UNDERFLOOR HEATING

Warm underfoot, every range.

Every floor we lay is rated for underfloor heating: ATS Timber, both herringbone ranges, Oak Plank and Laminate, over hydronic or electric systems. Here are the limits that keep it flat and warranted, and how we lay it over a heated slab.

Rated across the range

Range	Build	Thermal resistance	How it is laid
ATS Timber 190	14/3 engineered oak	approx. 0.09 m²K/W *	Glued direct
ATS Timber 260	15/4 engineered oak	approx. 0.10 m²K/W *	Glued direct
Herringbone & ATS Herringbone	15/4 engineered oak	approx. 0.10 m²K/W *	Glued direct
Oak Plank	12/2 or 15/4 engineered oak	approx. 0.08 / 0.10 m²K/W *	Glued direct
Laminate	12mm AC4 laminate	0.102 m²K/W, tested to EN 12667	Floated on IXPE underlay

* CALCULATED FROM BOARD THICKNESS AT 0.15 W/MK, THE TYPICAL CONDUCTIVITY OF ENGINEERED OAK. EN 1264, THE EUROPEAN UNDERFLOOR HEATING STANDARD, SETS 0.15 M²K/W AS ITS CEILING FOR A FLOOR COVERING: EVERY BOARD SITS BELOW IT.

The limits

27°C
Maximum floor surface temperature, at any point, including under rugs.

35 to 45°C
Typical flow temperature for a hydronic system, set by the heating designer.

5°C a day
The most the heating should change in a day, up or down. Never on full from cold.

40 to 70%
Indoor relative humidity to keep the room in, all year round.

How we lay it

Glued, for the timber ranges.
Every timber floor is bonded to the slab in a full trowel bed of Mapei Ultrabond ECO 995, a flexible urethane Mapei lists for radiant heated floors. No air gap sits between pipe and board, so the heat passes straight through, and nothing is nailed near the pipes.

Floated, for Laminate.
Laminate clicks together and floats on its IXPE underlay, the balance layer keeping each board flat through heat and humidity swings. The underlay adds its own resistance, so the heating designer allows for the full build.

Hydronic or electric.
Hydronic heating changes temperature gently and is the easiest partner for timber. Electric cables or mats suit too, embedded in screed and run from a floor probe thermostat capped at 27°C.



GLUED TIMBER OVER A HEATED SLAB · NOT TO SCALE

Around the install

1. **Commission first.**
The heating is installed, pressure tested and run before we lay, driving the last moisture out of a new slab. We then test the slab: under 75% relative humidity, every time.

2. **Cool to lay.**
Heating off, or the surface held near 18°C, for 48 hours before the install, during it, and for three days after while the adhesive cures.

3. **Bring it up slowly.**
Then raise it no more than 5°C a day to working temperature. Wind it down just as gently when winter ends.

Living with it.

- Thick rugs and beanbags trap heat over 27°C. Keep them off, or turn that zone down.
- Fine winter gaps between boards are natural timber movement and close again in spring. The wide boards, ATS Timber 260 and Oak Plank 240, show it a little more.
- Run outside these limits, the floor falls outside its warranty.