STORAGE, FITTING & MAINTENANCE INSTRUCTIONS

Specification and Defects:

Engineered floors are manufactured in accordance with accepted industry standards, which permit tolerances not to exceed 5%. The tolerances may be of a manufacturing or natural type (this does not include colour variation). We supply flooring material in accordance with our Product Specification and Data sheets subject to this 5% tolerance.

It is the responsibility of the buyer to examine goods supplied by the company and to identify defects in materials and/or workmanship which might cause damage or injury. Illustrations, descriptions, weights and measurementsshall be taken by the buyer as a guide only, and are not binding in detail. The company reserves the right without notice and without affecting the validity of the contract to make such changes in materials, dimensions and design as are reasonable and desirable. No claims for damages / discrepancies can be made after installation as installation of our materials constitutes acceptance of the product in its current state.

Exposure of the flooring to sunlight will alter the colour of the floor, exposure for prolonged periods to excessive heat from the sun through glass in summer (such as conservatories) will make it shrink and it will then expand in winter, this will happen even with engineered flooring, this is a natural reaction for wood floors which is not considered a defect.

While the company endeavours to hold sufficient stock to meet all orders, if insufficient stock is held or the stock item has been discontinued, the company may, at its discretion, supply or deliver a substituted product or refund the buyer for such goods as soon as possible.

Storage of Wood Flooring:

We will not accept returns or claims of any kind if the wood flooring has been delivered before the completion of wet trades including plastering, plumbing and any trades that will increase the humidity of the building. Wood flooring should not be stored in any area where the humidity is more than 60% and must not be subjected to direct heat if an area is damp and you are trying to dry it out. We cannot accept any returns or claims if you have decided to store the flooring yourself prior to fitting.

No claims can be made against quality or the condition of the flooring if you have stored it on site, or anywhere else for more than 30 days and we cannot accept any returns where you have had the flooring for more than 30 days.

DO NOT take boards onto site until all **WET** trades have been completed and Relative Humidity is less than 65%. Stack cartons 50mm off the substrate supported along their full length, a minimum of 500mm from any wall, and allow the wood boards to retain a moisture content of between 6% and 9%. The moisture content of the substrate must be as detailed in BS8201:2011 and recorded by a professional installer.

Cementitious Boards dry fit as fitted

Cement and sand screed must be less than 75% relative humidity for floating engineered wood flooring & less than 65% relative humidity for full trowel applicated glue down of solid and or engineered.

Calcium sulphate screeds must be fully cured either <65% RH or <55% for glue down alternatively, <0.5% determined using the calcium carbide (CM) method. Ensure any laitance or surface treatments are removed in accordance with the supplier's instructions. For more information, please refer to the 'Subfloors for Wood Flooring and Remedial Work Advice' section of our Technical Library, accessible on our website.

Some screeds are modified and the strict instructions of those manufacturers for testing must be followed.

Timber battens must have moisture content (MC) of no more than 12% Timber based softwood floorboards / plywood panels must be dry to within 2%M.C for wood flooring wider than 100mm maximum wood-based subfloor being no more than 12%M.C. For wood flooring less than 100mm 4%M.C is acceptable with maximum of 12%M.C of wood-based subfloors. Timber subfloors must be no more than 12%M.C. and our flooring should always be fully bonded with Flexi adhesive. All surfaces must be dust free, stable and manufactured to BS Standards.

Fitting:

Artwood Flooring products should be fitted in accordance with BS8201:2011 which is the 'Code of Practice for flooring of timber, timber products and wood-based panel products'.

Normal manufacturing tolerance of 5% have been set to allow for de-selection of material if deemed unsuitable for the installation. An additional 3% allowance should be made for cutting or wastage to the net square meters required.

If there are any other trades that need to work after the floor is fitted it must be protected properly. Do NOT use plastic coverings because they are not breathable and, in some cases, if exposed to sunlight can affect the floor. The correct method is to use a "Breathable Soft Membrane" then lay hardboard on top and fully tape the hardboard sheets together at the joints. Do not apply tape to the wood floor. This should prevent any dust and particles contaminating the floor underneath. The hardboard covering should be fully vacuumed prior to removal. If remedial works are being done on walls and there is plaster or cement dust, under no circumstances should water be used before fully vacuuming the floor. Cement and Plaster are corrosive materials and will damage any floor. If this type of protection is not installed and subsequent damage occurs to the floor or finish then all warranties on our floors are null and void.

Underfloor heating: If the boards are to be installed with under floor heating, please see the under-floor heating instructions on our website and refer to BS8201:2011. You should only use engineered boards with underfloor heating and the surface temperature must not exceed 27 degrees. If the surface temperature exceeds 27 degrees and any of the installation conditions are not met then we cannot validate the warranty our products.

The installation of the flooring must be carried out according to our recommendations in the underfloor heating technical section, the most important aspects being that the underfloor heating system must be commissioned and working at full temperature to test the controls and then turned off so it is completely cold and left for 2 days. The floor should then be installed and left for 72 hours before starting the underfloor heating system which must be gradually turned up by no more than 2 degrees a day. In addition, excessive sunlight and extreme temperature and humidity variations are not covered un-der any of our warranties especially where there is underfloor heating. At no time should any protective covering be left on the wood flooring when turning the underfloor heating back on. All covering must be removed and as much ventilation as possible should be made available. Remember if you are comfortable in a room then the wood floor will be also "comfortable".

Acclimatisation:

With underfloor heating even engineered boards should be acclimatised with the underfloor heating on and then installed after it is turned off. The re-commissioning of the underfloor heating system must be done gradually over a period of 10 to 14 days at no more than 2 degrees a day. The boards should never be left in a humid or damp environment, or in any premises where plastering or any wet trades are in operation. If dehumidifiers have been used to reduce the moisture and humidity after plastering there must be no wood in the vicinity or on site. No wood flooring should be delivered for at least 14 days after all plastering work has been completed and the plaster has dried to below 2% moisture, and the dehumidifiers removed. The boards should never be left in a damp cold place and then fitted in a warm moist room this could cause "cupping" and twisting of the boards and may occur 6 months to a year later. If dehumidifiers are on when wood flooring is delivered then it will dry the wood below the 7% moisture threshold which will damage the timber. Wood floors need to "live" at 7% to 12% moisture levels. ON delivery wood flooring must be moisture tested and documented by the installer.

All wood floors must be installed by competent professionals who have the necessary skills and instruments to test the subfloors and local environment and ensure conditions are acceptable for wood flooring. You can refer to our Technical Library in the "Site Conditions" section for further details. You can contact the British Wood Flooring Association for installers for your local area.

All negotiations for fitting, terms of business and payments should be made direct to the fitting company you employ. Our recommended fitters are the best we know and if you follow their advice then you should have a trouble-free installation and a lifetime of enjoyment from your wooden floor.

Installer and Purchaser Responsibility:

It is critical that all installations are done in compliance with the procedures outlined in the solid wood flooring company's installation and maintenance instructions and or BS8201 Failure to install in accordance with the instructions and to properly maintain your wooden floor will void all warranties. No warranty coverage is provided for flooring that contains obvious defects of any kind that were installed nonetheless. It is the installers and purchaser's responsibility to set aside pieces with visible defects and not use them and you must make sure that the flooring meets the purchaser's expectations prior to in-stallation. Likewise, it is the installers and purchaser's responsibility to check that the moisture content of the uninstalled flooring is within the acceptable range that Artwood warrants of 8% to 12% prior to installation. The wood flooring supplied is manufactured to 8% to 10% moisture content. The installer and purchaser are also responsible for ensuring that the subfloor has an acceptable moisture content (see subfloor moisture content and relative humidity re-quirements above) and that the relative humidity conditions at the site are suitable (40% to 55% relative humidity) prior to installation. It is the installers and purchaser's responsibility to inspect the flooring prior to installation and to install the floor in a random and harmonious mix, and with good workmanship. Artwood's warranty does not apply to claims made on pieces of flooring installed with colour/grain variation and any warranty does not cover poor workmanship by the installer. Once the flooring has been installed, the installer and purchaser have deemed the flooring acceptable and Artwood assumes no further responsibility for defects visible at the time of installation or moisture/humidity problems.

Underfloor Heating Flow Temperature Controls: Unless a condensing boiler with a low temperature control is being used, for most underfloor heating systems the water temperature from the boiler, normally 82 degrees centigrade is reduced to the required temperature using a mixing valve. More advanced controllers, called weather compensators, use an external sensor and programme to adjust the flow and temperature to compensate for outside conditions. It is imperative to have a device to control the boiler and pump to prevent flow temperatures exceeding safety limits for wood flooring which is a maximum floor surface temperature of 27 degrees centigrade. If any of these conditions are not met then we will not guarantee our flooring and no claims can be made against us for not following our recommendations.

Electric Underfloor Heating Mats or Carbon Film Systems: Wood flooring must never be fitted directly on electric under-floor heating mats, there must be an underlay over the matting and there must be a form of spreader plate or method to spread the heat evenly over the floor. The underlay used over the matting must be tested with the heating fully turned on to its maximum heat to ensure that the surface temperature of the surface of the underlay over the heating elements does not exceed 27 degrees before fitting the flooring. If any of these conditions are not met then Artwood will not be held responsible and will not offer any refunds and no claims can be made against us.

Samples: We always insist on sending wood samples and our wood floors are sold on the basis of the wood samples that are part of each batch production. However, because wood is a natural product with inherent characteristics such as grain and colour variation, knots and splits samples can only be an indication of and guide to what you will get. Every board will be individual and we try and show the colour variations on the web site. We can accept no claims for colour variations or characteristics which are inherent in natural wood flooring. Not every board will have the same features or characteristics as the sample we send.

If in the unlikely event any portion of your floor should fail with respect to the provisions of these warranties, Artwood will replace (material only) such portion, at no cost to the original purchaser, with the same prod-uct or another product of equal value. To file a claim please contact Artwood. Claims must also be filed within the warranty coverage period and a receipt verifying the date of purchase and the ownership of the products will be required. Artwood warranties are not transferable and the warranties are valid ONLY if the owner can provide an original proof of purchase. Artwood reserves the rights to have a designated Artwood representative inspect the floors and remove samples for technical analysis. No distributor, installer, retailer, agent or employee of Artwood has the authority to alter the obligations or limitations of the Artwood warranty.

Advice, Information and Opinion: Advice, information and opinion given by any Director, Employee or Agent of the com-pany is given without legal responsibility. Any recommendations or suggestions made by the company relating to the use of goods, whether in technical literature or in response to a specific enquiry is made in good faith, but it is for the buyer to satisfy themselves of the suitability of the goods for their particular purpose, and shall be deemed to have done so.

Limit of Liability: The company shall not be liable for damage or injury caused by its goods or workmanship beyond replace-ment of goods or work verification of the buyer's complaint. The company shall not be liable for any consequential loss caused by its failure or delay in supplying, servicing or repairing goods, whether the loss arises from the actions or from the omissions of the company, its employees, agents or subcontractors.

Important Note: (The following is an extract from BS8201:2011 section 12.5—Anticipated heating conditions and moisture content of wood flooring)

- 12.5.1—Flooring should protected at all stages of storage, laying and in use to ensure that it is retained at the recommended moisture content (see 12.5.3 and clause 35). NOTE Wood is a hygroscopic material; its moisture content, therefore, depends on its environment. The moisture content which the wood attains depends primarily upon the humidity of the atmosphere and, to a lesser extent, upon the temperature. Wood shrinks as the moisture content decreases and swells as it increases. This movement, which varies according to the species, occurs mainly across the grain of the wood and is usually greater in a direction tangential to the growth rings than in a radial direction. The movement values of various species are given in Table B.1 to Table B.11. For most flooring purposes, the longitudinal movement of wood may be ignored. The importance of using wood at correct moisture content cannot be over-emphasised. If, at the time of fixing, the moisture content is too great, shrinkage is inevitable and it results in unsightly open joints. If the moisture content is too low, swelling can occur, causing lateral pressure to floors which can produce lifting. Engineered flooring will move in its length and width.
- 12.5.2 Method of heating the building. To reduce the dimensional changes which take place after wood is fixed in a building, the temperature and humidity in the building before, during and after laying the flooring should be approximately the same as those which are likely to prevail during occupation. At an early stage, the flooring contactor should be in-formed of the form of heating to be installed and should also be consulted as to when it would be advisable to turn on the heating for the first time. Adequate ventilation should be provided and laying should not commence until the initial drying out is complete; the period varies widely with the type of construction and weather and local environmental conditions. **NOTE** when heat is first applied, latent moisture within the structure of the building is drawn out and this tends initially to increase the atmospheric humidity.
- 12.5.3 Recommended moisture content at laying. The range of moisture content at laying depends mainly on the type and intensity of heating to be employed in the building. As a guide, normally the following moisture content ranges are encountered for various heating conditions:

Unheated: 15% to 19% Continuous heating: 9% to 11%

These apply specifically to solid softwood and hardwood but they also provide guidance for wood-based panels. These board materials are commonly manufactured at comparatively low moisture contents, lower sometimes than the value suggested for intermittent heating situations. Floors for which the quality of finish is of prime importance should be laid at a moisture content within the range likely to be encountered in service. They should laid after the initial drying out period is complete (see 12.5.2). **NOTE** If floors are laid at higher moisture content or earlier in the building process it can result in unsightly shrinkage gaps. Before being fixed, hardboard should be conditioned to adjust the moisture content to approximately the recommended levels.

12.5.4 Variability of moisture content. Species of wood can differ in the equilibrium moisture content they attain under given air conditions, and allowance for this might have to be made when specifying the moisture content of the wood. Some guidance on this can be obtained from BRE Technical note. 38 [10], and in uncertain cases, it is advisable that expert advice³⁾ is sought.

When measuring moisture content with an electrical moisture meter, the adhesive incorporated in panel products can give rise to misleading meter readings; in such cases the appropriate correction factor should be obtained from the meter manufacturer.

NOTE 1 If a precise moisture is required, oven-dry testing in accordance with BS EN 322 or EN 13183-1 is necessary. **NOTE 2** Panel products have a lower equilibrium moisture content than solid timber for any given relative humidity.

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