

Quantum NCX

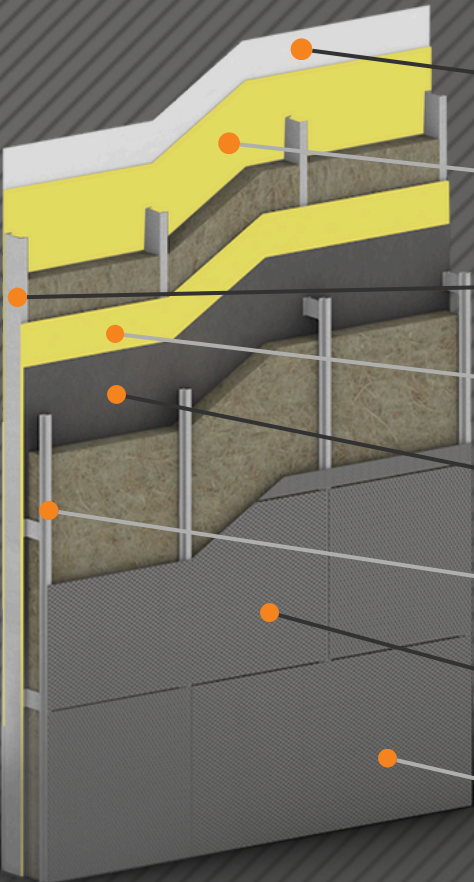
(Non-Combustible Exterior)

The Quantum NCX panel system is our premium non-combustible solution engineered for deep energy retrofits and high-performance façade upgrades. With steel stud framing, built-in rainscreen, and moisture / vapour management layers, Quantum NCX delivers exceptional thermal performance and long-term durability—ideal for residential, institutional, and commercial retrofits.

Application	Thermal Resistance (R/RSI)	Thickness (in/mm)	Max Panel Size
Retrofit, New Construction	R value (°F·ft²·hr/BTU) 7.2 - 37.1 RSI (K·m²/W) 1.3 - 6.5	4"-13 1/8" 101.6-314.19 mm	10.1 m × 3.6 m

KEY FEATURES:

- Works with multiple pre-existing claddings and structural systems
- High-performance insulation reduces energy costs
- Prevents moisture damage with integrated rainscreen
- Supports sustainable building goals (carbon reduced materials)
- Non-combustible for increased safety



- 1 Primary Air & Vapour Control (Airtight, Vapour Diffuse Membrane)
- 2 Fiberglass Mat-faced Gypsum Sheathing
- 3 Steel Stud Cavity & Insulation 3 5/8" or 6"
- 4 Fiberglass Mat-faced Gypsum Sheathing (For Panels With Depth >4")
- 5 Weather Resistive Rain screen (Airtight, Vapour Diffuse)
- 6 Cladding Support System & Insulation (0-6" Fiberglass & Mineral Wool)
- 7 Facility Installed Exterior Cladding (Optional, ~ 80% Coverage) ACM, Fibre cement, Composite, Engineered Wood
- 8 Facility Installed Windows & Doors (Optional, not shown here)

*modeled after 35/8" stud with 3" exterior insulation
**alternative materials may be specified

• Note: Clear Field Thermal Resistance & Heat Transfer modelled using recycled glass wool and mineral wool

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 (ft ² ·°F·hr/BTU) / (m ² K/W)	U-value (BTU/ft ² ·°F·hr) / (W/m ² K)	(kg/m2)	ASTM E283-19	ASTM E331-00
4"	4" / 102mm	7.2 / 1.3	0.1389 / 0.769	29.2	0.01 L/s/m ² @ 75 Pa	300 Pa
7"	7 1/4" / 184mm	14.7 / 2.6	0.0680 / 0.385	40.9		
8"	8 1/4" / 210mm	18.6 / 3.3	0.0538 / 0.303	44.4		
9"	9 1/4" / 235mm	22.5 / 4.0	0.0444 / 0.250	48		
10"	10 1/4" / 260mm	26.3 / 4.6	0.0380 / 0.217	51.5		
11"	11 1/4" / 186mm	30.2 / 5.3	0.0331 / 0.189	55.1		
6" 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 (ft ² ·°F·hr/BTU) / (m ² K/W)	U-value (BTU/ft ² ·°F·hr) / (W/m ² K)	(kg/m2)	ASTM E283-19	ASTM E331-00
6"	6 1/4"/ 159 mm	9.0 / 1.6	0.1110 / 0.631	33	0.01 L/s/m ² @ 75 Pa	300 Pa
9"	9 1/8"/ 232 mm	21.6 / 3.8	0.0463 / 0.263	44.6		
10"	10 1/8" / 257 mm	25.5 / 4.5	0.0392 / 0.222	48.2		
11"	11 1/8" / 283 mm	29.4 / 5.2	0.0340 / 0.192	51.7		
12"	12 1/8" / 308 mm	33.2 / 5.8	0.0301 / 0.172	55.3		
13"	13 1/8" / 333 mm	37.1 / 6.5	0.0269 / 0.154	58.8		