



Frevini Technical Datasheet

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Product Details

Collection	Basica / Moderno
Construction	Engineered oak
Backing	Cross bonded water boil proof birch plywood
Country of origin	Lithuania, Europe
Profile	Tongue and groove
Bevel	0.7mm micro bevel Plank: 2 sided Parquet: 4 sided
Finish	UV Lacquer (Basica Collection) UV Oil (Moderno Collection)
Surface texture	Brushed or sanded (dependent on colour selection)
Sizing	
Plank	Lengths: 1750mm – 2400mm Widths: 150 200 250 300
Herringbone and chevron	Multiple options available- size upon request or refer to website
Pack size	Dependent on selection
Nested lengths	NIL
Total thickness	15/4mm & 20/6mm
Oak lamella thickness	4mm & 6mm
Material related certifications	FSC © Certified upon request FEP Real wood Certification EC Declaration of Conformity EPA TSCA Title VI and CARB Phase 2 certified – Plywood Exceeds requirements for REACH FRR EU 2023/1464 – Plywood
Residential warranty	25 years
Commercial warranty	5 years

Technical Details

Janka hardness rating	1,120lbf or 4,982 N
Oak lamella density	600kg – 900kg/m ³ (kiln dried)
Biological durability class	Class 2
Formaldehyde emission	E1 (EN717-1)
Slip test performance	Pendulum Slip Test results as per EN BS 7696 – 2
UV lacquer	Brushed: – 67 Dry / 34 Wet Sanded: 67 Dry / 42 Wet
UV oil	Brushed: – 69 Dry / 45 Wet Sanded: 67 Dry / 47 Wet
Reaction to fire	4.8kW/m ² Critical Radiant Flux Cfl-S1 (EN 13501-1)
Thermal conductivity	λ 0.17 W/m K (EN 12664)
Reaction to fire – walls and ceiling	Group 3 / Class Dfl-s1 (Group 1 can be achieved with intumescent coating)
Formaldehyde emissions	E1 (EN 717-1)
Preferred installation method	Full trowel glue down / direct stick
Acceptable E3 alternative solution	Compliant
Underfloor heating compatibility	Yes (see further underfloor heating guidelines)

Building Product Information Requirements

Declaration

Frevini Studio NZ has provided this declaration to satisfy the provisions of Schedule 1(d) of the Building (Building Product Information Requirements) Regulations 2022.

Product/system

Name	Frevini Engineered Timber
Line	100% European manufactured engineered flooring. Oak on top of Water boil proof birch plywood
Identifier	FRE-

Description

Frevini engineered timber flooring is manufactured in our facility in Šiauliai, Lithuania, for use in residential and commercial environments. Each board comprises a European oak wear layer, precisionbonded to a waterboil proof (WBP) birch plywood core. Surface finishes consist of lowVOC UVcured oil or lacquer systems, designed for durability, abrasion resistance, and ease of maintenance. The product range includes multiple board sizes and profiles, with over 60 colour options available across two surface finish systems.

Scope of Use

- Interior floor, wall, and ceiling lining for residential and commercial buildings.
- Suitable for hightraffic, climatecontrolled environments.
- Compatible with hydronic or electric underfloor heating systems (max surface temperature 27 °C).
- Suitable for floors adjacent to sanitary fixtures or appliances when installed using Frevini's moisturecontrol procedures.
- Can be installed over prepared concrete, timber, or screed substrates.
- Can be used with approved acoustic underlays to assist in achieving STC 55 and IIC 55 ratings in intertenancy applications

Conditions of Use

- Install by direct stick method only, using Freviniapproved adhesives and systems.
- For underfloor heating installations, surface temperature must not exceed 27 °C.
- Apply D3 PVA adhesive to all tongueandgroove joints in designated splash zones.
- Maintain dry, climatecontrolled conditions at all times.
- Not recommended for exterior use, wet rooms, or primary family bathrooms.
- Timber will naturally change colour with UV exposure; this is not a defect. Use blinds, UVfiltering films, or glazing to reduce colour change.
- Substrates must be prepared to Frevini's specified tolerances.
- Installation must be carried out by qualified professionals in accordance with Frevini's installation guidelines.

Relevant building code clauses

- B2 Durability — B2.3.1 (c)
- C3 Fire affecting areas beyond the fire source — C3.4 (b)
- D1 Access Routes — D1.3.3 (d)
- E3 Internal moisture — E3.3.3, E3.3.5, E3.3.6
- F2 Hazardous building materials — F2.3.1
- G3 Food preparation and prevention of contamination — G3.3.2 (b)
- G6 Airborne and impact sound — G6.3.1, G6.3.2

Contributions to compliance

Contribution to B2.3.1

Produced in our own Lithuanian manufacturing facility, operating to European standards with controlled quality and dimensional tolerances. The construction uses a European oak wear layer over a waterboilproof (WBP) birch plywood substrate for strength and stability. Proven in residential, commercial, and hospitality projects worldwide, the product maintains performance in varied environmental conditions. With normal maintenance as per Frevini's guidelines, it will continue to meet B2.3.1(c)(i) and (ii). Covered by a lifetime structural warranty, 25year residential wear warranty, and 5year commercial wear warranty.

Contribution to C3.4

Frevini engineered timber flooring meets CflS1 reaction to fire requirements, providing flameretardant performance for use in any flooring situation within the scope of Clause C3.4. With an appropriate intumescent coating, it can also be installed on walls and ceilings where a Group 1S rating is required.

Contribution to D1

Frevini engineered timber flooring has been assessed for slip resistance in accordance with AS 4586:2013 using the Wet Pendulum Test Method (Appendix A). Dry test results exceed 60 BPN, which is above the minimum 45 BPN required for a P3 classification under D1/AS1 Table 2 for dry internal floors. When installed in conjunction with a stair nosing meeting the dimensional and slip resistance requirements of D1/AS1 (Section 7.0), the product is suitable for use in commercial and public stair access routes. Surface finish selection should be made to ensure continued compliance in areas subject to potential wet or contaminated conditions.

Contribution to E3.3.3, E3.3.5, and E3.3.6

Frevini engineered timber flooring has been tested in accordance with ISO 4760:2022 to assess surface liquid impermeability. The test results (refer to attached table) demonstrate that the product meets the impervious and cleanability requirements of E3 when installed as part of the specified system. This is presented as an E3/AS1 Alternative Solution.

For compliance in areas subject to sanitary fixtures, sanitary appliances, or splash zones, installation must be carried out using the directstick method, with D3 PVA adhesive applied to all tongueandgroove joints within the required

splash areas. This ensures water is unable to penetrate behind linings or into concealed spaces, in accordance with E3.3.6.

Contribution to F2.3.1

Frevini engineered timber flooring is safe to handle and has been tested for VOC emissions, achieving an E1 formaldehyde emission rating in accordance with EN 7171. The product meets the requirements of Acceptable Solution F2/AS1 (First Edition, Amendment 3, 2017) without additional treatment.

Contribution to G6.3.1 and G6.3.2

Frevini engineered timber flooring can be incorporated into an acoustic flooring system using an approved underlay to achieve compliance with G6.3.1 and G6.3.2. When installed over the specified acoustic underlay, the system can meet or exceed STC 55 for airborne sound and IIC 55 for impact sound. Final performance is dependent on the selected acoustic underlay specification.

Building code performance clauses

B2 Durability

B2.3.1

Building elements must, with only normal maintenance, continue to satisfy the performance requirements of this code for the lesser of the specified intended life of the building, if stated, or:

- (c) 5 years if: the building elements (including services, linings, renewable protective coatings, and fixtures) are easy to access and replace, and failure of those building elements to comply with the building code would be easily detected during normal use of the building.

C3 Fire affecting areas beyond the fire source

C3.4

Surface Linings

- (b) floor surface materials in the following areas of buildings must meet the performance criteria specified below: Area of building Minimum critical radius flux when tested to ISO 9239-1: 2010 Buildings not protected

with an automatic fire sprinkler system
Buildings protected with an automatic fire sprinkler system Sleeping areas and exitways in buildings where care or detention is provided 4.5 kW/m² 2.2 kW/m² Exitways in all other buildings 2.2 kW/m² 2.2 kW/m² Firecells accommodating more than 50 persons 2.2 kW/m² 1.2 kW/m² All other occupied spaces except household units 1.2 kW/m² 1.2 kW/m²

D1 Access Routes

D1.3.3

Access routes shall:

- (d) have adequate slip-resistant walking surfaces under all conditions of normal use

E3 Internal moisture

E3.3.3

Floor surfaces of any space containing sanitary fixtures or sanitary appliances must be impervious and easily cleaned.

E3.3.5

Surfaces of building elements likely to be splashed or become contaminated in the course of the intended use of the building, must be impervious and easily cleaned.

E3.3.6

Surfaces of building elements likely to be splashed must be constructed in a way that

prevents water splash from penetrating behind linings or into concealed spaces.

F2 Hazardous building materials

F2.3.1

The quantities of gas, liquid, radiation or solid particles emitted by materials used in the construction of buildings, shall not give rise to harmful concentrations at the surface of the material where the material is exposed, or in the atmosphere of any space.

G3 Food preparation and prevention of contamination

G3.3.2

Spaces for food preparation and utensil washing shall have:

- (b) all building elements constructed with materials which are free from hazardous substances which could cause contamination to the building contents

G6 Airborne and impact sound

G6.3.1

The Sound Transmission Class of walls, floors and ceilings, shall be no less than 55.

G6.3.2

The Impact Insulation Class of floors shall be no less than 55.