



## External corners profiles **Cerfix<sup>®</sup> Protrim**

### Description

PROTRIM is a range of profiles which are ideal to seal and protect external corners in ceramic tile coverings, to prevent the unsightly and delicate 45-degree cut in the tiles; the rounded shape also gives the corner a symmetrical, injury-proof finish.

Available in a variety of sizes, materials and finishes, PROTRIM is used for decorative purposes alongside profiles in the PROLIST range; together they create striking and sophisticated combinations and contrasts with all kinds of coverings.

The PROTRIM range is also ideal in applications to seal and protect floors and the edges of stairs covered with a variety of materials: wood, stone and resin; it can also be used to finish work surfaces and platforms.

Polished and coated aluminium and PVC models are not recommended for use on floors.

Chrome-plated brass models are not advised for floor installation or on surfaces subject to heavy foot traffic.

Special components are available to create internal/external angles and end caps, to create an overall harmonious, linear effect.

PROTRIM is also available in a Flex version, made of anodized silver and natural brass; it was designed specifically for situations in which the profile has to be shaped using the PROFLEX machine to match the curved edge of the joint. See the section presenting our bendable profiles.

Anodized titanium aluminium models are not recommended for use in exterior environments.

### Materials

#### Anodized aluminium

Al-Mg-Si aluminium, heat-treated in T6 (6060 T6).

The profiles are made by extrusion then anodized with a  $\geq 15 \mu\text{m}$  thick layer.

The outer surface must be protected from scratches and rubbing. They present a strong resistance to chemical and atmospheric agents. When wet, concrete and its derivatives produce alkaline substances which can corrode metal (forming aluminium hydroxide) when allowed to react with the surface. For this reason, the visible surface of the profile must be quickly and delicately cleaned to remove any concrete, adhesive or grouting substances and detergents.

Anodized surfaces can become ruined through wear and foot traffic (profiles used on floors) and the original finish lost as a result.

#### Polished aluminium

Al-Mg-Si aluminium, heat-treated in T6 (6463 T6).

The profiles are extruded then treated and machined. Relatively good resistance to chemical and atmospheric agents is guaranteed. When wet, concrete and its derivatives produce alkaline substances which can corrode metal (forming aluminium hydroxide) when allowed to react with the surface. For this reason, the visible surface of the profile must be quickly cleaned to remove any concrete, adhesive or grouting substances and detergents. Do not use polished aluminium profiles on floors and outdoors.

#### Coated aluminium

Al-Mg-Si aluminium, heat-treated in T6 (6060 T6).

The profiles are extruded and then coated. They present a relatively good resistance to chemical and atmospheric agents but not to mechanical stress which damages the surface coating. This means they are not recommended for floor use. Concrete, adhesive, grouting materials and detergents must be immediately removed from the visible surface of the profile.

#### **Anti-bacterial coated aluminium**

Al-Mg-Si aluminium, heat-treated in T6 (6060 T6).

The profiles are extruded and then coated with special anti-bacterial technology. The surface reduces the most hazardous bacteria by up to 99%. This technology has been tested to the most stringent standards under international standard JID Z 2810:2000. They also present a relatively good resistance to chemical and atmospheric agents but not to mechanical stress which damages the surface coating. This means they are not recommended for floor use. Concrete, adhesive, grouting materials and detergents must be immediately removed from the visible surface of the profile.

#### **Stainless steel**

AISI 304 - DIN 1.4301

Especially resistant to the main chemical and atmospheric agents, to lime, mortar, tile adhesives and cleaning products.

Also recommended for use in food industries, hospitals, external environments in general, etc.

#### **AISI 316 – DIN 1.4404**

Especially resistant to the main chemical and atmospheric agents, to lime, mortar, tile adhesives and cleaning products. Moreover, they resist chlorine and salt well. They are especially suited for use in extreme environments.

#### **Polished brass**

Alloy CW624N UNI EN 12167

The profiles are extruded then polished mechanically. The outer surface must be protected from scratches and rubbing.

Resistance to chemical agents and mechanical stress is good. Parts of the brass in contact with the air are subject to oxidation, producing a film on the surface. In the presence of extreme humidity or corrosive agents, brass will oxidise quickly and marks may appear on the surface. Where necessary, it can be restored to its natural state with abrasives or special polishes.

#### **Chrome-plated brass**

Alloy CW624N UNI EN 12167

The profiles are extruded and then chrome-plated. Resistant to UV, chemical and atmospheric agents. Do not use chrome-plated profiles in areas subject to intense foot traffic.

#### **Rigid PVC**

Rigid PVC compound, lead-free, shock-proof, self-extinguishing. Stabilised, eco-compatible, based on Ca-Zn salts.

#### **PVC Co-extruded PVC Rigid/Plasticised**

Rigid PVC compound, lead-free, shock-proof, self-extinguishing. Stabilised, eco-compatible, based on Ca-Zn salts.

Plasticised PVC compound, lead-free, self-extinguishing. Stabilised, eco-compatible, based on Ca-Zn salts.

#### **General note on metals**

Aluminium and stainless steel are not resistant to all chemical compounds. Consequently, contact with particularly aggressive products like hydrochloric acid (HCl) and phosphoric acid (H3PO4) should be avoided.

Products generally used to clean stone, ceramic and porcelain tiles, such as muriatic acid, ammonia and bleach, damage the surface finish on the metal and can cause intense corrosion. Moreover, any residues of concrete, adhesive, and grouting materials must always be removed from the surface of the profiles as quickly and delicately as possible.

If adhesive tape is used to cover the profile, it must not be left any longer than an hour.

## **Fixing**

#### **Fixing with adhesive**

Remove the profile from the packaging.

Check that the depth of the covering to be laid is not greater than the depth of the profile (see label).

Where present, also remove any protection (protective and/or shrink-wrapped film) added to protect the finish.

Measure the length required and cut the profile to this length using an appropriate tool.

Level the adhesive on the laying surface using a toothed spreader.

Place the profile in position and level it with the covering laid previously.

Lay the covering delicately, making sure it is flush with the profile and leaving the right space for a grout line (usually 1-2 mm).

Fill any gaps left between the covering and the profile with a suitable grout.

Remove any excess grout, adhesive, solvents etc. with a soft sponge and water within ten minutes of application.

## Care and maintenance

Care and maintenance procedures for the materials used to make these profiles depends largely on the type of alloy and/or finish used. The instructions provided below describe the operations to be performed on the profile to restore it as much as possible to its original condition. The purpose of this document is to provide as many general indications as possible to guide you on when and how to clean the product, but they should also be verified on a case-by-case basis. It should be pointed out there are specific responsibilities in each part of the product's life cycle, starting from when it is installed the first time.

### Aluminium

No special maintenance is required and aluminium products can be easily treated with colourless alcohol in a water solution or using ordinary detergents, provided they do not contain acid (hydrochloric or hydrofluoric). Detergent products made by multiple manufacturers and sold under a variety of commercial brands can generally be used for cleaning. Generally speaking, there are three types of products:

- Alkaline
- Neutral
- Acid

For cleaning purposes, we recommend using a neutral detergent diluted in water then rinsing with water only, using a non-abrasive sponge and/or cloth to avoid scratching and/or damaging the anodized surface.

During cleaning, the following aspects must be kept in mind at all times:

- Do not use acid or alkaline detergents because they could damage the aluminium;
- Do not use products and/or abrasive materials;
- Do not use organic solvents on painted surfaces;
- Do not use detergents without first checking their chemical composition;
- Do not apply detergents straight onto the surface to be cleaned;
- Surfaces must be "cold" (max T°= 30°C) during cleaning and not exposed to direct sunlight;
- Detergents used in cleaning must also be "cold" (max T° = 30°C) and steam sprays should not be used.

In any case, the final stage in the cleaning process is always sufficient rinsing with water of the parts treated, then immediately dried using cloths or soft leather. Polishes or similar products are not required.

Clean profiles carefully as soon as required, following the instructions on the product package, to prevent any residues of concrete, grout or similar substances from attacking the surface.

### Stainless steel

Stainless steel surfaces can be polished with suitable, widely available products.

Stainless steel is easy to clean and extremely hygienic; the smooth, non-porous surface makes the adhesion and survival of bacteria and/or other micro-organisms.

To keep stainless steel perfectly maintained, there are just a few simple rules: wash with soap and warm water, rinse well then dry with a soft cloth. For surfaces exposed to atmospheric agents and attack, we recommend cleaning the stainless steel profile regularly to maintain the surface unaltered and prevent corrosion.

Surfaces with a brushed finish should always be cleaned in the direction of the brushing and not at an angle to it.

In the event of scratches, use a detergent/polish made specifically for stainless steel, and a soft cloth.

For cleaning, do not use any of the following:

- detergents containing hydrochloric acid (also known as muriatic acid), hydrofluoric acid or bleach; avoid direct contact on surfaces with detergents containing chlorides, unless the contact is short and the surface is well-rinsed afterwards.
- abrasive powdered detergents which could damage the surface finish of the profile.

Do not leave mild steel objects or utensils (like brushes or steel wool normally used to remove residues of mortar or similar products) in contact with stainless steel profiles for extended lengths of time. They could transfer iron particles (contamination) and trigger rust on the surface.

Do not leave damp cloths or sponges for extended lengths of time on the stainless steel surface to prevent the formation of unsightly water marks.

### Brass

Brass does not require special maintenance: it can be easily cleaned with alcohol diluted in water or ordinary detergents, provided they are not acid-based. Water can be used with added neutral detergents and the final rinse with water alone. Use non-abrasive sponges or cloths which will not scrape the surface. Use polishes that are commonly available.

#### **PVC**

Does not need any special maintenance; they can be easily treated with colourless alcohol diluted in water or using normal detergents, provided they are not acid or alkaline based and also diluted in water; use only water for the final rinse.

Use non-abrasive sponges or cloths which will not scrape the surface.

#### **Fire prevention measures**

In the event of fire, use chemical fire extinguishers, dry sand or solid extinguishing agents.

#### **Notes:**

These profiles must be handled with caution, being careful to wear suitable gloves to prevent injury and/or cuts to the hands.

The instructions and specifications provided here are the product of our experience but are only a guide, should not be considered exhaustive and must be confirmed by extensive practical applications.

Profilpas declines any responsibility for damage to people or things resulting from improper use of the product.

Users must establish for themselves if the product is suitable for the required used and they bear full responsibility for any incorrect installation of the material.