

Supplementary Table 1. The mix proportion of the functional and structural layer concrete (Unit: kg/m³)

	Cement	Fly ash	Mineral powder	Fine aggregate	Coarse aggregate	Admixture	Mixing conveyer water	Basalt fiber	Silica-fume	Titanium-oxide
Functional layer	400	25	50	747	1074	5.54	150	4.6	25	6.9
Structural layer	355	48	77	732	1097	4.8	141	-	-	-