Why use a radiant system?

Radiant Cooling and Heating System

- No uncomfortable jet flow
- Uniform radiant environment and uniform air temperature
- Energy loss caused by thermal transmission & ventilation is small

Air-conditioning System

- Uncomfortable hot/cold jet flow
- Vertical air temperature distribution disrupts the normal metabolic balance
- Energy loss caused by thermal transmission & ventilation is large

System configuration

- Small peak load
- Heat/cool source is ducted type low-power air conditioner
- Ceiling radiant panel made of common plasterboard
- Low initial cost
- Ceiling radiant panel is pasted with permeable wallpaper for adding dehumidification function and dew condensation prevention

Sensible temperature, Ambient air temperature, Ambient surface temperature

Adjust

- Sensible temperature
- Ambient air temperature
- Ambient surface temperature

Cool the attic air

Ceiling surface is chilled

Ducted type air conditioner

Ceiling access panel

Occupant

Radiational coolness

Floor surface is chilled by radiational cooling