Hertog Vloeren BV Meerstraat 20 6241ND Bunde

Tel.: +31 (0)43 3655971 Fax.: +31 (0)43 3656672 info@hertogyloeren.com www.hertogyloeren.com



# **Technical Product Information**

## 1.1. General

## 1.1.1. Safety instructions

Wear safety gloves, goggles, hearing protection and respiratory protection when using power tools (e.g. sawing or sanding) on the product. Adhere to safety instructions, belonging to your tools. Keep your tools away from children.

#### 1.1.2. Transportation

When the product is transported, please take care of the following: The product must be laid on a flat and stable surface. The product must be kept dry. Provisions must be made to prevent the product from sliding or falling.

#### 1.1.3. Storage

The product must be laid on a flat and stable surface. At least 72 hours prior to installation, the product must be placed in the room, where it is to be used, to allow for acclimatization.

#### 1.1.4. Important

The manufacturer assumes no responsibility for possible damages, caused by disregard of the instructions, pertaining to transportation, storage, installation and the following use of the product, or from other disadvantageous factors, unknown to the manufacturer. Even though our products are inspected many times, some deficiencies may occur. (In up to 5% of the boards)

## 1.1.5. Intended use of the product

This product is for indoor use. It has no load bearing capacities, therefore the sub floor must be sound and stable. If you want to use this product on sub floor heating or floorcooling, please observe the relevant additional instructions. The product is suitable for DIY installation, but installation by a professional is advised. In any case the installation instructions must be observed carefully.

## 1.2. Dimensions and tolerances

(these dimensions and tolerances apply to the product at the time of first delivery)

Covering length	Various	+2/-0mm	
Covering width	Various	+0,2/-0,2mm	
Thickness	15mm/20mm	+0,2/-0,1mm	
Edges	Microbevel 0,8mm		
Cup (max.)	0,36mm. (Hertog Top 20mm/15mm)		
Squarness dev.	≤ 0,2% over the width		
Bow (max.)	25mm		
Spring (max.)	1,5mm		
Lipping (max.)	0,2mm		
Specific gravity	670 – 820 kg/m3		
	20mm: 12,8 – 16,4 kg/m2		
	15mm: 9,6 – 12,3 kg/m2		
	12mm: 7,7 – 9,84 kg/m2		

Covering length	Various	+0.079" / -0 "	
Covering width	Various	+0,008" / -0,008"	
Thickness	5/8" or 3/4"	+0.008" / -0,004"	
Edges	Microbevel 0.031"		
Cup (max.)	0,014". (Hertog Top 20mm/15mm)		
Squarness dev.	≤ 0,2% over the width		
Bow (max.)	1"		
Spring (max.)	0.059"		
Lipping (max.)	0,008"		
Specific gravity	41 – 51 lbs / ft3		
	3/4": 2.6 - 3.4 lbs/ft2		
	5/8": 1.95 - 2.55 lbs/ft2		
	0,4724": 1.56 -		

# Hertog Vloeren product series are composed of: Hertog Top 20:

20 x 160mm (thickness x width)
3/4"x 6.2992" (thickness x width)
20 x 180mm (thickness x width)
3/4"x 9½" (thickness x width)
20 x 200mm (thickness x width)
3/4"x 7.8740" (thickness x width)
20 x 220mm (thickness x width)
20 x 220mm (thickness x width)
3/4"x 8.9914" (thickness x width)
20 x 235mm (thickness x width)
20 x 260mm (thickness x width)
3/4"x 9.2520" (thickness x width)
3/4"x 10.2362" (thickness x width)
3/4"x 11.0236" (thickness x width)
3/4"x 11.0236" (thickness x width)

## Hertog Top 15:

15 x 160mm (thickness x width) 5/8"x 6.2992" (thickness x width) 15 x 183mm (thickness x width) 5/8"x 7.2047" (thickness x width) 15 x 200mm (thickness x width) 5/8"x 7.8740" (thickness x width) 15 x 220mm (thickness x width) 5/8"x 8.6614" (thickness x width) 15 x 235mm (thickness x width) 5/8"x 9.2520" (thickness x width) 15 x 260mm (thickness x width) 5/8"x 10.2362" (thickness x width) 5/8"x 11.0236" (thickness x width) 5/8"x 11.0236" (thickness x width)

# Hertog Top 12:

Only available in: 12 x 183 mm (thickness x width) 0,4724"x 7.2047" (thickness x width)

These series are available in several standard lengths, \*)

# Wood Length in Meters.-Centimeters.

1.500-2.500 mm (Ca 90%) 600-1.500 mm(Ca 10%)

Wood Length in ft.-inch. 4,92ft - 8,20ft (Ca 90%) 1,97ft - 4,92ft (Ca 10%)

\*) Depending on availability deliveries may contain nonstandard lengths and can be delivered with the following bevelling:

Micro Bevel; 0,8mm

All bevels on the 2 long sides of the board.

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Moisture is the most important factor in wood shrinkage, swelling and warping. When the moisture content of wood rises, it swells. It shrinks when wood moisture content drops. This phenomenon is most significant in the directions perpendicular to the wood grain. Along the wood grain it is negligible. Because this product has a plywood base, in which the layers are perpendicular to each other, it is much less subject to swelling and shrinkage than solid wood boards. Nevertheless, large changes in wood moisture content can lead to cracks in and splits between boards.

It is important, that the sub floor is and remains dry, that when cleaning the floor a minimum of water is used, (use a damp cloth; never a wet one) and that the air moisture content (relative humidity) is not subject to large fluctuations. The relative humidity must be between 40 and 60%.

## 1.4. Materials/composition

#### 1.4.1. Base layer

Hertog Vloeren's Quality Flooring products (20mm. / 3/4" thickness) have a 14mm. / 9/16" plywood base layer. This base layer consists of 11 layers of peeled veneer, with mutual perpendicular wood fiber accommodation in adjacent layers. (15mm. / 5/8" thickness has a 11mm. / 5/32" plywood base layer. This base consists of 9 layers of peeled veneer).

#### 1.4.2. Glue

The top layer is bonded to the base layer by means of a PVAC glue.

#### 1.4.3. Top layer

Solid hardwood is used as top layer. Several hardwood species and grades available. Wood defects, if any, may be filled with an epoxy- or wood filler.

## **Wood Hardness**

European oak 6280 3.8

# 1.5. Release of formaldehyde

Hertog Vloeren flooring products are rated E1 for formaldehyde. This is the best (lowest) emission class.

## 1.6. Flame spread

Flame spread: Under investigation.

# 1.7. Sub floor heating

Most Hertog Vloeren flooring varieties can be used with sub floor heating under certain conditions. Ask your supplier. More information on sub floor heating is given in Hertog Vloeren's installation information.

Thermal conductivity:  $\lambda$ =0,17 W/mK (applies to 20mm. / 3/4" thickness)

Thermal resistance: Rc=0,12 m2K/W (applies to 20mm. / 3/4" thickness)

Thermal conductivity:  $\lambda$ =0,17 W/mK (applies to 15mm. / 5/8" thickness)

Thermal resistance: Rc=0,09 m2K/W (applies to 15mm. / 5/8" thickness)

Thermal conductivity:  $\lambda$ =0,17 W/mK (applies to 12mm. /

0,4724" thickness)

Thermal resistance: Rc=0,72 m2K/W (applies to 12mm. /

0,4724" thickness)



#### 1.8. Relevant European standard

EN 13489:2002 - Wood flooring - Multi layer parquet elements

## 1.9. Manufacturer

Hertog Vloeren BV Meerstraat 20 6241ND Bunde The Netherlands