

generation of contract floors

Heavy requirements are placed on floors in public spaces: flooring must withstand heavy and abrasive wear, it must be safe, easily maintained and incur low lifecycle costs. On the other hand, forming the basis for the overall look of the space, the floor is a key part of the décor. The warmth of natural wood is often sought for interior décor in public spaces; in order to support the corporate image, add comfort to business premises, or create a cosy atmosphere in rest homes – the classic beauty of wood suits a vast range of spaces.

LifeLine LT flooring combines the unique features of a new innovative material with the appearance of wood and warm tones in a floor which serves users of public spaces while being durable, long-lasting and easily maintained.

What's more, LifeLine is free of PVC and plasticisers. In terms of the well-being of both people and the environment, it is the sustainable choice.





High-tech performance and the natural appearance of wood strike the perfect balance

LifeLine LT provides classic elegance in its state-of-the-art high-tech flooring, with-standing the hard wear to which public spaces are subject, even that caused by pallet- and fork lift trucks e.g. on commercial premises. The flooring is extremely damp- and chemical-resistant. It is also comfortable underfoot and acoustically pleasant. LifeLine LT floors are practically emission-free, forming a basis for pure indoor air.

Typical applications include commercial premises, restaurants, cafes, hotels, hospitals, healthcare centres, assisted living, educational and training premises as well as offices.

Whatever the application, LifeLine LT creates a welcoming atmosphere – without compromising on durability.

Cover picture, product nr 1142





Deck striping creates a vivacious floor style. Striping can be created using a black welding rod or LifeLine strips, whose width can be determined by the designer, see picture on page 5.

LifeLine LT provides the possibility of the concept-based interior design of commercial premises in an ecologically sustainable way, while preserving the style and atmosphere of a wooden floor.



Feel good from opening till closing

In business and retail, a pleasant working environment with user friendly floors is a must for both customers and staff. Underfoot, LifeLine LT feels good and offers better antifatigue properties than the stone materials often used on commercial premises; it is therefore less tiring, for example for those who have to stand a long time.

It withstands the moving of shop furnishings and doesn't change tone with time. The surface requires no polishing – after installation or later – enabling the immediate productive use of the premises.

Due to its advanced ionomer surface, LifeLine LT withstands heavily abrasive use, and is thus more dirt-resistant and easy to clean.



Safety and easy maintenance

Hygiene and ease of care are emphasised in hospitals, outpatient clinics and other care sector facilities. LifeLine LT is resistant to a very broad range of chemicals, acids, alkalis and disinfectants, and does not react with rubber. In addition, it is MRSA tested. Dirt cannot penetrate its ionomer surface, enabling easy floor care.

Its lightly embossed surface provides an antislip, flexible floor underfoot. This PVC- and plasticiser-free covering is practically emission-free: it releases no harmful substances into indoor air. In case of fire, LifeLine is fireresistant and doesn't generate toxic combustion gases such as, for instance, hydrogen chloride or hydrogen cyanide.

LifeLine is a sensible investment in safety, employee welfare and high patient comfort, which can even have a positive effect on the recovery process.

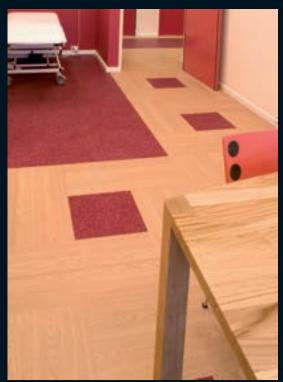
LifeLine LT's warm tones create a cosy feeling e.g. in waiting rooms, receptions and hallways as well as high-quality hospital accommodation. In assisted living and retirement homes, a cosy, pleasant environment ease the process of settling into new surroundings.







LT 1142, tile 5058

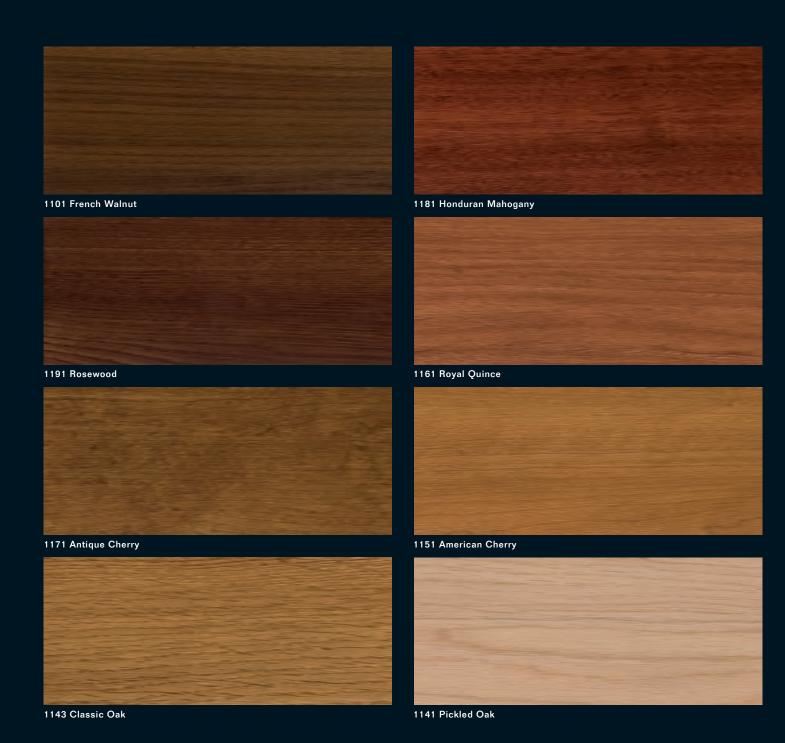


LT 1141, tile 5048

LifeLine product family includes various flooring and design options, which combine to create individual floors either creatively patterned or for a special purpose – for instance, to help in identifying various departments and sections of hospitals and for giving directions.

In the floors pictured, LifeLine LT and a 50x50cm LifeLine tile are combined into an impressive whole.

LifeLine LT



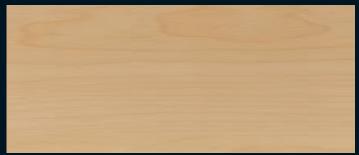
Colours may have changed slightly in printing.



1142 Golden Oak



1122 Canadian Maple



1121 Scandinavian Maple

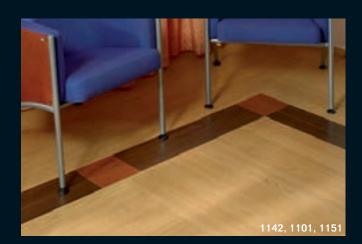


1131 Smoked Ash

The LifeLine LT selection offers a wealth of tones for creating various atmospheres: refreshing and light maples, lightened ash, traditional mid-tone oak patterns, warmer reddish cherry tones and dark and full-bodied mahogany, rosewood and walnut.

Part of LifeLine family

In addition to LifeLine LT, the LifeLine family includes LifeLine tiles (50x50 cm) and LifeLine CS sheet flooring. They all have the same thickness, they are installed using the same adhesives and the same methods apply for their maintenance and care. They are easily combined for attractive floor designs either by using various compositions within one collection or by creating interesting combinations of different products.



LifeLine LT

Product Information

Product LifeLine LT Contract luxury tile

PVC- and plasticiser-free flooring for public spaces.

lonomer impregnated wear layer.

Application Public spaces subject to heavy wear e.g. shops, of-

fices, hospitals, retirement homes, schools and day

care centres.

EN 685: 21-43

Product standard EN 14565

Technical specification

Tile size	EN 427	914.4 x 101.6 mm 36 x 4 "
Weight	EN 430	3,400 g/m ²
Thickness	EN 428	2.0 mm
Delivery packing		2.8 m ² (30 tiles)

Product Properties

Property	Test method	Result	
Fire resistance	EN 13501-1	B _f - s1	
Emissions	FLEC	M1	
Residual indentation	EN 433 (2,5 h)	< 0.05 mm	
Dimensional stability	EN 434 (6h 50 °C)	< 0.2 %	
Effect of castor chair	EN 425	No effect	
Abrasion resistance	EN 660-2	Group T (<2.0 mm³)	
Colour fastness	EN 105 – B02	7	
Slip resistance	EN 13893	DS (>0.3)	
Flexibility	EN 435	40 mm	
Electrical propensity	EN 1815	<2 kV (antistatic)	
Underfloor heating		Suitable (max temp. +28 °C)	
Chemical resistance		Excellent resistance to acids, alkalis and solvents.	
Bacterial growth		Does not act as substrate for bacterial growth. MRSA tested.	

Quality Management System Certified by DNV





Manufacture certificated in accordance with ISO 9001 quality system standard and ISO 14001 environmental management standards.

Resistance to Chemicals

Because of its ionomer-impregnated wear layer LifeLine LT has an excellent resistance to various chemicals, acids, alkalis and solvents. The material also does not react with rubber.

Effect of chemicals

Test periods were 2 hours and 24 hours, after which the chemical was washed off and the results assessed.

X - No effect V - Slight effect

Chemical	2 h	24 h
Acids		
HCI 10 %	Χ	Χ
Citric acid 10 %	Χ	Χ
Sulphuric acid 10 %	Χ	Χ
Alkalis		
Lye (sodium hydroxide10 %)	Χ	Χ
Soda (sodium carbonate 10 %)	Χ	Χ
Ammonia 5 %	Χ	Χ
Alcohols		
Ethyl alcohol 30 %	Χ	Χ
Ethyl alcohol 70 %	Χ	Χ
Ethyl alcohol 90 %	Χ	Χ
Isopropyl 70 %	Χ	Χ
Aromatic substances		
Phenol	Χ	Χ
Xylene	Χ	V
Unleaded gasoline	Χ	Χ
Crude oil	Χ	Χ
Light fuel oil	Χ	Χ
White spirit	Χ	Χ
Miscellaneous		
Wine vinegar	Χ	Χ
Acetone	Х	Χ
Bleach solution (5 %)	Χ	Χ
Olive oil	Х	Χ
Kerosene	Х	Х
Silver nitrate (5%)	Χ	Χ
Chlorhexidin	Χ	Χ





Installation and maintenance

Installation

LifeLine LT is made of a wholly new flooring material with a range of features unrivalled by its competitors. It can be installed using conventional installation methods, but for best results it is important that you follow the manufacturer's instructions. Installation should be performed using an adhesive approved by Upofloor.

During installation, the relative humidity of the concrete floor should not exceed RH 85% and the installation temperature should be at least 18 °C. The adhesive must be applied using a fine-toothed trowel and the amount of adhesive should be around 200–250 g/m², depending on the subfloor, adhesive and laying conditions. The reverse side of the tiles has been roughened to maximise adhesion. The tiles must be installed using the semi-wet gluing method. Please note that the open time may vary greatly, depending on the subfloor and conditions. Ensure that the glue has been spread evenly over the backing of the tile.

Do not install on top of old flooring.

The tiles must be installed using an adhesive approved by Upofloor (see the list of approved adhesives at www.lifelinefloors.com or the instructions on the packaging.)

The tiles must be rolled before the adhesive dries, using a roller of 45-70kg. Rolling will prevent the appearance of adhesive application lines and indentations left by furniture and traffic on the finished surface. Prevent traffic across the floor and do not place any furniture on the floor until the adhesive is dry.

Upofloor is not responsible for the floor's performance if the aforementioned instructions are not followed.

Maintenance

LifeLine LT is easily maintained by hand or with machines. The compact and hard surface does not scratch easily, nor can dirt penetrate the wear surface. The surface's friction is low, so that mopping is easier, and furniture can be shifted easily. The slightly embossed surface structure however means that the floor is safe for walking.

Initial cleaning

Wet cleaning methods should not be used until around a week following the floor's installation, to allow the adhesive time to dry. First remove loose dirt. Wash the floor using a mild alkaline or alkaline detergent solution and rinse. You may use a combination machine or a floor-care machine with red pads, or a scrubber. Avoid excessive scrubbing and excessive use of water.

Polishing is not required.

Periodic maintenance

First remove loose dirt. Depending on how soiled the floor is and the size of the room, use a moist or wet cleaning method or a machine with red pads or medium hard brushes. SHS machines with a conditioner are also suitable. Use a neutral or mildly alkaline cleaning solution and conditioner.

LifeLine LT in a nutshell

Application

Classification according to EN 685:21-43 (from domestic use to light industrial use). Flooring tile for public premises subject to heavy wear: department stores, shops, hospitals, offices, schools, day care centres, assisted living.

Composition

LifeLine LT tiles are made of 80 % natural minerals and 20 % thermoplastic polymers, with an ionomer impregnated wear layer. Thanks to its heterogeneous structure, LifeLine offers optimal durability, easy maintenance and installation, and environmental friendliness.

Wear resistance

LifeLine LT is suitable for heavy duty use in public places and has a long service life. Thanks to its ionomer impregnated wear layer, it is highly scratch- and wear-resistant. LifeLine belongs to the best wear resistance group T (EN 660-2 – Frick-Taber test).

Fire Resistance

LifeLine LT does not support combustion in fire situations, nor does it generate toxic combustion gases such as hydrogen chloride or hydrogen cyanide. Because of its low flame spread, low smoke, and low heat production, the flooring belongs to fire class $B_{\rm fl}$ – s1 according to standard EN 13501-1.

Installation

LifeLine tiles can be installed with commonly-used water-based acrylic dispersion adhesives. The backing of the tiles has been roughened for better adhesion. Due to their size (36 x 4 inches) the tiles are handy and can be installed quickly, with minimal wastage at only 0-3%. If the flooring is damaged, it can be repaired easily one tile at a time.

Maintenance

Maintenance is easy and low-cost, due to LifeLine's compact ionomer impregnated wear layer, which dirt cannot penetrate. LifeLine is also outstandingly resistant to chemicals, such as acids, alkalis and solvents, and does not react to rubber.

The flooring does not require polishing, which helps to keep its lifecycle costs low. Construction work grime is easily removed after installation, allowing the premises to pass into productive use quickly.

Safety

LifeLine LT is PVC and plasticiser -free and emits no substances hazardous to health. Its indoor emissions in general are extremely low.

The material does not act as substrate for bacterial growth and has been MRSA tested.

LifeLine is an antistatic flooring (electrical propensity <2 kV according to EN 1815).

It is fire-resistant, smoke-resistant and does not emit dangerous fumes. Its lightly embossed surface provides high slip resistance (EN 13893: >0.3). The product's manufacture complies with ISO 9001 and ISO 14001.

Environment

LifeLine is made of safe raw materials and its production is ecologically sound. It contains no halogens, chlorine, plasticisers, phthalates, stabilisers or heavy metals. The new production line features lower energy consumption and the product's material is recyclable during production, can be disposed of by burning and can be utilised as energy producing waste. LifeLine's emissions to indoor air are low and only small amounts of water and chemicals are required for cleaning. It has a long service life and low lifecycle costs.







The Finnish company Upofloor Oy, part of Karelia-Upofloor Ltd, manufactures and markets floorings for both public premises and homes. Upofloor was established in 1955 and is the market leader in its field in Finland. Upofloor operates in accordance with an ISO 9001 based quality management system and an ISO 14001 based environmental management system. Upofloor strives for continuing growth by investing in the future. Its new generation of products focuses on special high-technology floor coverings. The most recent result of intense product development is LifeLine™, which will change our view of traditional heavy duty floorings. It is an innovative product for conditions that require extreme strength and durability without compromising the environment.



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> www.upofloor.com www.lifelinefloors.com