

HEAT PLUS
INSTALLATION MANUAL
(CLAMP)

|주|세기센추리

Seggi Century Corp.



1. Job-Site Preparation

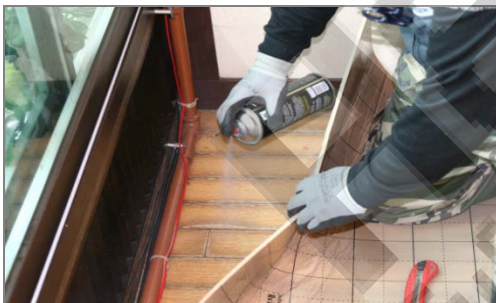
Ensure that the sub-floor (concrete or timber) is clean, dry and free from dust and debris.



2. Laying Insulation

Lay out the insulation to cover the entire floor area.
(Using double sided tape or adhesive spray)

Join the sheets of insulation together to prevent them from moving apart





3. Rolling out the film

Roll out the heating film copper face down. Adjust positioning to obtain the best floor coverage and lightly fix into position with tape to avoid movement.

DO NOT WALK DIRECTLY ON THE HEATING FILM





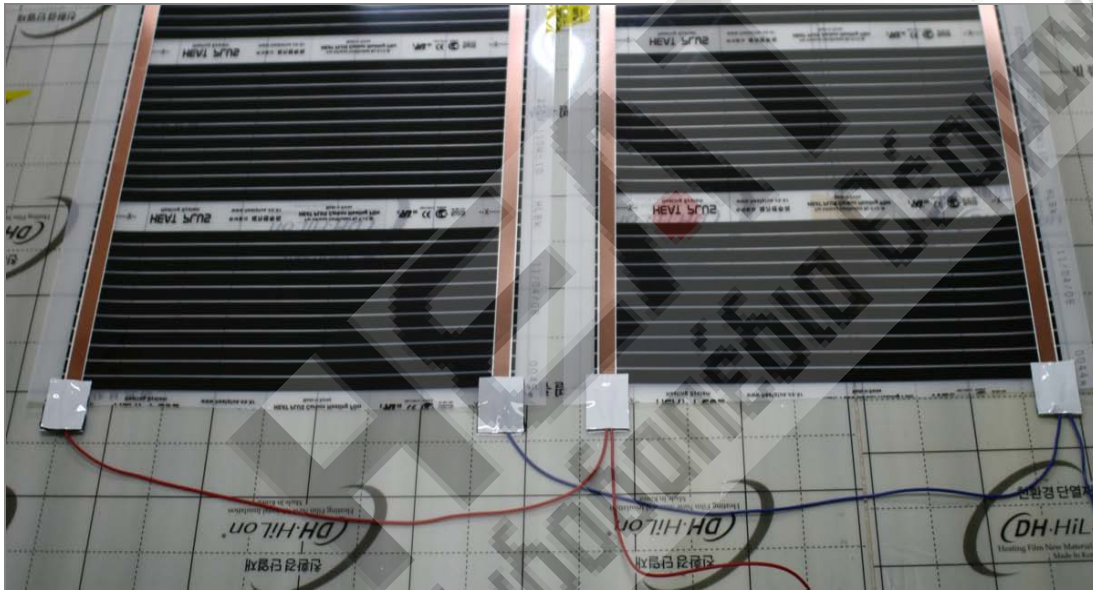
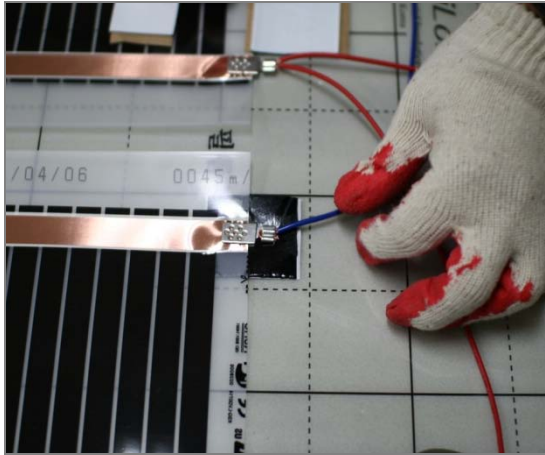
4. Connecting wires

Strip the non-heating lead wires that will be attached to the connector (clamp).

Insert the wire(s) into the barrel section of the clamp

Crimp the wires as shown pictures.

Insert the clamp into copper bus bar.
(NOT SILVER bus bar)



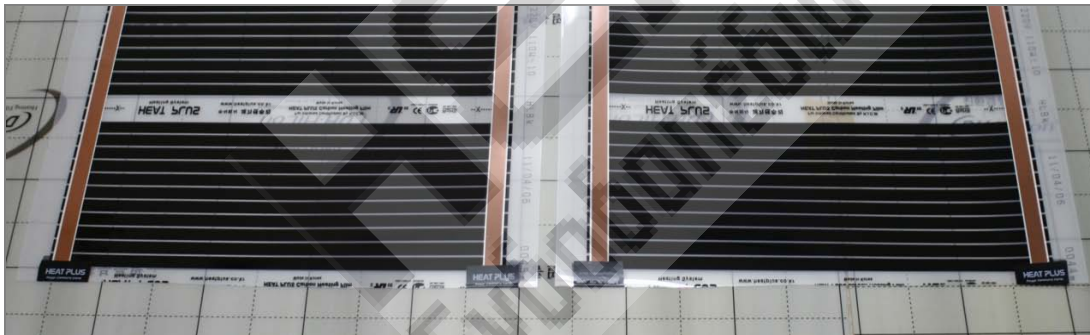
5. Insulating the clamps

Insulate the connectors (clamps) by attaching butyl tape both sides as shown pictures.



6. Insulating the other end of each bus bar

Place a length of electrical tape over the exposed end of each bus bar opposite the electrical connector.

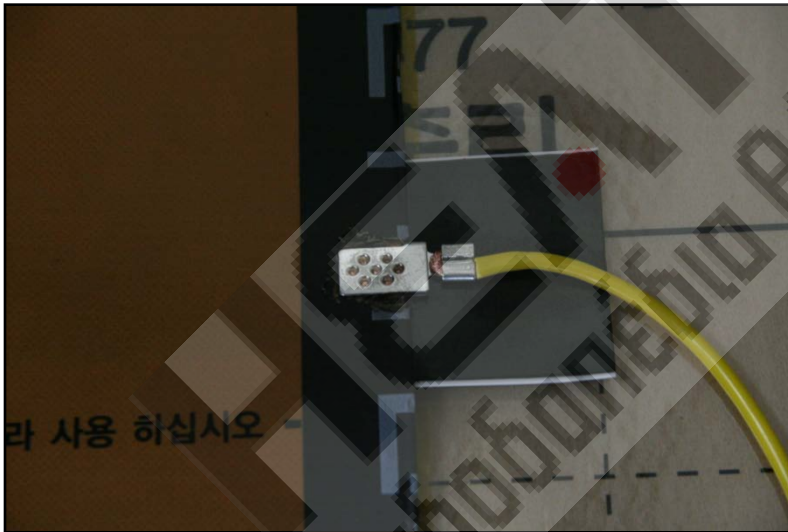




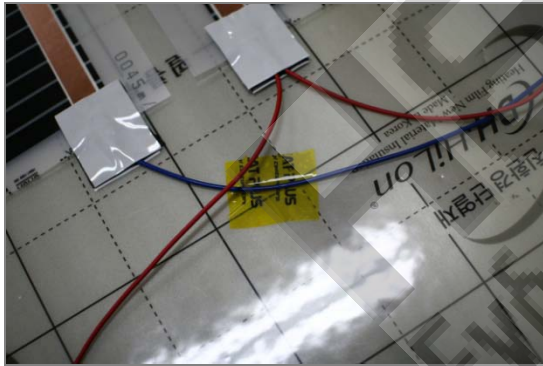
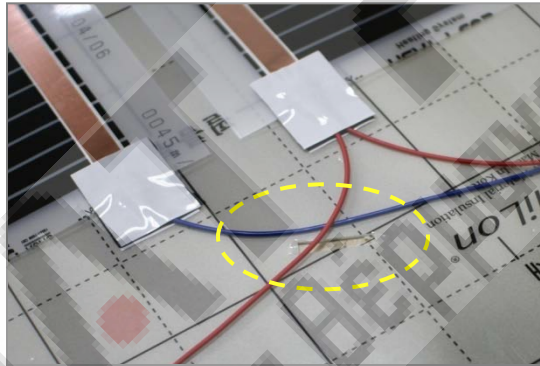
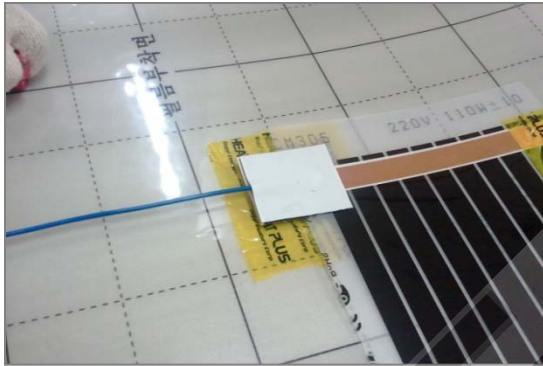
7. Temperature Sensor & Overheating Sensor

Place sensor in the middle of film.
(cut the insulation mat 1*1cm and cover the hole by tape)

- ※ why in the MIDDLE OF FILM?
→ Because the area is the hottest in the film and begins to warm from the middle.



< Plane Film >

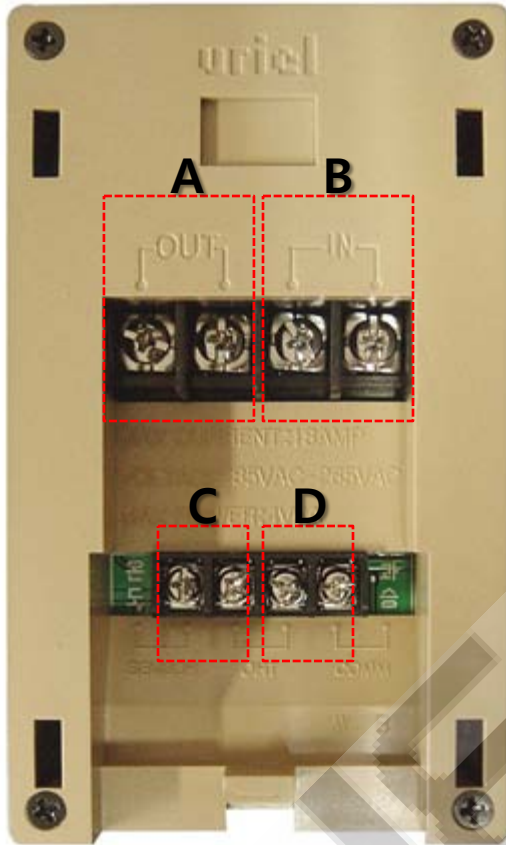


8. Arrange wires

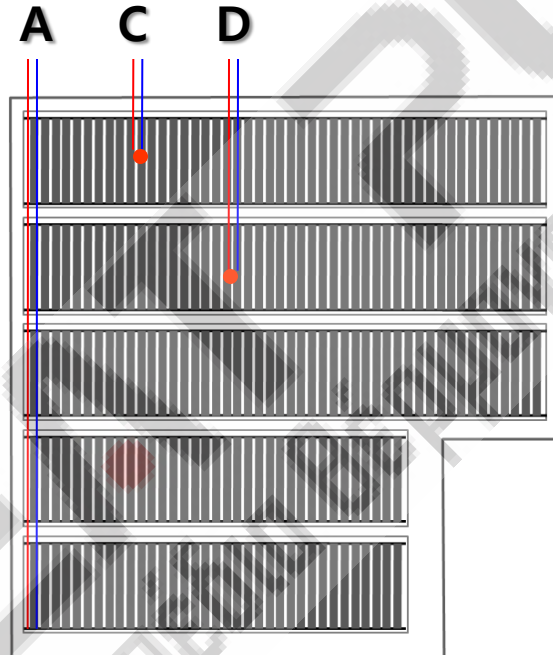
Cut the insulation mat under butyl tape portion and attach tape the hole to prevent humidity.

Cut the insulation mat not to overlap with each wires. Cover the cutting portion by tape, replace the wire in the hole and attach tape the wire.

9. Connecting thermostat



B ——— Electricity



2 wires from film to "A"

2 electricity wire (power) to "B"

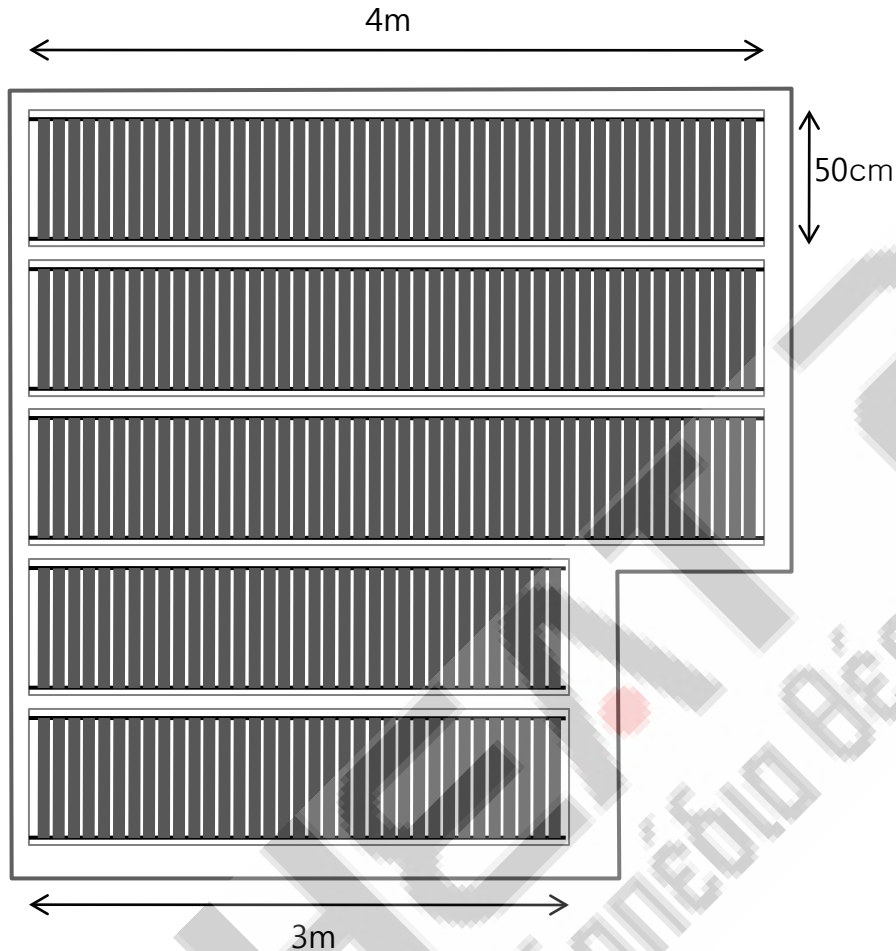
Temperature sensor to "C"

Overheating sensor to "D"



10. Measure electric current

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Film : 50cm(w), 200W/m² (0.25Kw)

Total Wattage

$$= \text{Total film area (m}^2\text{)} * \text{Film's Wattage (W)}$$

$$= (4\text{m} * 3 + 3\text{m} * 2) * 0.5 * 200\text{W}$$

$$= 1,800\text{w (1.8Kw)}$$

Total Ampere

$$= \text{Total Wattage (W)} / \text{Voltages (V)}$$

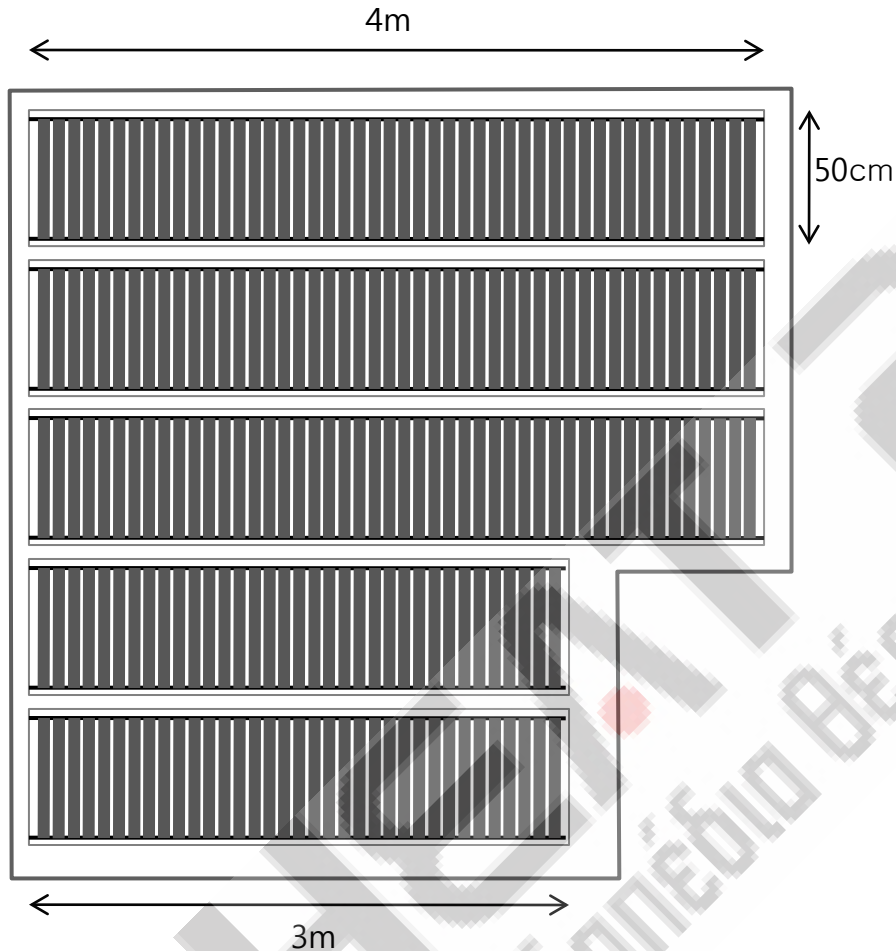
$$= 1,800\text{W} / 220\text{V}$$

$$= 8.18\text{A}$$

UTH-200 : Max Output = 4Kw, Max Capacity = 18A

(Recommendation(80%) = 3.20Kw, 14.4A)

You need ONE UTH-200



Film : 50cm(w), **150W/m² (0.15Kw)**

Total Wattage

$$= \text{Total film area (m}^2\text{)} * \text{Film's Wattage (W)}$$

$$= (4\text{m} * 3 + 3\text{m} * 2) * 0.5 * 150\text{W}$$

$$= 1,350\text{w (1.35Kw)}$$

Total Ampere

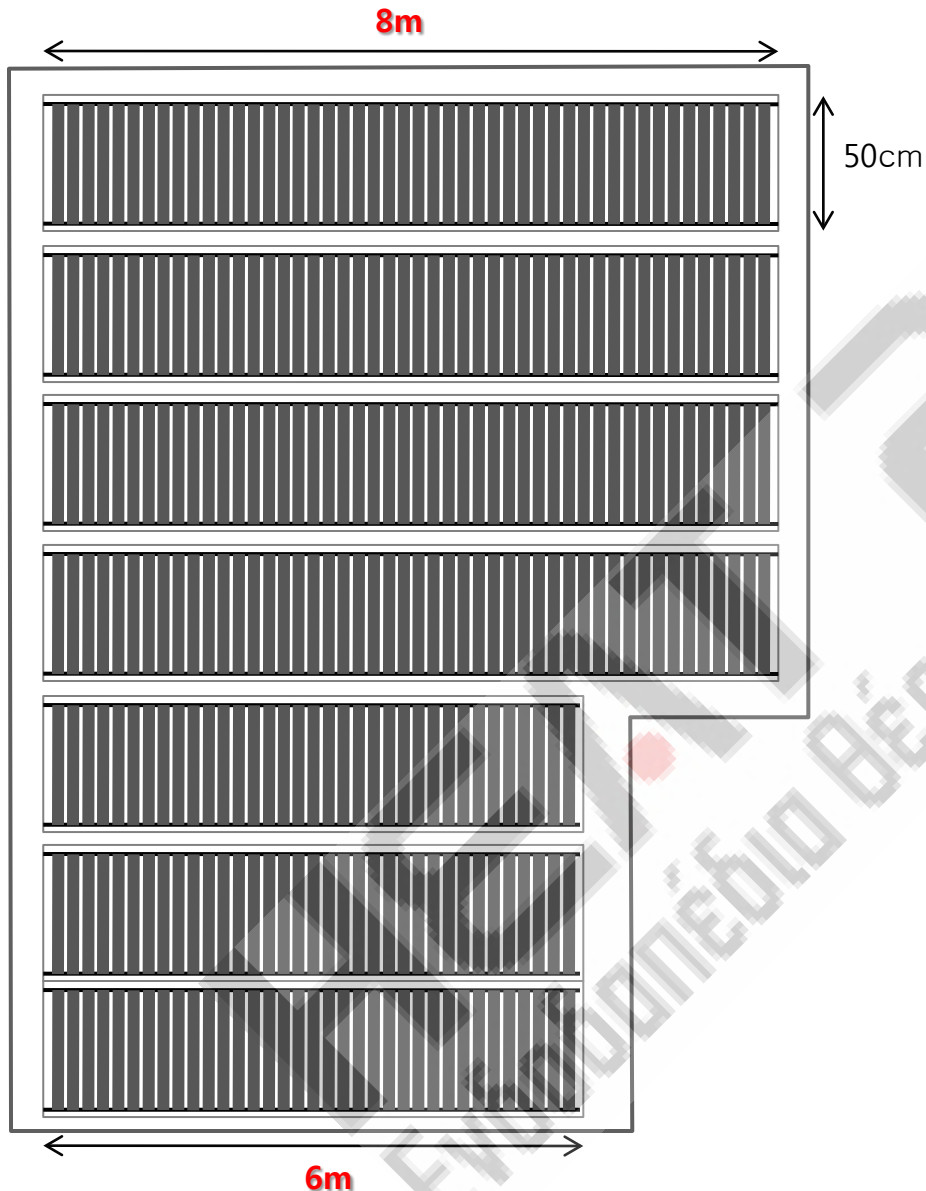
$$= \text{Total Wattage (W)} / \text{Voltages (V)}$$

$$= 1,350\text{W} / 220\text{V}$$

$$= 6.14\text{A}$$

UTH-200 : Max Output = 4Kw, Max Capacity = 18A
(Recommendation(80%) = 3.20Kw, 14.4A)

You need ONE UTH-200



Film : 50cm(w), **150W/m² (0.15Kw)**

Total Wattage

$$= \text{Total film area (m}^2\text{)} * \text{Film's Wattage (W)}$$

$$= (8\text{m} * 4 + 6\text{m} * 3) * 0.5 * 150\text{W}$$

$$= 6,150\text{w (6.15Kw)}$$

Total Ampere

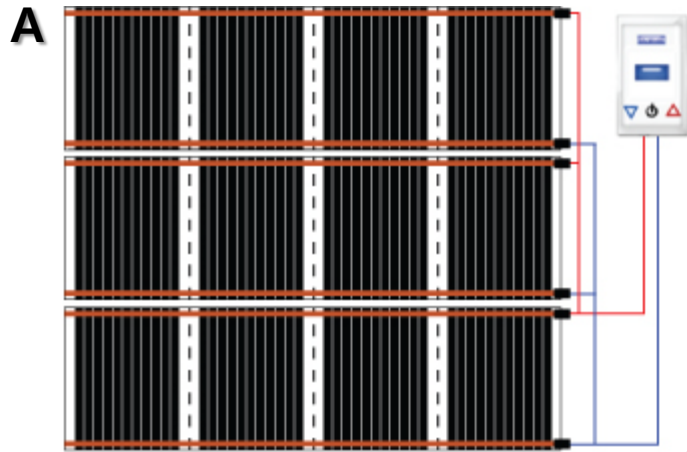
$$= \text{Total Wattage (W)} / \text{Voltages (V)}$$

$$= 6,150 / 220\text{V}$$

$$= 27.95\text{A}$$

UTH-200 : Max Output = 4Kw, Max Capacity = 18A
 (Recommendation(80%) = 3.20Kw, 14.4A)

You need TWO UTH-200



Here are 2 kinds of connection.

A : One red and blue wire from film to thermostat. It is not suitable for DIY products. (Usually, we use 2.5mm² wire for this)

B: Each panels have their own wire and they join before thermostat. It is suitable for DIY products. (1mm² from film, 2.5mm² from joint)

NOTE : Please get advice on thickness of wire from electric engineer, before make DIY products. Depend on electric current, the wire is different.

