

UNDERFLOOR HEATING

SWISS KRONO AG Floor can be installed without problems over hot water underfloor heating systems. However, according to information available to us, the installation of SWISS KRONO AG Floor on electric underfloor heating systems should be avoided.

Our Laminated Flooring has a favorable thermal resistance for the economical operation of your underfloor heating. Because of the natural warmth of SWISS KRONO AG Floor, it is also possible to switch off heating earlier during transitional periods. Underfloor heating means lower heating costs. It also means that you can achieve a more even surface temperature.

For efficient heating in a room the thermal resistance of the floor should not be higher than $0.15 \text{ m}^2\text{K/W}$. SWISS KRONO AG Floor has a thermal resistance rating of between $0.05\text{-}0.10 \text{ m}^2 \text{ K/W}$ - well within this range. If more heat than 65 W/m^2 is required we suggest to use additional heating appliances.

All in all, Laminate Flooring is ideally suitable for use with your underfloor heating system. However, please take careful note of the following installing instructions;

Screeds must be installed in accordance with industry standards. All mineral sub-floors must be heated before the installation of laminated floors, so that no more harmful moisture can be released. This heating process is required throughout all the seasons. Cement screeds can be heated three weeks after installation, anhydrite screeds after just one week.

The temperature must be raised by increments of 5°C/9°F per day until the maximum heating output is reached. This is also important for all the following heating periods. The time you have to maintain the maximum heating by running full load depends on type and thickness of the screed.

Cement screed: per cm screed thickness 1 day
Anhydrite screed: per cm screed thickness 2 days

After this full load heating phase the temperature has to be decreased by reductions of 5°C/9°F per day. For reasons of security it is necessary to repeat the procedure of heating the screed.

If the heating and cooling procedure is carried out by the heating installation contractor he should automatically compile and submit a heating report. Questions should always be raised if this report is missing.

Before the installation, moisture should be tested with CM-machines at the points marked by the screed installers and the heating installation contractors. The permissible moisture for cement screed is max. 1.8 CM-% and for anhydrite screed max. 0.3 CM-%.

Important: to test the dryness of the screed bedding, lay out several pieces of PE foil (ca. $50 \times 50 \text{ cm}/20 \times 20''$) and seal off the edges. If no condensation has collected, it is clear that the screed is dry and the installation process can be started.

The temperature of the underfloor heating system could be raised again progressively to the required output 24 hours after the laminate floor is installed

Note: This also applies for the beginning of each heating period.

And please note one further fundamental rule:

The surface temperature of your laminated floor covering should not exceed $26^{\circ}\text{C}/79^{\circ}\text{F}$. An ideal climate during the heating period is a temperature of $20 - 22^{\circ}\text{C}/68 - 72^{\circ}\text{F}$ and a humidity of 50 - 60%.

Please note: it is imperative that a non-pervious building foil with a thickness of at least 0,2mm is laid over the whole surface.

The chosen footstep sound insulation can now be laid on the building foil. If it is not possible to maintain a constant room temperature, a slight opening of joints may occur. This joint opening is not a defect, it is a consequence of the natural properties of wood and wood products. This should be borne in mind particularly during changes of climate.

The recommendations and information given in this Product Sheet are to the best of our knowledge in keeping with the present state of the art. However, they are intended purely for information purposes and as noncommittal guide-lines. As such they cannot constitute grounds for any claim under warranty.