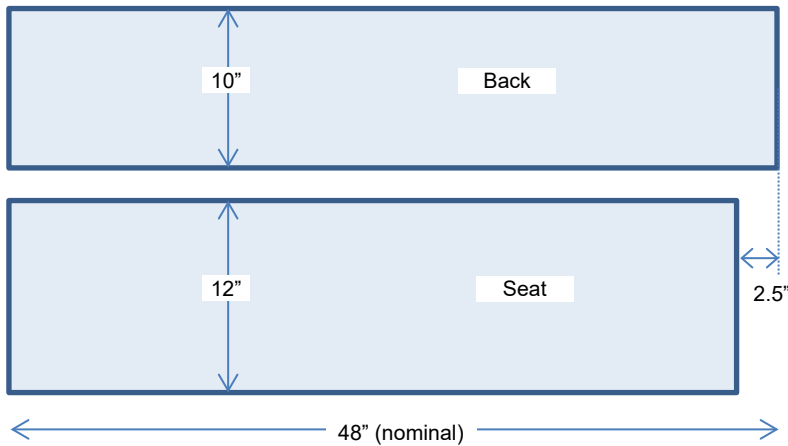


All pieces are 5/4" thick Black Locust
Edges should be rounded, surfaces lightly sanded



Countersink nuts on inside



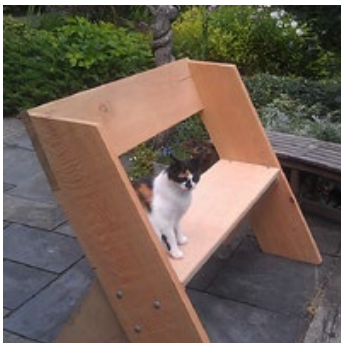
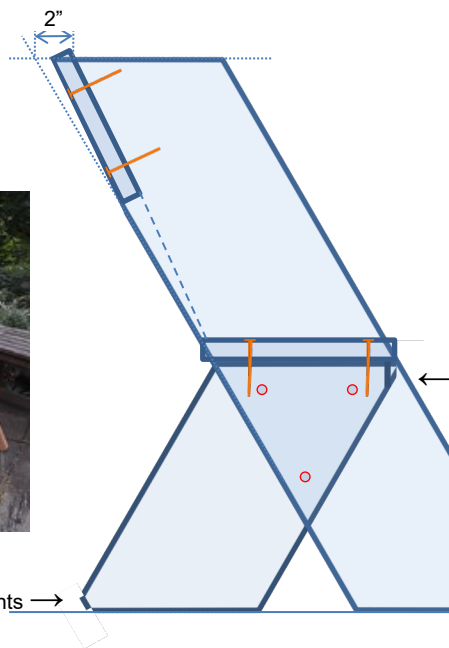
Screw seat to back legs



Screw back to front legs



Set back into front legs for comfort



Qty 8 - 4-1/2" HeadLok Screw



Qty 6 - 3/8-in-16 x 2-1/2-in Hot-Dipped Galvanized Carriage Bolt



Qty 6 - 3/8-in-16 Hot-Dipped Galvanized Standard (SAE) Hex Nuts

Leopold Bench <http://www.aldoleopold.org/AldoLeopold/LeopoldEvents.shtml>

Roger Hopkins, Ithaca, NY <http://naturalhighs.net/waterfalls/misc/BuildLeopoldBench.html>

Materials needed				
Quantity	Description	Purpose	Price*	Total
1	2" x 12" x 8' ground contact, #1, pressure treated	Seat and 2 back legs	\$26.00	\$26.00
2	2" x 10" x 8' ground contact, #1, pressure treated	Seat back and 2 front legs	\$14.00	\$28.00
8	4-1/2" HeadLok Screw	Attach seat and seat back	\$2.00	\$16.00
6	3/8-in 16 x 2-1/2-in Hot-Dipped Galvanized Carriage Bolt	Attach front and back legs	\$1.00	\$6.00
6	3/8-in 16 Hot-Dipped Galvanized Standard (SAE) Hex Nuts	Attach front and back legs	0.25	\$1.50
			Total	\$77.50

*Prices are approximate (2021). Consult with local supplier for alternative (non-pressure treated, hardwood) lumber; prices may be higher.

Tools needed
Mitre saw or wide miter box and saw
Circular saw or rip hand saw for cutout for seat back
Jig saw or hand saw to finish cutout for seat back
Measuring tools and straight edge
HeadLok spider driver bit
3/8" socket wrench
Drill
3/8" drill bit for carriage bolts in legs
1/8" drill bit for pilot hole for HeadLok screws in seat and back
Sander and/or router for rounding edges
Painting supplies and equipment (optional)
Long pipe clamps (6') to assist with assembly (Optional)
Bar clamps (12" or greater) to assist with attaching back (optional but desirable)
PPE: Dust mask, ear and eye protection