



CERTIFICATE NUMBER

04-LD389636/1-PDA

DATE

25 March 2009

ABS TECHNICAL OFFICE

ABS Europe

CERTIFICATE OF Design Assessment

This is to Certify that a representative of this Bureau did, at the request of
LANTOR B.V. - VEENENDAAL

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate. It will remain valid as noted below or until the Rules or specifications used in the assessment are revised (whichever occurs first).

PRODUCT: laminate bulking material

MODEL: Coremat Xi

ABS RULE: High Speed Craft, Sailing Yachts and Motor Pleasure Yachts

OTHER STANDARD:

AMERICAN BUREAU OF SHIPPING

Reginald M. (Mike) Bell

Engineering Type Approval Co-ordinator

LANTOR B.V.

P.O. BOX 45
VEENENDAAL
3900 AA
Netherlands
Telephone: +31-318-537111
Fax: +31-318-537-420

Product: laminate bulking material

Model: Coremat Xi

Intended Service:

Thickness enhancer for single skin construction

Description:

Available in 2,3,4 and 5mm thickness'

Ratings:

Density: 0.028g/cm³ (dry), 0.75g/cm³ , Shear strength: 4.9MPa, Shear Modulus: 32.9MPa, Compressive strength: 7.6MPa, Compressive Modulus: 77.9MPa, Flexural strength: 9.5MPa, Flexural modulus: 940MPa, Tensile strength: 3.4MPa, Tensile modulus: 10.3MPa, Tensile strain: 50%, Shear Strain: 1.4%. (values given are with the coremat impregnated with a polyester resin) These values are for guidance only.

Service Restrictions:

Max. operating temperature 90 degrees centigrade. Suitable for use with polyester, vinylester phenolic and epoxy resins. The coremat should be completely wet out with resin and should not be located outside the middle 46% of the total laminate thickness. The coremat should be completely encapsulated.

Comments:

The complete laminate lay-up is to be reviewed and tested in accordance with ABS requirements for materials and welding 1997. The resulting mechanical properties are to be used for approval of the application.

Notes/Documentation:

This Product Design Assessment (PDA) is valid only for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

Term of Validity:

This Design Assessment Certificate number 04-LD389636/1-PDA, dated 25/Mar/2009 will expire on 24/Mar/2014 or at an earlier date should there be alterations to the product's design or changes to the referenced ABS Rules and other specifications, which affect the product. Product use on or after 1 January 2010, will be subject to compliance with the ABS Rules or specifications in effect when the vessel, MODU or facility is contracted. The product's acceptability on board ABS-classed vessels or facilities is defined in the service restrictions of this certificate.

STANDARDS**ABS Rules:**

High Speed Craft, Sailing Yachts and Motor Pleasure Yachts

