

Insight Plus GB Collection - Sheet Vinyl

Installation Guidelines

GENERAL INFORMATION

These instructions cover all installations of Mannington on Main Insight Plus GB. All recommendations are based on the most recent available information. Good preparation is essential for a trouble-free installation. Do not install Mannington On Main Insight Plus GB until jobsite testing and subfloor preparations are finished and the work of all other trades is complete. Site conditions must comply with the relevant building codes and local, state, and national regulations.

- Mannington on Main Insight Plus GB is recommended for use over properly prepared concrete, suspended wood, metal and other suitable substrates. Never install Mannington on Main Insight Plus GB over residual asphalt type(Cutback) adhesive as "Bleed Through" may occur.
- Mannington on Main Insight Plus GB is not suitable for external installation or unheated locations.
- Mannington resilient flooring, adhesive, jobsite and subfloor must be acclimated to a stable condition before installation.
- Following installation, Mannington on Main Insight Plus GB should be protected from traffic for 24 hours, point loads and rolling traffic for 48 hours.
- Once installed, the Mannington On Main Insight Plus GB temperature must be maintained above 55° F for the life of the floor.
- Always follow other manufacturers' written recommendations when using their materials for subfloor preparation.

MATERIAL RECEIVING, HANDLING & STORAGE

1. Always store Insight Plus GB tightly rolled, face out on a sturdy core with a minimum of a 4" diameter designed for that purpose. Store the roll horizontally and support it across the entire width. Before starting the job, always check the flooring materials to ensure they are the correct pattern, style, and color. Also make the sure the size and amount of the products are sufficient to complete the installation. Inspect the material closely before installation for any visible defects. Mannington on Main Insight Plus GB products are manufactured to high quality standards and are carefully inspected before leaving our facility. Occasionally, however, defects are not detected. If you notice a visible defect in the flooring product, stop the installation and contact Mannington on Main at 1-800-241-2262 ext. 2 (Claims), as installation of products installed with visual defects, mixed product runs, or incorrect styling will not be honored.
2. Verify materials delivered are correct style, color and quantity. Report discrepancies immediately to Mannington on Main at 1-800-241-2262 ext. 2 (Claims), as installation of products installed with visual defects, mixed production runs or incorrect style or color will not be honored.
3. Store all materials in a weather-tight enclosure.
4. Acclimate flooring, adhesive and jobsite to a stable condition between 65°-85° F (18°-29° C) and relative humidity between 30-65% for 48 hours before, during and after installation.

JOBSITE TESTING AND CONDITIONS

1. The jobsite building envelope must be sealed (walls, roofing, windows, doorways etc., installed).
2. Test sites must be properly prepared and protected for the duration of testing to achieve valid results.
3. Surface Flatness for all Subfloors: The surface shall be flat to within the equivalent of 3/16" (3.0 mm) in 10 ft. and 1/32" (0.8 mm) in 12". To check flatness, place a 10 ft straight edge on the surface and measure the gap or use another suitable method.

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4. Concrete Subfloors:
 - a. Concrete subfloors must be finished and cured without additives, curing compounds, hardeners or surface treatments that may prevent proper bonding of the flooring materials (ACI 302.1 and ASTM F710).
 - b. Randomly check concrete subfloor for porosity using the drop water test. Place a single drop of water directly onto the concrete subfloor. If the water droplet does not dissipate within 1 minute the subfloor is considered non-porous. If the substrate is too porous apply Mannington Premium Universal Primer to render the surface suitable for adhesive and floor covering. Please reference ASTM F3191.
 - c. Concrete subfloors must have a minimum compressive strength of 3000 psi.
 - d. Concrete subfloors shall not consist of lightweight concrete or gypsum with less than 105 lbs. /cubic foot density.
 - e. Moisture Testing: Perform either the preferred In-situ Relative Humidity (RH) Test (ASTM F2170) or the acceptable Moisture Vapor Emission Rate (MVER) Test (ASTM F1869). For acceptable moisture limits please refer to the specifications for the adhesive of choice.
 - f. Alkalinity: Must test surface alkalinity. When moisture is present excess alkalinity can potentially affect the product and the adhesive bond. See ASTM F710 and ASTM F3441 standards for measuring pH. The pH requirement is 7-9 pH unless the adhesive type permits a higher tolerance. To reduce pH, use Mannington Premium Universal Primer.
5. Wood Subfloors and underlayment panels shall have the moisture content tested using a suitable wood pin meter. Readings between the wood subfloor and underlayment panel should be within 3% and have a maximum moisture content of 14% or less. Effective moisture control in basements and crawl spaces is essential for achieving a successful long term installation.

MOISTURE SUPPRESSANT SYSTEM

Concrete subfloors that exceed adhesive specifications will require a Moisture Suppressant System. Due to complexities associated with moisture vapor transmission, emissions and movement of soluble salts (alkalinity) in concrete subfloors, we do not offer, recommend or warranty a specific solution for excess moisture in concrete slabs. However, there are many companies that offer subfloor solutions with warranties for excess moisture in concrete slabs.

Mannington On Main suggests that you reference the current ASTM F710, "Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring" and contact one or more of the following or other moisture suppressant system suppliers for assistance:

Ardex: 724-203-5000, www.ardex.com
 Koester American Corp.: 757-425-1206, www.koesterusa.com
 Mapei: 800-426-2734, www.mapei.com
 Schonox: 855-391-2649, www.hpsubfloors.com
 Uzin: 800-505-4810, www.ufloorsystems.com

SUBFLOOR PREPARATION

Concrete

Careful subfloor preparation is vital for an excellent floor appearance and good sheet adhesion. The subfloor must be smooth, firm, flat, clean, dry, and free from defects and fit for purpose. A suitable smoothing compound should be used to ensure that no irregularities show through to the surface of the finished floor. In all cases, the subfloor must meet the moisture and pH requirements before installation. Below and On-grade concrete subfloors must have a suitable vapor retarder properly installed directly beneath the slab. Always follow other manufacturers' written recommendations for the use and installation of their subfloor surface preparation materials.

1. Record site conditions, test results and corrective action(s). Mannington on Main requires written documentation of site conditions, test results and corrective action(s) before processing claims, other than manufacturing defects.
2. Subfloor must be clean (free of dirt, sealers, curing, hardening or parting compounds or any substance that may stain or prevent adhesion), smooth, flat, sound, fit for purpose, free of movement, excessive moisture and high alkalinity.
3. Slick surfaces such as power troweled concrete shall be profiled to allow for a mechanical bond between the adhesive and subfloor.

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4. Remove existing resilient floor covering, 100% traces of old adhesives, paint or other contaminants by scraping, sanding, grinding, shot blasting or scarifying the substrate. The use of adhesive removers or solvents in the abatement or removal of existing or old adhesives is prohibited and may void any warranty. **WARNING: ASBESTOS & SILICA** - Refer to the current Resilient Floor Covering Institute (RFCI) document "Recommended Work Practices for Removal of Existing Resilient Floor Coverings" for guidance.
5. Perform corrective actions necessary for elevated moisture or high alkalinity conditions.
6. Leveling and Patching:
 - a. Surface Flatness for all Subfloors: The surface shall be flat to within the equivalent of 3/16" (3.9mm) in 10 ft., and within the equivalent of 1/32" (0.8 mm) in 12" (305 mm). Bring high spots level by sanding, grinding etc. and fill low spots. Smooth surface to prevent any irregularities or roughness from telegraphing through the new flooring.
 - b. For concrete subfloors, use only high quality Portland cement based materials (minimum 3500 psi compressive strength according to ASTM C109). Mix with water only, do not use latex. Caution: Do not lightly skim coat highly polished or slick power troweled concrete surfaces. A thin film of floor patch will not bond to a slick subfloor and may become a bond breaker causing product to release at the interface of the subfloor and patching material.

Wood

All wood subfloor systems should be suspended at least 18" above the ground, with adequate cross ventilation and suitable vapor barrier. Wood subfloors require an underlayment (double layer construction) with a minimum total thickness of 1" (25 mm). Use minimum 1/4" (6 mm) thick APA rated "underlayment grade" plywood with a fully sanded face or other underlayment panel that is appropriate for the intended usage. Install and prepare panels and seams according to the manufacturers' instructions.

Many times wood panel subfloors are damaged during the construction process or are not underlayment grade. These panels must be covered with an appropriate underlayment. Underlayment panels are intended to be used to provide a smooth surface on which to adhere the finished floor covering. It should be understood that underlayment panels cannot correct structural deficiencies.

Panels intended to be used as underlayment should be specifically designed for this purpose. These panels should have a minimum thickness of 1/4". Any panels selected as an underlayment must meet the following criteria:

- Be dimensionally stable
- Have a smooth, fully sanded face so graining or texture will not telegraph through
- Be resistant to both static and impact indentation
- Be free of any surface components that may cause staining such as plastic fillers, marking inks sealers, etc.
- Be of uniform density, porosity and thickness
- Have a written warranty for suitability and performance from the panel manufacturer or have a history of proven performance

Any unevenness at the joints between panels must be sanded to a level surface. Gaps between panels, hammer indentations, and all other surface irregularities must be filled and sanded.

Wood (Other): Particleboard, chipboard, construction grade plywood, any hardboard and flake-board are not recommended as underlayment for fully adhered installations. All have inadequate uniformity, poor dimensional stability, and variable surface porosity. Mannington on Main Floors will not accept responsibility for adhered installation over these underlayment. Insight Plus GB loose laid method can be installed over all wood and wood composition panels provided that they are smooth, flat, structurally sound and free of deflection. This includes plywood, particleboard, oriented strand board (OSB), flake-board and wafer board. If the surface of the subfloor is not smooth, a 1/4" underlayment should be installed over the subfloor. In all cases, the underlayment manufacturer or underlayment installer is responsible for any/all underlayment warranties.

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INSTALLATION

Insight Plus GB must always be trimmed back (1/8" to 1/4") from all fixed vertical surface and must be fit with no compression or fullness. Under cut all door casings and be certain the material is positioned true and square in the work area.

Because the Permanent Bond is achieved by placing the Insight Plus GB into the wet-tacky MT-711 adhesive with a 1/16"x1/32"x1/32" notched trowel, the substrate must be smooth and have sufficient porosity to receive the adhesive. For wood substrates, in most cases this requires the use of an appropriate underlayment. A concrete surface must be smoothed using an appropriate Portland cement patching compound. Installation over existing resilient or ceramic floors requires and embossing leveler. Additionally, the Insight Plus should be rolled in both directions with a 50 lb., (or heavier) three section roller.

Note: Mannington's V-88 adhesive is an option in areas where a high moisture adhesive is needed. When installing homogenous sheet vinyl with V-88 adhesive it is recommended to trowel the adhesive then back roll with a short-nap paint roller to minimize the possibility of trowel ridge telegraphing. V-88 can only be used in permanent, full spread installation method. (See above Jobsite testing). When used in a Commercial application all previous flooring materials must be thoroughly removed and adhesive scraped up and cleaned before installation of the Insight Plus GB flooring. The floor must be smooth, level, and flat.

CUTTING & FITTING

When cutting and storing the flooring pieces, remember that each piece must be installed in sequential order. If you need more than one roll of floor covering, make sure the roll numbers are in consecutive order. You may use pattern scribing, freehand knifing, or direct scribing techniques when installing Insight Plus GB. The material is flexible and will handle easily when cutting and fitting. The material must always be cut flat before final cuts are made, leaving a 1/8" to 1/4" expansion gap. Never allow the material to become twisted. Always fold the material in a wide radius to avoid sharp kinks and creases that may cause breaks in the backing. You may flash cove Insight Plus GB only when using the fully adhered method.

ONE PIECE INSTALLATION

Thoroughly clean the subfloor, sweep or vacuum to remove all dust and debris. Remove any quarter round, shoe base or wall base, and undercut any doorways. Precut the floor covering to fit the area, allowing 2" to 4" extra length and width for fitting. Position the resilient flooring in the room, allowing enough material to drop into offsets, closets, alcoves, etc.

Align pattern squarely in room, parallel to all walls. If the room is not square, align the pattern so the run-off is located in the least conspicuous area. After the sheet is positioned, weight it to prevent shifting. Make relief cuts around unusual objects such as pipes, fixtures, floor registers, etc. Make relief cuts on all inside and outside corners. Rough-cut the sheet to remove excess material. Trim and fit the perimeter so the floor covering lies flat.

FULLY ADHERED

Apply the adhesive with a 1/16" wide, 1/32" deep, and 1/32" apart notched trowel. After trimming the material to fit the room, tube or lap it back to expose approximately one-half of the under floor; strike a white chalk line near the fold of the material. This line provides a guide for adhesive application. Spread the adhesive, leaving no gaps, voids, puddles, or thin spots, over 100% of the exposed under floor. Keep the trowel clean and properly notched to maintain this uniform coverage. Immediately after adhesive application, gently position the sheet into the adhesive. Roll the floor covering forward into the adhesive to eliminate trapping air. Do not drop or flop the material into the adhesive. Using a 50 lb. (or heavier) three-section floor roller, roll the material in both directions, starting in the middle of the sheet width and rolling toward the edges. This process eliminates air and embeds the floor covering into the adhesive. For areas that cannot be reached with a floor roller, use a hand seam roller.

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Failure to roll the floor covering can result in the following problems:

- Lack of bond between material and underfloor
- Telegraphing of adhesive ridges
- Permanent indentations: when heavy items are placed on the new flooring, resulting from adhesive displacement

Once the first half of the material is adhered and rolled, fold back the second half and repeat the procedure. When folding back the sheet use caution to prevent product tearing and telegraphing of the glue line. Also, be careful to regulate the adhesive spread at the glue line. This will avoid an adhesive ridge left in the center of the sheet.

SEAMED INSTALLATION

When the work area requires more than one drop of Insight Plus GB, determine the best possible placement of the seam. If the work area requires more than one seam. Fit and cut the first sheet as in a one piece installation. Weight this sheet to prevent it from shifting. Position the second sheet in the room and align it to the first sheet for accurate pattern match. Once you have achieved pattern alignment, weight the second sheet to prevent it from shifting.

PATTERN MATCHING

When your work area requires more than one sheet of material, provide additional length on the second and succeeding sheets to allow for proper pattern alignment. Install Insight Plus GB using the “Reverse” or “Do Not Reverse” method. The printed directional arrows on the backing of the Insight Plus GB can be helpful in determining the direction of sheet or fill piece if needed.

“REVERSE” METHOD

“Reverse Sheets for Seaming” means turning the second sheet 180° to the first sheet. To determine the amount of additional material required to assure proper pattern alignment when the “Reverse” method is recommended, cut the first sheet at least 3” longer than the net room requirements. Cut the second and all succeeding sheets to this length plus the length of the pattern repeat.

“DO NOT REVERSE” METHOD

“Do Not Reverse Sheets for Seaming” means placing the opposite selvage edges together. To determine the amount of additional material needed to align patterns in “Do Not Reverse” designs, cut the first sheet 3” longer than the net room requirements. Cut the second and all succeeding sheets to the next multiple of the pattern repeat over the net room dimension, providing the starting wall is the same.

SEAM CUTTING

Seaming is one of the most important aspects of resilient sheet installation. Always double-cut seams in Mannington on Main Insight Plus GB with a new, sharp utility knife blade.

DOUBLE-CUTTING SEAMS

The most accurate method for cutting seams in Insight Plus GB is double-cutting. In this technique, both sheets are cut at the same time. This ensures the edges of both sheets are cut exactly the same, with no gaps or fullness. The construction of Insight Plus GB will not permit the product to be compressed or stretched into match. Overlap the sheets of Insight Plus GB and bring the pattern into an exact match. The most accurate method of maintaining the pattern grout line width is to make the seam cut along the side of the grout line. With the sheets aligned, position the steel straightedge so it completely covers the grout line of the top sheet. Using the straightedge as a guide, cut the length of the seam in the “shadow” of the grout line with a utility knife. This technique will ensure that all grout lines are of the same width.

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Cut the seam net, not full. Do not add fullness to the cut by placing scrap under the seam. Keep the knife blade parallel to the straightedge, at a 90° angle to the floor covering. All seams are to be double cut "dry".

Insight Plus GB must be rolled flat and well bonded to the adhesive for a good seam. If the bond using the Releasable Bond method is not sufficient, it may be necessary to re-glue the seam area with a 6" band of MT-711. If the Loose-Laid method is used, after cutting the seam, apply a 6" band of MT-711 at the seam line, provide sufficient open time (tacky/wet), and then carefully position the sheet into the adhesive. Use caution to prevent the sheet edges from getting into the adhesive. Roll the seam area with a hand roller.

SEAM SEALING

All seams in Insight Plus GB flooring must be sealed with Mannington MLG-33 two-part seam sealer. Thoroughly mix all of Part A and Part B into the supplied VST applicator bottle. When using MLG-33 two-part seam sealer, it is necessary to mix the entire contents of Parts A and B. Once mixed, MLG-33 cannot be saved for re-use. Check the flow of sealer through the applicator tip on a scrap piece of material before use. If the flow is restricted, insert the cleaning wire into the tip to clear the obstruction. Before sealing the seam, make sure the seam cut is clean, dry, and free of adhesive contamination.

Insert the plastic fin of the VST slightly back from one end of the wall and push forward to make full penetration of the fin. Use your forefinger to apply a downward pressure on the flat, textured "head" of the VST. Gently squeeze the bottle to start the flow of the sealer. In a slow, continuous motion, pull the applicator along the length of the seam.

You must apply seam sealer into the seam cut and leave a bead of sealer approximately 1/8" wide centered on the seam. Remember, it is crucial that the seam sealer be applied to the full thickness of the floor covering from top to bottom. To ensure a strong, tight seam, make certain there are no skips or voids along the cut. Allow seam sealer to completely dry before walking on the seam or moving furniture over it. We recommend waiting 24 hours.

Note: Never use heat welding on Mannington On Main Insight Plus GB.

FLASH COVING

The Insight Plus GB can be Flashed Coved only when using the permanent full spread application. Apply Mannington's MT 711 or V-88 with a brush or paint roller. Seal all coved corners using Mannington's MLG 33 seam sealer.

FINISHING & MAINTENANCE

Molding & Base Installation

- Protect all exposed edges of the flooring with trim or restrictive molding.
- Always use moldings and transition strips over product edges.
- Nail wood moldings into the wall and not into the floor covering.
- Use metal or vinyl transition or reducer strips where Insight Plus GB meets other types of flooring and at doorways.
- Apply a bead of silicone caulk around bathtubs, shower stalls, toilets, and patio doors.

JOBSITE CLEANUP

- To enhance the appearance of the finished installation, it is always good practice to thoroughly clean the area before leaving.
- Sweep the floor.
- Remove all scraps and trash from the jobsite. (Leave any large pieces of flooring, rolled face-out, with the customer for future repairs.)
- Remove any adhesive smears or residue from the surface of the flooring with a clean cloth dampened with mineral spirits or lighter fluid.

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- If possible, wait 24 hours before moving furniture or appliances onto or across the floor. Always use wood or hard-board runways to move furniture and/or appliances, even when using a dolly. This is especially important when using the loose laid installation method.
- Leave Mannington Maintenance and Warranty literature with the customer. These are available from your Mannington Distributor or downloadable from manningtononmain.com.

REPAIRS

Small Cuts

Small cuts will eventually gap open. To repair, clean any dirt from the cut and apply MLG-33 seam sealer.

Replacing Damaged Areas – Plugs

If you must replace a damaged area, follow these steps:

- Select a design element from the scrap material that matches the design to be removed from the existing resilient.
- Accurately overlay this piece over the damaged area.
- Double cut on the inside of the grout line if possible and remove the damaged piece. If the floor covering you are repairing is installed over existing resilient flooring, be careful not to cut too deep.
- If the Insight Plus GB was installed FULLY ADHERED, apply a thin layer of MT-711 to the back of the repair piece and place into position. Roll with a hand roller. Apply MLG-33 seam sealer. Protect from foot traffic until sealer is fully cured.
- If the Insight Plus GB was installed Loose Lay, apply a thin layer of MT- 711 on the back of the repair piece as well as under the edges of the repair area. Position the repair piece into the cut out area and lightly roll the area with a hand seam roller. Apply MLG-33 seam sealer. Protect from foot traffic until sealer is fully cured.

For more information, contact Mannington On Main Technical Services at 800-241-2262 ext. 3 or visit manningtononmain.com.

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