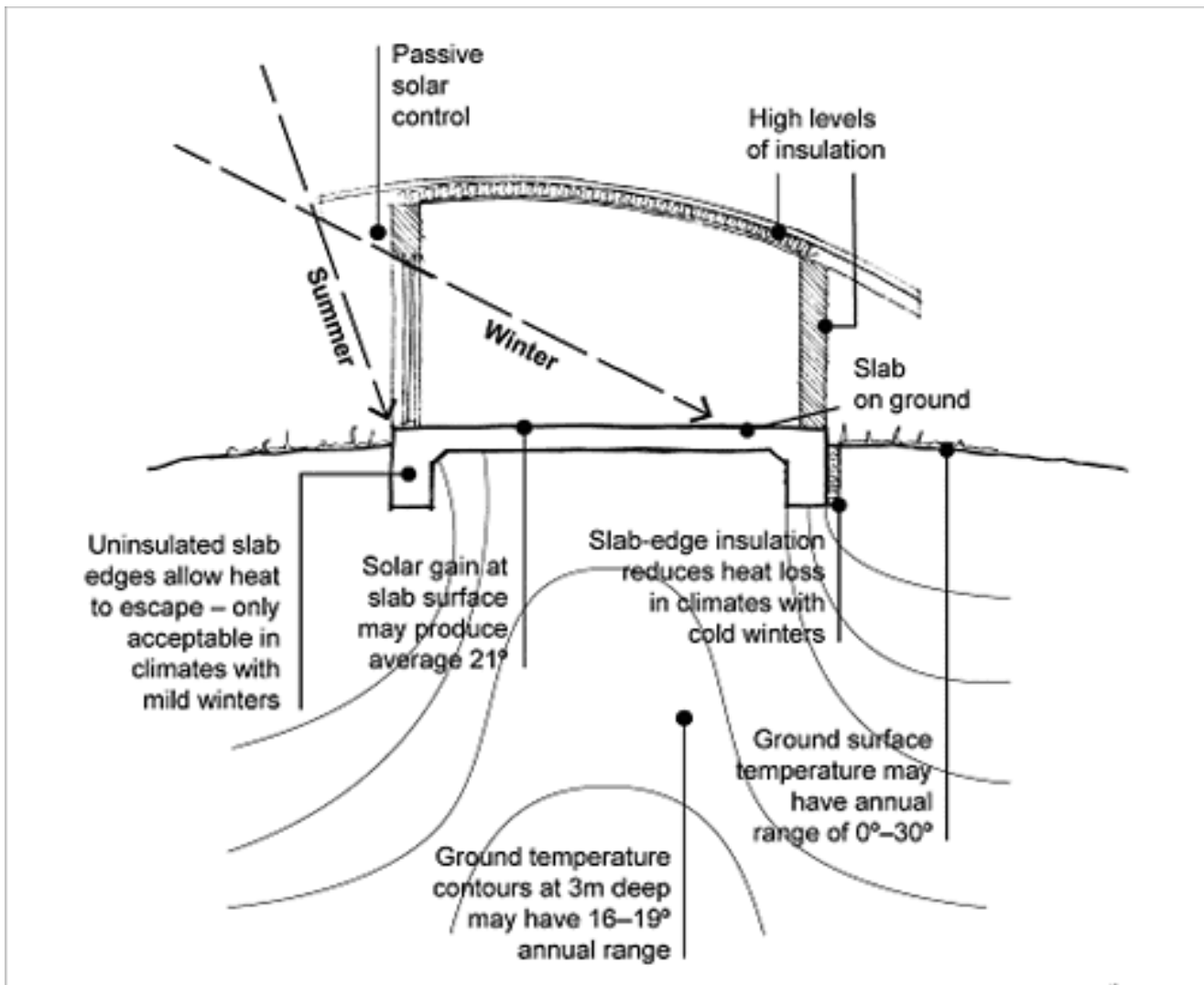


## Earth coupling

<http://www.yourhome.gov.au/passive-design/passive-cooling>



Earth coupling of thermal mass protected from external temperature extremes (e.g. floor slabs) can substantially lower temperatures by absorbing heat as it enters the building or as it is generated by household activities.

Earth coupling utilizes cooler ground temperatures. Passively shaded areas around earth-coupled slabs keep surface ground temperatures lower during the day and allow night-time cooling. Poorly shaded surrounds can lead to earth temperatures exceeding internal comfort levels in many areas. In this event, an earth-coupled slab can become an energy liability.

Ground and soil temperatures vary throughout Australia. Earth-coupled construction (including slab-on-ground and earth covered or bermed) utilizes stable ground temperatures at lower depths to absorb household heat gains.