[CLAIMS]

[Claim 1]

A cement composition for ground improvement, which contains at least fly ash that satisfies all of conditions (F1) to (F6) below and Portland cement, wherein a content of the fly ash is 10 to 40 mass% when a total amount of the fly ash and the Portland cement is 100 mass%:

(F1) a Blaine specific surface area of the fly ash is 2500 to 6000 cm^2/g;

(F2) a mass reduction rate of the fly ash is 5 mass% or less after the fly ash is heated for 15 minutes at a temperature of 975 ± 25°C;

(F3) a content of SiO_2 in the fly ash is 50 mass% or more;

(F4) in the fly ash, a sphere equivalent specific surface area of particles in which iron oxide and an amorphous substance are mixed is 2800 to 11,000 cm^2/cm^3; and

(F5) in the fly ash, a sphere equivalent specific surface area of amorphous particles containing Ca (calcium) is 2100 to 22,500 cm^2/cm^3.

(F6) in the fly ash, a sphere equivalent specific surface area of particles in which mullite and an amorphous substance are mixed is 1900 to 9500 cm^2/cm^3

[Claim 2]

The cement composition for ground improvement according to claim 1, wherein the fly ash also satisfies condition (F7) below:

(F7) in the fly ash, a sphere equivalent specific surface area of amorphous particles not containing Ca is 2100 to 9000 cm^2/cm^3.

[Claim 3]

The cement composition for ground improvement according to any one of claim 1 or claim 2, which further contains one or more types of gypsum selected from among anhydrous gypsum, gypsum hemihydrate and gypsum dihydrate, wherein

a content of the gypsum is 6.0 mass% or less in terms of SO_3 when a total amount of Portland cement, fly ash and the gypsum is 100 mass%.

[Claim 4]

A construction method for ground improvement, wherein ground is improved by mixing soil with a ground improvement material slurry that contains at least water and the cement composition for ground improvement according to any one of claims 1 to 3.

[Claim 5]

A ground improvement body obtained by mixing the ground improvement material slurry according to claim 4 with

cohesive soil that satisfies all of conditions (S1) to (S3) below:

(S1) a moisture content is 70 to 150%;

(S2) an allophane content, as measured using an acidic oxalate extraction method, is 5.0% or more; and

(S3) when cohesive soil is mixed with a slurry containing 150 mg of $Ca(OH)_2$ and 100 ml of water, an amount of $Ca(OH)_2$ adsorbed by the cohesive soil is 80 mg or more per 1 g of the cohesive soil.