

HESS INFO DATA SHEET

TYPES OF WOOD

Hess - We Design Cities

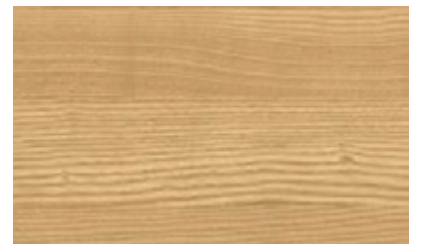
The company motto of the premium manufacturer of designed outdoor luminaires and site furnishings is unmistakably reflected in its versatile and design-focussed product portfolio - and in its quality.

Selected materials such as solid cast iron, galvanised steel and a large number of different woods lend the products an unrivalled finish.

Hess is synonymous with products "made in the Black Forest". We take a careful, responsible and sustainable approach to the natural product of wood and its use and through our complex treatment processes guarantee maximum weathering resistance and durability - as you would expect from Hess.

ASH

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ROBINIA

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AFRICAN TEAK

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ASH – WOOD SPECIFICATIONS

Type of wood:

- Ash (*Fraxinus excelsior*)
- From central Europe
- Heavy and hard wood from a deciduous tree, medium hardwood

Colour of the wood:

- Yellowish / light brown
- Greenish following pressure impregnation treatment
- Silver after long periods outdoors

Surface/finish:

- All natural wood surfaces are planed to shape
- Roughly sanded once
- Resistant to weathering and durable surface protection thanks to pressure impregnation
- Finely sanded
- The wood protection is not lost as a result of surface damage or abrasion because the impregnation penetrates deeply into the wood

Weathering protection:

- Liquid, chrome-free wood protection salt based on inorganic copper and boron compounds and organic active ingredients
- Effectively prevents moulds and insects which destroy the wood and fungal decay
- Maintenance-free, no follow-up treatment needed
- Wood protection in accordance with DIN 68800

Durability class:

- Durability class according to DIN EN 350-2: 1 – 2 after pressure impregnation treatment (see Table 1)

Resilience:

- Non-splintering
- Dimensionally stable shape, resistant to high levels of pressure and wear
- Wood absorbs moisture and releases it again. This may produce mould stains, but they wash out again over time
- Weathering may result in drying cracks and a slightly rough surface
- A fibrous, white-grey layer may develop on the surface of the wood, but this does not impair its quality. This is a natural deposit from the wood resulting from a reaction between water and the cellulose in the wood
- Raw density 0.41 – 0.82 g/cm³ (wood moisture $u=$ 12% - 15%)
- Compressive strength 43 – 59 N/mm²
- Bending strength 100 – 127 N/mm²

Disposal:

- Thermal recycling



Natural shade – similar to illustration



Pressure impregnated – similar to illustration

ROBINIA – WOOD SPECIFICATIONS

Type of wood:

- Robinia, also known as false acacia (*Robinia pseudoacacia*)
- Comes from Europe
- Heavy and hard wood from a deciduous tree, hardwood

Colour of the wood:

- Varies from light yellowish to golden brown
- If not treated, the wood turns grey

Surface/finish:

- All natural wood surfaces are planed to shape
- Roughly sanded once
- Finely sanded

Weathering protection:

- Naturally resistant to weathering and mould
- No wood protection needed, resistant to attack from moulds and insects

Durability class:

- Durability class according to DIN EN 350-2: 1 – 2
(see Table 1)

Resilience:

- Non-splintering
- Dimensionally stable shape, resistant to high levels of pressure and wear
- Wood absorbs moisture and releases it again. This may produce mould stains, but they wash out again over time
- Weathering may result in drying cracks and a slightly rough surface
- Raw density 0.58 – 0.90 g/cm³ (wood moisture u= 12% - 15%)
- Compressive strength 58 – 75 N/mm²
- Bending strength 120 – 160 N/mm²

Disposal:

- Thermal recycling



Similar to illustration

AFRICAN TEAK – WOOD SPECIFICATIONS

Type of wood:

- African teak, also known as iroko (*Milicia excelsa*)
- Comes from Africa
- Sturdy hardwood

Colour of the wood:

- Reddy brown/golden brown/dark olive brown
- Once oiled, it assumes darker and more powerful shades



Similar to illustration

Surface/finish:

- All natural wood surfaces are planed to shape
- Roughly sanded once
- Finely sanded
- Oiled with linseed oil (varnish) in natural state

Weathering protection:

- Naturally resistant to weathering and mould
- No wood protection needed, resistant to attack from moulds and insects
- Follow-up treatment with oil is needed

Durability class:

- Durability class according to DIN EN 350-2: 1 - 2

Resilience:

- Non-splintering
- Dimensionally stable shape, resistant to high levels of pressure and wear
- Wood absorbs moisture and releases it again. This may produce mould stains, but they wash out again over time
- Weathering may result in drying cracks and a slightly rough surface
- Raw density 0.55 – 0.85 g/cm³ (wood moisture u= 12% - 15%)
- Compressive strength 52 – 81 N/mm²
- Bending strength 70 – 158 N/mm²

Care information:

- Through treatment with linseed oil, the wood has a natural, ecological protection and a silky sheen
- Follow-up treatment with linseed oil is recommended. In the autumn as protection for the winter and in the spring to refresh the wood. Before follow-up treatment, the surface should be cleaned (free of grease and dirt). The wood can be gently sanded
- This does not prevent a natural greying process

Disposal:

- Thermal recycling

TABLE 1 –
APPROXIMATE LIFE EXPECTANCY

Class	Definition class according to DIN EN 350-2	Life expectancy under moderate climatic conditions	Life expectancy under tropical conditions
1	Very durable	Over 25 years	Over 15 years
2	Durable	15 to 25 years	10 to 15 years
3	Moderately durable	10 to 15 years	5 to 10 years
4	Not very durable	5 to 10 years	2 to 5 years
5	Not durable	Less than 5 years	Less than 2 years

The figures provided in Table 1 are guidelines for comparing the life expectancy of the wood types. These correspond to risk class 4 (earth contact) in accordance with DIN EN 335-1. Pressure-impregnated woods generally correspond to resistance class 1.

How would you like your bench?

With single, double or triple slats? With a back rest or as a stool? You will find a very wide range of benches in our standard woods on our homepage.

Link to Hess benches:

<https://www.hess.eu/en/products/street-and-site-furnishings>

