



Installation
Manual



Important Notice

Safety is everyone's responsibility. Warnings and instructions set forth in this manual and incorporated on Tarkett® residential flooring accessory labels should be strictly followed. When adhesives or other materials are to be used in the workplace, obtain material safety data sheets from their supplier.

Emergency Response

For 24 hour medical and DOT emergency response communications regarding Tarkett® adhesives and maintenance products call:

IN U.S.A.: 1-800-228-5635, Extension 079

IN CANADA: 613-996-6666

WARNING!

DO NOT SAND, DRY SWEEP, DRY SCRAPE, DRILL, SAW, BEADBLAST OR MECHANICALLY CHIP OR PULVERIZE EXISTING RESILIENT FLOORING, BACKING, LINING FELT OR ASPHALTIC "CUT-BACK" ADHESIVE OR OTHER ADHESIVE.

These products may contain either **asbestos fibers** or **crystalline silica**. Avoid creating dust. Inhalation of such dust is a cancer and respiratory tract hazard. Smoking by individuals exposed to asbestos fibers greatly increases the risk of serious bodily harm.

Unless positively certain that the product is a non-asbestos containing material, you must presume it contains asbestos. Regulations may require that the material be tested to determine asbestos content.

Various federal, state and local government agencies have regulations governing the removal of in-place asbestos-containing material. If you contemplate the removal of a resilient floor covering structure that contains (or is presumed to contain) asbestos, you must review and comply with all applicable regulations.

Refer to the current edition of the Resilient Floor Covering Institute (RFCI) "Recommended Work Practices for Removal of Resilient Floor Coverings" for detailed information and instructions for removal of resilient floor coverings.

WARNING!

Certain paints may contain lead. Exposure to excessive amounts of lead dust presents a health hazard. Refer to applicable federal, state and local laws and Lead-Based Paint Interim Guidelines for Hazard Identification and Abatement in Public and Indian Housing (Sept. 1990) or subsequent editions published by the U.S. Department of Housing and Urban Development regarding: (1) appropriate methods for identifying lead-based paint and removing such paint; and (2) any licensing, certification, and training requirements for persons performing lead abatement work.

WARNING!

Prior to removing an existing floor following the **RFCI Recommended Work Practices for Removal of Resilient Floor Coverings** (unless state or local law requires other measures), or installing a new floor, if there are visible indications of mold or mildew or the presence of a strong musty odor in the area where resilient flooring is to be removed or installed, the source of the problem should be identified and corrected before proceeding with the flooring work. In virtually all situations, if there is a mold issue, there is or has been an excessive moisture issue. Visible signs of mold or mildew (such as discoloration) can indicate the presence of mold or mildew on the subfloor, on the underlayment, on the back of the flooring and sometimes even on the floor surface. If mold or mildew is discovered during the removal or installation of resilient flooring, all the flooring work should stop until the mold/mildew problem (and any related moisture problem) has been addressed. Before installing the new resilient flooring, make sure the underlayment and/or subfloor is allowed to thoroughly dry and that any residual effect of excessive moisture, mold or structural damage has been corrected.

To deal with mold and mildew issues, you should refer to the **U.S. Environmental Protection Agency** (EPA) guidelines that address mold and mildew. Depending on the mold and mildew condition present, those remediation options range from cleanup measures using gloves and biocide to hiring a professional mold and mildew remediation contractor to address the condition. Remediation measures may require structural repairs, such as replacing the underlayment and/or subfloor contaminated with mold and mildew as a result of prolonged exposure to moisture.

The EPA mold guidelines are contained in two publications "A Brief Guide to Mold, Moisture and Your Home" (EPA 402-K-02-003) and "Mold Remediation in Schools and Commercial Buildings" (EPA 402-K-01-001). Appendix B of the "Mold Remediation in Schools and Commercial Buildings" publication describes potential health effects from exposure to mold, such as allergic and asthma reactions and irritation to eyes, skin, nose and throat. These publications can be located on EPA's website at www.epa.gov/iaq/molds/

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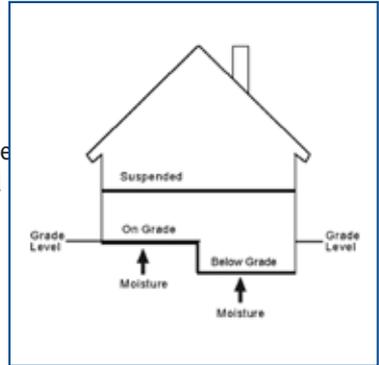
Chapter 1: SUBFLOORS AND UNDERLAYMENTS

Grade Levels

Suspended – An acceptable suspended floor is a concrete or wood substrate with a minimum of 18 inches (460mm) of well-ventilated air space below. It is recommended that a 10mil polyethylene moisture vapor retarder be placed upon the ground beneath the air space.

On grade – An acceptable on-grade floor is a concrete substrate in direct contact with the ground or over a fill in direct contact with the ground. Properly constructed, the concrete slab will be suitably protected from moisture penetration by planned water drainage and an installed proven moisture vapor retarder.

Below grade – An acceptable below grade floor is a concrete substrate partially or completely in contact with the ground below the average surrounding grade level. Properly constructed the concrete slab will be suitably protected from moisture penetration by planned water drainage and an installed proven moisture vapor retarder.



The following example displays these three types:

Definitions

Subfloor: Provides structure and support for the underlayment.

Underlayment: The smooth surface that the floor covering is to be installed over.

Subfloor/Underlayment System: The required system that provides both structure and support with the necessary smooth surface for Tarkett flooring. These systems shall be 1 inch (25.4mm) total thickness and double-layered construction.

Sleeper: adequate support, due to the possibility of moisture transmission from the concrete substrate they are not recommended as a substrate for installation of Tarkett flooring.

Concrete

Note: *Regardless of the type of concrete or cement-like material used as a base for Tarkett flooring, the responsibility for use or suitability rests with this products manufacturer or specifier, not with Tarkett.*

All concrete floors, old or new, should be tested for moisture and proper bonding of the flooring.

Tarkett flooring may be installed on all grade levels. Concrete shall be constructed in accordance with the American Concrete Institute (ACI) 302.1R-04 Guide for Concrete Floor and Slab Construction and ACI 360R Slabs on Grade with a minimum compressive strength of 3500 psi. In some cases, shrinkage compensating concrete is used to minimize or eliminate cracking caused by dry shrinkage in floor slabs. Such slabs should

be constructed in accordance with ACI 223-83 Standard Practice for the Use of Shrinkage Compensating Concrete. These guides and practices are available from the American Concrete Institute, P.O. Box 9094, Farmington Hills, MI, 48333.

The single most important consideration affecting tile flooring installations is knowledge and proper preparation of the construction site. Prevention of moisture and alkaline transmission through the slab into the adhesive film and flooring eliminates potential problems.

Proper site preparation, slab construction and the use of an effective moisture vapor retarder will make a successful installation more likely. A 10mil polyethylene sheet or equal is recommended. The sheet shall remain intact and shall not be damaged or ruptured prior to or during the concrete pour.

Regardless of the age of an on, above or below grade concrete slab, installation failures can occur due to the presence of moisture in the slab. The moisture can come from the slab itself, if not completely dry or from the ground as the slab comes to equilibrium with ground moisture. A slab may seem dry, but actually has moisture passing through it and evaporating. As moisture passes through a slab, it can carry with it alkaline salts from the ground and/or slab itself. Moisture and alkali cause various installation problems such as adhesive deterioration, bumps or ridges, color change and mold and mildew growth. Any or all of these conditions might be expected to occur in an undeterminable period of time after installation if a severe moisture condition is present before, during or after installation.

Installers and flooring manufacturers have little control over these factors. Installation failures due to the presence of moisture or alkali are not warranted by Tarkett. Although the dryness of an on or below grade concrete slab can be determined at the time of installation, it is not a guarantee that the slab will be free of excess moisture forever.

Moisture Testing

It is the flooring contractor's as well as the installer's responsibility to test all concrete subfloors, both new and old, for moisture content to determine if it is sufficiently dry to install Tarkett flooring. Concrete shall be cured a minimum of 90 days (preferably 120 days) before running moisture tests. These time periods are absolute minimum and concrete may require additional drying time dependent upon local environmental conditions.

Relative humidity in the concrete shall be tested according to **ASTM F 2170 (Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes)**. When tested according to this method, the internal relative humidity shall not exceed 75%.

Moisture vapor transmission can be tested at the concrete surface according to **ASTM F 1869 (Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride)**. The Quantitative Calcium Chloride Moisture Test Kit contains anhydrous calcium chloride. It employs the principles of both chemical absorption and entrapment of moisture vapor. A pre-weighed amount of anhydrous calcium chloride stored and sealed in a clear plastic cylindrical container is

placed on a clean area of the concrete slab to be tested. It is then unsealed, opened, and covered with a larger transparent plastic cover adhered to the slab with a moisture-tight sealant. The test is run between 60 - 72 hours and the amount of moisture absorbed by the calcium chloride is determined and converted to pounds of moisture/1,000 square feet/24 hours. **The results should be no more than 3 lbs./1,000 sq. ft./24 hours.**

In areas 1,000 square feet or less, a minimum of three tests shall be made; for each additional 1,000 square feet, one additional test should be made. These tests should be made simultaneously and the test units should not be concentrated, but not closer than 5 feet from the edge.

CAUTION:

ALL MOISTURE TEST RESULTS ONLY INDICATE THE CONDITION OF THE CONCRETE FOR THE ACTUAL AREA TESTED AND ONLY AT THE TIME OF THE TEST. ACCURATE TEST RESULTS WILL ONLY BE ACHIEVED WHEN TAKEN IN A ROOM ACCLIMATED TO ITS EXPECTED NORMAL ENVIRONMENTAL CONDITION. MOISTURE VAPOR EMISSION FROM CONCRETE VARIES BOTH FROM ONE AREA TO ANOTHER AND OVER TIME FOR NUMEROUS REASONS BEYOND THE CONTROL OF THE FLOORING CONTRACTOR OR INSTALLER.

Although the dryness of an on or below grade concrete slab can be determined at the time of installation, it is not a guarantee that the slab will be free of excessive moisture forever. Tarkett does not warrant or guarantee flooring problems caused by the presence of excessive moisture, alkali or hydrostatic pressure.

Surface Alkalinity On Concrete Substrate

Concrete by its very nature is a highly alkaline material. Under normal conditions this situation does not affect floor coverings and their adhesives. This does become a factor when concrete surface alkali salts build-up, usually as the result of excessive moisture vapor transmission through the concrete slab. Moisture carries alkali salts from the interior of the slab to the surface, which are left behind when the moisture evaporates. Excessive alkali has been known to degrade adhesives and tile floor coverings leading to poor appearance, maintenance difficulties, and in extreme cases, total floor failure. Measures of alkalinity are usually expressed in terms of a pH number. The normally encountered pH scale ranges from 1 to 14 with 7 being neutral. Numbers moving downward from 7 indicate increasing acidity and numbers moving upward from 7 indicate increasing alkalinity. Readings of pH in excess of 9 have been known to affect resilient floor coverings and adhesives and are usually suggestive of excessive vapor/moisture transmission. The most common test performed for excessive surface alkali is the pH Paper Test.

Materials required:

Wide range pH Test Paper (obtained from chemical/scientific supply house).

Distilled Water

Eye Dropper

The pH Test paper will change color when in contact with dissolved alkali salts. Reading of pH on the 1 through 14 scale can be determined by comparing paper color after exposure to chart provided by pH Test paper supplier. Concrete floors to be tested shall be clean, dust free, and at normal room temperature. **NOTE:** Drywall dust, subfloor patching compounds, and other contaminants will influence test results. Several drops of Distilled Water are deposited on the test point with the clean eye dropper (enough to form a quarter sized puddle), allow to react for 2-3 minutes, pH Test paper strips are placed into the water spot. Between 30 seconds and 1 minute after test strips are placed into water, color of the test strips are compared to the chart and a pH number reading is determined. Readings of pH in excess of 9 have been known to affect tile floor coverings and adhesives and are usually suggestive of excessive vapor/moisture transmission. Washing the concrete with clean water can lower alkalinity. **However, it cannot prevent future deposits of alkali on the surface of concrete.** Acid washes have been used to neutralize alkalinity, but it is important to remember that acids can leave a residue, which can be detrimental to the final installation.

Sealers, Curing and Parting Compounds

Tarkett does not recommend the use of concrete sealers, curing and parting compounds. These materials may not be compatible with Tarkett adhesives and may interfere with the adhesion of the flooring material. These products shall be removed using a terrazzo grinding machine or by sanding with a drum sander. A bond test shall be performed to determine if adhesion properties are acceptable.

Bond Test

A bond test shall be performed on all grade levels to determine if the concrete is sufficiently dry and if a sealer, curing or parting compound was used.

Install a few pieces of the flooring material selected for the installation and adhere with the recommended Tarkett adhesive. Pay particular attention to the adhesive open time. If after 72 hours a significant amount of force is required to remove the flooring from the concrete, and there is adhesive transfer to both the concrete and to the back of the flooring, the bond can be considered satisfactory.

NOTE: Regardless of the bond test or the type of surface treatment used, the responsibility for warranties, guarantees, and performance of a concrete substrate on which a surface treatment has been applied rests with the manufacturer of the surface treatment product for adhesion and/or patching compound failures and not with Tarkett.

Floor Flatness

The surface flatness or levelness will affect the finished appearance of floor coverings. Installation of flooring products over an excessively uneven or undulating concrete slab will require working techniques on the part of the installation contractor that would include leveling and smoothing. It is recommended that both flatness and levelness requirements be described by Face Floor Profile Numbers (F-numbers). Refer to the American Concrete Institute ACI 302.1 Guide for Concrete Floor and Slab Construction.

Painted Floors

Tarkett does not recommend installation of Tarkett flooring products over painted surfaces. All paint shall be removed from the surface to be covered.

CAUTION:

Certain paints may contain lead. Exposure to excessive amounts of lead dust presents a health hazard. Refer to applicable federal, state and local laws and Lead-Based Paint Interim Guidelines for hazard Identification and Abatement in Public and Indian Housing (Sept. 1990) or subsequent editions published by the U.S. Department of Housing and Urban Development regarding: (1) appropriate methods for identifying lead-based paint and removing such paint; and (2) any licensing, certification, and training requirements for persons performing lead abatement work.

Radiant Heated Floors

Tarkett flooring may be installed over radiant heated floors, provided the operating temperature does not exceed 85° F (29.4°C). Heating pipes shall be at least 2 inches (50.8mm) below the surface of the concrete. If the heating pipes are too close to the flooring, the flooring may discolor next to the pipe work.

Tarkett 400 or QBond-One™ Adhesive shall be used for both plank and tile installations over radiant heated floors.

NOTE: During installation, lower the radiant heated floor temperature to a minimum 65°F (18.3°C). This temperature should be maintained for at least 24 hours before, during and 48 hours after completion of the installation. On ground floors the radiant heating system should have a proper moisture vapor retarder beneath it. The concrete should be tested for moisture before the tile flooring is laid. Gradually increase temperature in increments of 5° per hour.

Lightweight Concrete

Lightweight concrete either aggregate or cellular should first be determined as suitable for the installation of Tarkett flooring. At a minimum, lightweight aggregate concrete should have a dry density greater than 90 lbs. per cubic foot and cellular concrete should have a wet density over 100 lbs. or 94 lbs. dry weight per cubic foot. Lightweight concrete may contain excessive moisture and shall be tested to determine if it is suitable to install Tarkett flooring. In locations where heavy static or dynamic (rolling) loads will occur, concrete should be designed at the construction planning stage to accommodate this need.

NOTE: Tarkett does not recommend or warrant the use of products containing gypsum as a satisfactory underlayment for the installation of Tarkett flooring.

Concrete Preparation

Prior to installation of Tarkett flooring, concrete shall be prepared in accordance with ASTM F 710 (Preparing Concrete Floors to Receive Resilient Flooring). Concrete shall be dry, clean, smooth, level and structurally sound. Surface of concrete shall be swept, damp mopped and/or vacuumed to remove any dust and debris. Any surface materials present such as paint, wax, grease, oil, adhesive residues, crayon, pen marking, etc.

that may prevent a proper adhesion or migrate to the surface of the flooring causing discoloration, shall be removed. Fill and level any cracks, construction joints, control joints, depressions, grooves or other irregularities with a high quality, non-shrinking, latex fortified, cementitious patching compound.

NOTE: Tarkett does not recommend or warrant the use of any products containing gypsum as a satisfactory patching compound for installation of Tarkett flooring. Tarkett will not accept responsibility for flooring failures related to the use of gypsum type patching and/or leveling compounds.

Expansion Joints

Expansion joints allow for movement between two concrete slabs. If flooring is installed over an expansion joint, adhesive bond failure, buckling and cracking of the flooring material is likely to occur. Do not install Tarkett flooring over expansion joints. Flooring material shall be cut to either side of the expansion joint, and then covered with an expansion joint cover. Use a cover that will provide a smooth transition and prevent a tripping hazard.

Self-Leveling Compounds

There are a large number of self-leveling products available on the market today with various compositions and performance characteristics. They have been recommended by their manufacturers for smoothing rough or irregular substrates, encapsulating asbestos containing flooring and adhesives, for acoustical or for certain fire prevention characteristics as well as other concerns. A cementitious, latex reinforced type having a minimum compressive strength of 3,500 PSI or greater is recommended. We do suggest they be obtained from a quality manufacturer that provides a warranty for this product's use as a flooring underlayment. Manufacturers such as "Ardex[®]" and "Mapei[®]" have products that meet these criteria for self-leveling and should be contacted for further information.

NOTE: All warranties and guarantees regarding the suitability and performance of these products, rests with the levelers manufacturer or the installation contractor, not with Tarkett.

Residual Adhesives

All existing residual adhesive shall be removed or covered with an approved self-leveling compound designed for this purpose. The leveler shall be recommended for use as an underlayment for installation of Tarkett flooring. Manufacturers such as "Ardex[®]" and "Mapei[®]" have products that meet these criteria for self-leveling and should be contacted for further information.

Removal of adhesive residues over plywood is very difficult. Therefore, installation of new underlayment is recommended. Lay thin sheets of paper over residual adhesive prior to installing new underlayment.

Tarkett does not recommend the use of solvent-based adhesive removers. These products leave a residue within the substrate that can adversely affect the new adhesive and flooring material.

WARNING!

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Instructions for removal of existing flooring and residual adhesives can be found in the Recommended Work Practices Manual for the Removal of Tile Floor Coverings. This manual can be obtained from The Tile Floor Covering Institute, 115 Broad Street, Suite 201, LaGrange, GA 30240, (706) 882-3833.

Wood Subfloors

Wood Floor Construction: Suspended wood floors shall be 1 inch (25.4mm) or thicker, double-construction, strongly constructed, free from spring and have a minimum of 18 inches (457mm) of well-ventilated air space clearance above the ground. A moisture vapor retarder (10 mil or thicker polyethylene sheeting) should be installed over the ground with overlapped widths and lengths, to reduce moisture vapor transmission. The joists shall be spaced not more than 16 inches (406mm) on centers. If joists are warped or twisted, have high crowns, or otherwise do not present a flat, true base for the subfloor, these conditions shall be corrected before installing underlayment. All subfloor panels shall be fastened to the joists in accordance with their manufacturer's recommendations to preserve their warranties. NOTE: Protruding fasteners shall be made flush with the surface of the subfloor panels before beginning installation of underlayment.

Single Wood Subfloors: Single wood subfloors are not a recommended surface for installing Tarkett flooring. These subfloors shall be covered with a minimum of 1/4 inch (6.3mm) or thicker underlayment grade plywood.

Stripwood Subfloors: Stripwood floors should be covered with 3/8" (9.5mm) or thicker underlayment grade plywood.

Plywood Underlayment

Underlayment grade plywood is used to cover an existing wood subfloor. The finished appearance of any resilient flooring installation will be determined in part by the underlayment over which it is installed.

Underlayment grade plywood used for tile flooring shall meet the following requirements:

- > Shall be 1/4 inch (6.3mm) or thicker with a fully sanded face.
- > Shall be structurally sound, dimensionally stable with no voids.
- > Designed for use with Tarkett flooring.
- > Texturing or graining shall not telegraph through the flooring.
- > Shall withstand damage from heavy loads.
- > Shall be free of any substances that may stain flooring or impair adhesion.

The underlayment panels listed in the chart below and their recommendation for use with Tarkett flooring are intended only as a guide. The underlayment selected is subject to the discretion of the installer. Tarkett strongly suggests that when purchasing underlayment, a warranty and installation instructions be obtained from the supplier.

UNDERLAYMENT	MANUFACTURER	THICKNESS	DIMENSIONS	WARRANTY
APA Underlayment, APA Underlayment A-C, B-C, C-C Plugged	Varies	1/4" 11/32" 15/32"	4' x 8'	—
ACCU-PLY	Halex Corporation	6.0 mm	4' x 5'	Limited Lifetime Warranty
C.S.A. (CanPly)	Varies	1/4" 11/32" 15/32"	4' x 8'	—
IntegraPly	Integra Wood International	5.5mm	4' x 4' 4' x 8'	25 Year Limited Warranty
Proboard	Raven Panel Sales	6.0 mm	4' x 8'	1 Year Limited Warranty
SurePly	Patriot Timber Products	1/4"	4' x 4' 4' x 8'	Limited Lifetime Warranty
TECPly	Plywood & Door Manufacturers Corporation	5.2 mm	4' x 4' 4' x 8'	10 Year Limited Warranty
ULAY	Riverside Forest Products	6.0 mm	4' x 4' 4' x 8'	10 Year Limited Warranty
Ultraply	Moreland Company	5.5mm	4' x 4' 4' x 8'	15 Year Limited Warranty

Tarkett cannot warrant or guarantee underlayment panels used with Tarkett flooring. The responsibility for warranties, guarantees and performance of the underlayment panels rests with the manufacturer of the underlayment and not with Tarkett.

Tarkett will not accept responsibility for the following:

- > Joint or texture telegraphing.
- > Tunneling or ridging over underlayment joints.
- > Discoloration originating from underlayment panel unless otherwise specified in the product warranty.

CAUTION:

Some plywood underlayment manufacturers use plastic or resin filler to patch surface voids. Some filler can cause discoloration in vinyl flooring. Specify plywood underlayment with wood plugs and fills.

All underlayment panels other than those listed are not recommended for use with Tarkett flooring.

Apa Rated Sturd-I-Floor Construction

Tarkett flooring is not recommended for installation directly over Sturdi-I-Floor. Install 1/4 inch (6.3mm) or thicker underlayment grade plywood over these panels.

AdvanTech® Flooring

Tarkett flooring is not recommended for installation directly over AdvanTech® Flooring. Install 1/4 inch (6.3mm) or thicker underlayment grade plywood over these panels.

Lauan Or Maranti Plywood

A wide variety of species and grades of Lauan or Maranti plywood have been imported into North America and sold for use as underlayment. Although they do not have all the preferred properties for underlayment, many retailers are using these panels under flooring with reasonable success. If Lauan or Maranti is used, it should be classified as Type 1, Exterior (Ext), which indicates the panel has an exterior glue bond. This may also be designated by the letters "BB" or "CC". However, many of these panels have caused severe problems such as discoloration, delamination and adhesive failures.

Construction Adhesives

Certain industrial grade adhesives used in the construction trade to adhere subfloor panels have been known to discolor resilient flooring products even if covered over with plywood underlayment or trowelable underlayments. Any construction adhesives used in subfloor construction shall be guaranteed to be non-staining for resilient flooring by its manufacturer. Tarkett will not accept responsibility for discoloration problems related to the use of construction adhesives.

Installing of Underlayment

- > Underlayment panels should be stored indoors in a dry area protected from the elements. Panels shall be laying flat over a minimum of two supports. It is extremely important for both remodeling and new construction applications that the underlayment panels be allowed to acclimate to room conditions and that the underlayment panels are protected from extremes of heat and moisture before, during and after installation.
- > **Installation of underlayment panels shall be performed in accordance with their manufacturer's recommendations to preserve their warranties.**
- > Installation of underlayment should begin in one corner of the room. Install all underlayment panels in the same direction.
- > Lightly butt panel edges together. Leave a 1/4 inch (6.3mm) to 3/8 inch (9.5mm) space between the panels and the wall around the perimeter of the room.

- > Underlayment panel edges and subfloor edges should be offset at least 8 inches (203mm). Stagger panel joints so that four corners do not meet. Cross joints should be staggered at least 16 inches (406mm).
- > Underlayment shall not be installed over heavily cushioned flooring. This will not provide a firm base and may result in deflection at the seams, nail pops and telegraphing of panel joints.
- > **Nails:** Cement coated or resin coated fasteners can stain flooring. Use non-coated ring-shank or screw type underlay flooring nails. The length of the nail shall not exceed the total thickness of the subfloor and underlayment combined. Space nails 2 inches (50.8mm) to 4 inches (101.6mm) on center at panel edges and 6 inches (152.4mm) on center throughout the field.
- > **Staples:** Use divergent chisel point staples. Staples should be spaced 1 inch (25.4mm) to 2 inches (50.8mm) along the edge and 3 inches (76.2mm) to 4 inches (101.6mm) on center throughout the field.
- > Begin fastening at one corner of the panel and work diagonally across the panel (fan nail). Fasteners shall be set flush or just slightly below the surface of the underlayment.

Underlayment Preparation

Prior to installation of Tarkett flooring, prepare underlayment panels according to ASTM F 1482 (Installation and Preparation of Panel Type Underlayments to Receive Resilient Panel Flooring). Underlayment shall be dry, clean, smooth, level and structurally sound. Sweep and/or vacuum to remove any dust and debris. Any surface materials present such as paint, wax, grease, oil, adhesive residues, crayon, pen marking, etc. that may prevent a proper adhesion or migrate to the surface of the flooring causing a discoloration, shall be removed.

Fill and level underlayment joints and all other irregularities with a high quality, non-shrinking, latex fortified, cementitious patching compound.

NOTE: Tarkett does not recommend or warrant the use of any products containing gypsum as a satisfactory patching compound for installation of Tarkett flooring. Tarkett will not accept responsibility for flooring failures related to the use of gypsum type patching and/or leveling compounds.

Existing Resilient Floors

Due to the problems associated with the removal of old flooring products and their adhesives, it may be desirable to leave the existing flooring intact with the last alternative being removal. Tarkett flooring products may be installed over a **single layer** of non-cushioned, existing flooring.

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Installation over existing floors is recommended for residential applications only.

Note: The final decision to cover an existing floor with new flooring rests with the flooring contractor and/or installer. Tarkett will not accept responsibility for floor failures where the condition, type or improper preparation of the existing floor is the cause for the failure.

The existing floor must meet the following requirements:

- > Shall be fully and securely adhered. Inspect adhesion along walls and seams and repair if necessary.
- > Shall not be a perimeter adhered or glueless installation.
- > Shall not be a cushion or foam backed product and shall not contain a thick foam inner-layer.
- > Shall be properly installed over a recommended substrate.
- > Shall be a single layer.
- > All floor polishes, waxes, or other surface coatings shall be removed by means that will not damage the integrity of the existing floor system.
- > Any damaged areas shall be repaired
- > Existing floors shall be smoothed and leveled with a good quality, embossing leveler.
- > Do not install Tarkett flooring over existing asphalt tile and linoleum flooring.
- > Do not install Tarkett flooring over existing tile installed below grade.

Embossing Levelers

The use of a good quality embossing leveler, is designed to eliminate the need to remove most existing floors. Embossing levelers will fill and level the surface of existing embossed floors prior to installation of Tarkett flooring.

It is important that the flooring surface be clean. All floor polishes, waxes, or other surface coatings shall be removed. Prepare and apply the embossing leveler in accordance with its manufacturers' recommendations. Manufacturers such as "Ardex®" and "Mapei®" have products that meet the criteria for embossing levelers and should be contacted for further information.

Note: All warranties and/or guarantees for the embossing leveler are the responsibility of the products manufacturer, not Tarkett.

Additional Substrates

Terrazzo, Marble and Ceramic Tile

Tarkett flooring may be installed over these substrates on all grade levels. The existing floor shall securely adhere to a structurally sound substrate. Any surface coatings, sealers or glazing shall be completely removed. If necessary, moisture tests shall be conducted. Bond tests should always be performed if porosity or suitability of substrate is in question. Very smooth surfaces shall be abraded. Smooth and level surfaces with a high quality, non-shrinking, latex fortified, cementitious patching compound.

Metal Floors

Tarkett flooring may be installed over steel, stainless steel and aluminum floors. The metal surface shall be sanded or abraded and thoroughly cleaned. Any rust or other contaminants such as oil, grease or dirt shall be removed.

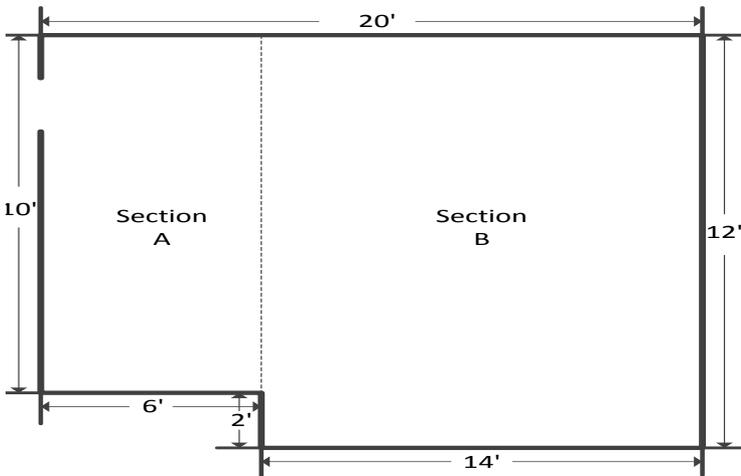
Chapter 2: Prior to Installation

Storage And Handling

- > All Tarkett flooring shall be stored in a climate controlled, enclosed location protected from the weather. Area shall be clean and dry. Ideal storage temperature shall be between 65°F (18°C) and 100°F (38°C). Humidity shall be maintained between 40% and 70%
- > Tarkett flooring shall be stored horizontally on a flat, dry level surface. Do not store cartons on end.
- > Avoid damaging cartons of flooring. Use caution when handling and transporting cartons of flooring.
- > Tarkett flooring can be heavy. Use dollies or carts when moving or handling flooring. Use proper lifting techniques to avoid injury.

Measuring and Estimating

- > It is necessary to determine the total square footage of the room. To determine the square footage, measure the length and the width of the room. Multiply these two numbers to determine the total square footage of the room.
- > For irregular shaped rooms, square the area off into rectangles or squares to determine square footage. See example below.



Section A - 6' x 10'	= 60 square feet
Section B - 12' x 14'	= 168 square feet
Total Square Feet	228 square feet
Add 7% for waste*	16 square feet
Total number of tile needed =	244 square feet

*When estimating a room, a waste allowance shall be added to the total square footage of the room. 5% is generally added for rooms ranging from 300 - 1000 square feet. A greater percentage of waste should be allowed for smaller rooms and a lesser percentage allowed for larger rooms.

Starting the Job

- > Tarkett flooring is designed to be installed in interior areas only. Tarkett flooring should never be installed outdoors or in areas exposed to weather.
- > It is recommended that the installation of Tarkett flooring begin only after the work of all other trades is completed. If the flooring is to be installed prior to completion of other trades, it is important that the flooring be protected.
- > To insure the best color match when installing from two or more cartons, make sure run numbers on each carton are the same.
- > Before beginning installation, check to insure correct color and quantity.
- > Tarkett flooring is carefully inspected before leaving our manufacturing facility. However, occasionally a defect may not be detected. Carefully check flooring for any defects prior to installation. **Tarkett will not pay labor costs for replacement of flooring installed with obvious defects.**

Jobsite Conditions

- > Jobsite conditions are very important to a successful installation.
- > Tarkett flooring shall not be installed until the work area is temperature controlled. The work area shall be maintained at a minimum temperature of 65°F (18°C) and a maximum of 100°F (38°C) for 48 hours before, during and after the installation. Ideal relative humidity range is between 40% and 70%. A permanent heat system shall be operational prior to installation.
- > Since subfloor conditions are so important, all preparation work shall be performed under normal room conditions. A substrate with a temperature below 55° F (13° C) can affect normal adhesive performance.
- > **Maintain flooring and adhesive between 65° F and 100° F (18°C- 38°C) for 48 hours before, during and after installation.**
- > Post installation temperature shall be maintained at a minimum of 55°F (13° C) and a maximum of 100°F (38° C). Maintain relative humidity between 40% and 70%.

Chapter 3: Tarkett® Adhesives

ADHESIVE RECOMMENDATIONS

Product	Underlayment Grade Plywood	Concrete	Approved Existing Floors	Radiant Heated Floors
Tiles and Modular Tile	800 or QBond-One	800 or QBond-One	800 or QBond-One	400 or QBond-One
Planks	400 or QBond-One	400 or QBond-One	850 or QBond-One	400 or QBond-One
Combination Tile & Plank	400 or QBond-One	400 or QBond-One	850 or QBond-One	400 or QBond-One

ADHESIVE APPLICATION

Adhesive	Tile		Plank	
	Residential	Light Commercial	Residential	Light Commercial
QBond-One	1/16" wide x 1/16" deep x 1/16" apart square notched trowel or medium nap paint roller	1/16" wide x 1/16" deep x 1/16" apart square notched trowel	1/16" wide x 1/16" deep x 1/16" apart square notched trowel or medium nap paint roller	1/32" wide x 1/16" deep x 1/32" apart square notched trowel
400	Not Recommended	Not Recommended	1/16" wide x 1/16" deep x 1/16" apart square notched trowel	1/16" wide x 1/16" deep x 1/16" apart square notched trowel
800	1/16" wide x 1/16" deep x 1/16" apart square notched trowel	1/16" wide x 1/16" deep x 1/16" apart square notched trowel	Not Recommended	Not Recommended
850	Not Recommended	Not Recommended	1/16" wide x 1/16" deep x 1/16" apart square notched trowel	Not Recommended

Tarkett QBond-One™ Acrylic Latex Flooring Adhesive

Use: For installation of Tarkett Luxury Tile and Plank Flooring.

Substrates: Below, on and above grade concrete, approved underlayment grade plywood, approved existing floors and radiant heated floors.

Application:

Tile		Plank	
Residential (Dry Set)	Light Commercial (Dry Set)	Residential (Dry Set)	Light Commercial (Wet Set)
1/16" wide x 1/16" deep x 1/16" apart square notched trowel or medium nap paint roller	1/16" wide x 1/16" x deep x 1/16" apart square notched trowel	1/16" wide x 1/16" deep x 1/16" apart square notched trowel or medium nap paint roller	1/32" wide x 1/16" x deep x 1/32" apart square notched trowel

Working Time: Dry Set – 1 Hour

Wet Set – 20 minutes

Coverage: Medium Nap Paint Roller – Approximately 350 sq.ft. per gallon

1/16" wide x 1/16" deep x 1/16" (1.6mm x 1.6mm x 1.6mm) apart square notched trowel - Approximately 150-165 sq.ft. per gallon

1/32" wide x 1/16" deep x 1/32" (0.8mm x 1.6mm x 0.8mm) apart square notched trowel - Approximately 225-250 sq.ft. per gallon

Packaging: Gallon and 4 Gallon

QBond-One™ Dry Set Application – After application, allow adhesive to dry until tacky. The drying time will depend upon conditions such as temperature, relative humidity and porosity of substrate. When dry, adhesive color will change from milky white to translucent. Dry adhesive will feel tacky and not transfer to fingers. Place flooring into adhesive within 1 hour after becoming tacky. Roll flooring with a 75-100 lb. (34-45 kg) sectional floor roller. Roll flooring in both directions. Use a hand roller in areas not reached by the roller.

QBond-One™ Wet Set Application (Tarkett Plank) – The wet set application is recommended for installation of Tarkett Plank installed in light commercial applications. Place flooring into wet adhesive immediately after application. Planks shall be installed while adhesive is wet. Only apply an amount of adhesive that can be covered with flooring within 20 minutes. Roll flooring in both directions with a 75-100 lb. (34-45 kg) sectional floor roller. Note: Do not roll flooring too soon to avoid shifting or slipping of planks out of position. On large installations, it may be necessary to roll sections of the room before completion. Use a hand roller in areas not reached by the roller.

> **Do not use QBond-One as a wet-set application over existing floors or non-porous floors.**

> **Allow 24 hours before allowing foot traffic on floor.**

> **Do not wash floor for at least 48 hours after installation.**

Tarkett 400 Acrylic Latex Flooring Adhesive

Use: For installation of Tarkett Luxury Plank Flooring and a combination of tile and plank luxury flooring.

Substrates: Below, on and above grade concrete, approved underlayment grade plywood, approved existing floors and radiant heated floors.

Application: 1/16" wide x 1/16" deep x 1/16" (1.6mm x 1.6mm x 1.6mm) apart square notched trowel

Working Time: 15-20 minutes

Coverage: 125 square feet per gallon

Packaging: Gallon and 4 Gallon

Open Time: Approximately 15-20 minutes depending on temperature, relative humidity and porosity of substrate.

Tarkett 400 is a wet-set adhesive. Only apply an amount of adhesive that can be covered with flooring within 15-20 minutes. Planks shall be installed while adhesive is wet. Roll flooring with a 75-100 lb. (34-45 kg) sectional floor roller before adhesive dries.

Roll flooring in both directions. Note: Do not roll flooring too soon to avoid shifting or slipping of planks out of position. On large installations, it may be necessary to roll sections of the room before completion. Use a hand roller in areas not reached by the roller.

> **Do not use Tarkett 400 Adhesive over existing flooring.**

> **Allow 24 hours before allowing foot traffic on floor.**

> **Do not wash floor for at least 48 hours after installation.**

Tarkett 800 Pressure Sensitive Flooring Adhesive

Use: For installation of Tarkett Luxury Tile Flooring.

Substrates: Below, on and above grade concrete, approved underlayment grade plywood and approved existing floors. Do not use over radiant heated floors.

Application: 1/16" wide x 1/16" deep x 1/16" (1.6mm x 1.6mm x 1.6mm) apart square notched trowel

Working Time: Up to 6 hours

Coverage: 180 square feet per gallon

Packaging: Gallon and 4 Gallon

Tarkett 800 is a dry-set adhesive. Tile shall be installed after adhesive dries. Drying time will take about one hour depending upon conditions such as temperature, relative humidity and porosity of substrate. When dry, adhesive color will change from milky white to translucent. Dry adhesive will feel tacky and not transfer to fingers. Place flooring into adhesive within 6 hours. Roll flooring with a 75-100 lb. (34-45 kg) sectional floor roller. Roll flooring in both directions. Use a hand roller in areas not reached by the roller.

> **Do not wash floor for at least 48 hours after installation.**

Tarkett 850 Acrylic Latex Flooring Adhesive

Use: For installation of Tarkett Luxury Plank Flooring in residential applications only.

Substrates: Approved existing floors.

Application: 1/16" wide x 1/16" deep x 1/16" (1.6mm x 1.6mm x 1.6mm) apart square notched trowel

Working Time: Approximately 60 minutes depending on temperature, relative humidity and porosity of substrate.

Coverage: 200 square feet per gallon

Packaging: Gallon and 4 Gallon

Allow adhesive to become slightly tacky. It is very important that the adhesive does not dry completely to the touch before installation. However, do not place flooring into adhesive that is too wet; the bond could become compromised. Total uniform transfer of adhesive to the back of flooring and substrate shall be achieved. The time from when the adhesive becomes slightly tacky to when flooring is placed into the adhesive shall not exceed 60 minutes. Roll flooring with a 75-100 lb. (34-45 kg) sectional floor roller. Roll flooring in both directions. Use a hand roller in areas not reached by the roller.

> **Do not wash floor for at least 48 hours after installation.**

Chapter 4: Tile and Plank Layout

Tarkett Luxury Floors can be installed several ways to create specific designs. Tile and plank can be installed together to create a custom look. Border a room, install on a diagonal, stagger joints or create a checkerboard design. This chapter explains the general layout instructions for both tile and plank designs installed on a square and installed on a diagonal.

Tarkett Luxury Tile is offered in three installation methods:

- > **GroutLess™** - Edges of tile are rolled and installed edge to edge without grout.
- > **GroutFit®** - Embossed grout effect on two sides of each tile.
- > **GroutFil™** - Floor is grouted with one of 14 colors of a premixed, acrylic grout.

Tarkett Luxury Tile and Plank Flooring products are manufactured in various sizes:

- > **Tile** - 12" x 12", 16" x 16" and 12" x 24".
- > **Plank** - 3" x 36", 4" x 36" and 6" x 36".

Before beginning installation, the floor area shall be squared and the best method of installing determined, considering the shape of the room, fixtures and the design to be laid. No set of rules can be given that will fit all applications. It is necessary to square the room in which flooring will be installed, however there are exceptions and each job should be given individual consideration.

Square Layout

The center point of the room shall be established. To find the center point, carefully measure across each end wall and determine the midpoints of each wall. Snap a chalk line between these two points to establish a center guide line on the floor. Measure along this line to find the center of the room. At the center point, use a carpenter's square and straight edge to establish a line across the room at exactly a right angle to the center guide line. To determine if the guideline is a true right angle use the 3-4-5 triangle method (Figure 1)

- > Measure 4 feet (1.2m) towards each side wall from the center point.
- > Measure 3 feet (0.9m) from the center point along the first line.
- > Measure the distance between the 3 foot (0.9m) mark and the 4 foot (1.2m) mark. This measurement should be exactly 5 feet (1.5m). **If this measurement is not exactly 5 feet (1.5m), the center crossing line is not at a true right angle to the first line and shall be adjusted to achieve a right angle.**
- > For larger rooms, multiples of 6-8-10 or 9-12-15 may be used to obtain greater accuracy.

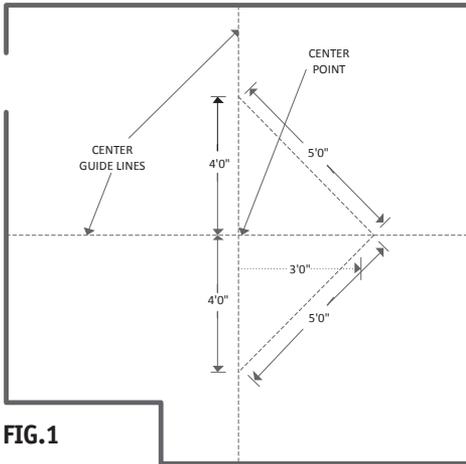


FIG.1

Measure or dry lay a row of tiles from the center point of the guidelines to each side wall to determine the size of the border tiles. If the resulting border is too small, adjust the center guidelines to achieve a larger border tile. When possible, the size of the border tiles shall at least one half the size of a full tile.

Diagonal Layout

Square the room and establish center guidelines as for square layouts. Establish diagonal lines (Figure 2 and 3).

- > Measure out from the center point of the room and mark an equal distance on each line (A, B, C and D). This distance from the center point can be a random measurement, but shall be equal on all sides.
- > Using a slightly larger size, swing an arc on both sides of each line from points A, B, C and D to form intersecting arcs.
- > Snap diagonal chalk lines at the point where the arcs intersect to establish guidelines. These lines should intersect at the center point of the room.

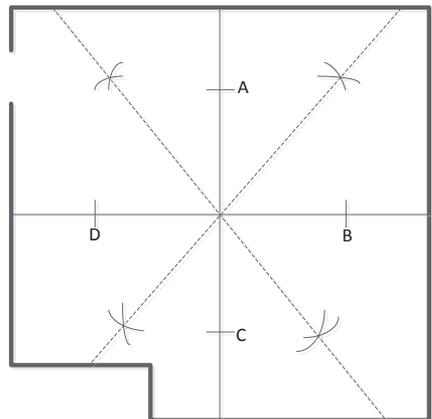
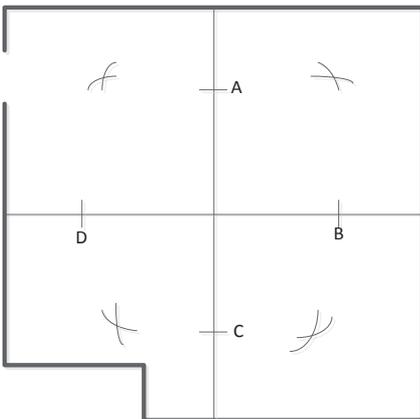


FIG.3

Measure or dry lay a row of tiles from the center point along the diagonal guidelines to each side wall to determine the size of the border tiles. If the resulting border is too small, adjust the diagonal guidelines to achieve a larger border tile.

If two or more colors are used, the borderline should be established so that the field will end with half tile of the same color on all four sides of the room.

Plank Layout

Carefully measure across each end wall and determine the midpoints of each wall. Snap a chalk line between these two points to establish a center guide line on the floor (Figure 4). Measure from this line to each side wall to determine the width size of the border planks. If necessary, adjust the center line to insure that border planks are at least one half the width of the plank.

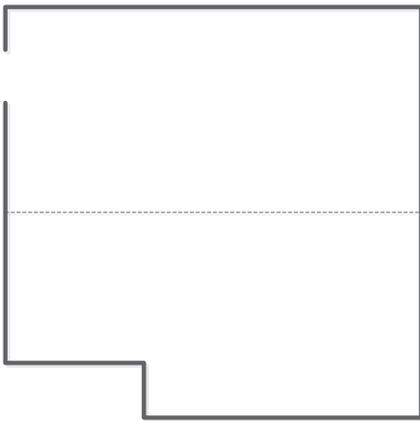


FIG.4

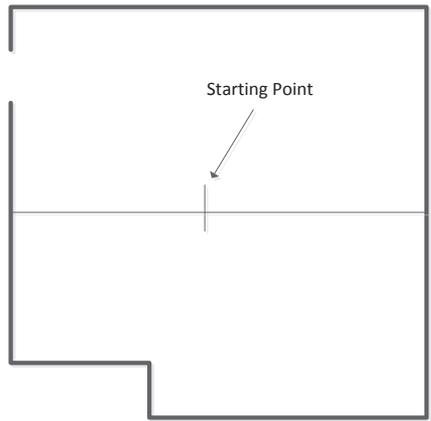


FIG.5

Establish and mark a starting point for the first plank on the center guide line (Figure 5.). When establishing this mark, take into consideration that the first and last plank in each row shall not be less than 8 inches (203mm).

Chapter 5: Tile Installation

Adhesive Application

Apply QBond-One™ or Tarkett 800 Adhesive. Apply adhesive over one half of the room (Figure 6 and 7). **Refer to Chapter 3 for adhesive recommendations and application instructions.**

Installing Tile

- > Tarkett Luxury Tile is designed with multi-shading to replicate natural products. Each carton is a blend of several shades. Installed floor using a random mix of all shades.
- > Tarkett GroutFit™ Luxury Tile is manufactured with a 2 sided grout. Install tile running the same direction.

Begin laying the tile from the right angle formed in the center of the room by the intersecting lines. **Lay the first few tiles perfectly on the guidelines as this will affect the entire installation.** Lay tile toward the two corners of the room laying the field area first. Install tile in a stair step (pyramid) fashion (Figure 6 and 7). Place the tile firmly into the adhesive. It may be necessary at times to compromise on the alignment of the joints to make allowances for unevenness of the subfloor. Place tiles as accurately as possible without sliding them into place. Always work ahead of yourself using care not to shift the tile you are kneeling on.

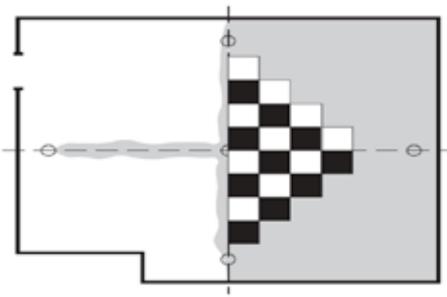


FIG.6 Square Layout

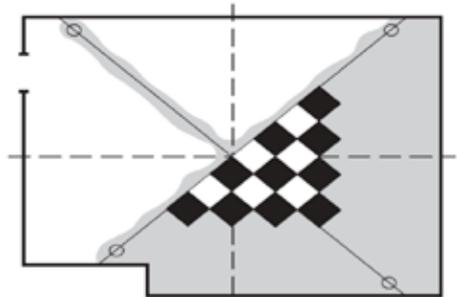


FIG.7 Diagonal Layout

Complete the first half of the room laying all full tiles first. After laying field tile in the first half of the room, apply adhesive over the second half of room. **Roll flooring in both directions with a 75-100 lb. (34-45kg) sectional floor roller.**

Cutting and Fitting Border Tiles

Square Layout: If mouldings or covebase will be used to cover the edges, border tile can be fit by measuring the distance between the wall and the last full tile installed. Using a carpenter square and a sharp utility knife, score the surface of a tile. Snap off the section along the score line. Place the tile firmly into the adhesive and roll.

If a net fit is required, placing a loose tile over the last full tile in the row (Figure 8). Place a full tile over the loose tile and butt it against the wall (Figure 9). Using this tile as a guide, score the bottom tile (Figure 10). Cut along the mark. Place the tile firmly into the adhesive and roll.



Diagonal Layout: To fit tile, use a template made out of sheet flooring, sheet metal or hardboard. Measure diagonally tip to tip across a full tile being installed. Cut the template to that dimension. Place a loose tile over the last full tile in the row (Figure 11). Place the template over the loose tile and butt it against the wall. Using the template as a guide, score the bottom tile with a sharp utility knife (Figure 12). Snap off the section along the score line. Place the tile firmly into the adhesive (Figure 13) and roll.

The diagonal measurement for tile is as follows:

12" x 12" tile = 17"

16" x 16" tile = 22 ½"



Fitting tile around door mouldings, pipes or irregular shaped walls can be done by direct scribing. Whenever possible, undercut door mouldings the thickness of the tile to allow tile fit underneath door mouldings. Heat the back of the tile and cut along the scribe or pencil mark on the pattern side of tile.

GroutFil™ Installation

Tarkett GroutFil Luxury Floor Tile is installed as described above. Tiles are laid with a 1/16", 1/8", 3/16" or 1/4" (1.5mm, 3.1mm, 4.7mm or 6.3mm) space between each tile. The maximum space should not be greater than 1/4 inch (6.3mm). Use appropriate spacers to maintain grout width. Place two spacers along each tile edge, then gently position adjacent tile against spacers.

Use only Tarkett Premixed Grout to grout Tarkett GroutFil™ Luxury Floor Tile. Grout is designed for indoor use only and is not recommended for use in areas subjected to excessive moisture (ie. showers). Do not add water or other liquids to premixed grout. Grouting can be done the same day tile is installed. Use grout at temperatures between 65° F (18° C) and 85° F (29° C). Tile and grout joints must be clean and dry.

Tarkett GroutFil Premixed Grout is available in 1 gallon containers. Coverage rate is as follows:

- > 1/16" grout joint - 450 sq.ft. per gallon.
- > 1/8" grout joint - 325 sq.ft. per gallon.
- > 3/16" grout joint - 275 sq.ft. per gallon
- > 1/4" grout joint - 225 sq.ft. per gallon

Begin grouting in one corner of the room and work toward a doorway or entranceway. Apply grout to small areas, approximately 10 square feet at a time. Using the tip of a rigid float, completely fill the grout space with the premixed grout.

Remove excess grout from the surface of the tile. Hold the float at approximately a 45° angle to the floor and move float on its edge diagonally across the tile joints. The surface of the grout should be flush with the surface of the tile. Check the applied grout for any voids.

Grouting and initial clean-up must be completed before continuing on to next area. Allow the grout to begin to set-up prior to cleaning surface of tile. Grout will begin to set in approximately 20 minutes depending on room temperature and humidity. Apply a light mist of water in the center of the tile using a spray bottle. **Do not spray water directly onto grouted joint.** Allow water to remain on the tile surface for 1 minute. Using a damp, white nylon or polyester pad, gently clean excess grout from tile surface. Then using a clean, damp, flat, square sponge, slowly wipe diagonally across the tile surface to remove remaining grout and water. **Do not pull any grout out of the joint.** Repeat until tile surface is clean. Use two buckets of water; one for rinsing most of the grout residue and the other for moistening the sponge for the following clean-up.

- > Floor is ready for light traffic in 24 hours.
- > Wait at least 72 hours prior to moving any furniture onto the floor.

Chapter 6: Plank Installation

Adhesive Application

Apply QBond-One™ or Tarkett 400 Adhesive. **Refer to Chapter 3 for adhesive recommendations and application instructions.**

Tarkett QBond-One™: Apply adhesive over one half of the room (Figure 15). Allow adhesive to dry until tacky. Install tile within one hour of adhesive becoming tacky. If installing plank flooring in a light commercial application, QBond-One must be used as a wet-set application. Only apply an amount of adhesive that can be covered with flooring within 15-20 minutes (Figure 14).

Tarkett 400: Tarkett 400 is a wet-set adhesive. Only apply an amount of adhesive that can be covered with flooring within 15-20 minutes (Figure 14).

Installing Plank

Begin laying planks at the starting point on the center guideline (Figures 14 and 15). Carefully lay the first row of planks perfectly on the guideline working toward each end wall. Place planks firmly into the adhesive without sliding planks into position.

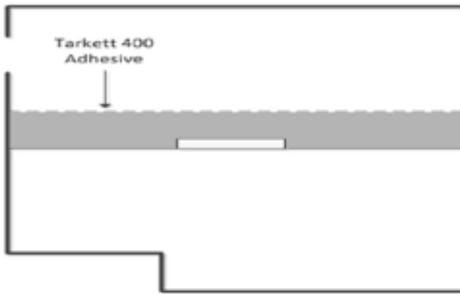


FIG.14

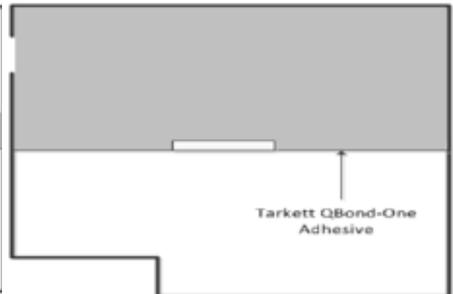


FIG.15

Continue installing planks throughout the field area. Planks can be installed in a stair step (pyramid) fashion (Figure 16) or row by row (Figure 17). **Roll flooring in both directions with a 75-100 lb. (34-45kg) sectional floor roller.** When using a wet set adhesive application, roll each section of flooring before continuing onto next section.

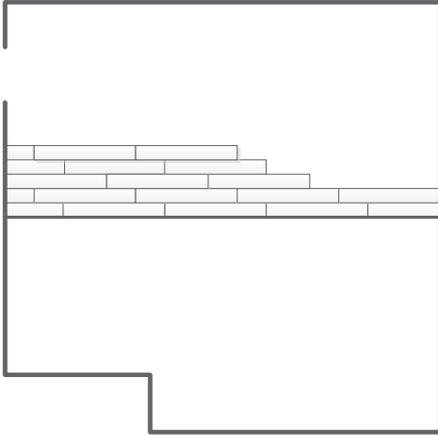


FIG.16

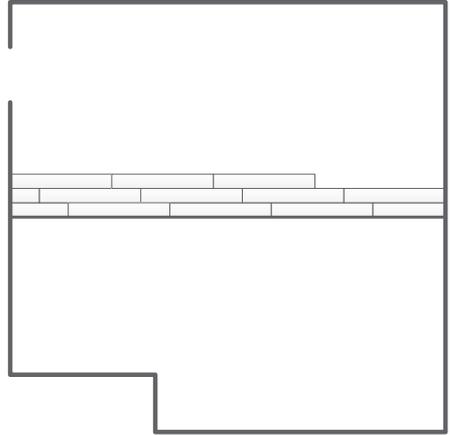


FIG.17

Cutting and Fitting Border Planks

The first and last plank in each row shall not be less than 8 inches (203mm). If mouldings or covebase will be used to cover the edges, border planks can be fit by measuring the distance between the wall and the last full plank installed. Using a carpenter square and a sharp utility knife, score the surface of the plank. Snap off the section along the score line. Place the plank firmly into the adhesive and roll. If a net fit is required, placing a loose plank over the last full plank in the row. Place a full plank over the loose plank and butt it against the wall. Using this plank as a guide, score the bottom plank. Cut along the mark. Place the plank firmly into the adhesive and roll.



Chapter 7: Transcend™ FreeSpan™ Locking Technology

Prior to Installation

- > Carefully check flooring material for any defects. Contact your supplier immediately if any defect is found.
- > Room temperature shall be no less than 65°F (18°C) for 24 hours before, during and after installation.
- > Remove quarter round, baseboard molding or cove base.
- > Undercut doorway moldings the thickness of the flooring.
- > Cartons must be stored horizontally at all times.
- > Protect carton corners from damage.
- > Do not use foam padding under Transcend.

Wood Substrates

Transcend may be installed over single floor wood construction in residential applications only. Subfloor must meet the following requirements:

- > Wood joist or truss systems spacing must be a maximum of 16 inches (406mm) on center.
- > Subfloor panels must be dry, sturdy, smooth and dimensionally stable.
- > Subfloor panels must be 3/4 inch (19mm) minimum thickness tongue and groove plywood or tongue and groove oriented strand board (OSB).
- > Subfloor panels must be good one side, fully sanded face with a solid core (no voids).
- > Subfloor panels must be exterior grade or classified as Exposure I.
- > All suspended wood subfloors must have at least 18 inches (457mm) of well ventilated air space clearance above the ground. The ground under the crawl space shall be covered with 10mil or thicker polyethylene sheeting to reduce moisture vapor transmission.
- > Offset subfloor panel joints by at least 16 inches (406mm) so that four corners do not meet.
- > Subfloor panels must be securely fastened to the joists and free from spring or deflection. Deflection shall not exceed 3/64" (1.1mm) per APA PS 2-10. If glue-nail procedures are required, use a solvent-free construction adhesive.
- > Subfloor must be level within 1/8 inch (3.1mm) in 8 feet (2.4m). Any unevenness must be sanded down or filled with a cementitious patching compound. Any unevenness may prevent Transcend from locking properly.

Wood subfloors not meeting the above requirements must be covered with 1/4 inch (6.3mm) minimum thickness underlayment grade plywood.

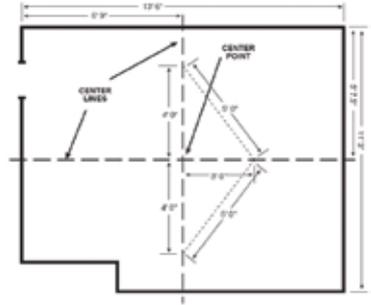


Figure 1. Finding the center point.

Concrete Substrates

Transcend may be installed over on grade, above grade or below grade concrete subfloors. Concrete floors shall be constructed in accordance with the American Concrete Institute (ACI) 302.1 Guide for Concrete Floor and Slab Construction. Concrete shall be finished and cured according to ACI and have a minimum compressive strength of 3500 psi. Installation of moisture vapor barrier is recommended prior to pouring of on or below grade slabs. Moisture vapor transmission shall not exceed 5 lbs./1000 sq.ft./24 hours per ASTM F-1869 (Anhydrous Calcium Chloride Test). Moisture may also be tested according to ASTM F 2170 (Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes). When tested according to this method, the internal relative humidity shall not exceed 80%. Transcend™ may be installed over properly prepared gypsum based underlayments.

Radiant Heated Floors

Transcend flooring may be installed over radiant heated floors, provided the operating temperature does not exceed 85° F (29.4° C). Heating pipes shall be at least 2 inches (50.88mm) below the surface of the concrete. If the heating pipes are too close to the flooring, the flooring may discolor next to the pipe work.

Existing Floors

Transcend may be installed over most hard surface existing flooring installed in residential applications. Existing floor must be smooth, solid, non-foamed, single layer and fully adhered. Check flooring for any curled areas around the perimeter or at seams and repair if necessary. Remove any wax or polish. Use a good quality cementitious based embossing leveler to smooth and level the existing floor.

Substrate Preparation

- > All substrates must be dry, clean, smooth, level, free from all existing adhesive residues, and free from movement or deflection.
- > The substrate must be level within 1/8 inch (3.1mm) in 8 feet (2.4m).
- > Fill and level all plywood seams, concrete cracks, construction joints, control joints, depressions, grooves and other irregularities. Use a latex fortified, cementitious patching compound.
- > Sweep and vacuum substrate to remove all dust and debris.

Getting Started

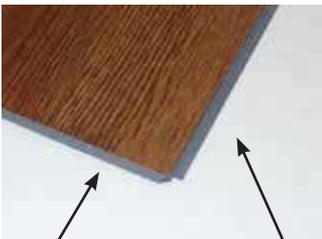
1. Transcend™ are floating floors and should not be glued or nailed to the substrate.
2. Transcend™ are intended for indoor use only.
3. Determine in which direction the planks will be installed. To make the room appear larger or if installing in very small rooms or hallways, it is preferable to lay the planks parallel to the longest room dimension.
4. Do not install cabinets on planks.
5. Carefully measure the room to determine squareness and also to determine the width of the last row of planks. If the width of the last row of planks is less than 2 inches (50.8mm), excluding the tongue, the width of first row of planks will have to be cut accordingly.

6. A minimum 1/4 inch (6.3mm) expansion space is required around the perimeter of the room and all vertical objects.
7. Inspect all planks for visible defects and damage before and during installation. Do not install damaged planks. Tarkett will not accept responsibility for claims on flooring installed with obvious defects. During installation, inspect the groove area and remove any debris that may prevent proper assembly of planks.
8. Do not use a hammer and tapping block to install planks.

Installation



Begin laying planks from the left side of the starting wall and work to the right side. The tongue side of the plank shall face the starting wall.



Tongue

Groove



Place 1/4 inch (6.3mm) spacers between the short and long side of the planks and the wall. Always position one spacer between the wall and where the planks join.



The end joints of the planks in the first row are assembled by inserting the tongue side into the groove side of the previous plank at a low angle. Gradually lower the plank down flat until the end joint closes, insuring that the planks are perfectly aligned. Install remaining full planks in the first row.



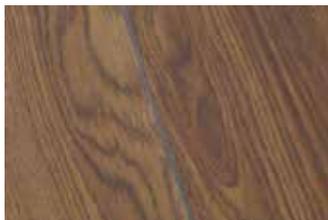
The last plank in the first row will need to be cut. Measure the distance between the wall and the surface of the last full plank. Subtract 1/4 inch (6.3mm) from this measurement to allow for the spacer. If this measurement is less than 12 inches (304mm), the length of first plank in the row must be cut. This will allow for a longer plank at the end of the row. The first and last plank in each row must be at least 12 inches (304mm) in length. Planks are cut using a sharp utility knife and straight edge/carpenters square. Score the surface of the plank with a utility knife, and then snap the plank at the score line.



The remaining piece cut from the last plank in the first row may serve as the first plank in the second row provided it is at least 12 inches (304mm) long. Always stagger end joints from row to row a minimum of 12 inches (304mm).



Install the long side of the first plank of the second row. Remember to place a 1/4 inch (6.3mm) spacer between the wall and the short side of the plank. Insert the tongue side into the groove side of the previous row at a low angle and rotate downward until plank is flat with the substrate.



To install the second plank in the second row. Insert the tongue side end joint into the groove side end joint of the previous plank at a low angle. Position the long side of the plank with the tongue side slightly overlapping the groove area of the planks in the previous row. Lift the plank upward and working from the left side of the plank to the right, gently push forward until the entire plank engages into the previous row. **Use caution when installing the long side of the planks. Do not push on the planks too hard as this may distort or deform the groove.** Rotate plank downward until plank is flat with the substrate. Continue installing remaining planks in the row. It is important to make sure that the first two rows are straight and square as they can effect the entire installation.

Continue working from left to right maintaining a random appearance. Planks may be installed row by row or by working multiple rows using the stair step method. Be sure to maintain a 1/4 inch (6.3mm) space around all walls and vertical objects. Offset end joints a minimum of 12 inches (304mm).

In most cases the flexibility of Transcend™ will allow for easy positioning of the planks under door moldings and casings. In the event this cannot be done, it is necessary to remove the lip on the groove edge of the planks you are fitting to using a sharp utility knife and straight edge. This will allow you to install the plank lying flat. After the lip has been trimmed off on the planks you are fitting to, lay the plank flat on the floor. Apply a thin bead of PVA glue on top of the tongue and push the plank into position. **Immediately wipe off any excess glue with a damp cloth.**

Finishing the Installation

- > After all planks have been installed, remove spacers from perimeter of room.
- > Install transition moldings. Do not fasten any moldings directly through the flooring.
- > Predrill and install quarter round or baseboard molding. Molding must be sufficient size to cover the 1/4 inch (6.3mm) space. Do not fasten moldings through the flooring. Fasten into the wall.
- > Use plywood to cover the top of the flooring when moving heavy furniture or appliances into position.
- > Use proper floor protectors under the legs of furniture.
- > Post installation temperature must be maintained between 55°F (13° C) and a maximum of 100°F (38° C). Relative humidity must be maintained between 40% and 70%.

Repairs

- > Using a straight edge and sharp utility knife cut the center of the damaged plank approximately one inch from the edge of the adjoining planks. Remove the center of the damaged plank.
- > Make a cut from each corner back to the inside edge.
- > Carefully remove the edges of the cut plank. Do not damage adjoining planks.
- > Prepare the replacement plank by removing the tongue and groove on each short side and by removing the groove on the long side.
- > Using Tarkett S875 Floating Seam Tape, place a piece so it is centered under each adjoining plank.
- > Remove the release liner on the tape on all sides.
- > Position the replacement plank by inserting the tongue of the long side into the groove of the adjoining plank.
- > Rotate the plank downward into position. Roll seam edges with a hand roller to ensure proper contact with floating seam tape.

Chapter 8: Cove Base Installation

Storage and Handling

- > Tarkett cove base shall be stored in a climate controlled, enclosed location protected from the weather. Area shall be clean and dry. Ideal storage temperature shall be between 65°F (18°C) and 100°F (38°C). Humidity shall be maintained between 40% and 70%.
- > Tarkett cove base shall be stored horizontally on a flat, dry level surface. Do not store cartons on end.
- > Avoid damaging cartons. Use caution when handling and transporting cartons cove base.

Starting the Job

- > Before beginning installation, check to insure correct color and quantity.
- > Tarkett cove base is carefully inspected before leaving our manufacturing facility. However, occasionally a defect may not be detected. Carefully check cove base for any defects prior to installation. **Tarkett will not pay labor costs for replacement of cove installed with obvious defects.**
- > **Maintain room temperature flooring and adhesive between 65°F (18°C) and 100°F (38°C) for 48 hours before, during and after installation.**
- > Post installation temperature shall be maintained at a minimum of 55°F (13° C) and a maximum of 100°F (38° C). Maintain relative humidity between 40% and 70%.

Surface Preparation Installation

- > All walls shall be clean, dry, porous, structurally sound, and not in direct contact with the ground. Surface shall be free of all dust, loose particles, paint, grease, oil, old adhesive or any other materials that could affect installation or adhesion of new cove base. Remove existing adhesive mechanically. Do not use adhesive removers or solvent.
- > Do not install Tarkett cove base over wallpapers or vinyl wall coverings. Fill and smooth all depressions, holes, cracks and other surface irregularities with a good quality wall patching material.
- > Walls should be smooth and continuous to within 1/2 inch (12.7mm) of the floor.

Adhesive Recommendation

- > Use Tarkett 700 Wall Base Adhesive. Apply adhesive with a 1/8" x 1/8" x 1/8" (3.1mm x 3.1mm x 3.1mm) V-notched trowel.

Installation of Wall Base

- > Coiled wall base shall be unrolled and allowed to acclimate to room temperature for at least 24 hours.
- > Apply adhesive to the ribbed surface on the back of the cove base. Leave a 1/4 inch (6.3mm) space at the top of the cove base to prevent the adhesive from oozing on to the wall when being installed.
- > Carefully position wall base on the wall surface and roll with a hand roller to insure full transfer of adhesive. Always roll back to the starting point to prevent stretching of the wall base.
- > Remove any excess adhesive immediately with clean, damp, white cloth.
- > The last piece of wall base can be cut using a sharp utility knife and carpenter's square.
- > During installation of cove-type wall base, press firmly down, flexing the toe tightly against the floor.

Factory Made Inside and Outside Corners

- > Install factory made inside and outside corners before installing wall base.
- > Apply adhesive to the ribbed surface on the back of the corner.
- > Carefully position corner in place and roll.
- > Install adjacent lengths of wall base prior to adhesive set-up of the corner piece, to allow for possible adjustment of the corner piece.

Field Made Inside Corners

- > Install wall base and stop in corner. Position another piece of wall base on adjacent wall, without adhesive approximately 1 inch (25.4mm) from the installed piece.
- > Using dividers, place one pin at the top of the installed piece and one pin at the top of the uninstalled piece. Carefully move the dividers downward in a straight vertical motion, allowing the pin of the dividers to follow the profile of the installed piece. Place adequate pressure on the pin to transfer and/or scribe the profile onto the surface of the uninstalled piece.
- > Apply adhesive and roll into position.

Field Made Outside Corners

- > Stop application of wall base approximately 18 inches (457mm) from the outside corner of the wall.
- > Position next piece of wall base at the corner and mark the back of the wall base with a pencil where the bend is required.
- > Lay the wall base on the floor with the back side up. Using a pull type router or gouge tool and a straight edge, make a shallow notch along the pencil line. **The notch should not exceed one-quarter the total thickness of the wall base. Do not extend notch all the way to the top of the wall base.**
- > Reposition the wall base corner on the wall. The corner of the wall should fit firmly into the notch on the back of the wall base.
- > Apply adhesive and roll into position.

Notes



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Customer Service and Technical Service:

In USA, call 1-877-TARKETT (1-877-827-5388).

In Canada, call 1-877-436-6267.



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