



# **PILE WEATHERSTRIPPING**

## **TECHNICAL SPECIFICATIONS**

### **"NEW ELVIS s.a."**

**"AVGO" Area**

**SOUFLI 684 00**

**EVROS GREECE**

**Sales:**

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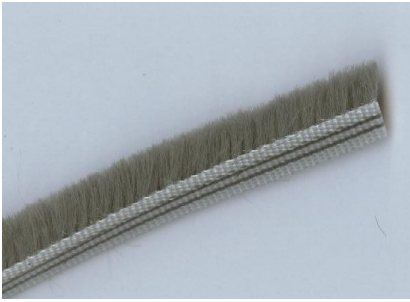
**Fax: +30-2554-020049**

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**Internet: [www.weathersrtip.gr](http://www.weathersrtip.gr)**

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**NEW ELVIS S.A.** is one of the leaders in producing high quality weather sealing products for aluminium and PVC profiles.

Its main manufacturing facility is situated in SOUFLI EVROU, in the north of Greece and the sales office is in

HERAKLION, on the island of CRETE.

We manufacture to the highest European and American Standards of Quality and Performance, with strictly controlled tolerances to ensure easy and continuous fitting. Quality products and high quality service are the driving force behind ELVIS NEW SYSTEMS.

We present a full range of woven pile weather seals acknowledged for their effectiveness in stopping draughts and sealing out weather variations whilst allowing smooth operation with minimum friction.

The outstanding properties of woven pile weather seals are recognized and preferred by aluminium and PVC door and window manufacturers throughout the world.

Pile supplied by **ELVIS NEW SYSTEMS** has been used extensively in Greece, as well as in many other countries, for a considerable number of years. It is specified for use in all climatic conditions.

Our weatherstrip pile is available in virtually any width, pile height, colour or density.

The grades most frequently manufactured and readily available are listed in the attached charts.

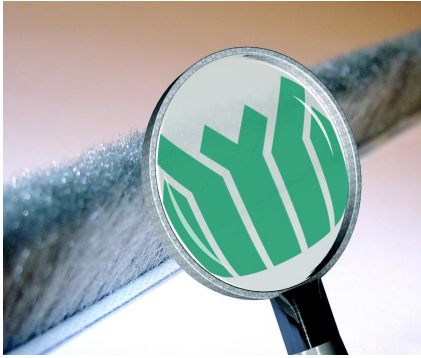
Knowing that the weatherstrip pile, that we produce, should perform throughout the service life of a door or window, we use 100% polypropylene for its manufacture.

Polypropylene is well known for its long durability, stability and perfect hydrophobic characteristics, as well as resilient, rot resistant and shrink-stretch proof.

Sample testing is carried out throughout the production process, from the polypropylene granules, when producing the different yarns, to the last stage during the packaging and storage of the ready final product.

The four standard colours produced are Grey, Black, White and Brown.

All the types of weatherstrip pile are supplied in standard reel sizes and cartons (as per charts), but these can be customer suited upon request and subject to quantities.



**NEW ELVIS "PRIMA" Pile Weatherstripping is made of 100% polypropylene mixed with some additives such as masterbatch (colouring), UV stabilizer and silicone.**

### **PROPERTIES:**

#### **1) Weatherstrip base :**

Polypropylene Multi-filaments twisted Warp and Weft yarns are geometrically woven, together with a layer of extruded polypropylene, forming an integral bond between the fabric and the melted polypropylene the result of which is the "backing" or "base" of the pile weatherstripping.

The fibers are firmly locked into place to prevent shredding.

After cooling, the extruded polypropylene becomes a strong and rigid backing for easy insertion into the profil grooves, in the same time it is so flexible to enable a smooth reeling and handling.

#### **2) Weatherstrip pile:**

Polypropylene Multi-filament yarns with a trilobed filaments cross section. The trilobed shape gives up to 50% better performance than the circular one.

High resistance to abrasion, biological and chemical attacks.  
Excellent resistance to shrinkage and stretching.

It is very light which makes it very easy to handle.

It has great recuperation power, this gives it the possibility to regain quickly its original shape after being submitted to hard compressions.

The yarns are impregnated with silicone for a better water repulsion and reduced friction during the opening or closing of the sliding doors or windows.

Because of the UV stabilisation, it doesn't deteriorate or change colour with time, even when exposed to very strong sun light.

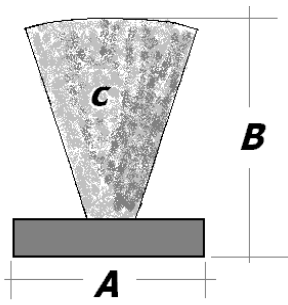
#### **3) PP Specifications:**

- Specific gravity, 0.90 - 0.91
- Moisture retention, less than 0.1 at 65% pH, 70 °F (21.1 °C)
- Elasticity at Break, 30-60%
- Thermal recovery, 85 - 90% at 10% compression.

#### **4) PP Thermal properties:**

- Softening point 150 - 160 °C
- Melting point 160 – 170 °C

The Weatherstripping has very good fire ratings, it will burn in the presence of a flame but is classed as a very low burning material. When exposed to a flame, the fibers will melt and curl away from the source.



**SELECTING THE CORRECT SIZE:**

Ordering system - **SIMPLE & ACCURATE.**

**B** Example: Type: **68X70 GR**

Backing width; **A = 6.8 mm**

Pile height : **B = 70 (7 mm)**

Colour : **GR** = Gray or **NT** = White, **BL** = Black, **BR** = Brown

**SELECT THE CORRECT PILE HEIGHT:**

Selecting the pile height is different for each application. It depends on the manufacturer's insulation needs which are based on the location of the building.

The more compression the Weatherstrip has, the better the insulation is, **BUT** also the initial force is also required to open or close the door or window. Thus it is better to use low compression for most applications.

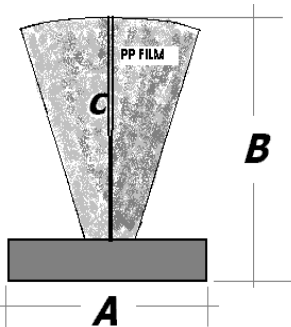
Usually, and based on experiments, the pile height should be 15% to 20% more than the aluminum profile's gap.

This is a recommended formula to calculate the right pile height:

**Pile Height = (profile gap) + 20% X (profile gap)**

For example if the gap between the frame and the window is 6 mm the recommended size for the WEATHER-STRIP is:

Pile height = 6 + 20%X6 = 6 + 1.2 = 7.2 mm = 7 mm and the type is **68X70**



**FINSEAL:**

Reinforced weatherstrip pile with Centre Fin: Double layer of UV stabilized polypropylene film to combat the effects of strong sunlight. Provides a solid line of protection against air infiltration and water penetration. Reduces friction for easier sliding.

**FINSEAL TYPES:**

The compression for the fin type is 10%-15% more than the profile gap.

The film is normally at the same height as the pile but fin types are produced according to customers' required specifications.

The code name for fin type is : (for example)

**68X70 F GR**

A = 6.8 B = 7 mm Colour = Gray F = finseal = fin height 7 mm (at pile height).

Letter H before F means that film is higher than pile or L means film lower than pile.

If there is a number i.e. +1 , +1.5, -0.5, etc..., then the film is higher by 1 mm, 0.5 mm or lower by 0.5 mm, than the pile.

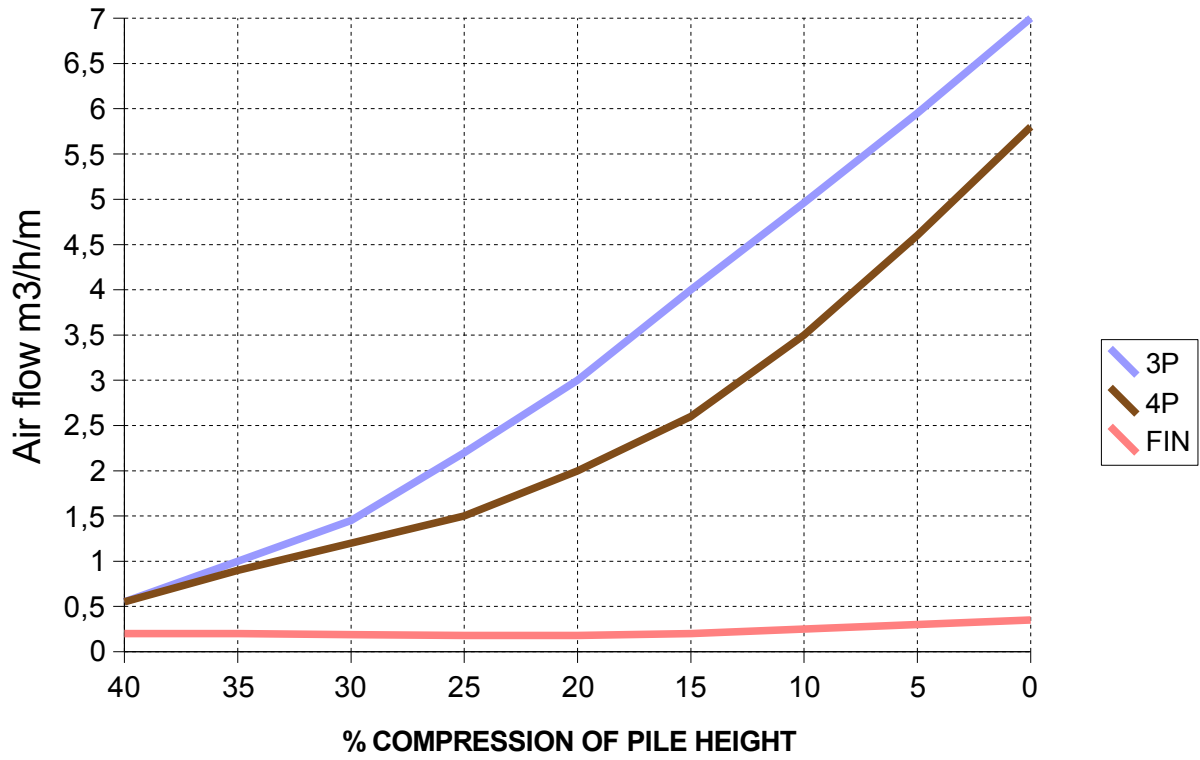
Examples: 68X70 HF+1, 48X70 HF+1.5 or 68X70LF-0.5 that can also be (- 1) : 1mm lower than pile.

**SELF-STICK TYPE:**

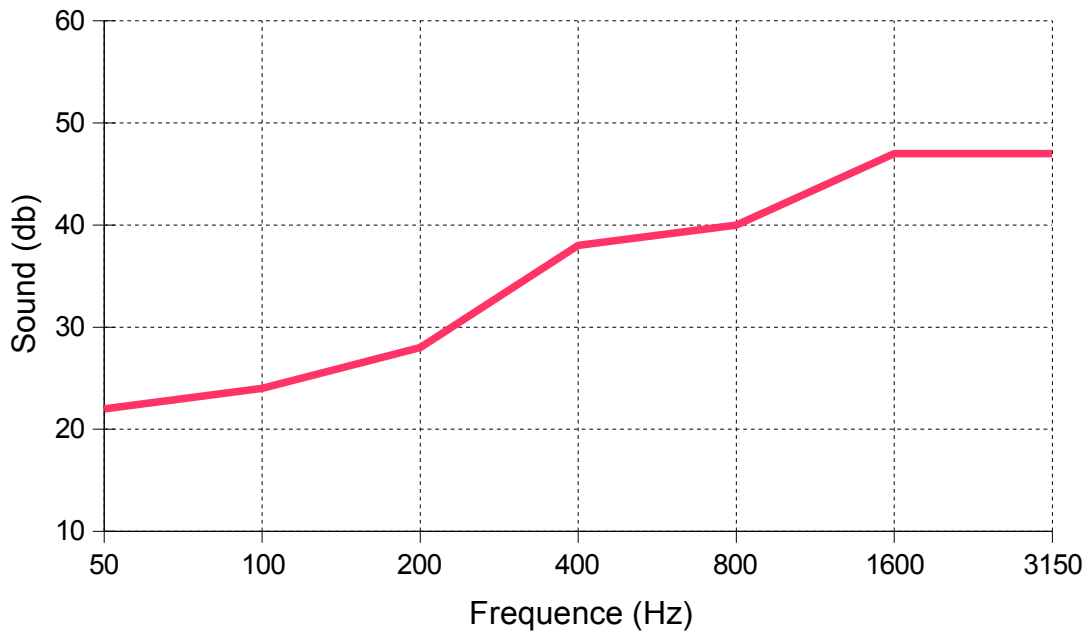
This is a weatherstrip pile which has a self-adhesive backing covered with a release tape. It incorporates a special adhesive which gives a very strong bond on aluminum, steel and wood. This type is available in the 6.8mm width but other widths are made to customers' orders.

Type code (example): **68X70 SS** (SS is for Self-Stick)

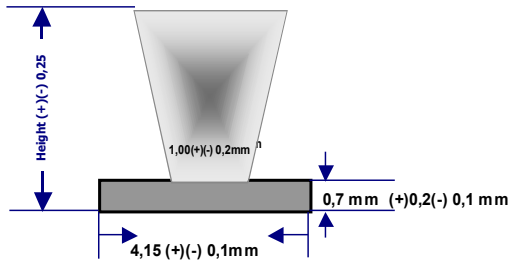
### AIR INFILTRATION



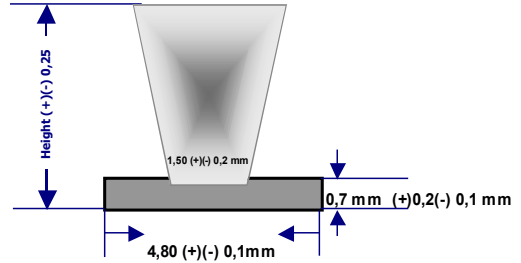
### Sound Isolation



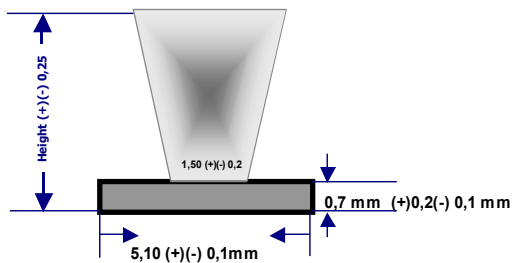
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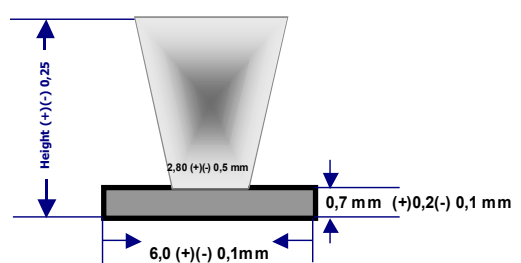
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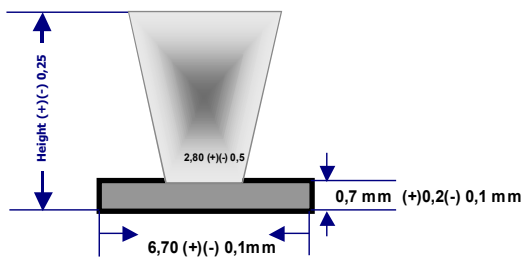
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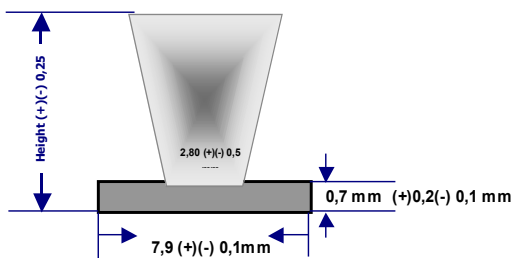
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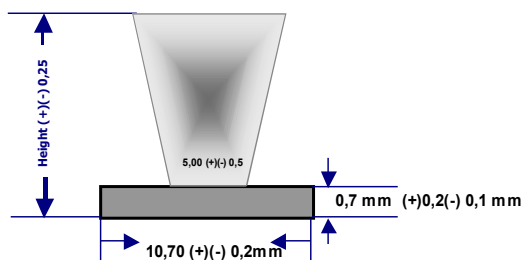
**TYPE 68**



**TYPE 78**



**TYPE 110**



**TYPE 130**

