

Navan Carpets - Contract Carpet Installation Guidelines

Guidelines for the Handling & Installation of Axminster Carpets

Receiving carpet:

Navan carpets are delivered in fully sealed wrappings. The vast majority of our shipments arrive at their final destination in perfect condition. However, occasionally they sustain damage in transit - most typically forklift damage when inappropriate lifting attachments are used at some transfer point en-route. Therefore, should any Navan roll arrive at its final destination showing any sign of damage to its wrappings, this fact should be assumed to indicate that the carpet inside the wrapping is also damaged. This should be investigated prior to signing for the carpet, and the delivery papers should be clearly marked to indicate that any apparent carpet damage existed prior to acceptance of delivery. This is the only way in which the customer or Navan can then seek compensation from the carriers or port handlers after the fact. Signing for the carpet as damaged does not require a full investigation of the extent of the damage at the time of delivery - only a noting of the fact that unspecified damage existed. The extent of the damage should however be documented and communicated back to Navan as soon as it is possible. This entails fully unrolling the carpet and taking photographs and making diagrams which note dimensions of damaged areas. Damaged carpet, which is not signed for as damaged, exposes the customer to significant loss, as Navan's freight insurance does not cover such a scenario. The onus is on the party receiving the carpet to examine the material at that time. Signing for the carpet, without noting damage, effectively means that the delivery is accepted as being in perfect condition - regardless of its condition when fully unwrapped.

Storage:

Navan carpet is typically shipped with a breathable fibre inner wrapping, and a sealed, airtight and watertight outer polythene wrapping. Should it be necessary to store the carpet for a period of 2-3 weeks prior to installation it is generally acceptable to leave the carpet in all its wrappings. However, if the storage area is excessively hot, then even for this short a period the polythene wrapping should be removed, as there is potential for the carpet to sweat inside the wrapping, which could cause shrinkage or mal-odour, particularly in jute-backed carpets.

Should the carpet need to be stored for periods in excess of 2-3 weeks we would recommend that the polythene wrapping be removed, and that it be laid flat, no more than 2 rolls high, in a location free from excessive heat, humidity or sunlight. It should of course be protected from excessive dust or other contaminants. The ideal storage conditions are 10 - 25°C (approx. 50 - 80°F) and no more than 75% relative humidity. The carpet should be shipped to the installation site at least 24 hours prior to installation, to allow it to become acclimated. Carpets which are brought from a cold storage area to a warm installation site will initially be stiff and difficult to stretch appropriately. If installed in this condition, they will likely stretch and expand under subsequent stress from foot-traffic, thus requiring significant re-stretching and potential impact to design resolution.

Floor Preparation:

The quality of the carpet installation is largely determined by the quality of the subfloor over which the carpet is laid. Concrete subfloors should be smooth, sufficiently cured and free of oil and dust. Wooden subfloors should be structurally sound, level and free of moisture, oil and dust.

Installation:

Whilst there are three methods available for the installation of Axminster (gripper and underlay, single stick, double stick) our experience has shown that for best pattern matching the gripper and underlay method is recommended. We further recommend that seams be hand sewn for greatest durability. The two alternate installation methods depend greatly on the experience of the carpet installer to achieve satisfactory results and performance, and therefore Navan cannot guarantee pattern match on single stick or double stick installations.

Carpet Gripper and Underlay Method: The carpet is installed over a separate underlay and fastened under tension to strips of tackless gripper which are installed around the perimeter of the area being carpeted.

Grippers should be installed leaving a space between the gripper and the walls of just slightly less than the thickness (2/3rds of the thickness) of the carpet. Architectural gripper is required any time the carpet is being stretched a distance of 6.00 metres or more.

Choose a good quality commercial underlay weighing not less than 1400 grams per sq metre, and no greater than 13mm thick. Underlay can be either fully synthetic or of rubberised jute construction. Underlay should be installed with seams running perpendicular to the carpet seams. Underlay should be adhered to concrete subfloors using appropriate adhesive or stapled onto wooden subfloors. Underlay seams should be further secured by means of vinyl coated fabric tape.

Carpet should be laid out and matched prior to stretching on to the gripper. It is imperative that a power stretcher be used to achieve sufficient tension in the carpet. Heat seaming must be done in the direction of the pile run and preferably with the aid of a board or seam weight. Under no circumstances should a spiked roller be used whilst heat seaming

Seams should be made using either of the following two methods:

Hand Sewing: Carpet should be cut to the appropriate dimensions and edges sealed using a good quality latex edge sealer. (Refer to later section providing information on the unique steps to be taken in fabricating cross-seams in Axminster carpets). Overcast stitches should be employed at 10mm intervals, not less than 13mm back from each side of the seam. Stitches should be secured using a good quality latex adhesives applied in an even fashion and allowed to fully dry before being covered with a cloth adhesive tape.

Hot Melt Tape: Carpet should be cut to the appropriate dimensions and edges sealed using a good quality latex edge sealer or spirit based sealer. ((Refer to later section providing information on the unique steps to be taken in fabricating cross-seams in Axminster carpets)) Use a good quality heat tape, 150 mm wide, and ensure that the iron is heated to the temperature recommended by the tape manufacturer ie sufficient to melt the tape's adhesive fully into the carpet backing while being careful not to overheat the iron and possibly damage the carpet pile. The iron should be equipped with a heat shield. Pressure to the seam should be applied as the iron passes by means of a wooden board.

Direct Stick: Carpet is adhered directly to the sub floor.

Adhesive should be spread using a trowel of the following type.

Notch Depth 4mm	
Notch Width 4mm	>>> As per manufacturers instruction generally printed on the
Spacing 2mm	Outside of the container or available from their technical
Notch Shape V	Department

A spread rate of approximately 6 sq. metres per 5 litres should result, and is recommended, to achieve adequate transfer of adhesive to the carpet backing when the carpet is laid into the adhesive. The carpet should be laid into the wet adhesives as soon as possible to ensure adequate time to stretch the carpet straight and match patterns before the adhesive sets up. All seams should be sealed using a good quality seam sealer ((refer to later section providing information on the unique steps to be taken in fabricating cross-seams in Axminster carpets)). The carpet should be rolled using a 75-lb. roller. (Care should be taken on woven carpet as they may shrink with the introduction of adhesive moisture)

Direct sticking of any carpet type exposes the carpet to levels of wear and compression far in excess of that seen in carpets installed over commercial underlay. Tests show that wear in directly glued carpets can be up to 40% greater over a period of one year, when compared to carpet over underlay. Navan therefore recommends that any specifier intending to directly stick a Navan carpet give appropriate consideration to this fact.

Double Stick Installation: A separate underlay is stuck to the floor and the carpet is stuck to the underlay.

Various manufacturers produce specific underlays for use in double stick-down installations (Navan carpets only accept these to be solid base underlays which are firm not soft) and the manufacturer's instructions should always be followed in relation to adhesive spread rates and trowel type used in adhering the underlay to the subfloor. In adhering the carpet to the underlay, adhesive should be spread using a trowel of the following type.

Notch Depth 4mm	
Notch Width 5mm	>>>> as above as per manufacturers recommendation.
Spacing 2mm	
Notch Shape U	

A spread rate of approximately 6 to 7 sq. metres / 5 litres should result, and is recommended, to achieve adequate transfer of adhesive to the carpet backing when the carpet is laid into the adhesive. The carpet should be laid into the wet adhesives as soon as possible to ensure adequate time to stretch the carpet straight and match patterns before the adhesive sets up. All carpet edges should be sealed using a good quality latex sealer. Seams should then be taped together. Use a good quality heat tape, 150mm wide, and ensure that the iron is heated to a temperature sufficient to melt the tape's adhesive fully into the carpet backing while being careful not to overheat the iron and possibly damage the carpet pile. The iron should be equipped with a heat shield. Pressure to the seam should be applied as the iron passes by means of a wooden board (refer to later section providing information on the unique steps to be taken in fabricating cross-seams in Axminster carpets). The overall installation should be rubbed with a carpet glider working from the middle out to ensure adhesive transferal and good overall bond to the underlay.

All seams in a double stick installation should have the manufacturers selvage edge trimmed off and apply a bead of seaming sealer to fuse the joint (although some installers like to heat seam joints prior to bonding to the underlay this eventually shows as a shadow on the seam after some foot traffic.) Seams should be rolled with a spiked roller. The overall installation should be rubbed in with a Carpet glider working from the middle out to ensure adhesive transferal and good overall bond to the underlay.

Cross-Seaming Axminster Carpets:

Cross seaming Axminster carpet requires a number of unique steps, which, if carried out correctly, will protect against the prospect of any failure of the seams under heavy traffic, or standard maintenance and cleaning.

When a cut is made across the width of an Axminster carpet, rows of the pile material can easily fray away from the exposed cut edge. Where two such edges are to be joined in a cross seam steps must be taken to ensure that the cut edges are fully sealed. It is not enough to simply apply a latex sealer to the carpet backing at this point.

The following procedure outlines Navan's recommendations for the treatment of Axminster woven carpet for cross-seams.

1. Cut the carpet pieces to be cross-seamed so that the pattern overlaps by approximately 50mm.
2. Fray away the pile rows and weft material to achieve the required exact pattern match. Polypropylene warp strands will now extend directly from the cut face of the carpet.
3. Apply a thin coat of latex to the carpet backing and fold the warp ends back into the latex so that they adhere to the carpet backing. This creates a sealed edge which will neither fray nor give rise to complaint in use.
4. When the latex is dry the pieces can be joined by hand sewing or heat seaming.

Selvage Edges:

Selvage edges must be trimmed prior to fabricating any side seams, and either a spirit based edge sealer or latex applied to the raw edges. For direct stick installations the carpet edge will be sufficiently sealed when the requisite seam sealer is applied. For double stick or gripper and underlay installations the trimmed carpet edges should be sealed by means of a narrow bead of seam sealer applied to the exposed cut face. It is advisable to use a spiked roller on direct and double stick installations on all seams.

Bowing:

In the manufacture of Axminster carpet it is normal for some manufacturing bowing to occur. Bowing up to 39mm in a 3.66m wide carpet is considered within industry standards. Installation of carpet over gripper and underlay affords the carpet installer plenty of opportunity to straighten any bowing that may be present. However, when carpet is being stuck down, care needs to be taken to ensure that stretching and pattern alignment can be carried out before the adhesive sets up. The acclimatization of the carpets in the areas that they are to be installed helps in that it allows the carpet to relax out / soften making it easier to stretch.

Typically, carpet installers lay out full rolls of carpet before folding back half the roll widthways to spread the adhesive onto the floor. The folded back carpet is then laid into the adhesive before repeating the same procedure for the other half of the carpet. While this process works well for shorter roll lengths, there can be problems with this method on longer runs, where the adhesive may start to dry before the installer has had time to stretch out any bowing and align the pattern. In such situations, adhesive should be applied to the floor to the equivalent of the full width of the carpet and approximately 3.5 m in length. The carpet is then rolled across and beyond the adhered area of subfloor and the installer can then concentrate on aligning this section of carpet before repeating the process for the rest of the roll length. A length of string stretched between 2 stay tacks and running square across the carpet width will provide a guide to help ensure that any bowing has been correctly straightened out. Stay tacks should be used to hold the stretched carpet in alignment as the installer completes each section of carpet.

Navan Carpets thoroughly inspects all carpet before it is released for shipping, and thus it is assumed that an experienced fitter of Axminster carpets should be able to stretch the carpet properly in order to achieve an installation with patterns matched and straight. The carpet should be fully laid out in the area to be carpeted and surveyed to determine if any bowing is present before proceeding with the installation. If a question arises as to the ability of the carpet installer to install the carpet satisfactorily, the job should be stopped immediately and either the mill or our local agent should be contacted. Without this contact no claims for bowing and pattern run-off will be honoured.

Carpet Borders:

Field Carpets should be seamed and stretched to correct tension prior to being attached to border carpet. The field carpet can be held in place, under tension, by means of stay tacks inserted through the carpet into the floor. Seams in border corners should be mitre cut, unless separate end caps are used. Care should be taken to ensure that corresponding corners are mitred (mirror cut) at the same point in the design. It is critical that all preceding directions on seaming techniques be followed in order to ensure the strength of all border seams.

Prior to cutting any carpet for seaming purposes the use of an antifray spray can be very beneficial especially at mitres where the very last edge is extremely delicate and susceptible to fraying