

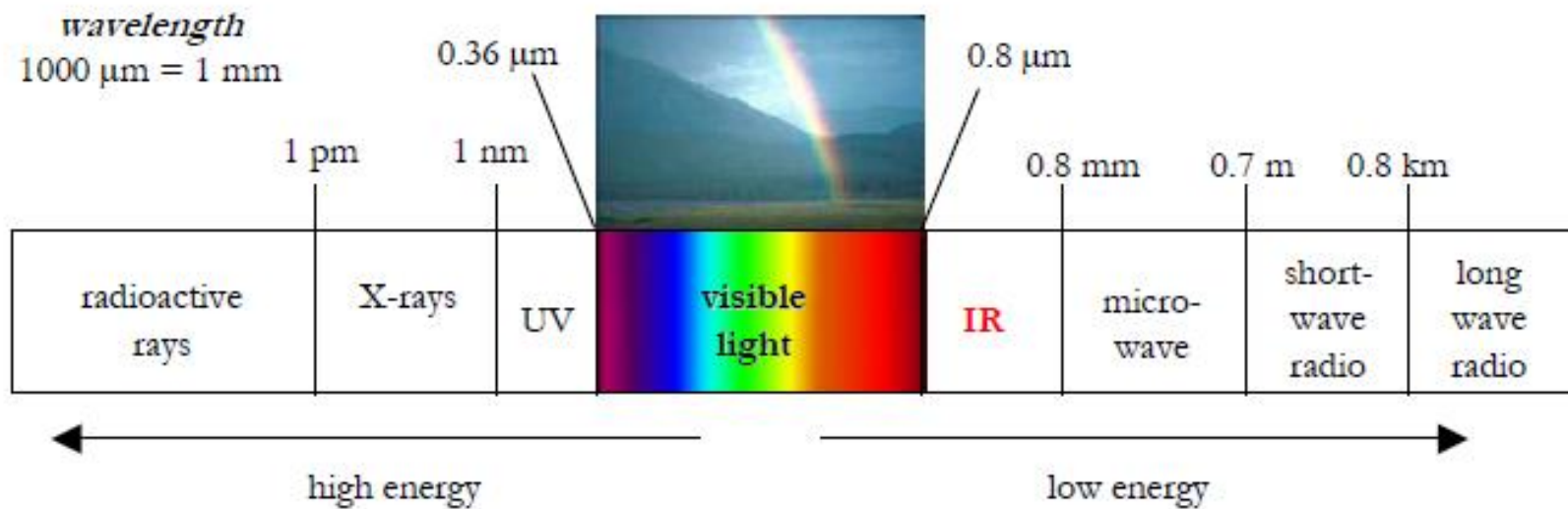


Importeur meeting Radiant heat

26.11.2013

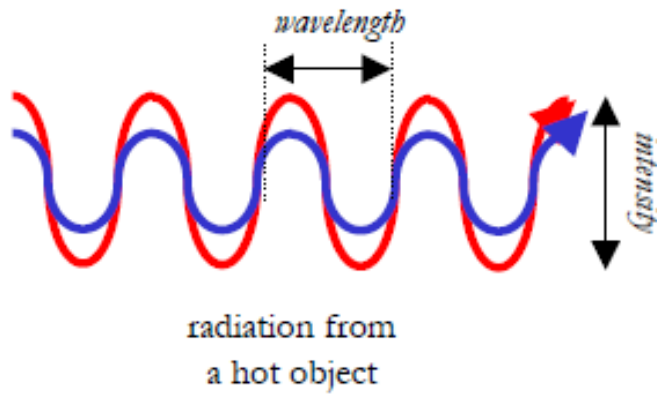
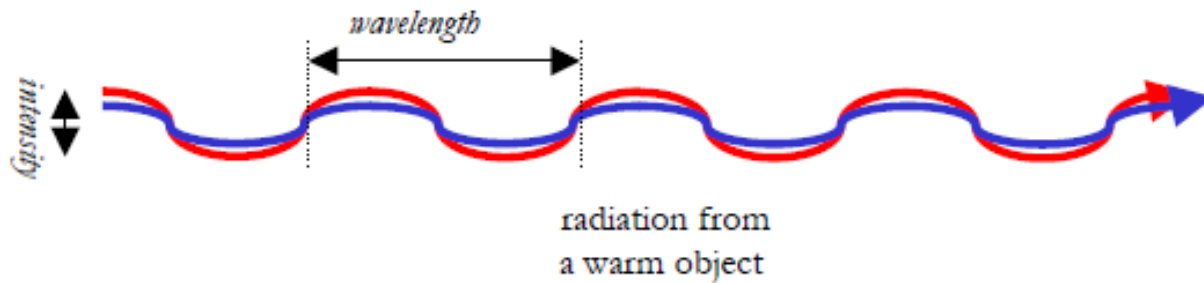
What's radiant heat?

A light which is invisible for human beings:

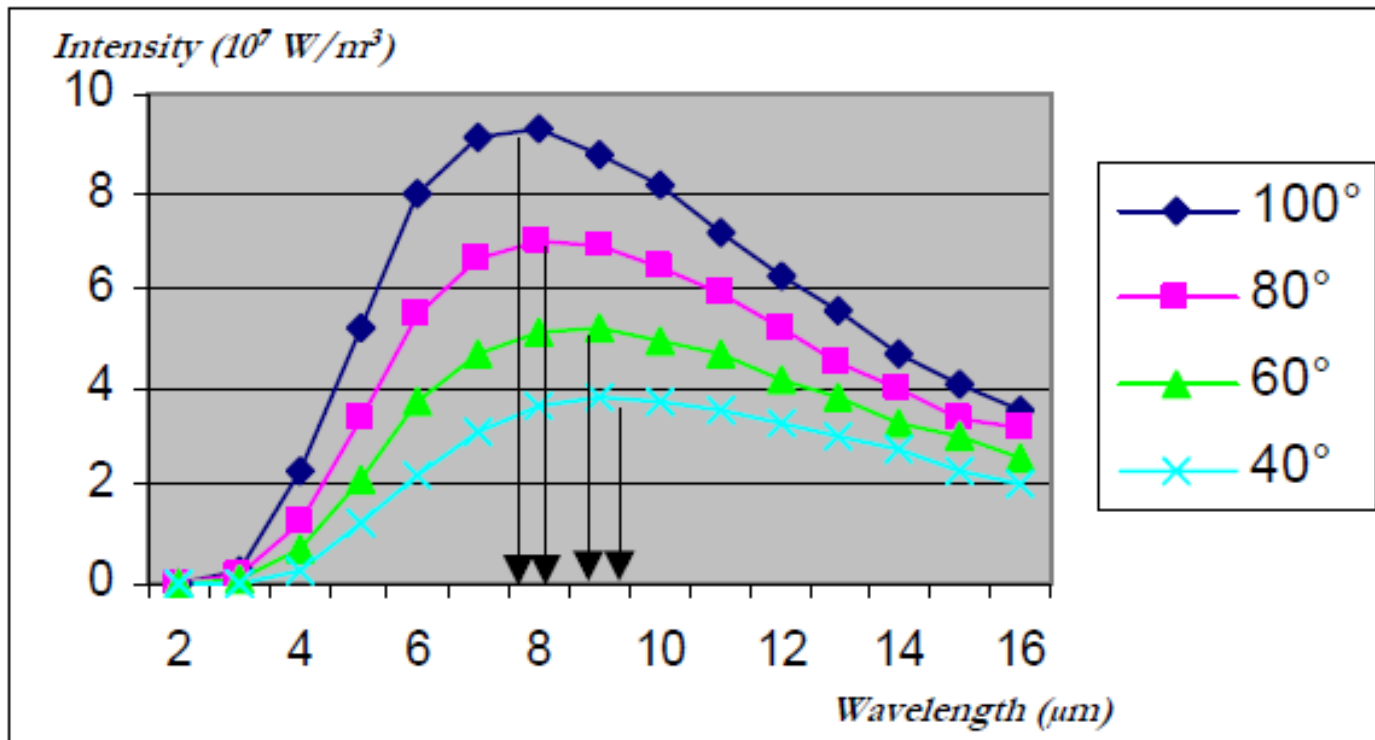


Radiant heat: a long wave!

The higher the temperature of a stove,
the stronger the radiation and the shorter the wavelength:

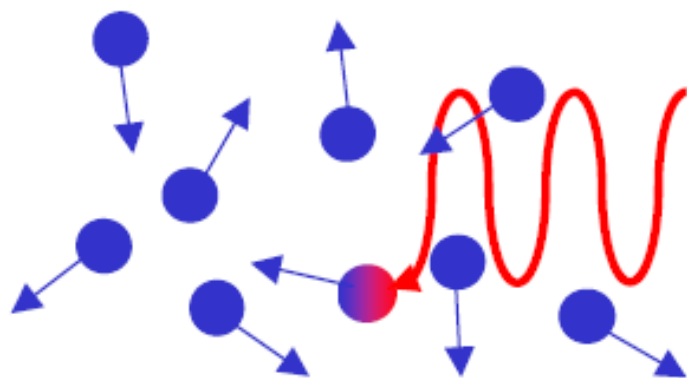


High surface temperature= High intensity



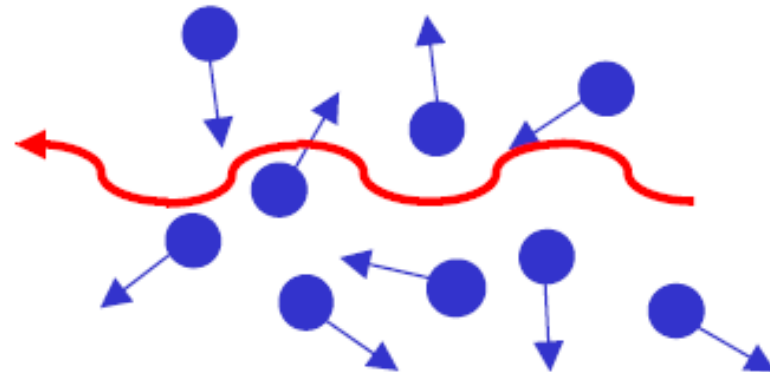
Long wave goes more far

The shorter the wavelength and thus the higher the surface temperature, the faster the radiant heat loses its energy when passing through the air:



longer path to cover =
high probability of
striking air particles

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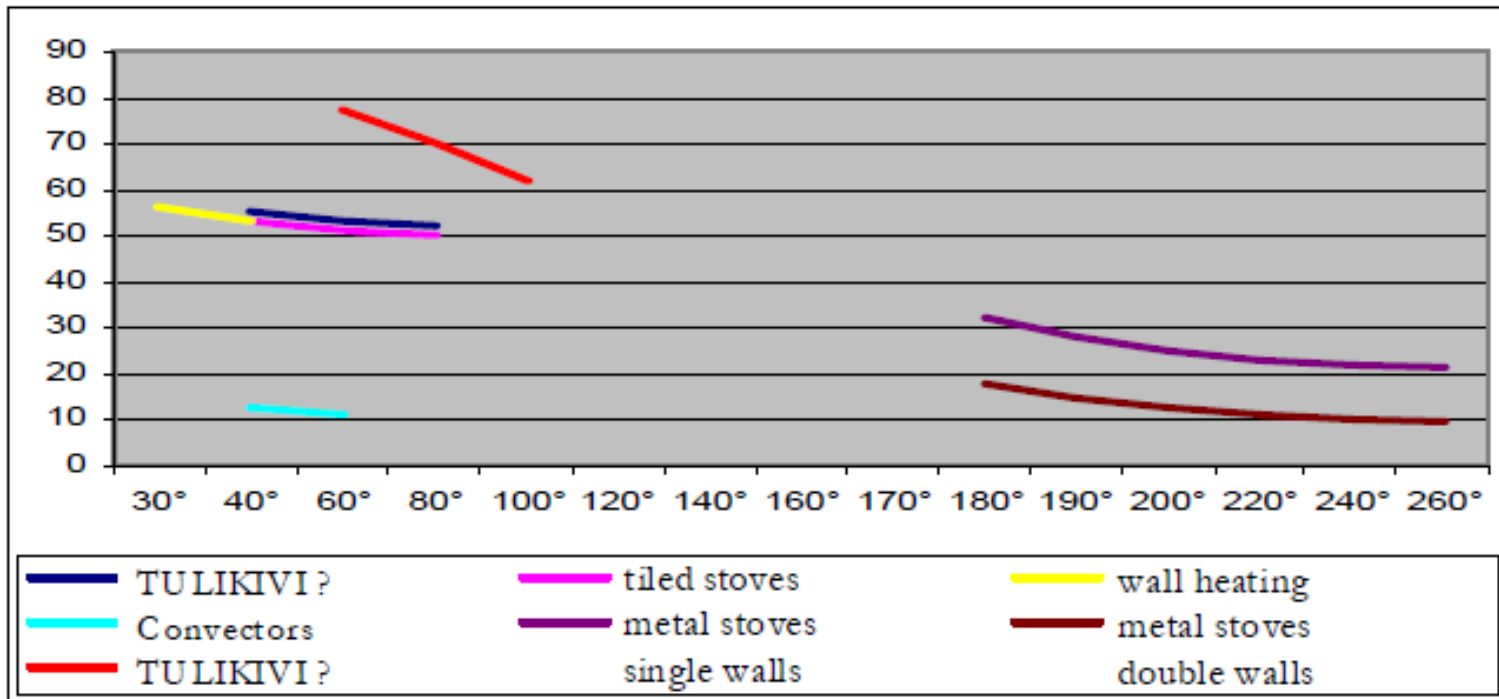


shorter path to cover =
low probability of
striking air particles

% of radiant heat

is also a function of the material used - soapstone.

% radiant heat



How to have radiant heat?

Soapstone doesn't mean RADIANT HEAT

Surface temperature

Norm EN 15250.



Mostly convection

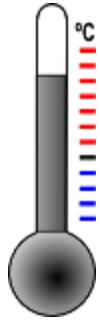


Mostly radiant heat



How to explain radiant heat?

The feeling of radiant heat



Cold radiation:
Window in the train



Convection



Warm air goes up



[®]
Tulikivi



What warm air does?



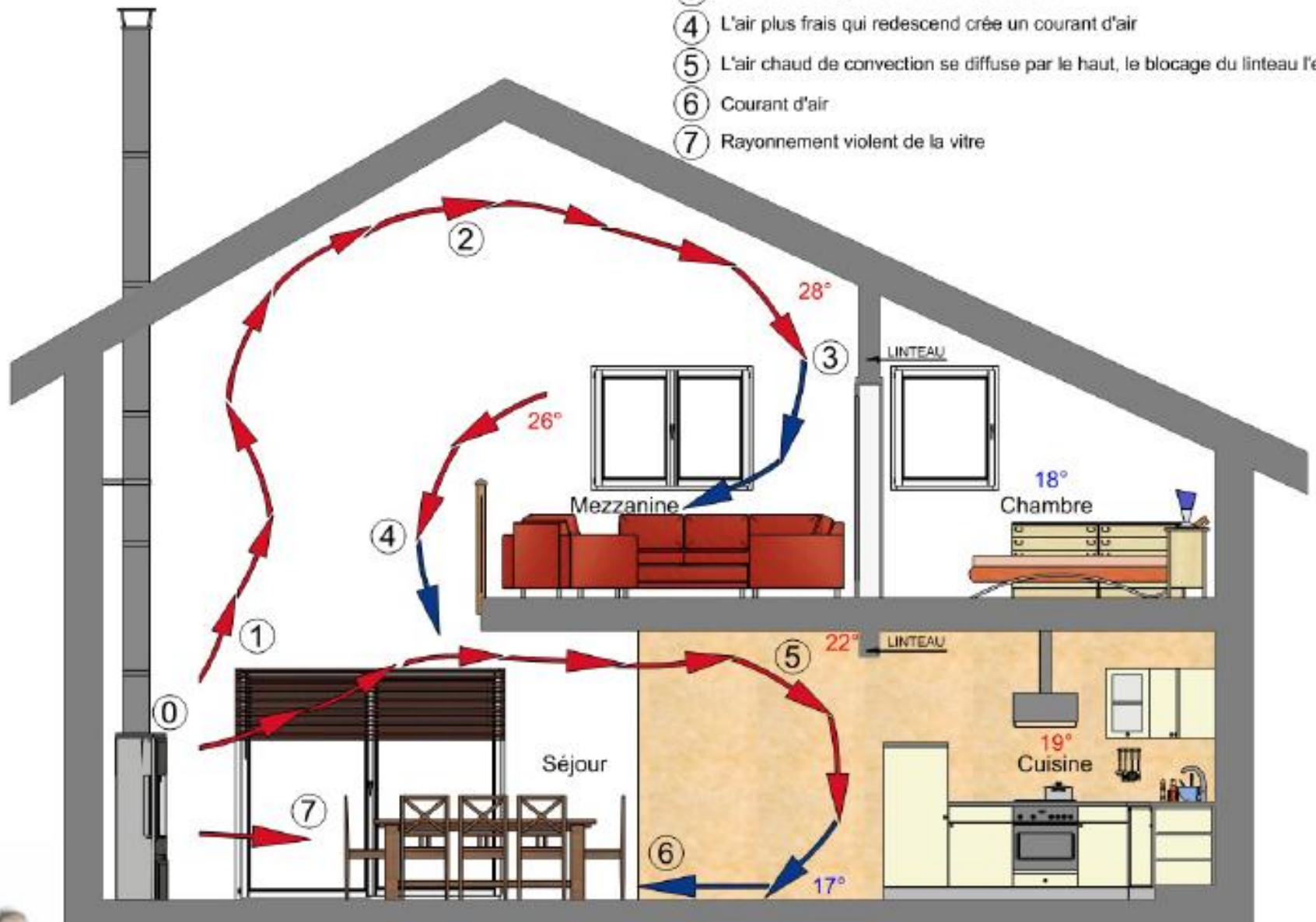
Warm air does warm you up, it just avoids to get cold



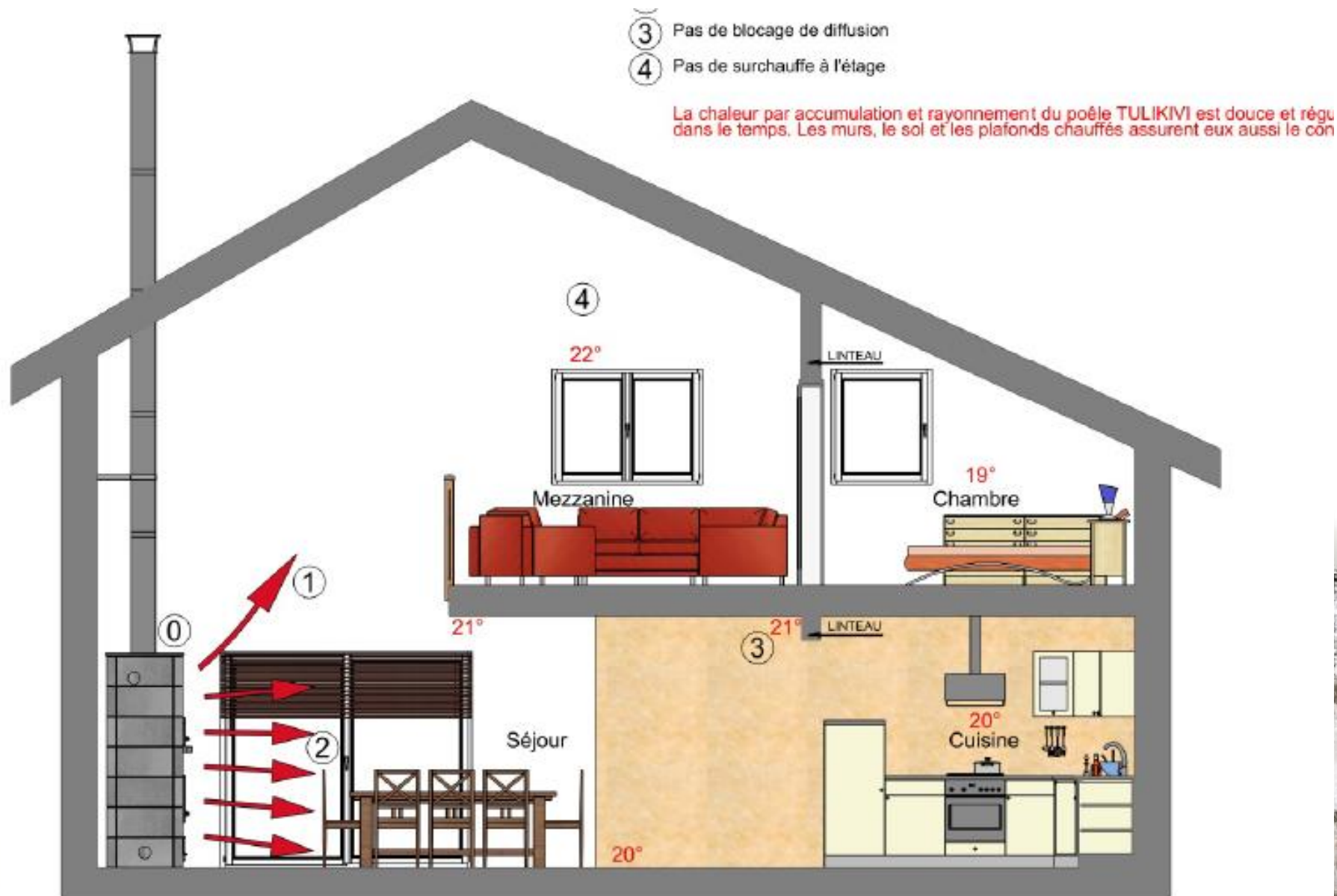
Radiation heat at home

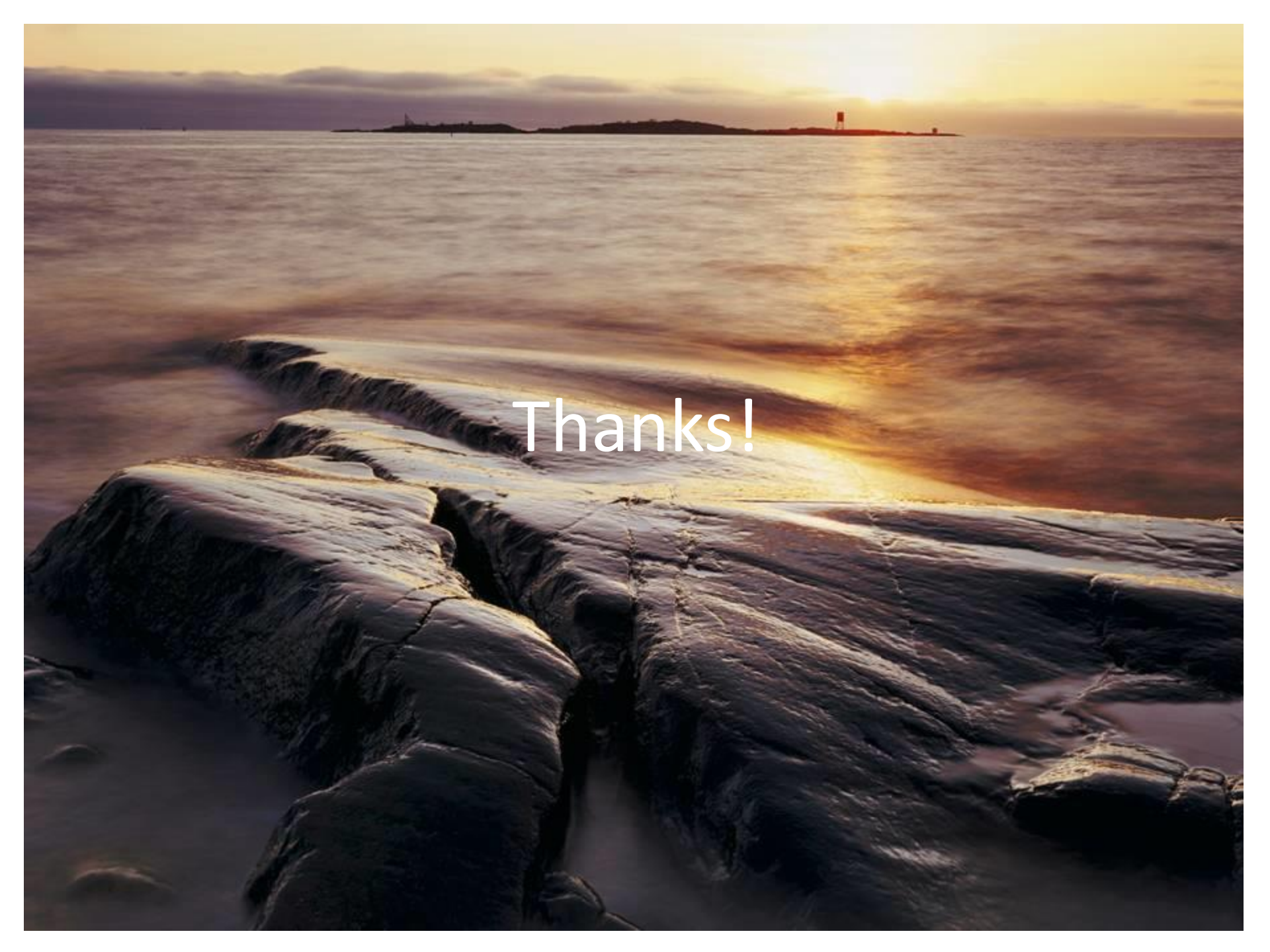
Convection

- ③ L'air chaud bloqué et refroidi redescend
- ④ L'air plus frais qui redescend crée un courant d'air
- ⑤ L'air chaud de convection se diffuse par le haut, le blocage du linteau l'empêche
- ⑥ Courant d'air
- ⑦ Rayonnement violent de la vitre



Radiant heat





Thanks!