Autodesk Takeoff
Day 3 | 3:15pm – 5:00pm
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

- 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 Takeoff
Project Setup
(Lecture only)
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
Autodesk Takeoff

- Autodesk Docs User Interface
Autodesk Takeoff

- Autodesk Docs User Interface
Autodesk Takeoff

- Autodesk Takeoff User Interface
Autodesk Takeoff

- Home Screen - Classification Systems
Autodesk Takeoff

- Classification Systems

1. Project
   - Project settings can’t be changed if there are takeoff types and items in this project.
   - Choose the measurement and classification systems for use during quantity takeoff.

2. Measurement system
   - Imperial
   - Metric

3. Classification system
   - Select...
Autodesk Takeoff

- Classification Systems
Autodesk Takeoff

- Classification Systems
Autodesk Takeoff

- Classification Systems
Autodesk Takeoff

Classification Examples

MasterFormat Classification

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Measure</th>
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<tbody>
<tr>
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<td>Procurement and Contracting Requiremen...</td>
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<td>General Requirements</td>
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<td>02</td>
<td>Existing Conditions</td>
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<td>03</td>
<td>Concrete</td>
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<tr>
<td>04</td>
<td>Masonry</td>
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<tr>
<td>05</td>
<td>Metals</td>
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<tr>
<td>06</td>
<td>Wood, Plastics, and Composites</td>
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<tr>
<td>07</td>
<td>Thermal and Moisture Protection</td>
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</tr>
<tr>
<td>08</td>
<td>Openings</td>
<td></td>
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<td>09</td>
<td>Finishes</td>
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<td>10</td>
<td>Specialties</td>
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<td>12</td>
<td>Furnishings</td>
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<td>13</td>
<td>Special Construction</td>
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<td>14</td>
<td>Conveying Equipment</td>
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Total rows: 3663

OmniClass Table 23 Classification

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<td>23-11</td>
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<td>23-13</td>
<td>Structural and Exterior Enclosure Products</td>
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<td>Interior and Finish Products</td>
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<td>Openings, Passages, and Protection Prod...</td>
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<td>Conveying Systems and Material Handling</td>
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<td>Medical and Laboratory Equipment</td>
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<td>Information and Communication Specific Products...</td>
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<td>23-39</td>
<td>Utility and Transportation Products</td>
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Total rows: 1508
Autodesk Takeoff

- Classification Systems
Autodesk Takeoff

- Home Screen – Upload Drawings and Models
Sheet & Models

- Sheets & Models
Sheet & Models

- Sheets & Models

Files used only by Autodesk Takeoff

Includes Project Files and Folders which are part of Common Data Environment

No sheets have been uploaded yet
Upload PDFs to get started
Upload files
Sheet & Models

- Sheets & Models

No models have been uploaded yet. Upload models to get started.
Sheet & Models

- Sheets & Models – Uploading Files

No sheets have been uploaded yet

Upload PDFs to get started

Upload files
Sheet & Models

- Sheets & Models – Publishing from Docs
Sheet & Models

- Sheets & Models – Publishing from Docs
Sheet & Models

- Files vs Sheets & Models
Sheet & Models

- Files vs Sheets & Models
Sheet & Models

- Sheets & Models – Publishing from Docs
Autodesk Takeoff

- Sheets & Models – Publishing from Docs
Sheet & Models

- Sheets & Models – Publishing from Docs
Autodesk Takeoff

- Publish Sheets – User Interface

1. 13 sheets total
2. Remove sheets
3. Draw sheet number area
4. 2 sheet number errors
5. Only show sheets with errors
6. Row height
7. Next to titles and tags
8. Sheet number duplicated in this list

Architectural Files - First Upload...
Sheet & Models

- Publish Sheets – Remove Sheets
Autodesk Takeoff

- Publish Sheets – Sheet Number Area
Autodesk Takeoff

- Publish Sheets – Sheet Number Area
Autodesk Takeoff

- Publish Sheets – Sheet Number Area
Autodesk Takeoff

- Publish Sheets – Sheet Number Review
Autodesk Takeoff

- Publish Sheets – Sheet Title and Tags
Autodesk Takeoff
- Publish Sheets – Sheet Title and Tags
Autodesk Takeoff

- Publish Sheets – Sheet Title and Tags
Autodesk Takeoff

- Publish Sheets – Tags
Autodesk Takeoff

- Publish Sheets – Tags
Sheet & Models

- Sheets & Models – Publishing from Docs
Autodesk Takeoff

- Publish Sheets
Autodesk Takeoff

- 3D Models
Autodesk Takeoff

- 3D Models

Added Aug. 4, 2021!
Autodesk Takeoff

- 3D Models
Autodesk Takeoff

- Packages
Autodesk Takeoff

- Packages

No takeoff packages have been created yet

Add takeoff package
Autodesk Takeoff

- Creating Packages
Autodesk Takeoff

- Begin Takeoff

<table>
<thead>
<tr>
<th>Package</th>
<th>Updated by</th>
<th>Last updated</th>
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<tbody>
<tr>
<td>Flooring</td>
<td>Mark Petrucci</td>
<td>Jul 26, 2021 1:21:27 PM</td>
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<tr>
<td>Walls</td>
<td>Mark Petrucci</td>
<td>Jul 26, 2021 1:21:18 PM</td>
</tr>
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Select a Package to begin a Takeoff
Autodesk Takeoff

- Takeoff Viewer

1. Walls
2. Flooring
3. Walls
4. 15 sheets and models
5. 2021_Sm Med Office - ARCH.rvt
6. For model to get started
Hands On!
TIP!
Hide Takeoff type to make doing other takeoffs easier!
Autodesk Takeoff

- Inventory / Reports
Autodesk Takeoff

- Inventory / Reports

![Autodesk Takeoff Interface](image)

- Inventory panel on the left shows a list of items with details like name, count, quantity, unit, code, description, and document.
- The main panel on the right displays a floor plan with highlighted areas indicating inventory items.

Click on an item in the left panel to view instances.
Autodesk Takeoff

- Inventory / Reports

1. Inventory/Reports window
2. Inventory items
3. Edit or select items
4. Quantity and Unit options
5. Export functionality
Q & A
Updates Notification for Packages

- Sheets/Models
Formula for Calculating Rebar Weight
Formulas - Bug

- Autodesk is working on fix