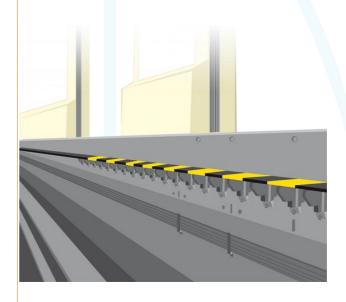


Static Platform Gap Filler prevent people from falling

Static Platform Gap Filler
Prevent people from
falling between the
platform
and the train

A RATP product
Designed and distributed by
CLEARSY





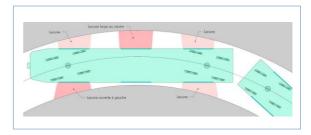
GAP FILLER

PURPOSE

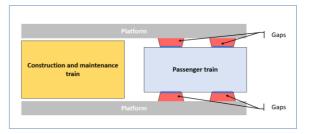
CLEARSY gap filler is designed to address two issues of the Parisian metro (RATP – Line 1):

Sometimes gap between trains and station platform is wider because of the station geometry. Some stations are in curve and so trains need more room to operate these stations. Figure 1.

Parisian transit authority has wider trains for construction and maintenance of track. Consequently, stations have been set to let them go through and as a side consequence there is a gap between passenger train and platform. Figure 2.



■ Figure 1: Gap from station in curve

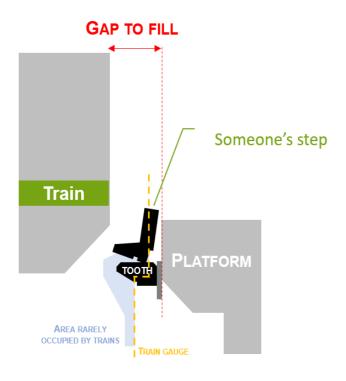


■ Figure 2: Gap from different size of trains.

ADVANTAGES

MOUNTED ON THE PLATFORM

Elastomer devices (« teeth ») filled the gap to prevent people from falling between the platform and the trains. Although the « teeth » can stand more than 400 kg from the top, they are released if they are dragged. This way they don't damage trains.



SIMPLE & SAFE

SIMPLE

- Only mechanical components
- Easy installation: 30 minutes to install 4 meters
- Different lengths and sizes available
- Each "tooth" can be individually replaced in case of damage

SAFE

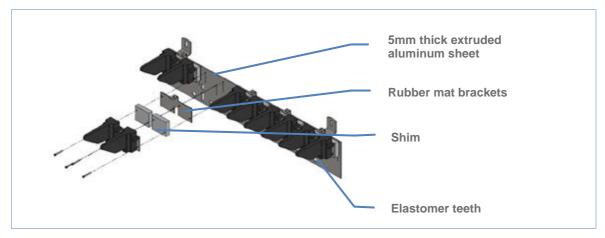
- Certified by RATP (Paris transit authority)
- Resist to 400 kg, 4 times a human being
- Doesn't damage trains: fusible device if dragged
- Fire and smoke compliant
- Halogen free



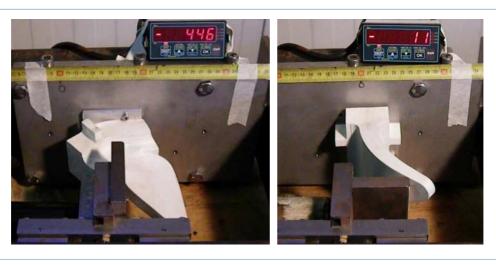
COMPONENTS AND MOUNTING:

The gap filler prevents people from stepping in the gap between the train and the platform. It is composed of two essential components:

- « Teeth » made of elastomer. They have such a shape that they act like fusible devices if train drags them. That's
 why they are engaging trains gauges. However, they are installed in areas where trains rarely hurt them. The
 material is halogen free and fire resistant.
- 5mm thick extruded aluminum sheet which is mounting on the platform. This element is the interface between the "teeth", which fill the gap, and the platform.
- It is also possible to install a rubber mat on top of the « teeth » to improve passenger comfort and shim has been designed for flexible installation.



■ Figure 4 : Components of the Gap Filler



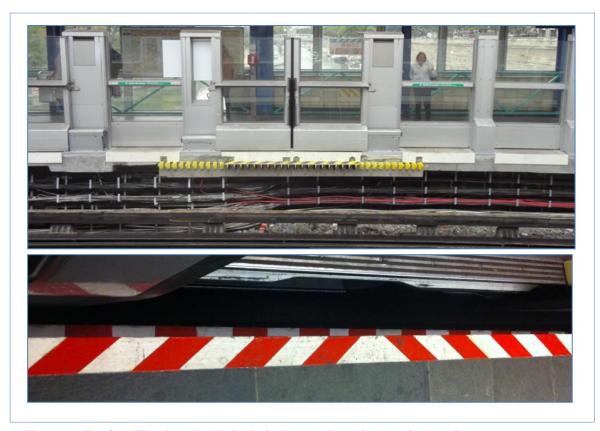
■ Figure 5 : Mechanical stress per tooth: stand more than 400 kg from the top to the bottom but doesn't stand stress from the side to not damage rolling stocks

DEVELOPPEMENT AND SERVICE:

CLEARSY has developed the gap filler for the Parisian metro authority RATP for the UTO metro line 1 (fully automatic without attendant). There are three stations in curve on this line (Bastille, Charles de Gaulle-Etoile, Nation) and there were hazardous gaps between the platform and the train once it is stopped. The gap filler addresses this hazard to make UTO operation possible. The need was reinforced by the platform screen doors installed.

Also, stations in Paris have very different layouts and platform are not identical within metro stations, that's why CLEARSY proposes different lengths of teeth and shims. Today, the gap filler still secures the gap between the platform and the trains in stations of the line 1 in Paris.

The CLEARSY gap filler is also installed and in service in Lyon (France) on the line B.



■ Figure 6 : The Gap Filler installed in Paris (yellow one) and in Lyon (red one)

CERTIFICATE:

Certified by RATP (Parisian metro authority) to be installed and in revenue service in its metro stations:

- Classified M4 after fire resistance tests: NF P 92-501 (Test by radiation), NF P 92-504 (Flame-Spread rating), NF P 92-505 (Dripping test)
- Certified F2 Material for the range of thickness used for the Gap Filler (Certificate number CC G F 1299/01/298 A): NF X 700-100-1/2 (Analysis of gaseous effluents), NF X 10-702 (Opacity of the fumes), NF F 16-101 (Rolling stock, fire behavior, Materials choosing)
- STM S-001 C (Material Technical Specification)

Mechanical tests according to CLEARSY's specifications







■ Figure 7 : Someone stepping on the



■ Figure n°8: Teeth supporting the rubber mat

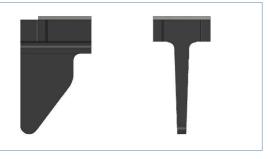
TECHNICAL FEATURES:



The extruded aluminum sheet is the mounting interface for the "teeth". This metal sheet is mounted on the platform by its mounting ears. It has the following dimensions $1000~\text{mm} \times 230~\text{mm} \times 5\text{mm}$. It offers 5 height options to mount the "teeth". Within this width, 10~"teeth" can be mounted on.

This part can be modified to meet clients' needs and requirements.

TEETH ECHNICAL FEATURES:



A tooth is composed of a core made of extruded aluminum covered with elastomer certified fire and smoke compliant and halogen free.

- Four different lengths of tooth are available: 130 mm, 170 mm, 190 mm, 210 mm.
- They can be tailored to fill the gap
- An aluminum shim can be added
- In case of rubber mat, a bracket has to be added (bracket already designed).

RUBBER MAT FEATURES:



The rubber mat improves passenger comfort but doesn't secure the gap. Only teeth secure it.

- Three different widths are available: 90 mm, 130 mm, 150 mm.
- Halogen free

Width and painting of the rubber mat are customizable.



CLEaRSY

Safety Solutions Designer



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