

Useful Information (King Tech Asphalt-Rubber)

- American Society for Testing and Materials (ASTM) Asphalt-Rubber Definition (D8-88)

“Asphalt-Rubber is a blend of asphalt cement, reclaimed tyre rubber and certain additives, in which the rubber component is at least 15% by weight of the total blend and has reacted in the hot asphalt cement sufficiently to cause swelling of the rubber particles.”

- King Tech Asphalt-Rubber

1) King Tech Asphalt-Rubber Binder (KTAR)

Asphalt Content 80% ± 2%
 Crumb Rubber Content 20% ± 2%

2) Crumb Rubber Particles

10 ~ 20 mesh (0.84~2.00mm)

3) King Tech Asphalt-Rubber Hotmix (KTAR-HM)

Asphalt-Rubber Content 7%~10%
 Aggregate Content 90%~93%

4) King Tech Asphalt-Rubber Bonding Impermeable Stress-Absorbing Membrane Interlayer (KTAR-BISAMI)

Asphalt-Rubber Application Rate ≈ 2.6 kg/m²
 Aggregate Application Rate ≈ 15 kg/m²

- Equivalent Thickness of King Tech Asphalt-Rubber

1cm KTAR - BISAMI ≈ 5cm Conventional Asphalt Hotmix
 1cm KTAR – OSMA (KTAR-HM) ≈ 2cm Conventional Asphalt Hotmix
 1cmKTAR – PQFC (KTAR-HM) ≈ 3cm Conventional Asphalt Hotmix

- Tyre Information

Average Weight of Vehicle Tyre 10 kg / tyre
 Average Number of Tyres per ton of weight 100 tyres
 Rubber Content 60%

- King Tech Asphalt-Rubber Pavements

Material	1 km (1 lane)	1 km (4 lanes)
Asphalt-Rubber*	35 ton	140 ton
Crumb Rubber*	7ton	28 ton
Scrap Tyres*	1,000 tyres	4,000 tyres

* 1cm KTAR-BISAMI + 4cm KTAR-HM

- Scrap Tyres Statistics

Country	Annual Scrap Tyres Production Rate	Country	Annual Scrap Tyres Production Rate
Worldwide*	1,000,000,000	China*	120,000,000
N. America*	400,000,000	Japan*	100,000,000
USA*	200,000,000	Hong Kong*	1,800,000
Canada*	200,000,000		

* 10% growth