

CORPORATE SUSTAINABILITY ENVIRONMENTAL FACT SHEET



ENVIRONMENTAL REPORTINGS

As a leader in the homebuilding industry, M.D.C. Holdings, Inc. (MDC) and our Richmond American Homes subsidiaries have a responsibility to conduct our operations in a socially and environmentally acceptable manner. We look for ways to enhance the sustainability of our communities and surrounding environment.

Energy efficiency features

Every Richmond American home comes standard with energy-efficient features that help cut down energy usage. Since the introduction of our Energy Wise program in 2009, the Richmond American companies in each region have offered both standard and optional features that help cut down on energy usage, reduce waste, and promote a healthy environment. National features include:



Efficient HVAC system
Designed to perform efficiently for each plan.



Mechanically controlled ventilation
Helps promote quality indoor air.



Effective insulation solutions
The building envelope is that portion of the exterior shell that separates the outdoors from the indoors. Effectively installed insulation in this envelope helps promote energy efficiency and better balances temperatures.



Interior air sealing
Sealing helps separate a home’s interior from the outdoors, reducing drafts, dust and pollen and cutting down on loss of conditioned air.



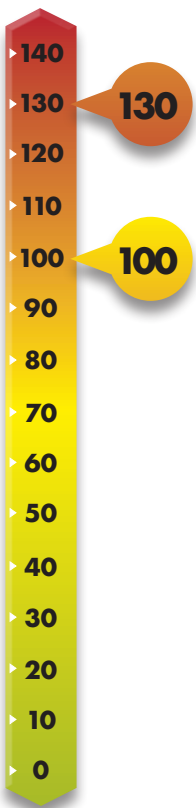
Low-E windows and Low-E3 high performance solar cooling windows (per market)
Low-emissivity coatings reflect infrared light to help keep heat inside in winter and outside in summer.



Radiant roof barrier (per community & plan)
A radiant barrier reflects the sun’s energy on the roof, lowering the attic temperature, which is beneficial in warmer months.

How our homes are rated

Working toward greater home energy efficiency starts with measuring energy performance, making improvements and continuing to rate and adjust. The Richmond American companies use the HERS® Index to gauge a home’s comparative energy efficiency. HERS stands for Home Energy Rating System, a system created by The Residential Energy Services Network (RESNET®), an industry standard for rating home energy efficiency. A third-party RESNET-certified home energy rater assesses the energy efficiency of every new Richmond American Home, assigning it a relative performance score.



HOW TO READ THE INDEX:*

130 = Typical resale**
100 = Reference home***

Each 1-point decrease on the index is designed by RESNET® to correspond to 1% reduction in energy consumption. Energy-saving features can drive the rating down.

Example:

A home scoring 70 on the HERS Index is 30% more energy efficient than a standard new home.

For more information about the HERS index, visit RESNET.US and hersindex.com.



The confirmed HERS rating is determined through verification of rated features in accordance with RESNET® standards by a third-party home energy rater.

Our HERS scores

35,360+ Richmond American homes were rated for energy efficiency and entered into the RESNET registry between January 2013 to June 30, 2020. The current average HERS score for homes built by Richmond American Homes companies is 58, a much lower score than a typical resale home. * In fact, our current homes are on average at least 70% more efficient than typical resale homes according to HERS Index.

We lowered our national average HERS rating by seven points between 2013 and June 30, 2020:

National Average HERS Index by Year							
2013	2014	2015	2016	2017	2018	2019	June 2020
65	62	61	60	62	63	60	58

* Average Home Energy Rating System Index for homes in the RESNET Registry from January through June 2020.



How do our efforts translate into energy savings?



ENERGY COST SAVINGS
\$88,553,235 = the total estimated energy costs saved to date for all Richmond American companies (compared to the same number of typical resale homes with HERS scores of 130).



CO₂ EMISSIONS
The cumulative energy savings by our rate of efficiency is equivalent to a 492,925+ ton reduction in estimated CO₂ emissions when compared to a typical resale home rating (the equivalent of 96,608 passenger vehicles taken off the road for one year).

ENERGY STAR®
ENERGY STAR® is a government-backed program established by the EPA in 1992 to provide trusted information to consumers and set performance-based definitions on energy efficiency. These homes and products meet the requirements for the label:

- 13,800+ ENERGY STAR® qualified new homes built through June 2020
- We have built ENERGY STAR® qualified homes in every year since 2000
- 100% of the time, ENERGY STAR® appliances are either standard or available

Solar energy
Solar is becoming more commonplace at our communities, especially in California. More homes sold with solar panels means more energy saved, lowering our overall carbon footprint. Homebuyers in California are now required to choose between purchasing or leasing a solar power system for their home.

- 4 facts on our homes installed with solar panels:**
1. 4,135+ homes or current models with solar panels installed through June 2020
 2. 48,434 tons in CO₂ emission savings from solar power installations through June 2020
(the equivalent of 9,493 passenger vehicles taken off the road for one year)
 3. 13,057,440 total watts of solar power installed on homes and current models through June 2020, producing an estimated 22,197,648 kilowatt hours of renewable energy annually
 4. By adding solar, we lowered the average HERS Index on our reported homes by 26.3 points

Radon testing
Richmond American was the first homebuilder in the U.S. to include active radon systems in areas designated as having high radon potential by the EPA.

- 3 facts on our radon mitigation efforts:**
1. 16,675+ active radon control systems installed in homes through June 2020
 2. Average radon levels based on short term radon test before closing are below 1.0 pCi/L
 3. For homes without a radon control system installed, we offer a radon mitigation reimbursement program (excluding Zone 1 homes)

Awards

American Association of Radon Scientists and Technologists (AARST) recognized Richmond American for their leadership in saving lives by incorporating active radon mitigation systems in new homes they build in high radon risk areas.

MDC accepted an award at the Healthy Homes Conference in June 2011 for its efforts to promote radon awareness and radon risk reduction by becoming the first production home builder in the United States to include an Active Radon System in homes built in Radon Zone 1.

Environmentally focused vendors

We like to work with vendors that share our environmental values and are making headway on their own to create healthier indoor environments for homebuyers. Here are just a sample of the vendors we work with as of June 30, 2020:



Shaw®

- All laminate and hardwood products are GREENGUARD certified for strict chemical emission limits
- Improved air quality through limited formaldehyde emissions in accordance with California Air Resources Board guidelines
- Cradle to Cradle™ Certified for environmental and social performance in five sustainability categories



Mowhawk

- Improved air quality through limited formaldehyde emissions in accordance with California Air Resources Board guidelines
- FloorScore® indoor air quality certified for limited volatile organic compound emissions
- Green Label Plus low VOC emissions for carpeting



Daltile®

Innovative tile options with more than 98% of manufactured products containing pre-consumer (post- industrial) recycled materials



GE®

ENERGY STAR® certified appliances rated for factors such as energy efficiency and water usage



Delta®

Delta® WaterSense® labeled faucets, showers and toilets use at least 20% less water than the industry standard—saving homeowners money without compromising performance*



Weyerhaeuser

- 100% of their timberlands are reforested after harvesting
- 98% of their waste is reused or recycled
- 100% of their timberlands are certified to the SFI Forest Management Standard



All three of these cabinet vendors are Kitchen Cabinet Manufacturers Association (KCMA) Environmental Stewardship certified for environmental manufacturing

*WaterSense is a registered mark of the U.S. Environmental Protection Agency.





RICHMONDAMERICAN.COM

+ This information is presented for educational and illustration purposes only.

++ Typical resale home is based on the U.S. Department of Energy definition with a HERS® index of 130.

+++ Standard new home is based on the RESNET® Reference Home definition with a HERS® index of 100 (based on the 2006 International Energy Conservation Code). The vendor registered trademark set forth above is the property of the owner, who is not affiliated with, connected to or sponsored by the Richmond American homes companies. The vendor listed has provided consideration to Richmond American Homes Corporation for marketing services

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