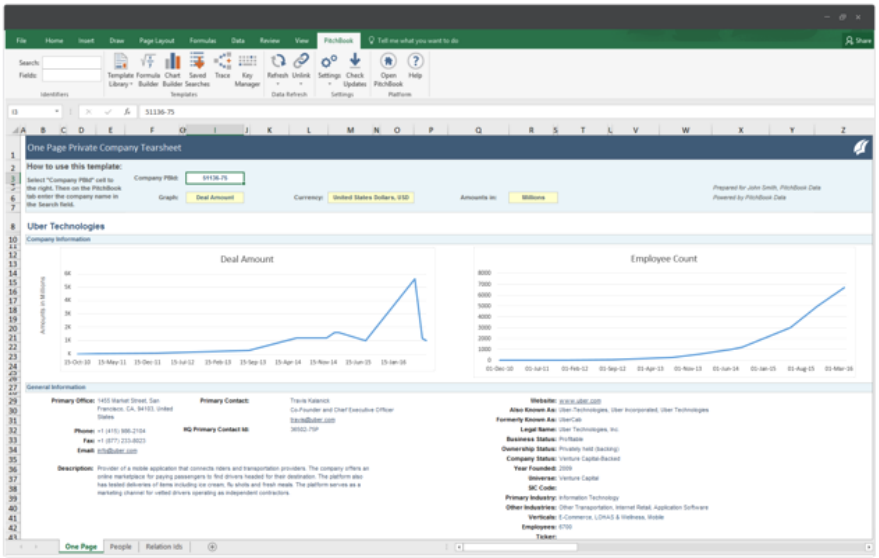
BVR What It's Worth

PitchBook

PitchBook Excel Plugin

User Guide



Save time

When you can pull public and private company data from the PitchBook Platform straight into your spreadsheets, you can forget manual data entry.

Create financial models

Our templates are easy to manipulate, so you can evaluate all potential outcomes. You can also create your own models with our data.

Update data fast

It only takes one click to refresh your models with the most up-to-date data from the PitchBook Platform.

Edit formulas easily

Nobody has time for Excel to crash. Our formula builder lets you pick the exact criteria you want and customize models quickly.

Build custom charts

Quickly create charts with a company's financial summary, stock price history and price volume. Then customize the frequency, currency and time period.

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Installing the PitchBook Plugin for Excel

System Requirements

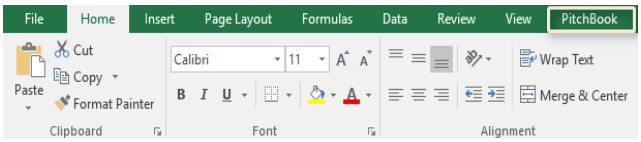
- Microsoft Windows 7 and above.
- Microsoft Excel 2007 or higher.
- Administrative rights to install applications on your computer.

Installation

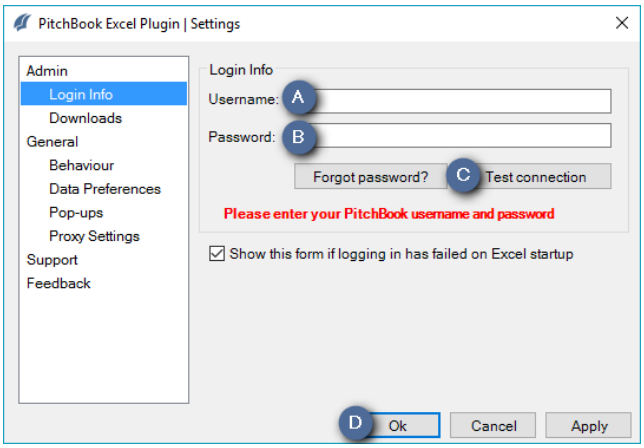
- Login to **BVResources.com/my-bvr**.
- Select **"PitchBook"** from your list of subscriptions.
- On the left-hand pane, select the wrench icon located at the bottom of the screen and click on the **Excel Plugin** Tab.
- Click on **Download Plugin**.
- Once the installation file has finished downloading, find and open the file entitled **PitchBook_Plugin_Setup.exe**.
- Windows should now open a wizard guiding you through the installation process.

Getting Started

Open Microsoft Excel. Notice a new PitchBook tab is available in the Excel menu. All of the PitchBook Plugin's functionality is available within this tab.



After a few moments, the following login popup will appear prompting you to enter your PitchBook username and password:



A. Enter your username.

B. Enter your password.

C. Click **Test Connection** to make sure your login credentials are correct.

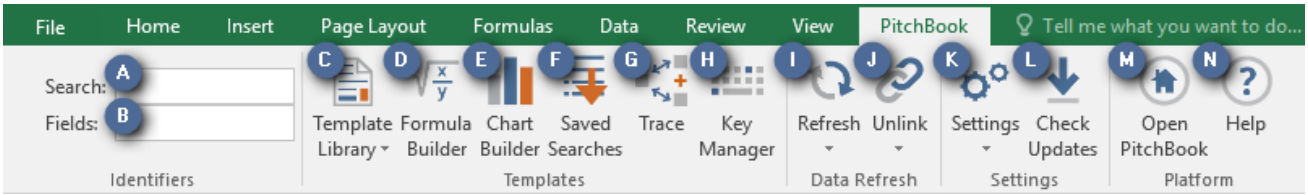
D. Click **OK.**

Please note: As of February 2018, PitchBook will send new customers an email with instructions to set up their login credentials for the Plugin. All customers who purchased prior to February 2018 should continue to use their email address/ ZIPCodeZIPCode (10-digit) to login to the Plugin. You only need to use the username and password (your ZIP code twice) once upon installation of the Plugin.

You are now ready to use the PitchBook Excel Plugin!

Navigating the PitchBook Excel Toolbar

After installing the PitchBook Plugin for Excel, a new PitchBook tab will be available in your Excel menu. The toolbar in this tab will help you navigate the various PitchBook functions within Excel.



A. Search companies and associated deals by name or ticker symbol.

B. Search formula fields.

C. Open the PitchBook Templates Library.

D. Open the PitchBook Formula Builder.

E. Open the PitchBook Chart Builder.

F. Open the list of your saved searches from PitchBook.

G. Open the PitchBook cell Trace.

H. Open the PitchBook Key Manager.

I. Refresh data from PitchBook.

J. Unlink Data from PitchBook.

K. Open Plugin settings.

L. Check for Plugin updates.

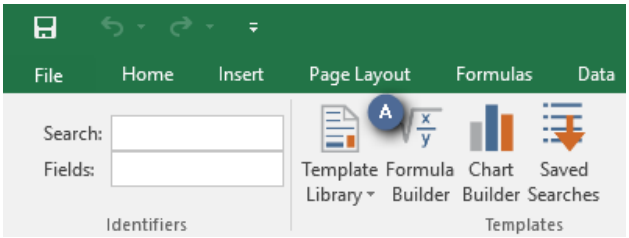
M. Open the PitchBook Platform in your default web browser.

N. Open the help section of the PitchBook Platform in your default web browser.

Formula Builder

To insert a specific formula from PitchBook into Excel, follow these steps:

A. Click on the **Formula Builder** button located in the PitchBook Plugin toolbar.



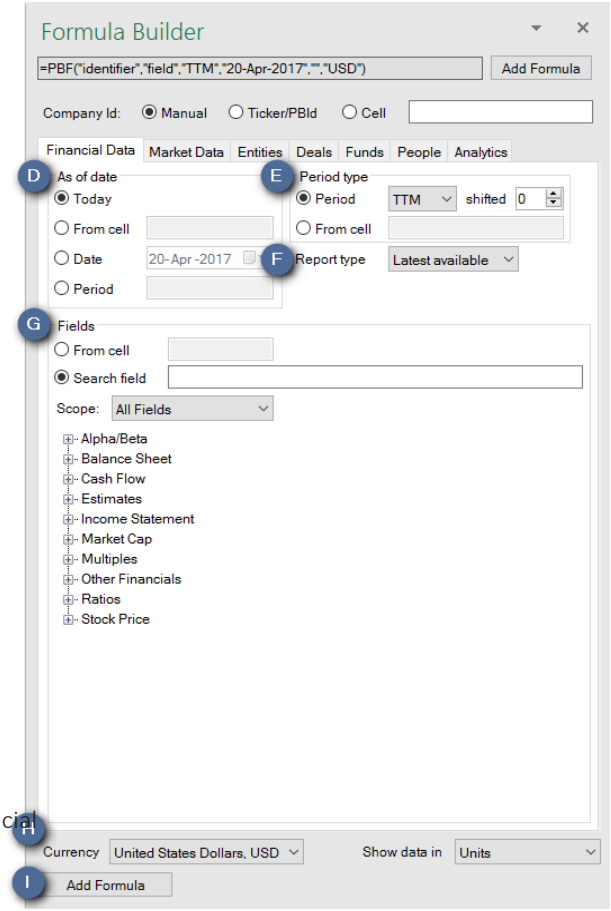
B. **Company**: **Manual**, **Ticker/PBId** or **Cell**: Input a ticker symbol/PBId manually, or select **Cell** to insert a cell reference to a specific company.

- If selecting **Manual**, type in the name of the company in the input field to the right. *Note: Be careful! If you don't type the name correctly, your formula will return an error.*
- If selecting **Cell**, type in or select the cell address (i.e., A1) in the Select cell popup.
- If selecting **Ticker/PBId**, search for the desired company in the Company Lookup popup and select the right exchange in case of trading in multiple countries.

C. Choose from multiple sets of data including: **Financial Data, Market Data, Entities, Deals, Funds, People,** and **Analytics.** You can navigate between the data sets once you are in the Formula Builder by clicking into each tab:

- **Financial Data**: Contains functions to import financial metrics, operating statistics and estimates.
- **Market Data**: Contains functions to import market data for equity or fixed income securities.
- **Entities**: Contains functions to import general entity attributes, including relationships between different types of entities. For example, a field that includes both a company and its investors.
- **Deals:** Contains functions to import data related to deals and their related financial attributes.
- **Funds:** Contains functions to import data related to funds and their related attributes.
- **People**: Contains functions to import data related to people and their roles at their associated entities.
- **Analytics**: Contains functions to import analytic functions to compare sets of data. *Note: The Analytics formulas require the use of Saved Searches, not PBIds, to extract data from PitchBook.*

Formula Builder (Continued)



D. **As of date**:

- **Today**: Today's date.
- **From Cell**: Type in or select the cell address (i.e., `$A$1`) in the Select Cell popup.
- **Date**: Select a specific date using the calendar.
- **Period**: Enter year and period. Enter absolute dates for a specific point in time.
  - `2017Y`: fiscal year end of 2017
  - `2017CY`: calendar year end of 2017
  - `2017Q3`: 3rd fiscal quarter of 2017
  - `2017CQ3`: 3rd calendar quarter of 2017

E. **Period Types:** Select the period type from the dropdown. The period may be modified with the **shifted** forward or backward. You may also reference a period type in a cell.

- **Period**: Select the period type.
  - `TTM`: Trailing 12 Months. Also, known as Last 12 Months (LTM). The last 12-month period for a selected financial metric.
  - `FQ`: Fiscal Quarter. The three-month period on a financial calendar
  - `FY`: Fiscal year. The period used by a company for accounting purposes. This may not be the same as a calendar year.
  - `FYTD`: Year to Date. Period from the beginning of the year to the present.
  - `NTM`: Next 12 Months. Used for forward estimates. Forecast for the immediate next 12 months from the current date.
  - `CY`: Calendar Year. Period that begins January 1 and ends on December 31.
  - `FH`: Fiscal half year (e.g., semiannual year). Used for forward estimates.
  - `shifted`: Increase (e.g., +1) or decrease (e.g., -1) the period. Shift may be used to change the historic or estimated data point.
- **From Cell**: Type in or select the cell address (i.e., `$A$1`) in the Select Cell popup.

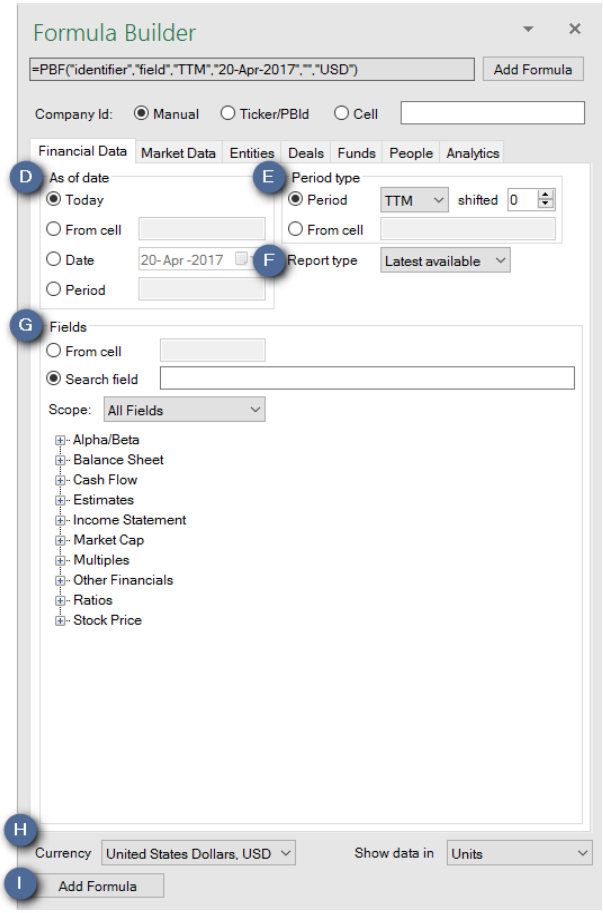
F. **Report Type:** Change report type from restated, original, preliminary, or the latest of all options.

Formula Builder (Continued)

G. **Fields**: Fields define the type of information the formula will reference and are organized by categories. Click the name of a category to expand and display a full list of fields. You can also search for a specific field in the **Search** field or filter the list with the **Scope** dropdown.

H. **Currency** and **Show data in**: The **Currency** dropdown allows you to select the currency you would like values to be displayed in. The **Show data in** dropdown allows you to select units, thousands, or millions.

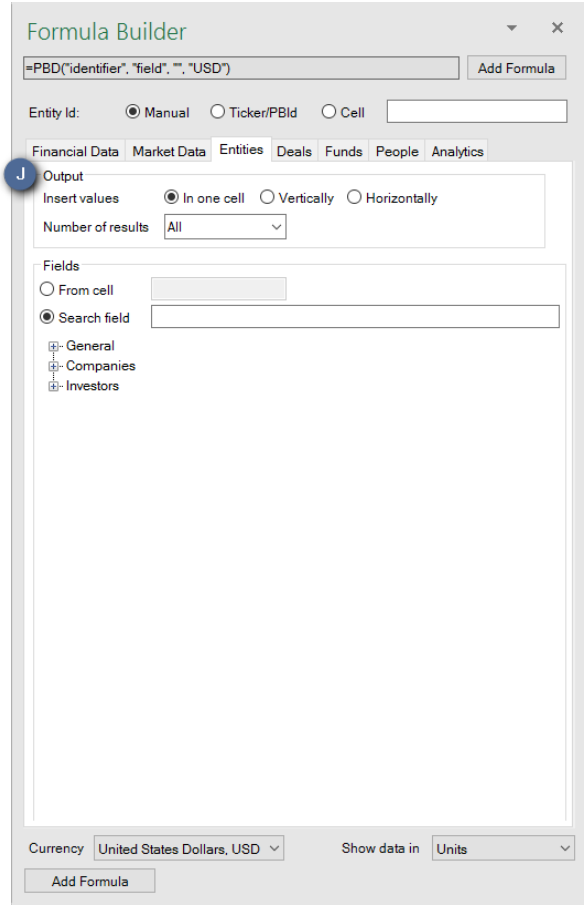
I. **Add Formula**: When your formula is complete, select the cell you would like the formula to be placed in and click the **Add Formula** button.



Formula Builder (Continued)

J. **Output**: Certain field types allow you to select output options. These options are available on the Entities, Deals, Funds, and People tabs.

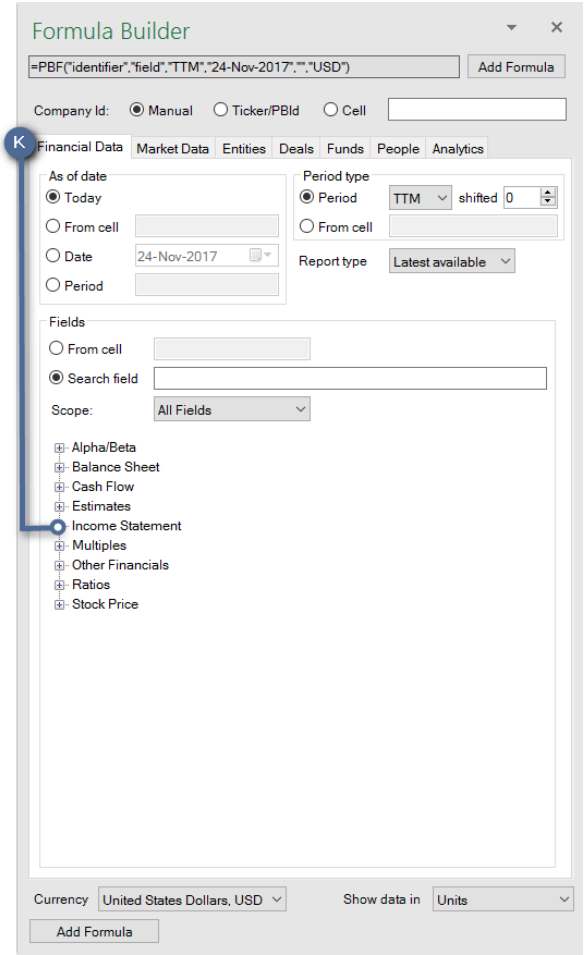
- **Insert Values**: Select how the resulting data display in your template.
  - `In one cell:` Will output all returned values for this formula in the specified cell, separated by commas.
  - `Vertically:` Each returned value will display in subsequent rows in Excel.
    - *Note: This may overwrite existing content in cells, so be sure to account for this when building your formulas.*
  - `Horizontally:` Each returned value will display in subsequent columns in Excel.
    - *Note: This may overwrite existing content in cells, so be sure to account for this when building your formulas.*
- **Number of results**: For formulas that return more than one result, this can be used to specify the maximum number of results to be pulled and displayed with the selected formula. This is useful if you want to limit your usage of downloads in your templates.
  - To use this feature manually, you can add a 'LimitX.' prefix to the field name in the formula to specify an exact number of results to return. (e.g., =PBD("NAS:FB", "Limit10.Deals Ids", "v") – this returns 10 deals for Facebook.



Formula Builder (Continued)

K. **Types of Data**: Using the tabs, you can access different types of data in your formula.

- **Financial Data**: Designated by **PBF** in the formula, Financial Data has the largest selection of financial metrics.
- **Market Data**: Designated by **PBM**, Market Data includes metrics for stock prices and alpha/beta.
- **Entities**: Designated by **PBD**, Entity Data includes general information, contact information and industry taxonomy, as well as reference fields for relationships between related entities.
- **Deals**: Designated by **PBD**, Deal Data includes information about deal/transaction data as well as the equity and debt associated with a deal.
- **Funds**: Designated by **PBD**, Fund Data includes information about funds, their investments and performance.
- **People**: Designated by **PBD**, People Data includes information about People and their positions within entities.
- **Analytics**: Designated by **PBA**, Analytics Data includes calculations based on sets of information driven by Saved Searches from the PitchBook Platform.

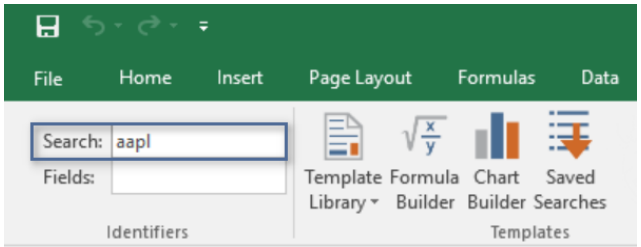


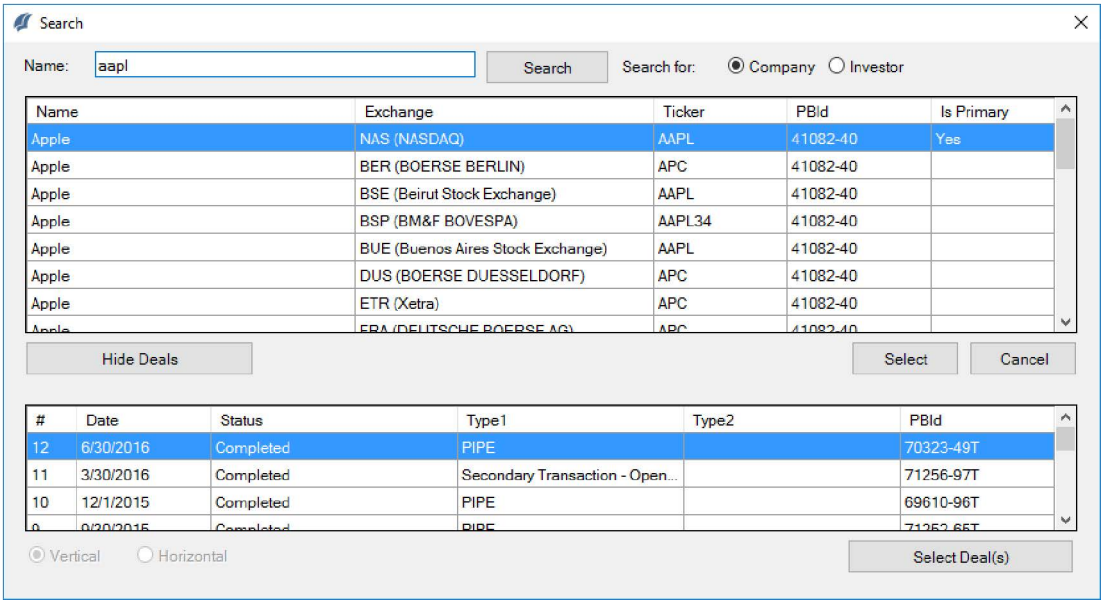
Search and Fields Lookup

Search Lookup

Type a company name or ticker symbol in the **Search** field and press enter. The popup will then display any potential matching companies and associated deals.

Example: Type `aapl` in the **Search** field and press **Enter**. Select the appropriate company or deal and click **Select** or **Select Deal(s)**.

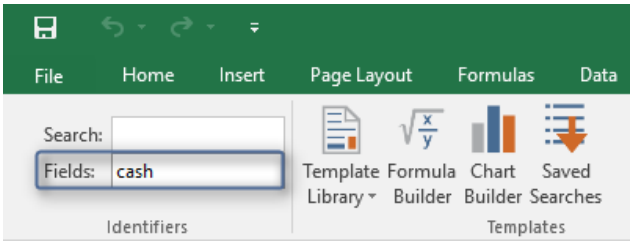


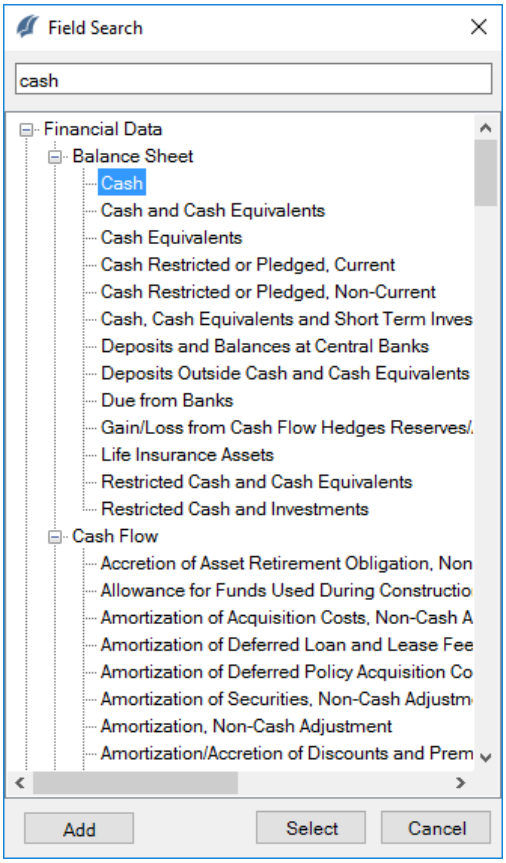


Search and Fields Lookup (Continued)

Fields Lookup

Type the name of the data point you'd like to reference in the **Fields** input field and press **Enter**. Select the correct data item and click **Select**.





Cell Referencing

Basic Cell Referencing

For Basic cell referencing, you can build cell references into PitchBook functions for company tickers. For example, assume cell A1 = `NAS:AAPL`, the formulas below will yield the same results:

```
=PBF("NAS:AAPL", "Total Assets", "FQ", "2015Y", "", "USD")
=PBF(A1, "Total Assets", "FQ", "2015Y", "", "USD")
```

In general, the formula arguments follow these patterns:

PBF: ({Cell/Text Reference}, “{Field Name}”, “{Period Type}”, “{As of Date}”, “{Report Type}”, “{Currency Code}”)

PBD: ({Cell/Text Reference}, “{Field Name}”, “{Value Insert Format}”, “{Currency Code}”)

PBM: ({Cell/Text Reference}, “{Field Name}”, “{As of Date}”, “{Show Dates Flag}”, “{Data Period Code}”, “{Sort Type}”,“{Currency Code}”)

PBA: ({Cell/Text Reference}, “{Field Name}”, “{Currency Code}”)

Note: Analytics (PBA) formula requires the name of a User’s Saved Search in PitchBook to return data. For example, if the user has a saved search of “Oceania,” then the Cell/Text reference must point to a cell/text of “Oceania.”

Advanced Cell Referencing

In addition to basic cell referencing, you can build advanced formulas where PitchBook functions are linked to cells, making the formulas dynamic. For example, assume A1 = `AAPL`, A2 = `Total Revenue`, A3 = `FY`, A4 = `2015Y`. The following formulas below will bring back the same result:

```
=PBF("NAS:AAPL","Total Revenue","FY","2015Y","","USD")
=PBF(A1,A2,A3,A4,"","USD")
```

Both formulas will give you Apple’s total revenue in the 2015 fiscal year.

Relational Cells

Some of the PitchBook formulas are designed to pull in data for specific relationships between entities. For example, it is common to pull a list of related deals for a company and investor combination. These formulas require the use of Relation ID fields.

One example field is Active Investors Relations IDs. This field will generate a list of Relation IDs for the specified company. An example return for this field is:

Cell Referencing (Continued)

AEI&10367-92&126286-84

In this case, the first letters, "AEI," specify the type of relationship field. The first Id number is the selected company. The second Id number represents one of the active investors in the same company.

Analytics Fields

The Analytics fields are designed to use your existing PitchBook Saved Searches to automatically pull in statistical evaluations of the entities in those searches. In order to use these fields correctly, the formulas need to point at the names of Saved Searches in your PitchBook account.

For example, if you have created a Saved Search looking at all companies existing in the Oceania region and saved the search with the name "Oceania," you can use this with Analytics fields to get an evaluation of this data set. In this case, let's look at the formula to pull the average deal size related to the Saved Search:

=PBA(I8,"DealSize.AVG","USD")

In this case, cell **I8** must be the name of the saved search—Oceania—in order to generate the formula correctly.

Here is an example of how you might set up the Excel worksheet to use the mean deal size formula:

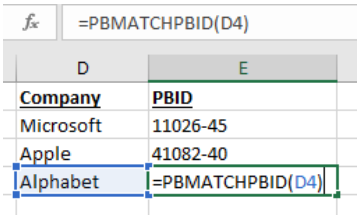
Saved Search Name	Average Deal Size ($M)
Oceania	$175.79

Special Formulas

PBMATCHPBID

`PBMATCHPBID` allows you to access the PitchBook-specific identifier (PBId) for any given company. This is useful in case you need to refer to data gathered from different sources (i.e., Salesforce).

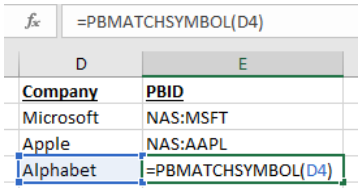
Example: Alphabet's PBId can be accessed using the `PBMATCHPBID` formula.



PBMATCHSYMBOL

`PBMATCHSYMBOL` allows you to access the stock ticker symbol for any given company.

Example: Alphabet's ticker symbol can be accessed using the `PBMATCHSYMBOL` formula.



Special Formulas (Continued)

Glossary of PBId Tags

A PBId or relational Id may have one or more tags on it that identifies what type of relationship or entity the ID is referring to. This can help connect the dots when planning out your templates and making references to "Related" formulas.

An example of an ID with tags is: AEI&10367-92&126286-84
From the glossary below, this indicates that the ID refers to an Active Entity Investor relationship between the two entities in the ID.

Prefixes
PAD - Person-affiliated deals
PAF - Person-affiliated funds
APP - Active person position
FPP - Former person position
AAP - Active advisory position
FAP - Former advisory position
ABP - Active board position
FBP - Former board position
DLB - Deal beneficiary
DLE - Deal exiter
DLI - Deal investor
DLS - Deal seller
DLL – Deal lender
DLSP - Deal service provider
DLT - Deal tranche
DLC - Deal cap table history
AEI - Active entity investor
FEI - Former entity investor
SEC - SEC filing
FCH - Fund close history item
FRH - Fund return history
FLP - Fund limited partner
FLC - Fund limited partner commitment
ADL - Associated deal lender
GSP - General service provider
FSP - Fund service provider

Suffixes
P - Person
F - Fund
T - Round

Chart Builder

Chart Builder allows you to create charts for companies that will display stock price, price volume, or a financial summary.

A. Click the **Chart Builder** button located in the PitchBook toolbar.

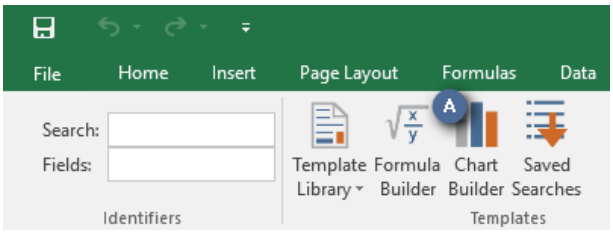
B. **Ticker/PBId** – Type the company identifier or click on the  button to search company identifiers.

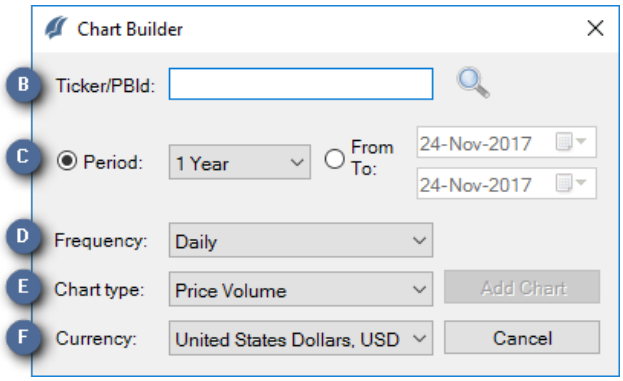
C. **Period** – Select a period in years or a range of dates.

D. **Frequency** – Set interval for data points.

E. **Chart Type** – Display open, high, low, and close stock prices, price volume, or financial summary.

F. **Currency** – Choose currency data should be displayed in.



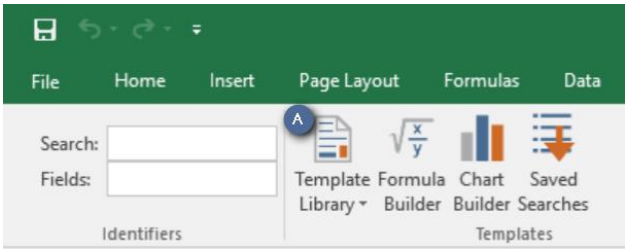


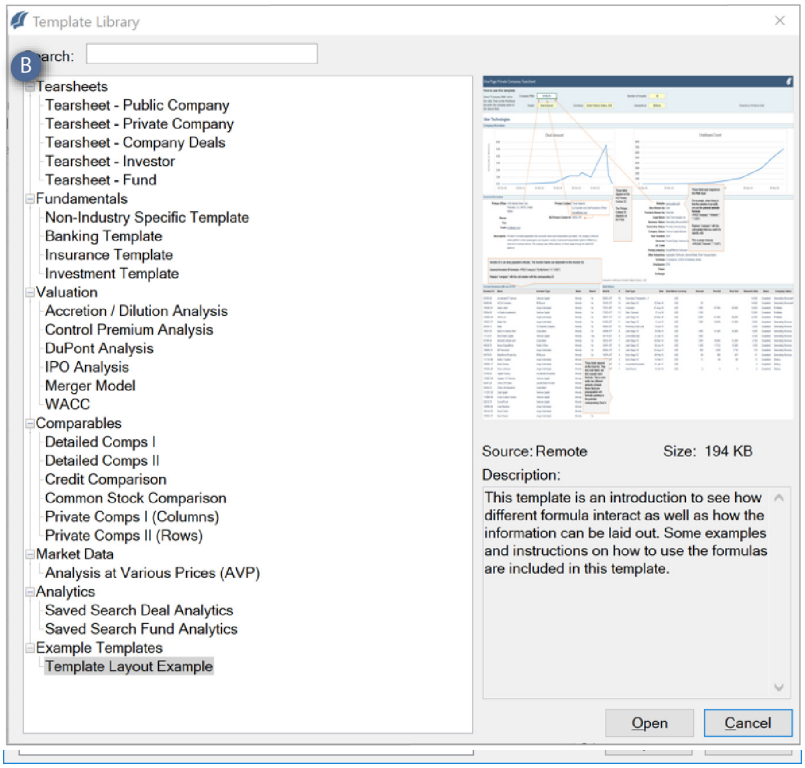
Templates Library

The Templates Library allows you to access prebuilt PitchBook formula-driven templates.

A. Click **Templates Library** in the toolbar to open a list of templates.

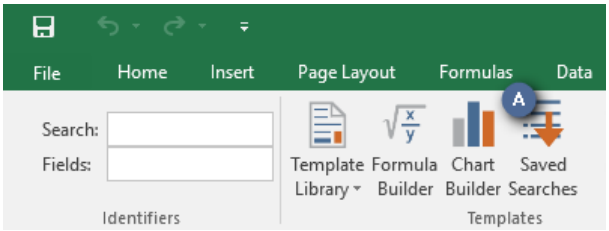
B. Preview a template by selecting one from the list. Once the desired template is selected click **Open**.





Saved Searches

The Saved Searches feature allows you to import data from searches you have saved on the PitchBook Platform.



A. Click **Saved Searches** in the toolbar.

B. Select the type of Saved Search to use.

C. Filter the results by entering the Search name.

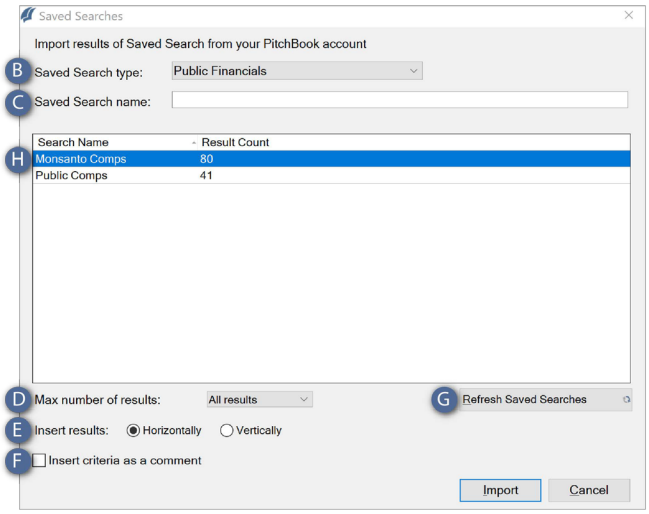
D. Choose number of results to download.

E. Choose whether to insert data horizontally or vertically.

F. Insert search criteria as a comment in the title cell.

G. Refresh the list of saved searches from the PitchBook Platform.

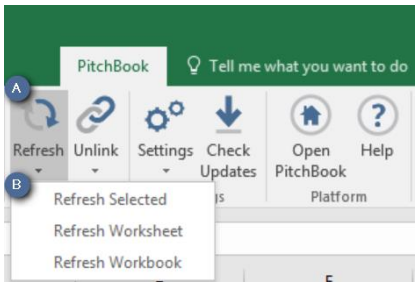
H. Select the desired saved search.



Refresh

A. Clicking the top half of the **Refresh** button in the toolbar will update the fields in your Excel document that are linked to PitchBook.

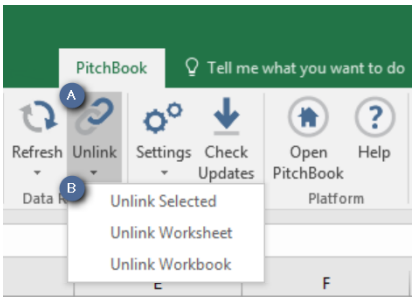
B. Clicking the bottom half of the **Refresh** button will bring up options to refresh the selected cell, your current worksheet, or the entire workbook.



Unlink

A. Clicking the top half of the **Unlink** button in the toolbar will remove the links to PitchBook. The data will no longer be updated once unlinked.

B. Clicking the bottom half of the **Unlink** button will bring up options to unlink the selected cells, the worksheet, or your entire workbook.



Show in Filings

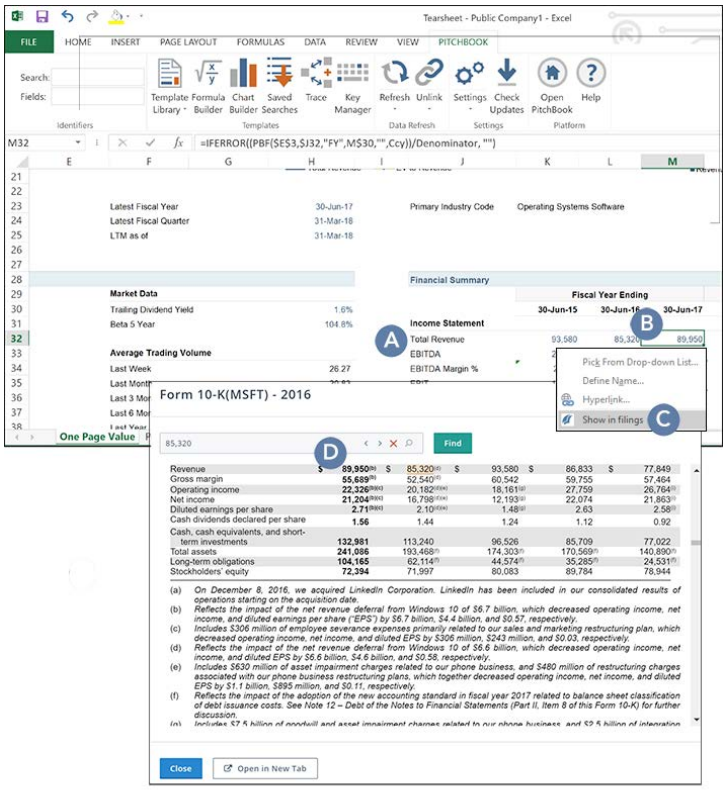
The PitchBook Plugin for Excel allows you to access the SEC filing for certain public-company data after it is pulled in via a PitchBook formula. When accessing this area of the system, a new internet browser tab will open and access the PitchBook Platform, linking you automatically to the related SEC filing and data point.

A. Find a public-company data point in your template that is linked through a PitchBook Formula (e.g., total revenue).

B. Right click on the cell with the data point.

C. Click **Show in filings**.

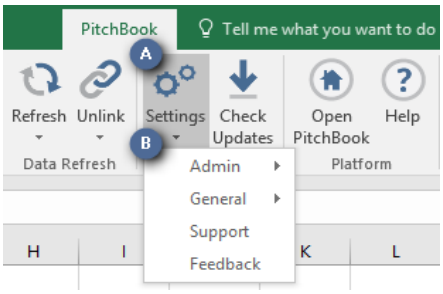
D. The PitchBook Platform will then open in a new browser window and link to the related SEC filing and data point.



Settings

A. Select **Settings** in the toolbar to open the settings window.

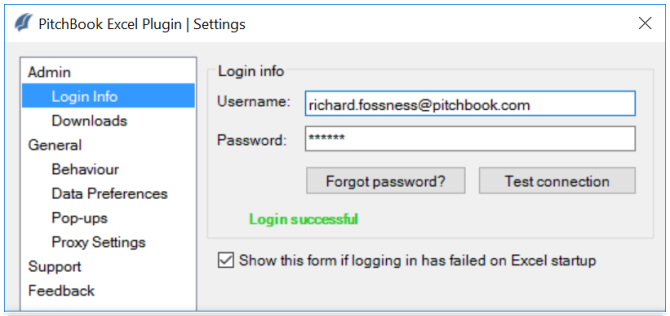
B. Clicking the bottom half of the **Settings** button will open the option to view **Admin**, **General**, or **Support** within settings.



Admin

Login Info

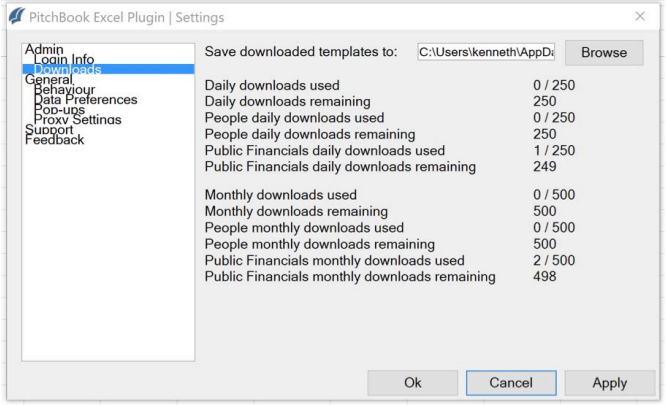
This is where your PitchBook username and password are stored. Incorrect login information causes the most common errors users experience with the plugin. Use the **Test connection** button to validate your login information. Use **Forgot password?** to reset your password. If you change your password on PitchBook.com, you must re-enter your new password here.



Downloads

Choose a directory in which to save downloaded templates with the **Save downloaded templates to** field.

Your daily and monthly used downloads as well as daily and monthly available downloads are also displayed here.

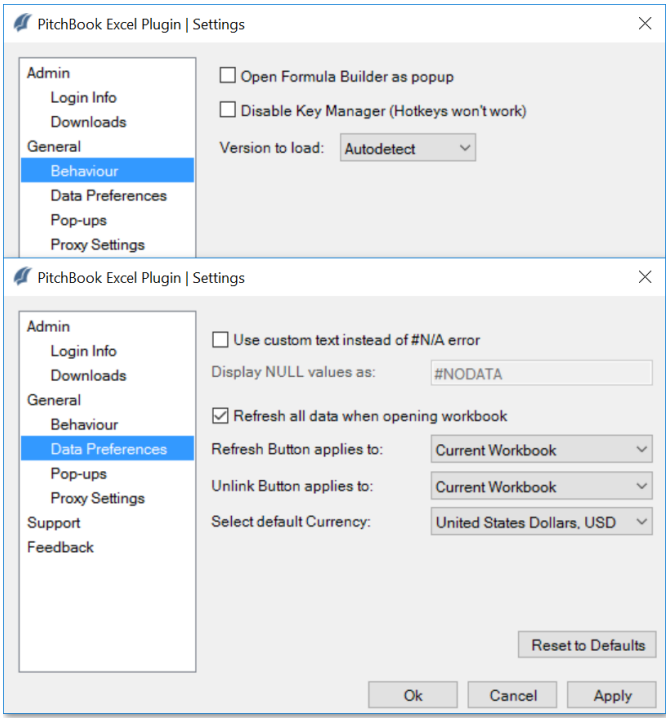


Settings (continued)

General

Behavior

Open as popup – select whether the Formula Builder feature should open as a popup or slide out of the top/right of the window.



Data Preferences

When data are null show – set how the plugin should display when there are no data for a given data point (default is `#NODATA`). If this box is not checked, Excel will show the default of #N/A.

Define the scope of Refresh/Unlink button – change the settings for the Toolbar **Refresh** and **Unlink** buttons to affect the selected cells, worksheet or workbook.

Refresh all data when opening workbook – by default, your workbook will refresh upon opening; deselect this checkbox to disable this setting.

Select Currency for PB Data – change the default currency.

Settings (continued)

General (continued)

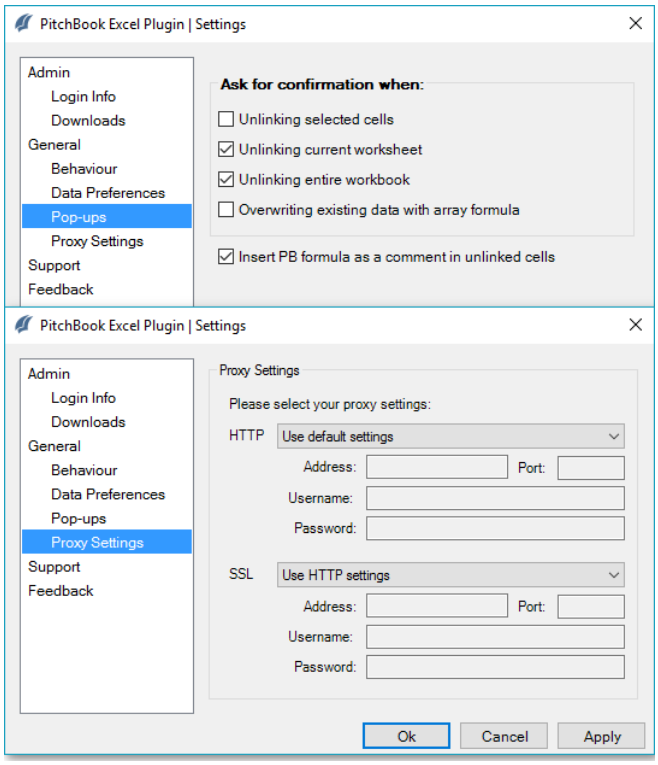
Popups

Ask my confirmation when – as a safeguard against error, you can select which actions prompt a confirmation window.

Insert PB formulas as a comment when unlinking a cell – When you unlink a cell or entire spreadsheet, the plugin will save each cell's original formula as a comment by default. Deselect this option to prevent commenting.

Proxy Settings

If your company uses a proxy server, you can enter the appropriate credentials here. Contact your IT administrator for more information.

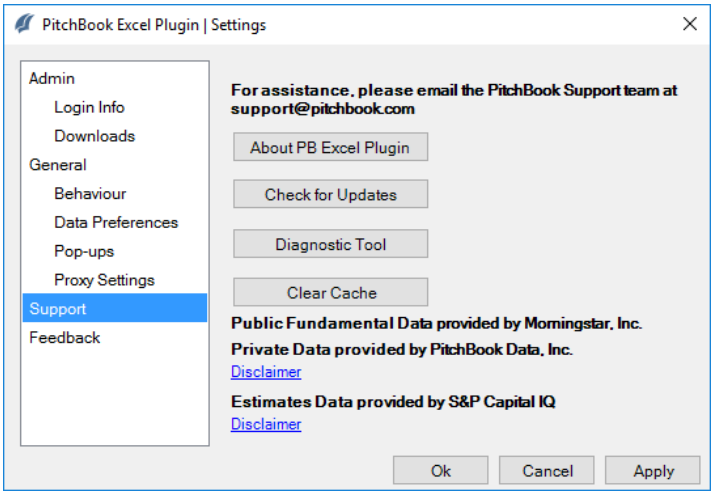


Settings (continued)

Support

The support tab allows you to:

- View contact information for PitchBook.
- Learn more about the plugin.
- Check for plugin updates.
- Run our diagnostics tool (See **Troubleshooting** for more details).
- Learn more about Public Fundamental Data provided by Morningstar Inc.

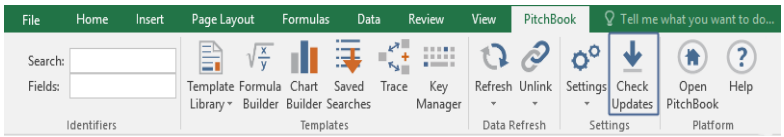


Check Updates

Clicking the **Check Updates** button in the toolbar will check for the latest plugin updates.

A popup window will then open informing you whether the plugin is up-to-date or a newer version is available.

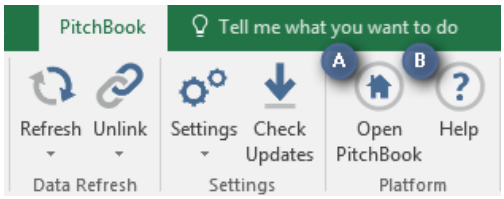
If a new version is available, you will have the option of installing it, which requires exiting and reopening Excel.



PitchBook Platform Connection

A. **Open PitchBook** – Click to open the PitchBook Platform in your default web browser.

B. **Help** – Click to open the help section of the PitchBook Platform in your default web browser.

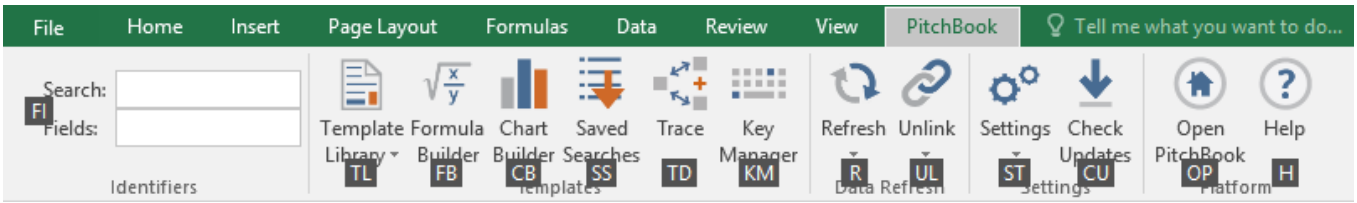


Keyboard Shortcuts

The Excel plugin can be navigated with only the keyboard if desired.

Each shortcut key must be preceded by pressing: **ALT + B.**

The following are the shortcuts you can use:



Key Code	Description
ALT + I + D	Focuses the cursor in the Search field.
ALT + F + I	Focuses the cursor in the Formula Fields search field.
ALT + F + B	Displays the Formula Builder window.
ALT + C + B	Displays the Chart Builder window.
ALT + T + L	Displays the Templates Library window.
ALT + S + S	Displays the Saved Searches window.
ALT + K + M	Displays the Key Manager window.
ALT + T + D	Displays the Trace window.
ALT + R	Refresh options.
ALT + U + L	Unlink options.
ALT + S + T	Settings options.
ALT + C + U	Check for plugin updates.
ALT + H	Visit PitchBook.com in your default web browser.
ALT + O + P	Visit my.pitchbook.com dashboard in your default web browser.

Example: The shortcut for Formula Builder is **ALT + B** then **ALT + F + B**.

Example: The shortcut for Refresh options is **ALT + B** then **ALT + R.**

Troubleshooting

Error Codes

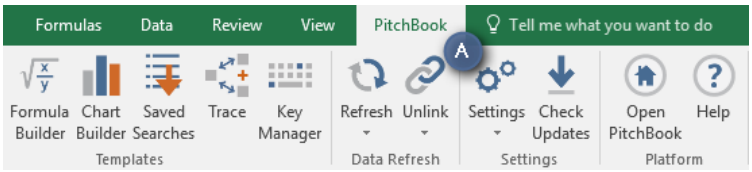
In certain circumstances, a cell in your spreadsheet will return an error due to invalid formula formatting, inability to connect to the PitchBook server, etc. The following is a guide for the error messages you may receive:

Error Code	Definition
#CURRENCYERR	Unknown currency.
#ENTITYNOTFOUND	Identifier is unknown or invalid (PBF, PBM, PBD).
#ERROR	Any other error.
#FIELDNOTFOUND	Field argument is invalid (PBF, PBM, PBD).
#FILINGERR	Invalid filing type parameter (PBF).
#FREQUENCYERR	Invalid frequency type parameter (PBM).
#LIMITREACHED	Download limit reached.
#N/A	Default message for missing value (can be edited in settings).
#NOCONNECTION	Server is unavailable or user has no internet connection.
#NOMATCH	Entity/Person not found with PBMATCHPBID or PBMATCHSYMBOL formula.
#NOTAUTH	Invalid credentials.
#PARAMETERERR	Any other parameter error.
#PERIODERR	Invalid period type parameter (PBF).
#SERVERERROR	Server has returned an unexpected error.
#SAVEDSEARCHNOTFOUND	Saved Search not found in PBA formula. *Note: Saved search names are case sensitive.*
#SORTORDERERR	Invalid sort order type parameter (PBM).
#SPECIFYREQUIRED	Appears if required parameter(s) are missing.
#TIMEOUT	Appears after no response for 180-second timeout limit.
#UNSUPPORTEDCURRENCY	Appears when currency argument is unsupported (PBF, PBM, PBD, PBA).
#UNSUPPORTEDSAVEDSEARCH	Saved Search in the PBA formula is of the wrong type. *Note: Only "Companies & Deals" and "Investors & Funds" search types are supported.*
#UPGRADEREQUIRED	Displays if user's license doesn't have access to desired data.
#WRONGDATE	Invalid date type is entered into formula.
#WRONGINPUT	Appears if using wrong ID type in formula (e.g., DealAmount field using Person PBId).
#INVALIDFIELDPREFIX	Appears when entered invalid prefix for field. Currently used only for Limit prefix (e.g., of correct usage—Limit3.DealsIds).

Troubleshooting (Continued)

Export Diagnostics Log

To help us troubleshoot any issues, we may ask for a diagnostic log from your PitchBook Plugin. Follow the instructions below to save your diagnostic log.



A. Click the **Settings** button to open the settings window.

B. Click the **Support** option.

C. Click **Diagnostic Tool** to run error diagnostics.

D. The PitchBook Plugin Manager window will appear. Click **Run Diagnostic** and save the file to your computer.

Send this file to your account manager and he or she will promptly investigate any issues you may be experiencing.