



TYPE APPROVAL CERTIFICATE

Certificate No:
TAK00000A4
Revision No:
3

This is to certify:

That the Wood Products

with type designation(s)
RIGA Floor Grating, RIGA Wall Grating, RIGA Lining, RIGA Heksa Plus, RIGA HPL

Issued to

Latvijas Finieris AS
Rīga, Latvia

is found to comply with
DNV class programme DNV-CP-0098 – Type approval – Plywood
DNV rules for classification – Ships

Application :

For use as floor grating, wall grating, various linings, including tank top linings, walls and ceilings calling for hard wear resistant, hygienic, preservative treated against biological attacks, as optional, and easy-to-clean surfaces and wet rooms.

For areas without special fire technical requirements.

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Issued at **Hamburg** on **2022-07-10**

for **DNV**

This Certificate is valid until **2027-07-09**.

DNV local station: **Riga FIS**

Approval Engineer: **Joachim Rehbein**

Thorsten Lohmann
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

Birch plywood glued with phenol- formaldehyde (PF) / lignin-phenol-formaldehyde (LPF) resins, a preservative treated (optional), epoxy painted or overlaid with phenolic, melamine or UV-resistant film or high-pressure laminate (HPL).

Type designations:

- **RIGA Floor Grating**
- **RIGA Wall Grating**
- **RIGA Lining**
- **RIGA Heksa Plus**
- **RIGA HPL**

	Test Standards	11 plies / 15 mm	Units
Bending strength, longitudinal	EN 310	78.6	N/mm ²
Bending strength, transverse	EN 310	74.4	N/mm ²
Modulus of Elasticity, longitudinal	EN 310	8 875	N/mm ²
Modulus of Elasticity, transverse	EN 310	6 118	N/mm ²
Density	EN 323	705	kg/m ³

Type of gluing:

- EN 314 class 3
- BS 1203 class H4
- DIN 68705-3 class BFU/100

Place of production

"Latvijas Finieris" AS, Mill Lignums, Finiera iela 6, Riga LV-1016, Latvia

"Latvijas Finieris" AS, Mill Furniers, Bauskas iela 59, Riga LV-1004, Latvia

"Latvijas Finieris" AS, Mill Hapaks, Finiera iela 2, Riga LV-1016, Latvia

DNV local station: Riga

Responsibility

The Company (stated on the front page of this Certificate) takes the responsibility that both design and production are in compliance with Rules, Standards and/or Regulations listed on page 1 of this certificate.

Application/Limitation

For use as floor grating, wall grating, various linings, walls and ceilings calling for hard wear resistant, hygienic, preservative treated against biological attacks, as optional, and easy-to-clean surfaces and wet rooms.

For use in areas without special fire technical requirements.

For use in some of the application areas listed there may be requirements to fire technical properties. The material may be subject to approval w.r.t. fire technical properties and this will be evaluated in each individual case.

Type Approval documentation

Renewal of TAK00000A4 2022:

1. Type approval assessment report TA 401 issued 2022-06-15;
2. Attestation 0765-CPR-0372 from Fraunhofer WKI of 2020-11-04 for production control acc. EN13986:2004+A1:2015 for birch plywood EN 636-3 S, mill "Lignum";
3. Attestation 0765-CPR-0373 from Fraunhofer WKI of 2020-11-04 for production control acc. EN13986:2004+A1:2015 for birch plywood EN 636-3 S, mill "Furniers";
4. Technical data sheets RIGA HPL 04/2022, RIGA Lining/Grating 04/2022, RIGA Heksa/Heksa Plus 04/2022;
5. Witnessed test reports of June 2022;
6. Evaluation report 2020/62 issued by Latvijas Finieris of 2020-10-20.

Extension of certificate by RIGA HPL for wet rooms, 2019:

1. Attestation 0765-CPR-0372 from Fraunhofer WKI of 2019-10-15 for production control acc. EN13986:2004+A1:2015 for birch plywood EN 636-3 S, mill "Lignum";
 2. Attestation 0765-CPR-0373 from Fraunhofer WKI of 2019-10-15 for production control acc. EN13986:2004+A1:2015 for birch plywood EN 636-3 S, mill "Furniers";
 3. Technical documentation Version Nr.3, 2020-01-20;
 4. Factory production control test results (Bending acc. EN 310, bond quality acc. EN314) of 2020-01-28;
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1. Assessment Report from DNV GL Riga of 2017-06-08.
 2. Letter from LF of 2017-05-22 re. renewal of certificates.
 3. LF summary of sample test results of 2017-06-08.
 4. Letter from LF of 2017-07-08 re. Birch plywood Riga@ preservative treated against biological attacks.
 5. Technical Leaflet and SDS for wood preservative component.
 6. Application for Type Approval of 2017-06-08.
 7. Re-issuance of Type Approval Certificate No. K-5579.
 8. Survey Report from DNV GL Riga of 2016-03-07.
 9. Letter from Latvijas Finieris of 2016-03-04.
 10. Assessment Report from DNV GL Riga of 2016-02-26.
 11. Test report QA-2016-0346 from Fraunhofer-Institut für Holzforschung Wilhelm-Klauditz-Institut WKI of 2016-02-03.
 12. Test report QA-2016-0347 from Fraunhofer-Institut für Holzforschung Wilhelm-Klauditz-Institut WKI of 2016-02-03.
 13. Test report QA-2016-0348 from Fraunhofer-Institut für Holzforschung Wilhelm-Klauditz-Institut WKI of 2016-02-03.
 14. Attestation BFU-524-1/2015 from Fraunhofer-Institute for Wood Research Wilhelm-Klauditz-Institut WKI of 2015-09-08.
 15. Attestation BFU-265-1/2015 from Fraunhofer-Institute for Wood Research Wilhelm-Klauditz-Institut WKI of 2015-09-08.
 16. Attestation BFU-221-1/2015 from Fraunhofer-Institute for Wood Research Wilhelm-Klauditz-Institut WKI of 2015-09-08.
 17. Email from "Latvijas Finieris" AS of 2013-06-06, incl. test report & summary report.
 18. Emails from DNV Riga of 2013-05-10, 2013-05-27 and 2013-06-04, incl.
 - Application for Type Approval of 2013-04-22.
 - Assessment Report from DNV Riga of 2013-05-27.
 - Survey Report No. RIG 82113023 from DNV Riga of 2013-05-17.
 - Test Results of 2013-05-23.
 - Standards overview documents by "Latvijas Finieris" AS of 2013-05-02 and 2013-05-09.
 - Technical Documentation for Det Norske Veritas Type Approval – Birch plywood RIGA for Ships of 2013-05-08.
 - AS Latvijas Finieris plywood handbook, 2010.

Tests carried out

Type Testing carried out in accordance with **Type Approval documentation**, including testing of: bending strength, modulus of elasticity (EN 310), shear strength of glue joint (EN 314-1), density (EN 323), thickness of veneers, number of plies.

Marking of product

Package shall be marked with *manufacturer's name*: "**Latvijas Finieris**" AS, Latvia and *type designation*.

The marking is to be carried out in such a way that it is visible, legible and indelible. The marking of product is to enable traceability to the DNV Type Approval Certificate.

Periodical assessment

Periodical assessments are required after two years and after 3.5 years (retention survey) and for renewal after 5 years (renewal survey). Refer to DNV-CP-0338, Sec.4.



Job Id: **262.1-022181-5**
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This certificate is only valid if required assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in <https://approvalfinder.dnv.com>

END OF CERTIFICATE