

# Technical Data Sheet

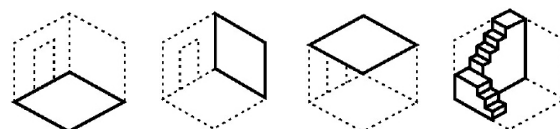
Version 1.0



HW2687

## Oranda

### Henley



#### Specification

Pattern	End Grain Plank
Construction	4-Layered Engineered
Top Layer Specie	European Oak ( <i>Quercus robur</i> )
Surface Process	Sanded
Finish	UV Oiled
Connection System	Tongue & Groove
Edge Profile	Square Edge
Backing	Softwood Veneer ( <i>Picea</i> spp.)
Wear Layer Thickness	4.2mm
Total Thickness	16mm
Width	180mm
Length	2200mm (May include up to 25% shorter boards)
Pack Size	2.77m <sup>2</sup>
Grade	Nature



#### Key:

^ Please note that this is a smoked/ fumed product. This reactive process will typically generate a wider range of colour variation in the product.

\*\* This product may require on-site sanding prior to applying a suitable finish

‡ Pack lengths will vary between the specified minimum and maximum lengths depending upon stock availability.

\* Subject to compatible subfloor and correct installation (see Installation Guidelines) including sensors.

# Temperature of top-face must never be allowed to exceed 27°C. UFH protocol to control temperature conditions is recommended.

## Installation Methods

Fully Bonded	Yes* (recommended)
Nailed/Screwed	Yes*
Floated on Underlay	Yes*
Over Underfloor Heating	Yes* # (Please ask for our technical guidelines)

All Havwoods floor must be installed by a competent installer who will have the necessary skills and take individual site circumstances into account. Havwoods warranty will apply only to floors which have been installed by a competent flooring installer comparable to BS8201 in the UK or equivalent standards worldwide.

## Grading Criteria

Sound Knots	Up to 60mm Øallowed
Broken Knots	Up to 30mm Øallowed
Filled Defects	Allowed
Heart/Pith	Trace
Sapwood	Max 10% of boards / Max 10% width
End Checks	Up to width of board (Max 2mm open)
Insect Damage	Not allowed
Filler	Allowed
Colour Variation	Allowed
Small Cracks	Allowed
Inner Bark	Not allowed

**N.B.** The product grading criteria is inspected at each mill visually and should be taken as an approximation only.

## Technical Criteria

Origin	Europe
Certification	PEFC™ Certified (PEFC/16-37-1417)
Janka Hardness Rating	1,120 lbf (4,980N)
Formaldehyde Emissions	E1 (EN717-1)
Pentachlorophenol Emissions	< 5ppm (CEN/TR 14823)
Slip Testing	86/23 PTV (CEN/TS 15676)
Reaction to Fire Classification	Dfl-s1 (EN 13501-1:2007)
Thermal Resistance	0.23 W/m K (EN 12664)



# HAVWOODS

For More Information  
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Comprehensive maintenance instructions and materials are available from Havwoods for all floors.



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