TALON CERTIFIED FLOORS | REAL HARDWOOD ENGINEERED TO THE MAX Proudly made in the USA

The Talon Tenacious Finish:

- 100 year transferable structural and finish warranty.
- The Sherman Williams finish is an environmentally friendly 8 coat process making it best in class for performance, durability, wear, and scratch resistance.
- Over 3000 cycles on a Tabor Test.
- TBD Mini-MartIndale (Scratch Resistance Test)
- No added VOC's no added Formaldehyde.
- Finished in the USA

Construction:

- All Talon Engineered floors are made with a FSC certified Poplar plywood platform Made in the USA..
- The plywood core has a patented anti cupping/warping technology allowing widths up to 8" wide and 8' long.
- All plywood is 5 to 7 ply construction.
- The wear layer is a plane sawn veneer from 3.5mm up to a best in class 4.4mm.
- CARB Phase 2 Compliant.
- Approved over radiant heat flooring systems.
- Made in the USA
- TSCA (TBD)

Sizes:

- The ½" thick product is available in 5" and 7" wide planks with a 3.3mm wear layer. Lengths are 1' to 8'
- The ¾" thick product is available in 6" and 8" wide planks with a 4.4mm wear layer. Lengths are 1' to 8'

You Can Staple, Glue, or Float Talon Flooring:

Talon engineered flooring any level of the home on any flat and level subfloor. Nail/Staple installation requires a plywood or other suitable OSB or solid wood subfloor. For fastener installation, engineered flooring is typically installed using pneumatic wood flooring staplers or cleat nailers. Always use correct sized fasteners and footplates/adapters for the flooring thickness. Talon can be fully-glued to wood subfloors and concrete. Follow the glue manufactures labeling instructions regarding correct trowel size, removal of surface sealers or contaminates and use of moisture barriers. Talon can also be edge-glued and "floated" over a dense underlayment pad. Padded Underlayment is necessary for building and condominium associations that require sound and/or temperature insulation.

Before installation of any wood flooring:

Properties should be graded to allow water to run away from the building. Crawl spaces and basements must be dry. Crawl space should be a minimum 18" from the ground to the floor joist and be well ventilated. Poly sheeting moisture barrier should be placed over any crawlspace dirt/gravel base. To avoid moisture related issues, all wet work must be completed such as tile work, plumbing, plastering, painting, etc. Gutters should be in working order and direct water away from the foundation. Although engineered is more stable than solid hardwood flooring, wood is a dynamic material subject to changes in dimension as a result of changes with humidity in the surrounding environment. It is recommended that the rooms that will have wood installed be climate controlled with temperatures of 50 to 80 degrees F., humidity of 35% to 55% maintained and the HVAC be fully operational with "fan" set in the "continuously on" position. In addition, the rooms should not be closed off from a normal air flow.

Owner/installer responsibilities and storage:

Engineered wood flooring is a product of nature and will exhibit variations in color, grain, and other characteristics of wood. This is the natural beauty of real wood and not considered a flaw or defect. If milling or quality issues are suspected stop the installation and call customer care or your local Cabinets-To-Go. The manufacturer is not responsible for costs associated with repairing or replacing flooring installed with visible defects. Our floors are manufactured in accordance with accepted industry standards that may allow possible defects not to exceed 5%. When purchasing Robusto Engineered add 5%-8% of additional material for waste. Diagonal installation requires an additional 10%-15%. Job site and subfloor conditions must be acceptable for wood flooring. *Flooring should be stored on a dry, flat surface in an environmentally controlled building. Never store in out buildings or unheated garages. Do not store on concrete.*

Acclimation:

Proper acclimation at time of install is crucial for any wood flooring. Flooring needs to acclimate to a room in real-world conditions. For best results the rooms should be maintained between 60F – 80F, with a humidity range between 30% to 50% (use Hygrometer). Boxes should be laid flat on dry wood subfloors or on wooden supports should you be over concrete floors. Keep flooring away from direct sunlight and vents during the acclimation process. Remove all plastic wrapping surrounding the boxes. Flooring should be allowed to acclimate for at least 48hrs inside the room where it will be installed. However, time is not the only factor. The goal of acclimation is to reach a moisture balance between the core of the new flooring, its surroundings, and subfloor moisture content before installation. Depending on your indoor conditions, the use of humidification/dehumidification equipment may be necessary.

Wood Subfloor:

Joist spacing determines minimum subfloor thickness. For joist spacing of more than 16 inches up to 19.2 inches on center, the minimum thickness for both plywood and OSB is 3/4 inch. For joists spaced more than 19.2 inches on center, the minimum thickness for plywood is 7/8 inch and for OSB, 1 inch.

When nailing over existing solid wood tongue and groove flooring, install an additional 3/8" plywood or run the new flooring perpendicular to the direction of the existing flooring.

Wood subfloor moisture content should not exceed 12%, should not be more than a 4% differential than the new flooring being installed or 2% for 3 1/2" and wider boards. A moisture test is recommended on all concrete subfloors or wood subfloors constructed over a crawl space or basement to determine if moisture is elevated. The source of elevated moisture should be identified and corrected before installation.

Use a reliable species-specific moisture meter to verify the moisture of the floors veneer and the subfloor. Follow the moisture meters manufactures guidelines for this step. The difference between the moisture of the wood subfloor and wood flooring should not exceed 4%, or 2% for planks 3" or wider.

Subfloor needs be flat with no more variance than 3/16" in 10' or 1/8" in a 6' radius. Leveling options are sand high areas or joints, use wood shims wedged between joists and the subfloor to raise if needed. Protruding nails/staples should be ground flat. Build-up low spots with layers of 15LB builders felt, old vinyl, wood shims, whatever it takes to lay your floor flat. Replace damaged plywood, do not use cement leveling compounds. Some "flexible" leveling compounds can be used on wood subfloors under floating flooring; check manufacturers information before using. Walk over every inch of the subfloor and listen for squeaks. Where you find the subfloor loose or squeaking, fasten down with Phillips-head screws or ring-shank nails. Fasteners should penetrate at least ¾ inch into the floor joists. Repair loose or damaged sheet flooring. Over badly damaged floors, glue and fasten sheets of AC-grade ¼-inch plywood, with the "A" side facing up.

Concrete Subfloor: Fully cured concrete, 90 days old minimum. Free from excessive moisture, contaminates, and sealers. Requires a flat surface with no more variance than 3/16" in 10' or 1/8" in a 6' radius. Latex concrete floor levelers can flatten trouble areas. Moisture testing is required.

Calcium Chloride Test (ASTM F 1869): The maximum vapor emissions cannot exceed 3lbs/1000SF in 24 hours.

Probe Method (ASTM F 2170): The Relative Humidity levels should not exceed 75%

All Installations

Tools you may require:

- Eye protection
- Gloves
- Dust Mask
- Pencil
- Chalk line
- 6’ level
- 72" straight edge
- Table saw
- Miter saw
- Carbide tip saw blades (60 tooth)
- Jamb saw
- Hand saw (20-26”)
- Floor Nailer/Stapler
- Air Compressor
- Blue painters tape (2080)
- PVA wood glue
- Drill
- Hammer
- Tape measure
- Moisture meter for wood subfloor
- Calcium chloride moisture test for concrete subfloor
- Adhesive remover for glue down installs
- Nail punch or set.
- Wood Flooring Adhesive

Take an inventory of the perimeter edges that would not be covered by existing trim, including, stairs, cabinets, hearths, or openings such as floor registers. Order quarter-round molding or shoe molding depending on the expansion gap you need to cover the flooring recommended expansion gaps which are at all vertical obstructions. With a pry bar, gently remove the existing baseboard trim. Also remove the end caps on baseboard heaters, registers for forced-air vents, plates for floor receptacles, and any other obstructions. Add a box extender to the floor receptacles, as code requires. Trim the bottoms of door casings to allow the new flooring to slip underneath. Place a scrap of the new flooring in front of the door casing and lay a handsaw on top. Then, slowly saw through the casing. Repeat on the opposite side of the doorway. Alternatively use a Jam Saw. Now you can slip the flooring under trim and door frames. Vacuum the entire floor to clean up all dust and debris.

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Starting your install (nail/staple):

Which way do you run the flooring? Most of the time the layout of your flooring will look best along the longest straightest wall in the room perpendicular to floor joists. Running along a focal point like a fireplace or prominent windows or doors is also common practice. It is also recommended that flooring be installed parallel with the greatest natural light source. Ceiling lighting would not be an issue because the illumination comes from above the flooring. If you have very large windows the light comes in at an angle and will illuminate the longer seams if it is placed perpendicular. When the flooring is placed parallel to the natural light source, only the shorter end seam is more noticeable. Remember that if you choose to lay the flooring parallel to floor joists, additional plywood is generally necessary to ensure a solid nailing base and prevent floor sag.

Lay appropriate underlayment. This can be padded underlayment but must be approved for naildown installation if that is your method. Generally, all that is needed is white silicone paper or 15lb felt paper as a vapor barrier. Vapor barrier prevents the migration of moisture effecting the flooring from under the subfloor which is particularly important over crawlspaces or damp basements.

Ready to start; For your starting wall, you want a straight line to guide your first row ensuring it is straight. Starting at each corner, measure out from the starting wall (towards the room) the equal width of one flooring plank and then add for an expansion gap. Expansion gaps can be determined by the floor thickness, therefore ¾" thick floor, ¾" expansion gap. Example; ¾" x 6" flooring you would measure 6-¾" from each end of your starting wall, place a check mark (check point always being your exact measured mark). Snap a chalk line between those two points, now you have a perfect straight line to start your installation.

Open at least 4 boxes and layout several pieces, dry lay to visualize your layout. Start on your chalk line from left to right with the tongue of the flooring facing the room. End pieces must be at least ½" from side wall. Use short and long boards equally during installation. Stagger new end-joints from previously installed 10” apart, or a minimum of 6” to avoid seam line-up. Remaining pieces at the end of row (cut off from planks) can serve as a starter or first plank in the next row. Watch your pattern for even distribution of long and short pieces and avoid clusters of joints. This first row is your "first course".

Line your flooring course along the chalk-line, remember end board to wall gap. Fasten every 4" and at least 1" - 3" from the end of each board. When nailing your first and last course where a nailer-stapler won't fit do to a wall or other obstruction, drill (with 3mm bit (3/32") and hand nail as many boards as you can through the tongue at a 45˚ angle and into subfloor. When you run out of room pre-drill (to prevent finish damage) and face nail and with 5d-8d galvanized, screw shank, ring shank or regular finish nails. Countersink with a nail punch and fill holes with a matching filler. Urethane adhesive can be helpful to ensure these first/last boards are secure.

Staple/nail Installation Continued:

Use a fastener every 4" and at least 1" - 3" from the end of each board. Use 18 gauge engineered flooring staples or cleats. Ensure stapler/nailer has appropriate base plate to fit your flooring thickness.

Lay your next row or course. Tap each course snugly into place with a hammer and tapping block (use a small scrap piece of flooring if you have no tapping block). Be careful to avoid hitting the block too hard or risk damage the tongue. If a tongue is slightly damaged, use a utility knife to trim away just enough wood to allow the groove of the next course to fit over the damaged section.

Check your rows every course ensuring a straight run (use a straight edge or string line). Make adjustments where needed. When you reach the last row, it is likely you will need to rip down the width to finish, don't forget the expansion space. If your last row is less than 1" in width use a PVA carpenters wood glue to join the last pieces to the previous course.

Replace trim, add trim where needed. Take care not to bind flooring when nailing trim. Use wood flooring filler stick for trim holes and any face nailing that was required.

Glue-down Installation:

Wood planks are glued to the subfloor using urethane-based adhesives. There are many appropriate adhesives on the market however we recommend **Asurbond Adhesive** found at your local Cabinets-To-Go. Adhesive should be approved for engineered wood or solid hardwood flooring and manufacturer recommendations followed. Proper trowel size, spread rate, cure times are all important. Always check the adhesive manufactures guidelines for subfloor prep, moisture testing, cure times, trowel sizes, and coverage. A moisture barrier or adhesive moisture barrier combo is required over all concrete subfloors. It is strongly advised to use moisture barriers/adhesives that offer 100% moisture protection over concrete.

Perform a calculation to determine the width of the last row of boards/planks. When less than 1 ½" wide, split the difference between the starter row and the last row. Cut the last row of planks to width with a table saw equipped with a 60 tooth carbide blade.

Starting at each corner, measure out from the starting wall (towards the room) the equal width of 2 flooring planks including tongue and then add for an expansion gap. Expansion gaps can be determined by the floor thickness. From each end of your starting wall, place a check mark (check point being your exact measured mark). Snap a chalk line between those two points for a perfect straight line to start your installation

Secure a straight edge on the inside of your chalkline. Use concrete screws or simply nails and a long straight piece of furring strip or other straight board. This will act as a guide to prevent the flooring planks from moving during installation (continued).

Using the proper trowel recommended by the adhesive manufacturer, hold the trowel at a 45° angle to ensure proper spread rate of adhesive. Apply pressure while spreading which allows the trowel to leave ridges of adhesive on the substrate with little adhesive left between the ridges. This helps the proper spread rate of the adhesive. Temperature and air flow across the adhesive can have an effect on the open time of the adhesive. Some adhesives will have a longer open time in areas of low humidity and will have a shorter open time in areas of high humidity (check adhesive technical data).

Spread adhesive from the chalk line/straightedge out to approximately the width of two planks. Install the first row of starter planks along the chalk line/straightedge and secure into position with the tongue facing the starter wall.

Proper alignment is critical. Misaligned starter rows can cause side and end gaps to appear in proceeding rows of flooring. A laser level or string line can be used to be certain, use on subsequent row alignment every 2-3 rows.

When you have the starter rows complete, allow them to set up before installing additional rows.then begin the next rows. Be certain the first two starter rows are straight and secure, continue to spread adhesive 2 to 3 feet wide across the length of the room. As a general rule, never spread more adhesive than can be covered in 30 to 45 minutes. If the adhesive has dried to much indicated by a skin over the top of the spread, remove and trowel new adhesive.

Continue to install planks and push them into place (no tapping blocks). Place the tongue of the board into the grooves of installed boards and press into the adhesive. As you continue working across the floor try to maintain a 6” to 10” minimum space between end joints. Randomly install different lengths to avoid a patterned appearance (work from several boxes). Use blue painters tape (2080) to hold planks together if needed until the adhesive cures. Don't leave tape on for more than 24hrs.

As you work, use urethane adhesive remover to remove excess adhesives and wipe thoroughly to prevent adhesive from leaving a haze of adhesive on your floor finish. Roll and cross roll the floor with a 100-150 lbs (45-70 kg) roller at the end of the installation to ensure proper full transfer of the adhesive to the subfloor.

Generally, adhesives will need a full 24hr cure time before you can walk on the floor. Furniture may be replaced then.

Floating Installation:

Moisture barrier; A 6 mil poly sheeting moisture barrier should be laid for floating floors for an On or Below Grade Concrete subfloor. Overlap seams 4” and tape with aggressive duct tape. Overlay perimeter 1-4" up wall. Then lay approved underlayment. Do not install over carpet. If installing over an old vinyl sheet floor, ensure that the vinyl is secure to the sub floor. Do not install over perimeter glued vinyl. If vinyl is over concrete, employ a moisture barrier as mentioned above.

If installing over an existing wood floor, install the flooring at perpendicular to the wood flooring. Secure creaking and loose floorboards with screws. Do not install over wood flooring glued to a concrete sub floor.

Allow for expansion gaps around all vertical obstructions. Expansion gaps should equal the floor thickness. Larger rooms require additional expansion space. Add 1/16” to the width of the expansion space for every 3’ the room extends beyond 25’. Dimensions exceeding 40’ in length or width we recommended you use a T-Molding over an expansion gap.

Floating Installation requires a padded underlayment designed for floating floors. This underlayment should be installed over poly sheeting moisture barrier over concrete. Install underlayment according to manufacturer guidelines.

Find your starting wall, generally the longest straightest wall or outside foundation wall. Starting at each corner, measure out from the starting wall (towards the room) the equal width of one flooring plank and then add for an expansion gap (not including the tongue). Snap a chalk line between those two points, now you have a perfect straight line to tack a temporary straight board, furring strip or other, to use as a backer for your floating installation.

Installing from left to right with the tongue side towards the wall, install the first row of flooring against the tacked wood strip. Use PVA carpenter’s glue or the tongue and groove flooring adhesive. Glue the butt end of first row by their tongue and groove. Remaining pieces at the end of row (cut off from planks to fit) can serve as a starter or first plank in the next row, stagger joints 6” or more for preceding rows for best visual appearance. Avoid clusters of boards, distribute evenly. Wipe any excess glue with a water dampened cloth, do this for all preceding rows.

Install second row. Insert a spacer the size of your expansion gap between the wall and end of flooring boards. Squeeze glue into the groove of the planks in one continuous bead the length of your next installed board, then slide flooring board against the previous row. Use a tapping block (scrap flooring) against the outside of the plank and tap it with a hammer to bring the plank tongue and groove, fully glued, tightly together. In addition, tap ends so butts are tight. Be certain all butt ends are fully glued on long sides of your floor rows. Use a pry bar (flat bar type) to close the end seam of the last plank installed in each row. Wipe excess glue as needed (continued).

To pass obstacles through the floor such as heating pipes, use a pencil to trace the center position for drilling. Use a big enough drill bit to leave an expansion gap around the pipe. Use a jig saw for bigger cuts. Cut the strip in two so that the saw mark goes through the center of the drilled hole, this way the strip can be glued and reassembled around the pipe or other obstacle.

After installing 4 or 5 rows use #2080 blue painters tape only and apply perpendicular to the installed floor to hold the flooring joints tight together while it dries. Remove the blue painters tape after 8hrs, no more than 10

Continue installing the flooring until you reach the opposite wall in the room. The last row of flooring by the wall will likely need to be ripped down to fit, allow for expansion gap.

Return to the first row of flooring, remove the strip of board used as a backer and insert the final row of flooring to complete the installation. Make sure proper expansion is left between the floor and wall. Allow adhesive to cure a full 24 hours before use. Install trim, do not bind flooring with trim but leave just enough space for lateral movement. Protect flooring from heavy items, furniture.

Maintenance:

Maintenance will vary depending on use, wear, and lifestyle.

To keep wood floors looking and performing well for generations, follow these guidelines.

Sweep often. Mop and sweep in the direction of flooring for best results.

Use wood floor cleaning products for water-based urethane finishes only; we recommend Robusto Floor Cleaner found at your local Cabinets-to-Go.

Do not use vinyl cleaner, tile cleaning products, or wax on wood floors.

Use throw rugs at doorways to help prevent debris from being tracked in.

Do not wet-mop or steam mop a wood floor. Water and steam can dull the finish and even damage the wood.

Wipe up spills immediately with a slightly water damp cloth.

Use felt protectors under the legs of furniture to prevent scuffing and scratching. Replace felt protection if they get beat up or full of dirt as this debris can become embedded on the pad and act like sand paper on the flooring surface.

Avoid walking on your floors with sports cleats and narrow high heels.

When moving heavy furniture, do not slide it over flooring, pick up to move it and to prevent scratches.

For wood flooring in the kitchen, place an area rug at the kitchen sink.

Padded throw rugs must have an appropriate backing approved for hardwood floors. Avoid vinyl and PVC rug pads as they may damage hardwood finish.