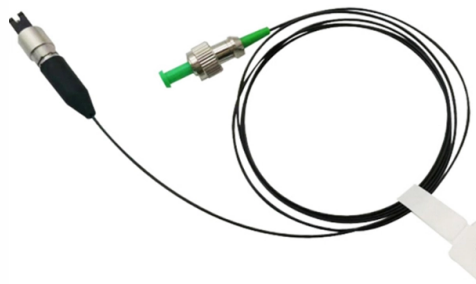


Fiber tailings affected by frost



Overview

The results demonstrate that elevated temperatures accelerate hydration, reducing flowability while significantly enhancing strength and pore structure refinement. In this study, iron ore tailings (IOTs) with different mass replacement rates (0%, 20%, 40%, 60%, 80%, 100%) and basalt fibers (BFs) with different volume contents (0, 0.3%) were co-incorporated into recycled concrete. To better simulate real-world conditions, a coupled. Fiber-reinforced cemented tailings backfill (FTB) has been widely adopted in underground mining operations as an effective solution for mitigating the brittleness of cemented tailings backfill (CTB) and ensuring compatibility with deep mining environments. Understanding the coupled effects of. This paper studies mechanical properties and energy damage evolution of fiber-reinforced cemented sulfur tailings (CSTB) backfill. In addition, the energy index. To improve the high brittleness of recycled aggregate concrete containing iron ore tailings (TRAC), the feasibility of adding polypropylene fiber (PPF) to TRAC was studied by performing a compression stress-strain curve test, scanning electron microscope characterization, and a freeze-thaw cycle. Fibers used as reinforcement can increase the mechanical characteristics of engineering cementitious composites (ECC), but their frost resistance has received less attention.



Article Content

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Thus, the tailings samples behaved like natural soils, indicating that classification methods developed for natural soils

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He discovered that the tailings having the optimal moisture content present the greatest compressive strength. In order to study the

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