



Confirmation of Product Type Approval

Company Name: AYRES COMPOSITE PANELS USA LLC

Address: 5460 BUSINESS PARKWAY, THEODORE, AL, United States, 36582

Product: Panel, Aluminum Honeycomb

Model(s): AYRLITE 2022 Aluminum Honeycomb Panel

Endorsements:

| Certificate Type | Certificate Number | Issue Date | Expiry Date |
|---------------------------------|---------------------------|-------------------|--------------------|
| Product Design Assessment (PDA) | 18-HS1776583-PDA | 27-NOV-2018 | 26-NOV-2023 |
| Manufacturing Assessment (MA) | 19-M4022114 | 02-DEC-2019 | 21-DEC-2024 |
| Product Quality Assurance (PQA) | NA | NA | NA |

Tier

3 - Type Approved, unit certification not required

Intended Service

Marine Applications - C Class Panels for Bulkheads, Linings, and Interior Finishes.

Description

AYRLITE 2022 is an aluminum honeycomb panel faced with aluminum sheets. Aluminum face sheets are available in a range of thicknesses from 0.3mm (0.012") minimum and upwards. 0.5mm (0.020") is the standard thickness.

Panels can be produced with different aluminum sheet thicknesses on front and back faces. Aluminum face sheets are of 5000 series alloy.

Ratings

Aluminum Honeycomb Core meets Part 1 (Noncombustible) of the IMO FTP Code.

Adhesive meets Part 5 (Low Flame Spread) and 2 (Smoke and Toxicity) of the IMO FTP Code.

Service Restrictions

- Unit Certification is not required for this product. This approval is only valid for panels manufactured by a plant under ABS Manufacturing Assessment.

- If the aluminum sheets are coated or painted or if a surface finish is applied to the aluminum sheets, then the paints and surface face finish should be type approved in accordance with the applicable statutory regulations.

Comments

- 1) The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
- 2) Continuous compliance with statutory requirements is a condition of type approval. The scope of type approval is required to comply with MSC/Circ.1221 dated 11th December 2006
- 3) Unless specially directed by Administration, this approval is not to be construed as a substitute for Flag Administration's approval for the purpose of SOLAS (Consolidated Edition 2014), as amended. This assessment has not been performed on behalf of any flag Administration.
- 4) Production items are to be manufactured in accordance with a quality control system which shall be maintained to ensure that items are of the same standard as per tested/approved prototype.
- 5) This certificate may not be used for EU and US flagged vessels (MED and/or USCG have their own specific requirements).

Notes, Drawings and Documentation

Southwest Research Institute Test Report No. 01.13544.01.601 (dated 5 March 2008).

Southwest Research Institute Test Report No. 01.13544.01.319b (dated 27 February 2008).

Term of Validity

This Product Design Assessment (PDA) Certificate 18-HS1776583-PDA, dated 27/Nov/2018 remains valid until 26/Nov/2023 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

ABS Rules

ABS Rules for Conditions of Classification, Part 1 (2018 Steel Vessels Rules) 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:

2018 ABS Steel Vessel Rules 3-4-1

ABS Rules for Conditions of Classification Part 1 - 2018 High Speed Craft 1-1-4.11.9, 1-1-A2, 1-1-A3 which covers the following:

2018 High Speed Craft Rules 3-4-1/1

2018 High Speed Naval Craft Rules 3-4-1/1.1

ABS Rules for Conditions of Classification, Part 1 - 2018 Offshore Units and Structures 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

2018 ABS Mobile Offshore Drilling Units Rules 5-1-1/ 3.5, 5.15, 5.17

International Standards

2010 IMO FTP Code adopted on 3 December 2010 - Annex 1: Part 1 (Non-combustibility); Part 2 (Smoke and Toxicity); and Part 5 (Surface Flammability)

SOLAS (Consolidated Edition 2014), as amended, II-2 Reg. 3.10 and MSC/Circ.1120 Construction of C-Class Bulkheads

EU-MED Standards

NA

National Standards

NA

Government Standards

USCG Certificate of Approval 164.109/54/1 for AYRLITE 2022 Aluminum faced Aluminum Honeycomb Panel and AYRLITE 2071 Acoustic Honeycomb Panel. Issued 5 May 2018; Expires 5 May 2023.

Transport Canada:

TP 14612E Procedures for Approval of Life-Saving Appliances and Fire Safety Systems, Equipment and Products

Vessel Fire Safety Regulations SOR/2017-14

Other Standards

NA



A handwritten signature in black ink, appearing to read 'James W. ...'.

Corporate ABS Programs
American Bureau of Shipping
Print Date and Time: 17-May-2021 12:11

ABS has used due diligence in the preparation of this certificate, and it represents the information on the product in the ABS Records as of the date and time the certificate is printed.

If the Rules and/or standards used in the PDA evaluation are revised or if there is a design modification (whichever occurs first), a PDA revalidation may be necessary.

The continued validity of the MA is dependent on completion of satisfactory audits as required by the ABS Rules. The validity of both PDA and MA entitles the product to receive a **Confirmation of Product Type Approval**.

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or prior to the effective date of the ABS Rules and standards applied at the time of PDA issuance. ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. The manufacturer is responsible to maintain compliance with all specifications applicable to the product design assessment. Unless specifically indicated in the description of the product, certification under type approval does not waive requirements for witnessed inspection or additional survey for product use on a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.