



CERTIFICATE NUMBER  
02-LD324722-PDA

DATE  
24 September 2002

ABS TECHNICAL OFFICE  
London ESD

# CERTIFICATE OF Design Assessment

This is to Certify that a representative of this Bureau did, at the request of  
**E. Wood Ltd.**

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; and it will remain valid for five years from the date of issue or until the Rules or specifications used in the assessment are revised (whichever occurs first).

PRODUCT: Non Structural Rebuilding and Surfacing Materials  
MODEL: See attached listings  
ABS RULE: N/A  
OTHER STANDARD: Manufacturer's Standard

AMERICAN BUREAU OF SHIPPING

David R. Morgan

# TERMS & CONDITIONS OF ABS Design Assessment

## 1. AGREEMENT

The issuance and interpretation of this certificate is subject to the terms and conditions of the Request for Product Type Approval and Agreement which are hereby incorporated by reference.

## 2. REPRESENTATIONS AS TO DESIGN ASSESSMENT

Design Assessment is representation by ABS as to the structural and mechanical fitness for a particular use or service in accordance with its Rules and standards. The Rules of American Bureau of Shipping are not meant as a substitute for the independent judgment of professional designers, naval architects and marine engineers nor as a substitute for the quality control procedures of shipbuilders, engine builders, steel makers, suppliers, manufacturers and sellers of marine vessels, materials, machinery or equipment. ABS being a technical society can only act through Surveyors or others who are believed by it to be skilled and competent. ABS represents solely to the vessel Owner or other client (hereinafter "Client") of ABS that when assigning class it will use due diligence in the development of Rules, Guides, and standards and in using normally applied testing standards, procedures and techniques as called for by the Rules, Guides, standards or other criteria of ABS for the purpose of assigning and maintaining class. ABS further represents to the Client of ABS that its certificates and reports evidence compliance only with one or more of the Rules, Guides, standards or other criteria of ABS in accordance with the terms of such certificate or report. Under no circumstances whatsoever are these representations to be deemed to relate to any third party.

## 3. SUSPENSION OF CERTIFICATION

Any of the following events will cause immediate suspension of the certificate of design assessment unless the change is submitted to ABS for a new review:

- Redesign of the product or products covered by this certificate.
- Substantial change in management organization.
- Failure to pay ABS fees.

## 4. RESPONSIBILITY AND LIABILITY

It is understood and agreed that the Certificate of Design Review (hereinafter referred to as "Certificate") issued as part of the services rendered under the Agreement is a representation only that the vessel, structure, item of material, equipment or machinery or any other item covered by a certificate has met one or more of the Rules or Standards of American Bureau of

Shipping and is issued solely for the use of ABS, its committees, clients or other authorized entities. The validity, applicability and interpretation of a certificate issued under the terms of or in contemplation of the Agreement is governed by the Rules and standards of American Bureau of Shipping who shall remain the sole judge thereof. Nothing contained in this certificate or any report issued in contemplation of this certificate shall be deemed to relieve any designer, builder, owner, manufacturer, seller, supplier, dealer, operator or other entity of any warranty express or implied nor to create any interest, right, claim or benefit in any third party. It is understood and agreed that nothing expressed here is intended or shall be construed to give any person, firm or corporation, other than the parties hereto, any right, remedy or claim hereunder or any provision herein contained; all provisions hereof are for the sole and exclusive benefit of the parties hereto.

## 5. LIMITATION

ABS makes no representations beyond those contained herein and in the provisions of the Agreement regarding its reports, statements, plan review, surveys, certificates or other services.

## 6. HOLD HARMLESS

The party to whom this certificate is issued, and his assignee and successor in interest, agree to indemnify and hold harmless ABS from and against any and all claims, demands, lawsuits, or actions for damages, including legal fees, to persons or other legal entities and property, tangible, intangible, or otherwise which may be brought against ABS incidentally, arising out of or in connection with the work done, services performed or material to be furnished under this certificate, except for those claims caused solely and completely by the negligence of ABS, its agents, employees, officers, directors or subcontractors.

## 7. ARBITRATION

Any and all differences and disputes of whatsoever nature arising out of this agreement shall be put to arbitration in the City of New York pursuant to the laws relating to the arbitration then in force, before a board of three persons, consisting of one arbitrator to be appointed by ABS, one by Client, and one by the two so chosen. The decision of any two of the three on any point or points shall be final. Until such time as the arbitrators finally close the hearings either party shall have the right by written notice served on the arbitrators and on an officer of the other party to specify further disputes or difference under this Agreement for hearing and determination. The arbitration is to be conducted in accordance

with the rules of the Society of Maritime Arbitrators, Inc. The arbitrators may grant any relief, other than punitive damages, which they, or a majority of them, deem just and equitable and within the scope of the agreement of the parties, including, but not limited to, specific performance. Awards made in accordance to this clause may include costs including a reasonable allowance for attorney's fees and judgment may be entered upon any award made hereunder in any court having jurisdiction ABS and client hereby mutually waive any and all claims to punitive damages in any forum.

Client shall be required to notify ABS within thirty (30) days of the commencement of any arbitration between it and third parties which may concern ABS's work in connection with this Agreement and shall afford ABS an opportunity, at ABS's sole option, to participate in the arbitration.

## 8. TIME BAR TO LEGAL ACTION

Any statute of limitation notwithstanding, Client expressly agrees for itself and its affiliated companies that its right to bring or to assert against ABS any and all claims, demands or proceedings whether in arbitration or otherwise shall be waived unless (a) notice is received by ABS within thirty (30) days after Client or its affiliates had notice of or should reasonably have been expected to have had notice of the basis for such claims; and (b) arbitration or legal proceedings, if any, based on such claims or demands of whatever nature are commenced within one (1) year of the date of such notice to ABS.

## 9. LIMITATION OF LIABILITY

The contractual liability of American Bureau of Shipping, its officers, employees, agents or subcontractors for any loss, claim, or damage arising from negligent performance or non-performance of any services under this Agreement, or from breach of any implied or express warranty of workmanlike performance in connection with the services, or from any other reason, to any person, corporation, partnership, business entity, sovereign, country or nation, shall be limited to the greater of a) \$100,000 or b) an amount equal to ten times the sum actually paid for the services alleged to be deficient.

The limitation of liability may be increased up to an amount twenty-five times that sum paid for services upon receipt of Client's written request at or before the time of performance of service and upon payment by Client of an additional fee of \$10,000 for every \$1,000.00 increase in the limitation.



# ABS

## TYPE APPROVAL PROGRAM

CERTIFICATE NUMBER

NC295181-X

PLANT LOCATION

Northallerton, UK

PORT OFFICE

Newcastle

# CERTIFICATE OF Manufacturing Assessment

This is to Certify that a representative of this Bureau did, at the request of  
**E. Wood Ltd.**


attend their facilities on the date and location stated, in order to carry out a survey of the facilities and associated quality procedures. The facility is considered capable of manufacturing a product which meets the designated standards. The product listed on the Attachment is eligible to be placed on this Bureau's *List of Type Approved Products*, subject to annual facility surveys by a representative of this Bureau and renewal of this Certificate after five (5) years.

PRODUCT DESCRIPTION Non Structural Rebuilding and Surfacing Materials

ISSUE DATE 30-Oct-02

EXPIRATION DATE 30 Oct 07

SURVEYOR'S SIGNATURE

  
PP Michael J. Melburn

FIRST ANNUAL ENDORSEMENT

SECOND ANNUAL ENDORSEMENT

THIRD ANNUAL ENDORSEMENT

FOURTH ANNUAL ENDORSEMENT



# TERMS & CONDITIONS OF ABS Manufacturing Assessment

## 1. AGREEMENT

Unless otherwise agreed in writing, all services rendered and certificates issued are governed by the terms and conditions of the "Request for Product Type Approval and Agreement" (the "Agreement") which are hereby incorporated by reference.

## 2. REPRESENTATIONS AS TO MANUFACTURING ASSESSMENT

A certificate of manufacturing assessment represents that the product design meets the ABS, statutory, industrial or manufacturer's standard described on the reverse hereof and that the manufacturer has established a systematic quality monitoring system sufficient to show its capacity to consistently manufacture a product which meets the designated standards. ABS is not a substitute for the independent judgment of professional designers or engineers nor a substitute for the quality control procedures of constructors, steel makers, suppliers, manufacturers and vendors of marine structures, materials, machinery or equipment. ABS represents solely to the manufacturer or other client of ABS that it will use due diligence in developing Rules, Guides and standards and in surveying the plant as called for by ABS criteria for type approval.

## 3. SUSPENSION OF CERTIFICATION

Any of the following events will cause immediate suspension of the certificate of manufacturing assessment unless the change is submitted to ABS for a new review and audit.

- a) Redesign of the product or products covered by this certificate;
- b) Change in production methods;
- c) Substantial change in management organization;
- d) Substantial change in frequency or curriculum for personnel training;
- e) Refusing access to ABS personnel for periodic or annual audits;
- f) Failure to correct a non-compliance identified during an audit or in service;
- g) Failure to pay ABS fees.

## 4. VALIDITY

The validity, applicability and interpretation of a certificate issued under the terms of or in contemplation of ABS Type Approval are governed by the Rules, Guides and

standards of American Bureau of Shipping which shall remain the sole judge thereof. Nothing contained in this certificate or in any report issued in contemplation of this certificate shall be deemed to relieve any designer, builder, owner, manufacturer, seller, supplier, repairer, operator or other entity of any warranty express or implied, nor create any interest, right, claim or benefit in any third party. It is understood and agreed that nothing expressed herein is intended or shall be construed to give any person, firm or corporation other than the parties hereto, any right, remedy, or claim hereunder or under any of the provisions herein contained; all of the provisions hereof are for the sole and exclusive benefit of the parties hereto.

## 5. LIMITATION

ABS makes no representations beyond those contained herein and in the provisions of the Agreement regarding its reports, statements, plan review, surveys, certificates or other services.

## 6. HOLD HARMLESS

The party to whom this certificate is issued, and his assignee and successor in interest, agree to indemnify and hold harmless ABS from and against any and all claims, demands, lawsuits, or actions for damages, including legal fees, to persons or other legal entities and property, tangible, intangible, or otherwise which may be brought against ABS incidental to, arising out of or in connection with the work done, services performed or material to be furnished under this certificate, except for those claims caused solely and completely by the negligence of ABS, its agents, employees, officers, directors or subcontractors.

## 7. ARBITRATION

Any and all differences and disputes of whatsoever nature arising out of this agreement shall be put to arbitration in the City of New York pursuant to the laws relating to the arbitration there in force, before a board of three persons, consisting of one arbitrator to be appointed by ABS, one by Client, and one by the two so chosen. The decision of any two of the three on any point or points shall be final. Until such time as the arbitrators finally close the hearings either party shall have the right by written notice served on the arbitrators and on an officer of the other party to specify further disputes or difference under this Agreement for hearing and determination. The arbitration is to be conducted in accordance with the rules of the Society of Maritime Arbitrators, Inc. The arbitrators may grant any relief, other than punitive damages,

which they, or a majority of them, deem just and equitable and within the scope of the agreement of the parties, including, but not limited to, specific performance. Awards made in pursuance to this clause may include costs including a reasonable allowance for attorney's fees and judgment may be entered upon any award made hereunder in any court having jurisdiction. ABS and client hereby mutually waive any and all claims to punitive damages in any forum.

Client shall be required to notify ABS within thirty (30) days of the commencement of any arbitration between it and third parties which may concern ABS's work in connection with this Agreement and shall afford ABS an opportunity, at ABS's sole option, to participate in the arbitration.

## 8. TIME BAR TO LEGAL ACTION

Any statutes of limitation notwithstanding, Client expressly agrees for itself and its affiliated companies that its right to bring or to assert against ABS any and all claims, demands or proceedings whether in arbitration or otherwise shall be waived unless (a) notice is received by ABS within thirty (30) days after Client or its affiliates had notice of or should reasonably have been expected to have had notice of the basis for such claims; and (b) arbitration or legal proceedings, if any, based on such claims or demands of whatever nature are commenced within one (1) year of the date of such notice to ABS.

## 9. LIMITATION OF LIABILITY

The combined liability of American Bureau of Shipping, its officers, employees, agents or subcontractors for any loss, claim, or damage arising from negligent performance or non-performance of any services under this Agreement, or from breach of any implied or express warranty of workmanlike performance in connection with the services, or from any other reason, to any person, corporation, partnership, business entity, sovereign, country or nation, shall be limited to the greater of a) \$100,000 or b) an amount equal to ten times the sum actually paid for the services alleged to be deficient.

The limitation of liability may be increased up to an amount twenty-five times that sum paid for services upon receipt of Client's written request at or before the time of performance of service and upon payment by Client of an additional fee of \$10.00 for every \$1,000.00 increase in the limitation.

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**E. Wood Ltd.**

Standard Way  
Northhallerton  
North Yorkshire  
DL6 2XA  
United Kingdom

Telephone : 44-1609-780-170

Fax : 44-1609-788718

**MA Certificate No: 97-NC11324-X**

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**Product :** Non Structural Rebuilding and Surfacing Materials

**Model Name:** Thortex Cerami-Flex EG, Thortex Cerami-Flex FG

**Intended Service:**

Rebuilding and resurfacing of materials subject to erosion, corrosion and cavitation attack

**Description:**

Thortex Ceramix-Flex EG and Thortex Cerami-Flex FG are two component high build flexible cold curing erosion and cavitation resistant polyurethane systems

**Ratings:**

Not Applicable

**Service Restrictions:**

The application of the above mentioned materials cannot be considered as restoring the original strength of the components. The use of the materials is merely for the purpose of restoring original dimensions, finish and alignment.

**Comments:**

Not Applicable

**Term of Validity:**

This product/model is covered under Product Design Assessment (PDA) Certificate # 02-LD324722-PDA, dated 24/Sep/2002. This PDA Certificate expires September of 2007. It will remain valid for the 5 years from date of issue or until the Rules or specifications used in the assessment are revised (whichever occurs first).

**STANDARDS**

**Others:**

Manufacturer's Specification



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**E. Wood Ltd.**

Standard Way  
Northhallerton  
North Yorkshire  
DL6 2XA  
United Kingdom

Telephone : 44-1609-780-170

Fax : 44-1609-788718

**MA Certificate No: 97-NC11324-X**

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**Product :** Non Structural Rebuilding and Surfacing Materials

**Model Name:** See Description

**Intended Service:**

Rebuilding and resurfacing of materials subject to erosion, corrosion and cavitation attack

**Description:**

Models: Thortex Metal-Tech RG (Unirep No. 1), Thortex Metal-Tech FG (Unirep No. 2), Thortex Metal-Tech EG (Unirep No. 3), Thortex Cerami-Tech FG (Unirep No. 12), Thortex Cerami-Tech EG (Unirep No. 13), Thortex Cerami-Tech HG (Unirep No. 19), Thortex Flexi-Tech 80 (Unirep 31/32), Thortex Flexi-Tech 60 (Unirep 33/34).

**Ratings:**

Not Applicable

**Service Restrictions:**

Materials cannot be considered as restoring original strength of components

**Comments:**

Not Applicable

**Term of Validity:**

This product/model is covered under Product Design Assessment (PDA) Certificate # 02-LD324722-PDA, dated 24/Sep/2002. This PDA Certificate expires September of 2007. It will remain valid for the 5 years from date of issue or until the Rules or specifications used in the assessment are revised (whichever occurs first).

**STANDARDS**

**Others:**

Manufacturer's Specification

