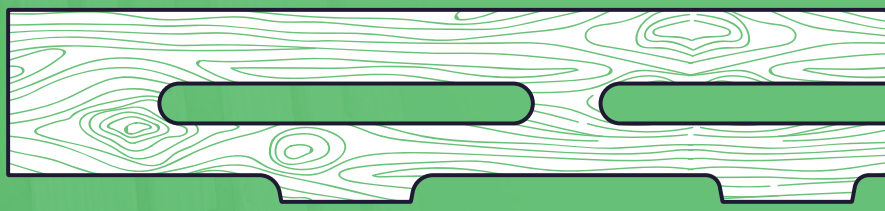
EcoSmart™
CONSTRUCTION STUD



Why ESS?

Comparison List

	EcoSmart™ Stud 2x6 or 2x8 exterior wall with 1"-2" spray foam in wall chamber	Builder Concern	Government Concern	Home Owner Concern
Exceeds 2016 & 2021 National Energy Code for exterior wall insulation	X	X	X	X
Simple to build	X	X	X	
Less expensive to build	X	X	X	X
Increased racking strength (resilient wall-strength) Seismic and high wind areas	X	X	X	X
Safer for wildfire areas	X	X	X	X
Completely air sealed wall	X	X	X	X
Wall can dry to inside building (resilient wall-moisture)	X	X	X	
Wall can dry to outside of building (resilient wall-moisture)	X	X	X	
Standard Framing practices at Windows and Doors	X	X		
Standard window flashing/details	X	X		
Standard door flashing/details	X	X		
No wider window jambs (2x6)	X	X		
No vapor barrier needed	X	X		
No Electrical vapor boxes needed	X	X		
Predrilled for electrical wires	X	X		
Predrilled for gas lines	X	X		
Predrilled for water supply lines Zone 1-3	X	X		
Standard siding installation practices	X	X		
Standard soffit installations	X	X		
Standard siding corner details	X	X		
Less clean up after trades	X	X		
Studs for wall system 30% lighter (easier to work with)	X	X		
Saves 30% Fuel & CO_2 emissions rail & truck shipping	X		X	X
Less embodied carbon in wall assembly	X		X	X
Studs used produce pulp for extra products	X		X	X
Saves Money/CO_2 on heating and cooling bills	X		X	X

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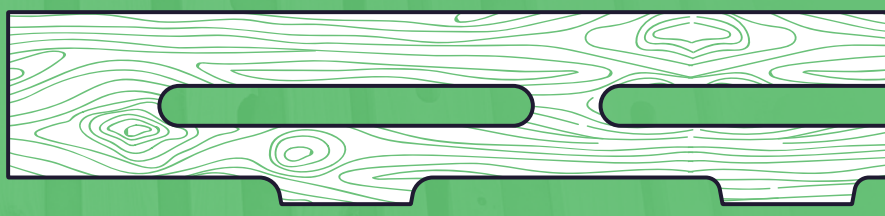


Why ESS?

Comparison List

	6” wide wall with ½” sheathing. EcoSmart™ Stud 2x6 wall 2” Spray Foam 3.5” Cellulose fill (Standard wall width)	7” wide wall with ½” sheathing 20+5 2x6 wall 1” ridged foam 5.5” fiberglass batt 1” wider than Std wall
Exceeds 2016 & 2021 National Energy Code for exterior wall insulation	x	x
Simple to build	x	
Less expensive to build	x	
Increased racking strength (resilient wall-strength) Seismic and high wind areas	x	
Safer for wildfire areas	x	
Completely air sealed wall	x	
Wall can dry to inside building (resilient wall-moisture)	x	
Wall can dry to outside of building (resilient wall-moisture)	x	
Standard Framing practices at Windows and Doors	x	
Standard window flashing/details	x	
Standard door flashing/details	x	
No wider window jambs (2x6)	x	
No vapor barrier needed	x	
No Electrical vapor boxes needed	x	
Predrilled for electrical wires	x	
Predrilled for gas lines	x	
Predrilled for water supply lines Zone 1-3	x	
Standard siding installation practices	x	
Standard soffit installations	x	
Standard siding corner details	x	
Less clean up after trades	x	
Studs for wall system 30% lighter (easier to work with)	x	
Saves 30% Fuel & CO_2 emissions rail & truck shipping	x	
Less embodied carbon in wall assembly	x	
Studs used produce pulp for extra products	x	
Saves Money/CO_2 on heating and cooling bills	x	

Spray foam advantage

Changing out the 1-2” of ridged foam to 1-2” of spray foam applied to the interior of the sheathing and combining with ESS many things are accomplished by this one simple change

Complexity of wall system eliminated. Any builder can build an ESS wall successfully compared to ridged foam

Equivalent or better effective insulation values at far less cost

ESS walls 30-110+% increase in actual wall insulation values compared to solid 2x6 walls with Fiberglass batts

Less chance of structural compromise. Spray foam glues sheathing and wall studs together. Reinforces sheathing & mechanical fasteners.

Air sealed walls, less chance of air leaks compared to ridged foam

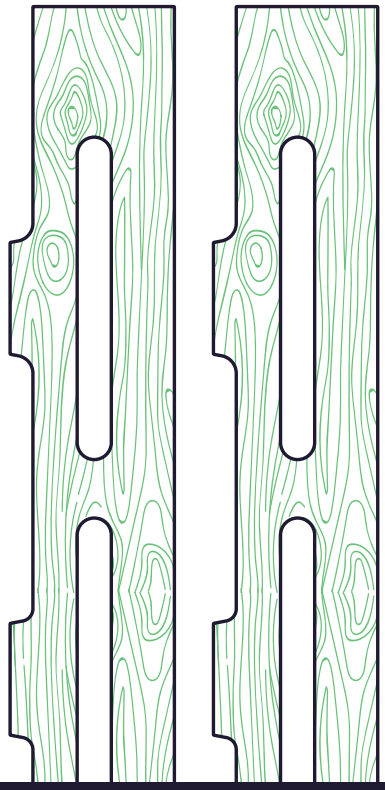
Walls can dry to inside and outside of cavity. Less chance of long-term issues

No vapor barrier, or sealant needed. Save cost and embodied carbon

No vapor boxes needed or extra framing to seal box area

Lower embodied carbon wall system with the combination of cellulose fill

Increased Racking strength over Ridged foam walls



U.S. Patent No. 10,612,235

Available Nationwide

EcoSmart™
CONSTRUCTION STUD

More questions?

Contact us today to learn more about EcoSmart™ Stud.

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