

# Team Tiny House Materials List

*We are a female founded 501(c)(3) non-profit engineering (STEM) team composed of students from Thomas Jefferson High School for Science and Technology. After realizing the positive impact tiny houses can have on the environment by being 100% sustainable, we created Team Tiny House to:*

- Build tiny houses on wheels to demonstrate that sustainable and affordable housing is possible for everyone
- Create a world where everyone has access to sustainable and affordable housing.

**By supporting us through in kind donations or direct tax-exempt donations, here are the benefits you will receive:**

Benefits	Diamond \$10,000+	Platinum \$6,000 - \$9,999	Gold \$1,000 - \$5,999	Silver \$500 - \$999	Bronze \$100 - \$499
Name/Company on our Website	✓	✓	✓	✓	✓
Name/Company mentions on Social Media Posts (YouTube, Tik Tok, Instagram, LinkedIn, Facebook)	✓	✓	✓ all social media	✓ only Instagram	
Name/Company on TTH merchandise	✓	✓			
Name/Company publicity in TTH Events	✓	✓			
Name/Company “thank you” on front page of published How-To Guide	✓				
Name/Company plaque with logo in the house	✓				

Email: [teamtinyhouse.org@gmail.com](mailto:teamtinyhouse.org@gmail.com)

Website: [teamtinyhouse.org](http://teamtinyhouse.org)

Information Packet: [tinyurl.com/tthInfoPacket](http://tinyurl.com/tthInfoPacket)

Sample Draft: [tinyurl.com/TTHSystems](http://tinyurl.com/TTHSystems)

# Electric and Water Systems

## Access Shed

Material(Amount)	<i>Estimated Cost</i>
Alkaline Filter	42
Bulkhead Tank Fittings(4)	24
Gravity Fresh Water Fill Hatch with Overflow & City Inlet	48
ID Hose 0.5"	46
ID Hose 1.25"	11
Micron Filter 0.5"	13
NPT Female 1.25" x NPT Fitting Male 0.5"	3
NPT Male 0.5" to Barbed Hose 0.5"	52
NPT Male 1.25" x Barb (4)	13
NPT Male 1" x NPT Reducer Female 0.5"	8
PEX One-Way Valve Crimp Fitting (4)	13
Piano Hinges	24
Screws 3" of 8 or 9 gauge. (200)	35
Shurflo Pump	72
UV Purifier	62
Water Heater	194
Water Tank - 30 Gallon	114
Water Tank - 65 Gallon	180

## Bathroom Appliances

Baskets 2x	24
Cement Board 0.25"x3'x5' (7)	84
Cement Quickcrete	7
Corner Braces	7
Curtain Rod Fastener	11

Diverter	63
Drop Ear	9
FPT 1.5" x Slip Adapter	7
Hand Washer Dryer	55
MPT 3" x Slip Adapter	8
Non-Modified Thinset Mortar 10lbs	6
NPT Female 1.5" x PVC Adapter 1.5"	5
NPT Female 3" x Bulkhead Tank Fitting	32
NPT Male 1.5" x Bulkhead Tank Fitting	14
Plastic Gallon Bucket	10
Plastic Gallon Jug	20
PVC 3" x Slip Adapter	13
PVC Shower Liner/Membrane (5'x6')	44
Shower Arm & Flange	10
Shower Drain	20
Shower Head	26
Shower Mixer	40
Slip Joint Extension Tube	1
Toilet Seat	38
Valterra Single RV Waste Valve	63
Waterproof Peel-N-Stick Vinyl Tiles (60 sq. ft)	84
<b>Electrical Roughing</b>	
Breaker Box	30
Cable Clamps	7
Circuit Breaker- AFCI/GFCI (6)	77
Drywall Anchors	3
Electrical Boxes 1-Gang (10)	8
GE Bonding Screw (2)	2
LED Canless Lights with Junction Box (6)	79
Load Center Ground Bar - PK7GTA Square D	32
Outlet Receptacles (10)	40

Plastic Nail-in Staples 3/4"	3
Protection Plates (50)	31
Romex Cable 25' 12/2	26
Romex Cable 50' 14/2	42
Wire Push Connectors (20)	8
<b>HVAC</b>	
Air Exchanger	1174
Cooper & Hunter 9,000 BTU, 115V, 25 SEER, Mini Split AC/Heating system	1200
Dehumidifier	110
Rockwool 5.5" Insulation	1600
<b>Piping, Tools, General Sealants</b>	
Fiber Mesh Tape	5
Liquid Nails	3
Nails 2" (75)	14
NPT Female Threaded Adapters Crimp Fittings 0.5" - to 0.5" PEX(10)	19
NPT Male Threaded Adapter Crimp Fittings 0.5" - to PEX 0.5" (10)	20
PEX 90 Degree Elbow Crimp Fitting (10)	19
PEX Crimp Rings 0.5" (50)	16
Pipe Strap Clamp 0.5" (10)	8
Pipes PEX Red and PEX Blue 0.5" with Cutter (100ft)	63
PVC 90 Degree Elbow 1.5"	3
PVC Pipe 3" (1')	22
PVC pipes 1.5"	13
PVC Purple Primer & PVC Cement Pack	13
PVC Wye 1.5"	6
Silicone Caulking (2)	20
Teflon	1
<b>Rainwater Collection</b>	
Block with PVC Funnel Reducer	11

Flashing	40
Galvanized Roofing Nails	8
Garden Hose Tee	7
PEX 0.5" x FPT 0.5"	10
PEX 0.5" x Garden Hose Fitting 0.5"	9
Roof Sealant-Cement	6
<b>Sink</b>	
Air Admittance Valve DFU	24
Basket Drain	11
Faucet	30
P-Trap 1.5"	17
P-Trap 1.5" (Swivel)	9
Pex Stops (2)	8
PVC Sanitary Tee 1.5"	8
Sink Bowl	38
Tail Piece	4
Wood Oil	10
<b>Solar Panel System</b>	
Lithium Battery	640
Pure Sine Wave Inverter Charger 2000W	580
Solar Panel Z - Mounting Brackets (8)	120
Solar Panels 100W 500 Wh (12)	800
Solar Panels 800W 500 Wh (8) with Charge Controller	1300

<b>Interior Furniture</b>	
*We are hoping to get these materials as in-kind donations, or second hand	
Material	<i>Estimated Cost</i>
Barn Door 1.5" x 30" x 80"	*
Cabinet 1.5' x 2' x 3' (3)	*

Cabinet 1.5' x 2' x 2.5' (3)	*
Cabinet Handles 5" x 1.5" (8)	*
Cabinets Pocket Hole Screws 1.25"	*
Fridge 2.5' x 1.5' x 5'	*
Microwave Oven	*
Plywood 0.75" Thick (250 sq ft)	*
Plywood 0.25" Thick (60 sq ft)	*
Pull-Out Couch 3' x 7'	*
Stone Countertop 50" x 30"	*
Stools 2' (2)	*
Stove Plate	*
Window 1' x 4' x 10" (2)	*
Wood Kitchen Island 2" x 4" x 10' (8)	*

## Structural Materials

### Doors

Materials	<i>Estimated Cost</i>
Door Hinge (6)	26
Entry Door Knob (2)	22
Front Door Slab (2)	328

### Exterior Walls

2x4 - 16' (4)	36
2x4 - 8' (65)	218
2x6 - 8' (6)	42
CDX Plywood (384 sq ft)	317
Galvanized Roofing Nails 1.25" (226)	76
Hardie Siding (594 sq ft)	957
Nail 10D (50)	24
Nail 16D (100)	11

Nail 8D (350)	31
Red Thermo - Ply Foil Poly Structural Sheathing (384 sq ft)	167
Strapping 1x3 (2)	45
<b>Floor</b>	
Bralton Oak Vinyl (120 sq ft)	398
Underlayment (120 sq ft)	178
<b>Subfloor</b>	
2x4 - 8' (22)	269
Flashing (140 sq ft)	153
Self tapping screws (226)	52
Sheathing (128 sq ft)	97
<b>Interior Walls</b>	
2x4 - 8' (10)	123
CDX Plywood (128 sq ft)	106
<b>Roof</b>	
2x6 - 10' (4)	38
2x8 - 12' (12)	256
Anti-rust Coating	30
Metal Roof Standing Seam (5)	500
Plywood Sheathing (192 sq ft)	196
Polyiso (192 sq ft)	239
Red Thermo-Ply Foil Poly Structural Sheathing (192 sq ft)	84
Roofing Nails (500)	60
Sheathing Clips	38
<b>Flashing</b>	
Roll Flashing (80 sq ft)	100

Step Flashing (192 sq ft)	39
Tape Flashing (50 sq ft)	59
<b>Windows</b>	
Casement windows	3600
<b>Trailer</b>	
Flatbed Trailer (8.5'x16')	6550