



ENVIRO WALL

STUDS
PLATES
HEADERS

ENVIRO WALL FRAMING SYSTEM WITH BUILT-IN THERMAL BREAK

- IMPROVED EXTERIOR ENVELOPE PERFORMANCE
- CONSISTENT STRUCTURAL INTEGRITY
- REDUCED ENERGY COSTS
- EARTH FRIENDLY



FSC-CERTIFIED PRODUCTS AVAILABLE



Responsible Forest Management
Certificate SW-COC-003985
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Who benefits from using the Nordic Enviro=Wall Hybrid Framing System?

Homeowner

- Saves money on heating and cooling costs by minimizing thermal bridging.
- Reduced heating and cooling load allows for more precise sizing of HVAC equipment, saving money on equipment costs and improving performance efficiency.
- Energy efficient homes have higher resale value, even more so as energy costs continue to rise.
- Enviro=Wall framed home will be more comfortable during the heating and cooling seasons.
- Enviro=Wall can save money on labor.

Builder

- There is no learning curve for the builders. It is the same framing he or she already knows only better.
- No specials tools or equipment are required to build with Enviro=Wall.
- Lighter weight.
- Easier for the electrician to wire.
- Reduces call backs from nail and screw pops in drywall.
- Reduces labor and trips around the building that other systems require.
- Keeps your wall depth at 6-9/16". No custom extension jambs needed.

The Environment

- Wood is the natural Green building product.
- Wood is renewable, economical, strong, and energy-efficient to manufacture.
- Enviro=Wall improves on wood's natural insulating properties, and optimizes wood's natural advantages.
- Home construction should benefit from our greatest natural resource, our forests.
- An average home built with Enviro=Wall will encapsulate over 2 tons of carbon for the life of the home.



What is the true Insulating Value in an R-19 wall?



The amount of wood in a wall system has a great effect on cavity insulation values. Builders tend to lean in the direction of using more wood in a wall system because they are usually more concerned with structural issues than with the effect of thermal bridging from framing on thermal performance. Every piece of lumber in an exterior wall acts like a thermal highway, allowing heat to bypass the high-R insulation barrier inside the wall cavity. No one has ever failed a framing inspection for using too much wood! Nordic's Enviro≡Wall System increases the R Value of the framing components from 5.5 (for 2x6 Dimension Lumber) to 11.5, eliminating thermal bridging and vastly improving the thermal efficiency of the wall system.

Typical wood walls contain more than just studs, so determining an accurate framing factor to use can be difficult. Other framing elements to consider include:

- Top and bottom plates (top plates are usually doubled)
- Jack studs under window sills and above headers
- Cripples and trimmers at the sides of doors and windows
- Headers
- Three- and four-stud corners

Since 1993, ASHRAE (American Society of Heating, Refrigerating, and Air Conditioning Engineers) uses a framing factor of 25% (27% in California), up from 15% prior to 1993. Other professionals use a framing factor as high as 33%. Based on these framing factors, Nordic's Enviro≡Wall System can increase the energy efficiency of a clear wall¹ by up to 28%.

ENVIRO≡WALL WEIGHTED R-VALUE COMPARISON CHART^{2, 3}

FRAMING PERCENTAGE	CONVENTIONAL FRAMING	NORDIC ENVIRO≡WALL FRAMING	INCREASE IN THERMAL EFFICIENCY
30%	R-12.3	R-16.9	+27.2%
25%	R-13.2	R-17.4	+24.1%
20%	R-14.1	R-17.9	+21.2%

1. Representative values are based on non-glazed walls (no window or door openings). To determine values including glazing, visit the Nordic website for an interactive guide to weighted thermal values.
2. Framing includes R-19 insulation, 1/2" drywall and plywood.
3. R-Value is not indicative of a particular type or brand of insulation.