

Bi-Annual Review

2019 – 2020

We Create Better Homes and Buildings
Through Windows, Doors, and Skylights



IS **MADE** **UP OF** INNOVATIVE
CAPABLE AND
INTELLECTUALLY
NFRC **CURIOS** **PEOPLE**
WHO **DELIVER**

NFRC Serves the Public

32 years of fair, accurate, and credible energy-performance ratings

- ▶ The National Fenestration Rating Council (NFRC) is a 501(c) (3) nonprofit organization that **serves the public.**
- ▶ Our ratings **empower people** to compare windows, doors, and skylights – otherwise known as fenestration products – so they can make a well-informed purchase.
- ▶ We help make homes and buildings **more comfortable** and more **energy efficient** and contribute to the green and **healthy** building movement.




World-Class Ratings

Independent, Third-Party Certification and Labeling

- ▶ NFRC's FenStar® Certification Program ensures compliance to ENERGY STAR® specifications for Windows, Doors, and Skylights and is accredited by ANSI National Accreditation Board (ANAB). ANAB accredits the FenStar program to the International Organization for Standardization (ISO) and International Electrotechnical Commission (IEC) ISO/IEC 17065 standard used for certification bodies worldwide.
- ▶ Accreditation to the ISO/IEC 17065 standard increases confidence that product certifications fulfil specified requirements impartially, consistent with international standards, and is based on objective testing.



 National Fenestration Rating Council® CERTIFIED	World's Best Window Co. Series "2000" Casement Vinyl Clad Wood Frame Double Glazing • Argon Fill • Low E XYZ-X-1-00001-00001
ENERGY PERFORMANCE RATINGS	
U-Factor (U.S. / I-P) 0.35	Solar Heat Gain Coefficient 0.32
ADDITIONAL PERFORMANCE RATINGS	
Visible Transmittance 0.51	Air Leakage (U.S. / I-P) ≤ 0.3
Condensation Resistance 51	—
<small>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</small>	

Since 1989

We have certified millions of products so homeowners could make a well-informed purchasing decision.



Over 8,000

Product models



57 million

Options

NFRC ratings cover nearly every homeowner's needs.

**\$50
Billion**

According to Lawrence Berkeley National Laboratory (LBNL), the amount of energy lost through inefficient windows in U.S. annually.

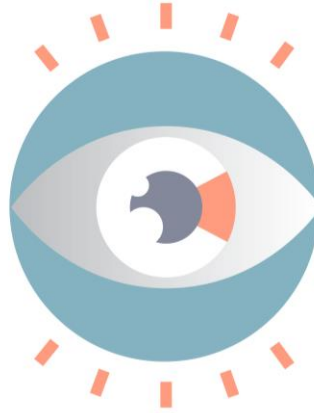
NFRC's work helps lower this number.





MISSION

NFRC is committed to advancing continuous improvement of windows, doors, and skylights, contributing to making buildings more comfortable and energy efficient.



VISION

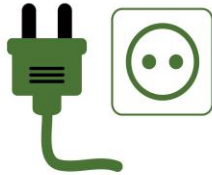
NFRC empowers people to create better buildings, increasing public awareness of energy efficiency and environmental responsibility, thereby enriching the wellness of those who choose NFRC-certified fenestration products.

Strategic Goals

- ▶ **Grow** commercial market penetration and expansion
- ▶ **Achieve** greater recognition with the residential market



Results: 1989 - 2018



The estimated energy savings amount to **774,619.53 GWh** (Gigawatt hours). U.S. national weighted average marginal emission rate, the CO₂ emissions avoided equals 547,772,975 metric tons from 1989 to 2018.

CO₂ **547 Million Metric Tons** (MMT) of CO₂ emissions avoided is equivalent to:



About **116 million** passenger cars NOT driven for one year (in 2005, about 14 million passenger cars were operated on California roads).



One year of energy use by about 65 million average U.S. households.



Greenhouse gas emissions avoided by replacing about **20 billion** standard incandescent lamps with energy-efficient LEDs.



About **644 million** acres of pine or fir forests absorbing CO₂ for one year.

Building a Sustainable Future



- ▶ Net-zero carbon emissions from facility and operations
- ▶ Nearly 100% remote staff and downsized headquarters
- ▶ Virtual meetings reduce environmental impact from travel, event space, materials
- ▶ Women in Fenestration Network supports gender equity in the industry

Corporate Responsibility

From Ratings Leader to Green Building Community Leader



NFRC empowers people to choose windows, doors, and skylights that save energy and reduce carbon emissions.

With every decision we make, we consider the triple-bottom-line.

“When a consumer wants to purchase a window, and they see the NFRC label, they have the peace of mind that the window will perform as it says it will in their home.



To better connect with consumers, NFRC acquired the Efficient Windows Collaborative in 2020. This gives us a forum and platform to showcase the value and importance of high-performance windows for all homes. Homeowners looking for new windows or to replace their existing windows, can search a database of products that pinpoints the most energy-efficient window for their home anywhere in the U.S. and Canada.

Merging the Efficient Windows Collaborative with NFRC gives us even more staying power to provide resources and tools for consumers to find the right window for their needs.”



Deb Callahan, CAE
NFRC CEO



"NFRC's strategic vision, and the foundation it sets, meets the needs of our current and prospective members to move the energy-efficient window market forward.

Now more than ever, it's vital for all members, participants, stakeholders, and allied groups to come together to put this vision into action. By doing so, we continue to make NFRC an example of excellence in not only the fenestration industry but also among nonprofit organizations."



John Gordon
NFRC Chairman of the Board

Projection: 2019 - 2049



The estimated energy savings amount to **522,578.34 GWh** (Gigawatt hours). Using the AVERT, U.S. national weighted average marginal emission rate, the CO₂ emissions avoided equals 369,541,796 metric tons from 2019 to 2049.

CO₂ 369 Million Metric Tons (MMT) of CO₂ emissions avoided is equivalent to:



About **78 million** passenger cars NOT driven for one year.



One year of energy use by about 44 million average U.S. households.



Greenhouse gas emissions avoided by replacing about **14 billion** standard incandescent lamps with energy-efficient LEDs.



About **434 million** acres of pine or fir forests absorbing CO₂ for one year.

Board of Directors

CORPORATE OFFICERS



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National Certified Testing
Laboratories



Anthony Cinnamon, *Vice Chair
and Regulatory Affairs
Committee Chair*
Wiss, Janney, Elstner Associates



Ravi Srinivasan, *Secretary*
University of Florida



Greg McKenna, *Treasurer*
Kawnear

DIRECTORS



Mahabir Bhandari
Oak Ridge National Laboratory



Neil Burning
International Code Council



Charlie Curcija
Lawrence Berkeley National
Laboratory



Joe Hayden
Pella Windows and
Doors

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Maggie Kelley
Southeast Energy Efficiency
Alliance



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Vitro Architectural Glass



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Committee Chair*
Kolbe & Kolbe Millwork



Robert Tenant
National Renewable Energy
Laboratory



Lisa Winckler
Eastman Chemical Company

EX-OFFICIO MEMBERS



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National Fenestration
Rating Council



Kevin Vilhauer, Technical
Committee Chair
Katerra



Jeff Baker, *Ombudsman*
WESTLab



Scott Meza
Greenberg Traurig, LLP

GENERAL COUNSEL



317 Members



8

Architects, Specifiers or
Design Professionals



13

Fenestration Industry
Organizations/Consultants



266

Fenestration Manufacturers
and Suppliers



3

Government Agencies/
Building Officials



4

Higher Education /
Research Institutions



4

Licensed Independent Inspection
& Accreditation Agencies (IA's)



11

NFRC Accredited Labs



8

Consumer, environmental or
Energy Efficiency Organization



Ready to Become a Member?
Contact our Membership Department
301-589-1776 or membership@nfrc.org

650

Product
Certification
Program
Participants

28

Certified
Simulators
and Labs

193

FenStar

4

Inspection
Agencies

Notable Accomplishments 2019-2020



Membership opportunities include webinars, blogs, podcasts including a series on 30 years/30 voices, membership meetings and a leaders network.



NFRC developed the Linear Energy Analysis for Fenestration (LEAFF), to help manufacturers get innovative products into the market faster.



NFRC implemented a Condensation Index rating that empowers design-build professionals to engineer windows that minimize condensation by climate zone for indoor temperatures and humidity levels.



Acquired the Efficient Windows Collaborative to provide homeowners resources and information on finding the most efficient window with the Window Selection Tool.



NFRC has helped other countries develop fenestration certification programs to meet the needs of their manufacturers.

Partnerships



Upward and Onward

Serve the public through the Efficient Windows Collaborative and the Window Selection Tool.

Build a collaborative environment where industry experts can learn from each other.

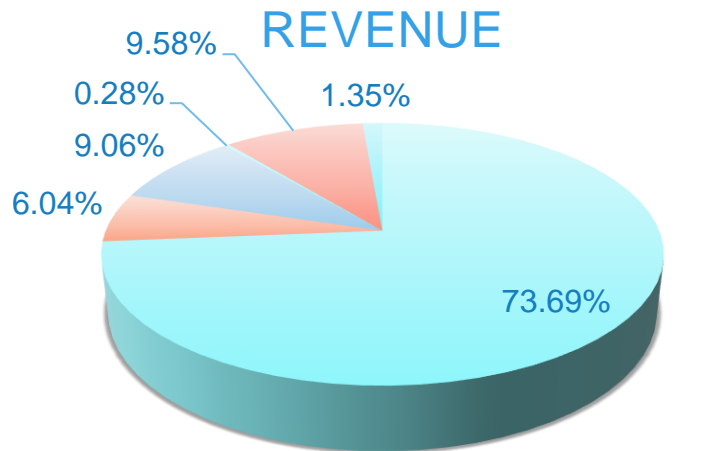
Encourage homeowners and building occupants to demand better buildings.

Financial Report

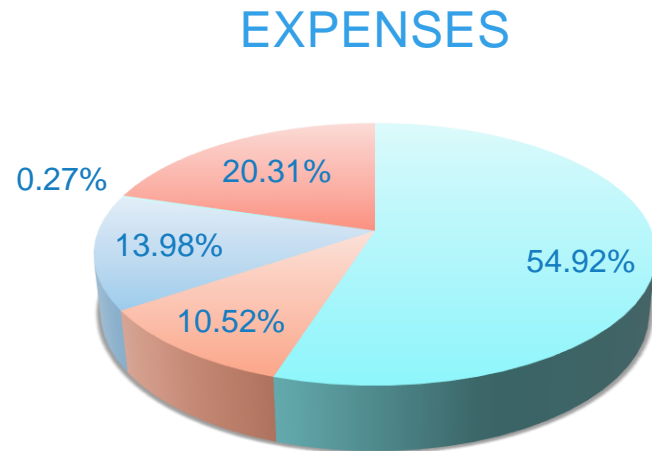


NFRC is a financially healthy organization.

Financials



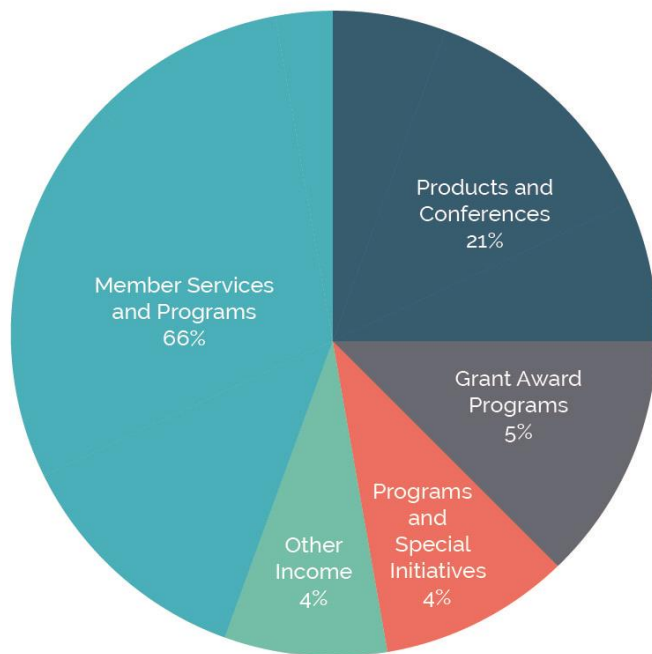
RESIDENTIAL
COMMERCIAL
MEMBERSHIP
FENSTAR
EWC
INTEREST INCOME



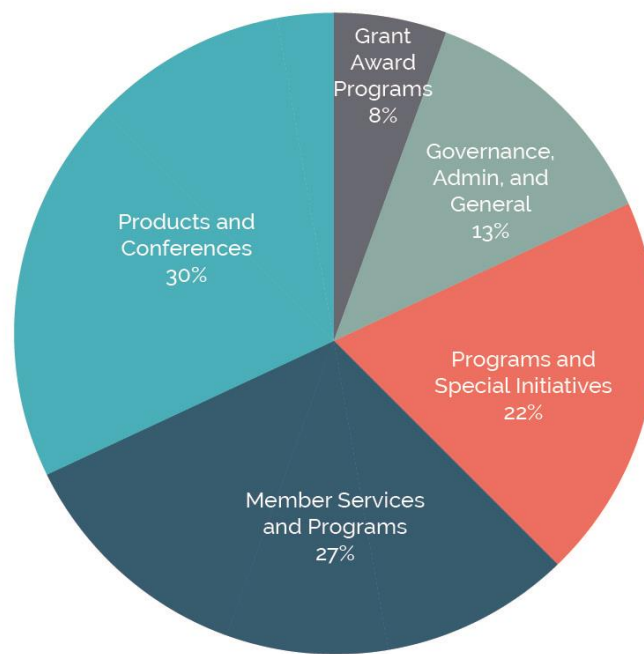
RESIDENTIAL
COMMERCIAL
OPERATIONS
FENSTAR
EWC

Financials

OPERATING REVENUE



OPERATING EXPENSES



Corporate Capabilities

The National Fenestration Rating Council (NFRC) is a non-profit, 501 (c)(3) public interest organization that administers the only uniform, independent rating and labeling system for the energy performance of windows, doors, skylights, and attachment products.

The NFRC was founded in 1989 to address concerns that some manufacturers were making unsubstantiated claims about the performance of their window products. In 1992, Congress codified NFRC's role as the nation's organization for rating and labeling the energy performance of fenestration products in the National Energy Policy Act (EPAct).

Since that time, the NFRC has partnered with our stakeholders, including architects, government, and code officials, manufacturers, and homeowners to provide fair, accurate, and reliable energy performance ratings for fenestration systems. Our procedures are referenced in national building codes maintained by the International Energy Conservation Code (IECC), and our ratings are a prerequisite for participation in Energy Star® and other rebate programs.



Core Competencies

Certification Program Development

- NFRC is a recognized U.S. Environmental Protection Agency (EPA) Certification Body. As such, NFRC verifies data and reports products that meet the relevant ENERGY STAR® specifications to the EPA.
- NFRC has 22 years of experience developing and administering third-party certification programs for the residential and commercial markets.

Standards Development

- NFRC is an American National Standard Institute (ANSI) Accredited Standards Developer (ASD). We develop and administer comparative energy and related rating programs for fenestration products.

Consulting and Testimony

- NFRC has fenestration industry expertise in the areas of energy codes, standards and testing specifications and requirements. NFRC has applied this expertise in the international arena to assist other nations in the harmonization of fenestration energy ratings programs.
- NFRC's experts educate the government and other bodies on the value of energy ratings for residential and commercial buildings.

Software Tools, Web and Data Services

- NFRC leads the way in developing innovative, enterprise-level data tools providing users access to a robust data warehouse of fenestration industry information.
- NFRC also builds and maintains association management software systems and websites for program participants, members, and the public.



Core Competencies

Grants Management:

- NFRC provides a full suite of grants management services for government and private foundation grants including the identification of funding opportunities, proposal development, and project management.

Professional Development and Conference Services:

- NFRC is an approved continuing education course provider for the U.S. Green Building Council (USGBC) and the American Institute of Architects (AIA), offering a comprehensive portfolio of leading-edge training solutions including conferences and workshops that address introductory and expert needs alike
- Our educational opportunities are available to design firms and local and state code agencies and are generally delivered onsite.
- NFRC provides comprehensive event planning and on-site support for industry meetings.

Consumer Education:

- Since 2005, NFRC has been educating consumers about the importance of energy savings by providing informational factsheets, brochures, and articles.
- NFRC designs and maintains educational websites for the public.



Partnerships

NFRC maintains partnerships and collaborations with the following organizations and government bodies: U.S. Department of Energy (DOE); U.S. Environmental Protection Agency (EPA); Lawrence Berkeley National Laboratories (LBNL); American Society for Testing and Materials; American Society of Heating, Refrigeration and Air-Conditioning Engineers; American Institute of Architects; National Institute of Building Sciences; U.S. Green Building Council (LEED); Canadian Standards Association.

Most notably: Since 1989, NFRC's Research Program, in partnership with the U.S. DOE, has invested an estimated \$3 million in fenestration rating research to ensure the most accurate ratings possible. NFRC's International Program - a program designed to harmonize fenestration energy ratings globally – has reached Australia, South Africa, China, India, and Canada. Since 2006, the U.S. DOE and NFRC have invested over \$500,000 in international energy ratings harmonization. NFRC has provided education and training support to LBNL's WINDOW and THERM software, while supporting the software financially (\$200,000 annually) by maintaining its derivative Spectral Data Library.

Organization Data

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