Cape Pack Cloud 18.1

User Guide



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2. Introduction to Cape Pack Cloud

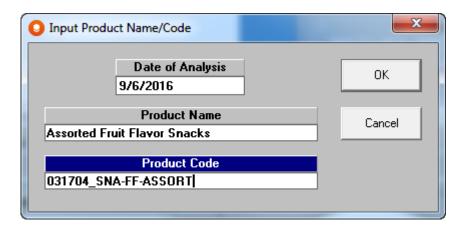
Use the online Cape Pack Cloud to download or share reports about palletization solutions you create in Cape Pack. You can quickly customize reports by clicking and dragging. You can also look at compression strength information if the solution you're viewing supports it.



3. Sending a Solution to Cape Pack Cloud

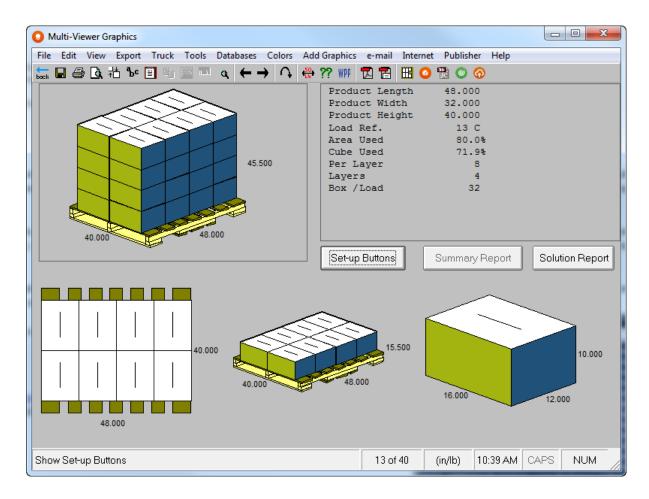
The first step in using Cape Pack Cloud is sending a solution from Cape Pack.

 Create a new solution in Cape Pack or open a saved one. Make sure to set the Product Name and Product Code using **Product Name/Product Code**. Cape Pack Cloud prominently displays these fields as well as using them when you search.



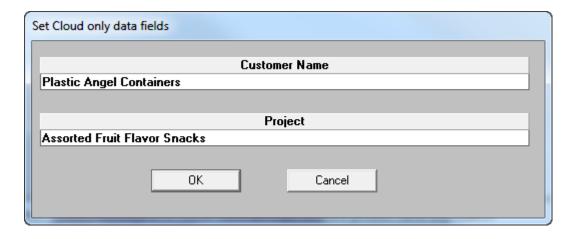
2. Olick **Send to Cape Cloud** on the toolbar.





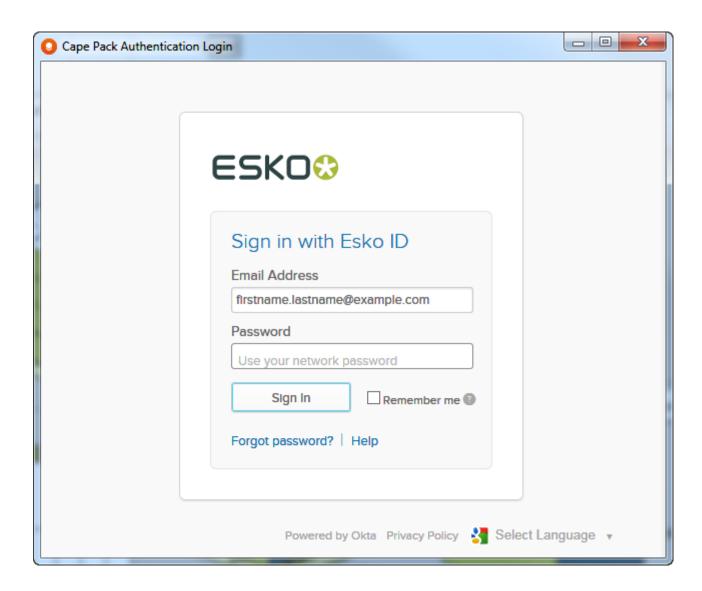
If you have calculated the compression strength, Cape Pack automatically includes this information in the upload.

3. In the Set Cloud only data fields dialog box, enter the customer name and project and click **OK**.

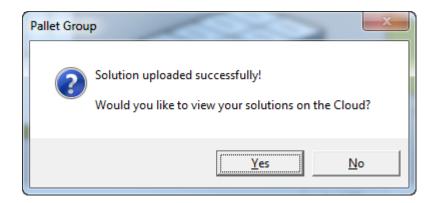


4. In the Cape Pack Authentication Login dialog box, enter your login credentials and click **Sign In**.

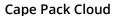




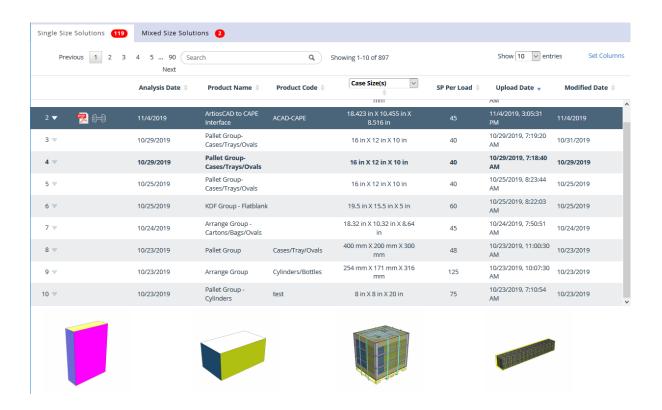
5. Cape Pack performs the upload and then asks if you want to see it.



- **6.** Click **Yes** to open your Web browser. You may be prompted to log in again.
- **7.** The list of uploaded solutions appears.



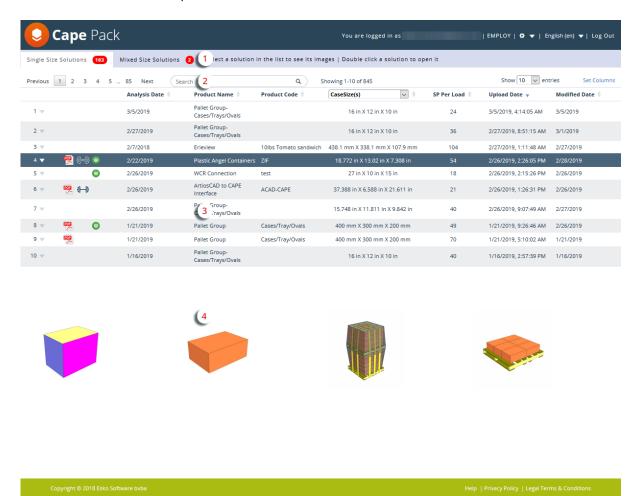






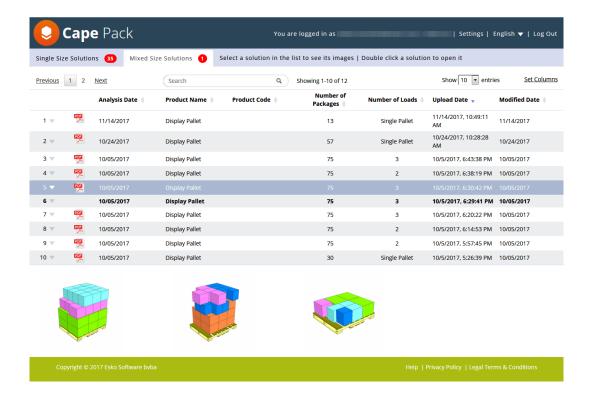
4. Viewing the List of Solutions in Cape Pack Cloud

The list of solutions in Cape Pack Cloud has four main areas.



Area 1 controls if the list in area 3 shows single size solutions or mixed size solutions. Shown above is an example list of single size solutions. Shown below is an example list of mixed size solutions on different pallets. The thumbnails at the bottom represent up to the first four loads in the full order.





Area 2 contains controls that affect the list of information shown in area 3.

Area 3 is the list of available solutions. Unopened new solutions are shown in bold. Solutions you have previously opened are in normal type. A PDF icon indicates the solution has a saved report, a barbell icon indicates the solution has a saved compression strength report, and a WebCenter icon indicates you uploaded the solution to WebCenter using Cape Pack Cloud.

Area 4 shows previews of the solution's graphics that are available for the report.

To quickly change the language Cape Pack Cloud uses in this session, click the language dropdown at the top right of the page. You can change it for everyone in the company on the Settings page.

4.1. List Controls

The list controls above the list affect different aspects of the list.



Item

1

Description

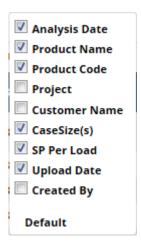
Unseen solution counter. Open each unseen solution to reset the counter.



Item	Description
2	List of pages of solutions. Click a number to go directly to that page, or use Previous and Next as desired.
3	Search field. Enter search terms here to search the Product Name, Product Code, Project, and Customer Name fields in solutions. The Project and Customer Name fields are not shown by default; use Set Columns to display them.
4	Lists how many solutions are on the page and the total number of solutions.
5	Sets the number of solutions per page.
6	Lets you choose the columns in the list.

4.1.1. Setting Columns in the List

To set the columns of data that appear in the list of solutions, click **Set Columns** in the header.



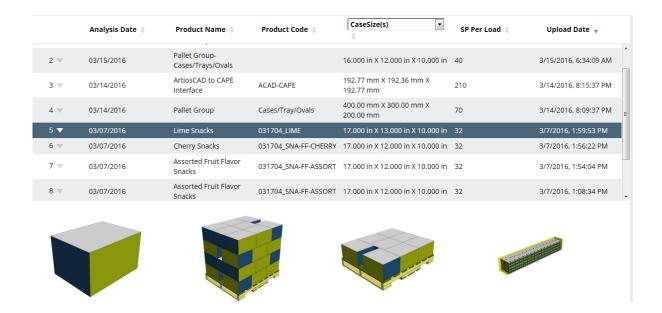
Select or deselect columns as desired. As you click columns, the selector disappears and the list updates, so you may have to repeat the process. To reset the columns shown in the list to the default, click **Default**.

Note: SP stands for secondary pack.

4.2. Working with the List

The list of solutions is where you choose the solution for which you will then build a report.

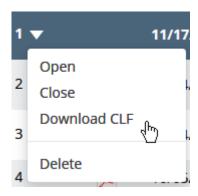




Change the sort order of the list by clicking a column header.

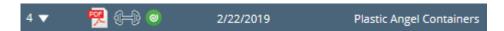
The fourth column allows you to choose which statistics to show. Click the drop-down arrow and choose from **CaseSizes(s)**, **Area Efficiency**, **Cube Efficiency**, or **PP Per Load** (where PP stands for Primary Pack). If you change this column to another entry, the list keeps the previous sort setting.

Next to each entry's number in the list is a triangle that, when clicked, opens a pop-up menu for the solution.



Click **Open** to open a solution, **Close** to close a solution, **Download CLF** to download a solution, and **Delete** to delete a solution. You may only delete solutions you uploaded.

If you have saved a PDF for this solution, an icon for it appears after the number. If there is a saved compression strength report for this solution, a barbell icon appears. If you have uploaded this solution to WebCenter from within Cape Pack Cloud, an icon for it appears as well.



Click the PDF icon to access its menu, where you can choose to **Download Saved PDF**, **Email PDF Attachment**, **Email PDF Link**, **Copy Link to Clipboard**, or **Delete Saved PDF**. You may



only delete the PDF for a solution you created. Reports are saved for 90 days by default, but you can change this on the Settings page.

You can also open a solution by double-clicking it, and close it by clicking the **X** in its tab.

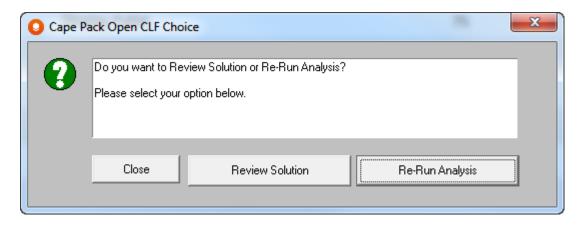
Beneath the list are different views of the solution.



5. Downloading and Working with a Solution from Cape Pack Cloud

To download a solution from Cape Pack Cloud, do the following:

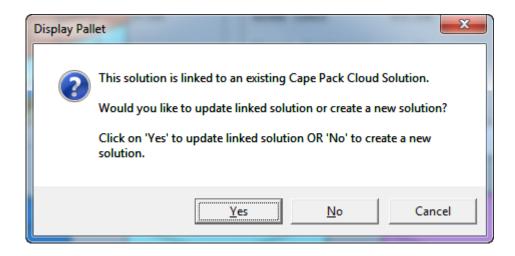
- 1. If you have an open instance of Cape Pack, close it.
- 2. Open the menu triangle in the row of the solution to download.
- 3. Click Download CLF.
- **4.** The browser may prompt you to open or save the file. If your browser is configured to automatically save downloaded files, use Windows Explorer to navigate to that location and double-click the downloaded file, which should result in the same dialog box as if you chose to open the file directly.



5. Choose to **Review Solution** (which will open it in MultiViewer Graphics) or **Re-Run Analysis** (which will open it in Cape Pack).

When you are done reviewing the solution or re-rerunning the analysis, if you upload the solution to Cape Pack Cloud again, you will be asked if you want to overwrite the existing solution (**Yes**) or create a new solution (**No**). If you create a new solution, you will be prompted to enter a customer name and project if you have not set one already.

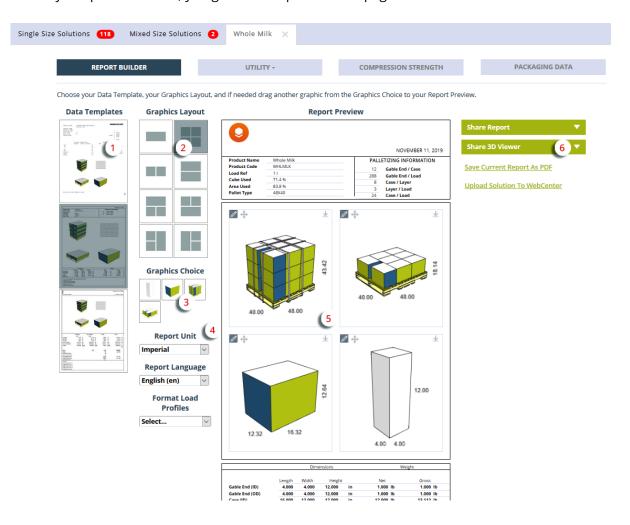






6. Generating a Report

When you open a solution, you go to the Report Builder page.



There are six steps to generating a report.

- 1. Select a template by clicking the one you want to use if you do not want to use the default one
- **2.** Select the graphics layout by clicking the one you want to use.
- **3.** Choose the graphics on the report. Click and drag the graphics into the windows on the report if you do not like the default placement.
- 4. Set the units for the report, either Imperial or Metric, and set the language for the report. You may also choose a predefined Load Format from the Format Load Profile drop-down list. If you want to change the appearance of the load, click Utility > Format Load at the top of the page.
- **5.** If you chose a mixed size solution, you can see the previews for the different loads using the controls next to Report Preview. Change the view of the graphics, if desired, by choosing a



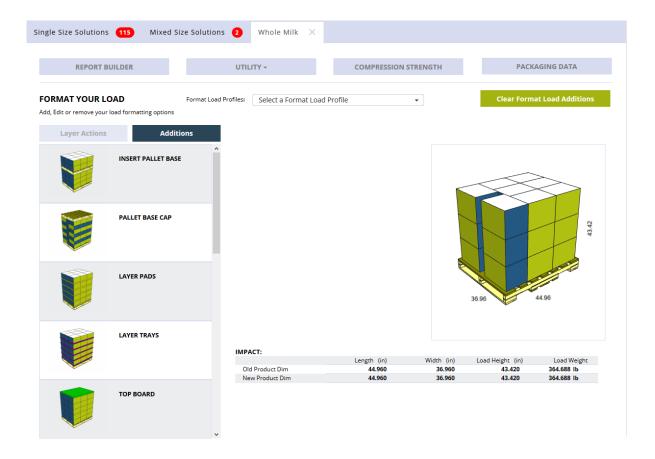
different view by clicking the pencil and then either **Corner View**, **Top View**, **Bottom View**, or **Side Views**.

- For pallet loads, you can also choose **Multi-Stack** and then set the number of pallets high.
- For cases, you can also choose Show Content, Lift Cover, or Open Flaps.
- Rotate the view manually by dragging it with the mouse.
- Reorder the windows on the report by clicking the axes icon and dragging the window to another position in the layout.
- Zoom in or out by using the scroll wheel on the mouse.
- Download a window's view by clicking the download icon in the top right corner of the window
- The options available here carry forward into the 3D Viewer.
- **6.** Once you have the report generated to your liking, you can save it, share it, or upload it to WebCenter as described in the following sections.

6.1. Changing the Load Format

Use the options on the Format Load screen (**Utility** > **Format Load**) to change the appearance of the pallet load. You can do things like adding separators, shrouds, strapping, and shrink wrap, or changing the layout of the load. You can alter the appearance of the layers in the load using **Layer Actions**, or you can add things to the entire load using **Additions**.





You can choose a predefined Load Format from the Format Load Profiles drop-down list box.

Note:

Layers are numbered from the bottom of the load to the top of the load.

6.1.1. Using Layer Actions

On the Format Load screen, **Layer Actions** change the way Cape Pack Cloud arranges the layers as a whole or the items within the layers.

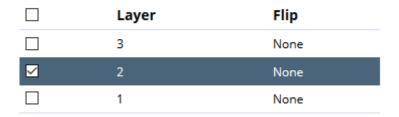
 Choose the desired Layer Action, Alternate / Column Stack / Flip Layers or Spread / Unspread.



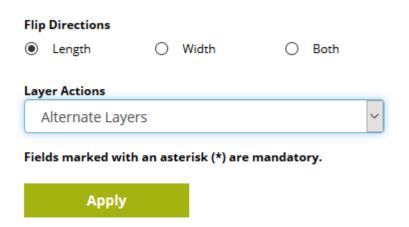


2. Select the checkbox of each layer to change.

ALTERNATE / COLUMN STACK / FLIP LAYERS



3. Set the parameters of the Layer Action as desired.



4. Click Apply. Cape Pack Cloud performs the action.

If any of the dimensions of the load exceed limits after the change, Cape Pack Cloud shows them in red.



IMPACT:

	Length (in)	Width (in)	Load Height (in)	Load Weight
Old Product Dim	43.977	39.530	70.333	185.540 lb
New Product Dim	43.976	39.529	75.833	230.540 lb
Maximum	44.000	44.000	72.000	1000.000 lb

6.1.2. Using Additions

On the Format Load screen, **Additions** lets you enhance the load with additional parts and treatments. Some of the things you can do or add are:

- Insert Pallet Base
- Pallet Base Cap
- Layer Pads
- Layer Trays
- Top Board
- Top Caps
- Picture Frame
- Horizontal Corner Posts
- Vertical Corner Posts
- Horizontal Straps
- Vertical Straps
- Shroud
- Stretch Wrap

If you added these things to the solution in Cape Pack before uploading it to the cloud, Cape Pack Cloud recognizes them and displays them here.

Some of these additions have profiles you can configure in **The gear icon > Databases > Format Load Settings**.

1. Choose the desired addition from the list.

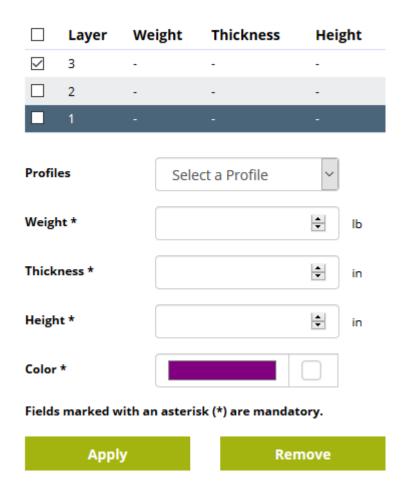
Note:

You can put a top cap on any layer. Picture frames and boards always go on the top. You may insert a pallet base under any layer.

- **2.** Some of the additions have profiles (already configured settings) that you can use. To use a profile, select it from the drop-down list and the predefined settings will appear in the fields.
- **3.** If you don't want to use a profile, or the addition doesn't have any, set the parameters for the addition as desired. An asterisk indicates a required setting. Sometimes you have to select at least one layer for the addition before its parameters are visible.



ADD LAYER TRAYS



4. Click **Apply** to make the addition. To remove an existing addition, click **Remove**.

If any of the dimensions of the load exceed limits after the change, Cape Pack Cloud shows them in red.

IMPACT:

	Length (in)	Width (in)	Load Height (in)	Load Weight
Old Product Dim	43.977	39.530	70.333	185.540 lb
New Product Dim	43.976	39.529	75.833	230.540 lb
Maximum	44.000	44.000	72.000	1000.000 lb

6.1.3. Clearing All Load Formatting

To clear all load formatting:

1. Open the solution and click Format Load.

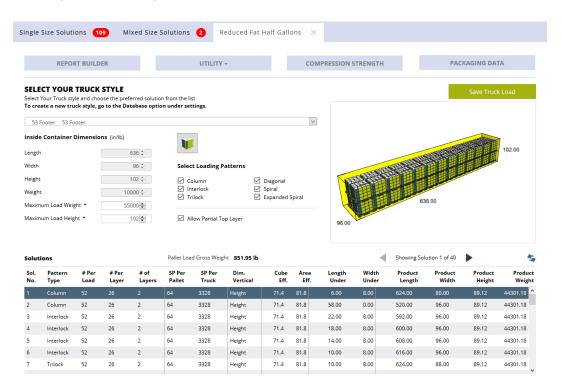


- 2. Click Clear All Formatting.
- 3. Cape Pack Cloud removes all the load formatting.

6.2. Generating a Truck Analysis

To generate a truck analysis for the current solution, do the following:

1. Click Utility > Truck Analysis.



- **2.** Set the options for the analysis:
 - a) Select the desired truck from the drop-down list.
 - b) Set the maximum load weight and height.
 - c) Choose the desired loading patterns.
 - d) Choose to allow a partial top layer or not.
- 3. Select an analysis to see a preview.
- **4.** To navigate the list of analyses, either scroll or use the arrows.
- 5. 🦕

Click **Recalc** to recalculate the analyses.

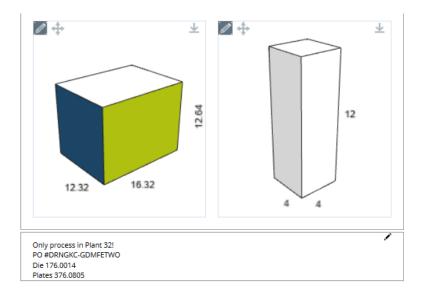
6. Click **Save Truck Load** to save the selected analysis to Report Builder. It remembers it for this session; the next time you do a Truck Analysis, it recalculates all of them based on the defaults.



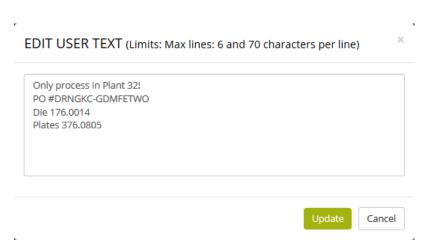
6.3. Changing User Text on the Report

User text is set in Cape Pack in the Set Options dialog box by clicking **File > Page Setup**.

- 1. Open a solution and click the Report Builder tab.
- **2.** Scroll down to the User Text area beneath the graphics.
- **3.** Click the pencil icon at the top right of the User Text area.



4. Make the desired changes in the dialog box and click **Update**. Cape Pack Cloud changes the text.



Note:

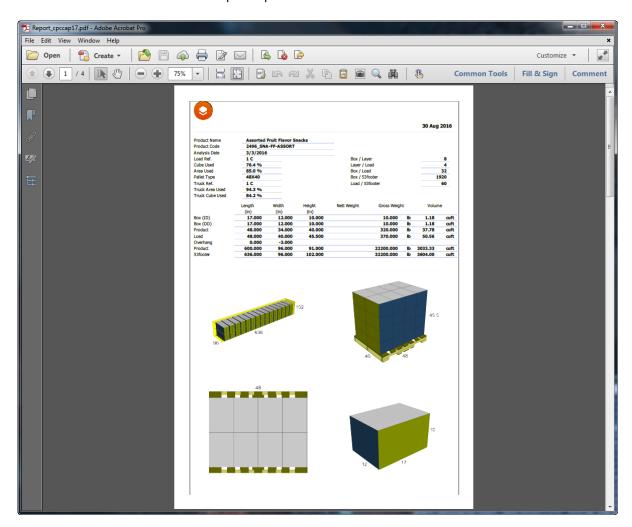
User text is limited to 420 characters in total.



6.4. Sharing and Saving the Report as a PDF

Share a PDF of the report by clicking **Share Report**, and then choosing to either **Print**, **Mail PDF**, or **Download PDF**. If you choose to print, proceeded as prompted by your browser. If you choose to mail the PDF, enter the recipients' addresses in the To, CC, and BCC fields separated with semicolons and click **Send**. If you choose to download the PDF, proceed as prompted by your browser.

Shown below is a downloaded report open in Adobe Acrobat Reader.

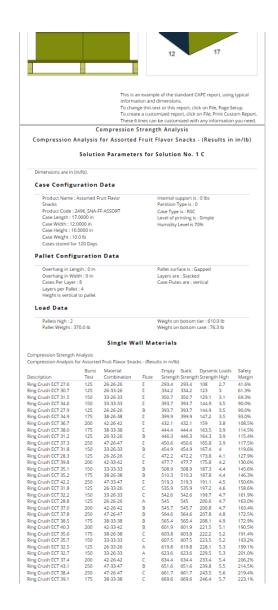


To save a PDF of the report for future use, click **Save Current Report As PDF**.

If you open the solution later and create a new preview, the program remembers all the settings from this preview except for the rotation of the models in the preview windows that you changed with the mouse.

If you completed a strength analysis in Cape Pack, that data is automatically uploaded with the solution and appears on the report as additional pages.



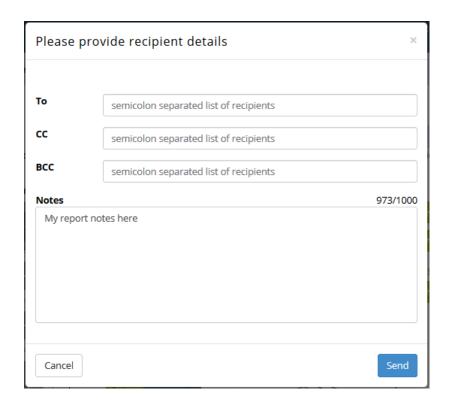


6.5. Sharing a 3D Viewer Report

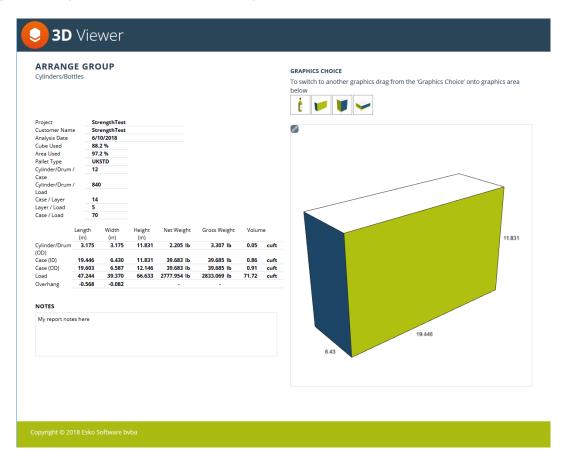
Click **Share 3D Viewer** and then either **Email link** or **Open link**.

Email Link prompts you for information to create an email message containing a link to this 3D Viewer. Enter appropriate information in the fields and click **Send**.





Open Link opens the 3D Viewer for this report in a new browser tab.

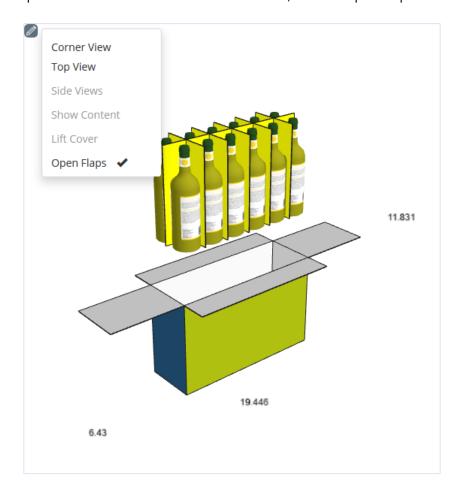




On the left is information about the items on the report.

Click and drag in Corner View to rotate the view of the current container. Use the mouse wheel to zoom in and out.

Click the pencil to choose a new view for the current design. The same views that were available in Report Builder are available in the 3D Viewer, such as Open Flaps.



Drag and drop a graphic choice onto the viewing window to change to a different view.

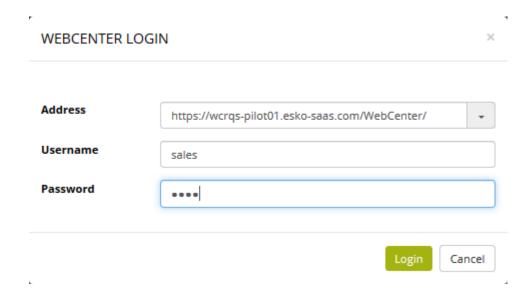
6.6. Uploading a Solution to WebCenter

You can upload a solution to WebCenter for use by other Cape Pack users.

- **1.** While on the Report Builder tab of the solution, click **Upload Solution to WebCenter**.
- **2.** In the WebCenter Login dialog box, enter the address of the WebCenter server, your login credentials, and click **Login**.

Cancel





3. Navigate to the desired Project and folder, enter a name in the Cape Document Name field, and click **Upload**.

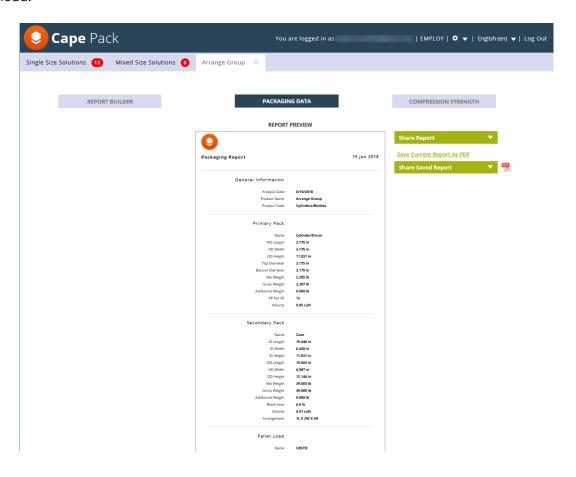
UPLOAD SOLUTION / SELECT / ENTER A CAPE DOCUMENT NAME **FAVORITE PROJECTS** PROJECTS I MANAGE **Search Projects** Q rojects 📗 - III Projects Documents -- 🛺 DR000012 - 🛺 01_Structural Design -- 🛺 02_Artwork -- 调 03_Manufacturing -- 🛺 04_Other -- 🛺 05_Quotes - 🛺 06_Palletization └─ 📋 ZIF.clf -- 🛺 07_Reports ZIF2.clf MILK **Cape Document Name**

4. Cape Pack Cloud uploads the document to WebCenter.



7. Viewing Packaging Data

In Cape Pack Cloud, click **Packaging Data** to see the data sent from Cape Pack to Cape Pack Cloud.



Click **Report Builder** to return to Report Builder.



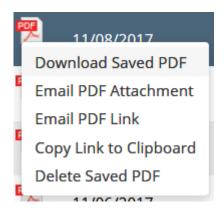
8. Managing Saved Reports

Once you have saved a report preview online as a PDF, there are a few things you can do with it

While you have the solution open, click **Share Saved Report** to access a context menu. This control only appears after you have saved a PDF.



Or click the PDF icon in the list of solutions.



Using the commands on either menu, you can download the PDF, attach the PDF to an email message, send a link to the PDF via email, copy a link to the PDF to the clipboard, or delete the saved PDF if you are the one who created it.

Reports are saved for 90 days by default, but you can change this on the Settings page.



9. Corrugated Compression Strength

The Strength Program allows you to evaluate the effects of a number of loading parameters and environmental conditions on the predicted individual case compression strength and on the resulting stacking height of a pallet load.

This program and the McKee formula relate to a standard Regular Slotted Container (top loading) case style.

The Case Compression Strength program uses McKee Formula for calculating initial case compression strength. As input to the calculations.

Imperial McKee Formula

The Imperial McKee formula requires the combined board Edge Crush Test (ECT), Caliper (CAL) and Case Perimeter (PER) information.

Compression Strength = 5.874 * ECT * CAL^{0.508} * PER ^{0.492}

Metric McKee Formula

As input to the calculations, the Metric McKee formula requires the combined board Edge Crush Test (ECT) in kN/m, Caliper (CAL) in mm and Case Perimeter (PER) in cm.

The Metric McKee formula is expressed as:

Compression Strength = $1.82 \times ECT \times 1.0194 \times CAL^{0.508} \times PER^{0.492}$

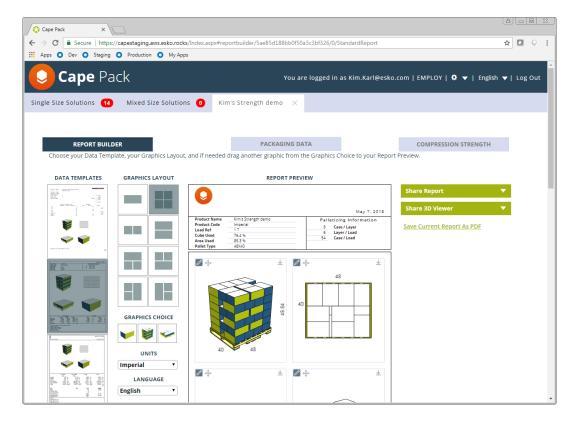
For more information on the McKee formula, please refer to the August 1963 issue of *Paperboard Packaging, Compression Strength Formula for Corrugated Boxes* by R. C. McKee, J. W. Gander, and J. R. Wachuta published by The Institute of Paper Chemistry, Appleton, Wisconsin, USA. Also reprinted in Chapter 11, Compression Strength Formula for Corrugated Board, *Performance and Evaluation of Shipping Containers*, George C. Maltenfort, copyright 1989.

For questions concerning compression strength of corrugated cases, two very good sources of information are *Performance and Evaluation of Shipping Containers* by George C. Maltenfort, Jelmar Publishing Company, Inc., 1989, and *Corrugated Shipping Containers, An Engineering Approach* by George C. Maltenfort, Jelmar Publishing Company, Inc., 1988.

9.1. Accessing the Cloud Strength Program

The Cloud Strength program uses the data uploaded to the cloud for your solutions from the Pallet, Arrange, Design and Folding Carton Arrange programs. From the database screen, double-click on any solution to open the Report Builder screen.





From this screen, when you click on the Compression Strength tab on the right side of the screen, Strength will open.

9.2. Navigating the Strength Program

There are two parts of the Cloud Strength program. The database and the actual program. Before you run a Strength analysis, you should modify your database to fit your environment and also adjust your board grades. The edge crush values and calipers provided within the board grade combination databases are provided for demonstration purposes only. You should create your own board grade information to use within the program.

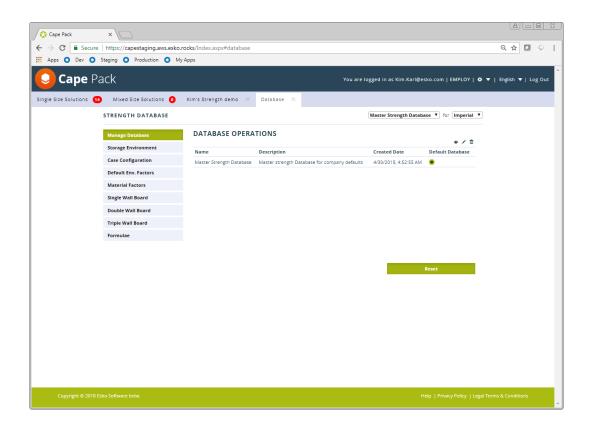
So let's begin with the database.

9.2.1. Cloud Strength Database

The Compression Strength Database consists of nine separate components that all provide direct input for the program's calculations. The base set of data is called the Master Database and there are two versions: Metric and Imperial. We will show the imperial version through the documentation.

To access the database, click **The gear icon > Databases > Strength**.





9.2.2. Manage Databases

In addition to the Master Database, you can create as many supplemental or custom database as you wish. You do this on the Manage Database screen.

Creating New Databases

To create a new custom database:

1. Click on the plus sign above the listing.

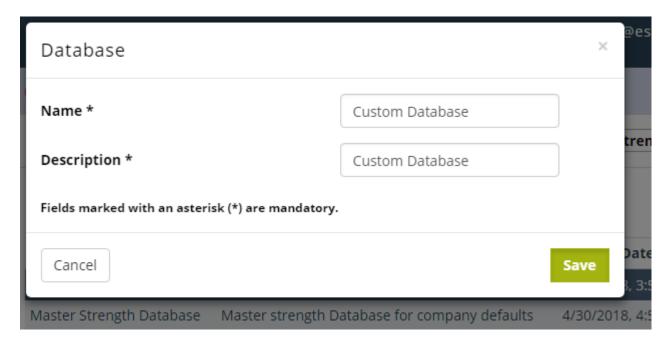




- **2.** Fill in the Name and Description and click on the Save button.
- **3.** A new custom database will be created including all the data in the master database. A complete copy.

Editing Databases

To edit a database, click on the pencil in the toolbar.



Deleting Databases

To delete a database, click on the trash can in the toolbar.



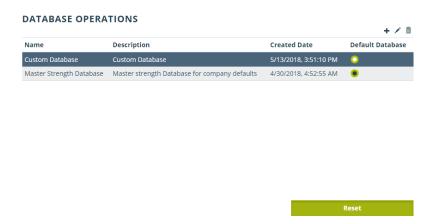
Default Database

To choose a default database, click on the selector in the Default Database column. You can choose a database as your default but still opt for another database when you calculate your results.



Resetting Databases

The Reset button is used to reset supplemental databases back to the Master Database set.



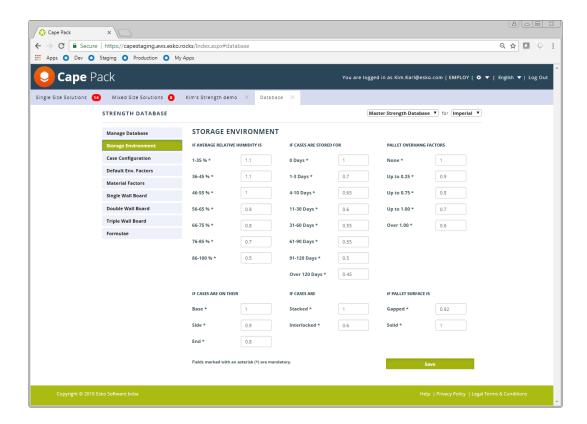
You can also use the Reset button to undo any changes you have made to the Master Database before saving it.

9.2.3. Storage Environment Database

The Storage Environment Database contains all of the environmental factors used in the predicted compression calculations and the respective values that are to be used when factoring (multiplying by) the initial calculated compression value. For example, if you choose a humidity of 90% and the respective factor value is .50, the initially calculated compression strength will be multiplied by .50 (or reduced by 50%) prior to displaying the predicted compression strength.

Once you select a series of environmental factors that will affect the estimated compression strength of the case, the program will use the corresponding numbered value for each of the environmental factors in the compression strength calculations.





Once you have set the factors within your database to match the theoretical conditions to which your corrugated cases will be subjected, it can be used within the initial calculations to replicate your own distribution environment. This will allow you to fine tune your corrugated requirements. Thus, you can ensure that you are only purchasing the strength of corrugated cases that you actually need.

Data Input Fields

The following data fields are included in the Storage Environment Database.

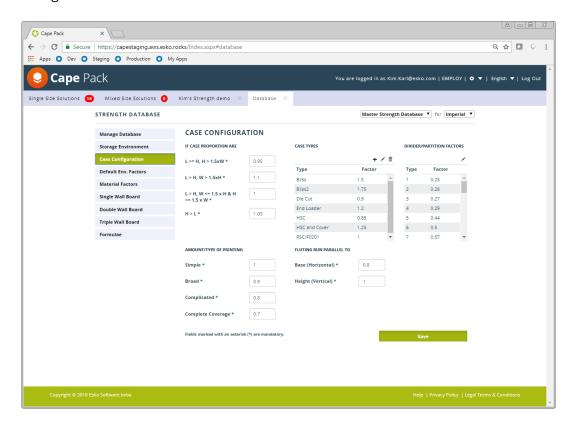
Average Relative Humidity	A factor for each Relative Humidity range listed.
Days of Storage	A value for each range of days listed.
Case Orientation	A value for whichever panel of the corrugated case will be placed flat on the pallet.
Pallet Surface	A factor reflecting use of a gapped or solid surface on which the corrugated case will be placed.
Stacked/Interlocked	A factor to be used depending on whether or not you choose to rotate/alternate layers in the load. This especially impacts the second layer of cases from the bottom of the load.
Pallet Overhang Factors	A value for each range of overhang listed. This is calculated for the maximum overhang on any one of the four pallet sides.



After modifying any of the factors for your database, click on Save. The factors on this screen will be saved to only the database shown at the top of the screen.

9.2.4. Case Configuration Factors Database

The Case Configuration factors Database contains all of the case design factors along with their respective values which are used when factoring (multiplying by) the initial calculated compression value. For example, after the strength of a case is computed, that result may be increased or decreased based on how much printing is on the carton, which partition is being used or even what type of case you use. By taking these factors into consideration, the software gives a more "real world" result.



Once you have set the factors within the database to match the type of container you are evaluating, you can predict the required compression strength for a variety of different corrugated box styles and manufacturing methods.

Data Input Fields

The following data fields are included in the Case Configuration Factors Database.

Case Proportions	A value used to reflect how your box would perform in relation to the panel dimensions. This also works in conjunction with Case Orientation if a tall narrow case is placed on its end.
Amount/Type of Printing	A value for different amounts of printing.



Case Types A value for different corrugated case styles. You can add as many case

types as you wish. The factor is a multiplying factor compared to the strength of an RSC. For example, if a case type is 50% stronger than

the RSC, then the factor for that case would be 1.5.

Divider/Partition Type A value for the additional compression strength added to the case as

a percentage of the case compression strength. See the Pack Types and

Divider Styles chapter for further information.

Fluting Direction A value for the direction of fluting.

After modifying any of the factors for your database, click on Save. The factors on this screen will be saved to only the database shown at the top of the screen.

9.2.5. Default Environmental Factors

The Compression Strength program consists of lots of factors that feed into the calculations. Rather than having to set those factors individually every time you run Strength, you can setup defaults for all the values that will be used. You can still change those factors for an individual analysis as needed. You set the defaults on the Default Environmental Factors screen.



Manage Database	DEFAULT ENVIRONMENTAL FACTORS		
Storage Environment	Humidity Level *	90 %	
Case Configuration	Cases Stored for *	120 day	ys
Default Env. Factors			
Material Factors	Internal Support *	0 kg	
Single Wall Board	Pallets Stacked *	2 hig	h
Double Wall Board	No Partition		
Triple Wall Board	Partition Type	6	
Formulae		50%	
	Custom Partition	2 L	x 1 W
	Partition Material	Case Materia	₩
	Case Type	RSC/F0201	•
	Case Printing	Simple	₩
	Edge Crush Type	Ring Crush	₩
	☐ Interlocked Layers		
	Horizontal Fluting		
	Solid Pallet Surface		
	Production Factor	0 %	
	☑ Safety Margin Required	33 %	
	✓ Seasonal Strength Factor	0 %	
	Display Safety Factor		
	Select Safety Factor Strength Cate	gory and enter i	minimum safety facto
	Production Strength ▼	1	
	Strength result columns optional:		
	✓ Production Strength		
	✓ Loads High		

9.2.6. Material Factors Database

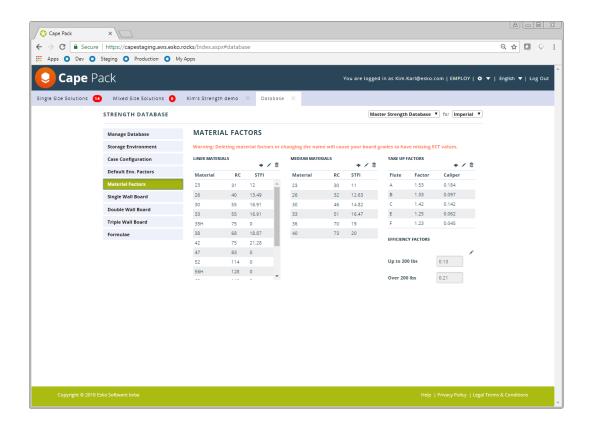
The Material Factors Database contains all of the Liner, Medium, take up and efficiency factors that are used to calculate the combined board edge crush value, from either the ring crush or STFI formulas. For each liner and medium, you can enter a ring crush and/or STFI value and caliper. For take up factors, you can enter any flute type with the corresponding take up factor. For efficiency factors you can enter any value for boards up to 200-pound burst (14 kilo).

Fields marked with an asterisk (*) are mandatory.



Note:

Before you can enter new Single or Double Wall board grades, you must make sure that their Liners and Mediums are in the Material Factors database.



Once entered, these factors are run through the formula on the formulae tab screen and the resulting edge crush value is entered in the appropriate field in the Single Wall or Double Wall database.

Data Input Fields

The following data fields are included in the Material Factors Database.

Liner Materials		As a description of the liner being defined, you can enter up to three numbers and two letters in the description field. Using the letter suffix you can distinguish between two liners of the same basis weight, but different characteristics and ring crush or STFI values.
	Matl (Material)	Enter the basis weight (lbs/msf) of the liner material to be used in a finished board in either the Single Wall or Double Wall database.
	RC (Ring Crush)	Enter the Ring Crush value for the liner.
	STFI (STFI)	Enter the STFI value for the liner.
Medium Materials		As a description of the medium being defined, you can enter up to three numbers and two letters in



		the description field. Using the letter suffix you can distinguish between two mediums of the same basis weight, but different characteristics and ring crush or STFI values.
	Matl (Material)	Enter the basis weight (lbs/msf) of the medium material to be used in a finished board in either the Single Wall or Double Wall database.
	RC (Ring Crush)	Enter the Ring Crush value for the medium.
	STFI (STFI)	Enter the STFI value for the medium.
Take Up Factors		The Take Up Factor is the conversion value from a flat sheet of paper to a fluted sheet of paper for the corresponding flute type.
	Flutes	Enter the flute type.
	Factor	Enter the take up factor for the flute.
	Caliper	Enter the caliper of the flute.
Efficiency Factors		For take up factors, you can enter any flute type with the corresponding take up factor. For efficiency factors you can enter any value for boards up to 200-pound burst (14 kilo).

Adding Material Factors

To add materials to the list, click on the appropriate plus sign button.

Enter the appropriate values and click on **Save**. Your list will automatically be updated.

When you add a Material Factor it will automatically be saved to the Master Database as well as whatever database you are currently working in.

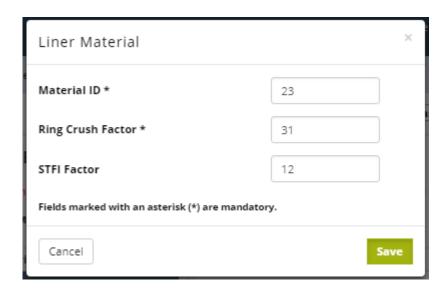
You cannot delete materials, but you can change them.

Modifying Material Factor Information

To modify a liner or medium, click on the pencil.

The material information will appear in a new window for you to edit.





Make your changes to existing entries and click on **Save**.

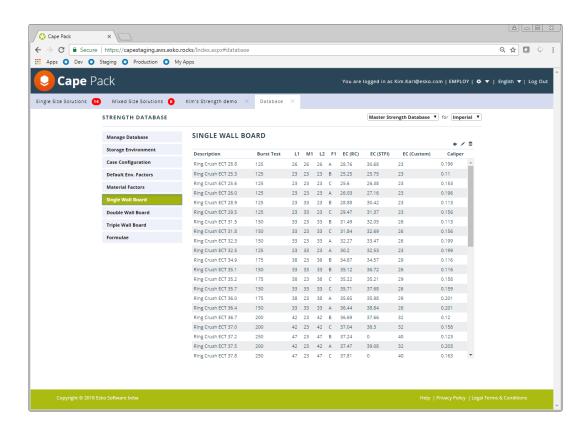
When you edit the Ring Crush or STFI values of existing materials and click on **Save**, the Edge Crush of any boards in your database that use these materials will automatically be updated.

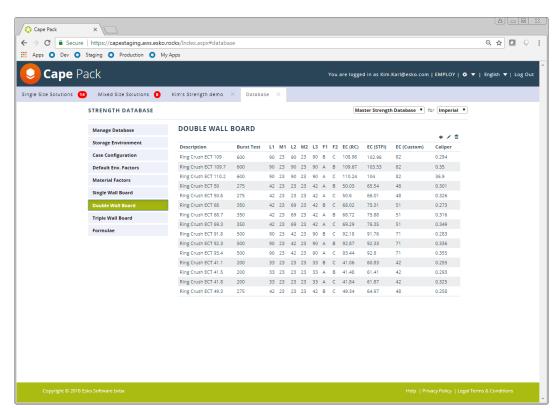
9.2.7. Board Grade Databases

The Single Wall, Double Wall and Triple Wall features let you build databases of board grade combinations along with their respective descriptions, flute types, caliper and edge crush values.

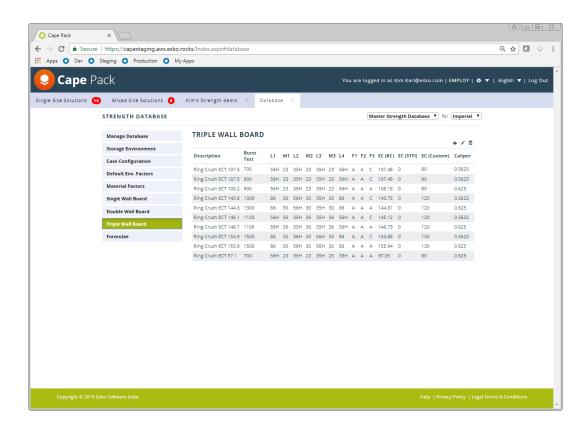
When calculating initial case compression results, the Edge Crush and Caliper values from the database are used as direct input into the McKee formula. This value is then multiplied by any of the Storage Environment and Case Configuration factors you have selected:











Data Fields

The following fields are included in the Single Wall and Double Wall Materials Databases.

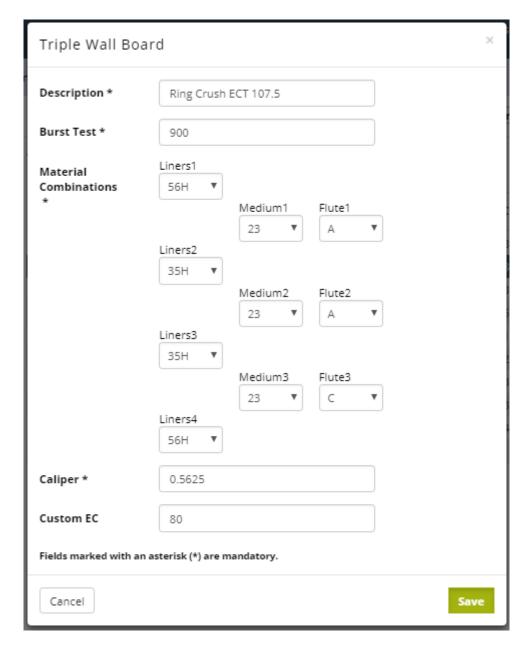
Test	The Mullen Burst Test value for the board grade. The database combinations are ranked by this value.	
Liner/Medium/ Liner	The Basis Weight of the paper used for each liner and the medium.	
Description	A description identifying each board grade (up to 35 characters may be used).	
Flute	Enter A, B, C or E to identify the flute type of each particular board.	
Edge Crush	Enter the known (or estimated) Edge Crush value for each board combination which will be used as input into the McKee formula and run through the Compression calculations. The program allows for three different types of Edge Crush values: Ring Crush, STFI and Custom. The Ring Crush and STFI values are derived from their respective testing procedures. Both tests involve the testing of individual samples of paper, but differ slightly in sample size and testing method. When the results from these tests are entered into their respective Edge Crush formulas, the resulting values are used to predict the finished combined board compression strength. The Custom value is normally obtained from testing a sample of the board.	
Ring Crush (RC)	Automatically calculated from Ring Crush values in the Material Factor Database.	



STFI (STFI)	Automatically calculated from STFI values in the Material Factor Database.	
Custom (Cstm)	Manually entered by the user.	
Caliper	The caliper (thickness) of the board grade, in inches. This value goes directly into the McKee formula for compression calculations.	

Changing Board Information

To modify a field, double-click on the row with that board, or click on the row and then on the pencil button.



Change any information you want in the fields provided and click on **Save**.



Adding Board Grades

To add a board, click on the plus sign button.

Type in all the information for the board and click on **Save**.

Adding boards will add to the Master Database in addition to whatever custom database you are in at the time.

Deleting Board Grades

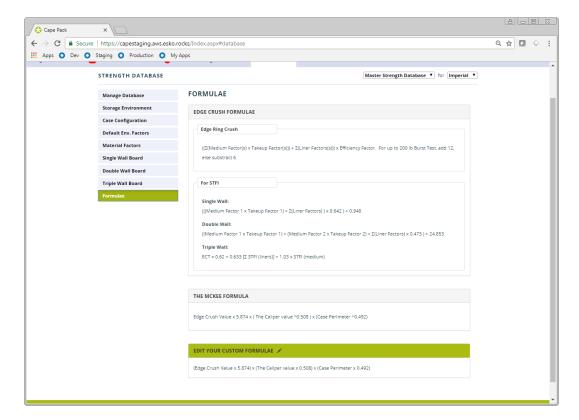
To delete a board from the database, select the row by clicking anywhere on the row. Click on the trash can button.

If you delete a board from the Master database it will be deleted from any other database where it exists.

9.2.8. Using a Custom Formula

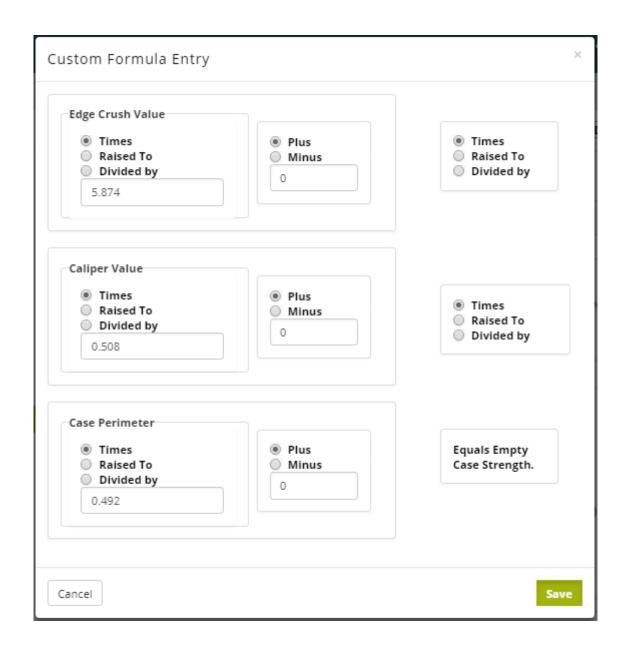
You can substitute your own data into the McKee Formula thereby creating your own custom formula.

Click on the Formula screen button to see the formulas and also modify your custom formula.



From the screen that follows, click on the pencil button in the Custom Formula section. The following Custom Formula Entry screen appears.





Adjust the various fields to suit your own formula and click on Save. Your new formula will appear in the Custom section.

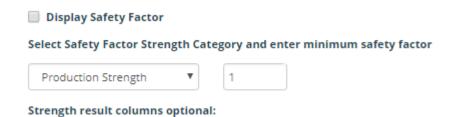
9.2.9. Establishing Safety Factors

Safety factors are a multiple of the weight on the bottom case applied to either Base, Production or Life Cycle Strength.

For example, if you have a weight on the bottom case of 200 pounds, and you apply a safety factor of 2 based on Base Strength, the only cases that would be displayed were those that had a Base strength of at least 400 pounds. Safety factor of 2 X 200 required pounds.

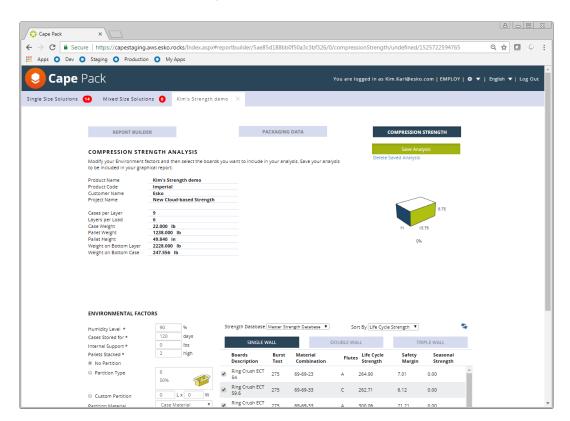
Safety factors are turned on and off and set as default in the Database on the Environmental Factors screen.





9.3. Determining Strength for a Cape Pack Solution

The program can calculate the strength of a load designed in Pallet Group for cases, the Arrange Group, or the Design Group. The program cannot reliably calculate the strength of a mixed load or of a load that uses trays rather than cases.



The top portion of the screen includes basic data about your solution and weight information.

The bottom portion of the screen includes Environmental Factors and your Calculated Results.

Strength of the solution will be automatically calculated for you based on the default Environmental Factors set in your database.

You can modify any of the environmental factors you wish and then recalculate by clicking on the refresh button.



Your new results will be displayed.

9.3.1. Environmental Factors Data Fields

ENVIRONMENTAL FACTORS 90 % Humidity Level * 120 days Cases Stored for * 0 lbs Internal Support * 2 high Pallets Stacked * No Partition 6 Partition Type 50% 2 Lx 1 W Custom Partition Case Material Partition Material RSC/F0201 Case Type Simple ۳ Case Printing Ring Crush Edge Crush Type Interlocked Layers Horizontal Fluting Solid Pallet Surface 0 Production Factor 33 % Safety Margin Required

The following data fields are included.

Humidity Level	The maximum humidity your product will be subjected to through its shipping cycle (0-100%). Bear in mind that once humidity adversely affects corrugated, lowering the humidity will not repair the damage incurred under loading.
Days in Storage	The length of time the corrugated will be subjected to the specified conditions (0-999). As an alternative, this can also be used to find the proper board grade needed to survive a given number of days in storage.
Internal Support	Enter (in lb.) the amount of additional support your product adds to the calculated corrugated case compression strength (0-9999). With this value at 0, only the strength of the case is calculated. Any other value will add the entered value to the calculated compression strength prior to displaying the final value on the Solution Report. If you do not know this value and cannot estimate a value, use a straight percentage of the case total. It is entirely possible that if

0

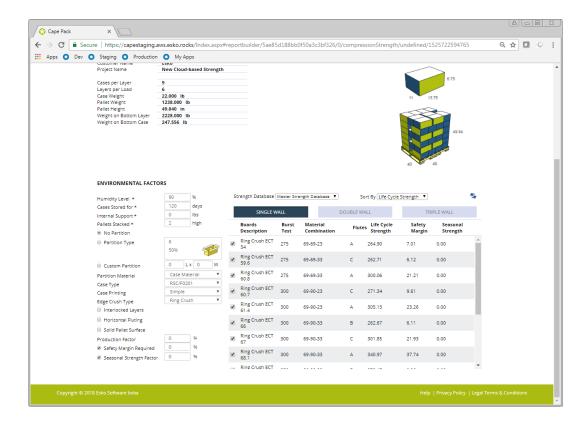
Seasonal Strength Factor



	you have a rigid or solid product this value could be more than the actual case compression strength value.	
Pallet Stack Height	The number of pallets stacked one on top of another, for compression calculations.	
No Partition	No divider or partition is being used I the case.	
Partition Type	From the list of available partition types (which all add support to the case) choose the type that most closely represents the one you use. If there is not an exact match, choose a style that uses a bigger or smaller factor, or change any factor to meet your own needs.	
Custom Partition	A special calculator that allows you to enter the number of lengths and widths of divider in the case. The program will calculate the total amount of linear inches of divider you will have and then it calculates the strength of the divider using the McKee formula.	
Partition Material	If the partition is made up of a material different than that of the case, select the material that most closely matches your partition material.	
Case Type	Choose the case type that most closely matches your case type.	
Amount of Printing	Choose the amount of printing that most closely matches your case.	
Solution Mode	Specify the method of calculating the Edge Crush for the boards in the Single Wall and Double Wall databases.	
Interlock of Load Layers	Click on this box if you are alternating the pattern arrangement for layers (or if at least the second layer from the bottom of the load).	
Horizontal Fluting	Check this box if your case is made with horizontal fluting.	
Gapped or Solid Pallet	If there are any gaps in the pallet surface, click on this field. You can then fine-tune the Gapped Input Factor in the Environmental Factors Database to reflect the amount of gap in your pallet surface relative to the panel lengths of the case you are evaluating.	
Production Factor	You can apply a percentage of deduction to the strength of your case based on equipment or processes used in constructing the box. The Production factor is applied to the Production Strength calculations.	
Safety Margin	You can apply a minimum Safety Margin as a filter for your results. This is applied to the results in the Life Cycle Strength. If you check this box, the Safety Margin is applied. If you enter a minimum value of 0, then only successful boards will be displayed.	
Seasonal Strength	A degradation factor applied when seasonal conditions adversely affect the cases. For example, increased humidity. This factor is applied to the Life Cycle Strength but appears in an extra Seasonal Factor column.	

Change any of the environmental factors needed and recalculate by clicking the refresh button.





9.3.2. Results

The compression results are displayed to the right of the Environmental factors and include descriptive information about the boards displayed as well as strength information on the boards.



The new information calculated from your input data is as follows.

Safety Factor	This column added only if a Safety Factor has been selected on the Parameters tab.
Base Strength	The case compression strength (lbs.) calculated as if the case were brand new or in a laboratory test environment at optimum conditions. It is



	derived from the McKee formula value multiplied by factors for flute direction, case position, case proportions and case type.
Production Strength	The Base Strength plus the printing, divider/partition, and Production factors.
Life Cycle Strength	Compression Strength of the case remaining after all of the factors have been applied (i.e., days in storage, humidity, etc.). This number should be compared to the weight on the bottom case.
Loads High	This figure represents the number of loads high you can stack this case under the environmental conditions you requested. It is determined using the Life Cycle Strength of the case.
Safety Margin	The Safety Margin expresses a percentage of the effectiveness of this board compared to the required strength (weight on the bottom case). A positive percentage means that there is strength in excess of requirements (i.e., 33% means the board is 33% stronger than you need), and a negative number means you are lacking in required strength (-33% means that the board is lacking 33% of the required board strength). This gives you an accurate assessment of each board and a much better way to compare different boards than just using Loads High or straight Life Cycle Strength.
Seasonal Strength	Seasonal Strength is Life Cycle Strength less the Seasonal Strength factor.

9.3.3. Saving Your Results

Once you have all the environmental factors set the way you want them, you can créate your report. You can select the board grades you wish to see in the report by checking the selector box next to the board. Or you can deselect all of them at once and then just choose the ones you want to see.



You can sort your report by any column you choose by clicking on the title of the column. The default sort is by Life Cycle Strength.

You can also choose to turn off any of the columns you don't want to see in the database option on the Default Environmental Data tab.



Switch on/off Strength result columns

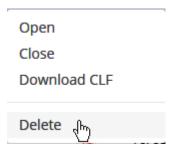
- Burst Test
- Material Combinations
- Flutes
- Base Strength
- Production Strength
- Life Cycle Strength
- Loads High



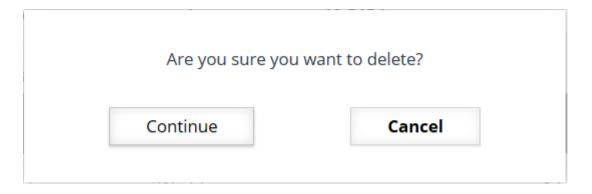
10. Deleting a Solution

You may only delete a solution you have uploaded.

1. In the list of solutions, click the triangle next to the number of the solution you want to delete to access its menu.



- 2. Click **Delete** on the menu.
- 3. Cape Pack Cloud asks you to confirm the deletion. Click Continue.



4. Cape Pack Cloud deletes the solution.



11. Changing Program Settings

To change how Cape Pack Cloud operates for all users at your company, click the gear icon on the menu bar, and then click **Settings**.

SETTINGS FOR YOUR COMPANY		Apply
Edit the settings and press the apply button.		
GENERAL		
Language	English (en)	
REPORT		
✓ Show Package ID	✓ Use Custom Logo on Reports Header	
✓ Show Product	Upload (Max 400 KB)	
☑ Show Actual Net Weight		
✓ Show User Text		
Show Dimension Labels for Graphics		
Show Customer Name and Project fields on Reports		
Default Data Template:	Default Graphics Layout:	
### 100 #### 100 ### 100 ### 100 ### 100 ### 100 ### 100 ### 100 ### 100 ### 100 ### 100 ### 100 ### 1	■	
∢ ▶		
Set Package Dim. Labels to:	● OD ○ ID	
Set Dimension Label to:	Load V	
Number of Days to Keep Saved Report:	90 (1-365) 0 (2-5)	
Decimal Places for Dim. labels (Metric):	1.17	
Decimal Places for Dim. labels (Imperial): Notes	2 [0-5] For More information contact your Esko	ro 2001
Notes	Representative.	[0-200]
EMAIL		
Sender:	capepack@example.com	
Display Name:	Cape Pack	
Reply To:	capepack@example.com	



You can change the language, specific report settings, the default data template and graphics layout, various formatting options, and the email configuration. To change the default data template or the default graphics layout, click the arrows beneath each to choose a different selection. Cape Pack Cloud uses its own built-in mail server so there is nothing to configure other than the addresses and display name it uses.

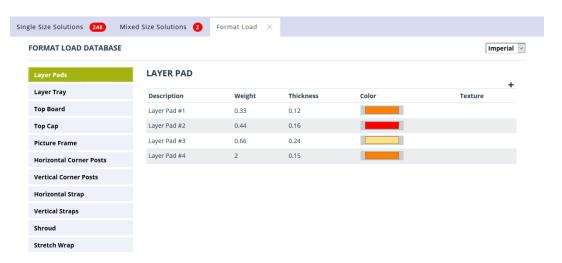
Change the settings as desired and click **Apply**, and then click **Update** to confirm the changes. Changes take effect the next time each user logs in.

To close the Settings page, click the X in its tab.

11.1. Defining Format Load Settings

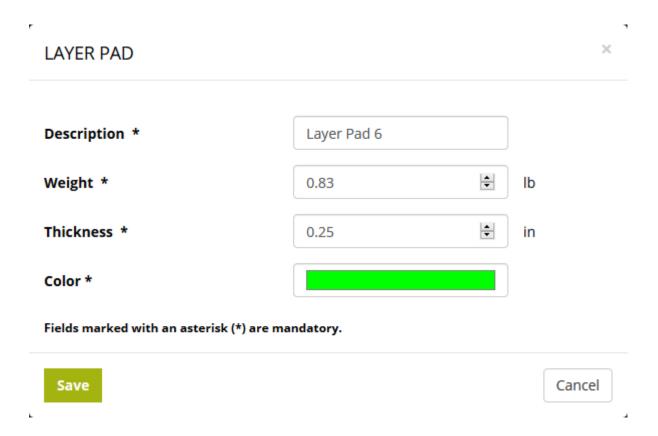
To define a new format load profile:

- 1. Click The gear icon > Databases > Format Load Settings.
- **2.** Click the measurement system from the drop-down list. Metric and Imperial have separate profiles.
- **3.** Select the desired addition in the list of additions on the left. Cape Pack Cloud shows the existing profiles for that addition.

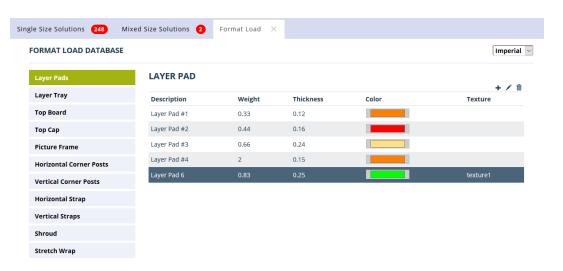


- **4.** Click the plus sign (+) above the table to add a new profile.
- **5.** Enter the parameters for the profile and click **Save**.





6. The new profile appears in the table. Continue adding profiles as desired.



11.2. Changing Individual Format Load Profiles

To change a format load profile:

1. Click The gear icon > Databases > Format Load Settings.



- **2.** Click the measurement system from the drop-down list. Metric and Imperial have separate profiles.
- **3.** Select the desired addition in the list of additions on the left. Cape Pack Cloud shows the existing profiles for that addition.
- **4.** Select the desired format load profile in the table of profiles. The plus sign at the top right of the table changes to show more actions.

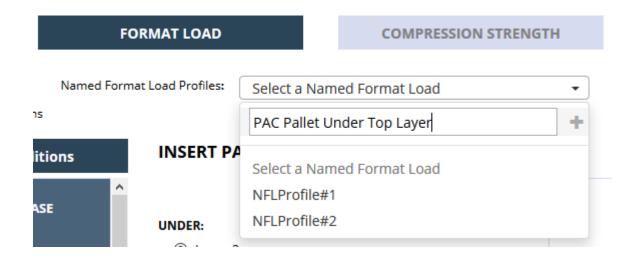


- **5.** To change the profile, click the pencil icon and change the fields as desired. Click **Save** when done
- **6.** To delete the profile, click the trash can icon. Cape Pack Cloud will ask you to confirm the deletion and also gives you the option to not be asked again for this session. Click **OK** to perform the deletion.

11.3. Defining Format Load Profiles

To start defining Format Load profiles (a group of individual profiles for layer actions and additions):

- 1. Open a solution and make any desired changes on the Format Load tab.
- 2. Click the Format Load Profiles drop-down list box.
- 3. Click inside the Save As New Format Load Profile field.
- **4.** Type a name for the new profile.



5. Click the plus sign (+). Cape Pack Cloud saves the Format Load Profile.



11.4. Working with Format Load Profiles

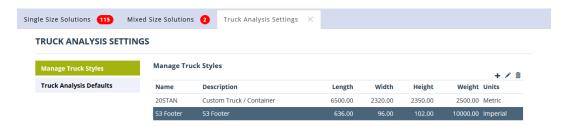
If you apply a Format Load Profile to a solution and then change it on the Format Load tab, Cape Pack Cloud will tell you that it has changed. You can then update the Format Load Profile by clicking **Update <name of the profile>**, or you can save it as a new name by entering the new name in the Save As New Format Load Profile field and clicking the plus sign (+).

To delete a Format Load Profile, click the Format Load Profiles drop-down list box, hover over the name of the profile to delete, and click the trash can icon. Cape Pack Cloud will ask you to confirm the deletion so click **OK**.

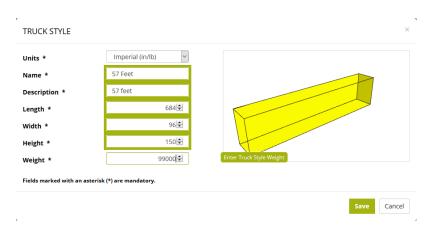
11.5. Managing Truck Styles

To manage truck styles, do the following:

1. Click The gear icon > Databases > Truck Analysis Settings.



2. To add an entry, click the plus sign and enter the desired values for the fields. Click **Save** when done.



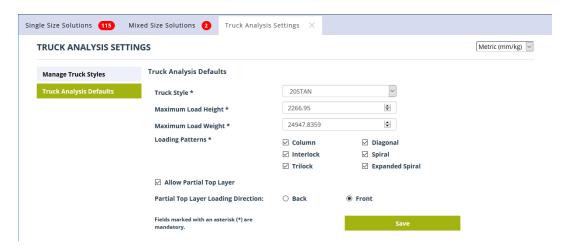
- **3.** To change an entry, select it in the list, click the pencil icon, change the values as desired, and click **Save**.
- **4.** To delete an entry, select it in the list, click the trash can icon, and click **OK** to confirm the deletion.



11.6. Setting Truck Analysis Defaults

Context for the current task

- 1. Click The gear icon > Databases > Truck Analysis Settings.
- 2. Click Truck Analysis Defaults.



- **3.** You can have a different default truck for each units system. Choose the units at the top right of the window.
- **4.** Set the truck defaults as desired.
- **5.** Click **Save** when done.
- **6.** Repeat, if desired, for the other units system.