#### Technical Data

Classification	Standard	Reflections 30	Reflections Click 55
Product type	EN ISO 10582	Heterogeneous flooring, LVT Dryback	Heterogeneous flooring, SPC
Domestic classification	EN ISO 10874	23 Heavy	23 Heavy
Commercial classification	EN ISO 10874	31 Moderate	33 Heavy
Industrial classification	EN <b>I</b> SO 10874		42 General
Technical Characteristics	Norm	Reflections 30	Reflections Click 55
Total Thickness	EN ISO 24346	2 mm	7 mm (include 1.5mm IXPE underlayment)
Wear Layer Thickness	EN ISO 24340	0.30 mm	0.55 mm
Wear Resistance	EN 660-2	Т	Т
Surface Treatment		PUR	PUR
Bevelled Edges		No Bevel	4sides
Installation Method		Glue-Down	Click
Performance For CE Marking	Norm	Reflections 30	Reflections Click 55
Declaration of Performance	EN 14041	Yes	Yes
Technical Performance	Norm	Reflections 30	Reflections Click 55
Dimensional Stability	EN ISO 23999	≤ 0.25%	≤ 0.10%
Curl Resultant To Heat	EN ISO 23999	≤ 2mm	≤ 2mm
Residual Indentation	EN ISO 24343-1	≤ 0.10 mm	≤ 0.10 mm
Reaction To Fire	EN 13501-1	Bfl-s1	Bfl-s1
Furniture Leg	EN ISO 16581	No Damage	No Damage
Castor Chair	EN ISO 4918	No Damage	No Damage
Impact Sound Reduction - ΔLw	EN ISO 717/2	4dB	19dB
Peeling Resistance	EN ISO 24345	≥ 50N/50mm	≥ 75N/50mm
Thermal Resistance	EN ISO 10456	0.02 m <sup>2</sup> •K/W	0.05 m <sup>2</sup> •K/W
Colour Fastness To Light	EN ISO 105-B02	≥ 6	≥ 6
Resistance To Chemical	EN 423	Class 0	Class 0
Slip Resistance	DIN 51130	R10	R10
Slip Resistance	EN 13893	Class DS (µ ≥ 0.30)	Class DS (µ ≥ 0.30)
Underfloor Heating		Suitable (Maximum 27°C)	Suitable (Maximum 27°C)
Sustainability Performances	Norm	Reflections 30	Reflections Click 55
TVOC Emissions	AgBB	TVOC28≤1.0mg/m³	TVOC28≤1.0mg/m³
Formaldehyde Emission	EN 717-1	E1	E1
Recycled Content		Yes	Yes
Phthalate - Free		Yes	Yes
Dimensions and designs		Reflections 30	Reflections Click 55
Plank		22.9x121.9cm/Plank, 18Planks/Box,	23.0x150.0cm/Plank, 5Planks/Box,
		5.02m²/Box, 60Boxes/Pallet	1.73m²/Box, 56Boxes/Pa <b>ll</b> et
Tile		30.5x61.0cm/Tile, 24Tiles/Box,	45.72x91.44cm/Tile, 4Tiles/Box,
		4.47m²/Box, 72Boxes/Pa <b>ll</b> et	1.67m²/Box, 58Boxes/Pa <b>ll</b> et
		45.6x91.2cm/Tile, 12Tiles/Box,	
		4.99m²/Box, 60Boxes/Pa <b>ll</b> et	

















www.hualifloors.com

Huali Factory in China

Taizhou Huali New Materials Co., Ltd. Zhangdian Industrial Zone, Jiangyan District, Taizhou, Jiangsu, China

#### Huali Factory in USA

3937 Old Federal Road, North Chatsworth, Georgia 30705, USA

#### Huali Factory in Vietnam

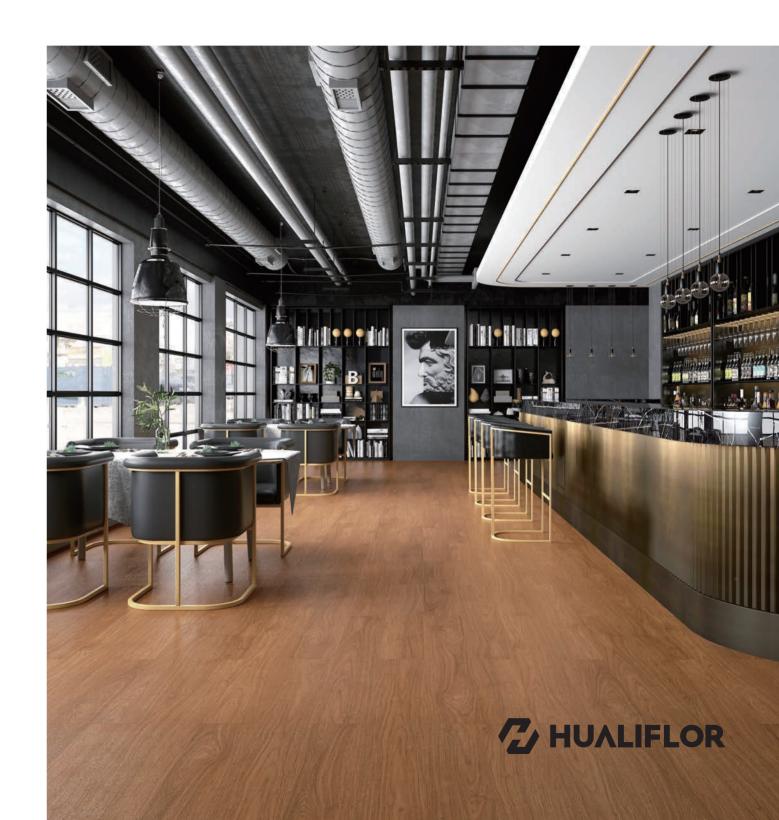
Lot CN2,Zone A,Diem Thuy Industrial Park,Hong Tien Ward, Pho Yen City,Thai Nguyen Province, Vietnam

#### Huali Factory in Thailand

No.168 Moo.3 Mapkha Sub-District, Nikomphattana District, Rayong Province.21180

# Reflections

BEYOND YOUR IMAGINATION,
THE NEXT GENERATION OF VINYL FLOORING



# Taking Vinyl Flooring to The Next Level

#### Next generation vinyl flooring since 2002

Huali Floors was established on April 15th, 2002 as Taizhou Huali Plastic Co. Ltd. We are located in Taizhou City, in the Shanghai metropolitan area. Our vision has always been to provide sustainable, high quality vinyl floors to customers all over the globe. 18 years later, this vision has become reality: Up to 2020, we produce a capacity of 1,800 shipped containers every month and export them to more than a dozen countries and regions.

Our company covers an area of 390,960 square meters including a production area of 360,000 square meters. These numbers make us the world's largest producer of vinyl flooring. But Huali Floors is not just about numbers. We are a company with values and stand for quality, design, reliability, internationality, responsibility and innovation



#### Responsibility

We take responsibility for environment by investing high amounts in sustainable production.



#### Design

More than 4,000 designs, amongst them 2,000 exclusive designs, for a unique visual appearance.

# The World's Largest Producer of Vinyl Flooring





#### Internationality

We export our products all around the globe with a monthly production capacity of 1,800 shipped containers.





#### Quality

We deliver high quality, resistant products that run through stringent quality controls.

#### We pave the world for a better living

Life is full of changes and challenges. Every day offers you a new opportunity to grow and realize yourself. Every day marks another step in your walk of life. But to grow, you need a solid ground you can rely on. A stable base that makes you appreciate every step you take, that gives you warmth and confidence and makes you feel comfortable. And this is, what Huali Floors is about –we create floors for you to take the next step in this challenging world. We take vinyl flooring to the next level.

#### Internationally certified products of first-class quality

Our product range includes glue-down LVT, loose-lay LVT, regular LVT, Rigid LVT (SPC) and WPC with click system of 2G, 5Gi and 5G-C. Huali Floors has been awarded with different international certificates that prove the quality of our products, e.g. ISO9001, ISO14001, Greenguard and many more. For stringent quality control and monitoring the content of VOC, heavy metal and other related chemical materials, we invested 2 million USD to build a large Testing Center. Huali Floors does its best to protect environment by acknowledging social responsibility.

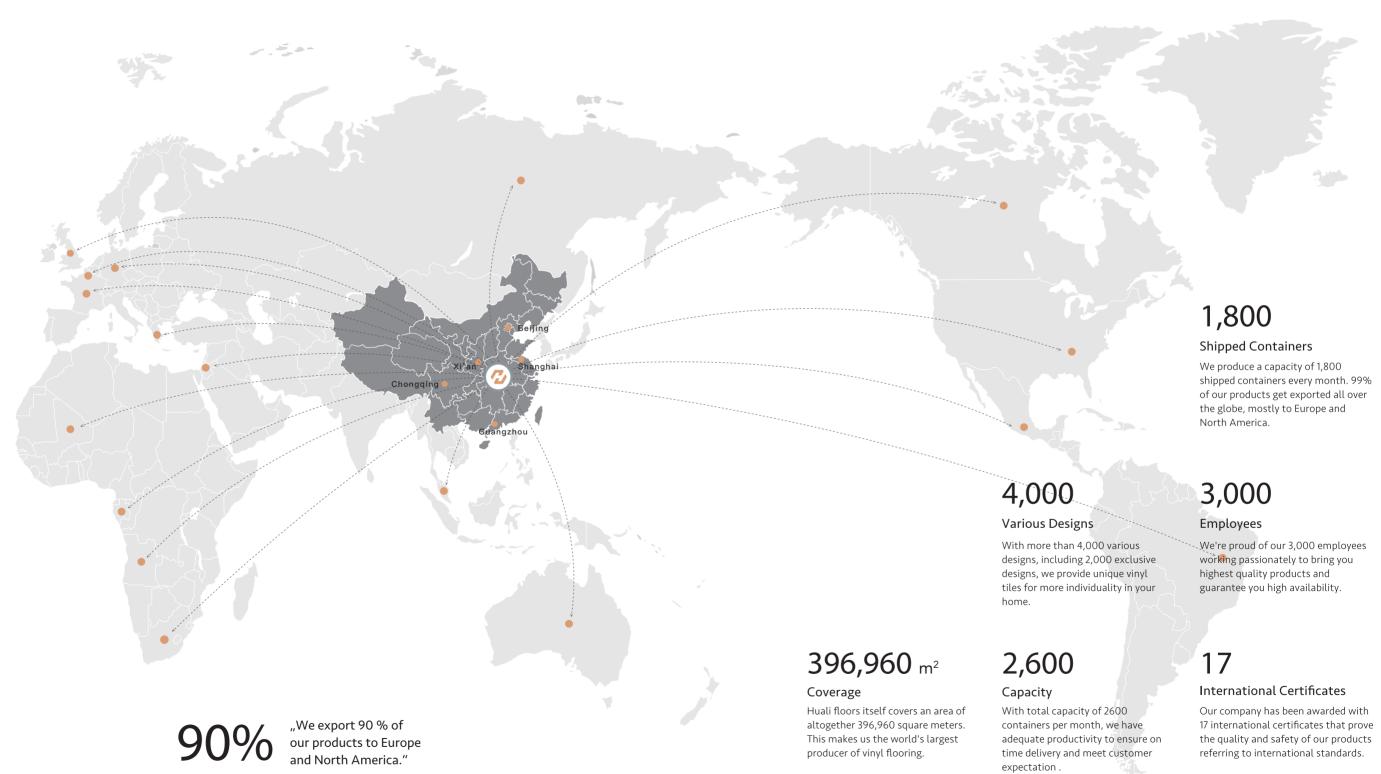
#### Establish manufacturing facility in US

Huali is going globalization. To further build our network, we announced the plans to establish our U.S. headquarters and manufacturing facility in Geogia on May 27, 2020. The new facility started running on March, 2021. It will have 21 SPC lines in total by end of 2022. Under this, we can offer more direct support and effective service to customers of North America. As one of the leading manufacturers of vinyl flooring, Huali keeps moving forward!

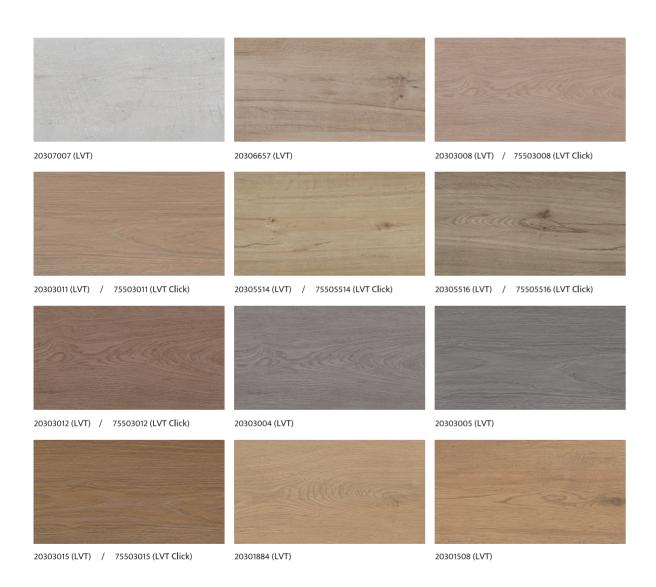
# We Pave The World!

# **Global Player**

We are proud of our international network



## **Collection Overview**







20303007 (LVT)



20303000 (LVT)





20303301 (LVT)





With regard to colour printing, it is only possible to give a provisional representation of the product colour. For colour selection, an original sample should be used which we shall be pleased to supply free of charge. To replicate the natural material, the stone effect tiles may include variation in markings as part of their design.





























Reflections 11 | 12



















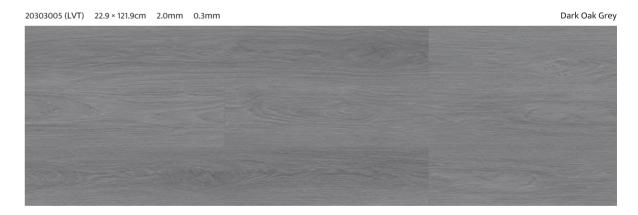














Reflections 19 | 20





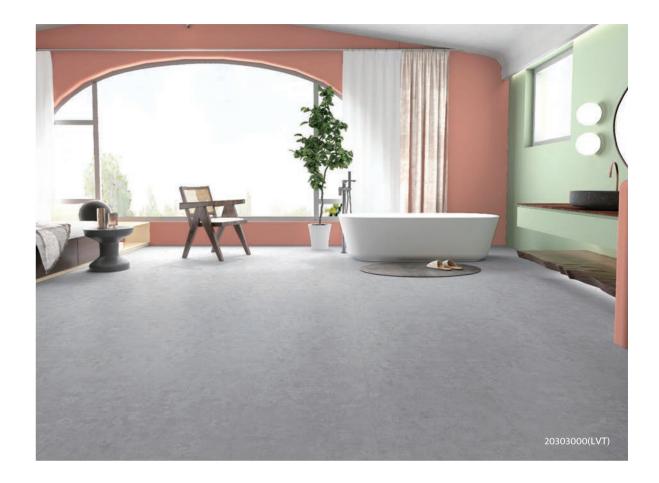


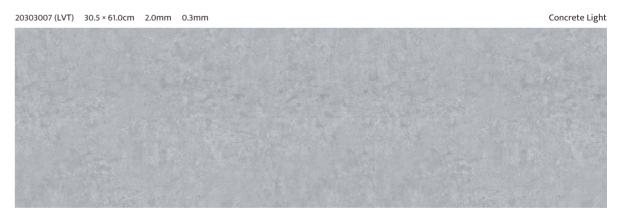


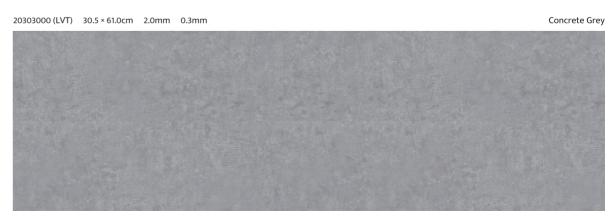


Reflections 21 | 22

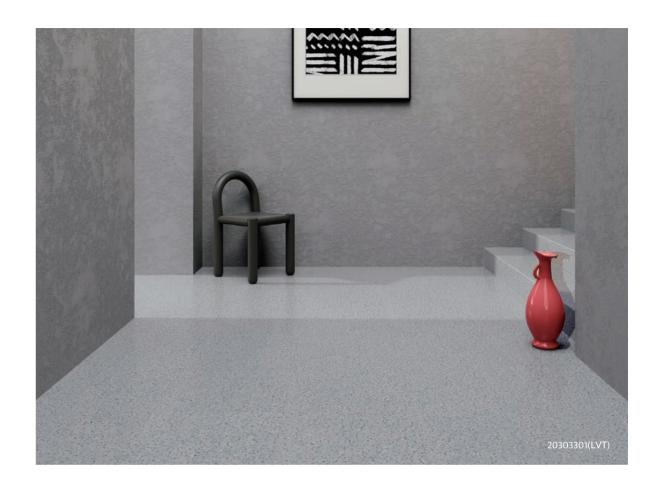




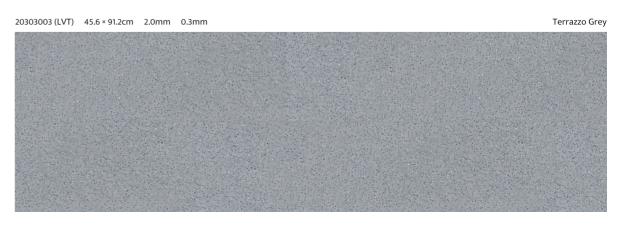












Special Notes: Pictures above for reference only, because of printing caused chromatic difference from the objects, please consult with the real product.



## FLOORCARE AND INSTALLATION

We want your Huali floor to look it's best for many years to come and to help you achieve this we have laid out the following floorcare guidelines. Huali does not harbour dust mites or bacteria making it ideal for the home environment.

Initial cleaning after your new floor has been installed:

- Avoid walking on the floor for at least 24 hours following completion of installation.
- Sweep or vacuum to prevent loose dirt or grit from scratching the floor.
- Polishing your floor can be beneficial to help prevent slight surface scratches and to provide further protection.

#### Day to day cleaning:

- Sweep or vacuum the floor to remove loose dirt, grit or dust.
- Use clean mops and neutral cleaning solutions to regularly clean your floor. Contact Huali for details of approved maintenance products.
- Dilute the floor cleanser to the manufacturer's instructions.
- Mop the floor evenly.
- Collect any excess liquid in a mop bucket.
- Rinse the floor with clean water and allow to dry.

Regular cleaning is more beneficial to the floorcovering and is more cost effective than occasional heavy cleaning.

Do:

- Install barrier mats at entrances to pick up grit and moisture. (Please note, some rubber-backed mats may discolour the floor)
- $\checkmark$  Ensure your furniture is fitted with protective pads where necessary to prevent scratches.
- ✓ Use protective cups under heavy furniture to prevent indentation.
- ✓ Remove spillages as quickly as possible to reduce risk of staining and causing slip hazards.
- ✓ Always use clean equipment when maintaining your floor.
- ✓ Regularly trim pets claws as these can cause fine scratches.

**Don't:** X Use abrasive liquids or metal scouring pads as these can damage the floor.

- X Clean the floor with solvents, caustic detergents, washing up liquids, soap powders, bleach, furniture polishes, petroleum based products, pine gels, stain removers or highly coloured products. Such products may make the floor slippery or cause permanent damage.
- X Drag furniture with unprotected feet across the floor.



Huali flooring is resistant to everyday dirt and soil



Huali flooring is resistant to accidental splashes and temporary surface water



Dirty footprints are not a problem and can be easily wiped away



Everyday dirt and crumbs can be simply swept away

#### PRODUCT STORAGE AND TRANSPORTATION

The flooring should be stored in batches as per batch number in a dry, clean and ventilated place below 40 °C.

In case of a heat source near the storage site, the flooring should be kept away from the heat source at least 1 meter, and neatly stacked with a stacking height not exceeding 2 meters.

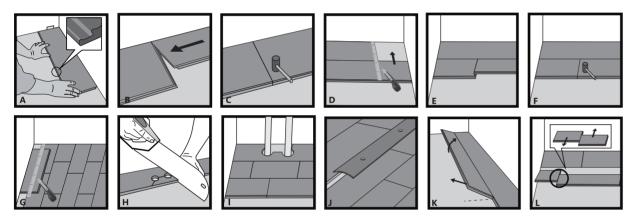
The flooring should be handled carefully and not be thrown during transport in order to avoid damage to the corners of the tiles.

The flooring should be stored away from direct sunlight or rain. Avoid throwing and collision. Stack the products. Avoid being stored unsupported or upright.

The unused flooring that have been unpacked should be put back into the original packing box in time.

#### Installation-SPC

Tape Measure, Rubber Mallet, Spacer, Utility Knife, Pencil, Carpenter's Square, Spade Bit.



#### A. First plank/tile first row

The planks/tiles are laid without glue. Start to lay the floor in the left-hand corner of the room with the groove facing towards you. A minimum expansion gap of 8-12mm should be left around the installation perimeter.

**B.** Second plank/tile first row

Place the short end of the second plank/tile close to the corresponding short end of the previous plank/tile. Carefully fold it down with a single action movement.

- **C.** Use the rubber mallet gently tap down the short joint along the short end just installed to make sure the short joint are fully engaged and locked into one another. Complete the first row in the same way.
- **D.** Before place the last plank/tile, measure the distance between the end of first row and wall, and cut the plank/tile to fit it. The length of the plank/tile should be greater than the width of the plank/tile. Ensure the correct expansion gap is left.
- E. First plank/tile second row

Start this new row with a half plank/tile

cut from a whole piece or with the leftover piece from the last row. Insert the tongue of the long side into the corresponding groove of the long side of the plank/tile in the previous row, at an angle of 30°. Press down until it locks into place.

**F.** Use the rubber mallet gently tap down the short joint along the short end just installed to make sure the short joint are fully engaged and locked into one another. Complete the row in the same way.

#### G. Last Row

Need to cut the planks/tiles/tiles to fit the last row. The remaining width of the plank/tile should be greater than the 1/2 width of the plank/tile. Ensure the correct expansion gap is left.

**H.** Pipes (fixtures above ground)

Mark the centres of the holes on both the long and short sides using a carpenter,s square and a pencil. Further drill the hole with a spade bit wide enough to accommodate both the diameter of the pipe and the required expansion gap. Cut around as shown with a saw or with a sharp utility knife

- **I.** When do the cutting, ensure the correct expansion gap is left.
- J. Check the height difference and gap between pieces during the installation. The height difference and gap should be less than ≤0.15mm respectively. When the length of the area to install is greater than 12 meters, the area should be divided into smaller sections and installed one by one. There must be enough expansion gap between sections, and a suitable transition molding will be recommended to cover the resultant gap.
- **K.** In the course of paving, if the direction deviation occurs or the installation is not in place, you can dismantle and reinstall them. Firstly tile the plank/tile to be removed at a 30° 45° angle, then take it out in parallel. Follow these steps to remove along the long edge.
- **L.** Slide out the lock joint between the dismantled planks/tiles along the short edge in opposite directions in parallel to dismantle the planks/tiles. Do not pull out the short edge forcibly when dismantle the planks/tiles. Slide out parallelly to avoid damaging the joint.

#### PRIOR TO INSTALLATION

When installing Huali 61 Serie vinyl flooring, always follow current national standards for the installation of floor coverings. Best current installation practice, incorporating the latest technical developments should also be employed. The preparation of the subfloor, the installation of the floor covering and the measures taken to safeguard value are key factors in ensuring optimum

suitability and performance of resilient floor coverings. On receipt of materials, check that the colours correspond to those ordered and that there is no damage or visual defects in the material. Check that the material is from one batch if that was requested. Claims for visual defects can only be accepted prior to installation and cutting.

#### CONDITIONING

Huali 61 Series vinyl flooring must be protected against dirt and moisture during storage and both before and during the installation. The climatic conditions acceptable for the installation of Huali Loc vinyl flooring are:

#### Residual moisture content:

- Floor temperature > 15°C
- Room temperature > 18°C
- Air relative humidity < 50-60%

Prior to installation, open the boxes and place them in the room they are to be installed in, together with the underlay, for a minimum of 48 hours BEFORE the installation commences, so the material can acclimatise. Boxes should never be stacked greater than 3 high. Ensure that the room temperatures are between 18 and 27°C during the conditioning period. Shuffle the planks/tiles to ensure a random appearance before installation.

#### PREPARATION OF SUBFLOORS

Subfloors should be prepared as described in BS 8203/DIN 18365 or prevailing local/national standards. Huali Loc vinyl flooring can be installed over most hard subfloors, provided they are prepared in accordance with local standards. Subfloors must be hard, clean, and free from contamination, dry, durable, flat and sound. Solid subfloors must be tested in accordance to local standards to ensure they are not damp. Carpets and soft floorings are unsuitable as a base for the installation of Huali Loc vinyl flooring and will need to be removed prior to installation. Remove all debris and vacuum the whole subfloor area prior to commencing the installation.

Where underfloor heating is used, the maximum temperature on the surface of the flooring must never exceed 27°C. Subfloors should be tested for moisture in accordance with local standards. Solid subfloors should demonstrate a maximum damp content of 75%RH before the installation can begin.

#### Residual moisture content:

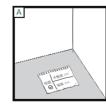
- Cement screed max. = 2.0 CM %
- With underfloor heating = 1.8 CM %
- Anhydrite floor max. = 0.5 CM %
- ullet With underfloor heating = 0.3 CM %

Remove any unevenness in the subfloor prior to installation. Subfloor levels should be in accordance with local/national standards and in any event, should never exceed a maximum deviation of 5mm when measured under a 3m long straight edge. High spots and ridges should be removed to prevent damaging the locking mechanism of the planks/tiles. Please note that while the Vinyl Loc

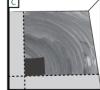
Underlay will mitigate against minor undulations in the subfloor, it should not be used in place of a proprietary levelling compound.

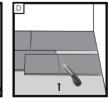
#### Installation-LVT

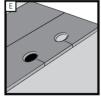
grinder, blender, spikes, foam roller, trowel, measure tape, utility knife, rubber mallet, floor roller, etc. Adhesives, self-leveling cement and sub-flooring primer, Which are for LVT flooring use only.

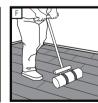












- **A.** Check temperature, humidity, the flatness, strength and moisture content of subfloor before installation.
- **B.** Measure the room before installation. Divide it into 4 sections by drawing 2 perpendicular lines across the floor. Apply the adhesive when you are ready to install the flooring, starting from any section. Use the suitable trowel at an angle of 80 degrees to spread the adhesive and evenly.
- **C.** Followed the adhesive instructions, once the adhesive is dry, start to place the

floorings from the center point of the room, and gradually to the whole room. Use the rubber mallet slightly to slap the flooring to make sure it's firmly bounded to the floor. Repeat it until the installation is completed.

**D.** The last piece close to the wall. To fit edge flooring that needs to be cut, lay it exactly over the last full flooring; place another full flooring against the wall and mark the cutting line where the flooring overlap. Cut the flooring in position.

- **E.** Pipe or irregular pillar. Just make a cardboard template as a guide and use this to draw an outline onto the flooring. Cut to shape and check that if it fits.
- **F.** Any installation imperfection should be fixed within an hour after the floorings are installed. Once the floorings have been installed, use a 70kg floor roller to ensure the floorings are firmly bonded to the floor. Rolling should take place during the working time of the adhesive.

## **TECHNICAL DETAILS**

Huali floor is a top quality vinyl flooring in tile and plank formats. Each layer has been thermally pressed by means of innovative technologies for ultimate performance.

### HUALI Luxury Vinyl Tile LVT

#### 1. PUR surface treatment

Easier care and less cleaning thanks to a factory applied PUR surface treatment.

#### 2. Wear layer

This transparent, extremely dense layer is hard-wearing and protects the decoration of the product. This allows the surface embossing to create a highly authentic effect.

#### 3. Film layer

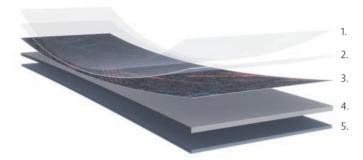
The designs have been exclusively developed for wood and embossed on to the film layer using innovative printing technology.

#### 4. Stabilized substrate

Improved dimensional stability by minimising chandes caused by physical effects.

#### 5. Base layer

The basis for the long service life and high performance of Hualiflor.



## 15 YEARS Guarantee

#### 15 years product guarantee

The Reflections Dryback of luxury vinyl tiles has been developed to meet the highest technical specification of its product type. Ideal for all areas of the home, the products ensure high performance and optimum style. In addition, Reflections Dryback is suitable for moderate commercial applications such as light traffic areas within hotels, conference rooms and small offices.

## HUALI Stone Plastic Composite Tile SPC

#### 1. PUR surface treatment

Easier care and less cleaning thanks to a factory applied PUR surface treatment.

#### 2. Wear layer

This transparent, extremely dense layer is hard-wearing and protects the decoration of the product. This allows the surface embossing to create a highly authentic effect.

#### 3. Film layer

The designs have been exclusively developed for wood and embossed on to the film layer using innovative printing technology.

#### 4. Stabilized substrate

The layer made primarily of PVC vinyl offers flexibility as well as dimensional stability.

#### 5. Underlayment

IXPE, provide comfortable foot feeling and sound insulation.





#### 20 years product guarantee

Reflections SPC of HUALIFLOR has been developed to meet the highest technical specification of its product type. Ideal for all areas of the home, the products ensure high performance and optimum style. In addition, Reflections SPC is suitable for commercial applications such as hotels, conference rooms and offices.

## **ENVIRONMENT**

Huali has for many years been recognised as a leading global manufacturer of high quality, high performance floorcoverings. We have demonstrated a high level of commitment and endeavour to minimise the impact of our products on the environment whilst maximising the performance benefits of our flooring throughout their entire life.

Huali flooring is 100% recyclable and eco-friendly. Along with low VOCs, energy efficient manufacturing, long life and low maintenance it is clear why Huali achieves BRE A+ rating for its LCA performance.

















