

# newhey

Great British carpet since 1968

## Product Installation Guide



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newhey

## **NEWHEY CARPETS LTD – PRODUCT INSTALLATION GUIDE (Dec 25)**

*(Colortec+, Axminster & Tufted Products)*

**Updated and aligned with BS 5325 and BS EN 14159**

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## 1. Introduction

This installation guide must be read alongside the latest versions of **BS 5325** *Installation of Textile Floor Coverings – Code of Practice*, **BS EN 14159** *Textile Floor Coverings — Dimensional and Pattern Repeat Tolerances*, and any other relevant industry standards.

The guidance provided here outlines recommended procedures for installing **Newhey Colortec+, Axminster, and Tufted carpet products**, ensuring the best possible performance and longevity. These recommendations are offered for guidance only; **Newhey Carpets accepts no liability for issues arising from poor workmanship or improper installation.**

Every carpet type and installation area has its own characteristics. Installers must therefore carefully assess each individual project before beginning work. All Newhey products must be installed by a **competent, experienced installer**, ideally trained and assessed to recognised industry standards. Failure to comply may invalidate any product warranty or guarantee.

Always follow the manufacturer's guidelines relating to underlay, adhesives, tools and accessories used during installation.

All Newhey carpets comply with applicable commercial performance and flammability requirements. For product-specific information, contact our Customer Services Team on **+44 (0)1706 846 375**.

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## 2. Storage and Handling

### 2.1 Storage

Carpet and related materials should be stored in a clean, dry, climate-controlled area with conditions as close as possible to those expected during use.

Protect all materials from frost, dust, moisture, and contaminants.

Do not stack carpet rolls more than **three high** and avoid placing heavy objects on top of them. Rolls must be stored **flat and fully supported** to prevent distortion.

### 2.2 Handling

Carpets should be moved and transported in a manner that avoids damage or bending of rolls. If bending is unavoidable (e.g. for delivery access), loosen and remove the core where possible and unroll the carpet on site as soon as practicable. Allowing sufficient **relaxation time** will make installation easier and help compression marks dissipate.

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### 3. Preparation

Before installation, ensure that site conditions are suitable.

Ask the client to remove furniture and vulnerable items (pictures, ornaments) to prevent accidental damage. If items remain, take photographs prior to commencing work to protect against potential disputes.

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### 4. Sub-floor Conditions

The Main Contractor is typically responsible for providing a suitable sub-floor. If asked to assess sub-floor conditions, installers must record all findings and provide copies to the contractor.

Even when not formally requested, installers should always conduct their own checks. Installing carpets before other trades have completed their work can lead to visible damage, contamination, adhesion failure, de-lamination, or instability—problems which may only become apparent later.

Any concerns must be clearly communicated to the client before work begins.

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### 5. Temperature and Humidity

It is recommended that carpet should be installed in an environment with:

- **Temperature:** 18–22°C
- **Relative Humidity:** 45–65% RH

If the atmosphere is outside of these conditions, it is recommended the installation does not commence until such time the atmosphere has stabilised within these parameters.

Ensure the HVAC system is operational and maintaining these conditions for at least **48 hours before**, throughout, and **72 hours after installation** (including overnight).

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### 6. Floor Preparation

Sub-floors must be properly prepared meeting or exceeding British Standards. They must be structurally sound, level, dry, and free from contaminants, residues, indentations, and loose material. Sub-floor irregularities can mirror through the carpet and cause premature wear.

All holes, cracks and defects must be repaired. Existing adhesives must be removed unless specifically compatible.

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## 7. Relaxing / Conditioning Carpet

Proper conditioning of the carpet prior to installation is essential to minimise wrinkling, buckling, and residual tension from manufacturing, rolling, or handling. The carpet should be unrolled in the installation area and allowed to relax for a minimum of **24 hours** at an ambient temperature between **18°C and 22°C**. Where this is not possible, condition the carpet for as long as practical—**never less than two hours**. Carpets must not be installed when the ambient temperature is below **16°C**.

Relaxation is particularly important for perimeter-fix installations, where achieving stable tension is critical. Insufficient conditioning can lead to tension imbalance, movement, or the need for re-stretching once the carpet acclimatises to the room environment.

During the relaxation period, carpets must be protected from dust, moisture, soil, and other contaminants. Time for relaxation should always be factored into installation planning.

After positioning, trim excess material, leaving approximately **50 mm** of carpet running up walls or fixed objects. This supports natural relaxation and assists with handling when turning back the carpet for installation.

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## 8. Underfloor Heating

The maximum sub-floor surface temperature must not exceed **27°C**, in line with British Standards.

For direct-stick or double-stick installations, adhesive and surface temperatures should typically be **≥15°C** (confirm with adhesive manufacturer).

Temperatures must remain stable for at least **24 hours before** and **48 hours after installation** to allow the adhesive to reach full cure strength.

Advise the end user to avoid rapid temperature increases. A gradual rise of **2–3°C per day** is recommended.

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## 9. Underlay Selection

Selecting the appropriate underlay is essential for achieving optimal carpet performance and long-term durability. Underlay should be chosen based on the specific location and expected usage. For most commercial and contract environments, a **heavy contract-grade underlay of uniform thickness** is recommended—firm enough to provide support without excessive softness.

A minimum thickness of **6 mm** is advisable. For stretch-fit installations, underlays thicker than **8 mm** may inhibit effective engagement with the gripper pins, reducing the carpet's ability to hold tension. Note that certain luxury or "super" grades of underlay are designed for comfort and may not be suitable for contract or high-traffic areas.

All underlays must be securely fixed around the perimeter of the sub-floor. On stretch-fit installations, all joins (including accidental cuts) should be taped using a **cloth-type, single-sided tape** to prevent movement and dust migration. Felt underlay does not work effectively with tape and must therefore be adhered using a suitable adhesive. Where possible, position underlay joins **at right angles to the direction of the carpet run** to minimise the risk of visible ridging.

Underlays also carry a **thermal resistance rating (TOG)**. For use over **underfloor heating**, select an underlay with a TOG rating of **less than 1.0**, as higher ratings restrict heat transfer. Conversely, where reducing heat loss through the sub-floor is desirable, a higher TOG-rated underlay may be beneficial.

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## 10. Underlay Installation

Underlay joints must be accurately aligned, tight, and free from compression or gaps. For stretch-fit installations, all underlay must be securely fixed to the sub-floor around the perimeter, and all joints (including any accidental cuts) must be taped using a cloth-type single-sided tape to prevent movement and to minimise dust migration.

Felt underlay is generally unsuitable for taping; therefore, it must be fixed using an appropriate adhesive. Where possible, position underlay joints at right angles to the direction of the carpet or offset them by approximately 150 mm from carpet seams. Each run of underlay should be laid in the opposite direction to the adjacent run. This helps to minimise the risk of visible ridges, particularly where underlay tolerances vary across the width.

Staples must not be used along underlay joints, as they may mirror through to the surface of the finished carpet.

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## 11. Patterned Carpet

Carpet is a textile product and therefore subject to natural manufacturing tolerances governed by **BS EN 14159**. These may include bowing, skew, linear variation, arking, or pattern distortion.

Side-to-side pattern matching is **not guaranteed**. Assess all pattern characteristics prior to installation.

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## 12. Pattern Adjustment

Pattern adjustment during installation may be necessary and should be anticipated. For Colortec+ & Tufted carpet designs with non-critical side match, allow at least 30 cm per length for visual alignment.

For Axminster products, pattern match and pattern repeat (both length and width) must be carefully considered during planning and quantification. These details can vary between projects and designs, so installers must ensure that all relevant pattern information is obtained prior to planning to ensure accurate setting out and ordering.

If unsure about pattern repeat or alignment, **do not cut** and consult Technical Support on +44 (0) 1706 846 375.

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## 13. Pattern Alignment

Pattern alignment should begin at the midpoint of each seam. From this central point, bring the pattern into accurate register, using appropriate installation tools such as a power stretcher, knee kicker, and seam re-stretcher (double-headed stretcher). On wood-based subfloors, temporary fixings may also be used to assist with maintaining alignment during the process.

When installing using the double-stick method, gripper may be utilised to aid pattern alignment. Apply adhesive to only a short section at a time, allowing it to cure sufficiently to secure the carpet before progressing to the next length of the seam. This staged approach helps maintain control and accuracy throughout the alignment process.

A firm, uniform underlay thickness is essential when pattern matching is required, as inconsistencies can affect the accuracy of the alignment. Successful matching also depends on the carpet's ability to move freely when placed into the adhesive. Warm conditions—ideally between **18°C and 22°C**—along with proper acclimatisation will help the carpet remain pliable and more responsive during adjustment.

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## 14. Edge Trimming (Colortec+ and Graphics Tufted Only)

Colortec+ & Tufted products are supplied with approximately **25 mm of excess backing** along each edge. This material must be removed prior to installation and seaming to ensure a clean, accurate joint.

### Recommended Tools and Method

Edge trimming can be carried out using several methods; however, the most effective and precise approach is to use a **Roberts cutter (No. 10-146 or 10-152)** together with a **row finder (10-517)**. These commercially available tools are versatile and suitable for multiple installation tasks.

Roberts cutters feature **two independently operated blades**, selected depending on the direction of movement. For best results, use the blade positioned closest to the pile. When using the 10-146 model, set the blade depth carefully to avoid cutting into the underlay. **Never lower both blades simultaneously.**

**Tip:** Place a sheet of plywood or vinyl beneath the carpet during trimming to prevent accidental damage to the underlay.

Holding the cutter at **90°**, tight against the edge tufts, will produce an accurate cut that removes the excess backing and leaves a clean, well-defined edge suitable for creating a gapless seam. Do not trim the edges until you are ready to produce the seam, as early cutting increases the risk of accidental edge damage.

### Alternative Cutting Tools

Excess backing may also be removed using scissors or a knife; however, these methods may not be as accurate and therefore may not achieve the same edge quality as dedicated trimming tools.

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## 15. Planning Seams

Seams should be minimised wherever possible and positioned thoughtfully to support the long-term performance and appearance of the installation. When determining seam locations, the following principles should be observed:

- **Avoid high-stress areas:** Position seams and cross-seams away from locations subject to heavy, concentrated, or twisting wear, including doorways, lift entrances, stair nosing's, and narrow access points.
- **Follow the length of the area:** Wherever feasible, seams should run in the lengthwise direction of the space to provide improved stability and visual consistency.
- **Align with traffic flow:** Seams should be arranged so that the primary traffic flow runs *along* the seam rather than *across* it, reducing the risk of wear, peaking, or visibility.



- **Consider natural light:** Avoid placing seams where natural light will fall *across* them, as this can highlight even well-constructed seams and diminish the overall appearance of the installation.
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## 16. Seaming

Colortec+ & Tufted carpets are best suited to seaming using a heat-bond tape when installed using the stretch-fit method. When operating a heat seaming iron, the thermostat setting must not exceed level 3. As thermostat accuracy can degrade over time, always perform a test run on a spare piece of carpet to confirm the iron is not overheating. Excessive heat can cause the adhesive on the tape to become brittle, leading to premature seam failure.

Installers should also be aware that not all heat-bond tapes are compatible with every backing type. While our standard synthetic backing has shown no issues in testing, variations in tape construction mean compatibility must always be checked prior to installation.

Even with strong tuft bind, it is good practice to apply a seaming adhesive to both seam edges to minimise peaking and reduce fibre loss in high-traffic environments.

For double-stick installations, heat-bond tape is generally not required. However, a high-quality seam sealer must be used to prevent seam movement during professional wet cleaning.

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## 17. Sealing Edges

Before seaming, apply a suitable seam sealer to fully encapsulate both the primary and secondary backings along each trimmed edge. This helps to reduce fibre loss and peaking along the seam.

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## 18. Double-Stick Installation

For optimum performance, a double stick installation system is strongly recommended for all commercial and public areas exceeding 26 m<sup>2</sup>. In environments subject to sustained or heavy use—such as hotel corridors, public spaces, and areas subject to wheeled traffic—this method should be used wherever possible. Where sub-floor conditions prevent the use of a double stick system, the carpet must be correctly tensioned for a stretch-fit installation (see *Stretch Fit Installation*), particularly when installing Colortec+ or tufted products.

The correct selection of underlay is essential for overall performance; refer to the Underlay section above for full guidance. Adhesive coverage and application methods between the underlay and sub-floor will vary depending on the usage of the area. Always follow the adhesive manufacturer's instructions or consult their technical department. Applying a release adhesive using a medium fibre roller will not provide the same bond strength as application with a notched trowel. The adhesive must be allowed to dry to a clear, tacky state—within the specified open time—and protected from dust contamination. Installing underlay into wet adhesive will result in permanent adhesion; in some situations, such as areas with powered wheeled traffic exerting significant lateral pressure, permanent adhesion may be appropriate.

Once the adhesive has dried, place the underlay into position and secure it using a glider or similar tool (heavy rollers should be avoided as they may drag or stretch the underlay). For increased installation stability, lay the underlay at right angles to the length of the carpet.

Position the carpet before applying adhesive, referring also to the guidance on Pattern Adjustment and Alignment.

**Tip:** In large areas, laying a plastic sheet over the underlay can assist with positioning; remove this before adhesive application.

Once positioned, roll or fold back the carpet and apply adhesive evenly, ensuring coverage extends tightly to the perimeter to prevent bubbling at the edges. Apply only as much adhesive as can be worked within the open time. After sufficient open time has elapsed (refer to the manufacturer's instructions), place the carpet into the adhesive and smooth out any air bubbles or creases using a glider or similar tool. Heavy rollers should not be used, as they may stretch the carpet, which can later relax and cause gaps after trimming.

Always glide the width before the length to minimise stretching. Press and crease the carpet firmly against the skirting/wall during the adhesive's active bonding period. Lift back a section of carpet to ensure full adhesive transfer to the backing; if insufficient, apply additional adhesive as required.

Once the adhesive has taken sufficient hold, trim the edges allowing approximately 5 mm of excess to tuck neatly into the gap between the underlay and wall, or into the gripper gap where gripper is used, creating a secure and professional edge finish.

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## 19. Direct-Stick Installation

Direct-stick installation follows similar principles to the double-stick method but is carried out **without underlay**. A comprehensive Direct-Stick Installation Guide is available on request and should be consulted for full technical requirements.

This method generally reduces the carpet's overall performance and offers less acoustic and thermal benefit compared with installations over underlay.

Accurate cutting is essential, as there is no allowance for a tuck-finished edge. Any exposed edges must be fitted with an appropriate protective profile to prevent fibre loss and edge damage.

We strongly advise end users to carefully consider the long-term performance implications before selecting a direct-stick installation method.

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## **20. Adhesive Curing**

Allow **24–48 hours** of restricted traffic to achieve full adhesive cure.

Premature trafficking or early exposure to moisture can cause installation failure.

Do not wet-clean the carpet for **a minimum of 30 days**.

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## **21. Stretch-Fit Installation**

Stretch-fit installation requires the carpet to be fitted under consistent and appropriate tension to ensure long-term performance and dimensional stability. A suitable, supportive underlay must always be used, and all seams should be secured using a cloth-type single-sided tape to maintain alignment and prevent dust migration. The perimeter should also be taped to prevent movement during installation and use.

### **Gripper Selection and Performance**

Three primary types of gripper are available—short pin, medium pin, and long pin—with medium pin being the most commonly stocked and suitable for most installations. Standard gripper width is typically 25 mm with two rows of pins; narrower alternatives may lack adequate stability. Lower-quality grippers, particularly those manufactured from poor-grade plywood, can be prone to pin bending during stretching and use.

For installations where carpet dimensions exceed 5 metres in either width or length, additional holding strength is required. In such cases, architectural gripper with three rows of pins or double rows of standard gripper should be used to achieve reliable tension. When using power stretchers, long-pin gripper can be used to give a better hold, but installers must ensure that pins do not penetrate carpet pile, which may pose a safety risk.

### **Fixing and Positioning of Gripper**

- Gripper must be secured using appropriate mechanical fixings—such as serrated (ring-shank) nails, screws, or divergent staples—and may be supplemented with adhesive such as mastic. When fixing with adhesive, gripper lengths should not exceed 150 mm. Each section must be fixed with a minimum of two fixings to prevent movement, lifting, or twisting during installation.

- Position the gripper so that a consistent, unobstructed gap is maintained around all fixed objects (skirting boards, architraves, door frames, etc.). The gap must measure approximately two-thirds of the carpet thickness and must not exceed 8 mm. The void must remain completely clear.
- Gripper must never be installed across open thresholds or doorways, as this can result in premature wear, damage, and potential injury.
- Electrical cables must never be placed within the gripper gap, alongside the gripper, or beneath the carpet. This is prohibited by regulations, presents a serious fire risk, and may invalidate insurance.
- Mechanical fixings must not be used where underfloor heating systems are present.

### Stretching Principles

The carpet must be fully acclimatised to room conditions before stretching to minimise the risk of future re-stretching. Correct tension must be applied in both width and length; inadequate stretching will lead to premature wear, movement, or rippling.

Carpets should always be stretched in the length first, followed by the width, to establish uniform tension throughout the installation. Care is required when working around pillars, recesses, or protruding walls, as these can reduce effective tension transfer.

All carpet edges must be secured while under tension **before** any cutting is carried out. Simply cutting and tucking one wall before stretching to the opposite side will typically result in inadequate tension along the initial wall. Effective stretch-fit installation requires the carpet to be tensioned uniformly in all directions to ensure stability and longevity.

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## 22. Power Stretching

Power stretching is an essential procedure for achieving correct carpet tension, particularly in larger installations. In accordance with **British Standard BS 5325**, any area exceeding **5 metres in length or width** must be power stretched to ensure dimensional stability and prevent premature failure.

### When Power Stretching Is Required

Where stretch fitting is unavoidable in very large areas, a power stretcher should be used to distribute tension evenly across the entire installation. This ensures that carpet remains firmly secured to the gripper and maintains its performance under foot traffic.

### Verifying Correct Tension

Two simple on-site checks can help confirm whether adequate tension has been achieved:

- **Fibre Grasp Test:** Grip a small section of pile between your thumb and forefinger and lift gently. Correctly stretched carpet will resist lifting and pull away from your grasp before any significant height is reached.

- **Ripple Test:** Shuffle your feet or run your hands across the carpet, both along and across the width. If a ripple forms ahead of your movement, tension is insufficient and the area must be re-stretched.

### **Importance of Bidirectional Stretching**

Stretching must always be applied **in both directions**. The carpet should remain firmly in place under tension and must not lift when fixed. Failure to stretch correctly may lead to:

- Dimensional instability
- Rucking or bubbling
- Pattern distortion
- Premature wear

### **Aftercare Recommendation**

Installers should advise clients that, if any signs of rucking, bubbling, or movement appear during use, a **professional re-stretch** may be necessary to maintain appearance and extend the carpet's service life.

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## **23. Completion**

On completion:

- Remove all tools, waste and debris.
- Vacuum the entire installation.
- Inspect the carpet for flatness, correct tension, and absence of blemishes.
- Remove any loose fibres using suitable napping scissors.
- Inspect surrounding areas for accidental damage.

Protect newly installed carpet from other trades. Protective coverings should remain for **no more than three days** without being lifted to allow ventilation. If extended protection is required, coverings must be removed and replaced every 72 hours.

For a detailed cleaning and maintenance guide, contact Customer Services on **+44 (0)1706 846 375**.

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## Further Support

This installation guide must be read alongside:

- **BS 5325**
- Relevant manufacturer's product guidelines
- Current Newhey Carpets Terms & Conditions

For advice on adhesives, underlays, project-specific planning, pattern information or installation challenges, please contact:

### Newhey Carpets Technical Department

 **+44 (0)1706 846 375**

or speak to your **local Business Development Manager**, who will be happy to assist with project guidance, specifications and site queries.