

Installation Guidelines –VICTORY (Revised 04/19/16)

General Notes

These installation instructions are general and not intended to be applicable for all sub-floor conditions. If you have any questions concerning the proper installation (or use) of any Tarkett or Tandus Centiva products, please contact Tandus Centiva's Installation Services at 800-241-4902, extensions 2625, 2623, 2129, 2023 or 2670.

Material Supply Check

All products should be inspected for dye lot, style, color, size, quality and shipping damage prior to installation and should not be installed if any irregularities are observed. Inspect the cartons to be sure all colors are the same. Remember that with VICTORY, shading and subtle color variations are part of the design.

Check all materials at the jobsite to the order.

Site Requirements

It is solely the responsibility of the installation contractor to insure that the sub-floor is properly prepared prior to installation. Tandus Centiva modular products are intended for indoor installations on dry, properly prepared sub-floors. The product is not intended for installation on walls, stairs, ramps, outdoors, or on wet surfaces. The interior air temperature and Relative Humidity must be maintained between 65 - 85° F and 45 – 65% RH post installation.

Product & Sundry Storage

VICTORY **MUST** be stored in a controlled climate at a temperature between 65°- 85°F, and a relative humidity below 65%. VICTORY **MUST** be stored flat. **DO NOT STACK pallets.** Adhesives must be stored between 65°- 85°F. Failure to follow these storage requirements will result in a loss of warranty.

Previous Flooring and Adhesives

After removing the existing flooring, <u>remove all previous adhesive</u> including old cutback adhesive, grease, wax or other foreign matter. Painted and/or varnished surfaces must be sanded and dust free. In some cases old concrete subfloors must be shot blasted and a floor leveler should be applied prior to installation. If the previous adhesive remains after scraping, it must be encapsulated with Portland based cement or a synthetic gypsum. Poor subfloor preparation may eventually telegraph through the Tandus Centiva LVT flooring causing visible irregularities.

Between floor prep and start of installation, make sure to keep the floor dry, free from dirt, dust and grit. If the flooring contractor and owner want to install over an existing floor, they are accepting the responsibility of the condition of the floor and Tandus Centiva US LLC retains the right to negate or limit their warranty.

Asbestos - Tandus Centiva luxury vinyl tile or planks contain no asbestos fibers. When removing existing resilient floor coverings, carefully observe the following warning:

- Existing resilient floor coverings and black asphalt adhesive may contain asbestos. Improper procedures used to remove these products could release asbestos fibers into the air.
- Asbestos fibers, if inhaled, may cause serious bodily harm. Do not sand or dry scrape these materials. A preferred alternative to
 removal is to install a new floor over the old asbestos containing floor whenever possible. If removal of existing floor covering is
 necessary, be sure that all precautions are taken and proper procedures are followed. For information regarding proper removal
 procedures, please consult Tandus Centiva US LLC or the Resilient Floor Covering Institute, 401 East Jefferson Street, Suite 102,
 Rockville, MD, 20850, phone: 301-340-8580. Request the "Recommended Work Practices for Removal of Resilient Floor Coverings"
 brochure or view it online at www.rfci.com. Check state and local laws regarding removal of asbestos-containing materials.

Concrete Moisture & pH

Excessive moisture and/or high pH on any sub-floor, especially concrete, can cause adhesive and product failure. The referenced ASTM Standards are revised as necessary. Prior to Moisture or pH testing assure that you have the current ASTM Standard. All ASTM Standards are available online. For Tandus Centiva's VICTORY, the maximum allowable moisture emission rate (MVER) from the sub-floor is 6.0 pounds, as tested according to ASTM F-1869 (*Std. Test method for measuring Moisture Emission Rate of Concrete*). The required pH range must be between 7.0 – 9.0 as tested according to ASTM F-710. The In-Situ/RH (relative humidity) requirement on concrete is not to exceed 80% as tested according to ASTM F-2170 (*Std. Test method for measuring Relative Humidity in Concrete*). These are the limits of VENUE & EVENT and may or may not be the limits of the adhesive. For substrates that exceed 6.0 lbs MVER per ASTM F-1869, 9.0 pH per ASTM F-710, and/or 80% RH per ASTM F-2170, please contact Tandus Centiva's Field Services at 800-241-4902, extension 2625.

The above information provides two methods of determining potential moisture issues. Refer to our Technical Services Bulletin "Moisture and pH Testing of Tandus Centiva Products" for specific instructions on test methods, ambient conditions, and other requirements.



Concrete Moisture & pH (cont'd)

More accurate and representative MVER, RH and pH test results can be achieved when the HVAC systems is functioning 24/7 for two weeks prior to installation, and the temperature and ambient relative humidity has acclimated to occupancy conditions. In cases where the flooring substrate is light weight concrete, MVER results are not an accurate method of evaluating the conditions of the flooring substrate. RH testing is the only accurate moisture test method. Synthetic gypsum based self-leveling compounds used as a topcoat over existing concrete or wood subfloors are tested in accordance with ASTM F-2659 using an Electronic Moisture Meter.

An impedance meter may be used to determine potential problem areas and should be used as a guide for placement location of tests. The impedance meter should be used in random areas to test for surface moisture due to dew point condensation. Substrate surfaces prior to applying adhesives should not read over 4% on the impedance meter. All concrete substrate preparation and testing procedures must conform to the appropriate ASTM F 710 guidelines.

Moisture vapor emission testing, relative humidity, and pH testing indicate the moisture levels and pH of the concrete sub-floor at the time of installation. These tests do not provide static results and both moisture and pH can increase over time. Tandus Centiva is not responsible for product failure as a result of changes in sub floor conditions, including increases in moisture and pH levels after installation.

If remediation of a slab is performed, always retest to ensure that the problem has been corrected. A new concrete floor contains a high percentage of moisture; therefore, it must be allowed adequate drying time. This drying time normally requires 28 to 30 days per inch of concrete, but it can vary depending on several conditions such as the type of concrete used, average air temperature and the thickness or location of the slab. All moisture requirements and testing above apply after remediation.

Floor Patching, Underlayment Panels & Leveling

Underlayment panels can be used to correct deficiencies in the subfloor and to provide a smooth, sound surface for Tandus Centiva LVT flooring. There are numerous suitable underlayment panels such as Structurwood[®], Multiply and Masonite[™] brand underlayments. The most common of these is 1/4" APA underlayment grade plywood. RFCI does not recommend Luan, particle board, strand board and flake board; therefore, they are not recommended as a subfloor for Tandus Centiva LVT.

Always fasten underlayment panels in accordance with the manufacturer's recommendations because any failure of the underlayment or Tandus Centiva LVT flooring as a result of the underlayment is the responsibility of the underlayment manufacturer and installer. Suitable underlayment with a fully sanded surface and a minimum thickness of 1/4" is preferred. Always make sure that the subfloor is free of any foreign material such as dust, grease, oil, polish and loose material that may cause staining, telegraphing or adhesive failure.

Tandus Centiva fully supports the ASTM F710 standard practices methods of preparing concrete floors to receive resilient flooring. The customer or installer is responsible to assure the subfloor meets all associated manufacturer's recommendations including local codes/standards.

A Portland cement or synthetic gypsum leveler should be used to cover subfloor irregularities such as seams, cracks, indentations, etc. Tandus Centiva does not recommend calcium sulfate/plaster/gypsum* based patching or leveling compound materials be used to remediate subfloor issues as these compounds can harbor moisture, promote mildew growth, offer poor permanent bonding that affects adhesive strength and typically have low indentation resistance. All remediation methods must have a minimum compression strength of 3000 PSI per ASTM F710.

Temperature & Humidity of the Installation Environment

The temperature of the interior environment, including the sub floor, should be no lower than 65° F and no higher than 85° F at least 72 hours prior to, during and after the installation. Relative humidity should not exceed 65% as it will extend adhesive set times. The interior air temperature and Relative Humidity must be maintained between $65 - 85^{\circ}$ F and 45 - 65% RH, and the substrate temperature should be at least 5° F higher than the Dew Point.

Product Acclimation

All Tandus Centiva LVT tiles, planks and adhesive should be present at the jobsite for at least 48 hours at a temperature between 68-72° F in order to acclimate properly. Avoid installations with ambient temperatures above 85 degrees F and below 65 degrees F. The tiles, room and existing floor must be at room temperature (68-72 degrees F). It is helpful to stack the cartons two high around the area. Slabs in 36" x 36" are stacked on a pallet and may have to be acclimated up to 72 hours prior to installation. Avoid extreme cold and hot situations.



Installation Tools

Never begin installation without all necessary tools available. (straight edge knife, curved edge knife, ruler, trowel, roller, etc.)

edge knife

- Pencil & paper •
- Chalk line & chalk •
- Carpenter's square •
- Steel measuring tape & steel rule •

Calculating the Required Quantity of Tiles or Planks

- Measure the room's length and width in feet. Multiply the width times the length to get the square footage. 1.
- Measure all offsets and alcoves separately, and add the square footage for each area to arrive at the total square footage. 2.

Utility knife & blades

Straight edge knife & curved

- 3. Multiply the total square footage by 1.05 to allow for 5% waste. Use 1.08 for 8% waste on 36" x 36" installations.
- Determine which size(s) of LVT you want to purchase and denote the ft²/carton (in parentheses) from the table below. 4.
- 5. Divide your required LVT area by the ft²/carton and to determine the number of cartons required for the installation. Always round any fraction up since LVT is sold in cartons.

NOTE — A 36" x 36" tile covers 9 ft². Tiles are sold in 90 ft² cartons. For larger orders, due to environmental reasons, Tandus Centiva US LLC retains the rights to load a pallet of 240 slabs (2,160 sq. ft.) without packaging other than skirt and shrink-wrap.

PRODUCT SIZE CHART

VICTORY SERIES Standard ✓ Optional Packaging (ft²/carton)

	12" x 12" (45)	12" x18" (45)	12"x36" (45)	18"×18" (45)	18"x36" (45)	36"x36" (90)
Coral Reef/Magics	1	1	1	\checkmark	1	\checkmark
Mineral Chip	1	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark

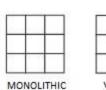
Natural shading will occur due to the variations of metallic components and our original production process.

Installation of VICTORY

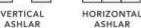
VICTORY comes in the various sizes previously listed and can be installed in multiple ways. Please review and investigate the recommended installation method(s) for the style(s) that you have purchased. VICTORY is a non-directional tile or plank and has an intentional variation in its metallic components to give it an original look.

NOTE (Shuffling): In order to increase the

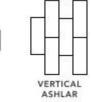
likelihood of a consistent, diverse visual appearance, color or pattern on the floor, we recommend the following:



A: Shuffling tiles or planks from the same carton B: Shuffling tiles or planks from multiple cartons



ASHLAR



- Trowels (notched to meet the adhesive being used & subfloor requirements)
- Clean cloths & clean water
- 100 lb. roller



Installation Layout Perpendicular to Walls with Tiles or Planks

Carefully determining where to begin your tile installation. Always try to end up with at least half a tile at each wall for best appearance. Mix tiles from various boxes to get a more consistent look, if wanted.

1. Treat the room as a rectangle, disregarding offsets, alcoves, etc. Find the center points of the two side walls and strike a chalk line between them.



a Figure 2

2. Find the center of the chalk line, using T-square or a tile to line up. Strike second chalk line at right angles to the first one from the front to the back wall. The room is now divided into four equal parts.

3. Starting in the center of the room where the two chalk lines intersect, divide the distance by the length and width of your tile or plank to determine the size of the last tile or plank. It may be helpful to loose lay several tiles or planks in a row until you reach the wall to determine the size of the last tile. If it is less than half a tile in either direction, move away from that wall half a tile and chalk a new line. Select a color of chalk that will be visible through the adhesive.

4. Apply a Tandus Centiva approved adhesive from the Adhesive Reference Guide on the following pages that is acceptable for the moisture testing results and restrict your adhesive application to an area that allows you to install the flooring within the open time of the adhesive. Apply the adhesive to the substrate with the appropriate tools as recommended by the supplier and the Adhesive Reference Guide.

Preparing the Installation Layout Diagonally with Tiles

Extra measurements and guidelines are needed for diagonal installations. A sketch is useful for any complicated installation. Follow these guidelines for diagonal installations:

1. Divide the room into equal guarter sections and adjust the same way you would for normal installations.





2. Measure and mark a point 25.5" from the center point on each centerline. Snap a chalk line to connect the four new points.

3. Mark the midpoint on the new guidelines and snap another chalk line to its opposite midpoint. These lines should intersect the original center point or the measurements will be incorrect.



4. Use the line to the other mid-point to generate a perpendicular line, if needed. Ensure that it goes through the center point. Use the carpenter's square or the 3-4-5 method to ensure that the lines are perpendicular.

5. Apply a Tandus Centiva approved adhesive that is acceptable for the moisture testing results and restrict your adhesive application to an area that allows you to install the flooring within the open time or working time of the adhesive. Apply the adhesive to the substrate with the appropriate tools as recommended by the supplier and the following chart.



ADHESIVES

- 1. Determine whether the sub-floor is porous. Place two droplets of water in various locations of the installation. If the sub-floor is porous, the water will be absorbed within a few seconds.
- 2. Make sure all sub-floors are clean, dry and free of dirt, dust, old adhesives, grease, wax, and other foreign matter that might interfere with the adhesive bond. Painted or varnished surfaces must be sanded and dust-free. Concrete floors must be fully cured, free from dust, moisture, excessive alkalinity, curing agents, and excessive moisture vapor emissions. If applying over old cutback, all old adhesive must be removed so that the floor is smooth.
- 3. Use a high-quality latex/Portland cement based patching compound to fill or level any irregular areas.
- 4. The sub-floor, flooring material, and adhesive must be acclimatized to the installation area for a minimum of 48 hours prior to installation. The area should be fully enclosed and weather-tight.
- 5. HVAC system must be set and maintained at a minimum temperature of 68°F for 48 hours prior to, during, and after installation.
- 6. Store adhesives indoors only. Protect from freezing. The finished installation must be protected from moisture and/or freezing for a minimum of 48 hours.
- Moisture testing should occur prior to the purchase of adhesive. Use adhesives that are approved to the measured moisture limits. Use of a Tandus Centiva approved adhesive with measured moisture higher than the limits of the adhesive will void the warranty.
- 8. Use of an unapproved adhesive will void the warranty.
- 9. Use of an approved adhesive outside of the installation instructions or guidelines from the Adhesive Reference Guide below will void the warranty.
- 10. Adhesives in the "Adhesive Reference Guide" below are the approved adhesives.

Notes for Centi 2001 Wet Set & Centi 2000 EP:

- 1. Centi 2000 EP must be used over non-porous floors such as sealed concrete, metal, existing sheet flooring. It is the responsibility of the user to determine whether or not the subfloor to be covered is porous.
- 2. Use CENTI 2001 Wet Set on grade, above grade, or below grade, porous structurally- sound surfaces of plywood and concrete.
- 3. Check open time periodically by lifting a section just laid to be certain that at least 95% of the adhesive pattern has been transferred to the back of the plank or tile.
- 4. Do not use CENTI 2001 Wet Set over existing resilient flooring or painted subfloors.

Adhesive Reference Guide

Approved Adhesive	CENTI 2001 Wet Set	CENTI 2000 EP	
Installation	wet set	epoxy mix	
Sub-floor	porous only	porous /non-porous	
over old vinyl	No	Yes ¹	
ating	Commercial	Commercial	
owel size	¼ ₆ x ¼ ₆ x ¼ ₆ sq. notch	^у 16 x У16 x У16 sq. notch	
read rate	~125 sq. ft. per gallon per trowel size	~130-150 sq. ft. per gal. per trowel size	
orking time ²	25 minutes	40-50 minutes	
oller	100 lb.	100 lb.	
ax. moisture ³ andus	6 lbs/1,000 sq. ft. or 80% relative humidity in 24 hours	6 lbs/1,000 sq. ft. or 85% relative humidity in 24 hours	
Centiva Floor	Victory, Contour, Event, Venue	Victory, Contour, Event, Venue	

¹ If the flooring contractor and owner want to install over an existing floor, they are accepting the responsibility of the

condition of the floor and Tandus Centiva US LLC retains the right to negate or limit their warranty.

² Open time is subject to temperature/humidity and sub-floor porosity.

³ For installation over 6 lbs/1,000 sq. ft. in 24 hours or 80% RH, please contact your Tandus Centiva account executive.



Tandus Centiva

A Tarkett Company

Installing VICTORY Plank or Tiles Vertical Ashlar or Horizontal Ashlar

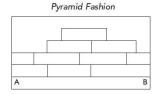
- Your chalk lines are visible through the adhesive and you are ready to begin installing.
 Install a row of VICTORY along the chalk line, making sure each plank is flush against the chalk line and tight against the adjacent plank. Make sure the plank is well seated
- into the adhesive, paying special attention to the edges.
 For Vertical Ashlar installations of planks or tiles, install the next row using the Pyramid Fashion or the Row by Row Fashion. Pyramid Fashion allows you to install one or two rows ahead of the last completed row but you never install beyond the

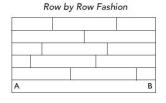
width of the previous row. Row by Row Fashion is completing one row at a time and cutting in along the wall prior to installing the next row.

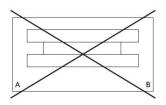
Pyramid Fashion

Row by Row Fashion

This is the incorrect way to lay the plank!







- 4. Roll the installed floor as you go with a with a 100 lb. sectional roller approximately five minutes after installation and again, 15 minutes after installation. Promptly remove any excess adhesive that appears after rolling.
- 5. Remove wet adhesive immediately with a damp cloth. Use mineral spirits to remove dried adhesive. Do not apply solvents directly to flooring material as a loss of strength/gloss/texture may result. If a tile needs to be cleaned of excess adhesive material on the finished surface, apply the solvent sparingly to a white cloth and slightly rub the dried adhesive from the surface of the product.

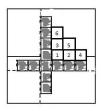
Optional Instructions for VICTORY Tile Installations

- 1. Your chalk lines are visible through the adhesive and you are ready to begin installing.
- 2. Install a row of VICTORY along the chalk line, making sure each plank is flush against the chalk line and tight against the adjoining plank. Make sure the plank is well seated into the adhesive, paying special attention to the edges



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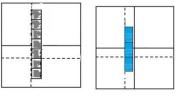
3. For unidirectional installation or quarter-turn, it is recommended that tiles be installed along both chalk lines until there is less than one tile distance from the wall.



4a. Start in the four interior corners of the two straight lines and begin to stair step your installation from the corner out towards the wall. Install the tile in the interior corner first, then the two tiles around the first, then the three interior tiles until there is less than a tiles length between the installation and the wall.

5a. Roll the installed floor with a 100 lb. sectional roller approximately five minutes after installation and again, 15 minutes after installation. Promptly remove any excess adhesive that appears after rolling.

*Row by row fashion installation specially recommended when using CENTI 2001 Wet Set Adhesive.





Installation Diagonally with VICTORY

Extra measurements and guidelines are needed for diagonal installations. A sketch is useful for any complicated installation. Follow these guidelines for diagonal installations:

1. Divide the room into equal quarter sections and adjust the same way you would for normal installations.





2. Measure and mark a point 25.5" from the center point on each centerline. Snap a chalk line to connect the four new points.

3. Mark the midpoint on the new guidelines and snap another chalk line to its opposite midpoint. These lines should intersect the original center point or the measurements will be incorrect.



4. Use the line to the other mid-point to generate a perpendicular line, if needed. Ensure that it goes through the center point. Use the carpenter's square or the 3-4-5 method to ensure that the lines are perpendicular.

6. Apply a Tandus Centiva approved adhesive that is acceptable for the moisture testing results and restrict your adhesive application to an area that allows you to install the flooring within the open time of the adhesive. Apply the adhesive to the substrate with the appropriate tools as recommended by the supplier and the following chart.

Cutting In Along the Perimeter

Measure the distance from the last plank in the row to the wall. Mark the plank and cut it against the mark. Lay the plank in place, making sure the cut edge is against the wall.

Tandus Centiva LVT Plank features beveled and square edges to accent individual planks and create a distinct plank effect. For this reason, anytime you make a cut, you will want to place that cut edge along a wall. Placing a cut edge against the uncut edge of another piece of flooring will not look natural or realistic. However, for special patterns, the floor may be installed cut edge to cut edge and beveled edge to beveled edge for a consistent and finished look.

Installing Around Irregular Objects:

Make a pattern out of heavy paper to fit around pipes and other irregularities. Place the pattern on the plank, trace, cutting along the trace lines with scissors or a sharp knife. Place the cut plank into position.

• It is always recommended to fit in intricate cuts around door frames, cabinets and transitions prior to spreading adhesive. See also adhesive pages.

The manufacturer or supplier will not be liable for any loss, damage or complaint of any kind if the specific procedures in the Installation Guidelines are not followed. Refer to tandus-centiva.com for the latest Installation Guidelines.

Post - Installation Tips

- After rolling the installation, check to see if any adhesive has been squeezed up between the tiles or planks. Use soap and water
 for Centi 6000 SP and Centi 2001 WET SET while wet or denatured alcohol or mineral spirits for all adhesives if they are dry. Any
 excess adhesive must be removed from the tile surface, in between tile seams or the surrounding area. DO NOT ALLOW EPOXY
 ADHESIVE TO DRY ON TILE SURFACE. To obtain best results, dampen a clean cloth with cleaner and gently rub areas as to not
 move the tiles out of place. Do not saturate the area with cleaner and make sure that you clean up any excess cleaning solution as
 you go.
- Like any flooring material, Tandus Centiva LVT should not be installed over expansion joints. As with real stone or wood products a cut should be made through the LVT to open the joint. Because of visual appearance this method is mostly not preferred. It is left to the discretion of the end consumer.
- Following installation, see Manufacturer's recommended maintenance instructions for post-construction cleanup and routine cleaning at tandus-centiva.com.
- Keep the installation from heavy foot traffic or rolling loads for at least 24 hours.
- Do not wash or apply a finish to the floor for a minimum of 48 hours after installation.

Please contact your Tandus Centiva account executive 800.248.2878. or visit tandus-centiva.com for more information.

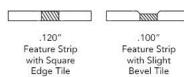


IMAGINATIONS[™]

IMAGINATIONS[™] Custom Flooring Design can generate virtually any idea into an intricately cut LVT design. Designs are conveyed to our IMAGINATIONS group and they can generate the CAD drawing and a custom design cutting file, locate the flooring in each location of your art, cut it, and assemble for easy installation. Call (256) 246 0640 with questions or requests. For IMAGINATIONS[™] installations, please refer to the installation instructions that accompany the order.

Feature Strips

Feature Strips can be installed around the perimeter of each tile to frame each tile or give a grout appearance. Feature Strips can be cut from any VENUE & EVENT style and color. All LVT products can be supplied as feature strips in widths of 1/8", 1/4", 1/2", 3/4", 1", and 2" in 36" lengths. An interesting grout appearance may be achieved by combining a feature strip of a lesser thickness and a beveled tile edge.



To figure out quantity on Imaginations[™] Custom Flooring Design patterns, please submit plans to your Tandus Centiva account executive or call 1-800-633-3380.

Borders & Corners

Create or accent an area in a space with borders and corners. Available in 4" and 6" wide from existing designs or customs.

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Medallions

Add impact to an entrance, hallway or back room with circular or square Medallions.



Keystones

Custom Cut squares from 2" x 2" up to 9" x 9" used to mix up a conventional installation.

