

Technical Product Information Duoplank® 20mm (¾") and 15mm (⅝")

Intended use

Engineered wood flooring for indoor use. The product is suitable for nonprofessional installation, but installation by a professional is advised. In all cases, we refer to the document: Hakwood Installation Information. Even though our products are inspected many times, some deficiencies may occur in up to 5% of the flooring. To use this product on subfloor heating or floor cooling, we refer to Hakwood's document titled; Subfloor Heating & Cooling.

Hakwood Duoplank® (thickness x width)

20 x 142mm (¾" x 5 9/16")
 20 x 180mm (¾" x 7")
 20 x 240mm (¾" x 9½")
 15 x 142mm (⅝" x 5 9/16")
 15 x 180mm (⅝" x 7")
 15 x 240mm (⅝" x 9½")

Duoplank® Herringbone (thickness x width x length)

20 x 85mm x 510mm (¾" x 3 3/8" x 20 1/16")
 20 x 142mm x 710mm (¾" x 5 9/16" x 27 15/16")
 20 x 180mm x 1080mm (¾" x 7" x 42 1/2")
 15 x 85mm x 510mm (⅝" x 3 3/8" x 20 1/16")
 15 x 142mm x 710mm (⅝" x 5 9/16" x 27 15/16")
 15 x 180mm x 1080mm (⅝" x 7" x 42 1/2")

These standard Duoplank flooring components are available in several standard lengths.*

Wood species	Length Metric	Length Imperial	Unfinished bevel options**
European oak	1790 / 1970 / 2100 / 2220 / 2470	5'11" / 6'6" / 6'11" / 7'3" / 8'1"	Square Edge / Micro Bevel

* Depending on availability, deliveries may contain non-standard lengths.

** Micro bevel is applied to long sides of Duoplank products. On request, a micro bevel may be added on the head ends.

All Hakwood Duoplank products comply with  requirement according to EN 14342

EN 14342 Multilayer parquet, Engineered flooring	Duoplank® 20 mm (¾")	Duoplank® 15mm (⅝")
Density (kg)/(lb)	650kg/1433lb	650kg/1433lb
Reaction to fire	Cfl-s1	Cfl-s1
Emission of formaldehyde	E1	E1
Content of pentachlorophenol	n.d.	n.d.
Breaking strength	5.4kN (60cm) 6.2kN (40 cm)	n.a.
Thermal conductivity	0.17 W/m K	0.17 W/m K
Biological durability	Class 1	Class 1

n.d. = not detectable by applicable test method

n.a. = not available

Dimensions and tolerances

These dimensions and tolerances apply to the product at the time of first delivery. Product thickness is stated for standard Duoplank without a texture or color technique applied.

Description	Accepted tolerances	Metric	Imperial
Covering length	Various	+2 / -0 mm	+0.079" / -0"
Covering width	Various	+0.2 / -0.2 mm	+0.008" / -0.008"
Thickness	15mm (5/8") and 20mm (3/4")	+0.1 / -0.4 mm	+0.004" / -0.016"
Edges	Micro bevel 1.4 mm / Square edge		Micro bevel 0.055" / Square edge
Cup (maximum)	0.36mm (Duoplank® 15 x 180mm)		0.014" (Duoplank® ⅝" x 7")
	0.48mm (Duoplank® 20 x 240mm)		0.019" (Duoplank® ¾" x 9½")
Squareness deviation	≤ 0.2% over the width		≤ 0.2% over the width
Bow (maximum)	25 mm		1"
Spring (maximum)	1.5 mm		0.059"
Lipping (maximum)	0.2 mm		0.008"
Specific gravity	670 - 820 kg/m ³		41 - 51 lbs / ft ³
	20mm: 12.8 - 16.4 kg/m ²		¾": 2.6 - 3.4 lbs/ft ²
	15mm: 9.6 - 12.3 kg/ m ²		⅝": 1.95 - 2.55 lbs/ft ²

Material composition

Base layer

Hakwood Duoplank® products have a water resistant multi-ply base layer. The 20mm (¾") thick Duoplank® has a ±14mm (9/16") multi-ply base layer consisting of 11 layers of peeled veneer cross-banded for stability. 15mm (⅝") thick Duoplank® has a ±11mm (5/32") multi-ply base layer consisting of 9 layers of peeled veneer cross-banded for stability.

Glue



The top layer of the Duoplank is bonded to the base layer by means of a PVAC glue with low to no formaldehyde emissions. Hakwood Duoplank® products are rated and comply with; European E1 (EN 717-1) and American CARB (ASTM - E1333).

Top layer

Solid hardwood is used as a top layer. Several hardwood species and grades are available. Wood defects, if any, may be filled with filler.

Wood species	Hardness Janka (N)	Hardness Brinell
Afzelia Doussié	8200	n.a.
American black walnut	4500	3.4
Teak	4450	n.a.
European ash	6140	n.a.
European oak	6280	3.8
Iroko	5600	3.5
Jatoba	10400	7.0
Merbau	8670	4.9
Sucupira	8750	5.6
Wengé	10600	8.1
Zebrano	7005	n.a.

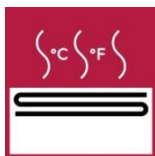
n.a. = not available

Tongue and Groove

Duoplank® products are delivered 4 sides tongue and groove unless otherwise indicated.

Herringbone products are delivered tongue and groove along the length of the boards, both end joints contain groove.

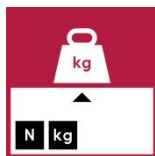
Subfloor heating



Under certain conditions, most Hakwood flooring products are suitable for use with subfloor heating and cooling. Ask your supplier for specific details. For further information on subfloor heating, refer to the documents; Hakwood Installation Information and Hakwood Subfloor Heating and Cooling.

Product	Thermal conductivity	Thermal resistance
Duoplank® 20mm (¾")	λ=0.17 W/mK	Rc=0.12 m2K/W
Duoplank® 15 mm (5/8")	λ=0.17 W/mK	Rc=0.09 m2K/W

Load bearing capacities



Hakwood's 20mm (¾") Duoplank can be used as a load bearing construction material over support beams placed 40cm (15 ¾") or 60cm (23 5/8") apart as per; EN 1533 defined by; Eurocode 1 (1999-1-1).

Load capacity according EN 1533	Bridging	Maximum load capacity (Fk)	In kg
Duoplank® 20mm (¾")	400 mm	6280 N	640 kg
Duoplank® 20mm (¾")	600 mm	5479 N	558 kg

Sound reducing properties

Hakwood Duoplank® products are tested for their sound reducing properties in accordance with EN-ISO 140-8 and EN-ISO 717-2.

Product	Impact noise improvement Formula: ([Lw]=dB)
Duoplank® 20mm (¾")	14 dB
Duoplank® 15mm (5/8")	16 dB