

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Wood Products**

with type designation(s)
Duraply HPL

Issued to

GARNICA PLYWOOD FUENMAYOR, SLU
Fuenmayor La Rioja, Spain

is found to comply with

DNV GL class programme DNVGL-CP-0098 – Type approval – Plywood
DNV GL rules for classification – Ships

Application :

For use as floor grating, wall grating, various linings, including tank top linings, walls and ceilings, preservative treated against biological attacks, and easy-to-clean surfaces.

For areas without special fire technical requirements.

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

This Certificate is valid until **2022-02-06**.

Issued at **Høvik** on **2017-02-07**

DNV GL local station: **Bilbao**

for **DNV GL**

Approval Engineer: **Stefan Marion**

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Martin Strande
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.

Product description

Duraply HPL, poplar plywood glued with MUF resins, preservative treated, with one or both sides having HPL finish

	Test standards	Features	Units
Bending strength, longitudinal	EN 310	2500 - 4500	N/mm ²
Bending strength, transverse	EN 310	3000 - 5500	N/mm ²
Modulus of Elasticity, longitudinal	EN 310	20-45	N/mm ²
Modulus of Elasticity, transverse	EN 310	22-48	N/mm ²
Density	EN 323	440-500	Kg/m ³

NOTE: Strength properties refer to raw panels.

Thickness [mm]	5	6	7	8	9	10	10.5	11	12	14
Number of plies	3	5	5	5	5	5	7	7	7	7

Thickness [mm]	15	17	18	22	25	30	35	40	44	50
Number of plies	7	9	9	9	11	13	15	19	21	21

Place of production

"Garnica Plywood Baños de Río Tobía (2)", Camino de Berceo, s/n. 26320, Baños de Río Tobía. La Rioja. SPAIN

"Garnica Plywood Fuenmayor", Ctra. de Navarrete, 20. 26360, Fuenmayor. La Rioja. SPAIN.

DNV GL local office: Bilbao

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, preservative treated against biological attacks, and easy-to-clean surfaces.

Low ignitability and Low flame spread properties have not been documented for the Duraply® HPL and is therefore intended 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

Tests carried out

Type Testing carried out in accordance with Type Approval documentation, including testing of: bending strength, modulus of elasticity (EN 310), bonding quality (EN 314), density (EN 323), thickness of veneers, number of plies.

Marking of product

Job Id: **262.1-024602-1**
Certificate No: **TAK00000N5**

Package shall be marked with manufacturer's name: "**GARNICA PLYWOOD FUENMAYOR, SLU**", Spain 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 GL Type Approval Certificate.

Periodical assessment

The scope of the Periodical Assessment is to verify that the conditions stipulated for the Type Approval is complied with and that no alterations are made to the product design or choice of materials.

Periodical Assessment to be performed after 2 and 3.5 years (Certificate Retention) and at renewal after 5 years (Certificate Renewal).

The main elements of the Periodical Assessment are to:

- Ensure that **Type Approval documentation** is available.
- Review design, materials, production process, and performance with respect to possible changes, in order to ensure compliance with **Type Approval documentation** and/or referenced material specifications.
- Ensure traceability between manufacturer's product marking and DNV GL Type Approval Certificate.

END OF CERTIFICATE