

# Mesh Track

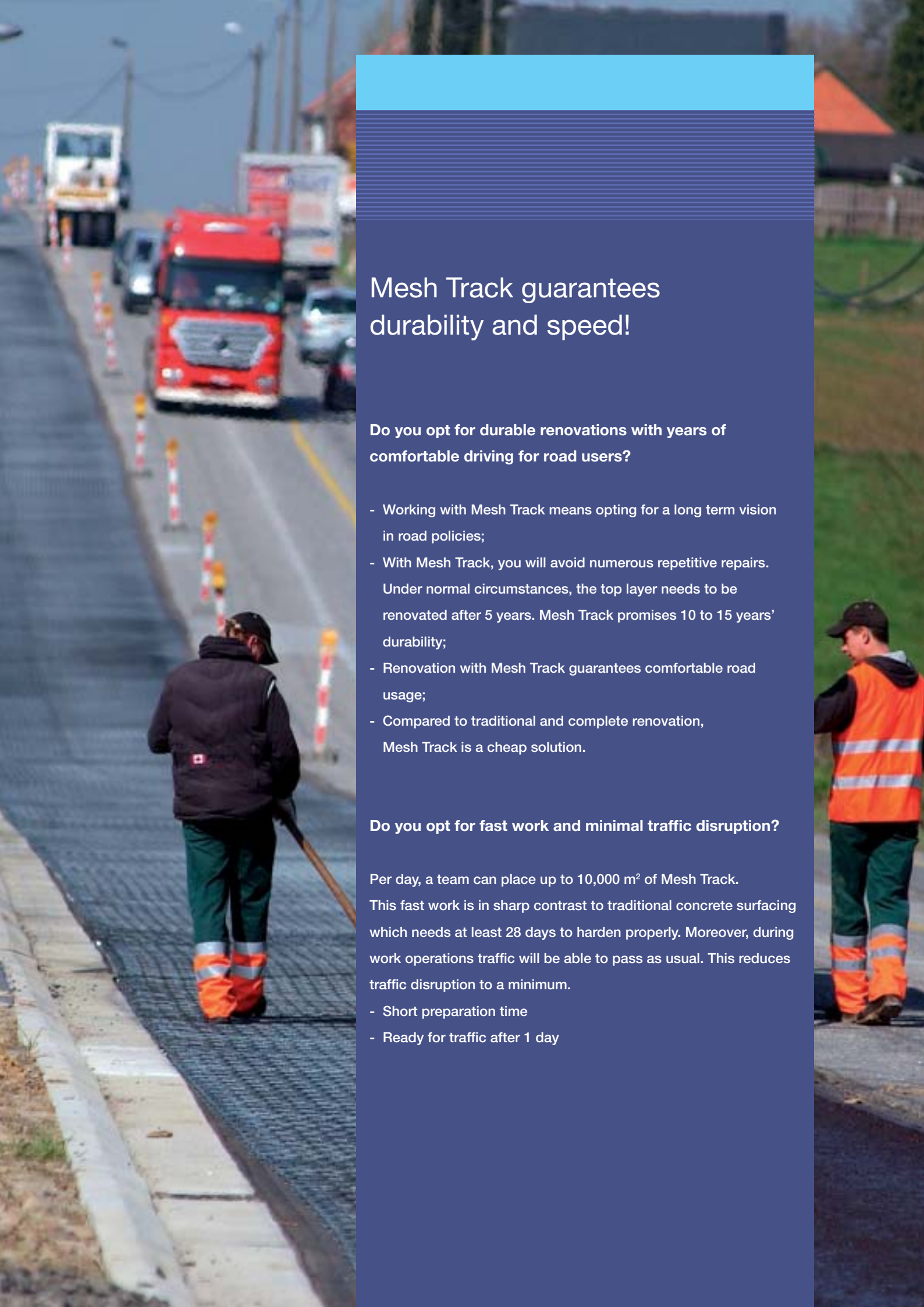
Fast planning and execution  
of road renovations



Investing in a solution that is durable and as hard as steel

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## Mesh Track guarantees durability and speed!

### Do you opt for durable renovations with years of comfortable driving for road users?

- Working with Mesh Track means opting for a long term vision in road policies;
- With Mesh Track, you will avoid numerous repetitive repairs. Under normal circumstances, the top layer needs to be renovated after 5 years. Mesh Track promises 10 to 15 years' durability;
- Renovation with Mesh Track guarantees comfortable road usage;
- Compared to traditional and complete renovation, Mesh Track is a cheap solution.

### Do you opt for fast work and minimal traffic disruption?

Per day, a team can place up to 10,000 m<sup>2</sup> of Mesh Track. This fast work is in sharp contrast to traditional concrete surfacing which needs at least 28 days to harden properly. Moreover, during work operations traffic will be able to pass as usual. This reduces traffic disruption to a minimum.

- Short preparation time
- Ready for traffic after 1 day



## Why do those roadworks take so long?

### Why does the road need to be dug up time and again?

Every year, the numerous road works cause huge frustrations among road users. It seems almost impossible to get to where you are going without getting stuck in a traffic jam or coming across a diversion. Besides, traffic is getting heavier by the day and the roads are becoming overloaded.

This undoubtedly causes concern among directors of technical services, chairmen of public works groups and engineers for public roads and transport. Providing comfortable and safe roads has become a real challenge for them In recent years.



## Professionals speak



**Pierre Biesemans**  
Service Manager  
surface maintenance  
The Brussels Airport Company

“Mesh Track makes it possible to keep roads in an optimum condition over a minimum of 10 years, even on a limited budget.”

### Problem

Our concrete taxiways were in a terrible state. The concrete slabs were starting to show horizontal and vertical cracks and in the joints the concrete started to crumble. At the time, however, our budget did not allow for any of the full renovations of this surfacing.

### Solution

Air traffic at the airport cannot be compared to daily traffic on the roads. Aeroplanes are responsible for huge wear and tear affecting the pavement surface. **Consequently, we had to start looking for very solid and durable reinforcement. Mesh Track was the only alternative for us to solve the problem.**

### Result

At the moment, 7 different taxiways have been renovated with Mesh Track. In an 8-year period, we have had only positive experiences with this durable solution. Why would we change anything?



“A much-used country road still in perfect state after 20 years: it speaks for itself.”

**Problem**

Our municipality lies mainly in the polder (low-lying tract of land enclosed by embankments). In areas like this, there is a lot of turf. This is not conducive to the supporting structure of our roads. The narrow roads along the many waterways and canals showed slipping on the edges. Moreover, busy farm traffic caused deep rutting.

**Solution**

In choosing the reinforcement, the supporting capacity of the product was particularly taken into account. **Mesh Track provides supporting power that is evenly distributed over the road surface. This is how the structure of the road is held together properly.**

**Result**

Thanks to Mesh Track, the state of our farm roads has improved enormously. We have had more than 20 years' experience with this product for concrete- as well as asphalt renovations. It started out as an experimental project in 1987, but because of the positive results, we were soon convinced. Scores of other projects followed in quick succession.



**Willy Delancker**  
Assistant service manager  
Road and Waterworks  
Diksmuide City Council



**Karel Van Nunen**  
Senior Project Manager  
Public Works and  
Water Management  
North Brabant

“Because of its durability and the fast, easy application, this reinforcement is a high-quality product.”

**Problem**

The concrete A59 motorway was badly damaged over a length of 10 km with serious damage caused by vertical and horizontal cracks. Moreover, there were irregularities in several locations and joints widths up to 35 mm. This clearly pointed to horizontal displacements. These problems were mainly due to traffic overloads. This is not surprising when you know that the A59 carries an average of 24,000 vehicles per day.

**Solution**

All these problems caused ever-increasing traffic hazards. The need to renovate the road surface was great. After extensive market research, we chose an efficient method of repair Mesh Track. **A large number of alternatives were not adequate to repair the cracks. Moreover, Mesh Track has the huge advantage of being able to absorb lateral force.**

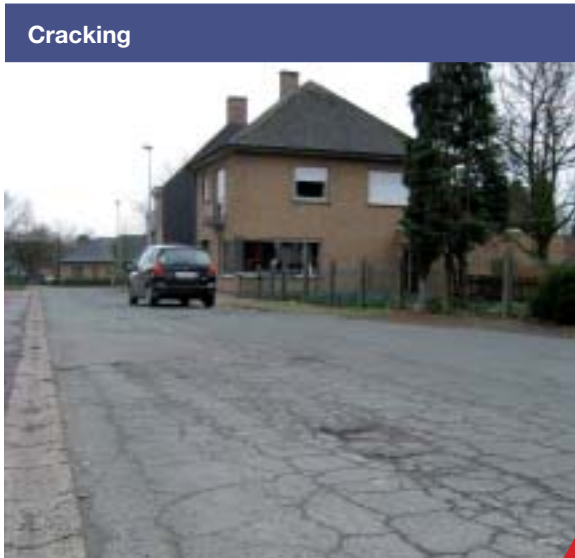
**Result**

After 6 years of Mesh Track, there is still no sign of cracks. It is a high-quality product: durable and easy and quick to install. This is important, because the traffic is spared any inconvenience and I am able to meet strict deadlines.

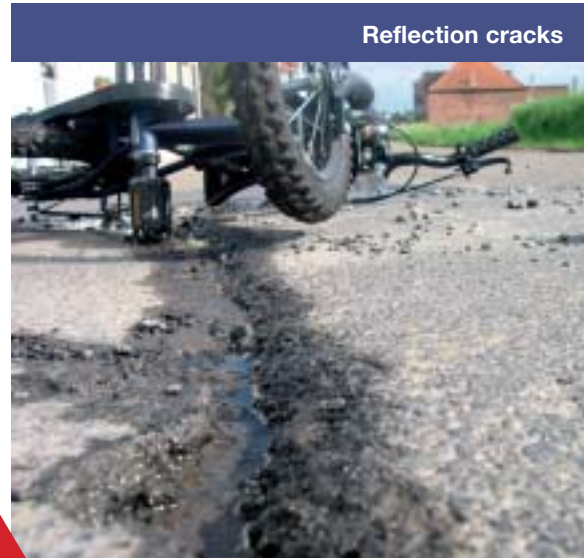


# Asphalt resurfacing

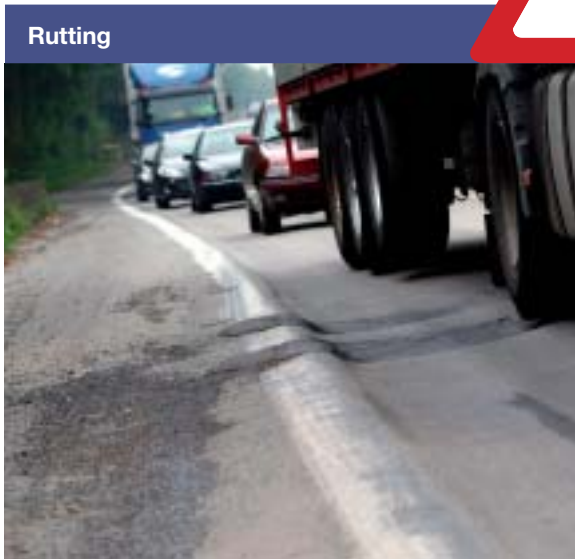
Are these your problems?



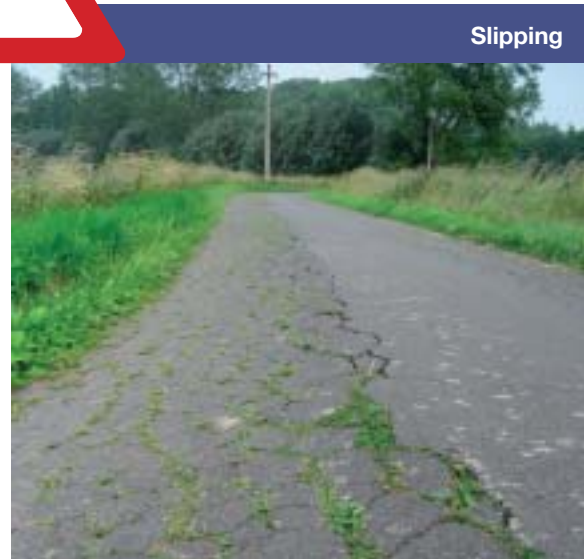
**Cracking** become more extensive, particularly after cold winter periods



**Reflection cracks** cannot be repaired using makeshift measures



**Rutting** and corrugation increase the danger of road accidents



**Slippage** due to weak subsoil

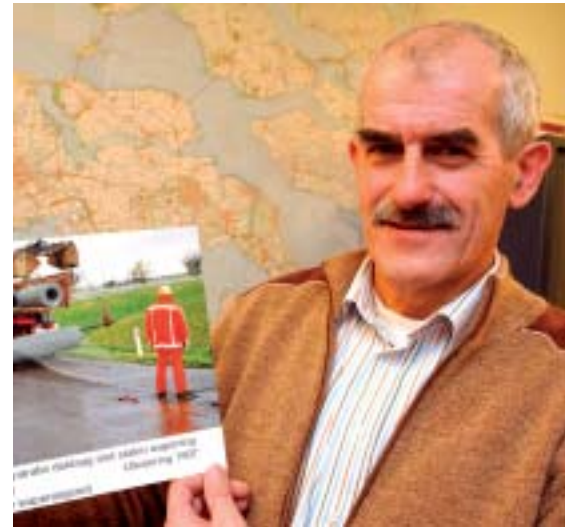
## Mesh Track

- prevents cracks due to: - reflection  
- cracking  
- slippage
- inhibits rutting and corrugation
- increases the load bearing capacity of any existing structure

“An investment is only valuable when it produces an excellent long-term yield.”

About 10 years ago, we started with Mesh Track. In the meantime more than 41,000 m<sup>2</sup> Mesh Track has been processed in the renovations of our asphalt roads. We are clearly not talking about a trial project anymore.

After all these years Mesh Track has proven to be the best solution as regards to durability. This is also the only product on the market that is resistant to horizontal stress.



**Aart Wondergem**  
Senior employee department  
Renovation - Infrastructure /  
Transport management  
Province of Zeeland

### Mesh Track: the solution for cracks



Before

The renovation of a road surface using Mesh Track gives excellent results. Moreover, asphalt resurfacing using this reinforcement is extremely durable.



After

**Mesh Track**

# Concrete resurfacing

## Mesh Track: a fast and effective solution



If concrete resurfacing were chosen for this damaged road surface again, the concrete would need 28 days to reach its full strength.

### Mesh Track

- prevents reflection cracks
  - that appear in the joints of the concrete slabs
  - that are the result of torn concrete slabs
- increases drivers' comfort
- requires minimal resurfacings thickness, even with increasing axle loads

Mesh Track speeds up renovation. As soon as the reinforcement is in place, the asphalt can be added immediately. In no time at all traffic can use this road again.

“This extremely speedy procedure keeps a renovated road in perfect condition at a relatively low cost.”

We had two choices. We could have laid a completely new foundation which would have meant that the road would have been dug up for a considerable period. It also would have involved a large investment and inconvenience for the immediate surroundings.

Choosing Mesh Track was easy. This extremely quick procedure keeps a renovated road in perfect condition at a relatively low cost. We can definitely speak of a successful project here.



**Willy Lievens**  
Engineer Area Office  
Courtray District

# Foundation reinforcement

## Mesh Track: an economical and ecological solution



How to make company premises easily accessible for haulage?

By adding Mesh Track to the foundation future problems like reflection cracks and rutting will be avoided. Moreover, Mesh Track considerably increases the load bearing capacity of the road due to the steel reinforcement.

Mesh Track in the foundation is an economically and ecologically responsible solution. Both the depth of the foundation and the transport of the dug out soil are greatly decreased.

Applications for Mesh Track.

- new roads on surfaces with little load bearing capacity
- widening of an existing road by adding another lane



**Danny Debrakeleer**  
Council Engineer Ronse

The road surface is still in perfect condition 10 years after the work was done. This experience has made us extremely positive about the results of a Mesh Track-reinforcement in the foundation. The price of a delivered and placed reinforcement mesh is the same as the delivery and placement of one layer of bituminous surfacing. The result is beautiful.

# Grassland reinforcement



Circus tent



Festival grounds



Camping ground



Grass parking area

The use of Mesh Track on grassland is the best solution to create temporary or permanent parking facilities. It is also a suitable reinforcement for the soil at events like festivals. Mesh Track is applied at surface level. When the grass grows again, the field will be green once more. The grass can be mowed at any time.



**John-Paul Slob**  
Camping ground Ter Leede in Leerdam

Before we knew of Mesh Track, our camping ground had a bad reputation. Usually, the terrain was wet and soggy. Bekaert and I went looking for the best solution to this specific problem. Thanks to Mesh Track we have been able to shake off our negative image. Tourists now give us nothing but positive reactions on our beautiful green camping ground. In short, we should have started much earlier with this reinforcement which is as hard as steel.

Annually > 1.000.000 m<sup>2</sup>  
world wide

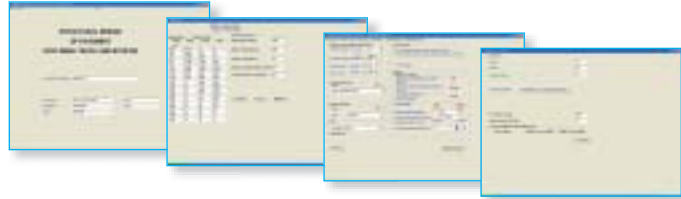
30 years experience

Use our knowledge  
and support



**SUPPORT**

- **Help in designing your renovation project**
  - Design software made up in collaboration with the Ministry of Education, Culture and Science (OCW)
  - Apply for your draft note



- **Complete Support:** of the estimated costs and specifications as a support for the executive builder.
  - Ask for our quotation
  - Ask for our installation guide with standard specifications



**TECHNICAL VERIFICATION**

- **Research reports of renowned road construction companies and clients**



- **Thermal crack test and dynamic bending test**

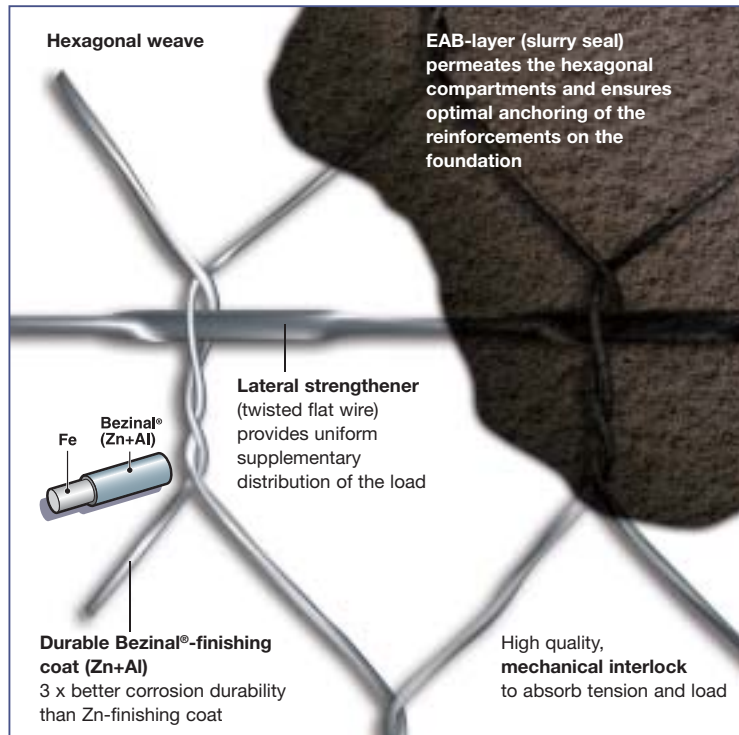
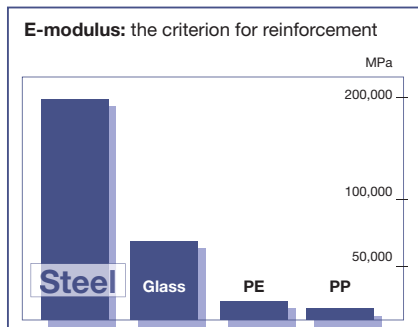
## What is a realistic time of completion?

(standard: 10,000 m<sup>2</sup>/day)

|  | m <sup>2</sup> /day | labour  |
|--|---------------------|---|
| <b>asphalt- and concrete resurfacing</b> |                     | unrolling <b>Mesh Track</b><br>+ application of slurry seal                             |
| motorway/national road                   | 10,000              |   |
| regional road                            | 6,000 - 8,000       |   |
| farm road                                | 5,000               |   |
| <b>foundation reinforcement</b>          | 750                 | unrolling <b>Mesh Track</b><br>+ application of granulated bed                          |
| <b>grassland reinforcement</b>           | 1,000               | digging <b>Mesh Track</b><br>unrolling <b>Mesh Track</b><br>anchoring <b>Mesh Track</b> |

the number of rolls depends on the width of the selected rolls

# Mesh Track: your steel reinforcement net to reinforce overloaded roads



| Mesh Track-specifications                   |           | MT1 Heavy Duty         | MT2 Regular            |
|---|-----------|------------------------|------------------------|
| Diameter                                    | wire      | 2,45 mm                | 2,20 mm                |
|   | flat wire | 7,0 x 3,0 mm           | 6,50 x 2,0 mm          |
| E-modulus                                   |           | 200 kN/mm <sup>2</sup> | 200 kN/mm <sup>2</sup> |
| Mesh  |           | 118 x 80 mm            | 118 x 80 mm            |
| Distance between the flat wires             |           | 245 mm                 | 245 mm                 |
| Weight & Measurements<br>(per roll, length) | width     | weight                 | weight                 |
|   | area      |                        |                        |
|   | 2,00 m    | 173 kg                 | 130 kg                 |
|   | 3,00 m    | 260 kg                 | 195 kg                 |
|   | 3,30 m    | 285 kg                 | 215 kg                 |
| Other dimensions on request                 | 4,00 m    | 345 kg                 | 260 kg                 |

| Mesh Track-applications                           |                  | MT1 Heavy Duty | MT2 Regular |
|---|------------------|----------------|-------------|
| Building new roads                                | foundation       | ++             |             |
| Maintenance, renovation and repair existing roads | on concrete      | ++             |             |
|   | on asphalt       |                |             |
|   | heavy traffic*   | ++             |             |
|   | normal traffic** | +              | +           |
|   | light traffic    |                | ++          |
| Road widening                                     | heavy traffic*   | ++             |             |
|   | normal traffic** | ++             | +           |
|   | light traffic    | ++             | +           |
| Grass parking                                     | intensive use    | +              | +           |
|   | occasional use   | +              | ++          |

\* heavy traffic: 70% trucks, 30% private cars

\*\* normal traffic: 30% trucks, 70% private cars

## Take advantage of our hard as steel Mesh Track-guarantees

- Mesh Track keeps your roads in top condition
- Your roads will be able to cope with the ever-increasing amount of traffic
- Mesh Track reduces the annual maintenance cost to a minimum
- By choosing Mesh Track you opt for a long-term solution and helping the environment
- Mesh Track optimises the driving comfort on your roads

We regularly hold information sessions about Mesh Track. In addition to a detailed presentation you will have the opportunity to view a project in progress. Please contact us if you would like to know more about this fast and durable reinforcement method. Our contact details are below.

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