



National Fenestration Rating Council Incorporated

TEST LAB USER MANUAL EXCEL EXCERPT_[E0A0]

Excel spreadsheet submittal in the NFRC Certified Products Database 2.0

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1. INTRODUCTION

This document is an extraction from the NFRC Test Lab CPD 2.0 User Manual and will only provide requirements to the formatting and completion of the NFRC CPD Test Upload Spreadsheet v3.04.

The CPD will have the capability to accept this XLS file type until December 31, 2016. This version will be sunset on January 1, 2017 and will no longer be able to be submitted into the CPD. After this date, test laboratories shall use the CSV file type for uploads which can be downloaded at the link provided below.

2. SIMULATION LAB EXCEL SUMMARY SPREADSHEET

The testing summary spreadsheet for U-factor, Solar Heat Gain Coefficient, Visible Transmittance, and Condensation Resistance was designed to allow for an efficient transfer of testing data into the NFRC Online Certification Products Database (CPD). This section will discuss the various components of the testing summary spreadsheet.

The Excel and CSV simulation summary spreadsheets can be located on the CPD Info web page on the NFRC website: <http://nfrccommunity.site-ym.com/default.asp?page=CPD20Info>.

The user shall use Test Upload Spreadsheet version 3.04.

The spreadsheet is divided into two parts: the header section, which contains the manufacturer and product line information; and the product rating section, which contains the rating values and individual product information.

Refer to Section 3.3 for the requirements for each field.

2.1 Header Section – Product Line Information

Figure 3a through Figure 3c depicts the header section, which are contained in rows from 1 to 8.

Figure 3a

	A	B	C	D	E	F	G	H	I	
1	Mfr Name:	123XYZ Company								
2	Series/Model #:	Test #001a								
3	Operator Type:	VSDH								
4	Thermal Break Type:	N							CPD Number	
5	Report Type:	New								
6										
7	Data Check v. 3.03	Data Checked:								
8	CPD2.0									

Figure 3b

	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
1	Data Check			NFRC 2004 Testing Data Upload Form											
2															
3															
4															
5															
6															
7															
8															

Figure 3c

	AV	AW	AX	AY	AZ	BA	BB
1	Data Check						
2							
3	Specimen Size: 1200mm x 1500mm						
4							
5							
6	Test Lab Code: TNFR						
7	Rating Procedure: 2004						
8							

2.1 Product Rating Section – Individual Product Information

Figure 3d through Figure 3h depicts the header section, which are from Row 10 and below.

Figure 3d

	A	B	C	D	E	F	G	H	I	J
10	MfrProdCod (255 Characters)	Product Number	Pane Thickness #1	Pane Thickness #2	Pane Thickness #3	Pane Thickness #4	Pane Thickness #5	Pane Thickness #6	Pane Thickness #7	Pane Thickness #8
11	Thermal Test	000	0.125	0.135						
12										
13	SHGC	001	0.125	0.125						
14										
15										
16										
17	CR	001	0.125	0.125						
18										
19	Air Leakage	001	0.125	0.125						

NOTE: The words “Thermal Test” is required to stay in Column A in the row associated with the thermal test data.

Figure 3e

	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE
10	Gap 1	Gap 2	Gap 3	Gap 4	Gap 5	Gap 6	Gap 7	Gap Fill 1	Gap Fill 2	Gap Fill 3	Gap Fill 4	Gap Fill 5	Gap Fill 6	Gap Fill 7	% of Gap Fill 1	% of Gap Fill 2	% of Gap Fill 3	% of Gap Fill 4	% of Gap Fill 5	% of Gap Fill 6	% of Gap Fill 7
11	0.500							ARG							95						
12																					
13	0.500							ARG							95						
14																					
15																					
16																					
17	0.500							ARG							95						
18																					
19	0.500							ARG							95						

Figure 3f

	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU
10	Emissivity Surface 1	Emissivity Surface 2	Emissivity Surface 3	Emissivity Surface 4	Emissivity Surface 5	Emissivity Surface 6	Emissivity Surface 7	Emissivity Surface 8	Emissivity Surface 9	Emissivity Surface 10	Emissivity Surface 11	Emissivity Surface 12	Emissivity Surface 13	Emissivity Surface 14	Emissivity Surface 15	Emissivity Surface 16
11		0.022														
12																
13		0.022														
14																
15																
16																
17		0.022														
18																
19		0.022														

Figure 3g

	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI
10	Tint	Shading System	Spacer	Grid Type	Grid Size	Frame Emissivity	Frame Absorptance	Frame Type	Sash Type	Door Description	Door Core Fill	Door Skin Material	Door Substructure (Edge)	Door Panel Material
11	LE		A1-S	N		0.9	0.3	vy	vy					
12														
13	LE		A1-S	Y	.75	0.9	0.3	vy	vy					
14														
15														
16														
17	LE		A1-S	N		0.9	0.3	vy	vy					
18														
19	LE		A1-S	N		0.9	0.3	vy	vy					

Figure 3h

	BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS
	U-factor(s)	U-factor(s)	SHGC	VT	Condensation Resistance	Air Leakage				
10							Test Procedure	Test Report Number	Test Date	Test Report Revision Date
11	0.350	0.362					102	TNFR-111607-001a	11/16/07	11/28/07
12										
13			0.780				201	TNFR-111607-001b	11/16/07	11/28/07
14										
15										
16										
17					38		500	TNFR-111607-001c	11/16/07	11/28/07
18										
19						0.1	400	TNFR-111607-001d	11/16/07	11/28/07

2.2 Spreadsheet Formatting Requirements

The following matrix contains fields and the corresponding description that have to be entered into the spreadsheet.

Note: Fields that are required to match data in the NFRC Certified Products Directory must match the exact syntax.

Table 2-1

Field Name	Description
Mfr Name	<ul style="list-style-type: none"> The name of the manufacturer who owns the product for which the testing data was generated. Manufacturer name shall be same as listed in the license agreement and as listed in the CPD.
Series/Model #	<ul style="list-style-type: none"> The series or model name, as specified by the manufacturer. The listed Series/Model # will be displayed in NFRC Certified Products Directory (CPD).
Operator Type	<ul style="list-style-type: none"> The Operator Type as listed in NFRC 100 Table 4-3, which applies to the entire product line. Match against the NFRC Database Codes.
Thermal Break Type	<ul style="list-style-type: none"> The Thermal Break Type which applies to the entire product line. Thermal break code must be filled in; if non-applicable - Thermal Break = N Match against the NFRC Database Codes.
Report Type	<ul style="list-style-type: none"> New, recertification, revision or addendum report type (Use arrow)
CPD Number	<ul style="list-style-type: none"> This field will be used for the following report types: revision, addendum, and recertification. Use alpha numeric CPD number, i.e. ABC-B-72
Specimen Size	<ul style="list-style-type: none"> The dimensions (height x width) of the product tested in mm, i.e. 2000mm x 2000mm.
Test Lab Code	<ul style="list-style-type: none"> The identification code which NFRC has assigned to the testing lab which prepared the report. Lab codes must be entered correctly on spreadsheets and correspond to the user that is logged in. If the code and the user's lab do not match, the user will not be able to delete or submit a spreadsheet.
Rating Procedure	<ul style="list-style-type: none"> The rating procedure used to prepare the report.

Field Name	Description
Data Checked	<ul style="list-style-type: none"> This is a read-only field that indicates when the local validation was last run on the spreadsheet.
MfrProdCode	<ul style="list-style-type: none"> This is a free-form field that manufacturers can use to enter additional information about the (reference or option) product. IA will be capable to edit this field.
Product Number	<ul style="list-style-type: none"> Product number ZERO (which will be denoted as 0) shall always be the validation option for comparison to the simulation. Currently, CPD 2.0 only accepts thermal validation tests. <p>Note: (Details for Phase 2 Implementation)</p> <ul style="list-style-type: none"> This field contains the internal number that the database uses to identify each product for each test procedure. (i.e., if the product line contains more than 3 SHGC tests, the first test will contain a Product Number of 001, the second will be 002, and the last will be 003).
Pane Thickness #[1 to 8]	<ul style="list-style-type: none"> Contains the thickness of the pane located at the specified position. The number represents the (relative) location of the pane within the glazing assembly beginning from the exterior. The field shall be rounded and contain a minimum number of 3 decimals and a maximum of 6 decimals. Values are expected to be within the range: 0.0 < x ≤ 1.0 (L) Test for existence versus # of Pane ID
Gap [1 to 7]	<ul style="list-style-type: none"> Contains gap distance between successive panes (in inches) The number represents the (relative) location of the gap within the glazing assembly beginning from the exterior. The field shall be rounded and contain a minimum number of 3 decimals and a maximum of 6 decimals. (L) Test for existence versus # of Pane Thickness
Gap Fill (1 to 7)	<ul style="list-style-type: none"> Contains the gas name which is used to fill the gap The number represents the (relative) location of the gap within the glazing assembly beginning from the exterior. This is a text field of a maximum 3 characters from the NFRC Database Codes – i.e., AR3 (L) Test for existence versus # of Gap fills (S) Match against the NFRC Database Codes
% of gap fill [1 to 7]	<ul style="list-style-type: none"> The gas fill concentration contained between glazing layers beginning from the exterior. The user shall only state the percentage of inert gases present; the application will assume the difference is air. If multiple inert gases are present, the user shall separate them using “/” (i.e. 80% argon, 10% krypton mixture shall be shown as “80/10”). % gas fill cannot be a decimal and must be a whole number .
Emissivity Surface [1 to 16]	<ul style="list-style-type: none"> The value of the emissivity of the surface beginning from the exterior exposed environment side. The user shall not enter the emissivity of for clear glass or tinted clear glass (typically 0.840) This is a decimal field of 3 decimals / 5 characters – i.e., 0.101 (S) Test for existence versus listed Pane ID

Field Name	Description
Tint	<ul style="list-style-type: none"> The color code for the tint of the glass, film, or dynamic glazing This is a text field of 2 characters from the NFRC Database Codes – i.e., BZ The hierarchy is tints and then clear (S) Match against the NFRC Database Codes
Shading System	<ul style="list-style-type: none"> Currently not in use (leave cell blank)
Spacer	<ul style="list-style-type: none"> The spacer system(s) used in the simulation of the product line.. Note: this field shall be populated and not be left blank, if there is no spacer, e.g single pane units, user will populate with 'N'. If multiple spacers are present, a comma shall be used to separate the different spacer systems. This is a text field of 4 characters for each spacer system listed from the NFRC Database Codes – i.e., A1-D,CS-D (S) Match against the NFRC Database Codes
Grid Type	<ul style="list-style-type: none"> This includes grilles between the panes, simulated divided lite, attached and true divided lite. Note: this field shall be populated and not be left blank. This is a text field of 1 character for each grid type listed from the NFRC Database Codes – i.e., N, G (S) Match against the NFRC Database Codes
Grid Size	<ul style="list-style-type: none"> The designation for grids less than 1” in height shall be listed as 0.75 and the designation for grids greater than or equal to 1” in height shall be listed as 1.5. This is a decimal field from the NFRC Database Codes – i.e., 0.75 (S) Match against database (DB) values
Frame Emissivity	<ul style="list-style-type: none"> The emissivity of the frame surface finish This is a decimal field with 1 decimal / 3 characters – i.e., 0.9
Frame Absorptance	<ul style="list-style-type: none"> Contains the frame absorptance value. Use 0.5 for glazed / sloped / curtain wall products; use 0.3 for all other product types. This is a decimal field with 1 decimal / 3 characters – i.e. 0.5 (S) Match against the NFRC Database Codes
Frame Type	<ul style="list-style-type: none"> Contains the frame type code of the product type from the NFRC Database Codes. Note: this field shall be populated and not be left blank. Frame code must be filled in: If non-applicable - Frame code = N This is a text field of 2 characters (xx) for frame type from the NFRC Database Codes – i.e., VY (S) Match against the NFRC Database Codes
Sash Type	<ul style="list-style-type: none"> Contains the sash type code of the product type from the NFRC Database Codes. Note: this field shall be populated and not be left blank. This is a text field of 2 characters (xx) for frame type from the NFRC Database Codes – i.e., VY Sash code must be filled in; If non-applicable - Sash code = N (S) Match against the NFRC Database Codes

Field Name	Description
Door Description	<ul style="list-style-type: none"> A description of the door panel configuration from the NFRC Database Codes This is a text field of 2 characters – i.e., EM (S) Match against the NFRC Database Codes
Door Core Fill	<ul style="list-style-type: none"> A description of the material used to enhance thermal, acoustical or structural performance of the door from the NFRC Database Codes This is a text field of 2 characters – i.e., EP (S) Match against NFRC Database Codes
Door Skin Material	<ul style="list-style-type: none"> A description of the covering which is applied to the door core for the primary purpose of protection from environmental elements that may or may not add structural integrity from the NFRC Database Codes This is a text field of 2 characters – i.e., GS This cell will be left blank when uploading a window S) Match against the NFRC Database Codes
Door Substructure (Edge)	<ul style="list-style-type: none"> A description of the structural members of door composed of, but not limited to, wood, wood products, metal, composites, or other reinforcing materials that is found between the Door Skin Material from the NFRC Database Codes This is a text field of 2 characters – i.e., WD This cell will be left blank when uploading a window (S) Match against the NFRC Database Codes
Door Panel Material	<ul style="list-style-type: none"> A description of the raised panel section of a door that is either an individual component of the door or it may be a simulated panel that is created in the embossing of the Door Skin Material from the NFRC Database Codes This is a text field of 2 characters – i.e., FG This cell will be left blank when uploading a window (S) Match against the NFRC Database Codes
U-Factor (s) Measured Value	<ul style="list-style-type: none"> The U-Factor representative of the total fenestration system of the measured value. This is a decimal field of 6 decimal places / 8 characters – i.e., 0.232342
U-Factor (st) Standardized Value	<ul style="list-style-type: none"> The U-Factor representative of the total fenestration system of the standardized value This is a decimal field of 6 decimal places / 8 characters – i.e., 0.232342
SHGC	<ul style="list-style-type: none"> The Solar Heat Gain Coefficient of the total fenestration system. This is a decimal field of 3 decimal places / 5 characters – i.e., 0.345
VT	<p>Note: At the time of publication, the NFRC test procedure was under development. This cell is a placeholder and will be used upon implementation of a VT test procedure.</p> <ul style="list-style-type: none"> The Visual Transmittance of the total fenestration system. This is a decimal field of 3 decimal places / 5 characters – i.e., 0.345
Condensation Resistance	<ul style="list-style-type: none"> The total fenestration product condensation resistance. CR cannot be a decimal and must be a whole number This is a number field of 2 digits, no decimals – i.e., 50
Test Procedure	<ul style="list-style-type: none"> The corresponding NFRC test procedure for the rating and product description. (i.e., 102 for NFRC Thermal Test)

Field Name	Description
Test Report Number	<ul style="list-style-type: none"> The name or number of the report as specified by the testing lab
Test Date	<ul style="list-style-type: none"> The date the product was tested
Test Report Revision Date	<ul style="list-style-type: none"> The date upon which the report was created. <p>Note:</p> <ul style="list-style-type: none"> This date is for the original report date and all subsequent revisions.

2.3 Using the Upload Spreadsheet

NFRC-accredited testing laboratories are required to use the summary sheet to upload data to the NFRC Certification Database. The summary spreadsheet shall be used as follows:

- The spreadsheet shall not be modified.
- Filename of the summary spreadsheet shall not exceed 50 characters including blank space in file name nor include bad characters:

Bad filename characters include: " = + / ' < | > * ?) , ^ % @ & # % ~ ! () _ { } ~ ` \$ [] ÷ ™ © "
- The columns headers and titles are fixed and shall not be changed from the format supplied to work in the application.
- Each field holds one value.
- Do not remove non-applicable fields from the spreadsheet.
- Correct formatting of CPD Number for addendum / simple addendum / recertification / revision report types must be entered as "XYZ-Z-17" not "XYZ-Z-017"

Refer to the NFRC Test Lab CPD 2.0 User Manual E0A2, Section 3.4 for the remainder of spreadsheet setup instructions.

3. UPLOADING FILE

After logging in, the user is taken to the Home tab of the application where the Test Lab will upload the client's data to the database. The current testing summary spreadsheet can be located on the technical documents web page on the NFRC website: <http://www.nfrc.org/technicaldocs.aspx>.

Figure 5a: Testing Lab Home Screen

The screenshot shows the 'CERTIFIED PRODUCTS DIRECTORY' interface. At the top, there are navigation tabs: Home, Lab Reports, IA Info, My Account, Codes, and Notification. Below the navigation is a 'Log off' link and a 'Welcome' message. The main content area is divided into two sections. The left section, titled 'FIND MANUFACTURER', has radio buttons for 'By Name' (selected) and 'By Code or ID'. There is a search input field and 'Search' and 'Show All' buttons. Below this is a table of manufacturers with columns for Name, Code, and ID. The right section, titled 'Excel File Upload', has a yellow header. It contains a 'Selected Manufacturer' dropdown (set to '<None Selected>'), a 'Report Type' dropdown (set to 'Test'), and a 'Lab Type' dropdown (set to 'Test'). There is a 'Data File' input field with a 'Browse...' button. Below the input field is a note: '(Please select a file after all other entries have been made.)' and a requirement: 'You must test all Excel formatted Sim Lab Reports with the Lab Report Test before upload.' followed by an 'Add Report' button. At the bottom of the 'Excel File Upload' section, there is a link: 'To upload a CSV formatted lab report please go [here](#).'

#	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	[All]
	A	Window, Inc.		AWN																							
	A&M Vinyl Windows LLC		AMC																								
	A.B.A. Fenestration Inc.		ABA																								
	A.J Manufacturing, Inc.		AJM																								
	ABC Window Contractors, Inc.		AWC																								
	ABC Window Systems		ABC																								
	Abritek Windows and Doors		ABR																								
	Acadia Windows and Doors		AWD																								
	Acadian Iron Works		ACD																								

3.1 Adding a Report to the CPD

To upload test data utilizing the test upload spreadsheet start at the Home screen.

3.1.1 Upload Excel or CSV file types

To Upload an Excel file, select the hyperlink in the sentence: “To upload an Excel formatted lab report, please go [here](#).” The page will refresh; make sure the top of the page reads “Excel File Upload”.

To upload a CSV file, select the hyperlink in the sentence: “To upload a CSV formatted lab report please go [here](#).” Instructions on how to upload a CSV can be reviewed in the “CPD Test Lab CPD User Manual E0A2.”

3.2 Selecting a Manufacturer

The Lab user can search for different manufacturer/clients either by Name, a three-character manufacturer alpha code or manufacturer numeric ID, or by scrolling through the list.

Figure 5b: Hyperlinks to Select a Manufacturer

Name	Code	ID
A Window, Inc.	AWN	854
A&H Windows	ECM	326
ABC Window Company, Inc.	ABC	1
ABC Window Contractors, Inc.	AWC	341

To select the desired manufacturer, click on the manufacturer hyperlink, which will result in the manufacturer name being placed to the right of the Selected Manufacturer tab.

Figure 5c: Selected Manufacturer is Displayed

Selected Manufacturer: 860 - 123XYZ Company

Report Type: [dropdown]

Lab Type: Test [dropdown]

Data File: [text input] [Browse...]

(Please select a file after all other entries have been made.)

You must test all Sim Lab Reports with the [Lab Report Test](#) before upload. [Add Report]

NOTE: The manufacturer name must be spelled out exactly the same in the upload spreadsheet for the upload to work properly.

An Excel file is located on the CPD Info page that contains the current list of Manufacturers. <http://www.nfrc.org/CPDInfo.aspx>

3.2.1 Select Report Type

Using the Report Type pull down menu, choose the report type. The report type shall match the report type listed on the upload spreadsheet.

- Addendum: A certified product line in which “new” individual products are added to the existing product line matrix obtains an “Addendum” report type upload. The addendum will add the rating of a new individual product(s) to the existing product line that cannot be simulated. **NOTE: This report type is not required until ALL test only products are uploaded to the CPD.**

- **New:** A product line that is obtaining initial certification authorization in accordance with the PCP obtains a “New” report type. “New” uploads also encompass existing product line reports that are issued to another NFRC licensee; these reports are referred to as “Reissued” report types. The upload shall contain original CAR information to validate a simulation containing the validation option listed as ZERO (0) in the Product Number column. Refer to section 3.4.2.
- **Recertification:** A product line that has been previously certified and is obtaining recertification in accordance with the PCP obtains a “Recertification” report type. The upload shall contain original CAR information to validate a simulation containing the validation option listed as ZERO (0) in the Product Number column. Refer to section 3.4.3.
- **Revision:** A certified product line requiring a revision to one or several of its individual product options obtains a “Revision” report type upload. The revision can affect the data in the header as well as other separate CAR rating values. All original data shall be archived and accessible. **NOTE: This report type is not required until ALL test only products are uploaded to the CPD.**

Figure 5e: Select a Report Type

Selected Manufacturer: 860 - 123XYZ Company

Report Type:

Lab Type:

Data File:

er all other entries have been made.)

Lab Reports with the [Lab Report Test](#) before upload.

3.2.2 Select Data File and Add Report

Utilizing the Browse button, select the Test Upload Spreadsheet for the specific manufacturer. When the correct Data File is displayed, click the ADD REPORT button.

Figure 5f: Choosing a Data File

Selected Manufacturer: 860 - 123XYZ Company

Report Type:

Lab Type:

Data File:

(Please select a file after all other entries have been made.)

You must test all Sim Lab Reports with the [Lab Report Test](#) before upload.

Figure 5g: Uploading process - uploading

Code	ID
XYZ	860
MMM	1323
TWW	1362
FSW	889

Selected Manufacturer: 860 - 123XYZ Company

Report Type: New

Lab Type: Test

Data File: C:\NFRC\Database Committee\Uploadsheet\Manual\Physical Testing Initial.xls

(Please select a file after all other entries have been made.)

You must test all Sim Lab Reports with the [Lab Report Test](#) before upload.

Uploading file : 0%

Figure 5h: Uploading process - registering

Code	ID
XYZ	860
MMM	1323
TWW	1362
FSW	889

Selected Manufacturer: 860 - 123XYZ Company

Report Type: New

Lab Type: Test

Data File: C:\NFRC\Database Committee\Uploadsheet\Manual\Physical Testing Initial.xls

(Please select a file after all other entries have been made.)

You must test all Sim Lab Reports with the [Lab Report Test](#) before upload.

Registering file

If there are errors with the upload, the errors will be listed on the screen. Record the errors and adjust the spreadsheet if applicable. If a spreadsheet cannot upload properly, utilize the CPD 2.0 Issue form located at <http://www.nfrc.org/CPDInfo.aspx> and contact NFRC Staff.

The test data file detail screen will be displayed if there are no errors.

3.2.3 Thermal Test Validation Option Numbering

The thermal test that will be used for the validation option shall be listed as ZERO "0" in the upload spreadsheet under Product #.

NOTE: An upload spreadsheet can possibly contain a series of thermal (or other) tests in one upload spreadsheet for that product line; therefore, the CPD 2.0 will designate the option containing a product number of "0" as the test validation option.

As previously stated, CPD 2.0 only accepts validation test options.

For all other CPD related actions, refer to the NFRC Test Lab CPD 2.0 User Manual E0A2.