

## 1.- TECHNOLOGY.

### 1.1.- The best vinyl on the market in terms of resistance and stability.

**1.1.1.- Abrasion resistance:** vinyl flooring is highly resistant due to the chemical composition of the protective coating. Traditional vinyl is less resistant. However, L'Antic has improved this feature, using a protective layer of polyurethane with excellent results. These vinyls are classified under the **EN 10874** standard as class 23/32 for the Project series, equivalent to an AC3 domestic use / AC4 commercial use, and 23/33 for the CONTRACT and OAK series, equivalent to an AC3 domestic use/AC5 commercial use. Domestic use includes dining rooms, halls or living rooms while commercial use includes classrooms, small offices or shops in the case of AC4, and department stores, schools or lobbies in the case of AC5.

**1.1.2.- Impact resistance:** Linkfloor models have a high level of resistance to impacts. Results of 7.4 Kgf/mm<sup>2</sup> are obtained for the **EN 1534** standard; this is equivalent to an e-value (coefficient of restitution) close to 1, when compared to the **ISO 10545-5** ceramic standard.

**1.1.3.- Resistance to water:** in accordance with the **EN 313** standard, it offers excellent water resistant surface. Water neither affects the product nor filters down through the joints, making it suitable for wet areas.

**1.1.4.- Fire resistance:** performs well in reaction to fire. In accordance with the **EN 13501-1** standard, it is classified as Bfls1 and is therefore suitable for use in hotels, conference rooms, offices,etc.

**1.1.5.- Resistance to stains and chemical agents:** 100% washable and guaranteed exceptional performance against chemical agents and stains. Fully complies with the requirements of the **EN 438:2005** standard, which defines the stain resistance of more than 40 substances, including tea, coffee, milk, citric acid, acetone, alcohol, fruit juice, detergents, bleach and colourants.

**1.1.6.- Dimensional stability:** it offers excellent dimensional stability, guaranteeing high quality with a value of -0.03% in the **EN 434** standard.

**1.2.- Anti-static:** Due to its chemical composition, vinyl does not generate static electricity in accordance with the **EN 1815** standard.

**1.3.- Sound reduction:** The composition is designed to offer major reductions in noise levels. Whether dealing with reflected or transmitted sounds, the results are outstanding thanks to the layer of elastic vinyl. Excellent performance suitable for use in hotels, nightclubs or zones requiring a significant reduction in noise levels. This performance is verified by the results,  $\Delta LW = 16$  a  $\Delta LW = 21$  dB for the **EN 140** standard.

**1.4.- Assembly:** The Lock system combined with the dimensions of the pieces make the flooring easy-to-install. Moreover, the perfect alignment of the joints combined with the elastic nature of the vinyl gives the impression of a jointless floor.

**1.5.- Comfort:** thanks to its chemical composition and manufacturing process, vinyl offers great warmth. Surface temperature is a critical feature in providing comfort. As the flooring is free of dust mite, this helps to alleviate respiratory problems and allergies.

## 2.- COMPARATIVE ADVANTAGE OVER TRADITIONAL CARPET.

## 3.- APPLICATIONS.

	CARPET	LINKFLOOR (SERIE CONTRACT)
<b>TYPE OF CLEANING</b>	With vacuum cleaner	With water (mopping) <b>Note.</b> Linkfloor systems are designed for installation in large spaces, with large surface areas. Therefore, industrial cleaning equipment may be used in these types of facilities.
<b>SPILLAGE</b>	Zero resistance to liquid spills, wines, etc. Resistant to spills of thick grease and oils, which are easily mopped up.	100% resistance to liquid spills, wines, etc. Resistant to spills of thick grease and oils, which are easily mopped up.
<b>EFFECTS AND BONDING OF VAPOURS AND ODOURS</b>	Affected by all kinds of filtrations and bonding of substances including smoke, sweat, etc., resulting in unpleasant odours	Not affected by any kind of bonding of unpleasant odours.
<b>BACTERIA AND MITES</b>	Retains various types of mites and bacteria. Given the difficulty of cleaning carpets not all microscopic organisms can be removed.	ANTI-BACTERIAL because mites and bacteria cannot survive on vinyl flooring due to its structure, composition and the ease with which it can be cleaned.

This product is recommended for use in commercial zones including shops, restaurants, sports centres, offices, event stands, nightclubs, airports, stations, etc. It is also ideal for residential use in any living area, including humid areas such as kitchens or bathrooms.

There is also the option of covering the surface with an additional coat of varnish, which provides Linkfloor with further advantages such as:

- 100% insulation from substrate (laboratories, operating theatres and hospital aseptic rooms and clean rooms for the handling of organic elements, cosmetics, etc.)
- Shops or workshops in contact with vehicle tyres.
- Additional resistance to scratches for industrial areas

For further information, please direct enquiries to the following e-mail address: [linkfloor@anticcolonial.com](mailto:linkfloor@anticcolonial.com)

## 4.- LEGISLATION AND CERTIFICATION.

Linkfloor vinyl complies with some of the most demanding European regulations and with the currently applicable legislation. As evidence of the above the product bears the following certificates and/or seals of approval:

#### 4.1.- U stamp

Certified 100% virgin vinyl in compliance with German regulations with regards to technical approval of domestic construction in Germany. The German Institute of Civil Engineering, Deutsche Institut für Bautechnik (DIBt) requires that all coatings for textile and elastic flooring comply with a series of values for volatile organic compound (VOC) emissions which guarantee that no user of a building could be affected by the emission of hazardous substances.

For this purpose the Committee for the Sanitary Assessment of Construction Products (AgBB), formed by health and environmental authorities of the federal and regional German governments, developed a series of specific requirements. Amongst their decisions, the Committee agreed that floor coatings must also undergo annual future inspections after technical approval of the initial construction work.

#### 4.2- A+ Stamp

This classification in accordance with French decree **2011-321** came into effect on 1 January 2012. It considers 4 possible classes, ranging from **A+** (low or non-existent emissions) to C (high emissions). In France this stamp is obligatory for construction, decoration and furniture products, and for other countries it has become a point of reference since the level of requirements is ten times stricter than those of current legislation. Linkfloor vinyl is classified as **A+**.

#### 4.3 CE Marking

The CE marking is the symbol for certain products that comply with European technical harmonisation legislation. Its main objective is to testify the conformity of a product that meets all the EU requirements imposed on the manufacturer by the directives of the CE marking. THE EUROPEAN REGULATION ON CONSTRUCTION PRODUCTS, 305/2011, establishes that, in order to distribute accredited construction products in the EU market, these products must carry the CE marking.

Under this directive, it must be stressed that Linkfloor vinyl complies to current legislation **DIN EN 717-1. Formaldehyde emissions certificate** with values below 0.05 ppm.

#### 4.4 ASTM Regulation

ASTM International is one of the largest organisations in the world in the development of voluntary consensus standards. ASTM is a non-profit making organisation which provides a forum for the development and publication of voluntary consensus standards, applicable to materials, products, systems and services. Members of ASTM, who represent producers, users, consumers, the government and the academic world in more than 100 countries, prepare technical documents that form the base for manufacturing, management and procurement, and for the preparation of codes and regulations.

In our models, the parameters tested include the **ASTM F1265** Resistance to impact, **ASTM G21** Anti-fungal test, **ASTM C1028-96** Static coefficient of friction and **ASTM E662-09** Smoke density.

#### 5.- WARRANTY

L'ANTIC COLONIAL guarantees its LINKFLOOR products for a period of 15 years from the purchase date.

#### 6.- Technical specifications

Features	Test	LINKFLOOR CONTRACT	LINKFLOOR OAK	LINKFLOOR PROJECT
<b>Classification</b>	EN 10874	23/33	23/33	23/32
<b>Thickness (mm)</b>	EN 430	5	5.5	5
<b>Weight (kg/m2)</b>	EN 430	7-8.5 depending on model		
	EN 600-1:99	0.068 mm	0.068 mm	0.068 mm
<b>Abrasion resistance</b>	EN 600-2:99 ASTM D4060-10	1.80 mm3 S-42, 500 g and 1000 cycles	1.80 mm3 S-42, 500 g and 1000 cycles	1.80 mm3 S-42, 500 g and 1000 cycles
<b>Fire resistance</b>	EN 13501-1	Class BFLs1 (B1)	Class BFLs1 (B1)	Class BFLs1 (B1)
<b>Stain resistance</b>	EN 438	Grade 5 (Groups 1, 2 and 3)	Grade 5 (Groups 1, 2 and 3)	Grade 5 (Groups 1, 2 and 3)
<b>Dimensional stability</b>	EN 434	-0.01%	-0.01%	-0.01%
<b>Curvature</b>	EN 434	0.20%	0.20%	0.20%
<b>Impact sound</b>	EN 140	ΔLw=21 dB ΔLw=1.3 dB	ΔLw=16 dB	ΔLw=16 dB
<b>Environmental sound</b>				
<b>Impact sound acoustic insulation</b>	ASTM E492	57 IIC	57 IIC	57 IIC
<b>Cigarette burn resistance</b>	EN 438 -2	Class 1	Class 1	Class 1
<b>Smoke density (burning)</b>	ASTM E662-09 ASTM E662-09	This sample passes the requirements of 450 or less.	This sample passes the requirements of 450 or less.	This sample passes the requirements of 450 or less.
<b>Critical radiant flux</b>	ASTM E648-08	Exceeds Class 1	Exceeds Class 1	Exceeds Class 1
<b>Impact resistance (Kgf/mm2)</b>	EN 1534	7.4	7.4	7.4
<b>Impact resistance</b>	ASTM F1265	No damage from drop height of 40 inches	No damage from drop height of 40 inches	No damage from drop height of 40 inches
<b>Slip/slide resistance</b>	EN 12633	Class 1	Class 1	Class 1
<b>Determination of coefficient for static friction when wet</b>	ASTM C1028-96	0.69	0.69	0.69
<b>Determination of coefficient for static friction when dry</b>		0.67	0.67	0.67
<b>Flexibility (mm)</b>	EN 435	10	10	10
<b>UV resistance</b>	ISO 105	≥ Grade 8	≥ Grade 8	≥ Grade 8
<b>Formaldehyde emissions</b>	EN 717	EO	EO	EO
<b>Water resistance</b>	EN 313	0% swelling	0% swelling	0% swelling
<b>Thermal resistance</b>	EN 12664	0.080 m <sup>2</sup> K/W	0.080 m <sup>2</sup> K/W	0.080 m <sup>2</sup> K/W
<b>Anti-fungal test</b>	ASTM G21	No observed growth. 28 days	No observed growth. 28 days	No observed growth. 28 days
<b>Locking strength</b>	ISO 24334	> 500 kg/ml	> 500 kg/ml	> 500 kg/ml