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## **BAMBOO FLOORING**



**FRONT FAÇADE**

### The GammaBamaBoo Collection

#### ***Bamboo Hardwood Flooring***

GammaBamaBoo Collection engineered strip and plank acrylic impregnated wood flooring in Natural and Carbonized Bamboo (vertical or horizontal grain) is manufactured by Gammapar, located in Forest, Virginia, USA.

The wear layer face is sawn cut or rotary cut and is impregnated using methylmethacrylate monomer (liquid plastic) and is then polymerized throughout the thickness of the wear layer by a proprietary process. The thickness of the wood face veneer is 1/8" (nominal) and is processed for hardness (PSI) and durability (scratch and abrasion resistance). The 1/8" wear layer is bonded to a multi-ply hardwood substrate. Flooring shall be 2 2/3" or 4" (wide) x 3/8" (thickness) x 15 1/2" — 47" (random lengths) installed and finished in accordance with instructions and adhesives as supplied by Gammapar.

Each flooring piece's tightly engineered tongue and groove sides and full matched ends are precision milled with micro-bevel edges to subtly define each plank. The standard finish is satin Pedestrian™ Urethane, a durable, scratch-resistant system. As an added benefit, an antimicrobial agent is dispersed throughout the finish. The recommended adhesive is Nydree Group's UP-28™ as supplied by Gammapar. Finished flooring should be cleaned and

buffed 16 to 48 hours after installation is completed using Pedestrian™ Cleaner.

Prior to installation, the sub floor must be tested for moisture using calcium chloride moisture test kits (1 kit per 1,000 sq. ft.). The results will determine the appropriate Gammapar moisture barrier to be used, if any. Moisture test results should be recorded in the job file and reported to the owner. It is essential to check the levelness of the sub floor before starting installation. The sub floor should also be tested for the presence of curing agents and other sealants that can cause adhesive bonding problems.

GammaBamaBoo is as durable as it is beautiful. It has a funny name, but a seriously good look. It's available in the following styles:

**Carbonized Horizontal Bamboo, Carbonized Vertical Bamboo, Natural Horizontal Bamboo, Natural Vertical Bamboo**



**Reception Desk – Bamboo Hardwood Flooring**



**Bamboo – Horizontal Gray**

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### *Specifications*

Dimensions	Width: 2 2/3" or 4" Thickness: 3/8" nominal Length: Random, 15 1/2" to 47"
Edges	Tongue and Groove/Micro-Bevel
Species	<a href="#">Carbonized Horizontal Bamboo</a> <a href="#">Carbonized Vertical Bamboo</a> <a href="#">Natural Horizontal Bamboo</a> <a href="#">Natural Vertical Bamboo</a>
Colors	5 Standard <a href="#">Colors</a>
Accessories	Width: 2 2/3" or 4" Thickness: 3/8" nominal Length: Random, 15 1/2" to 47"
Installation	Above or below grade, over suitable wood subfloor or concrete. May be installed over radiant heat systems—call for technical assistance. Please read and understand the installation and maintenance instructions prior to installing any wood floor.

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## **LOW VOC PAINT**



FRONT FAÇADE

### Low VOC Paint

#### **Low VOC Paints & Finishes**

##### **Summary**

Have you ever had to flee your house for a few days because it was being painted? That may be a thing of the past thanks to low-VOC paint. Low-VOC paint is odor-free and contains little or no volatile organic compounds (VOCs). Paints and finishes off-gas VOCs, which can diminish the quality of indoor air and be detrimental to your health. Today, manufacturers of products containing VOCs are using alternative manufacturing techniques that dramatically reduce or eliminate the use of these harmful compounds.

##### **Details**

In conventional paint, VOCs act as a carrier or solvent for the active ingredients, or the paint pigment. However, manufacturers can now use innovative production methods to develop non-toxic carriers and solvents. The key to low-VOC paint is a new water-based latex base. VOCs can be eliminated from the paint completely if color tinting is not used. If color tint is used, the VOC level rises to approximately 10 grams per liter, an insignificant amount when compared with conventional paint.

##### **Installation**

Low-VOC paint is applied the same way as conventional paint-with a brush, roller, or spray gun. No thinning of the paint is necessary. The drying time is slightly less, so the painter to re-coat sooner. As with traditional paint, the painter must be careful not to roller or brush over a recently applied coat that is still tacky.

##### **Benefits/Costs**

Low-VOC paints have little odor and little or no VOCs, so they are excellent for use in buildings where it is desirable to have very low levels of toxicity, such as hospitals, schools, and the homes of those who are chemically sensitive. The performance, hide-ability, coverage rate, ease of application, finished look, and durability are comparable to that of conventional paint. Application is relatively easy, and the paint is dry to touch in approximately 30 minutes and dry enough for a second coat in 2 hours. Equipment cleaning after painting is easily achieved with warm water and soap. Painted surfaces can be cleaned when the paint has sufficiently hardened.

Costs of low-VOC paints are comparable to good quality conventional paint.



Low VOC Paint & Sealants have been used in Project.

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# GEOTHERMAL HEAT PUMPS



FRONT FAÇADE

## Geothermal Heat Pumps

### The Heating Cycle:

**A - Ground loop:** An environmentally safe water/antifreeze solution is pumped through a system of buried, polyethylene loops. As it courses through the system, the solution absorbs the earth's heat.

**B - Pump:** The pump forces the water/antifreeze solution through the buried loop system.

**C - Refrigerant loop:** Liquid refrigerant flows through this tube, headed toward the evaporator.

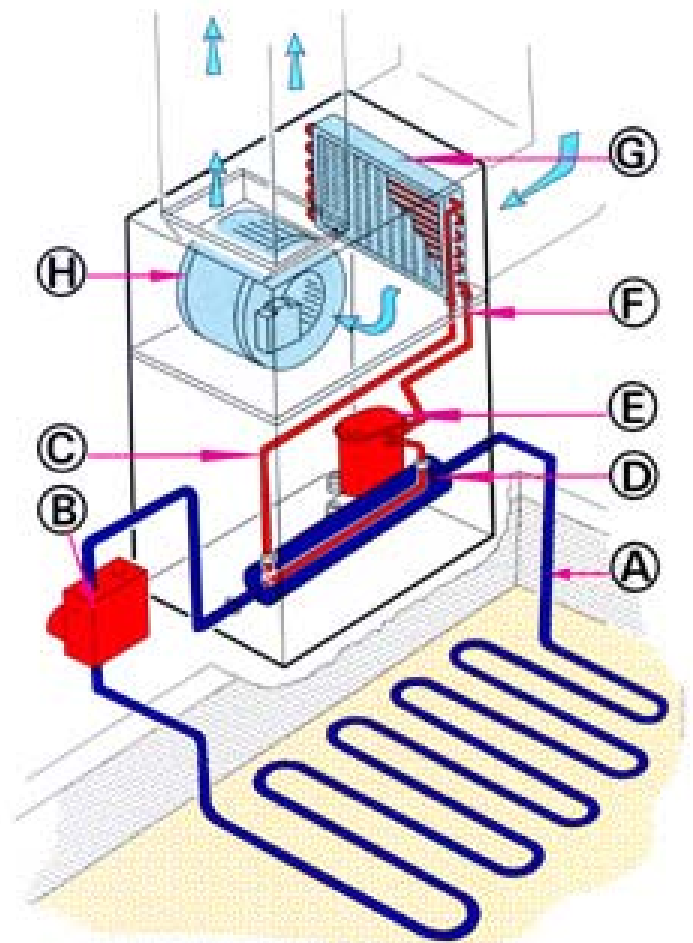
**D - Evaporator:** As the liquid refrigerant flows through the evaporator (at this point, it's in a tube within a tube) and absorbs the heat of the ground water, it changes state from liquid to a gas.

**E - Compressor:** In the compressor, gas from the evaporator is pressurized, raising the gas to a temperature of 180 degrees.

**F - Refrigerant loop outlet:** The 180-degree gas is conveyed from the compressor to the radiator.

**G - Radiator:** As the heated gas from the refrigerant loop circulates through the radiator, the fins of the radiator absorb the heat of the gas through conduction.

**H - Distribution fan:** This fan pulls air over the radiator fins which have absorbed heat from the compressed gas. The warm air is then distributed throughout the house, via the house's ductwork system. The gas in the loop system, as it loses its heat, changes back to a liquid, and the cycle starts all over again.



Cycle Diagram



**During Installation - Mechanical Room/Heat Pump**



**After Installation - Mechanical Room/Heat Pump**

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## CARPETING

indoor air and be detrimental to your health. Today, manufacturers of products containing VOCs are using alternative manufacturing techniques that



FRONT FAÇADE

### Eco Solution - Carpeting

**100% eco solution Q (R) premium branded nylon 59% yarn dyed - 41% solution dyed**

style name	<b>sliver ultraloc(R) pattern</b>
style number	<b>5A021</b>
color name	<b>RADIANT FLAX</b>
color number	<b>21755</b>
construction	<b>multi – level pattern loop</b>
fiber product	<b>100% eco™ solution Q(R) premium branded nylon 59% yarn dyed / 41% solution dyed</b>
protective treatment(s)	<b>S.S.P. (R) Shaw Soil Protection</b>
gauge	<b>1/12</b>
stitches per inch	<b>11.0</b>
tufted weight	<b>28 ozs. / sq. yd.</b>
finished pile thickness	<b>0.126 inches</b>
average density	<b>8000 ozs. / cu. yd.</b>
weight density	<b>224000</b>
dye method	<b>yarn dyed / solution dyed</b>
secondary backing	<b>ultraloc(R) pattern</b>
tufted pattern repeat	<b>12' W X 12' L</b>
warranty	<b>lifetime commercial limited</b>
collection	<b>fragments</b>
coordinating products	<b>broadloom: diced / slipfit / shards, tile: slice EW24 / bre...</b>

#### Manufacturer's Product Specifications

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Manufacturer's Product Imaging



Pattern detail - Front

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Pattern detail - Backing



Principal's Office 2



Principal's Office 1

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