Alloc Installation Instructions

I. Recommended Areas

Alloc flooring is recommended for use in normal, dry residential environments. It may be installed on, above, or below grade in most situations. The product may not be used in rooms with in-floor drainage, or wet areas (**except as noted in V1A**) or other areas that are not suitable due to job site conditions as mentioned below.

II. Jobsite Conditions

Acclimation

Alloc flooring must be conditioned prior to installation. One of two methods may be used to accommodate manufactured housing:

Jobsite installations Cross stack the unopened boxes for at least 48 hours in the room where installation is to take place. Do not stack boxes next to an outside wall, in direct sunlight, or in direct contact with a concrete sub floor.

Do not open the cartons until they are to be installed.

Installation within the factory

Acclimate the product in the factory for a minimum of 48 hours prior to assembly or distributors warehouse.

Sub floors

Acceptable Sub floors:

Exterior grade plywood
OSB board
Concrete slab
Existing wood
Vinyl
Ceramic floors
Terrazzo
Particle board

***NOTE:** An acceptable sub floor will consist of:

Sub floor that will be flat to within the subfloor must be flat within ½ inch over 10 feet but there must be no humps, dips or sudden changes in elevation within that distance (This deviation will be a gradual rise in the sub floor) that the sub floor will not deflect beyond the above 3/16'' over a 10' area from normal foot traffic and or furniture.

A sub floor that will not fall into the next category "Non-acceptable sub floors"

Non-Acceptable Sub floors:

Carpet
Thick cushioned floors
Perimeter-glued vinyl

All Sub Floors Must Be:

Clean – swept or vacuumed and free of dirt and debris

Level/Flat – ½" over a 10' span (patch depressed areas and sand or grind down raised areas) this **½" is to be a gradual rise or a gradual depression.** Structurally Sound – nail or screw areas that are loose or squeak and replace damaged areas that are loose or have been damaged by moisture

Joist spacing- may not exceed 16'' spread.

Deflection is the amount of movement in the sub floor that is felt when you walk on the floor.

Deflection of the sub floor must be held to a minimum. Deflection may not exceed the flatness spec. of ½" over a 10' area. The deviation in flatness of the sub floor added to the deflection of the sub floor must not exceed 3/16'' over 10'.

Dry – check moisture in the sub floor (see below) All manufactured housing applications require a 6-8mil polyethylene moisture barrier. See approved "Belly Wrap" Applications IPO moisture barrier for all product with pre-attached underlayment

Wood Sub floors

Wooden sub floors must have moisture readings of between 6 and 12% -- this must be checked with a moisture meter. Floor joists cannot be spaced greater than 16" without additional measures applied to increase rigidity, such as manufactures joist systems that spread the load of the joist. Under no circumstance should the spacing of the joists be greater than 19.2"

Wood Sub floors over Crawl Spaces, Pier & Beam, and Manufactured Housing

Open all vents in the crawl space to ensure proper air circulation. These vents must meet Minimum HUD requirements for the square footage of the crawl space **a 6-8 mil polyethylene film (moisture barrier) must be in place over the ground beneath the sub floor, with the seams overlapped and taped with a water resistant tape such as duct tape. With the exception of Alloc tested & approved Belly Wrap.**

Vinyl, Linoleum, Rubber Tile or Sheet Sub floors ensure that the above flooring is properly bonded to the sub floor. Patch if needed and fill depressed areas with a floor-leveling compound. Do not remove any vinyl or resilient floor that may contain asbestos without first seeking professional advice.

Concrete sub floors

Concrete sub floors require a moisture test prior to installation of Alloc products. The maximum allowable reading of a calcium chloride test is 5lbs./24hrs./1000 sq. ft.

Radiant Heat (N/A)

Radiant heat systems must be operating for a minimum of three weeks prior to the installation of Alloc flooring.

The system should be turned off at the time of installation, or if in winter, should be set at exactly 65 degrees Fahrenheit for a minimum of 48 hours prior to installation. After the installation is complete, or when turning on the radiant heating system from a cold start, the operating temperature can be increased by a maximum of 5 degrees Fahrenheit in a 24-hour period. The maximum allowable surface temperature for Alloc floors is 80 degrees

Fahrenheit. This is equivalent to 60 watts per square yard – remember that rugs placed over the floor will increase the surface temperature under them. Alloc floors are not suitable for installation over radiant heating systems that otherwise expose the floor to wide variations in temperature. An approved Alloc moisture barrier (specs = 1/16"@

25% comp. >5.7PSI; 1/8"25% comp.>7.12"PSI) is required over radiant heat floors.

Other Job Site Conditions

(Installations performed once the home is set on the end users property)

Heating/air conditioning must be on and set to a minimum of 60 degrees or a maximum of 80 degrees Fahrenheit. Relative humidity should be between 45% and 60%.

III. Underlayments – ONLY ALLOC APPROVED SPECIFICATIONS

Alloc requires an underlayment be installed prior to the flooring installation. Alloc Essentials products are recommended as they meet Alloc's requirement for compression. The use of underlayments that do not meet Alloc's requirements for compression may result in gapping due to excessive deflection of the flooring. The Alloc compression specifications are a 25% compression of 1/8'' thick underlayment must equal or exceed 7.12lbs. An underlayment of 1/16'' thickness must compress 25% at a weight equal to or above 5.7lbs. Underlayments used that do not meet Alloc's compression specification will void the product's warranty.

A 3-in-1 underlayment includes a moisture barrier, tape, and foam all in one.

• Start in the corner of the room where you will begin to install Alloc flooring, by unrolling the first roll with the moisture barrier side down, foam side up.

• Overlap the walls by bending the moisture barrier edge up the wall approximately 2" – this is critical on below-grade installations.

• Roll out the next roll overlapping the tape side over the moisture barrier, butting the foam edges together. Be careful not to overlap the foam edges.

• Pull the protective face away from the tape and secure the tape edge to the moisture barrier edge.

Underlayments can include a moisture barrier, tape and foam, all in one.

• Start in the corner of the room where you will begin to install Alloc flooring, by unfolding the first Alloc specified underlayment with the moisture barrier side up, foam side down.
• Overlap the walls by bending the moisture barrier edge up the wall approximately 2" – this is critical on below-grade installations.
• Unfold the next carton overlapping the tape side over the moisture barrier, butting the foam edges together. Be careful not to overlap the foam edges.
• Pull the protective face away from the tape and secure the tape edge to the moisture barrier edge.

IV. Tools Required

Safety glasses and dust mask
Moisture meter
Measuring tape and square
Table type power saw; or
Circular saw; or
Power jig saw
Hand saw or door jamb saw
3/8" thick spacer blocks of plastic or wood
Hammer
Tapping block
Pull bar
Chisel
Alloc recommends 60 tooth carbide saw blades

V. Layout and Measuring – Measure twice cut once!

Determine which way to run the planks *(rule of thumb*: *lengthwise in the longest direction of the room).* Note that if applicable, it is also best to run the planks perpendicular to the floor joists.
Be sure not to end up with a narrow strip for the final row – this row must be at least two inches in width for the mechanical locking mechanism to function properly. The best option may be to cut the first and last rows so they are equal in width.
If remodeling, carefully remove existing base and quarter round so that, if desired, they can be reused.
Undercut all doorjambs so that the Alloc flooring will easily slide underneath them. This can be done with an electric jamb saw, or by using a scrap piece of Alloc and underlayment as a guide and undercutting the jambs with a jamb saw or regular hand saw.
Inspection of the product EXTREMELY IMPORTANT BEFORE & DURING INSTALLATION!
All Boards that exhibit surface imperfections should be culled prior to installation and not installed. Boards that exhibit handling damage, shipping damage or any other type of mechanical or visual defect should not be installed.
For best results, it is recommended that material be mixed from at least three cartons when installing.
This will give the most natural appearance to the assembled installation. Note: All Alloc products have a repeat of pattern. The repeat of the pattern may be a repeat every 5-17 planks depending on the product selected.
The character of each pattern may vary considerably. Re; ANTIQUE OAK ORIGINAL – DISTRESSED
DESIGN VARIATION

VI. Installation

Alloc is designed to be a floating system – This means that the floor is never fastened to the sub floor or any other fixed objects. Restricting the floor from floating will prevent it from properly expanding and contracting due to changes in temperature and humidity. Always leave a minimum of **3/8"** expansion space between Alloc flooring and all walls or other fixed objects. Never screw, nail or bond any item to the Alloc flooring or Alloc flooring to any item.
• **Expansion Joints**
In manufactured housing Alloc can be installed up to:

• 32 feet in width and 32 feet in length without using transition pieces for all 7 ½" or less wide fiber locking product
40 feet in width and 40 feet in length without using transition pieces for all 16" wide Tile fiber locking product
• 50 feet in width and 50 feet in length without using transition pieces for all aluminum locking product

EXTREMELY IMPORTANT

Cabinetry- Cabinetry cannot be affixed to the sub floor through the Alloc flooring. This will trap the Alloc flooring and may result in buckling, gapping, ETC. The Alloc flooring must be stopped 3/8'' from the cabinets to assure the appropriate expansion area requirement. This will require either a ¾'' base molding (to cover the expansion/contraction space) or a combination of wall base and ¼ round molding that produces a minimum of ¾''.

Installation in washrooms, kitchens, ETC.

Installations that will have a potentially wet area must have the expansion area filled with weather stripping and a bead of 100% silicone. This will be required in the expansion area of exterior doors, dishwashers, washing machines, sinks, tubs, showers, behind refrigerators, around toilets, ETC.

Connecting the Planks; First Row

To begin the installation, start the first row in a corner of the room to be installed and continue the first row in a left-to-right manner. Orient the planks so that the **groove side of the locking mechanism is facing away from the starting wall** (On aluminum and fiber locking material, the long side of the board will face you) and to the right.

Cut the last plank in the row to fit, leaving 3/8" expansion space, and use what is left over from this cut to start the second row – this piece must be at least 12" in length. Remember to always stagger the end joints a minimum of 12".

Connecting the Planks; Second Row and Onwards

Method 1) Angle-Snap (Use for Alloc Original, Domestic, Commercial only This product may also be assembled using the Angle/Angle method printed in method 2)

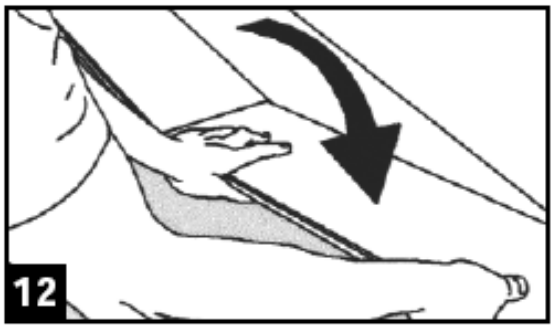
Connect the ends of the planks by inserting the tongue of the board to be installed into the groove of the already installed planks at an angle of 45 degrees. Fold it down while pushing it in. The distance between the end joint of the plank on the floor, and the end joint of the plank being installed should be about 1/8".

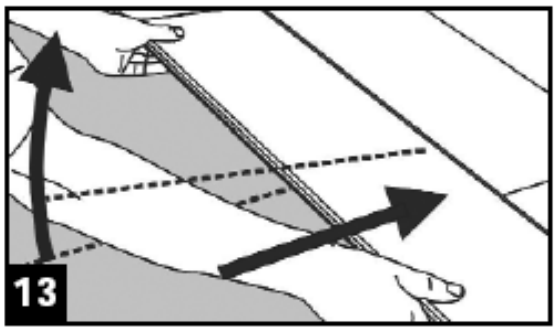
Connect the end joint of the plank just installed by using a tapping block and hammer and gently tapping it towards the other planks(s) that are already installed in the row.

Always use care when using a tapping block on Alloc, and never use a hammer directly on the material being installed. If a tapping block is not available, a scrap piece of material may be used.

Method 2) Angle-Angle
(Use for Alloc Tile, this product is not designed to be installed in any other manner.)
• Failure to use this method on the above products will result in locking system damage and void the Alloc warranty)

Insert the 1st plank or plank pieces tongue into the preceding row's groove. Press in and fold down. Insert the 2nd piece's short end into the 1st piece. Ensure that the 2nd piece's long side is close to the 1st row. Lift the 2nd piece together with the 1st piece about the thickness of your finger and push the long side into the 1st row. Both the 1st and 2nd piece may now be folded into place. Continue this method for the remaining boards to be installed. In using this method, you may end up folding entire rows into place at once. Remember to stagger the joints a minimum of 12'' in a random fashion.





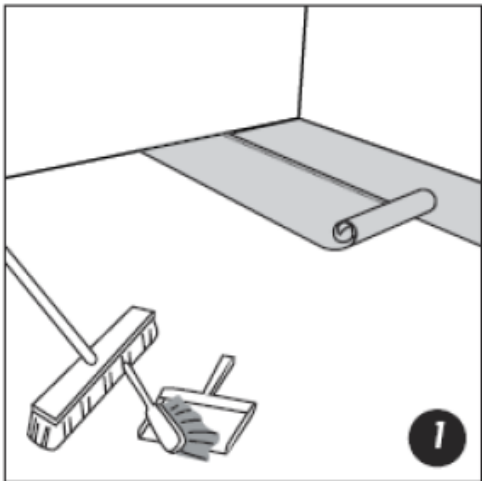
Method 3) Drop Lock(s) Installation
Assembly of 5G & 5G-S drop lock products manufactured by Berry/Alloc. Prestige, Elite, City Scapes, Lounge & Lounge Plus

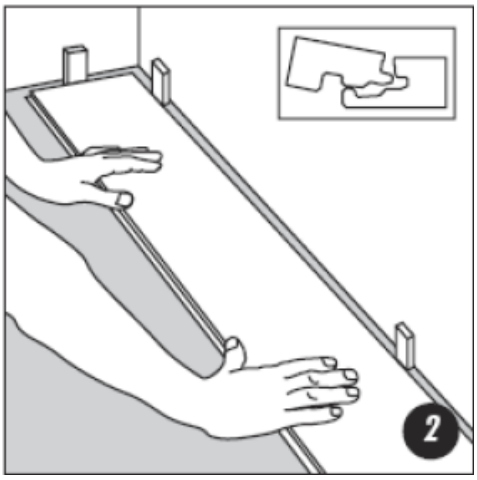
Drop locks are laminates that fit together by simply placing the tongue on the long side of one plank into the grove of the previous plank at an angle and then folding the plank down with the short side of the top plank dropping into the lock on the short side of the previous plank.

Note there is no tongue on the short side so: The locking together is achieved in the 5G (non plastic strip) by the fact that the lock is dropped into place on the short side and held there by the previous row plank and the next row of planks.

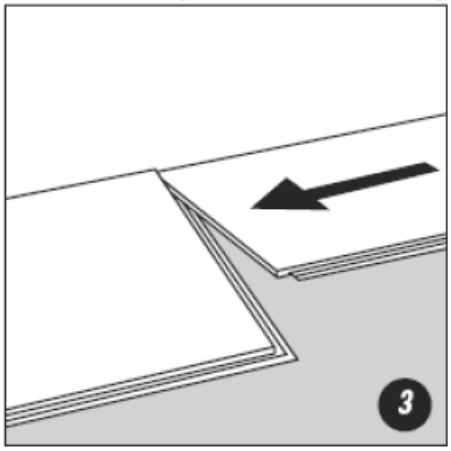
The locking together in the 5G-S system is achieved in the same manner as the 5G method with the addition of a plastic strip (acting as the tongue) retracting when the planks are first pressed together and then once in place springing forward and inserting itself into the grove of the adjoining plank.

The first row is started by placing the first board in the left corner of the room with the tongue side against the wall. (Grove side out) (see DL illustration #2)



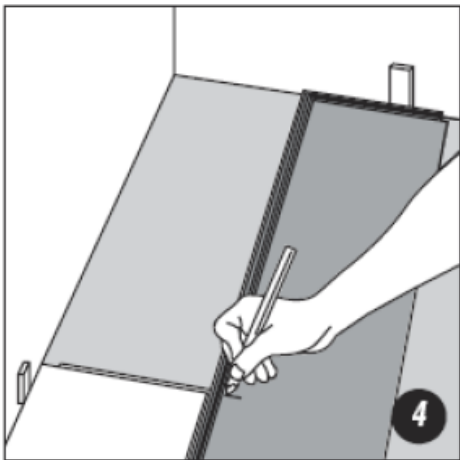


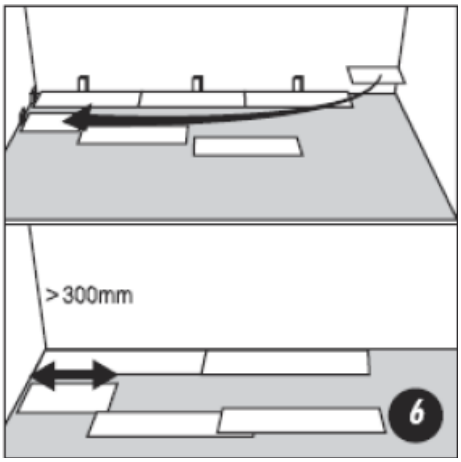
Align the next board and fold it into the right short side of the previous board .Continue until the first row is completed. (see DL illustration #3)



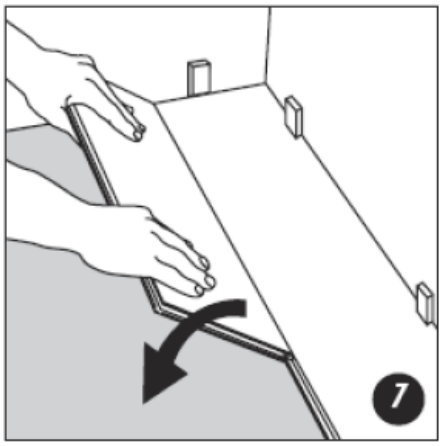
Note: You may need to cut the last board to fit the length of the room. Remember to make sure that that board is at least 12 inches in length and that the expansion space of ¼ inch is maintained. See (DL illustration #4)

Take the cut piece of the previous row [so long as it is larger than 12 inches in length and overlaps the board in the previous row by 12 inches (joint stagger)] and fold it at an angle into the long side grove of the first board of the previous row. Make sure that the same distance (expansion space) from the wall is maintained. See (DL illustration #6)

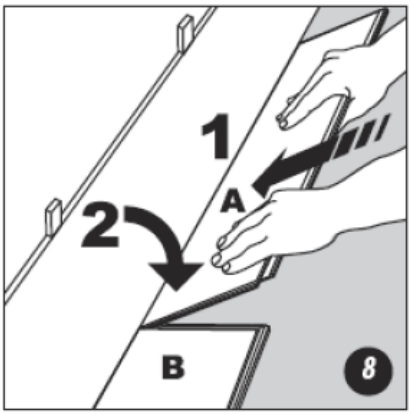




Note: If the cut piece does not meet the length and stagger criteria cut a board to size. See (DL illustration #7)



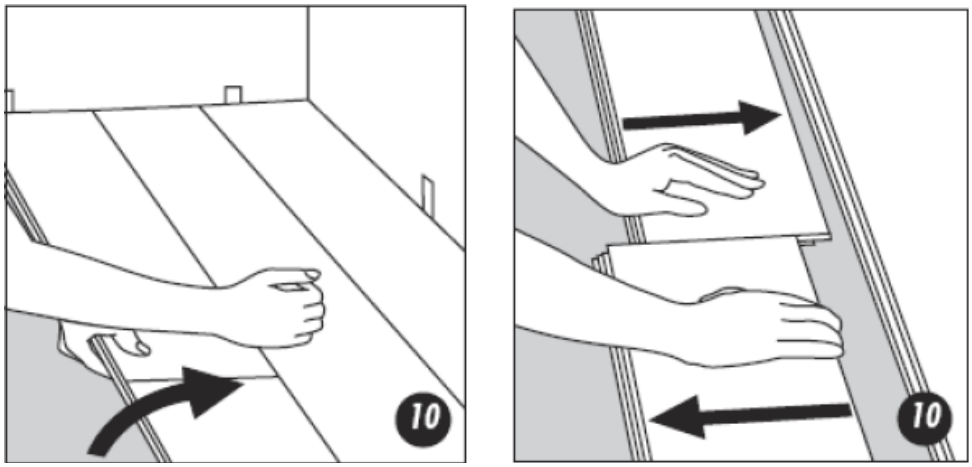
Take the next full board and angle it on the long side grove of the previous row and allow it to drop into the short side of the adjacent plank. In G4 the plank will nestle into the previous one In G5 & G5S the plastic strip will click into place. *(Be careful not to force the planks together and do not overlap the short ends as that may damage the core)* See (DL illustration #8)



Do not force the pieces together; *The long side assembly may be made easier by placing the next board in the grove of the previous one and then sliding it back and forth. This will provide a little friction and heat up the wax and allow the fold down step to be done with less force*

Continue this process until the row is complete; do not exceed 32' lin. feet in any direction. Start the next row in the same manner and continue until the room is complete
Aside from the method of assembly all other procedures regarding the installation process should be followed. See Installation Procedures for details regarding all other installation criteria. E.g. relating to flatness, moisture, expansion, underlayment etc. tolerance

(Note: IN DROP LOCK application joint stagger and board lengths of 12 inch minimum are very important to the locking strength. If this is not maintained throughout the installation future issues may occur.) To remove plank (re-adjust) See (DL illustration #10) slide right side toward you.



Door Jambs (refer to products in method 2)

When using Alloc products outlined in method 2, it is not always possible to lift the planks so that they can be angled in for installation in a door way. In this situation, it is necessary to remove ***0.4mm** of the top of the locking mechanism with a sharp chisel or small wood plane, and to use an appropriate wood glue to hold the planks together. When placing a transitions piece in the door way, undercut ½" When passing thru a door way undercut ¾"* 2x.4mm=1/64"

V1A Potentially Wet Area Installation

Kitchens, Outside Doors, Areas around tubs, showers, toilets, etc. - The expansion spaces in areas where moisture seepage may occur (in front of the dishwasher, tub, shower, behind the refrigerator, behind the washing machine, at outside entries, around the toilet, etc.) must have the expansion area filled with weather stripping and sealed with 100% silicone caulk.
ALL EXTREMELY IMPORTANT!

VII. The marriage of 2 or more home modules.

In cases where the home will be set on a permanent concrete foundation such as over a poured concrete or cement block basement, the marriage of the modules must not create a deviation in the sub floor flatness must be flat within ½ inch over 10 feet but there must be no humps, dips or sudden changes in elevation within that distance that will exceed the figure is expressed as a gradual rise or a gradual depression. This deviation of flatness may not occur as a step up or down between the modules. If the Home becomes "un level" it may cause the floor to peak or cup, this is not a product defect. This is a site issue.

VIII. Special instruction for transportation of the home

To prevent the shifting of the product from transportation, apply a small dot of 100% silicone in the perimeter expansion area every 4 feet.
For transportation of the home the manufacturer may also fasten blocks of wood to flooring installations that abut the marriage lone to prevent shifting of the flooring during transit.
These blocks are to be installed immediately before transit and removed immediately after transit. Failure to do so may adversely affect the flooring.
It may cause gapping, buckling, ETC. If blocking is used, failure to install the blocking immediately before transit and remove the blocking immediately after transit will void the Alloc warranty. If the entire floor is not completely installed by the manufacturer,
(Installations where the retailer will have the remaining flooring installed on the homeowners property after the portions of the home have been leveled and assembled)
The builder or retailer assembling the rest of the flooring must refer to this installation manual for instructions on all areas of installation.

IX. Requirements for the storage of completed homes

Once the home is constructed the manufacturer of the home may store the home on piers. The piers must level the home. They must be spaced equally to assure the home remains level. **The storage of the homes must not change the flatness spec. of the flooring. This same standard must apply to the storage of the home at the retailer's lot. The homes must be closed to prevent rain, snow ETC. from entering the home.**

X. Plank Removal/ Repair

After installation, should an error in the installation or a damaged plank be discovered, Alloc flooring can be easily replaced.
After carefully removing the moldings, unfold the planks in reverse order of the installation. Start with the long side and lift the pieces out of the locking joint before unlocking the short joints – even though portions of the locking element may be broken off (in Alloc fiber locking products) in this process, the planks are still fit for reinstallation (unlimited amount in metal locks and up to 5 times in fiber locks). Place removed planks

flat on the floor. It is a good idea to number the pieces as they are taken up, as the cut pieces are unique to that row. Replace the affected material, reinstall the unaffected planks, and reattach the moldings.

XI. Installing Stairs

To install Alloc flooring on a stairs, follow these steps:

1. Cut the pieces for the tread, riser, and nosing.
2. Use approved wood mastic, such as Bostik's Best Wood Flooring Adhesive, and a 3/16"x1/4"x1/2" V-notched trowel, to attach the tread and riser pieces. Allow the adhesive to cure before proceeding.
3. Finish the step by installing a stair nosing. This is done by pre-drilling the molding and attaching it with both construction adhesive and countersunk nails. Use a putty to fill all nail holes.
4. Glue & Screw all Stair Nose moldings!

XII. Moldings

All Alloc flooring Moldings are designed to blend with their assigned patterns – due to the fact that both Alloc flooring and Alloc flooring Moldings are made from a repeated pattern, it cannot be guaranteed that the two will be an exact match.

The following moldings are available for use with Alloc Flooring:

_. Quarter Round – Install nails upward or straight- approx. every 1 ½"
_. Stair Nosing
_. T-molding
_. Square Nose
_. Reducer

Expansion from flooring to mono track to be ¼"

Rule of thumb – Moldings above floor enough that a playing card may be inserted.

These should never be attached directly to the flooring material. The T-molding, Square Nose, and Reducer are attached to the sub floor via the Monotrack system. To install these, first attach the Monotrack to the sub floor – on concrete use a construction-grade adhesive, and on wood attach by either, nailing, screwing, or gluing Monotrack in place. Ensure that proper expansion is allowed for between the base of the molding and the Alloc flooring floor.

Attach these moldings by simply pressing them in place – the channel on the bottom of the molding will easily press into the center rib of the Monotrack. Attach Quarter Round by pre-drilling, nailing, and filling the holes with matching putty. Only attach Quarter Round to the wall, never to the Alloc flooring itself. Stair Nosing should be attached as outlined above in section (**VIII. Installing Stairs**)

XIII. Maintenance – Per Warranty brochure or web site

Routine Maintenance

Alloc is easy to care for, just sweep or vacuum periodically. When needed, Alloc may be cleaned with a dry dust mop using a spray bottle Alloc Free&Clean™. No further treatment of the surface is required. Do not use any floor polishes, detergents, oil-soaps or other soaps, or waxes, as the actions or residues from such cleaners may be harmful to the appearance of your Alloc flooring floor. Never use scouring pads or steel wool on your Alloc floor as damage may occur. For further information contact Alloc, Inc. at **877-DO-ALLOC** or on the internet at
www.alloc.com.

Spot/ Stain Removal

Most stains can be removed with a small amount of Alloc Free&Clean applied to a clean, white cloth. However, for stains such as ink, shoe polish or paint, apply a small amount of acetone to a clean, white cloth to remove.

Preventative Maintenance

While the aluminum oxide wear layer of Alloc flooring is both durable and strong, the key to keeping any floor looking good is proper preventative maintenance.

• **Use walk-off or entry mats both outside and inside all outside doors to collect dirt and soil from shoes.** It has been estimated that over 90% of all abrasive, grit-like material that is damaging to floors is literally "walked-in" the house on the soles of shoes.

_. **Use protective furniture coasters under narrow wheels and felt pads under furniture legs.**

_. **Move appliances carefully, using a piece of clean, thick cardboard as protection between the appliance and the floor.**
_. **Clean up spills as they occur.** Moisture is the enemy of any wood based product.
_. **Maintain a balanced Relative Humidity of between 45 and 60%.**