

Nebraska Department of Environment and Energy Dollar and Energy Saving Loans **Certification of Window and Door Replacement**

Window and door descriptions to be completed. IN FULL. by contractor

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 Responses such as "See attached" or "Unk 	(nown" will not be accepted
 Provide proof of Measured Performance 	or Construction Features●

FORM
23
WINDOW/DOOR
PAGE 1 OF 4

Loan Applicant Name			Contractor/Business Name	Phone Number	
				()	
Location or Address of Property to Receive Replacement Win	dows or Doors		Mailing Address		
City	State	Zip Code	City	State	Zip Code

WINDOW AND DOOR DESCRIPTIONS				
Manufacturer and	Quantity and		Check ✓ Compliance by: Measured Construction Performance Features	
Model Identification	Dimensions			
Vindows				Copy Total to Form 2, Line 8.
Sliding or swinging glass doors and $lac{1}{2}$ -lite or more sidelites				
Exterior (slab) doors and ¼-lite or less sidelites	Provide dimensions of door AND dimensions of glass or "No Glass"			Copy Total to Form 2, Line 9.

SHOW COMPLIANCE with Dollar & Energy Saving Loan Program requirements (see table below). You must provide copies of manufacturer's documents proving that the particular window, door, or sidelite has the required measured performance or construction features.

The "Construction Features●" method may ONLY be used for vehicle garage doors, commercial (store front) windows and sash replacements which have not been NFRC tested. All other windows, doors and sidelites must use NFRC Measured Performance + test data. A complete description of the product being provided must be included on either the bid or this form and must match the NFRC data or other manufacturer's documents (see instructions inside).

DOLLAR AND ENERGY SAVING LOAN PROGRAM REQUIREMENTS				
Measured Performance ◆	Construction	Features● (Vehicle Garage Doors, Commercial Windows and Sashes ONLY – Must Include ALL features)		
Windows and glass Whole unit R ≥ 3.85	Commercial	Glazing — At least two panes for door, three panes for windows, and a low-e coating		
doors and ½-lite or or more sidelites U < 0.26 Btu/hr-ft²-F	Windows and Sashes	Fill Gas — Argon, krypton, carbon dioxide, or some combination of these		
0 <u>3</u> 0.20 Btd/iii 10 1		Frame — Wood or vinyl, or aluminum with thermal breaks through all members		
Exterior doors Whole unit R ≥ 5.0 and ¼-lite or less — or	Vehicle Garage Doors	Core — Material has an insulating values of at least R-8.0		
sidelites U ≤ 0.20 Btu/hr-ft²-F		Lites — Double glazed (if any), and cover no more than 10 percent of the door surface area		

Signatures

I hereby certify, under penalty of perjury, that the information provided above is true, correct and complete.

aian					
sign	Signature of Loan Applicant	Date			
here					
	Signature of Window/Door Contractor	Date			

SUBMIT THIS FORM ALONG WITH FORM 2, YOUR WINDOW/DOOR BID(S) AND THE DOCUMENTATION **IDENTIFIED ABOVE TO A PARTICIPATING LENDER**

This material was prepared with the support of the U.S. Department of Energy (DOE) Grant No. DE-FG26-07NT43200, American Recovery and Reinvestment Act of 2009 funds and Oil Overcharge Escrow funds. However, any opinions, findings conclusions or recommendations expressed herein are those of the author and do not necessarily reflect the views of DOE

INSTRUCTIONS, FORM 2.3 WINDOW/DOOR

- **1.** What do you need to provide to your lender?
 - A bid for the windows and doors you intend to replace.
- NFRC data showing the windows or doors meet minimum U-value requirements.
- This application form, completed with all required information. (Read note 2 below, and other instruction included with this form for details on bid requirements, NFRC data requirements and requirements for completing this form).
- **2.** All information on the contractors bid, this form, submitted NFRC data, and on the NFRC website must match and be consistent. A detailed explanation of the type of information required is included in the instructions on pages 3 and 4. For garage vehicle doors, commercial (store front) windows, and replacement sashes, that are not NFRC tested, construction features may be used in place of NFRC data. See note 3 below and page 4 for information on construction features. All applicable portions of this form must be completed. You may not use the term "see attached."
- **3.** When showing program compliance using the "construction features" method, provide copies of manufacturer's documents which show the features are an available option. Those features must be shown on the bid or this form as part of the agreement to the customer to provide those features. The construction features method is ONLY allowed on vehicle garage doors, commercial (store front) windows, and sash replacements, and ONLY when the product has not been NFRC tested. Provide dimensions of vehicle garage doors and the area of glass in those doors, or state that there is no glass.
- **4.** Window/door/sidelite dimensions must be listed on this form and associated with the brands/models/types being provided.



World's Best Window Co.

Millennium 2000⁺
Vinyl-Clad Wood Frame
Double Glazing • Argon Fill • Low E
Product Type: **Vertical Slider**

ENERGY PERFORMANCE RATINGS

U-Factor (U.S./I-P)

Solar Heat Gain Coefficient

0.24

0.30

ADDITIONAL PERFORMANCE RATINGS

Visible Transmittance

Air Leakage (U.S./I-P)

0.57

0.1

Manufacturer stipulates that these ratings conform to applicable NFRC procedures for determining whole product performance. NFRC ratings are determined for a fixed set of environmental conditions and a specific product size. NFRC does not recommend any product and does not warrant the suitability of any product for any specific use. Consult manufacturer's literature for other product performance information.

www.nfrc.org

The particular window described on the sample NFRC label above has a U-factor of 0.24. Since this is less than the required U-factor of 0.26 listed in the table on page 1 of this form, this unit can be financed with a Dollar and Energy Saving Loan.

- **5.** The total rough opening area of existing windows, doors, and sidelites may NOT be increased under this program. Existing rough opening area may be decreased. (For replacing rough openings with solid panels or walls use Form 2, line 4)
- **6.** NFRC U-values are total unit U-values, as opposed to Center of Glass (COG) U-values. Whole, or total unit U-values take into account the U-value of all components of a unit, while COG takes into account only the U-value of the glass. Total unit U-value can vary greatly between brands having the same or similar type glass.

Look for the NFRC sticker when your purchase arrives to ensure performance from your energy dollar.

When using whole, or total unit U-values, the R-value can be found by dividing 1 by the U-value (R = 1/U). Conversely, the U-value can be found by dividing 1 by the whole, or total unit R-value (U = 1/R)

NFRC data for various windows can be viewed by visiting the NFRC website at www.nfrc.org , and clicking on the Certified Products Directory search links. NFRC web data may be used as proof of compliance, however, the window description on the bid must then also contain the complete NFRC CPD#(s) specific to the product being provided, and the data must be from an NFRC CPD# search. See details that follow.



World's Best Door Co.

Entrance Door CPD#000-x-000

Insulated Steel Wood Edge Door

ENERGY PERFORMANCE RATINGS Product U-Factor/Solar Heat Gain Coefficient (SHGC) Description* Default Frame** 1/4 Lite 1/2 Lite 3/4 Lite **Full Lite** Wood ≤410† <900+ ≤1100† >1100† 0.30 _ 0.18 0.36 0.40 2/A1/na/AIR/0.250 0.330.40 0.19 0.160.26 0.26 2/A1 /.020(3)/ARG/0.750 0.310.36 0.180.28 0.33 0.342/A1/na/AIR/0.675 0.34 0.40 0.26 🗲 0.20 0.27 0.163/S5/na/AIR/0.250 0.35·-- 0.40 U-Factor **0.19** SHGC **0.04** Flush/Embossed Manufacturer stimulates that these ratings conform to applicable NFRC procedures for determining whole product performance. NFRC ratings are determined for a fixed set of environmental conditions and a any product and does not warrant the suitability of any specific product size. NFRC does not recommend product for any specific use. Consult manufacture 's literature for other product performance information. #glazing layers / spacer type / low-e emissivity urface) / gap fill / gap width (na=not applicable) *per NFRC 100 Section B3.24 † square inches vw.nfrc.org

Two Full Lite Doors would comply as Patio Doors < 0.26 —

→ Doors Do Not Comply

Doors Comply < 0.20 ◀

WINDOW/DOOR PAGE 3 OF 4

INSTRUCTIONS, FORM 2.3 WINDOW/DOOR

Along with Form 2, and Form 2.3 Window/Door, what do you need to submit? You will need to submit a copy of your contractors bid and a copy of the window manufacturer's data which shows proof of loan program compliance.

What does the contractor's bid have to include, and what kind of manufacturer's data is needed? The contractors bid must include a complete description of what the contractor is promising to provide. The description on the contractors bid must match the description on the manufacturer's data that is provided, and in the case of residential windows, doors and sidelites, both of those descriptions must match information on the National Fenestration Ratings Council (NFRC) website. The customer/contractor has three options for showing loan program compliance for most residential windows, doors, and sidelites.

Option 1. A readable copy or picture of an NFRC sticker that can be verified on the NFRC website by Brand, Model, Window/ Door/Sidelite Style or Type, and Glass Type, and which shows an NFRC tested U-value meeting the requirement shown on the front of Form 2 Window/Door.

What must be listed and match:

Contrator's Bid (must list each)

- 1. Manufacturer
- 2. Series or Model
- 3. Window/Door/Sidelite Style
- 4. Glass Type (# panes, low-e, gas)
- 5. Frame/Sash Material
- 6. Amount of Glass (doors and sidelites only)
- 7. State the size of each unit

NFRC Sticker (must show each)

- 1. Manufacturer
- 2. Series or Model
- 3. Window/Door/Sidelite Style
- 4. Glass Type (# panes, low-e, gas)
- 5. Frame/Sash material.
- 6. Amount of Glass (doors and sidelites only)

NFRC Website

- 1. Manufacturer
- 2. Series or Model
- 3. Window/Door/Sidelite Style
- 4. Glass Type (# panes, low-e, gas)
- 5. Frame/Sash material.
- 6. Amount of Glass (doors and sidelites only)

(For doors and sidelites the amount of glass should be listed as either, no glass, quarter, half, three quarter, or full lite) (If NFRC stickers do not contain all listed, or matching information, they cannot be used – use other option)

OR, when a readable copy or picture of an NFRC sticker is not available, then the contractor may provide,

Option 2. A copy of a single page, per Window/Door/Sidelite Style or Type, from the manufacturer's published hard copy catalog, which includes NFRC tested total unit U-values and is specific to the Brand, Model, Style or Type, and Glass Type indicated on the contractor's bid, and that can be verified on the NFRC website.

What must be listed and match:

Contrator's Bid (must list each)

- 1. Manufacturer
- 2. Series or Model
- 3. Window/Door/Sidelite Style
- 4. Glass Type (# panes, low-e, gas)
- 5. Frame/Sash Material
- 6. Amount of Glass (doors and sidelites only)
- 7. State the size of each unit.

Manufacturer's Catalog (must show each)

- 1. Manufacturer
- 2. Series or Model
- 3. Window/Door/Sidelite Style
- 4. Glass Type (# panes, low-e, gas)
- 5. Frame/Sash material.
- 6. Amount of Glass (doors and sidelites only)
- 7. States U-Values are NFRC tested

NFRC Website

- 1. Manufacturer
- 2. Series or Model
- 3. Window/Door/Sidelite Style
- 4. Glass Type (# panes, low-e, gas)
- 5. Frame/Sash material.
- 6. Amount of Glass (doors and sidelites only)

(For doors and sidelites the amount of glass should be listed as either, no glass, quarter, half, three quarter, or full lite) (If catalog pages do not contain all the listed, or matching information, they cannot be used - use other option) (Spread sheets, web pages, and other editable material may not be used in lieu of hard copy catalog pages)

OR, if the manufacturer's catalog does not include the detail required in option 2. above, then,

Option 3. A copy of the <u>results from an NFRC CPD number search</u>. The contractor will need to obtain from the manufacturer, the actual, complete, NFRC Certified Products Directory (CPD) number(s) for the window(s)/door(s)/sidelite(s) they intend to install. The contractor will then need to search the NFRC's CPD using the CPD number search tool, and print the search results page for submittal.

What must be listed and match:

Contrator's Bid (must list each)

- 1. Complete NFRC CPD number(s)
- 2. Manufacturer
- 3. Series Name
- 4. Window/Door/Sidelite Style (operator type)
- 5. Glass Type (# panes, low-e, gas)
- 6. Frame/Sash Material
 7. Amount of Glass (doors and sidelites only)
- 8. State the size of each unit
- 9. A note providing the location on the unit of permanantly affixed CPD number

NFRC CPD number search page

- 1. Complete NFRC CPD number
- 2. Manufacturer
- 3. Series Name
- 4. Window/Door Sidelite Style
- 5. Glass Type (# panes, low-e, gas)
- 6. Frame/Sash Material
- 7. Amount of Glass (doors and sidelites only)

(For doors and sidelites the amount of glass should be listed as either, no glass, quarter, half, three quarter, or full lite)

(NFRC CPD numbers are minimum 10 to 18 characters, ABC-A-1-12345 or ABC-AB-123-12345-12345)

NFRC Data must be the results of a CPD number search, as opposed to full printed pages from the CPD)

Contractor Recomendation: If NFRC stickers do not contain all required information, or do not match what the contractor is selling, or if information on the NFRC website does not match catalog or sales data, the contractor may want to contact the manufacturer to request changes to NFRC stickers to include required or matching data, or that the manufacturer list their windows on the NFRC website so that they match the sales information provided by the manufacturer to the contractor.

INSTRUCTIONS, FORM 2.3 WINDOW/DOOR

Construction Features - Only used for commercial store front windows and doors, vehicle garage doors, and sash replacements that are not NFRC tested.

The application must include a copy of the **manufacturer's hard copy literature which shows the required construction features are either standard or an available option**. For aluminum commercial store front windows and doors, and for aluminum sash replacements, the contractor must include cross section views which show the thermal breaks through all members - frames, sashes, and/or door. The contractor's bid must also show that all of the required features are included in what he has promised to provide, by listing those features on the bid.

What must match:

Contractor's Bid

- 1. Manufacturer
- 2. Series or Model
- 3. Window/Door/Sidelite Style
- 4. Glass Type (# panes, low-e, gas)
- 5. Amount of Glass (garage vehicle doors only)
- 6. Core Material R-value (doors only)

Pages of Manufacturer's Catalog

- 1. Manufacturer
- 2. Series or Model
- 3. Window/Door/Sidelite Style
- 4. Glass Type (# panes, low-e, gas)
- 5. Amount of Glass (garage vehicle doors only)
- 6. Core Material R-value (doors only)
- 7. Section Views (only required to show thermal breaks for aluminum)

(For garage doors the area of the door, and of the glass, length times height, must be listed. If no glass is included, then it must be listed as such, i.e. "the garage vehicle doors will have no glass.")

Why does the Nebraska Department of Environment and Energy require all of this information, and why must it match? NDEE requires this information to insure materials meet loan program compliance, and to protect the consumer. Think of buying a new car. Would you expect the sticker on the window of that car to include the brand and model and to list all the accessories? Of course you would. Before you signed a commitment to buy that car, would you want that commitment to show exactly what you were buying? Yes to that as well. NDEE requires the contractor's bid to detail what it is that the contractor is promising to provide. This is required both as protection to the consumer, and to help clarify to the NDEE what is being proposed. The efficiency data must have a matching description in the same way that the mileage sticker of a compact economy hybrid does not apply to a less efficient gas guzzler. In quite the same way, if that mileage sticker did not list the brand, model, or type of engine, how could you tell what it applied too? For that reason, the NDEE requires that the data submitted as proof of loan program compliance must clearly define the window, door, or sidelite it represents, by including the brand, model, type of unit, type of glass, and for doors the amount of glass. All of those items must also be listed on your contractor's bid, showing you what he has promised to provide.

Why are CPD number searches required, as opposed to full printed pages from the CPD? CPD number searches are required to help speed the approval process, both on the contractor's end, and on the approval end. Full pages from the CPD contain a large amount of information. If that information is fit onto one page, the print will be much smaller than a CPD number search and harder to read, and after being faxed, may not be readable at all. In addition to being difficult to read and transmit, too often full page CPD printouts do not include the heading row, thus making a mystery out of the printed values. These issues then result in additional approval time as a result of requesting additional information from the contractor. The CPD number search is also required to help encourage window and door retailers to become familiar with the NFRC and the search tools available to them. But most importantly, using the CPD number search is the fastest way to obtain information for the window reported to the contractor by the manufacturer. This is as opposed to scrolling through multiple pages of the CPD to get to the correct CPD number that was reported. The CPD number search takes the contractor directly to the information needed. The CPD number search helps the contractor, the customer, and the Energy Office make the application as efficient as possible.

What if you can't find my windows, doors, or sidelites on the NFRC website? If your windows are not listed on the NFRC website, they most likely have not been tested to NFRC standards, and are not eligible for the loan program.

What if the windows are listed on the NFRC website, but sold under a different brand name, or model number? If this is the case, you, or your contractor, will need to request the manufacturer to list your brand or model number on the NFRC website. NDEE must be able to verify your windows are NFRC tested by viewing them on the NFRC website. That means that, except for commercial store front windows, garage vehicle doors, and sash replacements, only those windows which are listed on the NFRC website are eligible for the loan program. In addition, the data submitted as proof of loan program compliance must also match the brand, series or model, type, and glass features listed on NFRC.

Why can't you use information from a spreadsheet or web page? NDEE asks for proof of compliance to show accountability for the items that we approve. To do that we ask for information that is fairly permanent in nature, or not easily edited. We feel that copies of NFRC stickers, NFRC data from the manufacturer's hard copy catalog, or actual data from the NFRC website that is based on a CPD number search, best meets those requirements. Note: NDEE does accept information from downloadable Engineering or Architectural pdf format catalogs.

How do you get an NFRC sticker? You can only get an actual NFRC sticker from a window or door. NFRC stickers are regulated and can only be printed for the specific window or door they are to be attached to. However, for loan program purchases, the contractor can request the manufacturer to provide them with a readable copy or picture of the sticker.

Why does the NDEE require such a low U-value? The loan program was designed to promote the use of only the most efficient of materials and improvement projects. Efficiencies, R-values, and U-values will continue to be increased as products become more and more efficient. Promoting these more efficient materials and improvements increases the efficiency of the energy we use and reduces our energy dependence.