

MATERIAL CARBON PROJECT RESULTS



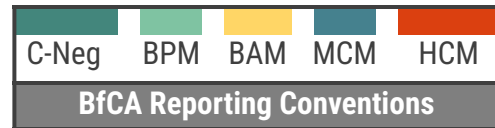
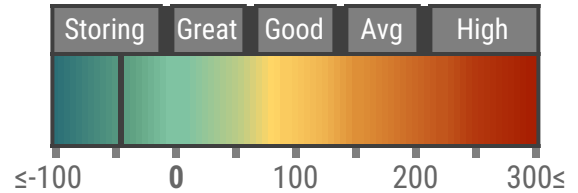
PROJECT INFORMATION			
Project Name	Terra	Construction Year	
Design Firm(s)		Number of Bedrooms	
Engineering Firm(s)		Stories Above Grade	2
Builder / Developer		CONDITIONED AREA	
Development Project		Above Grade	770 ft ²
Street Address		Below Grade	0 ft ²
City		Total	770 ft ²
Province / State		GROSS AREA	
Country	United States	Excluding Garage	770 ft ²
Building Type	Single Detached House	Garage	0 ft ²
Construction Type	New Construction	Total	770 ft ²
Project Stage	Construction Documents		

MATERIAL CARBON EMISSIONS BY SECTION			
Footings & Slabs	489 kg CO ₂ e		
Foundation Walls	0 kg CO ₂ e		
Structural Elements	176 kg CO ₂ e		
Exterior Walls	-5,922 kg CO ₂ e		
Party Walls	0 kg CO ₂ e		
Exterior Wall Cladding	493 kg CO ₂ e		
Windows	592 kg CO ₂ e		
Interior Walls	235 kg CO ₂ e		
Floors	119 kg CO ₂ e		
Ceilings	50 kg CO ₂ e		
Roof	711 kg CO ₂ e		
Garage	0 kg CO ₂ e		
NET TOTAL	-3,057 kg CO ₂ e	-10,000	5,000

MATERIAL CARBON RESULTS

	MCE		MCI (Conditioned)
Net Project Emissions	-3,057	kg CO ₂ e	-43
			kg CO ₂ e/m ²

MCI by Area Type	Metric	Imperial
Total Area	-42.7	-8.8
Conditioned Area	-42.7	-8.8
	kg CO ₂ e/m ²	lb CO ₂ e/ft ²



MCE: Material Carbon Emissions (net total)

MCI: Material Carbon Intensity (MCE per unit area)

HIGHEST CARBON MATERIAL APPLICATIONS

SECTION	kg CO ₂ e	MATERIAL
Roof	1,142	Metal Panels - Aluminum / 22 gauge / Metal Cons
Windows	592	Window - double-glazed / Wood frame, aluminum
Footings & Slabs	489	Helical pier / Generic / 3" Nominal Pipe, 3.5 x 3/16
Exterior Walls	295	Plywood / 1/2" / AWC & CWC [Industry Avg US & CA]
Roof	273	Wood I joist / TJI 230/360 / 16" Depth / AWC & CV
Exterior Wall Cladding	258	Drywall 1/2" [BEAM Avg US & CA]
Roof	214	Plywood / 5/8" / AWC & CWC [Industry Avg US & CA]
Roof	209	Metal Panels - Aluminum / 22 gauge / Metal Cons
Structural Elements	137	Wood / SPF / Lumber by volume / AWC & CWC [Industry Avg US & CA]
Interior Walls	130	Drywall 1/2" [BEAM Avg US & CA]

LOWEST CARBON MATERIAL APPLICATIONS

SECTION	kg CO ₂ e	MATERIAL
Exterior Walls	-6,323	Wood frame with straw bale infill / R-46 / 14" / do
Roof	-1,143	Cellulose / dense pack / R 3.7/inch / CIMA [Industry Avg US & CA]
Floors	-58	Cellulose / dense pack / R 3.7/inch / CIMA [Industry Avg US & CA]

COMMENTS

This is based off the Kaplan Model: We are using 13 Helical Piers for this project, depth TBD. This model also includes porch timbers, floor and roof in its calculations.