Parallel Architectural Products

Parallel Architectural Products are maintenance free, 100% recyclable, will not warp, rot, or split and is non-combustible. Parallel is also ideal for interior use as it gives off zero emissions in production. Additionally, the manufacturing process is VOC Free (Volatile Organic Compounds).

Energy & Atmosphere Accreditation:

Optimized Energy Performance – EA Credit 1
Goal – Reduce energy use in building operation through a variety of means.
Solution – Save energy use by using Parallel & a back framing system which allows for exterior insulation (example: TAC Thermal Spacer Clip, Cascadia Clip.). Exterior insulation has proven to be 40% more effective than interior insulation, decreasing demand on building HVAC systems.
Supporting Documents – TAC Thermal Spacer Morrison Hershfield OR Equivalent

Materials & Resources Accreditation:

Construction Waste Management – MR Credit 2.1, 2.2
Goal – Divert construction and demolition debris from disposal in landfills and incineration facilities through recycling or salvaging.
Solution – Parallel aluminum soffit and siding is 100% recyclable
Supporting Documents – The Aluminum Association “LEED™ Fact Sheet Aluminum Sheet & Plate for the Building & Construction Market”

Regional Materials – MR Credit 5.1, 5.2
Goal – Use at least 10% of building materials and products that are extracted and manufactured within the region for 1 point and 20% of regionally collected materials for an additional point.
Solution – The majority (85%) of our aluminum is sourced from a supplier that is within 80 Kilometres of our plant.
Supporting Documents – APEX Aluminum Extrusions Ltd, “Regionally Sourced Materials” – Not Applicable to Parallel Architectural Products.

Durable Building – MR Credit 8
Goal – Minimize materials use and construction waste over a building’s life resulting from premature failure of the building and its constituent components and assemblies.
Solution – Aluminum siding can last up to 40 years or more if properly maintained.
Supporting Documents – InterNACHI’s Estimated Life Expectancy Chart

Indoor Environmental Quality Accreditation:

Low-Emitting Materials: Paints and Coatings – IEQ Credit 4.2
Goal – Reduce the quantity of indoor air contaminants.
Solution – The high performance powder coating on Parallel is completely VOC free.
Supporting Documents – Parallel Architectural Products, “Aluminum Powder Coatings VOC Free Certification Letter”

Thermal Comfort: Compliance – IEQ Credit 7.1
Goal – Provide a thermally comfortable environment that supports the productivity and well-being of building occupants.
Solution – The back framing system along with Parallel Cladding System allows for external insulation, which helps the building to maintain an indoor level of comfort at greater energy efficiency than interior insulation solutions.
Supporting Documents – TAC Thermal Spacer Morrison Hershfield OR Equivalent

Innovative Design Accreditation:

Innovation in Design – ID Credit 1
Goal – Employ sustainable strategies not specifically addressed in other LEED credits.
Solution – Parallel Premium Wood Finishes use a polyurethane powder coat with ink-based wood grain patterns sublimated into the base powder effectively tattooing the powder. The combined effect creates all the aesthetic aspects of real wood while offering the same environmental advantages of powder coated finishes.

Politeknik
A member of the COVENTYA Gro

Tuzla Kimyacılar Organize San. Böl.
Melek Aras Bulvarı, Kristal Caddesi
No:2 B1/B4 Parsel TUZLA/ İSTANBUL
Tel: +90 216 504 02 65
Fax: +90 216 504 02 78
www.pm.com.tr

05.11.2019

To whom it may concern,

Polytoxal AC 27 and Polytoxal PCF 701 products which are produced by Politeknik METAL A.S. are free of toxic metals, contain no coal tar pitch and have zero VOCs.

Sincerely

Politeknik Metal AS Tuzla Kimyacılar Org San. Böl. Melek Aras Bulvarı Kristal Cd. No 2 B1/B4 TUZLA ISTANBUL

Product Data Sheet

AkzoNobel Powder Coatings

Interpon D2010 STF

Product Description

Interpon D2010 STF is a series of advanced durability powder coatings specifically formulated to meet AAMA2604 and to act as a basis for the heat-transfer decoration process (Sublimation Transfer Film) on architectural aluminium extrusions and components. **Interpon D2010 STF** powder coatings are available in a selected range of textured matt colours including popular wood tones.
Interpon D2010 STF used in combination with the sublimation transfer process offers an excellent alternative to wood or other materials, reproducing their appearance but without many of their specific architectural restrictions.

Powder Properties*

Chemical type	Polyester
Particle size	Suitable for electrostatic spray
Specific gravity	1.2 - 1.7 depending on colours
Storage	Dry cool conditions (below 30ºC)
Shelf Life	18 months
Sales code	Y-Series
Stoving Schedule	8 mins at 190ºC (Object temperature) 5 mins at 200ºC 4 mins at 210ºC

Film properties

Dry Adhesion	AAMA2604 Clause 7.4	Pass - no removal of film
Impact resistance	AAMA2604 Clause 7.5	Pass - no tape removal of film from substrate following 0.1" deformation
Dry Film hardness	ISO2815 (Buchholz)	Pass
Abrasion resistance	AAMA2604 Clause 7.6	Pass - abrasion co-efficient > 20
Salt Spray	AAMA2604 Clause 7.8.2 ASTM B117 at 35°C D1654	Pass at 3000 hrs no corrosion more than 1.0-2.0 mm from scribe Minimum blister rating 8
Constant Humidity Resistance	AAMA2604 Clause 7.8.1 ASTM D2247, ASTM D714	Pass at 3000 hrs – blister formation less than "few" size no 8.
Permeability	AS3715 Section 2.5.11	Pass
Sulphur Dioxide	ISO3231 (Kesternich)	Pass - no blistering, loss of gloss or discolouration.
Chemical Resistance	Generally good resistance to acids, alkalis and oils at normal temperatures	
Exterior durability	5 years Florida exposure AAMA 2604	Excellent performance, Colour change Delta E less than 5, gloss retention >30%. Chalking –none in excess of no.8 ASTM D4214 - D659.
Colour stability at elevated temperatures	Excellent for continuous exposure up to 120ºC.	

Mechanical Tests*

Mechanical and chemical tests carried out on Chromated aluminium panels. All tests are performed on panels coated with 60 to 80 microns of a gloss finish powder coating stoved for 10 minutes at 200°C (metal temperature). Interpon D2010 STF powder coatings are designed to meet the requirements of AAMA2604.

Chemical Durability Tests*

Pre-treatment

For optimum coating performance the following pre-treatment is recommended prior to the application of **Interpon D2010 STF**. The pre-treatment should be used in accordance with the supplier's recommendations.

A. Aluminium Multistage chrome chromate or chrome phosphate
B. Galvanised Steel Multistage zinc phosphate or chromate
C. Steel Multistage zinc or iron phosphate

Interpon®

Interpon D2010 STF

Application

Interpon D2010 STF powder coatings can be applied by manual or automatic electrostatic spray equipment. Unused or over-sprayed powder coating can be reclaimed and recycled through the coating system.

Interpon D2010 STF powder coatings have a low pigment loading and are therefore semi-transparent. The appearance of the coating (especially colour) can vary with film thickness, substrate type and pretreatment. 80-100µm film thickness is recommended to achieve a balance of colour consistency and finished appearance. Due to the high resin content **Interpon D2010 STF** powder coatings can be difficult to apply in high humidity situations. Optimal application conditions are achieved when relative humidity is less than 80%.

Additional Information

Product performance warranties are available with the Interpon D2010 range through accredited applicators. For further information on the available warranties and the applicable terms and conditions, please contact your local AkzoNobel sales office.

AkzoNobel Pty Limited has a policy not to use lead or other heavy metal based pigments in our range of powder coatings. As a result of this policy, the use of bright and deep colours such as Yellows, Oranges and Reds are not recommended for severe outdoor exposure where long-term colour fastness is required. These products can be sourced from the Interpon TC General Industrial range.

Interpon D2010 STF powder coatings as supplied by AkzoNobel contain no organic solvents and can contribute toward satisfying the IEQ credits in the following Green Star® rating tools:

IEQ11 Office Interiors v1.1	IEQ8 Education v1
IEQ13 Office Design v2	IEQ8 Retail Centre v1
IEQ13 Office As-Built v2	IEQ8 Healthcare v1
IEQ8 Multi Unit Residential v1	IEQ8 Industrial v1

green building council australia
MEMBER 2014-2015

Note: Products are not reviewed or certified under the Green Star® rating system. Green Star® credit requirements cover the performance of materials in aggregate, not the performance of individual products or brands. For more information on Green Star®, visit www.gbca.org.au.

Safety Precautions

This product is intended for use only by professional applicators in industrial environments and should not be used without reference to the relevant health and safety data sheet, which AkzoNobel has provided to its customer. If for any reason a copy of the relevant health and safety data sheet is not immediately available

the user should contact AkzoNobel to obtain a copy before using the product. Minimum safety precautions in dealing with all powder coatings are as follows. All dusts are respiratory irritants. Therefore, inhalation of the dust or of the vapors resulting from the cure should be avoided. Take steps to prevent skin contact, but should contact occur, wash skin with soap and water. In case of eye contact flush immediately with clean water and seek medical advice. Dust clouds of any finely divided organic material can be ignited with an electric spark or open flame. Dust and powder should not be allowed to build up on surfaces or ledges. Dust collection equipment should be used which has provision for adequate explosion release. All equipment should be electrically earthed to prevent build up of static. Users are recommended to follow the guidelines laid down in AS3754:1990, "Safe Application of Powder Coatings by Electrostatic Spraying".

Disclaimer

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Interpon D2010 STF - Issue #001
Issued: Aug 2014

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P.O. Box 218
Olney, Texas 76374
Phone: 940-564-5681
Fax: 940-564-5033
E-mail: www.towerextrusion.com

April 12, 2024

RE: Recycled Aluminum content of Billets

Dear Sirs:

This letter is to advise that at this time we manufacture the majority of our extrusion billet at our Olney, Texas facility. We use primary aluminum and aluminum scrap to produce primary quality extrusion billet. The quantities and types of scrap consumed are typically of the following proportions:

1. 60% post industrial scrap
2. 10% post consumer scrap
3. 30% primary aluminum

It is also important to note that there are occasions when our billet may be produced from one hundred percent post-industrial scrap and/or a combination of post-industrial scrap and post-consumer scrap.

If you need any other information please do not hesitate to contact us.

Sincerely,

W. Mark McClelland
General Manager

WMM/das

TOWER EXTRUSIONS

930 Hensley Lane ~ Wylie, TX 75098
(972) 442-3535

CERTIFIED INSPECTION REPORT FOR EXTRUDED PRODUCTS

OUR ORDER NUMBER	ITEM

BILL TO		DIE NUMBER		
PARA01-PARALLEL REP LLC.				
SHIP TO	CUSTOMER PO	ALLOY	TEMPER	
PARA01-PARALLEL REP LLC.				
Certified By:	CUSTOMER PART NUMBER	DESCRIPTION		

SPECIFICATION
Critical

We hereby certify *that the material covered by this report has been inspected in accordance with, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown.*

CHEMICAL COMPOSITION- PERCENT

ITEM NO.	ALLOY	SILICON		IRON		COPPER		MANGANESE		MAGNESIUM		CHROMIUM		ZINC		TITANIUM		OTHERS	
		MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.
	6005A	0.50	0.90		0.35		0.30		0.50	0.40	0.70		0.30		0.20		0.10	0.05	0.15
	6061	0.40	0.80		0.70	0.15	0.40		0.15	0.80	1.20	0.04	0.35		0.25		0.15	0.05	0.15
	6063	0.20	0.60		0.35		0.10		0.10	0.45	0.90		0.10		0.10		0.10	0.05	0.15

Aluminum Standards for Tensile Strength			TEMPER	TENSILE STRENGTH-KSI				ELONGATION % IN ___"
				ULTIMATE		YIELD		
				MIN.	MAX.	MIN.	MAX.	
	6005A		T61	38.00	***	35.00	***	8.00
	6061		T6	38.00	***	35.00	***	8.00
	6063		T6	30.00	***	25.00	***	8.00
	6063		T5	22.00	***	16.00	***	8.00
	6063		T52	22.00	30.00	16.00	25.00	8.00
	6063		T4	19.00	***	10.00	***	8.00

Aluminium Alloy - 6106 - T6 Extrusions

SPECIFICATIONS

Commercial	6106
EN	6106

Aluminium alloy 6106 is an extrusion alloy designed to provide optimum combination of mechanical properties, complexity of shape, minimum section thickness and good surface finish together with the good resistance, weldability and formability associated with the 6000 series alloys. Very complex shapes are possible which are not obtainable with stronger alloys such as 6182.
(6000 series alloys achieve their properties by thermal treatment which can be adjusted to provide combinations of strength and formability conditions with good corrosion resistance and weldability. Because the properties are obtained by thermal treatment, fusion welding reduces the non-welded properties by up to 50%.)

Applications
Alloy 6106 is typically used for:
~ Structural applications
~ Ladders, pylons and towers
~ Railway Rolling Stock
~ Marine applications
~ Automotive structures

CHEMICAL COMPOSITION

BS EN 573-3:2009
Alloy 6106

Element	% Present
Magnesium (Mg)	0.40 - 0.80
Silicon (Si)	0.30 - 0.60
Iron (Fe)	0.0 - 0.35
Manganese (Mn)	0.05 - 0.20
Copper (Cu)	0.0 - 0.25
Chromium (Cr)	0.0 - 0.20
Others (Total)	0.0 - 0.15
Zinc (Zn)	0.0 - 0.10
Titanium (Ti)	0.0 - 0.10
Other (Each)	0.0 - 0.05
Aluminium (Al)	Balance

ALLOY DESIGNATIONS

TEMPER TYPES

The most common temper for 6106 aluminium is:

- T6 - Solution heat treated and artificially aged

SUPPLIED FORMS

- Extrusions

GENERIC PHYSICAL PROPERTIES

Property	Value
Density	2.70 g/cm³
Melting Point	655 °C
Thermal Expansion	23.4 x10^{-6} /K
Modulus of Elasticity	69.5 GPa
Thermal Conductivity	192 W/m.K
Electrical Resistivity	0.035 x10^{-6} Ω .m

MECHANICAL PROPERTIES

BS EN 755-2:2008
Profiles only
Up to 10mm Wall Thickness

Property	Value
Proof Stress	200 Min MPa
Tensile Strength	250 Min MPa
Elongation A50 mm	6 Min %
Hardness Brinell	75 HB
Elongation A	8 Min %

Above readings refer to profiles in the T6 condition only.

[1 OF 2] CONTINUED

Aluminium Alloy - 6106 - T6 Extrusions

WELDABILITY

Weldability – Gas: Good
Weldability – Arc: Very Good
Weldability – Resistance: Good
Brazability: Good
Solderability: Good

FABRICATION

Workability – Cold: Acceptable, but limited in T6 temper
Machinability: Good

CONTACT

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Web:	www.wilsonsmetals.com

REVISION HISTORY

Datasheet Updated	17 January 2014

DISCLAIMER

This Data is indicative only and as such is not to be relied upon in place of the full specification. In particular, mechanical property requirements vary widely with temper, product and product dimensions. All information is based on our present knowledge and is given in good faith. No liability will be accepted by the Company in respect of any action taken by any third party in reliance thereon.

Please note that the 'Datasheet Update' date shown above is no guarantee of accuracy or whether the datasheet is up to date.

The information provided in this datasheet has been drawn from various recognised sources, including EN Standards, recognised industry references (printed & online) and manufacturers' data. No guarantee is given that the information is from the latest issue of those sources or about the accuracy of those sources.

Material supplied by the Company may vary significantly from this data, but will conform to all relevant and applicable standards.

As the products detailed may be used for a wide variety of purposes and as the Company has no control over their use; the Company specifically excludes all conditions or warranties expressed or implied by statute or otherwise as to dimensions, properties and/or fitness for any particular purpose, whether expressed or implied.

Advice given by the Company to any third party is given for that party's assistance only and without liability on the part of the Company. All transactions are subject to the Company's current Conditions of Sale. The extent of the Company's liabilities to any customer is clearly set out in those Conditions; a copy of which is available on request.