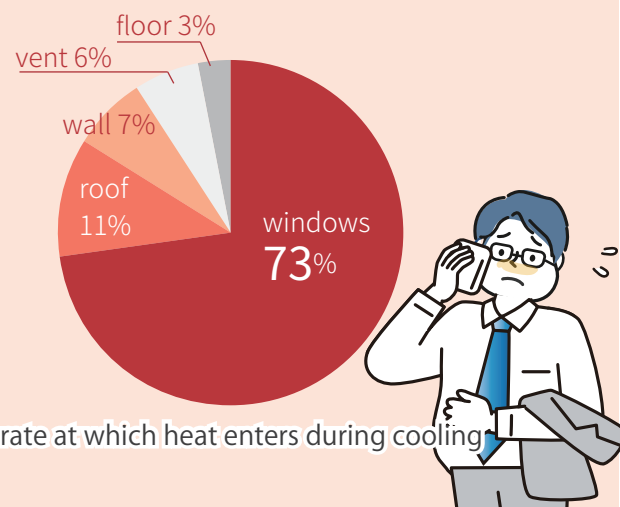
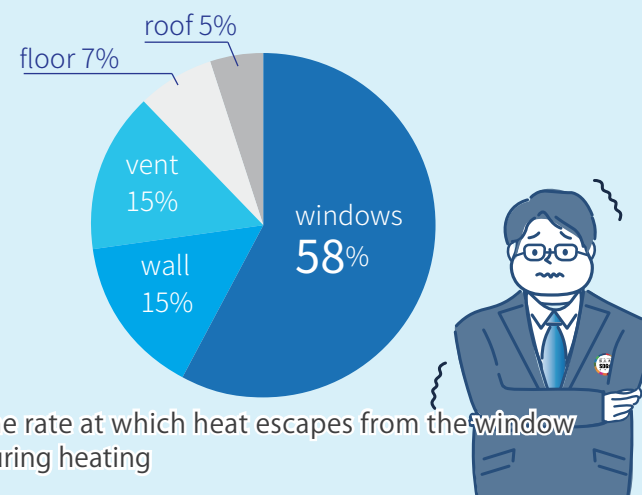


## ● The most important point is insulation of window glass

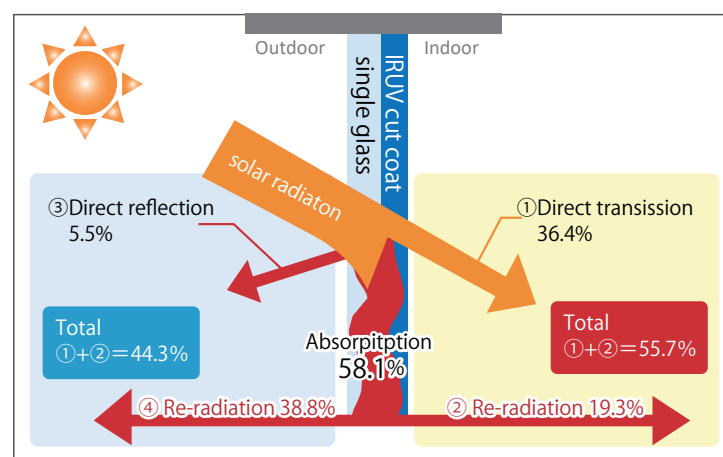
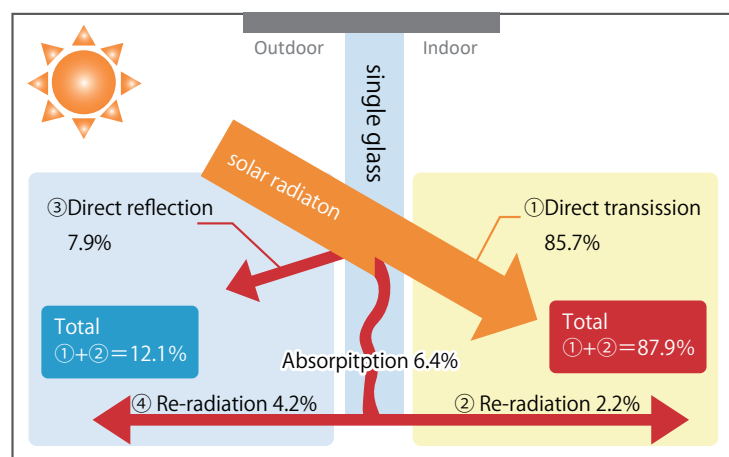
summer



winter



## ● The mechanism behind the summer heat shielding effect



## ● Major IRUV Cut Coat Application Projects in Japan



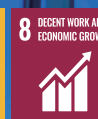
### 1 100Yen Shop DAISO

30-100 SQM of Glass Window glasses per shop of more than 1200 Daiso Branches across Japan from 2020- 2024.



### 2 DRUG STORE MORI (Only New Store)

100-150 SQM of Window glasses per shop of more than 100 DRUGSTORE MORI Branches in Japan from 2020- 2024.



nanotechnology coating to block heat and energy saving for window glass



## IRUV Cut Coat H-SC

Thermal insulation coat for window glass



Sketch



Sketch  
Business Management



Sketch Nano.Ph  
Thermal Paint Heat & UV Cut Coat Anti-fouling Coat

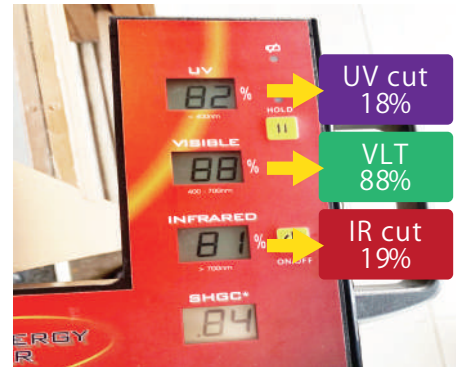


# What is IRUV CUT COAT H-SC ?

IRUV Cut Coat H-SC is a coating product that improves the heat shielding of glass windows. The coating leads to **25 ~ 30% of Energy Savings** on air-conditioning energy consumption cost.

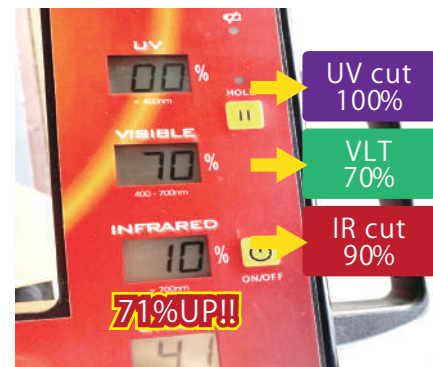
## Before Coating

UV ray cut ratio = 18%  
Visible light transmittance = 88%  
Near infrared rays cut ratio = 19%



## After Coating

UV ray cut ratio = 100%  
Visible light transmittance = 70%  
Near infrared rays cut ratio = 90%



## Advantages on Glass Windows

### Heat-blocking effect

Increases near-infrared cut rate by approximately **90% or more**. Near-infrared cut of 90% or more is achieved in Summer  
Reduces direct solar heat during summer by approximately 8°C to 15°C. Far-infrared cut of 90% or more is achieved in Winter. The surface temperature near the windows increases by about 3–5°C, eliminating the cold draft from the windows. Even with the heating setting lowered by 2–3 degrees, it still feels warm.

### Ultraviolet Rays blocking effect

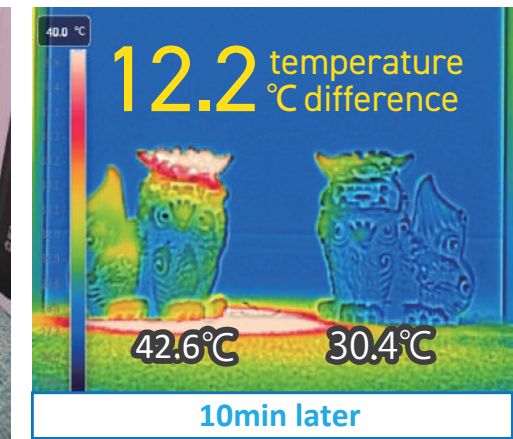
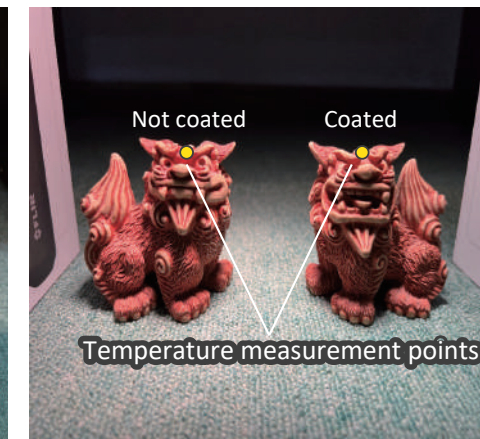
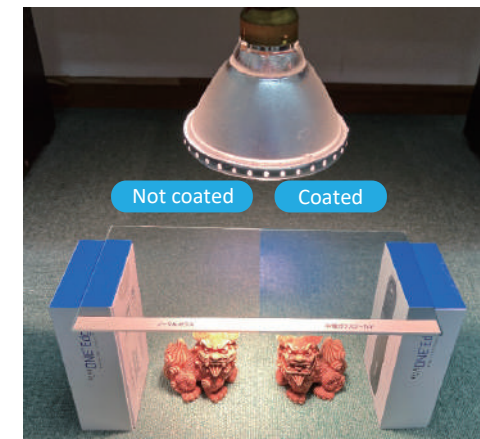
### Condensation reduction

**50% condensation reduction** / Minimizes water dripping

### Long durability

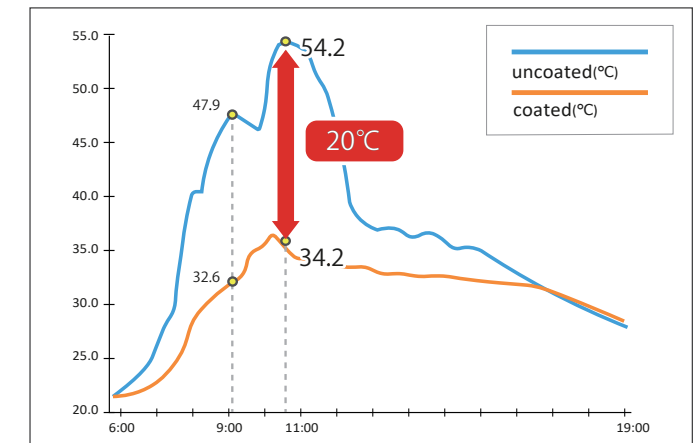
**15-year weather resistance with a 10-year reinstallation guarantee in Japan.**  
2 times more durable and longer-lasting than regular window films.\* Reduces air conditioning load, resulting in **energy savings of 25-30%**. **Depreciation within 5 years** (theoretical value).

## Comparison of normal glass and IRUV cut coat H-SC



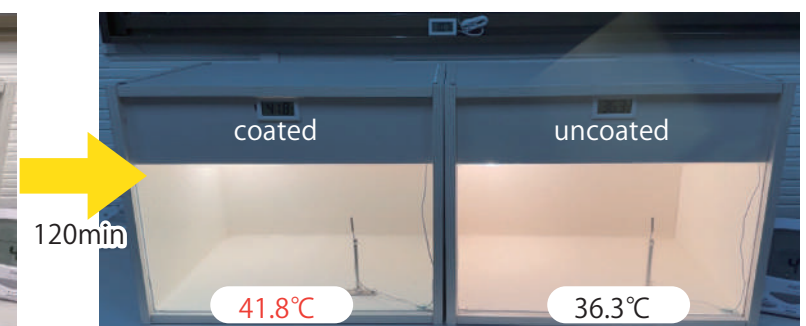
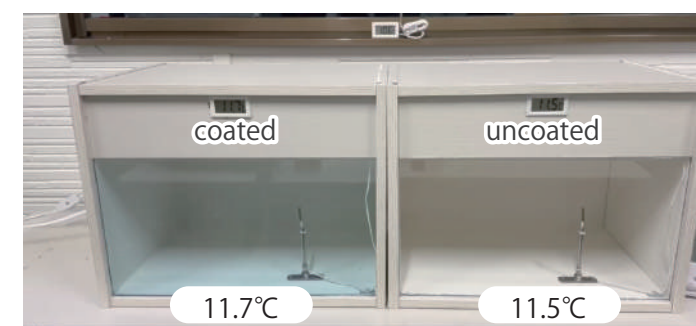
- A glass coating is applied to half the area of normal glass.
- Assuming we wanted to measure the temperature inside a room, we shone a light through the glass onto an ornament to measure its temperature.
- The thermal image also confirms that it effectively blocks infrared radiation.

## Temperature comparison between coated and uncoated area



※Sep 2 outside temperature 17.9~26.2°C

## Insulation effect verification in water



【 Comparison of coated and uncoated single glass 】  
Outside temperature: 10.6°C, A 100W krypton bulb and a thermometer were placed inside the box.

Coating the room drastically reduces heat loss.

- = Proven insulation effect.= Reduces cold zones around windows.
- = Prevents condensation

