

Conductive installation instructions

The installation of Colorex should not begin until the work of all other trades has been completed, especially overhead trades. Areas should be cleaned, fully enclosed and uniformly maintained at a temperature of at least 15°C for 72 hours prior to, during and after the installation is completed.

Subfloor requirements:

- Rigid, firm and free of cracks. Patch and repair minor cracks with an appropriate cement-base patching compound.
- Level and smooth (we always recommend to level the subfloor with a cement-base self levelling compound).
- Permanently dry. Maximum residual moisture for subfloors without floor heating:
 - 2,5% CM for concrete
 - 0,5% CM for anhydrite screed
 - 75% or less according with ASTM F2170
- Clean, especially free of oil, grease, dust, paint and foreign objects.

For subfloors with residual or rising moisture problems, an adequate moisture barrier must be applied prior to install Colorex SD/EC. Please refer to our instruction manual "Subfloors with high humidity".

Acclimatisation / Conditioning:

The Colorex tiles, the welding rods (if applicable) and the adhesive must be acclimatised for at least 24 hours prior to installation at a room temperature of at least 18° C. In all circumstances, the tiles must be unpacked for acclimatisation and displayed on the floor in small and straight stacks of max. 10 tiles each.

Copper strip installation and layout

• General recommendations:

Copper strip(s) for electrical grounding must be applied first, i.e. under the conductive adhesive. In normal conditions, no conductive primer is required. Preferably use self-adhesive copper strips, they are quicker to install and they provide best conductive adherence to the subfloor. The electrical connection to the grounding point(s) must always be made by a qualified electrician.

• Layout for rooms smaller than 50m²:

Install approx. one meter length of copper strip straight up to the nearest grounding point. Please refer to figure 1 on page 3.

• Layout for rooms larger than 50m² - Alternative A:

This alternative is recommended for rooms where the shorter side is below 50m. Install a combshaped copper strip circuit as shown on figure 2 on page 3. Punch all strip connections to ensure proper contact and test the conductivity of the copper strip circuit with an appropriate testing device prior to start installing the tiles.

• Layout for rooms larger than 50m² - Alternative B:

This alternative applies to rooms where the shorter side is exceeding 50m. Install 2 copper strip systems facing each other as shown on figure 3 on page 3. Punch all strip connections and test the conductivity as described for alternative A.

Installation procedure:

1. First mark the centre of the room by drawing a cross-hair with a chalk line. The centre of the room will serve as a guide from where to start laying the tiles.

2. Spread the conductive adhesive using the proper trowel blade making sure that the tiles are installed into a wet adhesive bed. Carefully observe the open time specified by the adhesive manufacturer and ensure that the adhesive transfers to at least 70% of the reverse side of the tiles. In normal conditions, do not spread more than 3-5 m² at a time.

Always start installing the tiles from the room centre outwards as shown on the adjacent diagram. Install all tiles following the arrow direction printed on their reverse side.

3. The floor covering must be rolled immediately after installation with a 50 kg roller.

Observe the adhesive curing time specified by the manufacturer prior to fully access the floor (usually 24 hours in normal conditions).

Adhesive:

A conductive, acrylic dispersion adhesive for vinyl shall be used. We recommend 641 Eurostar special EL (low VOC - EC1 class) or 323 Eurotack special EL (> 5% organic solvents). Approx. usage: 300 g/m².

Trowel blade specifications:

(notching TKB S1 or equivalent for conductive adhesives):

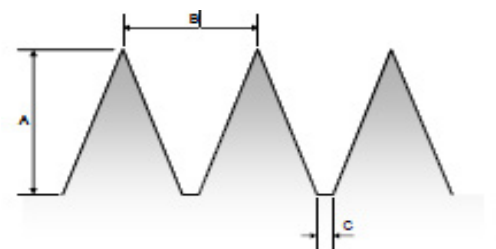
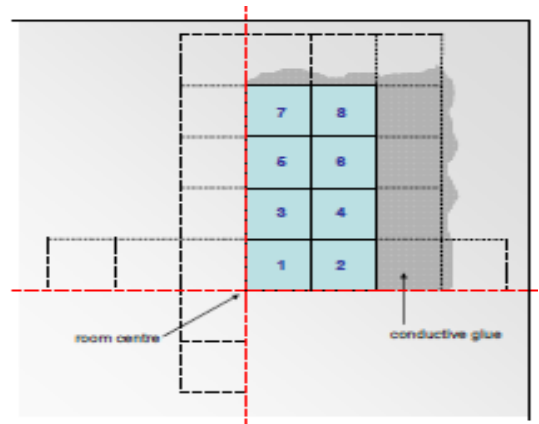
- A – Notch depth: 2.8 mm
- B – Notch width: 1.8 mm
- C – Notch bridge width: 0.2 mm

Electrical resistance testing after installation:

Point-to-ground electrical resistance tests according to approved relevant standards should not be carried out earlier than 14 days after installation. First random control measurements can be made after 24 hours. Electrical resistance readings may be higher than specified if the floor covering has been coated with wax, acrylic emulsions etc.

Heat welding:

Heat welding of the ColoRex tiles is strongly recommended for those areas where wet cleaning methods will be used. Please refer to our instruction manual "Heat welding instructions" as to how to realize a correct welding.



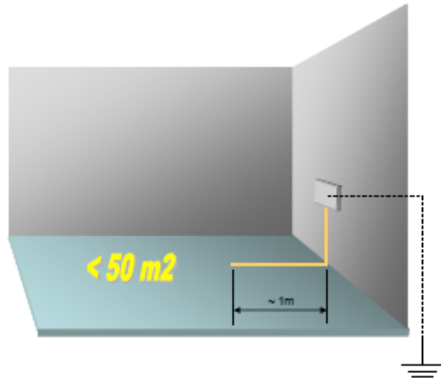


Figure 1 – Copper strip layout for rooms $< 50 \text{ m}^2$

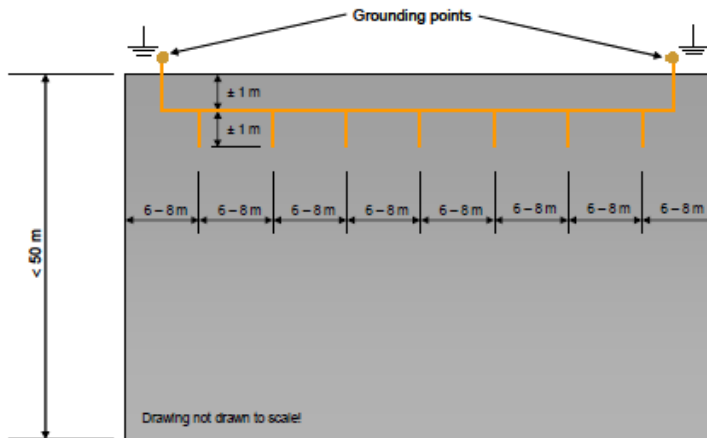


Figure 2 – Copper strip layout for rooms $> 50 \text{ m}^2$, alternative A

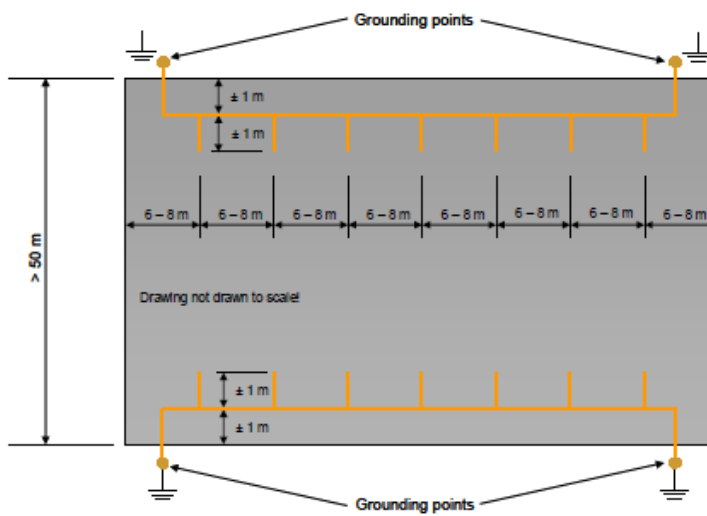


Figure 3 – Copper strip layout for rooms $> 50 \text{ m}^2$, alternative B