

# Installation instructions Needle felt carpet









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# **Introduction**

#### **Congratulations!**

Congratulations on your purchase of a product from the Condor Group! For the optimal result from the product we would like to inform.

For carpets with a vinyl backing we refer you to the special installation instruction, which can be obtained at www.condor-group.eu/downloads.

With the publication of this installation instruction, all previous instructions regarding the installation of needle felt carpet expire.



# 1. Preparation

#### 1.1 Material check

Check the carpet prior to installation for possible manufacturing errors (such as errors in colour, construction, patterns, and dimensions), or transport damage. Products can show a limited squished effect as a result of packaging, storage, and transport. This effect will subside within a few hours when the fibres recover themselves. Material which comes from the Condor Group is delivered from one production batch with which colour correspondence is guaranteed. Nevertheless slight colour deviations cannot be fully excluded. In order to attain an even result it is necessary that, within a space, products of the same batch number will be installed in an ascending role number.

In case you will still notice a mistake, contact your supplier before you proceed to further processing. It is not possible to accept complaints which could have been reasonably expected to be noticed prior to installation.

#### 1.2 Material storage

The correct storage of the material ensures that the installation properties are optimally preserved after installation.

Therefore always store carpet in a space which is cool and dry and in which the carpet is stored on an even foundation.

#### 1.3 Conditioning

Prior to installation it is essential to acclimatise the carpet tiles and thereby let them adept to the environment. For this the carpet tiles need to be unpacked on an even foundation, in the space where they will be laid, after which they have to acclimatize for at least 24 hours with a minimum temperature of 16 degrees Celsius.



# 2. Preparatory activities and required conditions

#### 2.1 Foundation

The condition of the foundation determines to a large degree the look of your carpet. Carpets from the Condor Group can be used for many applications provided the foundation suffices. The Condor Group advises a foundation which is based on the DIN 18 560-norm and the advice of the "Technische Kommission Bauklebstoffe im Industrieverband Klebstoffe e. V.".

#### This means the surface minimally must meet the following:

- (Permanent) moisture-free. Maximum humidity degree, measured according to DIN EN 13 813:
- 0.3% rubber polyolefin and floor heating;
- 0.5% with linoleum, vinyl, and central heating;
- 1%with permeable carpet;
- 2% with cement screeds;
- Have a good surface firmness. The coating needs to have good surface firmness so it can give good adhesion to the
  product which will be installed. The coating needs to be sufficiently thick and have good adhesion to the foundation.
   In case of mastic asphalt screeds the coating needs to be a hinimum of 8mm thick.
- Good shape retention. The foundation needs to have good shape retention in order to absorb tensions/size changes,
  which can occur due to installation substances. In order to guarantee foundations with shape retention we advise
  the use of primers;
- Be free from cracks. In order to guarantee crack-free foundations we advise the use of primers; pay attention that in case of conductive floors this does not affect the conductive functioning.
- Even and smooth conform DIN 18202 "Toleranzen im Hochbau; Bauwerke"
- Even absorption power from foundation for adhesion of adhesives. The foundation needs to have an even absorption power in order to get an even adhesion in all places between the foundation and the product which will be installed. An even absorption power of the foundation can be attained by providing the foundation with a primer. Make sure that in the case of conductive floors this does not affect the conductive functioning.
- Clean (among other free from loose parts, grease, oils, and detergents).
- Free from old adhesives and other solvents. Old substances can react with new adhesives and the product. The
  foundation needs to be low in emission and meet the GEV-EMICODE "EC1" or even better meet the guidelines of
  the RAL-UZ 113 "Der Blauer Engel".
- Keep shrinking and expanding seams which influence the foundation.
- Limited height difference between the floors. In case the height difference is large, this needs to be smoothed.
- Tear and pressure resistant.



- Meet the requirement conform the DIN 18365 and the attached norms and documents.
- The current national construction norms and guidelines.

In case shortcomings have been noticed in one or more of the aforementioned points, these need to be reported to the client so appropriate steps can be taken.

#### 2.2 Sub-floor

For needle felt carpets with a domestic application we recommend the use of sub-floors. Sub-floors give the carpet a longer lifespan, a complementary attenuation, and improved isolating function. Keep in mind that the use of sub-floors can have a negative effect on the fireproof properties of your floor.

In case of underfloor heating we advise you to not use a sub-floor since there the sub-floor less through less heat.

#### Keep the following things in mind for the use of sub-floors:

- Sub-floors need to be attached to the foundation
- In case of gluing as installation method: The carpet needs to be able to be glued to the sorface for sure (should not be repellent). We recommend you to always perform a glue test. Keep in mind that the absorption power of the floor changes with the use of sub-floors.
- The sub-floor needs to be clean from solvents which can possibly have a negative effect on the carpet.
- It is essential to ensure that the sub-floor will not have negative effects to the floor as a whole in regard to moist repellency and condensing properties
- The sub-floor may not degrade the mechanic properties of the carpet (charge of rolling and swivel casters, pressure on the carpet, etc.)
- In case of conductive floors this should not reduce the conductive function.

In case shortcomings have been found on one or more of the aforementioned points, you should inform the client on this so appropriate steps can be taken.

Sub-floors give the carpet a longer life-span, additional attenuation, and enhanced isolating function.

For the use of needle felt carpets in the project and contract market we advise you to not use sub-floors since these have a negative effect on the fireproof properties of your floor.



### 3. Installation

Installing your carpet is an important job and we recommend you to let this be done by a recognised and professional installer.

It is important that the carpet is cut before installing and or gluing it.

#### 3.1 Installation temperature

During installation of the needus felt the installation temperature needs to be between 18 and 22 degrees Celsius, with a humidity of 40-65%. The minimal temperature of the sub-floor needs to be 15 degrees Celsius, with a floor heating system this needs to be between 18 and 22 degrees Celsius. For an optimal result the space needs to meet these conditions minimum 3 days prior to installation and minimum 7 days after installation. 48 hours after installation of the carpet tiles the space may gradually be returned to its original temperature, in steps of maximum 5 degrees Celsius per day.

Carpet tiles from the Condor Group are suited to process on sub-floors with floor heating. However, it is essential to turn off the floor heating system 48 hours prior to installation.

#### 3.2 Pile direction

Normally an installation direction is chosen from which you view from the main enterance door into the pile. In case of multiple stretches make sure the pile is installed in the same direction. In case of needle felt there is a minimal pile direction. In order to install needle felt in the same direction the backside is provided with an arrow in case of flat felt, so multiple stretches can easily be installed in the same direction.

#### 3.3 Seams and Cutting

Before the carpet will be glued, the carpet needs to be cut. The carpets should be installed approx. 3-5 cm over each other and be cut perpendicularly with a carpet knife. Do not cut over each other, prior to gluing, this can result in the formation of seams. In case of carpets with a pattern the carpets need to be cut separately with a carpet edge cutter, possible with a straight edge or a ruler.

#### 3.4 Joining

During joining of two borders it is important that the fibres do not get stuck between the edges since this causes seams. If necessary the fibres can be brushed back before joining the borders. Make sure the carpets are not pressed to firmly to prevent joining formation.



#### 3.5 Gluing

Prior to installing the carpet the spaces need to be completely glued. By completely gluing the carpet you optimally use the form retention of the carpet.

There are various kinds of adhesives which are suited for connection carpets. Personal advice from a glue specialist or glue manufacturer is essential for use of a suitable adhesive.

The use of adhesives can influence the odour development of the needle felt carpet after this has been installed. Also to limit odour development, you need to use adhesives which are low in emission and are provided with a GEV-EMICODE "EC1", or even better, meet the guidelines conform to the RAL-UZ 113 "Der Blauer Engel". Aside from that the low emission adhesives need to be free from natural resin and solvents.

VFor gluing needle felt carpet you need to use water-based dispersion adhesives with a gluing power of minimally 2N/mm2 (gluing power can be tested conform DIN EN 14293).

Adhesives need to be applied in accordance with the provisions of the manufacturers and the applicable health and safety norms. Consult the attached safety sheets of each adhesive from your adhesive manufacturer prior to use.

#### 3.6 Installation method

- 1. Starting with the installation of the carpet the carpet track needs to be laid back to the middle so you can start from the middle.
- 2. Apply the glue which is at room temperature (between 18 and 22 degrees Celsius) on the surface using a glue comb. Consult your adhesive manufacturer for the suitable quantity of adhesive and the suitable toothing of the glue comb for your situation.
- 3. While installing work from the middle toward the outside. First glue the recently cut parts.
- 4. After the carpet has been installed, move a carpet roller (with a pressing weight of minimally 50 kg) over the carpet to ensure a good adhesion between the carpet and the foundation, starting with rolling in the width. It is important that there is no air between the foundation and the installed carpet.
- 5. After ca. 30 minutes of pressing with the carpet roller, repeat again. Special attention goes to properly rolling seams. Do this with the carpet roller and not with other pressure means.
- 6. After ca. 60 minutes a special inspection needs to be performed in order to verify whether the end result has been installed to satisfaction.
- 7. After the carpet has been installed and glued it needs to be left uncovered for at least 24 hours to allow the glue to dry.



8. For a minimum of 24 hours after installing the carpet needs to be protected against dirt if any complementary activities will be done in the space.

#### 3.7 Alternative surfaces

Carpets can be used on various surfaces provided they meet the requirements as described in chapter 2. Consult your installer for the possibilities and the optimal installation and connection method.



## 4. Conductive installation

The installation of conductive carpet is possible on conductive (floor) systems which makes the carpet a part of the complementary protective measures for electricity, functioning by equipotential connection. Conductive carpet needs to be earthed by a professional electrical mechanic/specialist. In spaces with conductive systems the guidelines of the NEN 1010 apply.

In order to connect the conductive carpet with the foundation it is essential that the adhesives (such as glue and anti-slip coating) have a conductive function and hereby do not have a negative effect on the ability of your needle felt carpet to be conductive.

#### 4.1 Installation on a conductive floor

In case the surface has been provided with conduction, conform the provisions of the manufacturer, it suffices to place minimally 1 meter of copper tape on the connection points of the foundation. In spaces of <30 m2 you need minimally 2 connection points. Multiple connection points are required if there are larger spaces. The number of connection points is determined in that the maximum distance of the connection points can never be more than 10 metres from each other. Connecting the connection points to the ground fault network needs to be done by a recognized installation agency.

#### 4.2 Installation without a conductive floor

In case the foundation has not been provided with a full conduction, the use of copper tape is required to make a proper conductive foundation. In doing this the copper tape is applied uninterruptedly over the full length under each carpet length. At the end of the row of carpet tiles the copper tape needs to be crossed by another line of copper tape. Every surface may be maximally 30 m2 and have a connection point which then is connected to the ground fault network. In spaces of <30 m2 you need at least 2 connection points. Connecting the connection points to the ground fault network needs to be done by a recognised installation agency.



# 5. Finishing

In order to prevent possible moving and/or damags you need to apply a transition strip between the carpet tiles and other floor covering.

After the carpet has been installed a minimum of 24 hours without charge needs to be respected in order to prevent damaging and/or movement. Direct sunlight, radiation from heat sources or strong air circulation on the carpet tiles immediately after installation needs to be prevented also.



# 6. User application after installation

Carpets from the Condor Group have been developed to be used in environments with room temperatures, mostly in combination with temperature and humidity regulating systems.

#### Main points of attention are:

- The environment temperature is between 18 to circa 23 degrees Celsius.
- The desired humidity degree in spaces for carpet is between 40% and 70% humidity (ideally between 50 and 65%). With a humidity of <40% shrinkage or unwanted carpet tension can occur. Aside from that, a humidity which is too low has an effect on the electrostatic charge of synthetic carpet (mostly in case the humidity is <50%). In case of humidity of >70% the carpet might expand.

In environments where the aforementioned tolerances cannot be guaranteed, we advise you to perform a glue test and to inform the client on the risks of this situation.



# 7. Points of attention before use

#### 7.1 Charge

For the use of desk chairs with wheels it is required to use type H wheels conform EN 12529 (hard wheels with the provided wheel diameter). However, we advise regarding (local) heavy objects (such as desk chairs) to use synthetic floor mats in order to prevent wear and/or damage.

#### 7.2 Installation FAQ

After installing the carpet you may have some questions which can be clarified beforehand:

- Some fibres spring from the carpet. It is possible that some fibres spring from the carpet. These can be cut without negative consequences/effects.
- It seems there is a colour difference between the carpet tiles: A part of the carpet tiles might have a deviating colour direction, which gives the optical illusion of colour difference. This s oftentimes not a colour difference but a difference in colour direction which is a property of carpet.
- These are various fibres and fluffs on the carpet: After installing carpet tile excess fibre material can get loose. This will get less after a number of times of vacuum cleaning.
- After installing folds become visible in the carpet: in case imperfections/swellings occur in your carpet tile floor, please contact your installer. The carpet will possibly have to be stretched or glued again.

#### 7.3 Conditions

During the installation it is essential to check the end result. After a maximum of 100 m2 has been installed a proper product evaluation can be performed. In case you find any deviation compared to the product specifications, you need to inform the Condor Group and enable them to take action before proceeding with the installation.

Not following this installation instruction and the herein described user application may lead to expiration of the guarantee on the product. The Condor Group is not responsible for damage and/or errors which occur due to deviation of the installation instructions.



# 8. Support

This installation provision can be found digitally on our website at www.condor-group.eu/downloads. Aside from this, installation provision we offer you complementary support by giving maintenance advice on our carpets. The maintenance advice can be found at www.condor-group.eu/downloads. If you have complementary questions or would like to obtain more information, you can contact your installer or the Condor Group. We can be reached via the contact form at www.condor-group.eu/ contact.