

## **REACTION TO FIRE - CLASSIFICATION REPORT No EUI-23-000777A-Revision 1**

---

### **1. INTRODUCTION**

---

This classification report defines the classification assigned to Futural also known as HJ Tech PVDF Pre-coated Solid Aluminium in accordance with the procedures given in BS EN 13501-1:2018.

## **REACTION TO FIRE CLASSIFICATION IN ACCORDANCE WITH BS EN 13501-1:2018**

<b>Sponsor:</b>	Anhui HJ Tech Co., Ltd #568 South Huizhou Rd Chuzhou City Anhui Province 239065 China
<b>Product name:</b>	Futural also known as HJ Tech PVDF Pre-coated Solid Aluminium
<b>Classification report No.:</b>	EUI-23-000777A
<b>Issue number:</b>	2
<b>Date of issue:</b>	15 November, 2023

**Reproduction of this document is only authorised in full unabridged version.**

**This report cancels and replaces the Classification Report Nr. EUI-23-000777A.**

## 2. DOCUMENT TRACKING

Revision Index.	Modification
0	Original document
1	§5.3 - Field of application: Profile geometry of sheeting

## 3. DESCRIPTION OF THE PRODUCT

### 3.1. GENERAL

The product, Futural also known as HJ Tech PVDF Pre-coated Solid Aluminium, is defined as a pre-coated aluminium panel

### 3.2. PRODUCT DESCRIPTION

The product, Futural also known as HJ Tech PVDF Pre-coated Solid Aluminium, is described below, or is described in the reports provided in support of classification listed in 3.1.

Product description		
<b>Trademark</b>	Futural also known as HJ Tech PVDF Pre-coated Solid Aluminium	
<b>Manufacturer / supplier</b>	Anhui HJ Tech Co., Ltd	
<b>Composition</b>	PVDF Topcoat (Front side)	Supplier name: Information provided and kept within the project folder at the laboratory facility but withheld on the report for commercially sensitive reasons Reference name: PVDF Paint Thickness: 40 µm Mass per unit area: 0.06 kg/m <sup>2</sup> Colour: Wide range of colours Relative mass to the final product: 0.73%
	Polyester Front Primer Coating	Supplier name: Information provided and kept within the project folder at the laboratory facility but withheld on the report for commercially sensitive reasons Reference name: Polyester Primer Paint Thickness: 6 µm Mass per unit area: 0.008 kg/m <sup>2</sup> Colour: White Relative mass to the final product: 0.1%
	Flat Aluminium Coil Sheet	Supplier name: Information provided and kept within the project folder at the laboratory facility but withheld on the report for commercially sensitive reasons Thickness: 3 mm Mass per unit area: 8.1 kg/m <sup>2</sup> Relative mass to the final product: 99%

	Polyester Back Coating (Back Side)	Supplier name: Information provided and kept within the project folder at the laboratory facility but withheld on the report for commercially sensitive reasons Reference name: Polyester Back Paint Thickness: 12 µm Mass per unit area: 0.014kg/m <sup>2</sup> Colour: Grey Relative mass to the final product: 0.17%
<b>Thickness</b>	3 mm	
<b>Mass per unit area</b>	8.18 kg/m <sup>2</sup>	
<b>Density</b>	2727 kg/m <sup>3</sup>	
<b>Colour</b>	Wide range of colours	
<b>Fire retardant</b>	No	

#### 4. REPORTS AND RESULTS IN SUPPORT OF THIS CLASSIFICATION

##### 4.1. REPORTS

Name of Laboratory	Name of sponsor	Report ref. no	Test method and date field of application rules and date
EFFECTIS UK/Ireland	Anhui HJ Tech Co., Ltd	EUI-23-SBI-000691	BS EN 13823:2020+A1:2022
EFFECTIS UK/Ireland	Anhui HJ Tech Co., Ltd	EUI-23-HC-000242	BS EN ISO 1716: 2018

##### 4.2. RESULTS

Test method and test number	Parameter	No. Tests <sup>a)</sup>	Results	
			Continuous parameter - mean (m)	Compliance with parameters
BS EN 13823:2020+A1:2022 EUI-23-SBI-000691	FIGRA <sub>0,2 MJ</sub> (W/s)	3	0	-
	FIGRA <sub>0,4 MJ</sub> (W/s)		0	-
	THR <sub>600 s</sub> (MJ)		0.2	-
	LFS		-	Compliant
	SMOGRA		2	-
	TSP <sub>600s</sub> (m <sup>2</sup> )		15	-

	Flaming droplets or particles		-			Compliant
BS EN ISO 1716 :2018 EUI-23-HC-000242	PCS (MJ/kg) GCV (MJ/kg)	3	Topcoat PVDF White colour	15.82 (MJ/kg)	0.95 (MJ/m <sup>2</sup> )	-
		3	Topcoat PVDF red colour	14.95 (MJ/kg)	0.90 (MJ/m <sup>2</sup> )	-
		3	Topcoat PVDF black colour	15.36 (MJ/kg)	0.92 (MJ/m <sup>2</sup> )	-
		3	Polyester primer coating	13.91 (MJ/kg)	0.11 (MJ/m <sup>2</sup> )	-
		3	Polyester coating	16.48 (MJ/kg)	0.23 (MJ/m <sup>2</sup> )	-
		-	Aluminium* (Not tested)	0*	0*	-
		-	Product as a whole	0.16 (MJ/kg)	1.29 (MJ/m <sup>2</sup> )	-
BS EN ISO 1182 :2020	-	-	Aluminium sheet (Not tested)**			-
a) Not for extended application						

(-) means not applicable.

\* Metallic components shall not be tested. Their gross heat of combustion shall be deemed to be zero according to BS EN ISO 1716:2018

\*\* This component is classified as reaction to fire class A1 without testing according to Commission Decision 96/603/ES as amended Commission Decision 2000/605/ES and 2003/424/ES

**5. CLASSIFICATION AND FIELD OF APPLICATION**

**5.1. REFERENCE OF CLASSIFICATION**

This classification has been carried out in accordance with BS EN 13501-1:2018.

**5.2. CLASSIFICATION**

The product, Futural also known as HJ Tech PVDF Pre-coated Solid Aluminium, in relation to its reaction to fire behaviour is classified:

**A1**

The format of the reaction to fire classification for construction products excluding floorings and linear pipe thermal insulation products is:

<b>Fire behaviour</b>
<b>A1</b>

i.e., **A1**

<b>Reaction to fire classification</b>	<b>A1</b>
--	-----------

**5.3. FIELD OF APPLICATION**

According to the standard BS EN 14782:2006, this classification is valid for the following product parameters and end-use applications:

Grade of metal	Valid for all grades of metal sheet
Thickness	Valid for all nominal thicknesses of 3 mm or greater
Profile geometry of sheeting: flat, profiled or corrugated, or cassettes	Valid as tested
Overlap between two successive profiles	Valid for all overlaps between 40 mm and 300 mm
Horizontal joint	Valid for end use conditions with or without this joint
Colour	Valid for all colours
Type of coating	Valid for the tested coating type and where PCS and mass ≤ that of the tested organic coatings
Fixing for metal flashing	Valid for all spacing less than or equal to 360 mm
Substrate	Valid for any wood based substrate and also any substrate of class A1 and A2-s1,d0 with a density of 337.5 kg/m <sup>3</sup> or greater
Cavity/ airgap	Valid with a cavity/ airgap of at least 160 mm between the specimen and the substrate

## 6. LIMITATIONS

---

This classification document does not represent type approval or certification of the product.

### SIGNED



Vitor Oliveira  
Project leader

### APPROVED



Damien Flammier  
Technical Manager