

# RUBWAY MULTISPORT CYCLEWAY SYSTEMS



The Rubway Multisport **poured-and-paved cycleway technology with multifunctional sport surface can be the 21. century alternative to tarmac or concrete.** The monolithic wearing course is utilizing recycled rubber tire chips and urethtan based bonding agent, therefore - among other benefits - the Rubway Multisport is **more flexible than tarmac** or concrete and **does not crack or break** like traditional hardscape surfaces.

## Recommended ways of application



Rubway Multisport is recommended for **cycleways, sideways, walking paths, recreational tracks or wheelchair accessible forest trails.**

The surface of Rubway Multisport can be used by **bikers, runners, pedestrians, rollerskaters, horse riders, also perfect for strollers, wheelchairs.**

Furthermore Rubway Multisport provides solution for **landscaping, tree surrounds, handling erosion issues, embankment stabilization.** Installation is highly recommended in areas which allocate limited budget for cycleway or sidewalk maintenance.



The Rubway Multisport cycleway systems are **developed in the European Union by Hungarian professionals.** The installation is mostly capitalizing on regionally obtained recycled tires, materials and workforce, therefore contributes to thriving the local economy.


Addressing the different consumer needs, the Rubway Multisport cycleway systems are available with two different wearing courses.



### Rubway Multisport Shield

The traditional way of drainage.

Like in case of asphalt **the water is directed from the surface of the wearing layer to the drainage system.**


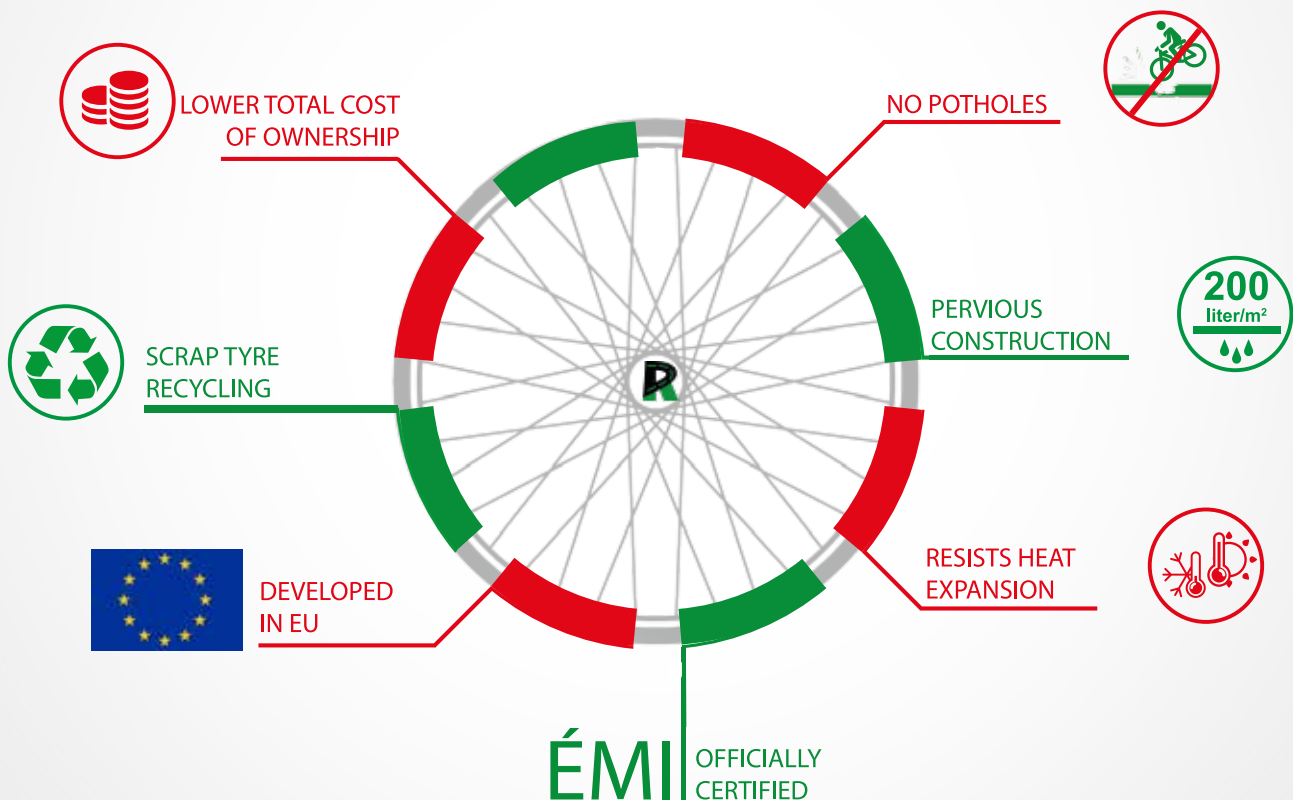


### Rubway Multisport Flow

The natural way of drainage.

The pervious system of the Flow **allows the stormwater to efficiently return into the ground** while controlling erosion.

## RUBWAY MULTISPORT FLOW



The porous wearing layer **allows water penetration through the base layer**, - which also contains stone - **directly to the ground layer**, adapting the proven way of nature for handling rising drainage issues.



The drainage rate of Rubway Multisport Flow is more than **200 liters per minute by square centimeters**, meaning that by this extremely high speed of water evacuation it is able to handle even the most intense rainfall ever recorded in history\*.

(\*Source: Keith C Heidorn: The weather doctor)





The surface **dries rapidly, no puddles formed**, also the humidity from the soil can evaporate through the porous wear layer in reverse direction.

The common features of Rubway Multisport Flow and Shield.


## EVEN SURFACE DURING THE TOTAL LIFESPAN




 The traction and rolling features of Rubway Multisport match the tarmac. Since the wearing course is **more flexible than asphalt or concrete the Rubway Multisport is able to resist more efficiently to the sub surface movements**, which would normally cause trip hazards and seams.


 Rubway Multisport **resists freeze-thaw conditions, UV degradation, and effects of intraday temperature fluctuation**, which lead to cracking.


## OVERPERFORMING TARMAC BY LOWER MAINTENANCE

 **Lower total cost of ownership for the total lifespan** compared to tarmac. The repaired surface provides the same high quality features and travel comfort.

 The damaged wearing course **can be repaired manually, quickly, easily**, by allocation of minimum level of required labour force.

## VALIDATED PRODUCT FEATURES

 The product features are **validated and the National Technical Assessment was proofed by the Hungarian Non-Profit Limited Liability Company for Quality Control and Innovation in Building (ÉMI Non-profit Llc.)**

 1 km length of the Rubway Multisport wear layer **recycles the rubber content of more than 2000 piece of average sized scrap tyre** on an environment friendly way.



# Rubway Multisport Flow vs. cycleways with tarmac

Features	Rubway Multisport Flow	Tarmac
<b>Relevant features</b>		
Travel comfort – new installation	<ul style="list-style-type: none"> <li>- even, flat surface</li> <li>- flawless rolling experience</li> </ul>	<ul style="list-style-type: none"> <li>- even, flat surface</li> <li>- flawless rolling experience</li> </ul>
Handling subbase layer moves or deformation	<ul style="list-style-type: none"> <li>- no cracks or brakes</li> <li>- the flexible wearing course can overcome the sub surface movements to a high extent</li> </ul>	<ul style="list-style-type: none"> <li>- trip hazards</li> <li>- separation, potholes apply</li> </ul>
When the first problems occur on the surface layer?	<ul style="list-style-type: none"> <li>- as result of vandalism or inappropriate use</li> </ul>	<ul style="list-style-type: none"> <li>- cca in the 3rd year</li> </ul>
Expected deformation of the surface	<ul style="list-style-type: none"> <li>- burn</li> <li>- erosion by certain rare compounds</li> </ul>	<ul style="list-style-type: none"> <li>- cracks, breaks</li> <li>- settles</li> <li>- develops potholes or blisters</li> </ul>
The nature of the connection between the road and the curb	<ul style="list-style-type: none"> <li>- seamless seal</li> <li>- gap by material shrinkage is not expected</li> </ul>	<ul style="list-style-type: none"> <li>- seamless seal</li> <li>- material shrinkage is likely to cause a gap</li> </ul>
Permeability	<ul style="list-style-type: none"> <li>- 100%</li> </ul>	<ul style="list-style-type: none"> <li>- close to 0%</li> </ul>
Stormwater drainage	<ul style="list-style-type: none"> <li>- directly to ground layer</li> </ul>	<ul style="list-style-type: none"> <li>- stormwater directed to public drain system through the built-in drainage</li> </ul>
Recycled material content	<ul style="list-style-type: none"> <li>- 40-50%</li> <li>- recycled scrap tires in granules</li> </ul>	<ul style="list-style-type: none"> <li>- max 20% - only when applying advanced tarmac recycling technology</li> </ul>
<b>Need and effect of maintenance</b>		
The complexity of maintenance	<ul style="list-style-type: none"> <li>- low complexity</li> <li>- can be executed manually by 1 person</li> </ul>	<ul style="list-style-type: none"> <li>- moderate complexity</li> <li>- machine-made maintenance is required in every case</li> </ul>
The surface after repair	<ul style="list-style-type: none"> <li>- contiguous surface</li> </ul>	<ul style="list-style-type: none"> <li>- the surface remains patchy</li> </ul>
Travel comfort on repaired surface	<ul style="list-style-type: none"> <li>- the spot of reparation is barely noticed</li> <li>- same like new</li> </ul>	<ul style="list-style-type: none"> <li>- the spot of reparation is significantly noticed</li> </ul>
Safety hazard on repaired surface	<ul style="list-style-type: none"> <li>- no trip hazard</li> </ul>	<ul style="list-style-type: none"> <li>- the remaining mark of the maintenance generates moderate trip hazard</li> </ul>