Impact SmartLock 
Installation Instructions

Impact SmartLock Luxury Vinyl Plank Flooring with Interlocking Joints is part of the Timeless by Congoleum collection. Impact SmartLock is constructed with a patented interlocking joints that locks the plank together to form a tight, durable, water proof joint. Impact SmartLock is installed as a floating floor so no adhesive is required.

General Information
• Impact SmartLock is recommended for residential interior use in enclosed rooms with continuously maintained temperatures ranging between 65°F and 85°F. Do not install flooring in areas where wide temperature fluctuations can occur or over sloped floors, ramps or in wet areas.
• Handle cartons and plank flooring carefully to protect the locking edge profile. Always store and transport cartons neatly stacked on a smooth, flat, solid surface. Do not stack more than 10 cartons high.
• Acclimate the flooring and room(s) at a constant temperature between 65°F and 85°F for 48 hours prior to, during and continuously after installation.
• Mix planks from several different cartons to ensure a random appearance.

• Always allow a 1/4” expansion space around the entire perimeter of the room, at all base cabinets, fixtures and pipes. Cover the exposed edges with trim or fill the gap with a high quality acrylic caulking.
• All base cabinets must be installed prior to installing flooring. Do not install base cabinets or island cabinets on top of the floor.
• In a large single room with a length of 40 feet and a width greater than 25 feet, the addition of T-molding expansion joints will be required. When transitioning from an adjacent area into another room (i.e. a hallway into a bedroom) maintain adequate expansion in the doorways by using T-moldings and undercutting the door casings.
• Protect Impact SmartLock finished installations from prolonged exposure to direct sunlight. Close curtains or blinds where extreme sunlight hits the floor. Prolonged direct sunlight can result in fading and discoloration. Excessive surface temperatures can cause floor expansion that may result in buckling or delamination.

Preparing The Area
• Remove all furniture and appliances from the room(s).
• Remove wall and doorway trim
• Always undercut wood door casings

Subfloor Recommendations
Impact SmartLock can be installed over a variety of subfloor surfaces including concrete on all grade levels, wood subfloors and many existing hard surface floors. The subfloors must be clean, smooth, flat, solid and dry. Do not install planks over floors that are sloped for drainage or uneven floors where deviations are greater than 3/16” in 10’ or 1/16” in 1’. Subfloor deflection should not exceed 1/360th of the span. Uneven or wavy floors must be leveled with portland cement based patching compound.

Wood Subfloors
Impact SmartLock is suitable for installation over double layer wood subfloors a minimum of 1” thick. Single layer subfloors constructed with APA rated Sturd-I-Floor panels, 23/32” or heavier should be covered with a minimum 1/4” underlayment. Joist spacing should not exceed 19.2”. Set fasteners 1/32” below the subfloor surface, sand joints smooth and fill holes and gaps wider than 1/8” wide. Install suitable underlayment when necessary to achieve a flat or solid surface. Impact SmartLock can be installed over underlayment grade plywood, lauan plywood and other underlayment that are recommended by the panel manufacturer for use with vinyl flooring.

Concrete Subfloors
Impact SmartLock can be installed over concrete on all grade levels. Moisture vapor emissions should not exceed 5 lbs./24 hour per 1,000 sq. when tested with the Anhydrous Calcium Chloride Test in accordance with ASTM F 1869 or 80% RH in accordance with ASTM F 2170 “Standard Test Method for Determining Relative Humidity in Concrete Slabs using in situ Probes”.

Fill cracks; saw cuts and control joints and level wavy floors or uneven areas that exceed 3/16” in 10’ or 1/16” in 1’. Do not install flooring over expansion joints.
Attach the end joints of the planks in the first row by inserting the tongue into the groove while holding the plank at a 10° to 15° angle to the floor. Apply light pressure inward and down until the planks lock together (Fig. 1). Use spacers in the first row between the edge and end of the planks and the wall to maintain a 1/4" expansion space.

**EXISTING FLOORING**

Impact SmartLock can be installed over a variety of finished floors including single layer resilient sheet floor and tile, ceramic, marble and terrazzo. The surface must be in good condition with no indication of excessive moisture or moisture damage. Level deep or wide grout lines with embossing leveler. Do not install flooring over heavy cushioned floors, cushioned backed floors or over tile installed over concrete below grade level.

The grout joints in ceramic tile and marble must be leveled so they are flush with the tile surface. Additionally the tile may require several skim coats to achieve a flat surface.

**ASBESTOS WARNING**

**WARNING:** DO NOT SAND, DRY SWEEP, DRILL, SAW, BEADBLAST, OR MECHANICALLY CHIP OR PULVERIZE EXISTING RESILIENT FLOORING, BACKING, LINING FELT, ASPHALTIC “CUT-BACK” ADHESIVE, OR OTHER ADHESIVE. THESE PRODUCTS MAY CONTAIN ASBESTOS FIBERS AND/OR CRYSTALLINE SILICA. AVOID CREATING DUST. INHALATION OF SUCH DUST IS A CANCER AND RESPIRATORY TRACT HAZARD.

**INSTALLATION**

For best appearance planks should be installed parallel to the long dimension of the room and preferably parallel with outside light sources i.e. windows and doors.

Measure the width of the room and snap a chalk line down the center of the floor. Determine the width of the plank in the last row either through measurements or dry layouts. If smaller than one-half of the plank width, adjust the chalk line in either direction one-half of the plank width to achieve larger cut planks at the side walls. Snap a second chalk line by measuring from the center line over toward the starting wall. Use a multiple of the plank width to establish the starting line for the first rows of planks.

Start the installation in the left hand corner of the room with the edge of the plank accurately positioned at the chalk line and with the tongue side and end toward the starting wall. If necessary trim the plank to fit to the wall allowing a 1/4" expansion space. If starting the first row with a whole plank width it will be necessary to trim the tongue off against the wall. Always place the cut edge against the wall.

To trim planks use a utility knife and a straight edge. Score the top surface of the plank and flex it downward to separate the pieces.

Attach the end joints of the planks in the first row by inserting the tongue into the groove while holding the plank at a 10° to 15° angle to the floor. Apply light pressure inward and down until the planks lock together (Fig. 1). Use spacers in the first row between the edge and end of the planks and the wall to maintain a 1/4" expansion space.

Fig. 1

Start the second row using 1/3rd of a plank (Fig. 2).

Fig. 2

Place the cut end against the wall. Insert the tongue on the long side of the plank into the groove of the plank in the first row. Hold the plank in a 10° to 15° angle while applying light pressure inward and down until they lock together. To complete the second and all successive rows it will be necessary to lock the short end into the previous plank first before locking the long side of the plank. Angle the plank and push the tongue into the groove until the tongue locks into place. It may be necessary to lift both planks slightly to lock the long joint together. Complete the second row allowing a 1/4" expansion space at the end of the row.

Start the third row using 2/3rds of a plank with the cut end against the wall. Complete each row thereafter using a random layout with end joints off-set by at least 8". Plan the layout to avoid using small planks (less than 6") at the walls. The cut piece at the end of the row can often be used to start the next row provided it achieves a random layout. Always place the cut end against the wall and allow a 1/4" expansion space.

Impact SmartLock is unique in that it can be installed easily when working forward (placing the tongue in to the groove) or backward (placing the groove in to the tongue).
This allows for easy fitting around door trim and changing direction to go into alcoves or adjoining rooms. SmartLock can also be assembled by using a pull bar or tapping block in difficult areas such as the last row and when fitting around door trim. Use a pull bar to lock the joints together in the last row (Fig. 3).

Finishing the Job
Remove all spacers. Install door and wall trim so they do not pin or restrict the floor from moving. Do not install trim tight to the floor. Drive fasteners into the wall and not the floor. When installing doorway transition moldings allow a 1/4" expansion space between the edge of the floor and the molding fasteners. Do not drive fasteners in to the floor. Return appliances to the room by rolling or sliding over strips of hardboard to prevent damaging the floor.

REPAIRS
Impact SmartLock is a tough, durable floor however if a plank becomes damaged it can be replaced.

Damaged planks along the wall can be replaced by unlocking the planks in that area and then re-installing them after the replacement plank is installed. Follow the instructions below for replacing a plank in the body of the floor.

• Use a straight edge and utility knife to make a cut down the center of the damaged plank to within 2" of the ends.
• Make diagonal cuts from the corner of the plank back to the center cut.
• Remove the damaged plank by lifting the edge of each piece until it unlocks.
• Prepare the replacement plank by removing the bottom of the groove along the long and short side. Check the replacement piece by laying it into place. The plank should fit neatly into place with out gaps at the joints. Remove the plank.
• Before completing the repair, place a 2" wide strip of wax paper under the centered under the edge of the tongue on the long and short side. This will prevent adhesive from bonding the plank to the subfloor.
• Next apply a 1/8" bead of Loctite Power Grab clear heavy duty construction adhesive to the exposed groove along the long and short end of the surrounding planks. Do not use excess adhesive.
• Immediately while adhesive is wet install the replacement plank by inserting the tongue into the groove along the long side. Use a tapping block to lock the short end and then drop the plank into position. Remove excess adhesive from the surface and roll the edges with a steel hand roller. Clean the surface immediately with a clean cloth and mild detergent to remove any adhesive residue. Then dry with a clean soft cloth. Note, adhesive and adhesive film is not removable if allowed to dry on the surface of the floor. Apply weight to the adhered edges for 20 to 30 minutes.
• Keep traffic off the repair for 12 hours.

SPECIAL INSTRUCTIONS
Bathrooms
When Impact SmartLock is installed in a bathroom the flooring can be laid under the toilet provided that the floor is separated from adjacent rooms with a doorway threshold or transition molding. Otherwise the flooring should be fit around the toilet leaving a 1/8" expansion space. Use a high quality acrylic caulking to fill the expansion space at the toilet, bathtub, shower and all wet areas to prevent surface water from seeping under the floor.

Stairs
Impact SmartLock can be installed fully adhered over steps using AD-32 Adhesive. Follow the instruction on the adhesive for trowel size and drying time. Always use a flush stair nose molding to finish each step at the nose.