

KEY FEATURES:

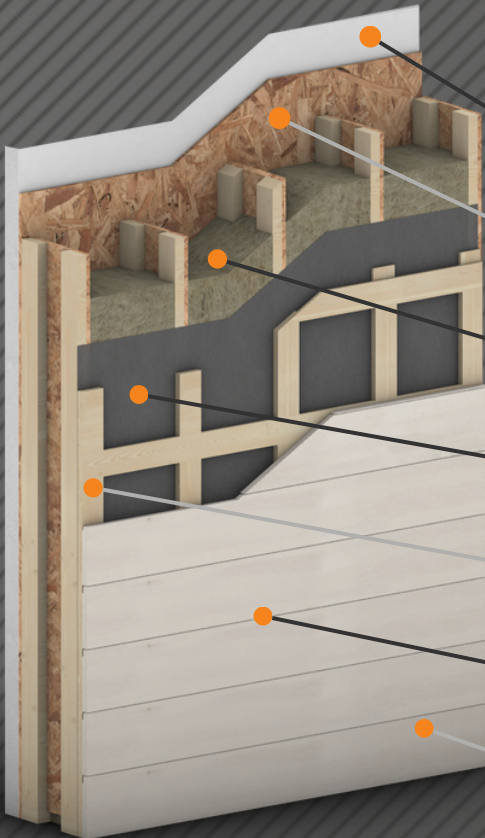
Works with multiple pre-existing cladding types and structural systems

High-performance insulation lowers energy costs

Integrated rainscreen prevents long-term moisture damage

Prefabricated for faster, more consistent installation

Engineered with eco-conscious materials for airtight comfort



*modeled after 12" nominal depth
**alternative materials may be specified

Quantum LCX

(Low Carbon Exterior)

The Quantum LCX panel system is a wood-framed, low-carbon solution engineered for deep energy retrofits and high-performance envelope upgrades. Featuring double-stud construction, smart vapour control, and sustainable insulation options, Quantum LCX delivers exceptional thermal performance and long-term comfort—ideal for residential, institutional, and commercial applications.

Prefabricated for quality and efficiency, LCX panels provide reliable moisture protection, airtight construction, and flexible cladding compatibility streamlining the path to Passive House and Net Zero goals.

Application	Thermal Resistance (R/RSI)	Thickness (in/mm)	Max Panel Size
Retrofit, New Construction	R value (°F·ft²·hr/BTU) 11.7 - 57.3 RSI (K·m²/W) 2.2 - 10.1	4"– 16" 102 – 418mm	10.1 m × 3.6 m

- 1Primary Air & Vapour Control (Airtight,Vapour Diffuse Membrane)
- 2OSB Sheathing
- 3Double Wood Stud Cavity & Insulation (Variable Depths)
- 5Weather Resistant Rain screen (Airtight, Vapour Diffuse)
- 6Universal Strapping (Supports Cladding in Any Direction)
- 7Preinstalled Exterior Cladding (Optional,~ 80%Coverage)
ACM, Fibre cement, Composite, Engineered Wood
- 8Facility Installed Windows & Doors (Optional, not shown here)

• Note: Clear Field Thermal Resistance & Heat Transfer modelled using glass wool (30% - 50% recycled)

3 5/8" INTERIOR STUD						
NOMINAL DEPTH	PANEL DEPTH	CLEAR FIELD THERMAL RESISTANCE	CLEAR FIELD HEAT TRANSFER	SURFACE WEIGHT	AIR LEAKAGE RESISTANCE	WATER LEAKAGE RESISTANCE
		R-Value / RSI (ft²·°F·hr/BTU) / (m²K/W)	U-value (BTU/ft²·°F·hr) / (W/m²K)	(kg/m2)	ASTM E283-19	ASTM E331-00
4"	4" / 102mm	12.2 / 2.15	0.0819 / 0.465	26.8	0.01 L/s/m² @ 75 Pa	500 Pa
6"	5 5/8" / 143mm	18.7 / 3.29	0.053 / 0.304	30.9		
8"	8 7/16" / 214mm	23.6 / 4.16	0.042 / 0.241	32.4		
10"	11 1/8" / 283 mm	34.1 / 6.0	0.029 / 0.167	38.9		
12"	12 1/8" / 308 mm	41.8 / 7.4	0.024 / 0.135	40.4		
14"	13 1/8" / 333 mm	49.5 / 8.7	0.020 / 0.115	41.7		
16"	16 7/16" / 418mm	57.3 / 10.1	0.017 / 0.099	42.8		