

Vermason		Product Information		No: PIS 192
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VINYL FLOORING AND MATTING

Code C4*

FEC Part Nos: 3878922, 3878934, 3878946, 3878958, 4383382

Description

C4* flooring is made of a static dissipative, two-layer flexible PVC calandered sheet. The exposed layer (top layer) of the product does not contain carbon-black. The sheet is very tough and is ideally suited for floors in ESD protected areas that are to meet the requirements of EN 61340-5 for primary grounding of personnel. It is suitable for the electronic and telecommunications industries, telephone exchanges and other ESD protected areas where static discharge may cause damage to sensitive devices or personnel. When properly installed, the floor can carry forklift traffic.

C4* flooring is supplied in 1.5m wide rolls up to 25m long in three standard colours with seven others available to special order. The rolls of matting can be laid on any surface suited for normal vinyl flooring. Because the underside of the material is conductive regular acrylic-based adhesive is suitable to bond it to the substrate. It is earthed via a copper strip that is supplied with the rolls. Conductive adhesive is not required for installation.

Matting is available in several sizes and can be laid loose or bonded. It is usually earthed via an earth lead connected to a stud riveted to the mat, but it can also be adhered to the floor and earthed via a strip of copper foil.

Typical Properties

Thickness	2.0mm	
Weight	3 kg/m ²	
Roll length	10 to 25m	
Roll width	1.5m	
Fire resistance	B1	DIN4102
Dimensional stability	< 0.1%	EN 434
Residual indentation	< 0.05mm	EN 433 2.5 h
Effect of castor chair	Suitable, 0 mm	EN 425
Abrasion resistance, volume lost	Group T ≤ 2.0mm ³	EN 660 Pt2
Seam strength	≥ 400 N/50 mm	EN684
Colour fastness	≥ 7	ISO 105-B02
Insulation resistance	> 100 kΩ	VDE 0100
Resistance to ground	approx. 10MΩ	IEC 61340-4-1
Surface resistance	< 100 MΩ	EOS/ESD 7.11
Combined shoe/floor resistance	< 35 MΩ	IEC 61340-5-1
Charging during walk test	< 10 V	
Thermal resistance	0.25 W/m ² K	

Installation

Any surface suitable for normal vinyl flooring will be suitable as a base for installation. Relative humidity of the concrete floor must not exceed 90% or 3.5% by weight when laying floor and the temperature must be at least +20°C. **THE FLOORING ROLLS MUST BE ALLOWED TO TEMPERATURE STABILISE BEFORE ATTEMPTING TO UNROLL OR LAY.** At lower temperatures, the material is brittle and may crack when bent.

As the matting has a built-in conductive underlayer, conductive adhesive is not required for installation. By the same token, a metal grid on the subfloor is unnecessary. Regular vinyl flooring adhesive is suitable for installation. Adhesive manufacturers provide full information and recommendations on the use of their products.

Conductivity between lengths of flooring is ensured by using copper strip measuring approximately 30 x 165mm with a thickness of $\leq 0,1\text{mm}$. One or two strips are used per two running metre of seam. Strips should be placed at both ends of the seam near the wall, but not immediately in front of a door. The copper strips must be clean and there should be no adhesive between the flooring and the strips.

The flooring is earthed via a copper strip 60 x 200mm, fitted between the floor and the floor covering and connected to a suitable conductor. Areas up to 100m^2 should be fitted with two earth strips, while larger areas should have one extra strip per 100m^2 or fraction thereof. Separate areas should be earthed using their own earth point. All copper strips are delivered in the core of the rolls of C40.

In high traffic areas the floor covering must be rolled to achieve maximum adhesion. Rolling should be carried out before the adhesive dries. This is done to prevent the emergence of adhesive application lines and indentations on the finished floor surface. Avoid traffic on the floor and do not move furniture until the adhesive has completely dried. If a watertight joint is required, the seams of the flooring should be hot air gun welded using a PVC rod. The corners should also be welded. Where welding is not possible, sealing should be carried out using a suitable welding paste.

Welding paste should also be used for sealing of through-fitted pipes. A hot air gun should be used on the reverse side of the flooring when laying flooring sections against the wall in order to avoid differences in gloss and damage on the floor surface.

Installation instructions and grounding connectors are included in the core of each full roll of flooring.

Maintenance

Initial Cleaning

Sweep the floor clean of any loose dirt. Wash with neutral or mild alkaline solution such as Vermason C911. Use red pads or medium hard brushes when cleaning with scrubbing machine or a combination machine. Rinse. Maintenance instructions are included in the core of each full roll of flooring.

Polishing

If necessary, polish the floor with one thin coat of an antistatic floor finish such as Vermason C901 floor polish. The electrical insulation resistance must be tested after polishing.

Note: Waxing may reduce the conductivity of the flooring.

Daily Maintenance

The floor should be cleaned by damp or wet cleaning, depending on type of soiling. Use a neutral or mild alkaline detergent such as Vermason C911 cleaner. Localised polishing can be carried out on the areas carrying most traffic.

Stain Removal

Stains must be removed immediately to avoid permanent marks on the floor. Stain removers may affect the flooring or the adhesive. When in doubt about the effect of stain remover, carry out a test or contact a flooring or remover manufacturer. On stubborn marks it is recommended to use chemicals instead of mechanical scrubbing.

Note: Floors may be slippery when wet or polished. Flooring must not be disposed of by burning

Resistance to Chemicals

Test period 24 hours and 2 hours (EN 423), after which the chemical was washed off.

Chemical	24 hours	2 hours
Lye 10%	Weak effect	No effect
Soda 10%	No effect	No effect
Hydrochloric Acid 10%	Strong effect	No effect
Citric Acid 10%	No effect	No effect
Light fuel oil	No effect	No effect
White Spirit	Weak effect	No effect
Acetic acid 30%	No effect	No effect

Flooring on roll

Three colours of roll 1.5 metre wide and up to 25 metre long are held in stock:

Product Code	Description	Colour Number
C47LG	light grey	73011
C47G	mid-grey	73016
C47B	mid-blue	73056

Seven other colours are available to special order. Minimum quantity is approximately 450m².

Mats

Pre-cut and studded floor mats are available. The corners are rounded with a 25mm radius.

Product Code	Size	Studs	Weight
C413*	1.5 x 1.0m	Two x 10mm studs on long side	4.5kg
C423*	2.0 x 1.5m	Two x 10mm studs on long side	9.0kg
C433*	3.0 x 1.5m	Two x 10mm studs on long side	13.5kg

* Colour suffix LG for light grey, G for mid grey, B for mid blue

Welding Rods

Welding rods are supplied on rolls of 50m. The rods serve to join two or more lengths of matting.

Product Code	Colour	Length	Weight
C4RLG	light grey	50m	0.9kg
C4RG	mid-grey	50m	0.9kg
C4RB	mid-blue	50m	0.9kg

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