

## Chalkline Tech Support Bulletin - Linking your First BIM Model Elements and Specifications

VisiSpecs enables process and quality improvement integrating the current separate silos of information in the BIM model and specifications. Linking the BIM elements to the required specs is best started with a recently completed project which can take just 1-2 days. The resulting errors and omissions can not only be responded to quickly through addendums, but justify the ROI this coordinated process enables. Since NO CHANGES are required to the BIM model, the linking can be immediate with specifiers using the Free Revit Viewer as needed. Preparatory [Recorded Intro Demos](#) should be watched and the following document read to ensure a successful integration effort.

### First Project to Integrate

Select a recently completed project which includes company standard elements and materials. It is not recommended to select a project in process as issues inevitably arise such as:

1. Schedule delays
2. By the time the team started, they forgot what they learned
3. "We probably would have caught that anyway!"
4. Had to do it the old way for reason XYZ...
5. Team members changed
6. Didn't have time as the project was fast tracked

A completed project enables the validation in 1-2 days instead of 6-12 months and links are ready for the next project.

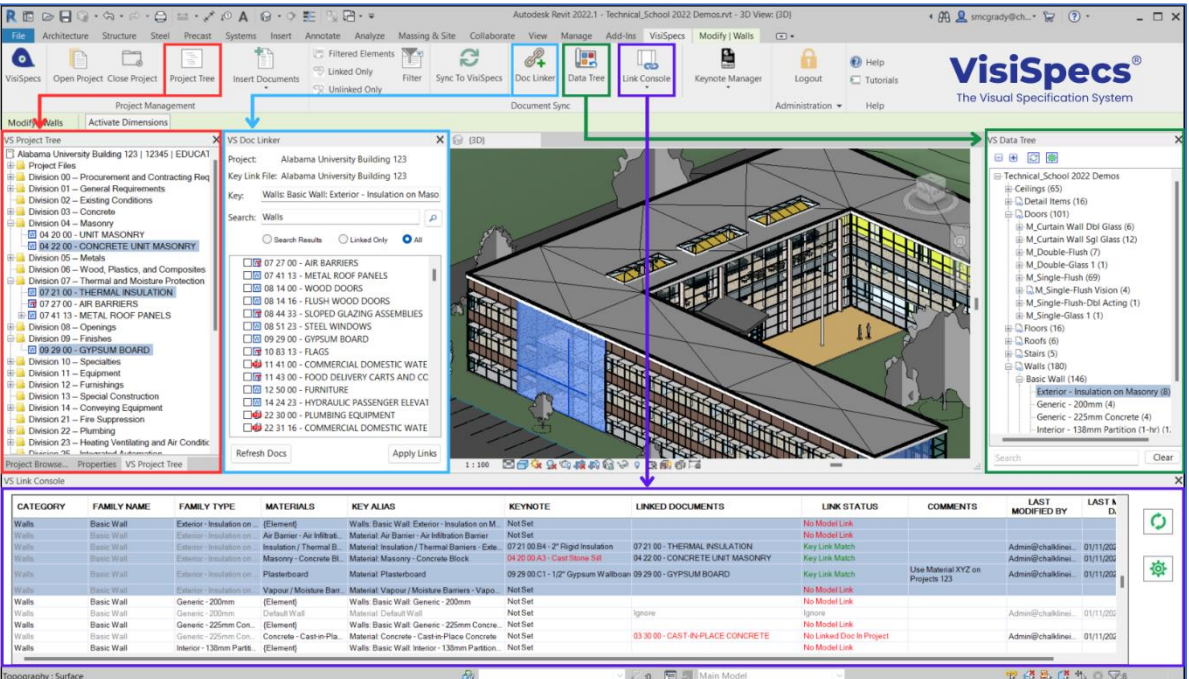
Import all the specs (DOCs and PDFs) into a VisiSpecs project and setup the **Project Settings > Reference Master** search path with your Office Master or the Client Master and optionally a commercial master such as AIA MasterSpec® or NMS.

Make a copy of the completed Revit model and then login to VisiSpecs. For completed projects turn off **Administration > Settings > Auto Insert Linked Documents For New Model Key Links**.

1. **Project Tree (PT)** lists all the Project docs. Right Click to Show Key Links if desired.
2. To get started, open the **VisiRevit > Filter** and only select a couple of categories such as Walls and Windows to reduce the time to refresh data in the VisiSpecs panels.
3. For Model Key Linking, setup your VisiSpecs panels as follows:

### VisiRevit® Screen Layout

- 1. Project Tree**  
Project specs and related files
- 2. Doc Linker**  
Search docs and create model key links
- 3. Data Tree**  
Placed element list
- 4. Link Console**  
Placed elements and materials with link status



The screenshot displays the VisiRevit software interface. On the left, four panels are highlighted with red boxes and numbered: 1. Project Tree (listing project documents), 2. Doc Linker (searching for documents), 3. Data Tree (listing placed elements), and 4. Link Console (showing a table of linked elements and materials). The main window shows a 3D architectural model of a building. The bottom of the interface features a table with columns for Category, Family Name, Family Type, Materials, Key Alias, Keynote, Linked Documents, Link Status, Comments, Last Modified By, and Last Modified Date.

CATEGORY	FAMILY NAME	FAMILY TYPE	MATERIALS	KEY ALIAS	KEYNOTE	LINKED DOCUMENTS	LINK STATUS	COMMENTS	LAST MODIFIED BY	LAST MODIFIED DATE
Walls	Basic Wall	Exterior - Insulation on	(Element)	Walls - Basic Wall - Exterior - Insulation on M.	Not Set		No Model Link			
Walls	Basic Wall	Exterior - Insulation on	As Barrier - Air Barrier	Material: Air Barrier - Air Barrier	Not Set		No Model Link			
Walls	Basic Wall	Exterior - Insulation on	Insulation / Thermal B.	Material: Insulation / Thermal Barriers - Exte	0721 00 04 - 2" Rigid Insulation	0721 00 04 - 2" Rigid Insulation	Key Link Match		Admin@chalkline	01/11/2022
Walls	Basic Wall	Exterior - Insulation on	Masonry - Concrete Bl.	Material: Masonry - Concrete Block	04 20 00 03 - Cast Stone Wall	04 20 00 03 - Cast Stone Wall	Key Link Match		Admin@chalkline	01/11/2022
Walls	Basic Wall	Exterior - Insulation on	Plasterboard	Material: Plasterboard	09 29 00 01 - 1/2" Gypsum Wallboard	09 29 00 01 - 1/2" Gypsum Wallboard	Key Link Match	Use Material XYZ on Project 123	Admin@chalkline	01/11/2022
Walls	Basic Wall	Exterior - Insulation on	Vapour / Moisture Bar.	Material: Vapour / Moisture Barriers - Vapo	Not Set		No Model Link			
Walls	Basic Wall	Generic - 200mm	(Element)	Walls - Basic Wall - Generic - 200mm	Not Set		No Model Link			
Walls	Basic Wall	Generic - 200mm	Default Wall	Material: Default Wall	Not Set		No Model Link		Admin@chalkline	01/11/2022
Walls	Basic Wall	Generic - 225mm Con.	(Element)	Walls - Basic Wall - Generic - 225mm Concre	Not Set		No Model Link			
Walls	Basic Wall	Generic - 225mm Con.	Concrete - Cast-in-Pla.	Material: Concrete - Cast-in-Place Concrete	Not Set		No Model Link			
Walls	Basic Wall	Interior - 130mm Partit.	(Element)	Walls - Basic Wall - Interior - 130mm Partit.	Not Set	03 30 00 00 - CAST-IN-PLACE CONCRETE	No Linked Doc In Project		Admin@chalkline	01/11/2022

Note: If you are focused on the Keynoting assignment and verification, replace the Doc Linker panel with the Keynote Panel.

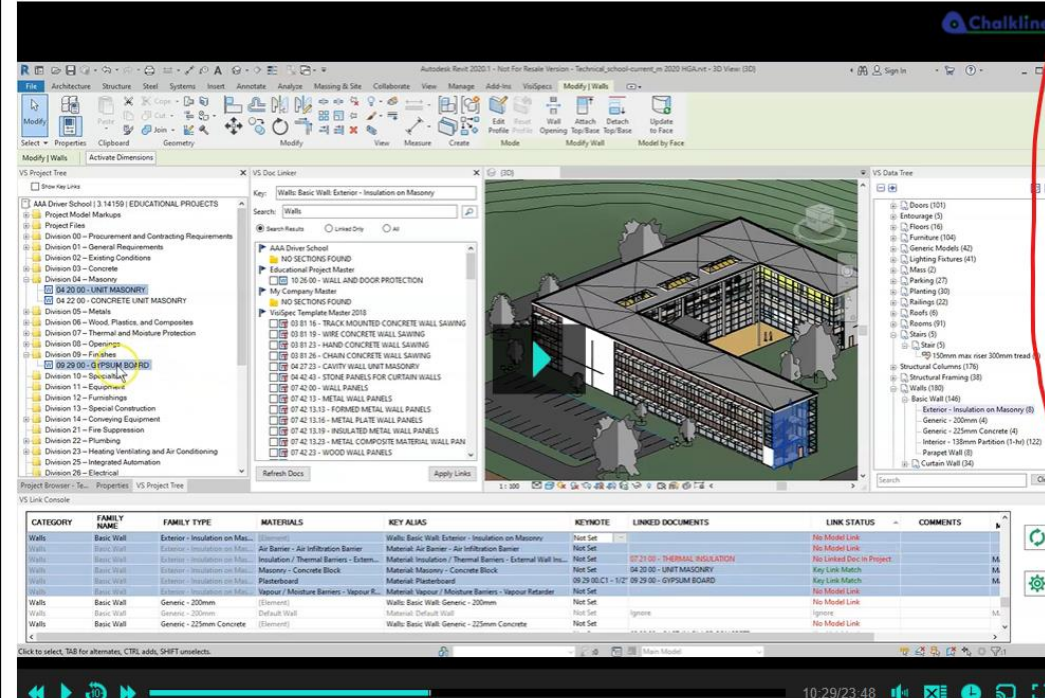
A new project needs a Model Key Link File assigned to it. For your first project, use MKL File Manager to create a new Master MKL file named {Company} Master Model Key Links. Future projects will be prompted to copy the Master MKL file to a project specific MKL file. After future projects are complete, the project MKLs may be exported to Excel and the new MKLs can then be imported into the Master MKL file.

4. **Data Tree (DT)** is used to search for placed elements in the model.
5. **Link Console (LC)** enables selection of Elements/Materials to create a Model Key Link (MKL) for.
  - a. Right Click in rows such as Default Material and Specs in Div 00 / 01 and select **IGNORE**.
  - b. Right click over the row (Model Key) and select Properties or Zoom for additional info.
  - c. LINK STATUS indicates one of the following:
    - i. **Key Link Match** = Model Key is linked and the document(s) are in the project.
    - ii. **No Model Link** = No link exists for the element or material key.
    - iii. **No Linked Doc in Project** = A link exists but the document is not found in the project.
    - iv. **No Link for Project Doc** = Document does not have a link to a model key.
    - v. **Ignore** = The document or model key has been ignored as not relevant to have a link.
    - vi. **Doc# (section Number was not found in the search path)** indicates there is a linked document for the model key, however that document is not found in the project's search path. Either modify the search path or manually insert that section from another project or the file system.
6. **Doc Linker (DL)** is used to find the specs to link to the Model Keys. Be sure to include Adhesives or Joint Sealant specs as applicable when required.
7. **Comments** in LC (Right click > Comments on a row) can be sorted and might include:
  - a. Add to Master: (Indicates this new MKL should be added to the master MKL file)
  - b. Verify: (Indicates another person should verify the link created or element used)
  - c. Caution: (Not for use in Healthcare or Exterior or Federal Projects)
  - d. BIM Edit: (Should this item be split based on functionality and spec linking?)
8. The **LC Gear icon** enables an export to Excel for easy searching, sorting, filtering, editing and importing to update your list of MKLs and comments.
9. After creating a MKL for an element such as Stud\_2x4, you can right click in the LC to **Edit Key Alias**. Group multiple Elements using the \* Delimeter such as grouping Stud\_2x4, Stud\_2x6, Stud\_2x8 into Stud\_\*
10. Use the ribbon menu **Filtered Elements** to only show those categories in the model viewer. Or **Unlinked Only** to show those elements without a green **Key Link Match** status.
11. Coordinating the project specs and model elements
  - a. The LC indicates dynamic Link Statuses helping coordinate the model and spec data. You will find missing specs, specs that should not be in the project, and incorrectly used BIM elements. These are great justification for completed projects as to the value and ROI.
  - b. Missing specs may be inserted into the VisiSpecs project in one of the following ways:
    - i. Insert the spec from a Master or Project
    - ii. Import the spec from the file system
    - iii. Auto Insert all or selected required specs from the Search Path
    - iv. Right Click in LC and automatically Insert the missing specs

Note: View Item Information displays the source file for all docs in the project
  - c. Specs which should not be included in the project perhaps due to a design change or miscommunication may be seen at the bottom of the LC as they don't have a model element linked to the spec.
  - d. Elements can also be found in the Link Console which were incorrectly used.

Self-Paced Training Videos are available via the ribbon menu **Tutorials** option.

### VisiRevit® Tutorials



The screenshot displays the VisiRevit application interface. The ribbon menu at the top includes options like Architecture, Structure, Steel, Systems, Insert, Annotate, Analyze, Measuring & Site, Collaborate, View, Manage, Add-Ins, VisiSpecs, and Modify Walls. The main workspace shows a 3D model of a building. On the left, the VS Project Tree lists various project components. The VS Data Tree on the right shows a hierarchy of elements. The VS Link Console at the bottom displays a table of linked documents. The VS Keynote Manager on the right side of the console shows a list of keynotes.

CATEGORY	FAMILY NAME	FAMILY TYPE	MATERIALS	KEY ALIAS	KEYNOTE	LINKED DOCUMENTS	LINK STATUS	COMMENTS
Walls	Basic Wall	Exterior - Insulation on Masonry	Concrete	Walls Basic Wall Exterior - Insulation on Masonry	Not Set		No Model Link	
Walls	Basic Wall	Exterior - Insulation on Masonry	Air Barrier / Air Infiltration Barrier	Material: Air Barrier - Air Infiltration Barrier	Not Set		No Model Link	
Walls	Basic Wall	Exterior - Insulation on Masonry	Insulation / Thermal Barriers - External Wall Ins.	Material: Insulation / Thermal Barriers - External Wall Ins.	Not Set	07-21-00 - THERMAL INSULATION	No Model Link	
Walls	Basic Wall	Exterior - Insulation on Masonry	Masonry - Concrete Block	Material: Masonry - Concrete Block	Not Set	04-20-00 - UNIT MASONRY	Key Link Match	
Walls	Basic Wall	Exterior - Insulation on Masonry	Plasterboard	Material: Plasterboard	Not Set	09-29-00 - GYPSUM BOARD	Key Link Match	
Walls	Basic Wall	Exterior - Insulation on Masonry	Vapour / Moisture Barriers - Vapour R.	Material: Vapour / Moisture Barriers - Vapour Retarder	Not Set		No Model Link	
Walls	Basic Wall	Generic - 200mm	(Element)	Walls Basic Wall Generic - 200mm	Not Set		No Model Link	
Walls	Basic Wall	Generic - 200mm	Material: Default Wall	Material: Default Wall	Not Set		Ignore	
Walls	Basic Wall	Generic - 225mm Concrete	(Element)	Walls Basic Wall Generic - 225mm Concrete	Not Set		No Model Link	

#### VisiRevit Application Overview

An introduction to the VisiRevit application, menus, and windows.

#### VisiRevit Project Tree

The Project Tree of folders, docs, and hyperlinks centralizes project data for access in Revit or Word.

#### VisiRevit Data Tree

The Data Tree displays all the elements placed in the model based on the filter settings.

#### VisiRevit Link Console

The Link Console lists your elements, materials, and documents and the link status of each.

#### VisiRevit Doc Linker

The Doc Linker assists the user in finding the docs to link to the selected element or material.

#### Keynote Manager

Manage keynotes integrated with your project specs and validate them throughout the design phases.

#### Keynote Assign / Place / Verify

VisiSpecs keynote assignment, placement, and verification tools.

Please email [support@chalklineinc.com](mailto:support@chalklineinc.com) if any of these steps need clarification or you have other processes you feel would be of value in this Tech Bulletin.

Thank you.