

COMBUSTION CONVERSIONS

Basis: 1 mmBTU

Tree Species	pounds of wood	pounds CO2 released
Apple	221	254
Aspen	222	271
Balsam Fir	224	272
Basswood	223	272
Beech	225	257
Black Ash	224	257
Black Spruce	223	272
Boxelder	224	256
Cherry	222	256
Cottonwood	223	272
East.Hophornbeam	222	256
Elm	223	257
Hackberry	224	256
Hemlock	223	272
Hickory	225	256
Jack Pine	224	272
Norway Pine	224	272
Paper Birch	223	257
Ponderosa Pine	224	273
Red Maple	222	257
Red Oak	225	257
Sugar Maple	225	257
Tamarack	224	256
White Ash	225	257
White Oak	225	256
White Pine	224	272
Yellow Birch	225	257

<https://futuremetrics.info/wp-content/uploads/2013/07/CO2-from-Wood-and-Coal-Combustion.pdf>

WEIL-MCLAIN BOILERS

Model	Rating (BTU/hr)
AB-120C	97,000
AB-120H	97,000
AB-155C	125,000
AB-155H	125,000
AB-80C	65,000
AB-80H	65,000
CGa-25	27,000
CGa-3	48,000
CGa-4	73,000
CGa-5	98,000
CGa-6	122,000
CGa-7	147,000
CGa-8	172,000
CGi-25	35,000
CGi-3	42,000
CGi-4	66,000
CGi-5	88,000
CGi-6	117,000
CGi-7	140,000
CGi-8	164,000
EG-30	55,000
EG-35	73,000
EG-40	91,000
EG-45	110,000
EG-50	128,000
EG-55	146,000
EG-65	183,000
EG-75	217,000

Model	Rating (BTU/hr)
ET 110-C	87,000
ET 110-H	87,000
ET 150-C	121,000
ET 150-H	121,000
ET 199-C	160,000
ET 199-H	160,000
ET 80-H	64,000
EVG 110	88,000
EVG 155	124,000
EVG 220	179,000
EVG 299	243,000
EVG 399	333,000
GC90+5	113,000
GV90+3	56,000
GV90+4	84,000
GV90+6	140,000
ULT 105	81,000
ULT 155	123,000
ULT 230	183,000
ULT 299	234,000
ULT 399	317,000
ULT 80	62,000

https://www.weil-mclain.com/sites/default/files/field-file/Weil-McLain_BoilerReplacementGuide_WM2012-web_0.pdf

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Basis: 1 mmBTU

fuel	unit	weight/volume	pounds CO₂ released
propane	gallons	10.9	139
butane	gallons	9.7	144
crude oil (No. 1)	gallons	7.4	165
heating oil (No. 2)	gallons	7.2	162
diesel fuel	gallons	7.2	161
kerosene	gallons	7.4	159
motor gasoline	gallons	8.3	163
residual fuel oil (No. 6)	gallons	6.5	166
1 cubic foot of natural gas	cu.ft.	964.3	113
Anthracite coal	pounds	78.7	224
Bituminous coal	pounds	113.6	280

https://www.engineeringtoolbox.com/co2-emission-fuels-d_1085.html

<https://www.eia.gov/energyexplained/units-and-calculators/>

<https://extension.umaine.edu/publications/7216e/>

<https://www.extension.iastate.edu/agdm/wholefarm/html/c6-87.html>

<https://www.generatorjoe.net/html/energy.html>

<https://www.eia.gov/energyexplained/units-and-calculators/>