

Pool Heating Time Planner

Estimate when to start heating so your pool is ready on time.

1. Pool Details

Pool type

Pool volume (gallons)

Length / diameter

Average depth

2. Temperature Goal

Current water temperature (°F)

Target water temperature (°F)

Temperature rise needed (°F)

Desired swim date / time

3. Heater Information

Heater type

Rated BTU/hr

Delivered BTU/hr if known

Estimated heating hours

4. Quick Calculation

BTUs required = pool gallons x 8.34 x temperature rise

Baseline heating hours = BTUs required / delivered BTU per hour

Planning estimate only. Real heating time can be longer because of weather and heat loss.

5. Heat Loss Check

- | | |
|---|--|
| ☐ Physical pool cover available | ☐ Heater and filter are maintained |
| ☐ Pool will be covered overnight | ☐ Water circulation is working normally |
| ☐ Strong wind is expected | ☐ Good sun exposure is available |
| ☐ Cool nighttime temperatures expected | ☐ Heater manual requirements checked |

START HEATING BY

Add extra time for wind, cool weather, evaporation, and equipment performance.

HOT TUB PATIO

Pool Heating Quick Reference

Use pool gallons, temperature rise, and heater output to plan your warm-up time.

Core Formula

BTUs required = gallons x 8.34 x temperature rise (°F)

Heating hours = BTUs required / delivered BTU per hour

Ideal Heating Time for a 10°F Increase at 300,000 BTU/hr

Pool volume	BTUs needed	Ideal time
5,000 gal	417,000 BTU	1.4 hr
10,000 gal	834,000 BTU	2.8 hr
15,000 gal	1,251,000 BTU	4.2 hr
20,000 gal	1,668,000 BTU	5.6 hr

Method Snapshot

Gas heater Usually the fastest common option for same-day heating.

Heat pump Better when you can start earlier and maintain temperature.

Solar heating Lower operating cost potential, but slower and weather-dependent.

Physical cover Does not create heat. It helps keep added heat from escaping.

Fast-Heating Checklist

- ☐ Confirm pool gallons before estimating time
- ☐ Measure the actual starting temperature
- ☐ Use the heater output listed by the manufacturer
- ☐ Cover the pool whenever it is not being used
- ☐ Reduce wind across the water when practical
- ☐ Start earlier than the ideal formula suggests

Planning note

The formula gives a baseline only. Wind, evaporation, outdoor temperature, plumbing, and heater performance can extend actual warm-up time.