

# Measuring up to your ideas to create unique profiles.

PA, PPE/PA, ABS, PVC, TPE, expanded profiles



Tailor-Made Plastic Profiles





#### **OUR COMPANY**

Alfa Solare S.p.A., located in San Marino, has been working in the sector of plastic material extrusion since 1986. Since 2001 operates in two production sites. Our long experience has always been based on continuous research, quality and flexibility, making us, not only a supplier of finished products, but an essential partner in the developing of new solutions. The many types of products we offer, range from:

PVC (soft, semi-hard and hard), TPE, ABS, PA, to PPE/PA. Our vast know-how in the production of thermal break profiles has enabled us to become a world leader in this sector. In the building industry and window and door frame sectors, our company has developed highly innovative solutions for energy-saving and for the improvement of the thermal performance.

Our solutions are also being increasingly used in a wider range of applications, from home and office furniture, to automotive and shipyard components.

Our technical office offers a complete service and advanced solutions, from the design to the extrusion phases, as well as during the final usage of the finished product, by using: Programs CAD/CAM, for the study and design of the projects.





Simulation software FEM, for the calculation of the possible critical points of the system under study.

#### WHY CHOOSE US

The Alfa Solare Group, thanks to more than three decades of experience and its specialized production, is not only a supplier of finished products, but also a <u>PARTNER AND</u> <u>EXCLUSIVE INTERLOCUTOR</u> in the study and development of innovative solutions, in particular for the improvement of the thermal insulation performance. All this is thanks to our:

$\overline{1}$	CONSTANT PRODUCT INNOVATION
2	KNOW-HOW AND 360° GLOBAL VISION
3	COMPLETE PRODUCT RANGE
4	NEW TECHNICAL SOLUTIONS
б	CUSTOMIZED SOLUTIONS

The Alfa Solare Group guarantees the realization of STANDARD PROFILES and CUSTOMIZED PROFILES from clients' drawings.



Since the start, ALFA SOLARE has adopted a "tailored" approach with the customers. We listen carefully to their needs to offer customized solutions for their projects and to establish, in time, a relationship of trust. As a tailor cuts wisely any type of fabric, ALFA SOLARE develops and extrude high technology profiles of any shape or material, with the quality and the excellence of the brand "made in Italy".



#### THE RIGHT MATERIAL FOR EACH TYPE OF APPLICATION

We do not ask our customers to adapt to our products. Our main goal is to offer the right material for any type of application.



# All Solutions

A technical office dedicated full-time to the study of advanced solutions for our clients to obtain the maximum energy efficiency.

# **All Materials**

A wide range of standard products, PVC (soft, semi-hard and hard), TPE, EPDM, ABS, PA and PPE/PA. A new generation of high-performance materials studied by our research and development department.

# **One Partner**

An exclusive partner able to propose varied technical solutions and materials with the aim to reduce thermal transmittance.



#### THE THERMAL BREAK



Thermal break insulating profiles for windows and facades developed with different materials, which can meet all performance or process requirements.

## **CHOOSING BETWEEN DIFFERENT MATERIALS**

Thermal break insulating profiles for windows and facades with a special alloy PPO / PA.

ALFA

Thermal break insulating profiles for windows and facades extruded with PA 6.6 with 25% of fiberglass.



Thermal break insulating profiles for windows and facades with specific ABS or PVC compositions.

- Allows the extrusion process, assembly, storage and powder coating on request.
  - Allows to save costs during powder coating.
  - More industrial assembling process.
  - Better Lambda value.
  - Better aesthetics on the coated surface.
  - Less hygroscopic problems.
  - Reduces the size of the system with the same UF.
- More expensive.
- Allows the extrusion process, assembly, storage and powder coating on request.
  - Allow to save costs during powder coating.
- More industrial assembling process.
- Existing standard profiles.
- Higher lambda value.
- Hygroscopic material.
- Quality problems in powder coating.
- Storage limited time.
- Better lambda value.
- Not hygroscopic material.
- Co-extrusion.
- Possibility to choose different colors.
- More complex geometry and shape.
- Reduction of system size with same Uf value.
- Does not allow the process of extrusion, assembling, stocking and coating on demand.
  Higher logistic costs.
- More expensive coating costs.
- More expensive assembling costs.



#### THE GASKETS



Closure seals for windows and facades made of various types of materials, able to satisfy any performance demand of the product or process.



Closure seals for windows and facades in thermoplastic polymer. - Lower compression set.



# THE ACCESSORY PROFILES



#### Tailor-Made Plastic Profiles

#### **OUR PRODUCT RANGE**

ALFA mid

ALFAMID<sup>®</sup>, registered trademark of The Alfa Solare Group. A range of insulating bars for aluminum thermal break systems, made of Polyamide 6.6 with 25% fiberglass content.



Insulating profiles for aluminum thermal break windows system and facades systems made in special alloy PPE/PA



Range of gaskets in EPDM for window and door frame systems.



ALFAPRO®, registered trademark of The Alfa Solare Group. Innovative insulating bars for aluminum thermal break systems, made of a special ABS compound.

ALFA ECO-Line, is a range of products made of recycled plastic materials Polyamide, ABS, PVC and TPE. Products that respect the environment by using recyclable materials.

ALFATECH<sup>®</sup>, registered trademark of the Alfa Solare Group. Range of products in PVC, rigid and co-extruded, for the realization of complementary profiles in window and door frame systems.

Range of closed cell, expanded insulating strips, mainly for aluminum window and door frame systems.

Range of gaskets in thermoplastic rubber for window and door frame systems.



Range of product made with a material reinforced with wood fiber. ALFA

ALFA XPE

Range of expanded products, created for the realization of thermal insulating window and door mounting frames and door sills, for the correct installation of window and door frames.

ALFA

Range of extruded insulating strips, for aluminum window and door systems. A fundamental characteristic is the expansion that occurs during the painting of the aluminum profiles.

Range of open lating strips, m window and do fundamental ch sistance to heat

Range of open cell, expanded insulating strips, mainly for aluminum window and door frame systems. A fundamental characteristic is the resistance to heat of more than 220°C.





Range of product made with a material added reinforced with natural fibers, water resistant, used also for outdoor.

Range of product made in Polycarbonate.



#### **OTHER SOLUTIONS**



ALU FOIL TAPE – Low emissivity tape



NOMINAL VALUE OF THE NORMAL EMISSIVITY Reference to IFT test Report No. 16-000059-PR01







Range of materials and ancillary solutions able to improve the thermal performance of windows and doors, or for the needs of each process solution. The wide range of offered solutions, also complete with mechanical processing and with the possibility to produce finished or semi-finished products by performing assembling.

#### Tailor-Made Plastic Profiles

# CERTIFICATION



The Quality System has been certified for many years according to the ISO 9000 norms and in 2010 obtained the upgrade to the new standard ISO 9001:2008. This norm certifies that The Alfa Solare Group operates, in every area of its organization, on the basis of precise criteria that are constantly monitored and reviewed.

The Quality Management System is for The Alfa Solare Group a fundamental instrument to realize, pursue and reach its objectives. This quality is at the foundation of our activities, a quality that has made us an essential partner for many companies.

# PRODUCT CERTIFICATION



The quality of our products has been recognized and verified by prestigious international institutions such as IFT Rosenheim (Germany), CSTB (France), CSTC (Belgium) and Qualital (Italy).

Our range of products for Thermal Break, ALFAMID<sup>®</sup>, ALFATHERM and ALFAPRO<sup>®</sup>, has obtained the product certification ATG, issued by the Belgium institution UBAtc. The thermal break products ALFATECH<sup>®</sup> in PVC have obtained the French certification NF132.

#### **OTHER SECTORS**

The Alfa Solare Group offers not only products for the window and door frame sector, but also solutions for many other sectors and applications, from home and office furnishing, to general industry and the automotive sector.



Our technical office is always at the client's di-

sposal to carry out detailed studies in collaboration with the client to find an ideal, customized solution, our aim is to satisfy in the best way every requirement, even the most complex. It has always been a strategic choice of our company to use high quality raw materials by carefully selecting our suppliers. Our production is capable of meeting every requirement of our clients. We are able to produce profiles with a weight from 10 to 2500 grams.

#### TEST LABORATORY

Our laboratory is at the service of the Quality System and is a further guarantee for the client, we are able to carry out the following tests to verify mechanical and physical properties:

- TENSILE STRENGTH, MODULUS AND ELONGATION AT BREAK
- FLEXURAL STRENGTH AND MODULUS
- HARDNESS
- DENSITY
- ASH CONTENT
- VICAT
- HDT
- IZOD AND CHARPY
- COLORIMETRIC TEST
- WATER CONTENT



# We create unique profiles with the same skill and ability of a tailor

www.alfasolare.com



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