

Tiny Home Utilities & Systems Design Checklist

☒ Water Supply & Plumbing

- ☒ Decide between on-grid (municipal/well) or off-grid (water tank) supply.
 - ☒ Choose PEX piping for flexibility and freeze-resistance.
 - ☒ Install low-flow faucets and efficient showerheads.
 - ☒ Select a compact/tankless water heater.
 - ☒ Plan plumbing layout for minimal space usage and easy access.
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☒ Wastewater & Sewage Systems

Gray Water:

- ☒ Check local regulations on gray water discharge or reuse.
- ☒ Consider a gray water filtration system if reusing water.

Black Water:

- ☒ Choose a toilet type:
 - ☒ Composting toilet
 - ☒ Incinerating toilet
 - ☒ Traditional flush toilet with holding tank or septic hookup
 - ☒ If mobile, plan for black/gray water holding tanks and dump station access.
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✓ Electricity & Power Supply

- ✓ Decide on on-grid or off-grid power.

If Off-Grid:

- ✓ Size and install solar panels or an alternative energy source (wind, generator).
 - ✓ Include a battery bank for energy storage.
 - ✓ Install LED lighting and energy-efficient appliances.
 - ✓ Plan power capacity to match appliance usage.
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✓ Heating & Cooling

Heating Options:

- ✓ Electric heater
- ✓ Propane heater (with ventilation)
- ✓ Wood stove
- ✓ Mini-split HVAC system

Cooling Options:

- ✓ Mini-split AC or window unit
 - ✓ Ceiling fan and vented windows
 - ✓ Use spray foam insulation or equivalent for thermal efficiency.
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✓ Ventilation & Air Quality

- ✓ Install:
 - ✓ Heat recovery ventilator (HRV)
 - ✓ Bathroom exhaust fan
 - ✓ Kitchen range hood
 - ✓ Ensure cross-ventilation via windows or vents.
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Space Optimization & System Integration

-  Use tankless or wall-mounted appliances where possible.
-  Consider combo units (e.g., washer/dryer).
-  Plan for utility access under floor, in lofts, or behind panels.
-  Design cabinetry and furniture around utility components for concealment and efficiency.