

EC-TYPE EXAMINATION CERTIFICATE

Application of: Council Directive 96/98/EC of 20 December 1996 on Marine Equipment as amended by directive 2014/93/EU, issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Directorate. This Certificate is issued by DNV GL AS under the authority of the Government of the Kingdom of Norway.

This is to certify:

**That the Surface materials and floor coverings with low flame-spread characteristics:
decorative veneers**

with type designation(s)

Duropol-HPL IMO / Duropol-HPL Metallic IMO

Issued to

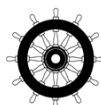
Pfleiderer Arnsberg GmbH
Arnsberg Nordrhein-Westfalen, Germany

is found to comply with the requirements in the following Regulations/Standards:

Annex A.1, item No. A.1/3.18a and Annex B, Module B in the Directive. SOLAS 74, Reg. II-2/3, II-2/5, II-2/6, II-2/9 & X/3, IMO MSC/Circ. 1120, 2000 HSC Code 7 and IMO 2010 FTP Code

Further details of the equipment and conditions for certification are given overleaf.

Høvik, 2015-11-06
for **DNV GL AS**



This Certificate is valid until
2019-12-02

Notified Body No.: **0575**

Vidar Dolonen
Head of Department

DNV GL local office:
Essen

Synnøve Bolstad Eri
Surveyor

Product description

"Duropal-HPL IMO / Duropal-HPL Metallic IMO" a high pressure laminate consisting of:

- Melamine impregnated decorative paper (top layer)
- Phenol impregnated core paper
- Water based polyvinyl acetate adhesive
- Substrate (centre layer)

Top layer: Melamine impregnated decorative paper
Nominal thickness: 0.5 – 0.8 mm (+/- 0,1 mm)
Nominal density: 1.540 kg/m³

Substrate: ThermaxSN / Fibro AG
Nominal thickness: 19 mm
Nominal density: 750 kg/m³ (+/- 5%)

Adhesive: Rakoll GXL-3 (water based polyvinyl acetate) / H.B. Fuller Deutschland GmbH
Application rate: 95 g/m²

Total thickness: 20.6 mm
Nominal density: 750 kg/m³
Nominal area density: 17.6 kg/m²
Organic content: 10 %

Application/Limitation

Approved for use as low flame spread surface material, not generating excessive quantities of smoke nor toxic products in fire.

Approved for all colour variations.

The products may be applied to any metallic base and non-metallic base.

Any adhesive used, other than the one used during testing, has to be tested for low flame spread characteristics according to IMO 2010 FTP Code part 5 and to be approved according to the Marine Equipment Directive and bear the Mark of Conformity.

Maximum gross calorific value shall be documented separately where applicable, ref. SOLAS Chapter II-2 Reg. 5.3.2

Each product is to be supplied with its manual for installation and use.

Type Examination documentation

Test reports all from DMT-Test laboratory for Fire Protection, Dortmund, Germany:

Product name	Test report no.	Dated	IMO 2010 FPT Code part
Duropal-HPL IMO (0.8 mm)	20645132-10c	2014-08-08	5
Duropal-HPL IMO (0.8 mm)	20645132-20c	2014-08-11	2
Duropal-HPL Metallic IMO (0.8 mm)	20645132-10a	2014-08-08	5
Duropal-HPL Metallic IMO (0.8 mm)	20645132-20a	2014-08-11	2
Duropal-HPL IMO (Etagenpresse 0.5 mm)	20654141-10a	2015-08-12	5
Duropal-HPL IMO (Etagenpresse 0.5 mm)	20654141-20a	2015-08-13	2
Duropal-HPL IMO (Contipresse 0.5 mm)	20654141-10b	2015-08-12	5
Duropal-HPL IMO (Contipresse 0.5 mm)	20654141-20b	2015-08-13	2

Tests carried out

Tested according to IMO 2010 FTP Code part 5 and 2.

Job Id: **344.1-004052-5**
Certificate No: **MEDB00000BM**

Marking of product

The product or packing is to be marked with name of manufacturer, type designation, the MED Mark of Conformity and USCG Approval Number if applicable (see below).

Mark of Conformity

The manufacturer is allowed to affix the Mark of Conformity according to Article 11 in the Council Directive 96/98/EC on Marine Equipment and shall issue a Declaration of Conformity, only when the module D or E or F of Annex B in the same directive is fully complied with.

Module D: The quality system for production and testing shall be approved by the Notified Body.

Module E: The quality system for inspection and testing shall be approved by the Notified Body.

Module F: Compliance of the products to type as described in this EC Type-Examination Certificate must be verified by the Notified Body who also shall issue a Certificate of Conformity.

USCG Approval

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F), as allowed by the "Agreement between the United States of America and the EEA EFTA states on the mutual recognition of Certificates of Conformity for Marine Equipment" signed 17 October 2005.