Amorim Rubber Flooring Specifications

	Test Method	Amorim Typical Value
Durometer, Shore A, points of hardness	ASTM D2240-97	60
Density, lbs/ft ³	ASTM D297-93 Part A, Section 16.3	64
Compressibility @ 100 psi, %	ASTM F36-95	12
Recovery, % after 100 psi compression	ASTM F36-95	85
Flexibility	ASTM F137-71(1994)	F=1
Tensile, psi	ASTM D412-98a, die C @ 20 ipm	
With grain		600
Against grain		450
Tear, ppi	ASTM D624-98, die C @ 20 ipm	
With grain		150
Against grain		120
Compression Set, %, 22 hours at 158°F	ASTM D395-98, Method B	
25% deflection		40%
50% deflection		30%
Coefficient of Friction	ASTM D1894-95	
Dry		1.33
Wet		1.56
Critical Radiant Flux	ASTM E 648-99	0.1 W/cm ²
Flammability and Flame Spread	DOC FFI-70 CSPC	Pass
Indoor Abrasion, % of Material Loss	ASTM C501-84(1996)	0.24
Resistance to Chemical Attack	ASTM F925-97	
Ammonia		No surface attack or color change
Bleach		No surface attack or color change
Disinfectant		No surface attack or color change
Alcohol		No surface attack or color change
Tide		No surface attack or color change
5% NaOH Solution		No surface attack or color change
Human Sweat		No surface attack or color change
Instrumented Impact,		
absorbed energy at rupture, ft/lbs	ASTM D3763-00	20
Static Load Limit, residual compression	ASTM F970-98	.0016"
Rubber In Compression, % deflection	ASTM D575-91, 500 lb. Load	43
Compression Endurance	10,000 fatigue cycles at 50% displacement	5% set



AMORIM CORK COMPOSITES RUBBER FLOORING MAINTENANCE / INSTALLATION / WARRANTY GUIDE

I. Product Data

A. General Information

1. Rolls

- a) Width: Nominal 48"
- b) Length: Custom cut to length above 30 linear feet
- 2. Tiles
 - a) 36"x36" squares (Tile coverage is 9 square feet)
 - b) 36"x36" interlocked (Tile coverage is 7.5 square feet without the interlocking tabs)
- 3. Other Attributes
 - a) Thickness: Available in 5/32[°], 1/4[°], 3/8[°], or 1/2[°]
 - b) Available in solid black and in standard color fleck densities of 10% or 20% in red, blue, green, gray, tan, eggshell, yellow, purple, orange, or teal fleck on a black base.
 - c) Custom colors blends (Example: 10% red + 10% white = 20% red/white color density) or color densities up to 90% available with minimum incremental purchase.

II. Roll Installation Guide

A. Substrate

1. Suitable substrates include but are not limited to permanently dried concrete and wood.

2. To eliminate the telegraphing effect of defects in the substrate through the flooring, the substrate must be smooth.

3. Remove all dust, dirt, grease, and foreign materials from the substrate.

4. Moisture in the substrate negatively affects any adhesive product and should be eliminated prior to installation.

B. Roll Install Procedure

1. Inspect flooring prior to installation for manufacturing defects, correct color, and size. See warranty statement for details.

2. Make the assumption right now that the walls in the room are not square or straight.

3. A Full glue down installation is recommended for maximum wear and durability, but tape down applications are acceptable for low traffic installations. Substrate quality is equally as important for tape down installations as it is for full glue down installations.

4. Unroll / unpack the flooring in one direction and allow it to equilibrate with the installation environment for a period of 12 hours or more prior to



final installation. This will allow the flooring time to relax as it is stretched somewhat during manufacturing.

5. It is a good idea to roll out the floor now in such a fashion that will minimize excess cuts and waste during the final installation. If a tape down installation method is chosen, the tape can be applied to the substrate as the flooring is being laid out in this step. The top layer of the tape can be exposed when the final cuts are complete.

6. Slightly overlapping the rolls now along the length will help insure tight seams during the adhering process.

7. Cut all rolls to the required length making allowances to run up a wall and / or for overlap on a head seams where required.

8. Begin the final installation by starting with the roll that is against the truest wall. Square this roll with the room.

9. Proceed to butt the next roll against the first roll utilizing the factory edge. All interior seams (those not against a wall) may be butted against the preceding roll using the factory edge. Head seams or other joints may be overlapped and double cut using a sharp utility knife as necessary. 10. Starting with the first roll, fold back half of the roll lengthwise along the wall and apply the adhesive to the substrate using the manufacturers recommended coverage rates and trowel size. Note the adhesive manufacturers "open time" and only apply as much as you can install within this time period. In order to minimize trapped air LAY, don't drop, the flooring back into the adhesive.

11. Trim the roll to the final length. Leaving a slight gap at the walls roughly the thickness of the material being installed is a good idea and can be hidden with most moldings. Under normal interior conditions, the rubber flooring is very stable and won't grow or shrink, but because it's rubber, it can stretch. Leaving the gap allows for this stretch and will help prevent any bunching at the walls.

12. Roll the floor immediately with a 100 lb roller to maximize contact of adhesive with the floor working from the middle of the roll to the wall. 13. Fold back the other half of the first roll and the first half of the second roll and apply adhesive to the substrate under both being careful to not apply too much adhesive at the seams. Too much adhesive will ooze up through the seam.

14. Lay flooring into wet adhesive and roll. When laying down the second roll, the initial overlap allows you to "work" or "walk" the joint back with your hands thereby insuring a tight seam and effectively eliminating oozing adhesive.

15. Repeat this folding, spreading, trimming, and rolling procedure for each consecutive roll until complete.

This information is intended to be used as a guide only and is subject to change without notice. 09/02/2009 Page 2 of 6



16. Roll all seams after the entire floor has been rolled. Use masking tape to hold together seams that appear to have gaps. Do not use duct tape, as it will leave a residue on the floor.

17. Allow the adhesive to cure per the adhesive manufacturer's recommendation prior to excess foot traffic and rolling loads across the flooring. Premature traffic could cause gaps to form in the seams.

III. Tile Installation Guide

A. Substrate

1. As with the rolled goods above, substrate preparation is critical to a good installation.

B. Tile Installation Procedure

1. Inspect flooring prior to installation for manufacturing defects, correct color, and size. See warranty statement for details.

2. A successful installation depends on several factors and your flooring contractor will help you choose the correct installation method based on your needs. Amorim Rubber Flooring Tiles have been successfully installed with "loose laid", tape down, and full glue down applications. The entire floor should be dry laid prior to adhesive application. This eliminates problems associated with the differences in "open time" of different adhesives.

a) Square Cut Tiles

(1) Starting in the center of the room. Snap a chalk line lengthwise down the center of the room.

(2) Begin laying tiles lengthwise along the chalk line towards the opposite wall.

(3) When a wall is reached, it is a good idea to refrain from cutting the last tile to fit until all the tiles are installed.
(4) Continue laying the tiles in rows until the room is complete except for the areas along the walls. Some installers prefer to use a staggered "bricklike" pattern as they feel it minimizes stress between the tiles.

(5) Finish the areas along the walls by cutting in tiles to fill the gaps. Leaving a gap at the wall roughly the thickness of the material being installed is a good idea.

(6) Tiles can be finish cut slightly larger than needed

 $(\sim 5/32")$ and then undercut to ensure a professional result.

b) Interlocking Tiles

(1) Snap a chalk line on the sub-floor 24" from one wall in your room. Snap another chalk line on the sub-floor 24" from an adjacent wall. You now have a set of



perpendicular lines making an approximate 90-degree angle.

(2) Begin laying the interlocking tiles along one of the chalk lines, snapping the locks together as you go making sure the "arrow" of each tile points in the same direction.(3) Leave the perimeter of the room open until the field is installed.

(4) Continue locking the tiles together in successive rows until the field area is covered.

(5) Go back and cut in the tiles along the walls in the room. Leaving a gap at the wall roughly the thickness of the material being installed is a good idea.

(6) This method should maximize the usage of the tiles and the strength of the interlock mechanism while minimizing the cuts that need to be made.

IV. Cleaning and Maintenance Instructions

Note: Sealing the floor is not a necessary step and in fact, it is discouraged in very abusive applications (e.g., Health club free weight area or ice hockey perimeter flooring). However, high color percentage floors (>50%) or areas that experience foot traffic only will greatly benefit by being sealed. A. Maintenance For Un-sealed Floors.

- 1. Amorim Rubber Flooring can be cleaned much like carpeting.
- 2. Daily vacuuming is encouraged to keep dust to a minimum.

3. If the flooring cannot be fully cleaned with a vacuum, a <u>damp</u> mopping with a mild soap and water solution will usually be sufficient.

- a) It is important not to get the flooring too wet as this may have
- an adverse affect on the adhesive system employed.
- b) Change the soap and water solution often!
- 4. Use a wet vacuum to remove excess water from the flooring.

5. Be sure to use a clean mop. This will keep your floor smelling fresh and clean.

B. Post Construction Maintenance For Sealed Floors.

- 1. Sweep the floor clean.
- 2. Dry vacuum to ensure any fine soil is removed.
- 3. Wet scrub floor with TASKI Profi cleaner (6-8 oz / gl of water) using buffer or autoscrubber with a TASKI contact pad or soft nylon brush.

a) TASKI floor care products are manufactured by

JohnsonDiversey[™] and can be found at many janitorial supply houses.

b) JohnsonDiverseyTM customer service hotline is 800-626-5015

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c) Look under institutional floor care products on their website at http://www.diverseylever.com

4. Recover solled solution, rinse, and allow to dry thoroughly (6-8 hours).

C. Initial Treatment

- 1. Apply 3 thin coats of TASKI Vision Matte
- 2. Allow proper drying time before applying next coat.

a) Note: Apply floor finish with synthetic wax mop. While the finish is wet, buff the floor with floor buffer (150-300 rpm) and soft nylon brush. This application drives the finish into the floor and prompts proper sealing and coating of the floor.

D. Daily / As Needed Cleaning

1. Dry vacuum floor thoroughly (daily).

2. Auto scrub or wet mop floor using TASKI Combiplus or TASKI Wiwax as needed. (2-3 oz/gl of water).

a) NOTE: In an office environment, the floor may become scuffed due to heavy foot traffic and may require weekly or as needed spray buffing or dry buffing of the floor with a mint or white pad. In application of spray buffing, use TASKI Wiwax diluted 50/50 with water.

E. Periodic Cleaning As Needed

1. Dry vacuum the floor thoroughly.

2. Wet scrub the floor with TASKI Profi (4 oz / gl). This application is done with an autoscrubber or a buffer and wet vacuum. Use a TASKI purple pad for scrubbing the floor.

- 3. Allow the solution to remain on the floor for at least 5 minutes.
- 4. Wet vacuum soiled solution.
- 5. Rinse and allow to dry (1-2 hours).
- 6. Apply 1-2 thin coats of TASKI Vision Matte using a wet buffing process with soft nylon brush.

F. A Few Tips About Working With Amorim Rubber Flooring

- 1. Use a vacuum with a high CFM to pick up dust.
- 2. Wait for the floor to dry between applications of floor finish or sealer.

3. Apply floor finish (thin coats) with wax mop and follow with a floor buffer using a soft nylon brush.

4. For large areas, use an autoscrubber with a contact pad or soft nylon brush to clean the floor daily.

5. For stripping a rubber floor, use TASKI Ice-It and nylon brush.

6. For poorly maintained floors, it may be necessary to continue cleaning with Ice-It for an extended period.

7. For food areas, daily cleaning should be done with Profi (2-4 oz/gl).



V. Warranty

Amorim Cork Composites recycled rubber flooring is guaranteed to be free from manufacturing defects in material and / or workmanship. If the recycled rubber flooring is found to be defective under normal conditions for a period of five years from the date of receipt (to original purchaser), Amorim Cork Composites will, at it's own discretion, replace the defective material or issue credit not to exceed the selling price of the defective goods. This warranty does not cover installation costs or other related expenses. Although Amorim rubber flooring is used successfully in ice-rink applications, this warranty expressly excludes premature wear caused by ice skates in heavy-use areas (penalty boxes, walkways to and from the ice, etc.). Due to the abusive nature of skate blades on any type of flooring, Amorim Cork Composites highly recommends the use of blade protectors when walking on our floor.