# OAKCENT

## Technical sheet

This document serves as a technical data sheet. It describes the properties of OAKCENT wooden floors and defines the product's features that cannot be the subject of a complaint.

By following the instructions, you will provide the oiled wooden floor with excellent care and, thus, its longevity. We recommend this advice based on years of experience and the experience of owners of wooden floors in homes and public spaces.

# Safety and quality

OAKCENT floors meet all hygiene standards and regulations according to the European standard and carry the CE mark with the attestation of a certified testing institute.
OAKCENT wooden floors are produced in high quality with maximum respect for the environment and respect for natural raw materials and human craftsmanship.

**Risks of damage to the natural surface**
Newly oiled parquet floors are more sensitive to possible surface damage, so be extra careful after unpacking and laying. The moments after laying are critical - during painting, assembly work, or moving. The surface of the floors is still being cured and can be exposed to a significant risk of damage.
A dusty floor must not be wiped when wet. Provide felt pads to all pre-changes placed on the wooden floor. Any liquid on the floor must be wiped off immediately; otherwise, the surface may be damaged, even after the surface has been fully cured.

**The necessity of maturing the oiled floor**
Natural oil is the best surface treatment for wooden floors. Thanks to the deep impregnation of the wood, a new oiled floor is well protected against dirt and moisture. The oiled surface matures up to four weeks after production. Aging is extended by the time the product is packed. After this time, the surface treatment is already well-matured and resistant to the effects of the environment and direct moisture. During the curing period, we recommend vacuuming the floor and keeping it clean. In extreme cases, it can be wiped with a thoroughly wrung-out mop after two weeks.

**Mandatory maintenance of the OAKCENT oiled floor**
OAKCENT explicitly points out that to preserve the natural wooden floor's value, properties, and technical parameters, only OAKCENT & Biofa cleaning agents may be used for its maintenance. If other means are used, all claims from the warranty become invalid!
Maintenance can also be ordered at http://www.oakcent.com/doplnky.

**Floor care after installation**
After laying the floor or during laying, construction dust can still occur in the interior, mainly due to unfinished construction work or interior decoration. During the surface's maturing period, the oiled wooden floor is susceptible to construction dust and mechanical damage. Construction dust has a strongly alkaline PH, which reacts with the immature surface and causes surface damage by matting the floor surface. Construction dust also acts as a fine abrasive and further aggravates the damage to the floor. If possible, prevent the creation of dust and protect the floor from dust. However, if you cover the floor, ensure the dust does not get under the blanket, where it can easily enter the wood's pores and cause severe and hard-to-repair damage. Remember that when you cover the floor, you stop the maturation of the oil, and the maturation time is extended. Do not cover the floor for more than three weeks.

**Initial treatment**
Wet (not wet) floor mopping must first be preceded by thorough surface vacuuming. Wet cleaning is possible no earlier than four weeks after unpacking the floor from the original packaging. We recommend cleaning exclusively with Clean&Care from OAKCENT. Once the surface has been thoroughly washed with Clean&Care, it is essential to use the ReNew emulsion, which will protect the surface. For the floor's initial treatment with ReNew, use 20 times its concentration than indicated in the instructions.

**How to prevent floor damage**

**I.** Use only OAKCENT Clean&Care and ReNew cleaning products to clean and care for floors. Do not use other cleaning agents. Non-original preparations can damage the surface, and the floor can get dirty quickly. Even one wipe of the floor with the wrong product or just water can damage the surface.

**II.** If the floor seems too dull, dry, or without protection, it is necessary to conserve it. This is possible by using a quadruple concentration of Clean&CARE. If liquid stains form, we recommend a professional application of polished ReNEW, oil spray treatment, or surface re-oiling. Contact us for these professional floor treatment applications.

**III.** The maximum surface temperature of the wooden floor should not exceed +27°C; otherwise, there is a risk of cracks, fissures, joints, and other damage. Check with your underfloor heating installer and pay attention to the area around your fireplace and stove. We recommend placing protection in the form of glass, tiles, or sheet metal on the floor in front of radiant heat sources.

**IV.** We recommend installing cleaning mats at the entrance to interior spaces with wooden floors. Attach felt pads to furniture parts that move on the floor (table legs, chairs, cabinets, flowerpots). When rearranging the furniture, put placemats on the furniture to avoid scratching the floor.

**V.** If a liquid is spilled on the floor, it is necessary to dry it as soon as possible. If the area is not wiped in time and the liquid forms a stain, it is possible to lightly polish the damaged area and re-oil it with an oil of the appropriate colour after the wood has properly dried. In that case, contact us.

**VI.** Do not place flowerpots directly on the floor. Moisture may not be able to dry, and the subsequent formation of mould will damage the floor.

**VII.** Liquid stains that can no longer be removed with the Clean&CARE solution may disappear over time. Wood has a particular self-cleaning effect, and oil and other stains can disappear on their own over time.

**VIII.** Very dark and light floors are significantly susceptible to damage and clogging of the wood's pores with dirt shortly after installation, usual dust from construction, or improper maintenance. Before laying such a floor, finish all construction work producing or swirling construction dust. If the floor is damaged, the floor must be treated with surface conservation after removing all dust sources. Do not hesitate to consult us about the procedure.

**IX.** We recommend painting the walls in rooms with a wooden floor before laying the floor to prevent damage to the floor. If you still need to repair the painting, carefully cover the floor.

**X.** Some carpets may contain a non-slip layer on the underside, which can stick to the surface of the wooden floor over time and damage it. Pay extra attention when choosing a suitable carpet.

**XI.** If the floor is covered for a long time with a carpet, furniture, or another object, the shade of the floor may change. After removal, a color or shade difference may be visible, but it will even out over time. We do not recommend covering the floors during the curing period, i.e., four weeks after laying.

If you need clarification about the procedure of treatment, maintenance, or other matters related to the wooden floor, feel free to contact and consult us. OAKCENT implementers have a lot of experience and will help you with professional installation, surface finish treatment, and repair of damaged areas or the entire floor surface.

**Uniqueness and differences**

The OAKCENT wooden floor is made with much manual work, especially for the client according to his wishes and requirements. Absolutely every piece of wood and, therefore, parquet is unique. The properties of the wood itself cause differences in structure and colour changes. Wood can crack, change colour, acquire a patina, and age.

You shouldn't be concerned about the appearance of a product sample or a newly laid floor. At OAKCENT, we let wood live a life of its own, so it becomes a permanent part of an interior's life. We do not try to unify the wood, seal every crevice, or unify the colours. We leave the wood with a more natural expression and preserve its uniqueness. It also offers rustic floors with knots and a distinctive wood pattern, which are not sealed. The putty can be grey in its raw state, and the final colour will only be revealed after surface treatment. Depending on the colour of the surface finish, the putty will also change in colour to a certain extent.

Individual batches of wood may differ from each other in colour or structure. Minor surface imperfections are manifestations of the uniqueness of the material, handwork, processing technology, and the properties of natural oils. Therefore, samples and exposed surfaces can sometimes differ from your new wooden floor. Each implementation is unique, and the floor is always different in shade and surface to a certain extent. These deviations are, therefore, not the subject of a valid complaint. Consult us for special requirements.

**The character of wood - classification**

The wood of the tread layer is usually classified according to its character:

• Heart is a heavily rustic wood from the centre of the trunk, with large cracks and knots, distinct colour, distinct pith rays, central drawing of the trunk, and many other beauties of wood. With the Heart character, it is possible to choose the colour of the putty, which has a noticeable influence on the flooring's final appearance. This is the most distinctive wood from the OAKCENT range. Does not contain white.

• Rustic wood is distinctly rustic. It contains drawn knots, longer cracks, and pith pars; it contains fallen-out cemented knots, larger overgrown knots, and does not contain sap.

• Premium is wood with a decent structure and an overall less pronounced appearance. Overgrown knots and loops up to 20 mm can occasionally occur. Cemented stitches sporadically up to 10 mm, occasional black stitches, decent pith rays, and natural colour differences. Most boards in the Premium classification are clean without any knots.

• You can also order sorting with no knots. Based on your specific request, we can perform an appearance classification - choosing wood, especially for you. This possibility must be discussed in advance. Manual wood selection is a slow process and requires sufficient time to prepare the order and a considerable amount of raw material in stock in the required format.

The wood's pattern and structure determine the specific characteristics of the classification Heart, Rustic, and Premium and affect the final appearance of the surface. The same surface treatment on a different grade of wood can mean a significantly different surface. Each knot or burl on rustic wood changes the appearance of the treatment and thus creates an original surface structure. Rustic floors are more open in the wood design, and in some places, they can appear torn or as if they have not been filled with oil. This is a desired and natural property during surface treatment. By nature, hand-finished floors are outside the standard specified height tolerances and may show unevenness, lower and higher places, height differences between parquets, etc. Hairs or small wood chips may also build up in some areas of the structure, which will disappear with time, maintenance, and use. All these features are evidence of the manual processing of the material.

## Surface finishes

### Brushed surface
Depending on the hardness of the wood, its structure, and its pattern, the brushing intensity of individual parts may vary. We offer several types of brushing, which differ in technology and appearance.

### Gridded surface
The squared surface is a significantly mechanically processed surface imitating the character coming from a square saw. The surface is then re-brushed. A more pronounced mechanical treatment ensures excellent adhesion and a surface that masks potential damage well. On some boards in an intense structure, a wood pore that has not been smeared with coloured oil may appear. This is not a problem; the wood is filled with transparent oil.

### Hand-planed, chiselled, rasped, and naturally dried surface
These floor surfaces are hand-finished. As a result, each piece is processed differently, directly depending on the properties of the individual piece.

### Smoke surface
The smoke surface is a special surface treatment with ammonia, which, thanks to the tannin content in the wood's tannins, causes its typical dark colouration. The tannin content can vary significantly on each parquet and thus affect the intensity of the colour. Each flooring plank can have a contrasting colour, or the floor's colour can be uniform. As it is a natural material, the smoked floor sample may not match the final product's colour, even if the production process is identical. To unify significant colour differences, it is possible to use colour-toned oil. The dark smoky colour is at a depth of 1-2 mm of the treatable oak layer. Renovating a smoked floor does not require rough sanding of the floor surface.

### Tanned surface
The tanning finish is created by exposure to a real flame. The high heat can cause the wood to crack and release the internal pressure. Some planks may crack after the floor has been laid. This is not a defect but is characteristic of the wood. Even wider boards that are not tanned can crack, for example, near a fireplace or a lighted window. The intensity of tanning can vary and cannot be precisely defined. There may be differences in the intensity of wood tanning. The wood's tanning cannot be regulated too much due to the properties of fire, wood, and the need to brush the tanned surface afterward.

### Coloured surface
This surface is impregnated with coloured pigment deep into the wood's pores and is ideal in combination with Biofa-coloured oils. Wood colouring unifies the colour differences of the wood. We offer several colours.

### Leached surface
Wood leaching is done with coatings that react with the tannins in the wood. This causes colour differences in the individual boards according to the tannin content, similar to smoking the surface. Some lyes also contain colour pigments and add a particular shade to the wood's subtler colour differences. It can be bleached wood or the removal of the pink tinge of oak. All these surfaces can still be treated with coloured oils. This creates a wide range of possible colours and combinations that offer exclusive surfaces with excellent colour depth.

### Oiled surface
We use high-quality Biofa Naturprodukt DE natural oils, which give the surface a rich appearance. This type of oiled surface is very durable after complete curing. Still, it requires approx. four weeks after laying to develop hardness for higher loads and resistance to water and other liquids. Until this time, the surface of the oiled parquet is highly susceptible to possible damage. We recommend extra caution, especially during other modifications, assembly work, moving, etc. Every oiled surface is hydrophobic; therefore, moisture can pass through after a specific time, on the order of several hours. For this reason, it is necessary to wipe any liquid from the floor's surface to avoid a direct reaction with the wood. This rule applies when using floors in bathrooms, kitchens, and other rooms.

**Swelling and drying of wood**
Wood is an organic material of plant origin. One of the main physical properties of wood is its moisture content. By wood moisture, we mean the proportion of water content in it. Wood is a hygroscopic material. It tends to keep its moisture in an equilibrium state, which depends on the environment's properties (mainly humidity and temperature). Since the properties mentioned above in the environment are variable, the moisture content of the wood also changes. When wood loses moisture, it dries out (reduces its dimensions). If wood gets wet, it absorbs moisture from its surroundings and swells (increases its dimensions). Alternating drying and swelling is called woodworking.

**Manifestations of woodworking**
Wood swells and dries out with changes in humidity. Along with this dimensional change, there may be apparent deformations of individual floor parts or the entire floor. For example, cracks can form in the wood, knots break, cemented elements are outlined, local hollow places are created on the floor, a joint is created between individual planks, or, on the contrary, the floor bulges. These properties of wood are normal and should not limit the functionality and safety of the floor. If the given manifestations limit or threaten the functionality and safety of the floor, consult with the manufacturer about a possible solution to the complaint. A prerequisite for recognising the claim and the potential repair or replacement of parts is consistent monitoring and compliance with environmental conditions (see the following humidity tables in relation to temperature). We specifically draw your attention to the transitional period and during the heating season, when there is a decrease in a room's humidity in the interiors, often simultaneously with an increase in the temperature load of the flooring due to underfloor heating.

**Air environment conditions**
The formation of joints caused by the environment, especially in the winter months, when the humidity in heated rooms drops below 45%, is only a natural property of wood.  Generally, the wider the plank floor, the greater the dimension deviation for individual parquets. In extreme cases, a persistently low percentage of moisture can lead to damage to the floor. For this reason, we recommend purchasing a hygrometer for checking and placing air humidifiers in heated and under-dried rooms. The same applies to rooms with air conditioning and rooms with a fireplace. It is essential to maintain ideal conditions in the room. Recommended humidity is 40 - 60% and temperature around 20 °C (min. 15 °C). These values benefit your wooden floor.
If this range is not observed, the floor manufacturer OAKCENT is not responsible for possible deformation of the floor (drying, bowing, troughing, dimensional changes, cracking of boards, peeling of slats, etc.).

## A suitable environment for living and the stability of wood

| Temperature | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 35 | | | | | | | | | | | | | | |
| | 30 | | | | | | | | | | | | | | |
| | 25 | | | | | | | | OK | | | | | | |
| | 20 | | | | | | | | | | | | | | |
| | 15 | | | | | | | | | | | | | | |
| | 10 | | | | | | | | | | | | | | |
| Humidity % | | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 |

# Information on orders

**Ordering a wooden floor**
The floor order is specified per m2. After accepting the contract, the client receives the order. It is necessary that you carefully check the contents, including all details. If we do not receive any response within the next two days, we consider the order to have been accepted by you, and we will produce the order according to this specification.

**Order quantity tolerance**
As a result of different dimensions and multi-stage quality control, there may be a deviation in the quantity of ordered and delivered goods = billed material, but at most by ± 3%. If you require an exact number of specific pieces of parquet size (e.g., for stairs), do not forget to state this fact on your order, broken down into individual pieces. Due to specific orders and the principle of custom production, no parts or packages can be taken back. Try to avoid possible re-orders, especially for very light and white floors; different colours may occur due to the influence of a different production batch, oxidation of the wood, and the pigment of the oil used.

**Deliveries**
Production dates are 4-8 weeks on average. When ordering, we provide a current but rough date for the completion of production. After planning the order for production, we send a precise scheduled completion date.

**Multi-layer parquets 12, 13, 15 mm**
The stable construction of multi-layer parquet is developed for laying exclusively by full-surface gluing to the substrate. The upper lamella is glued with polyurethane glue to the lower layer. The bottom layer is most often made of birch plywood or spruce lath. In the case of a specific request, this information must be specified in the order and confirmed by production.

**Manufacturing tolerances**
When processing a wooden product, measurable dimensional tolerances arise. The following tolerances are in the production standard and may occur within the material delivery or between individual deliveries. If you have a special request, it must be listed in the confirmed order from OAKCENT production.

**Appearance diversity of lots**
We draw your attention to the problem of connecting different batches of material directly to each other.
Each batch may be different in appearance. Every material age and oxidizes from the time it is made. Therefore, the colour shades of the same material can be different, and due to this, the connection can be noticeable. The difference is also due to the aging of the surface produced earlier compared to the surface made later. Batches of wood and batches of natural oil substrates and mineral pigments are also diverse. Aging of the surface and change, especially of light surface finishes, can also occur on a product that has been packed in its original packaging for a long time.

**The sameness of the tongue-and-groove profile**
We use precise diamond profiling cutters. Thanks to the custom principle of our production and optimization on the production lines, every single order item does not have to have the same stiffness and distribution of the tongue-and-groove connection. We assume that each item is material for a separate area. However, if you plan to combine items, for example, for a mix of widths in one place, this must be stated when ordering. Subsequently, it is necessary to check this fact in the order confirmation. In the same way, it is required to specify any other specific requirements and consistently check this information in the order confirmation.

**Phase on the edges**
We manufacture all single-lamella parquets as standard with a phase on all sides, except for the brushed surface, where a discreet folding of the transverse edge creates brushes.

**Sealed defects**

An ecological water-based sealant is used to seal any knots and other imperfections in the wood. However, some joints in the wood are so small or have a specific shape that the putty does not hold in them. Cut out the part of the parquet with the sealant that has fallen out or seal it with wax before laying.

**Packaging and delivery**

Instead of one long parquet in each package, there may be two half parquets. As standard, we pack parquet in vapor-tight shrink film. Non-standard lengths are marked with a red or black mark on the pen from the front of the parquet. The delivery may also contain several pieces of parquet cut on one side and missing a tongue or groove; this is a sample lot. Due to the principle of custom production and precise customer orders, we do not accept any parts or packages back.

# Flooring

**Transfer of responsibility**
Before the installation itself, check the correctness of the colour and sorting of the parquet. Please note that after laying the parquet, the installer takes responsibility for these things, and they can no longer be the subject of a complaint. It is, therefore, no longer possible to complain about the appearance of the parquet after its installation. Parquet floors are generally made to order according to the client's requirements. When ordering floors, we always recommend ordering a sufficient quantity, including the necessary cross-section. Making a few extra meters may not always be made quickly enough and may take as long as making the entire order.

**Precautions when laying the floor**
If you do not have exclusive control over ensuring the protection of the floor surface during its laying and the entire maturing of the surface, we strongly point out the necessity of implementing measures for a successful course and handover of the whole implementation without defects.
It is crucial to clarify the solution of individual details with the customer before the actual installation. During installation, check the individual planks, choose an aesthetic composition, guess and fine-tune the details, record the construction diary, gradually hand over your work (ideally by separate rooms) and then train the customer/user of the floor about important details and demonstrably familiarize them with proper maintenance.
Never allow builders and craft workers to step on the floor in their shoes during the implementation, before handing over the work, curing the glue, and during surface treatments! Painting work, construction and residual dust after construction, SDK sanding, etc., are significant risks.
If there is a risk of undue stress after installing a new floor, mark the given areas with signs warning about installing a new delicate floor. Cover the floor with a special film or a hardboard, OSB, or plywood. The responsibility of the expert and implementer is to comply with the conditions of correct implementation and to acquaint the user/customer with relevant information. Making the user/customer aware of critical points in material selection, use, and maintenance recommendations is essential.

**Preparation of flooring**
The preparation of the base and the subsequent laying of the floors are intended for experts and require strong experience in working with multi-layer wooden floors. Unprofessional installation can cause several inconveniences and can lead to the non-recognition of a claim for a defect that is not related to unprofessional installation. OAKCENT floors are exclusively intended for full-surface gluing to the substrate or other fixed fixation. It cannot be laid in a floating manner. Knowledge and thoroughness of substrate preparation, principles of correct laying, and moisture measurement cannot be underestimated! A poorly prepared base for gluing the OAKCENT wooden floor can lead to the deterioration of the entire floor. Floating installation voids the warranty!

**Unevenness of the base**
An uneven base layer with tolerances greater than 2mm per 2m length must be filled, sanded, or levelled with the appropriate material before laying. It is necessary to check its humidity, and the maximum humidity of the cement screed must not exceed 2 CM-% and, in the case of underfloor heating, 1.8 CM-%. Anhydrite screed must have a moisture content of 0.3 CM-% and chipboard: 5 to 12 percent by weight. When laying, it is necessary to check the moisture content of the floor layer. The installer must thoroughly measure the moisture content of the floor layer. Conditions for moisture content in underfloor heating are determined according to the following:

For floor coverings with cement binder: moisture content max. 1.8% CM. For anhydrite floor coverings: moisture content max. 0.3% CM. The determined residual moisture of 1.8 CM% for heated cement screeds and 0.3 CM% for heated liquid anhydrite screeds are the maximum values for accessible residual moisture. The highest permitted moisture content of concrete substrates before laying for unheated substrates is set to a maximum of 0.5% CM for anhydrite screeds, 2.5% CM for cement screeds under non-absorbent materials, and 2% for absorbent materials. The substrate must be gradually and thoroughly heated before laying. The heating log must be requested from the plumber. A screed temperature of approx. 15 - 18°C. After finishing the laying work, this temperature should not change for three days (hardening time of the glue). A glue primer is applied to the screed prepared according to the standard provided in the manufacturer's instructions.

For gluing to the screed, it is necessary to use the usual shear-resistant adhesives and primers, marked by the manufacturer as “suitable for underfloor heating.” We recommend a more flexible type of glue that can work with wood, for example, SIKA BOND T54. Due to climate changes and their effect on the floor, spar formation may occur. These do not represent a quality deficiency. When starting up for the first time and at the beginning of the heating season, it is necessary to start the heating only gradually! We recommend lowering the temperature before each cleaning of the floor. At a room temperature of 21°C, the floor’s surface temperature should not exceed 27°C at any point.  The stronger joint formation must be expected due to the higher floor temperature for carpets or furnishings on a wooden floor.

**Bonding the floor**

All OAKCENT floors are intended for full-surface bonding to the substrate. We supply the highest quality Sika Bond T54 parquet adhesive for our floors. We recommend using an adhesive with which you have good experience and have been tested on a similar type of product. A specific type of adhesive depends directly on the installer, who assumes responsibility for its selection and use. Laying must be carried out exclusively by professionals with experience in the given product type. When laying, the humidity in the room must be in the range of 40-60%, and the temperature must be 20-25°C.

**Floor heating**

Two-layer parquets (12/13mm) have a thermal resistance of R 0.10-0.12 m2K/W, three-layer parquets (15mm) have R 0.13 m2K/W and are tested and certified in the testing institute in Zlín. Jumbo parquets with a thickness of 19 mm have a thermal resistance of approx. 0.16 m2K/W. OAKCENT parquets are directly designed for use with low-temperature underfloor heating.  Adherence to the right technological laying procedure conditions, the details specified in the technical sheet, and maintaining the ideal humidity in the floor spaces are inevitable prerequisites for this floor’s trouble-free use and functionality. The generally considered superior thermal transmittance for effective room heating is not to exceed 0.18 m2K/W2, which means that all OAKCENT floors can be combined with underfloor heating.

**Environmental conditions and warranty duration conditions**

In rooms with wooden floors, it is fundamentally necessary to maintain air humidity in the range of 40-60%.
It is necessary to provide humidification, ventilation, or heating of the space. The optimum air temperature is 20-25°C. In the event of non-compliance with these conditions, any claim cannot be considered. It is critical to comply with these conditions already during installation.

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