

GENERAL INSTALLATION GUIDELINES HETEROGENEOUS VINYL



COMMERCIAL

HETEROGENEOUS VINYL

Storage & transport

Rolls should be stored in either a flat horizontal or preferably a vertical position (2m rolls). In order to minimise the risk of pressure marks when storing in a horizontal position, the rolls should not be stacked one on another, and regular rotation of the rolls is recommended. Do not store the rolls in very cold (less than 2°C), very warm (more than 35°C) or damp/humid places.

Prior to installation

Visual inspection

Please ensure the product is inspected and checked for damage, defect or variation prior to installation in adequate light conditions. Check that the colours correspond to those ordered, that the quantities are correct and that there is no visible damage to the sheet. Do not install any vinyl that displays any imperfections. For defects that are visible prior to installation, IVC Commercial will never assume responsibility for the uplift & relay costs. Installation implies acceptance. We recommend that you always use materials from a single colour bath in one room, as we cannot guarantee a 100% match between different colour baths. The rolls, selected within one colour bath, should be installed in the sequence of increasing roll number, with respect of the reverse laying direction if the design requires it.

Suitability

- IVC heterogeneous vinyl can be laid on concrete, cementitious screed, anhydrite (calcium sulphate), timber, plywood, particleboard and ceramic tiles, raised access floors, which have been suitably prepared (see Floor Preparation).
- IVC heterogeneous vinyl can be used with traditional water-based underfloor heating and cooling systems. See separate section on underfloor heating. The subfloor surface temperature must never exceed 27°C.
- IVC heterogeneous vinyl is only suitable for indoor installation.
- Seasonal temperature conditions: IVC heterogeneous vinyl can be used in indoor situations. Preferably, keep the temperature between 6°C (min.) and 35°C (max.). Avoid rapid temperature increases of more than 5°C per 12 hours.
- For installation in areas with high temperature or high temperature variation (in certain cases this includes direct sunlight through glass) we recommend the use of a high temperature adhesive. If you require any further information, please contact your IVC Commercial representative or supplier.

Composition, construction and quality of the subfloor

Knowledge of the composition and construction of the subfloor or base provides valuable information that allows you to correctly check the acceptable humidity, flatness, compressive and tensile strength of the subfloor. In addition, it tells you what type of floor preparation, levelling/smoothing compound, and possible moisture barrier you may need during the installation process. When there is ambiguity or doubt about the quality or composition of your subfloor, check your local installation standards and/or seek advice from your floor preparation, levelling compound manufacturer/supplier.

National regulations & standards

- Site and installation conditions must always comply with the relevant national regulations and installation standards.
- In case the national standard or regulation conflicts with the manufacturer's recommendation, the most stringent of the two prevails.

Subfloor preparation

Irregularities in the subfloor

Good preparation is essential for trouble-free installation. It is vital for an excellent IVC heterogeneous vinyl finish. The appearance of IVC heterogeneous vinyl will only be as good as the quality of the base over which it is installed. Any irregularities in the subfloor will show through the finished floor and must be suitably prepared before installation.

The subfloor must be hard, structurally sound, flat, smooth, clean and dry, as well as being free from defects and fit for purpose. When required, scrape off and remove old adhesives and loose laying levelling compound. Make sure the subfloor is free from chemical substances and other contamination.

For aesthetic reasons, it is recommended that the unevenness of the subfloor is not greater than 2mm measured over a width of 200cm.

A suitable plywood/levelling compound should be selected to ensure that no irregularities show through to the surface of the finished floor. However, the selection of suitable materials, including plywood, smoothing/levelling compounds and any ancillary products, is dependent upon the occupational use of the area and must be agreed by the supplier of the preparative materials and the flooring contractor. All floor preparation materials used must be used in accordance with the manufacturer's recommendations and in accordance with the national standards for resilient floorcoverings.

The moisture content of the subfloor

- Unheated cementitious screeds less than 2.0CM% - 75% RH (UK)
- Underfloor heated cementitious screeds less than 1.8CM% - 75% RH (UK)
- Unheated anhydrite (calcium sulphate) screeds less than 0.5CM%
- Underfloor heated anhydrite (calcium sulphate) less than 0.3CM%

Direct-to-earth concrete and stone subfloors must have an effective Damp Proof Membrane (DPM) in accordance with the national standards for the installation of resilient floorcoverings. Follow manufacturer's detailed instructions for the installation of a surface applied DPM and the use of levelling compound. An overview of manufacturers and suppliers can be provided by IVC Commercial.



Important

Floor installation should not begin until the installer has assessed and approved the subfloor and installation conditions.

Acclimatisation

IVC heterogeneous vinyl must acclimatise in the room of installation, or an equivalent area for at least 24 hours prior to installation, or until such time as the product has achieved an ambient temperature: this is a minimum temperature of 18°C and a maximum of 27°C.

Store the rolls away from heating, cooling or windows with direct intense sunlight. This is to achieve a gradual acclimatisation.

Temperature condition before installation

IVC Commercial recommends that the rolls are cut to approximate installation sizes 24 hours before installation. Unpack and unroll the IVC Commercial floorcovering and check all sheets in daylight for possible defects or discrepancies in colour.

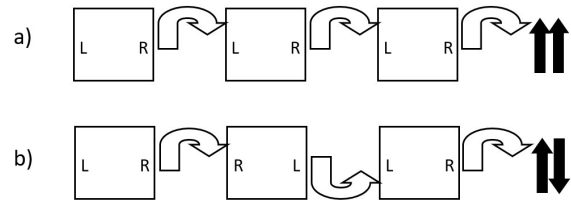
For two-metre width floor coverings, the sheets should then be rolled loosely and stored in an upright position for acclimatisation. Four-metre width floor coverings should be cut to size and laid flat to acclimatise.

Be careful when stacking rolls. Falling rolls can cause harm to people and the surrounding environment, and this may also result in damage to the product.

To maintain the best shade match, when planning the installation of multiple rolls, roll number sequencing/order must be followed, e.g. 20374900, 20374901, 20374902. See picture below. This may result in slightly more installation waste.

When cutting to size please consider the nature of the design and pattern repeat. In the case of wood designs and tile styles IVC Commercial recommends that every sheet is installed in the same direction (a). In the case that the design is one

all-over colour or design, IVC Commercial recommends that every sheet is rotated through 180° (b). If there is doubt, we advise to check with your local supplier.



Installation in areas colder than recommended will make sheets harder to handle and less flexible, whilst cutting will become more difficult. For installation in areas warmer than recommended, we advise consultation with your local supplier on how to create the appropriate installation conditions.

Starting installation

Temperature conditions during and after installation

A constant temperature, fluctuating no more than 5°C per day, not below the required 18°C room temperature and 15°C subfloor temperature, should be maintained 24 hours before, during and 72 hours after installation.

- Fully adhered to the subfloor, preferred option (see the section "recommended adhesives")
- Alternatively, it can be fully looselaid for surfaces up to 12 m², only on condition that the whole floor is installed from one sheet without joints (or the joints are cold-welded to connect the sheets with Xtrafloor® Invisiweld type A) and no rolling loads.

For alternative installation methods, not included in this overview, always seek technical advice from IVC Commercial.

Underfloor heating

IVC heterogeneous vinyl can be used with traditional water-based underfloor heating systems (according to standard EN 1264 part 1 to 5). Wired electrical systems are not recommended unless the system is encased in a minimum of 9mm of suitable levelling compound. Direct contact with electrical wired heating systems must be avoided. The surface temperature must never exceed 27°C. If in doubt seek further advice. 72 hours after installation the underfloor heating must be gradually increased by increments of 5°C per day until it reaches the standard operating temperature conditions, with a maximum operating temperature of 27°C. For the suitability of the system please check the manufacturer's instructions.

Underfloor cooling

IVC heterogeneous vinyl can also be installed over floor cooling systems. However, the supply temperature of the cooling water must not be reduced below the dew point temperature. Always keep the temperature of the subfloor at least 3 degrees above the dewpoint. Temperatures below the dew point will produce condensation and can therefore damage the adhesive and the floor covering.

Installation methods

IVC heterogeneous vinyl can generally be installed with the following methods:

Recommended adhesives

IVC Commercial floors recommends to install with solvent free adhesives. IVC Commercial provides Xtrafloor® adhesives, appropriate for effective and efficient installation. If you use other adhesives, please contact IVC Commercial or your supplier, who can provide a list of those appropriate.

Please also take note of the IVC Commercial welding instructions. Both hot and cold welding is possible.

Installation step by step

Recommended tools

- Tape measure
- Pencil
- Adhesive and trowel
- Damp cloth
- Utility knife
- Hook blades
- Straight blades
- Combi scribe
- Long scribe
- Broom and/or rubbing block
- Steel line for cutting straight and/or seams
- Roller minimum 50kg
- For hot welding: Hand or electric groover, Hot air welding gun with appropriate tools, Quarter moon set or skiving knife, Xtrafloor® welding rod in the chosen colour
- For cold welding: Xtrafloor® Invisiweld kit, use type A



Finishing accessories, either proprietary or Xtrafloor® can be used to provide a neat finish (door trims, skirting board, etc.).

- Step 1: Place the sheets in position, cut seams with the double-cut method and trim to size.
- Step 2: Fold back half of the sheet ready for the application of the adhesive. Prior to using the adhesive read the manufacturers' instructions. Spread the right amount of adhesive, with a notched trowel, equally over the subfloor. After applying the adhesive and in accordance with the instructions, allow the adhesive to partially dry (open time) until it reaches its initial bonding strength, before placing the floor covering back into position.
- Step 3: Install the sheet floorcovering avoiding bubbles, compression and tension. Check that the seams are butted together neatly. Do not compress the seams as this will cause tenting.
- Step 4: To remove any bubbles, use a broom or rubbing block. Work from the centre of the sheet towards the edges/seams. Use a roller to flatten the adhesive and ensure full adhesive transfer. The latter should be done before the adhesive has dried.
- Repeat steps 1 to 4 with the second half of the sheet.
- Step 5: Welding the seam together is recommended but only after the adhesive is fully dry, normally 24 hrs (depending on site conditions and type of adhesive used).

Welding

Welding is the only option for ensuring closed and tight seams. This is important for watertightness and bacteria resistance. Hot welding is only recommended on commercial products (it needs sufficient wear layer thickness), IVC Commercial offers a large range of matching and suitable welding rods and does not recommend the use of products from other manufacturers. Cold welding is suitable for domestic, commercial and industrial use. IVC Commercial recommends Xtrafloor® Invisiweld type A and cold welding masking tapes from Werner Müller Kaltschweißtechnik. Please read the manufacturer's instructions before applying.

Protection

IVC Commercial floors should be protected from heavy traffic for 72 hours after installation so that the adhesive can cure at constant temperature between 18-27°C.

First contact with water

Prevent the floor from coming into contact with water for the first 72 hours after installation. Hereafter the adhesive is sufficiently resistant to water so that the bonding strength will not be affected.

Maintaining your floor

Appropriate maintenance procedures will help to preserve the appearance and will extend the life of a IVC heterogeneous vinyl floor. The frequency of maintenance will depend on the amount and type of traffic, degree of soiling, the floor colour and type.

Below we will give a short summary of the 5 key points to effective maintenance.

For full maintenance instructions and recommended products we refer you to www.ivc-commercial.com.

1. Preventative measures

- Keeping dirt off the floor is easier and less expensive than removing it.
- Proper entrance walk-off material is able to remove large amounts of dry soil as well as absorb water or oil-based moisture.



- Prevention also means making the right choice of floorcovering and design/colour for the right area, e.g. avoid too dark or too light colours for high traffic areas near the entrance of a commercial building.
- Protect against scratching from furniture feet by using wide, free-moving, castors, glides, rollers or pads, e.g. www.scratchnomore.nl. NOTE: felt protection pads can pick up dirt and grit and subsequently cause scratching or further damage to the floorcovering.



- Use furniture caps or other protection under heavy items or appliances to prevent indentation.
- Avoid rubber or latex backed mats, furniture feet and the like as the rubber or latex may leave permanent stains.
- Almost all flooring will vary in colour over time when exposed to UV light. Avoid this by using curtains or sunscreens when the sun is very bright.
- Mechanical damage of the floorcovering, caused by heavy overloading or sliding of furniture/items and permanent stains caused by rubber/latex are not covered by the product warranty.

2. Vacuuming

Regular vacuuming is the most important part of a successful maintenance program to remove all grit, debris and other solid particles. Vacuuming is far more effective for this type of soiling than wet mopping, which normally moves soiling from one place to another, rather than removing it.



3. Spill and spot cleaning

Spills and spots are inevitable, but they don't have to be permanent. Remove a spill quickly and there is less chance of permanent staining. First try to blot the spill with a dry cloth/kitchen towel, then use water. Only use detergents/cleaning products when the above is not sufficient to remove the spill/stain. Use neutral pH detergents, e.g. from the product range of www.james.eu.



4. Periodic cleaning

- Inspect and assess the appearance of the floor. Seasonality may also alter the maintenance requirements.
- Vacuum to remove all grit, debris and other solid particles.
- For light cleaning, a damp mop may be sufficient. Do not use cleaning products when not required.



For heavier cleaning, e.g. to remove oil/grease/surface dirt in kitchen area/entrance ways, wet mopping with detergent may be required, e.g. products from www.james.eu. In this instance always use the so called "two bucket" method, which is one bucket with water and detergent and one bucket with clean water for rinsing.



- A common error is to use excess detergent, which then leaves a film on the surface. In this instance, clean the floor a few times without any detergent to remove the excess soap/detergent, this would bring you back to a standard condition. Care should be taken to dilute detergents in accordance with the manufacturers' recommendations.
- For larger (commercial) areas, a professional cleaning machine with rotating brushes and vacuum extraction can be used.



5. Deep cleaning

- Periodic cleaning is far more beneficial to the floorcovering than infrequent heavy or deep cleaning. However, seasonality can influence the amount of cleaning required.

- Remove surface dust and grit by vacuuming.



Once dust and debris free, with a spray, apply a solution of neutral pH cleaner to the section to be cleaned (or dependent upon the level of soiling, a light alkaline cleaner), carefully diluted to the manufacturer's instructions. Leave for enough time to react with and lift the soiling. Some agitation with a soft brush may be required.



Pick up the solution with a clean "microfiber" mop, using a continuous and steady side-to-side motion. When the mop head becomes loaded, it will leave residues and start to streak the floor. At this point the dirty mop head should be removed, wrung out, placed into a suitable bag and a clean mop head fitted. The cycle should then be repeated until the whole floor is completed, is clean and streak-free. Do not move dirty water from one place to another, extraction cleaning may be required.



- The dirty mop heads should then be machine washed and dried ready for reuse.
- Heavy soiling and soiling in the grain, may require a "scrubber dryer" with immediate wet vacuum extraction prior to mopping. Numatic International have a range of appropriate machines for this application. Further advice can be obtained directly from the manufacturer, their distributors or specialist floor care companies.



Important part from the warranty:

- Almost all flooring will vary in colour over time when exposed to UV light. Avoid this by using curtains or blinds when the sun is very bright. PVC also has a tendency to yellow in the dark. The combined effect can cause covered areas (under furniture, under permanently closed doors, etc.) to differ in colour compared to non-covered areas. This is a characteristic of all PVC floorcoverings and is excluded in our warranty conditions.
- Avoid rubber or latex backed mats as they may leave stains. Rubber and latex castors or protection caps under furniture must not be used (we advise the use of castors type 'W' in accordance with EN 12529).
- In case of loose lay installation, damage of the vinyl flooring caused by heavy overload, rolling loads or sliding activities is excluded in our warranty conditions.
- Do not allow cigarettes, matches and other very hot items to contact the floor as this causes permanent damage.
- Important: Cleaning or maintenance may only take place if the floor is correctly installed and there are no visible imperfections.
- Contact your representative / supplier for the complete warranty conditions.
- This document was issued on (see at the end of this document) and supercedes all previous versions, at the same time it is superceded as soon as a new version is published. For the latest version please always check www.ivc-commercial.com. The original English version is always leading.
- In case of conflict between these installation instructions and the local technical standards/legislation, the most stringent of the two prevails.

IVC Group - 24/02/2021