



OX SI-Strong vs OSB

CONSTRUCTION CRITERIA

	OSB	1" SI-Strong	1/2" SI-Strong
Exceeds 2018 IRC Building Codes for Shear Strength (including hurricane zones)	YES	YES	YES
Utilizes Existing Home Plans & Subcontractors	YES	YES	YES
Requires House Wrap (SI-Strong has vapor/moisture barrier on both sides)	YES	NO	NO
Requires Extra Trip Around Structure to Apply House Wrap	YES	NO	NO
Reduced Material Weight (SI-Strong is roughly 1/3 the weight of OSB)	NO	YES	YES
Reduced Construction Labor Needed (SI-Strong typically reduces 1-2 days)	NO	YES	YES
Superior for Off-Site Wall Panel Framing (SI-Strong has multiple benefits)	NO	YES	YES

ENERGY CRITERIA

	OSB	1" SI-Strong	1/2" SI-Strong
Added Estimated R Value of Wall Sheathing Material	R-0.5	R-6	R-3
Percentage Increase of Sheathing R-Value vs OSB	0%	1,100%	500%
Reduces ACH50 Blower Door Tests by 15-20% (Some homes greatly exceed this number.)	NO	YES	YES
Lowers the HERS® Scores	NO	YES	YES
Sheathing Material Reduces Energy Use	NO	YES	YES
Qualifies for Department of Energy (DOE) Passive Home Energy Building	NO	YES	YES
Reduces Thermal Bridging (OSB actually acts as conduit for thermal loss)	NO	YES	YES
Reduces Wall Cavity Temperature Differences (reduced moisture in walls)	NO	YES	YES
Reduces Heating/Cooling Costs (SI-Strong typically reduces by 20% - 40%)	NO	YES	YES
Requires Downsized HVAC Systems (SI-Strong typically saves \$200-\$350)	NO	YES	YES
Meets 2018 Prescriptive Energy Codes (check zone for required R Value)*	NO	YES	YES
Contributes Energy Savings to Meet 2018 Performance Path Energy Codes	NO	YES	YES
Substantially Reduces Number of Solar Panels Needed to Power Home	NO	YES	YES
Product is "Green" and Uses over 70% Post Consumer Recycled Materials	NO	YES	YES
100% of the Product is Made In The USA (some OSB is imported)	NO	YES	YES

HOMEOWNER BENEFITS (Sources: U.S. DOE, EPA, HUD & HERS® Ratings)

	OSB	1" SI-Strong	1/2" SI-Strong
Provides A Healthier Home (DOE & EPA)	NO	YES	YES
Provides A More Comfortable Home (DOE)	NO	YES	YES
Provides A More Durable Home (DOE) (ISO protects frame from elements)	NO	YES	YES
Provides A Quieter Home (DOE) (continuous ISO is a sound barrier)	NO	YES	YES
Documented Homeowner Money Saved Every Month/Year (HERS® report)	NO	YES	YES
Requires Higher Appraised Value (HUD) (usually 2% to 5%)	NO	YES	YES
Higher Re-Sale Values (DOE)	NO	YES	YES
Shorter Sales Time (DOE)	NO	YES	YES

* Some states, counties or municipalities may require more continuous insulation now or in the future.

DOE is US Department of Energy www.doe.gov

EPA is US Environmental Protection Agency www.epa.gov

HUD is US Housing and Urban Development www.hud.gov

HERS® is a trademark of © 2018. Residential Energy Services Network (RESNET)

A Few Facts About Uninsulated Sheathing Like OSB:

- OSB does nothing to reduce home energy use. (RESNET HERS® reports)
- OSB actually promotes and accelerates home energy loss due to thermal bridging. (DOE)
- OSB homes cost more to own than homes with SI-Strong/continuous insulation. (DOE)
- OSB homes are worth less than homes built with SI-Strong/continuous insulation. (HUD Green Appraisal Requirements)
- OSB/uninsulated sheathing is a primary culprit for wall cavity moisture production. (DOE)
- OSB homes require larger, more expensive heating and cooling (HVAC) systems. (DOE)

