

TECHNICAL DATA SHEET

CEYES RPR[®]

STORM WATER RETENTION PANELS

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Revision: 1.1

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Technical data CEYES RPR60 panels

Retention Panels Rubber (RPR), developed for water retention in creating a greenroof, roof terrace, walkway or shock and sound absorbing layers for roads. Products contains SBR granules (made from European Tires and/or Artificial sport fields, temperature bonded with PU-binder. Upper side tubs profiled, bottom side flat with caps.

Revision 1.1 Dated 20-07-2020

Description	Details	According to standard
Artical code and dimensions:	RPR60 0600 0800 - Retention Panel Rubber 60mm x 600mm x 800mm	
Material and colour:	SBR granules from waste tires / black	
Temperature resistant:	- 30° C to 120° C	
Weight:	600mm x 800mm 17kg / 800mm x 1200mm 34 kg / 35,9 kg p/m ²	
Weight-mass tolerance:	+/- 3%	ISO 9864
Thickness tolerance:	+/- 3%	ISO 9863-1
Length-width tolerance:	+/- 5%	ISO 9863-1
Expansion coefficient:	+/- 0,8%	IHT (In House Tested)
Expansion polytechnic:	per 10°C*m / +/- 0,4mm	IHT
Perforation opening diameter:	17mm (tolerance +/- 2%)	IHT
Perforation opening per m2:	55cm ² (tolerance +/- 10%)	IHT
Compressive strength crush test unfilled:	>1000 kPa	IHT
Compressive strength crush test unfilled:	Pointload 10cm x 10cm >1000 kN/m ²	IHT
Behaviour to fire:	Class E	EN 13501-1
Thermal conductivity:	0,0 S (tolerance 0,001)	IHT
SVHC REACH:	Pass (concentrations: <0,1%)	
Reference service life (RSL):	>75 year.	
CE marking:	Earth, road and water engineering	NEN-EN 14933
Leaching test:	SGS Intron A101410 - R20190063	NEN 7383, NEN 7375:2004,
Life Cycle Assesment (LCA):	SGS Search / EcoChain valid to: 18-03-2024	ISO 14040/44, ISO 14025, ISO 21930 and NEN 8006.
General product properties:	Water- and frost resistant -30°C / suitable for indoor- and outdoor use / sound- and shock absorbing / anti-slip / 100% recyclable / 3 years warranty	



LCA Life Cycle Assessment

Article	kg CO ₂ / m ²	kg packaging material per m ²
RPR60 0600 0800	8,58	5 grams

Using recycled rubber in molded products, creates a substantially smaller (by a factor up to 20 times) carbon footprint as compared to using virgin plastic resins. (Source: RecycledRubberFacts.org)

Environmental cost indicator

Article	Unit	MKI value m ²
RPR60 0600 0800	Euro	1,039

This chapter includes the Cradle to Grave environmental profiles of the RPR retention panels. The results represent the environmental profile in MKI value (Environmental Cost Indicator). The MKI value is an aggregated single score value based on 11 environmental parameters calculated with the method: SBK Determination method, 20-9-2016 (NMD 2.0) 29-9-2017 V3.03 / MKI-SBK single-score. The MKI parameter is a Dutch calculation method and not part of the ISO14040, ISO14044 or EN15804 standards.

Water draining capacity

Description	Details	Tolerance
No slope	6,3 L/s*m – according ISO 12958	1 L/s*m
2% slope	7,5 L/s*m – according ISO 12958	1 L/s*m
4% slope	20,1 L/s*m – according ISO 12958	1 L/s*m
Water buffering capacity:	20,35 L/m ²	2 L/m ²
Panel fill volume:	27,56 L/m ²	2 L/m ²

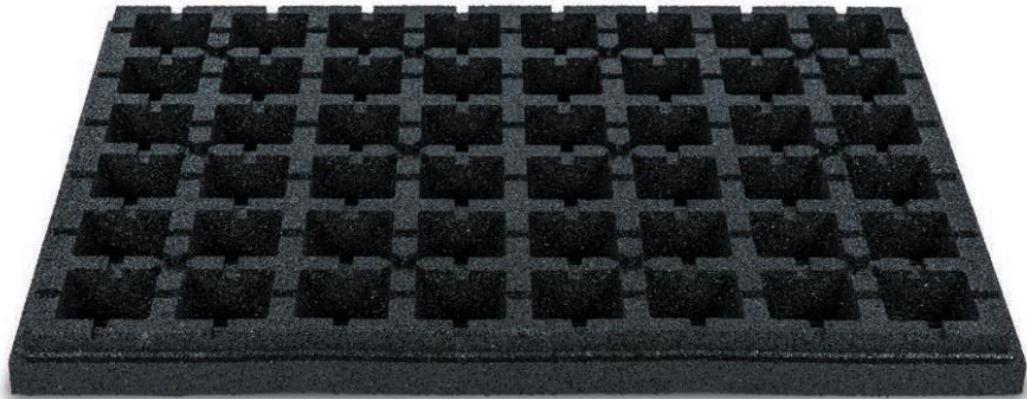
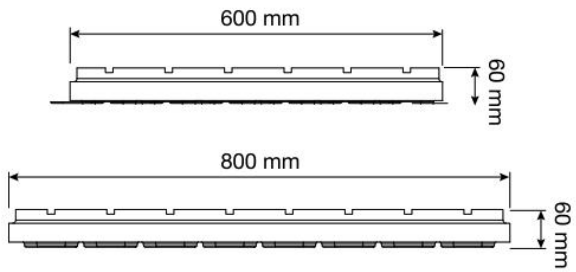
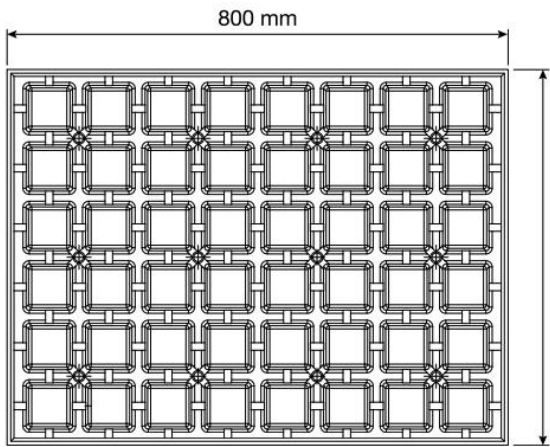
Noise reduction

Description	Details	Tolerance
Contact noise Rw – unfilled	23 dB	+/- 2 dB (IHT)
Surroundings noise Rw - unfilled	15 dB	+/- 2 dB (IHT)



The CEYES RPR rubber retention panels meet the requirements of the Environmental Performance Assessment Method Buildings and civil engineering works”, with underlying standards ISO 14040/44, ISO 14025, ISO 21930 and NEN 8006, and meets the maximum emission values of the Soil Quality Decree for all components.

The results are included in the Dutch National Environmental Database.



Packaging information

Thickness	Pcs / EURO pallet	Pallet weight (Incl. plt)	Pallet height (incl. plt)
RPR 60 – 60mm – 600mm x 800mm	48 pcs. (23,04 m ²)	840 kg	160 cm
RPR 60 – 60mm – 800mm x 1200mm	24 pcs. (23,04 m ²)	840 kg	160 cm

