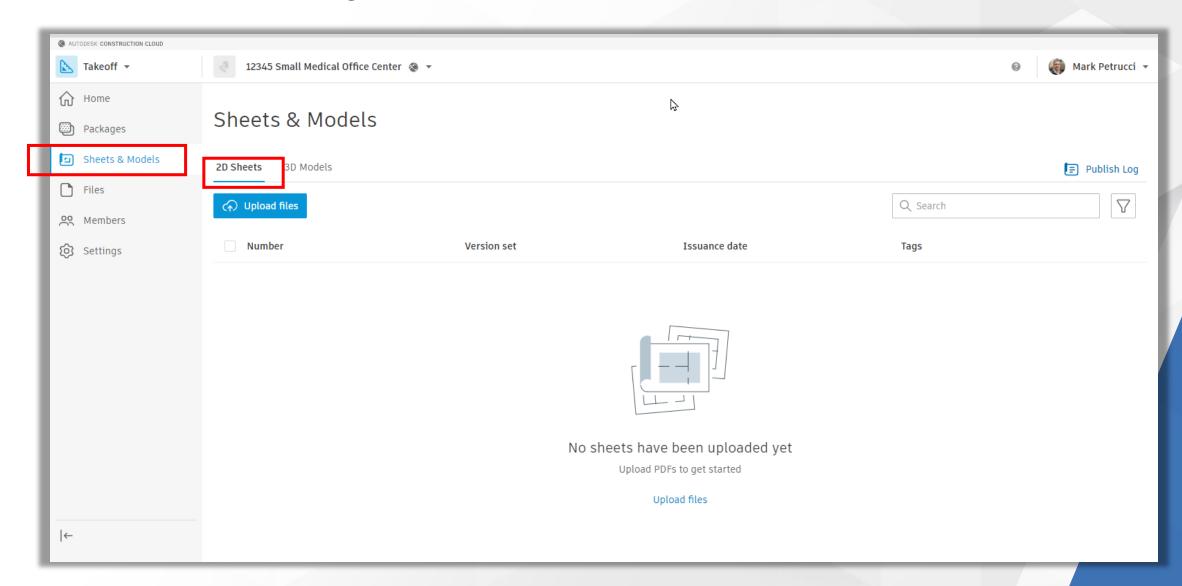


Publish Sheets –Tags

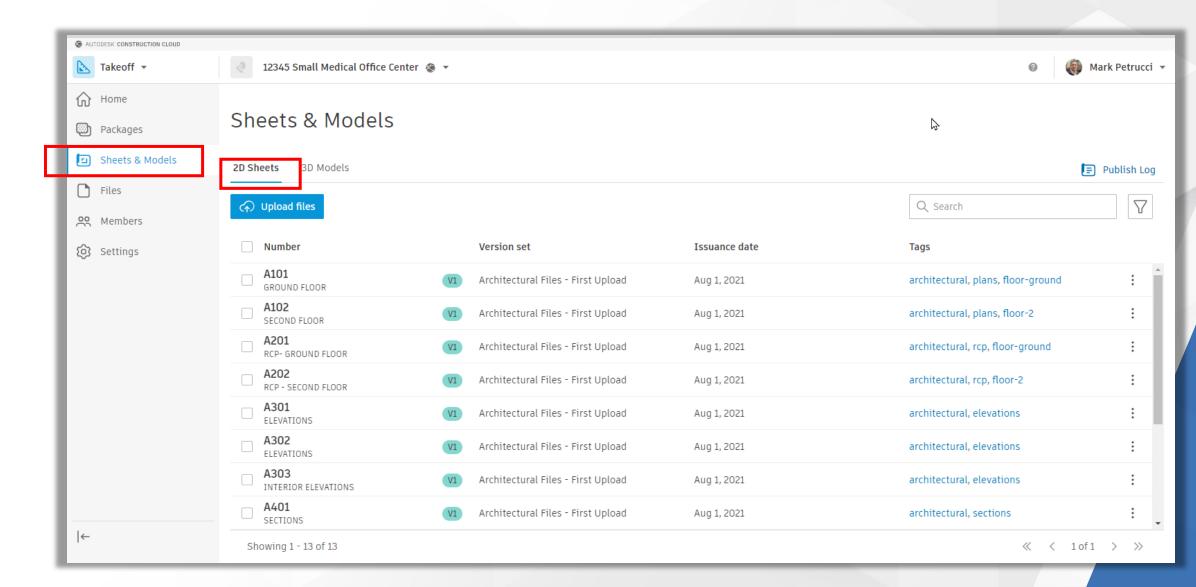


Sheet & Models

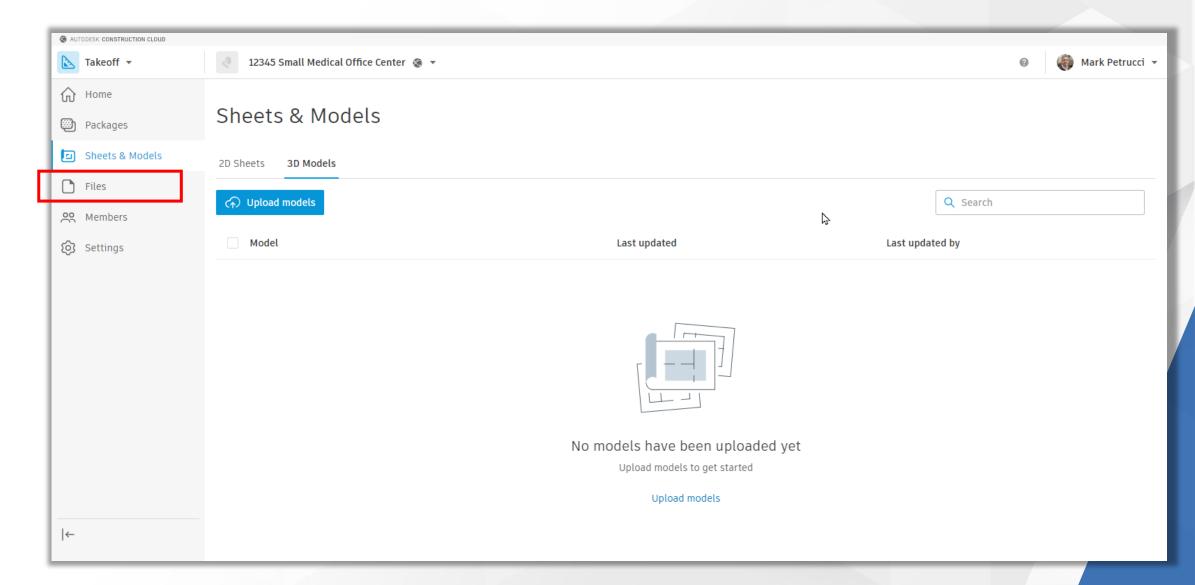
Sheets & Models – Publishing from Docs



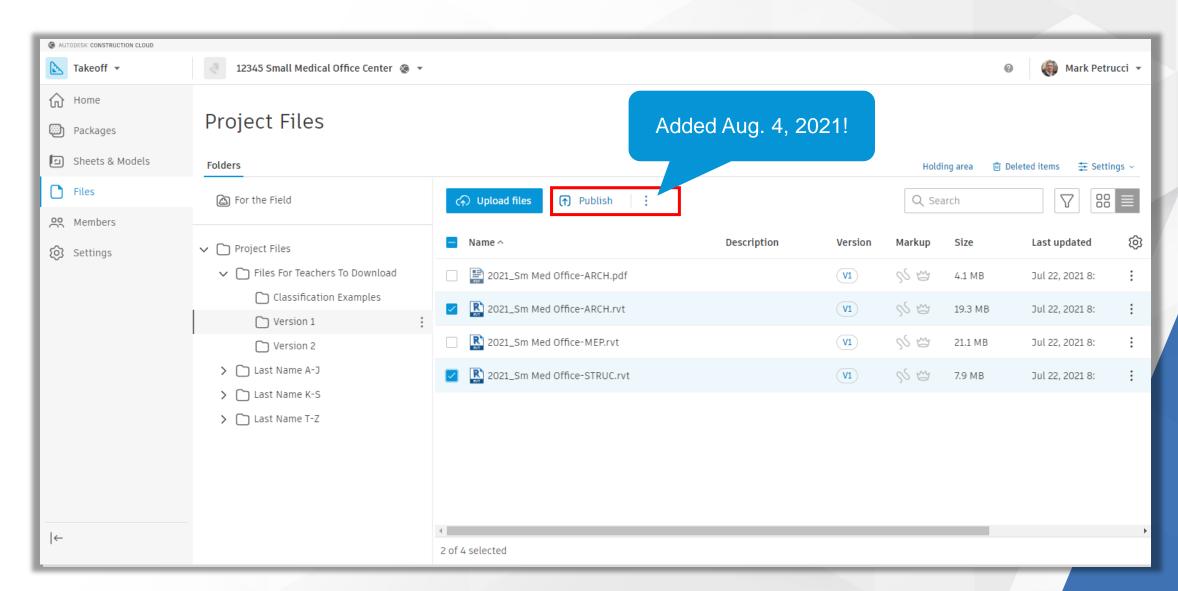
Publish Sheets



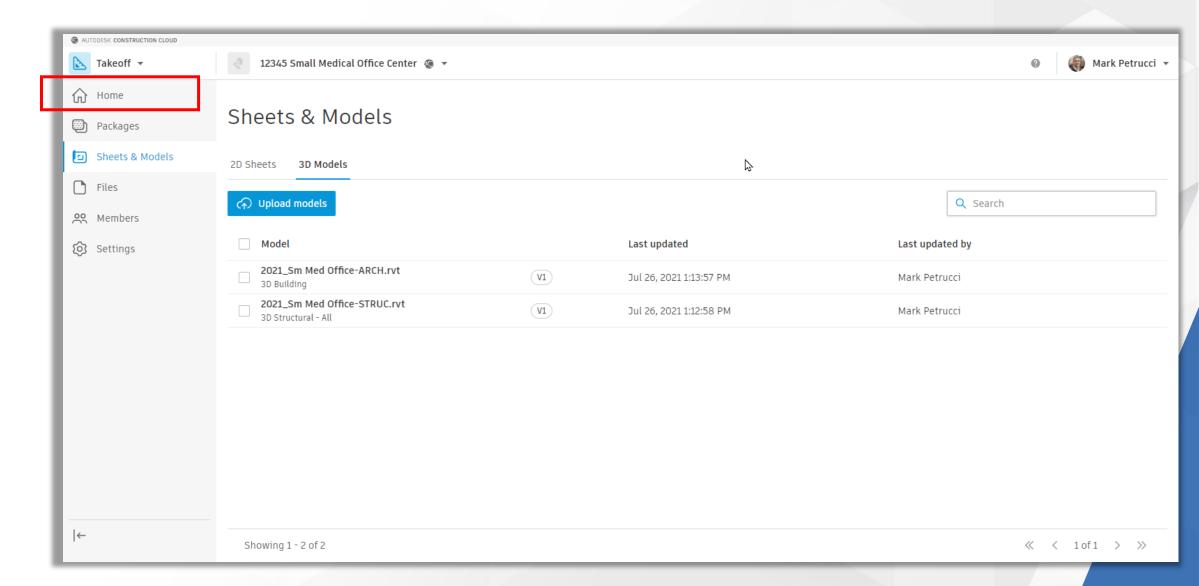
3D Models



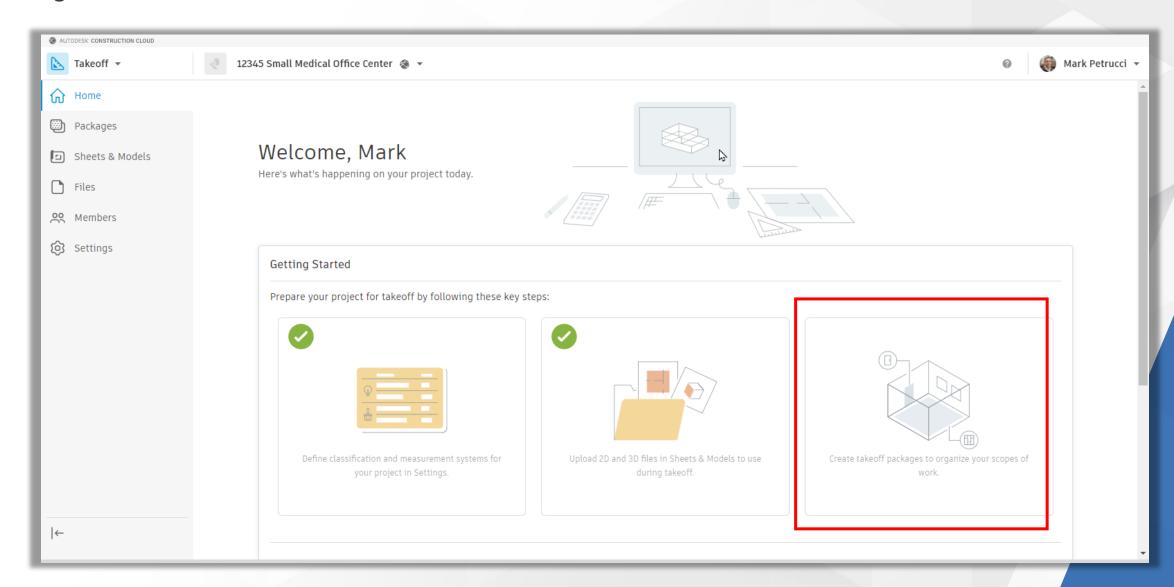
3D Models



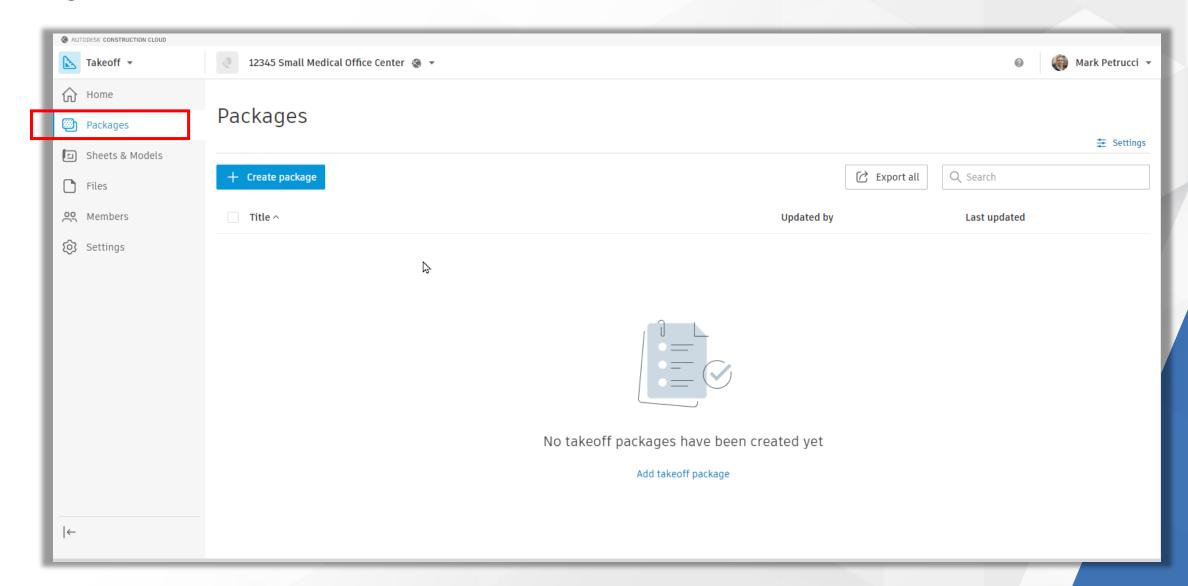
3D Models



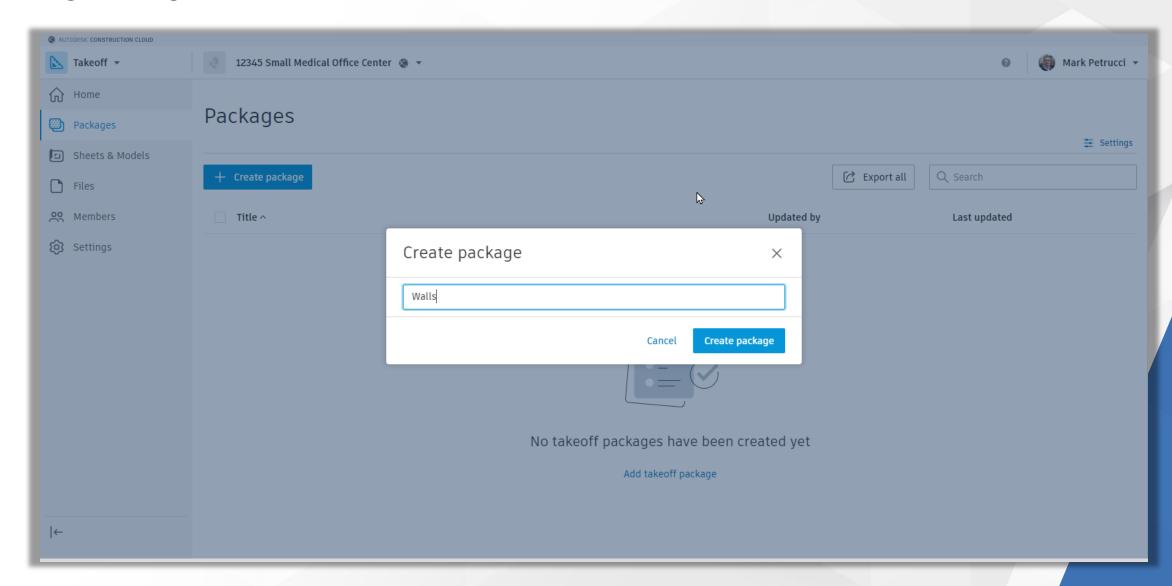
Packages



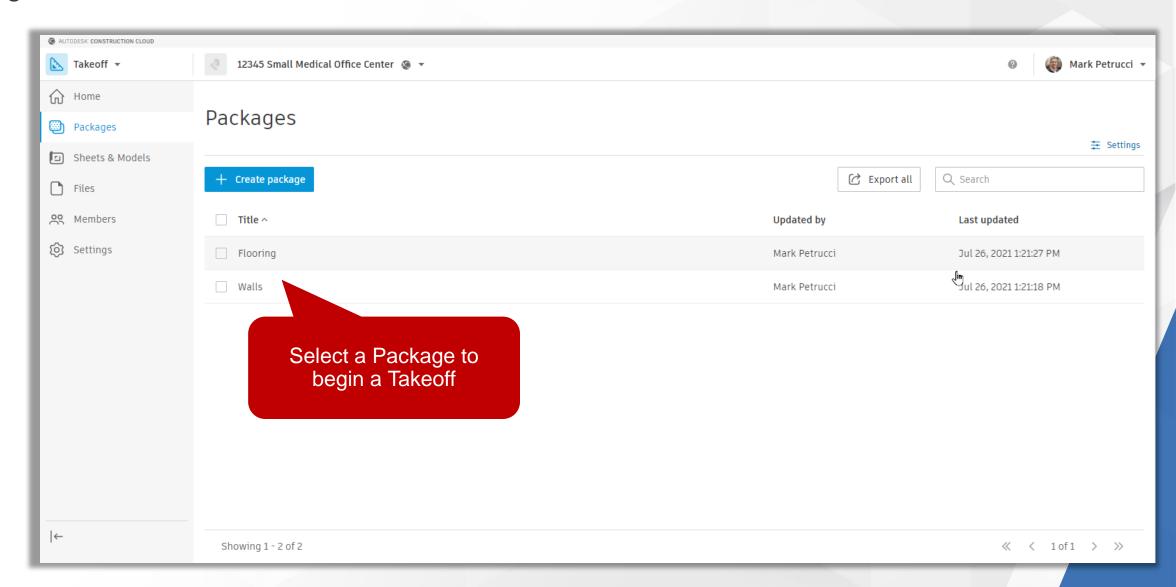
Packages



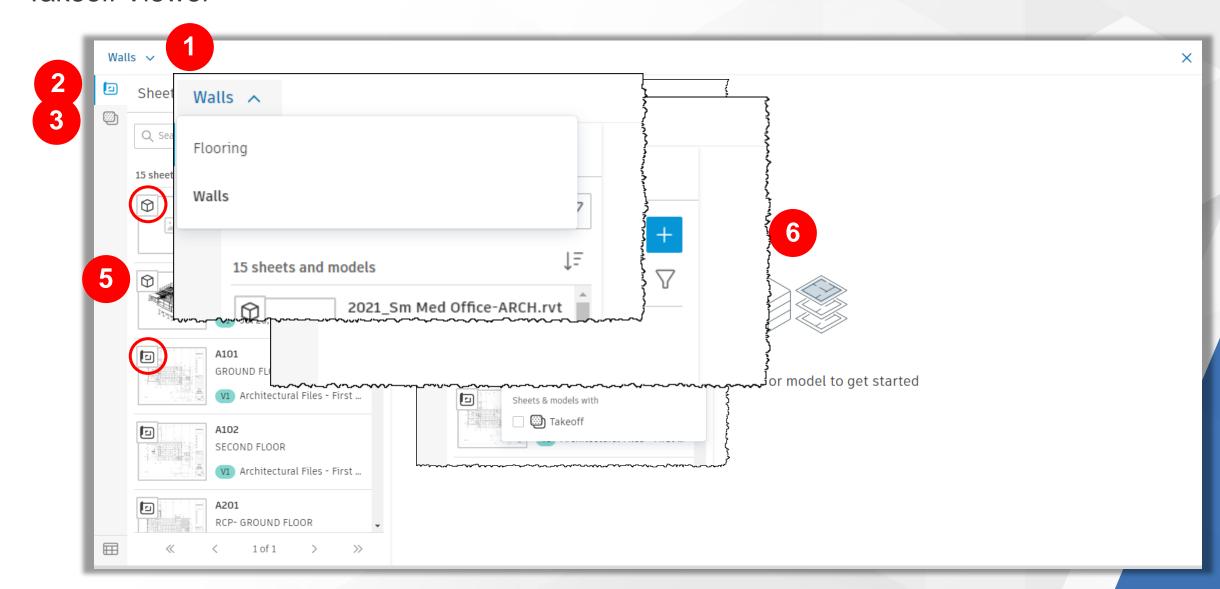
Creating Packages



Begin Takeoff

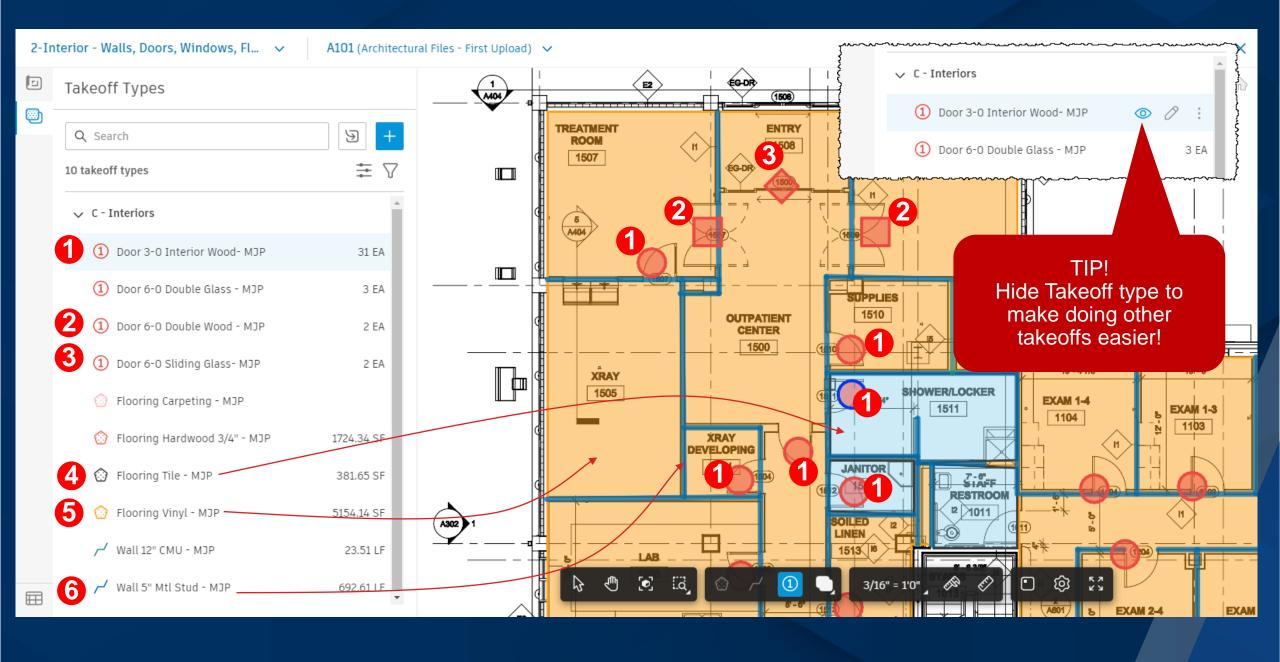


Takeoff Viewer

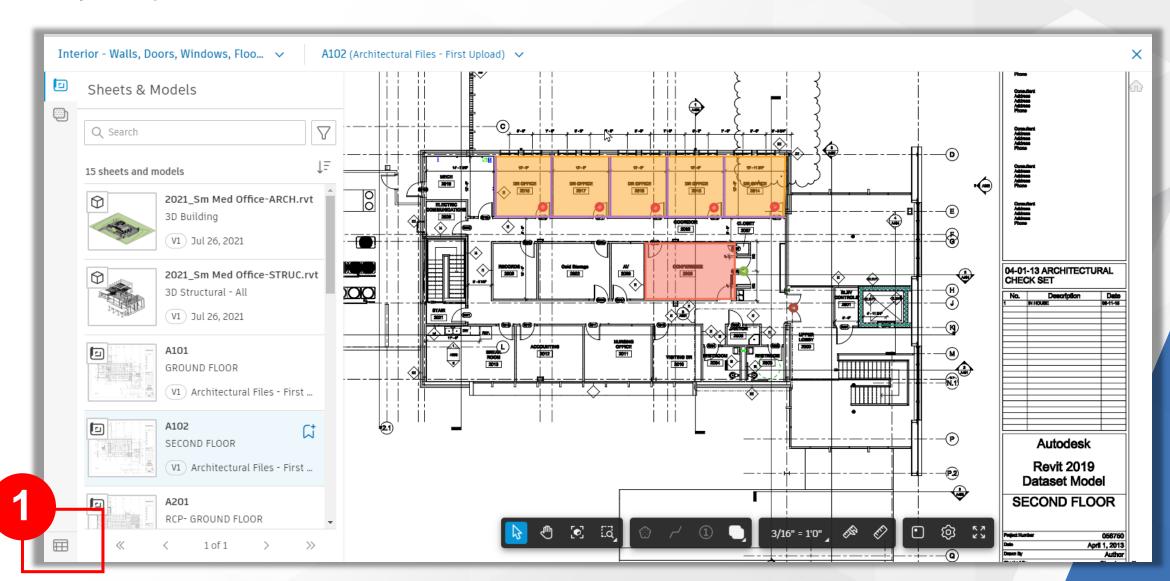




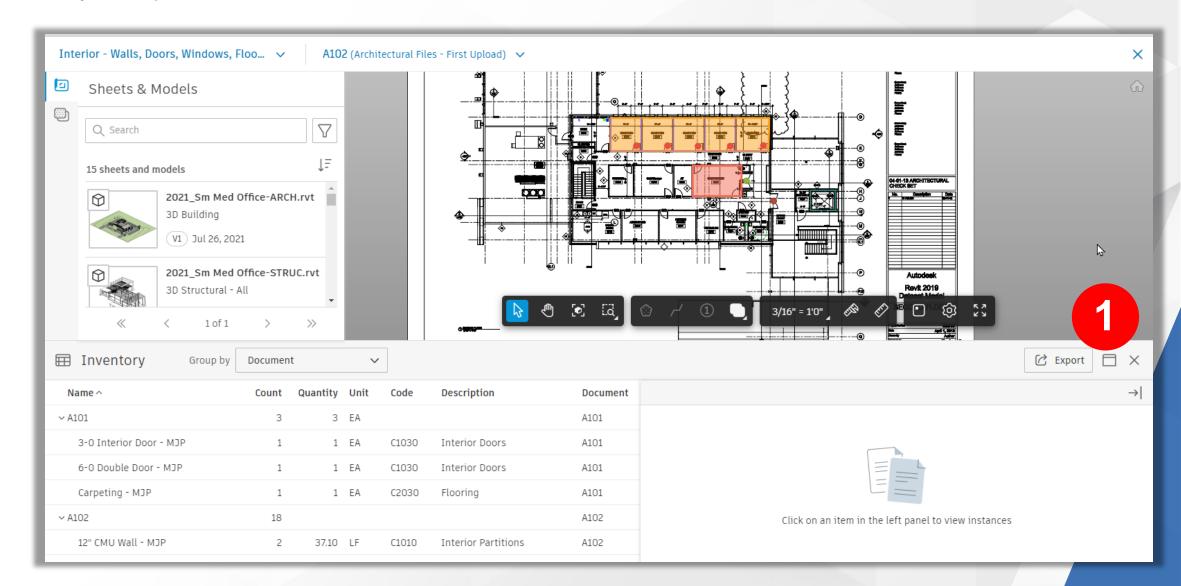
Hands On!



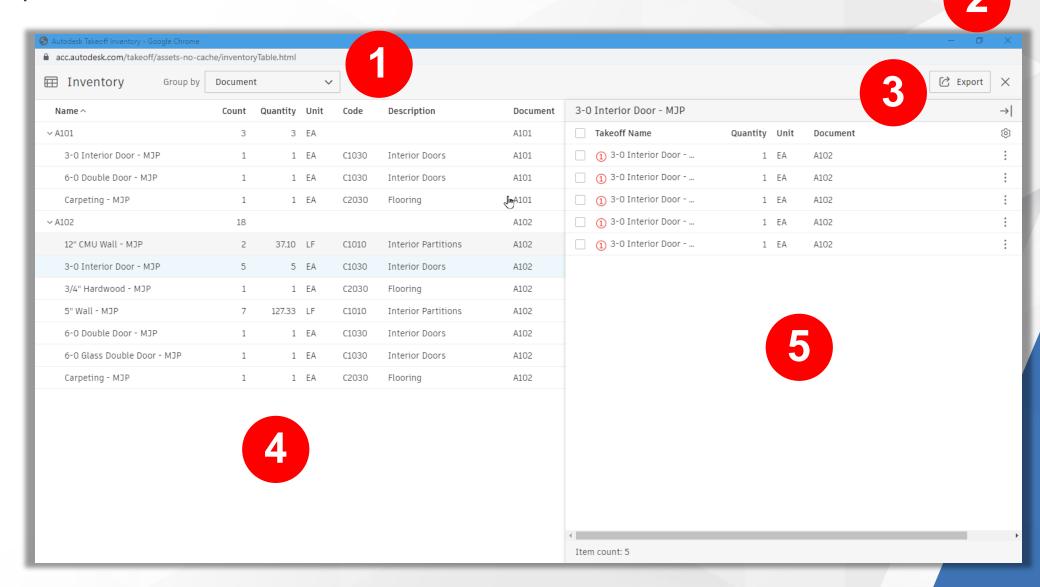
Inventory / Reports



Inventory / Reports



Inventory / Reports





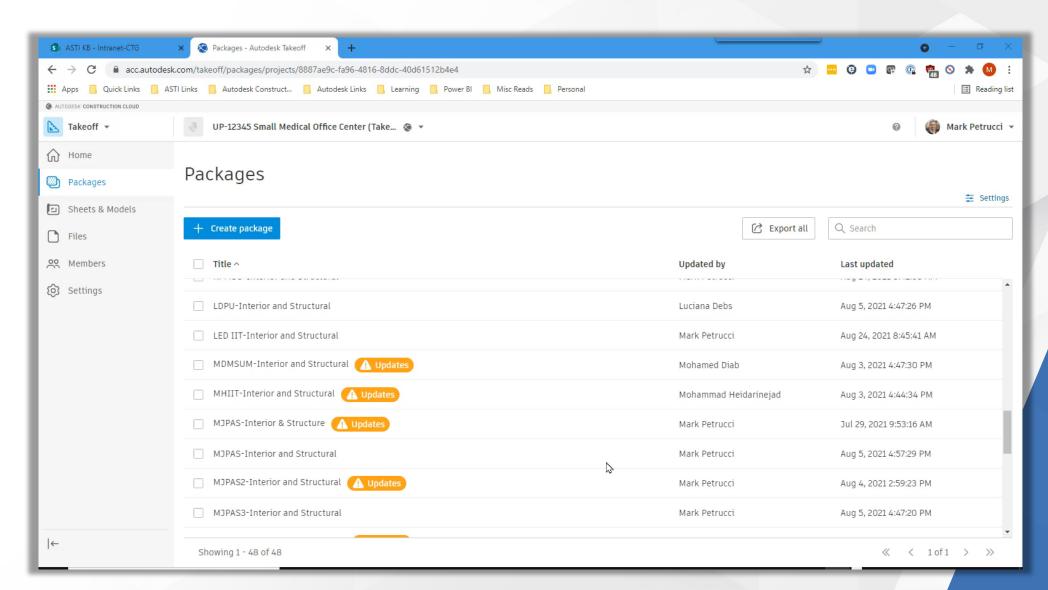
Q & A



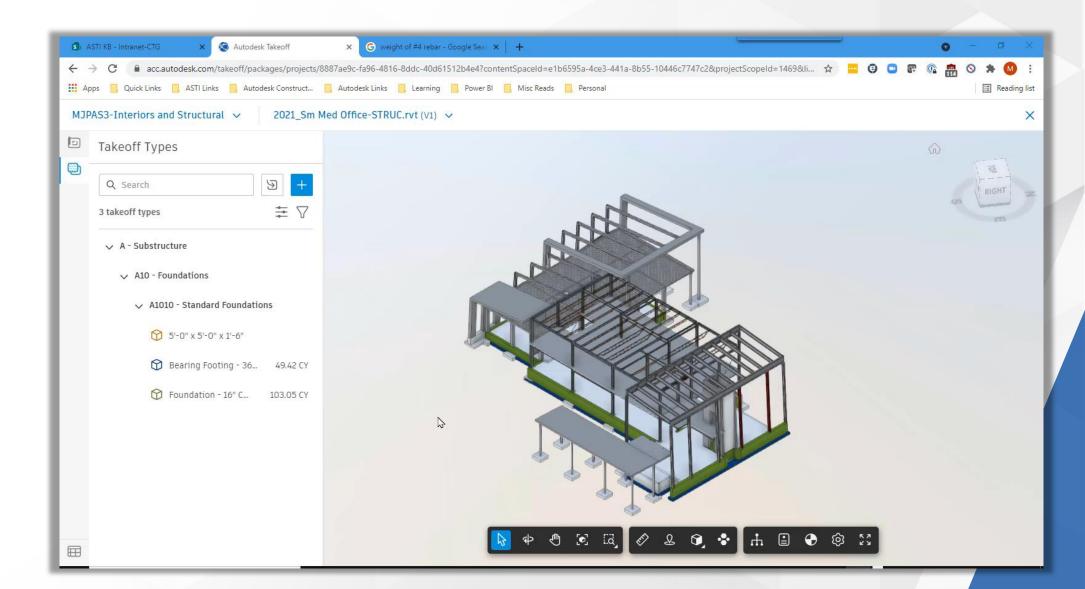
Make anything...

Updates Notification for Packages

Sheets/Models



Formula for Calculating Rebar Weight



Formulas - Bug

Autodesk is working on fix

