





# Lignacite ECO Range – Technical Data Comparison Table

The Lignacite ECO Range is manufactured using responsibly sourced aggregates. The range has much lower embodied carbon (CO<sub>2</sub>e) than standard Lignacite blocks while providing outstanding technical performance. All of our blocks are manufactured in accordance with EN 771-3:2011+ A1:2015. Environmental Product Declarations have been developed and verified in accordance with EN 15804+A2 and ISO 14025/ISO 21930. All of our EPDs are freely available from the Lignacite website or EPD Hub.

						
	Lignacite ECO 50 100mm	Lignacite ECO 50 140mm	Lignacite ECO 70 100mm	Lignacite ECO 70 140mm	Lignacite Standard 100mm	Lignacite Standard 140mm
Block Type	Medium Dense PG	Medium Dense PG	Medium Dense PG	Medium Dense PG	Medium Dense PG	Medium Dense PG
Thickness	100mm	140mm	100mm	140mm	100mm	140mm
Form	Solid	Solid	Solid	Solid	Solid	Solid
Dry Density (kg/m³)	1570	1450	1570	1450	1570	1450
Approximate Weight (kg)	14.9	19.2	14.9	19.2	14.9	19.2
Compressive Strength (N/mm²)	7.3	7.3	7.3	7.3	7.3	7.3
Thermal Conductivity (W/mK)	0.90	0.79	0.90	0.79	0.90	0.79
Reaction to Fire	Class A1	Class A1	Class A1	Class A1	Class A1	Class A1
Moisture Movement (mm/m)	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7
Weighted Sound Reduction (dB)						
Bare Block	44	47	44	47	46	49
Painted Block	45	48	45	48	47	50
Air Tightness (m³/hr/m²)	0.60	0.56*	0.60	0.56*	0.50	0.25
Block painted on one side with two coats						
% of Recycled Content	50%	50%	70%	70%	Up to 30%	Up to 30%
Embodied Carbon (kgCO <sub>2</sub> e/m²)**	A1-A3 6.5A1-A4 6.6	A1-A3 17.3A1-A4 17.4	A1-A3 6.8A1-A4 6.9	A1-A3 17.3A1-A4 17.4	A1-A3 20.9A1-A4 22.2	A1-A3 32.8A1-A4 36.2
% Reduction in Embodied CO <sub>2</sub> **	68%70%	47%52%	67%69%	47%52%	n/an/a	n/an/a
In comparison to the Lignacite Standard block						

Data accurate as of 01/05/2025

\*Estimated figure based on industry benchmarks.

\*\*A1-A4 data based on HVO-fuelled deliveries only, within a 50-mile radius of Nazeing (EN9).

Note: The primary factor contributing to the difference in embodied carbon between the 100mm and 140mm blocks is the variation in mix design. This adjustment ensures that the 140mm blocks remain under 20kg in weight.

### Sustainable Fuel Choice for Block Deliveries

By choosing HVO (hydrotreated vegetable oil) as the fuel source for your block deliveries, you can reduce carbon emissions under A4 by at least 90%.

