

MSHA Flame-Resistant Cable — Compliance Reference

30 CFR Part 18 · Part 75 · Part 56/57 | Underground Coal · Metal/Nonmetal · Surface Mine

PRODUCT OVERVIEW

All Mirabel Energy USA mining cables supplied for underground and surface mine applications are manufactured, tested, and approved to the applicable Mine Safety and Health Administration (MSHA) regulations under 30 CFR. MSHA flame resistance testing subjects cable specimens to a controlled methane/air atmosphere ignition sequence — a uniquely severe test protocol that is significantly more demanding than standard UL or IEEE flame tests and directly reflects the mine fire and explosion hazard environment for which these cables must perform. 30 CFR Part 18 governs electrical equipment and trailing cables used with underground coal mine equipment. Part 75 covers underground coal mine safety standards including cable installation practices. Parts 56 and 57 govern surface and underground metal and nonmetal mines respectively. Mirabel mining cables span the full Type W / G / G-GC / SHD / SHD-GC construction range, providing a single-source MSHA-approved cable supply for complete mine electrical system compliance. Ground check conductor (GC) versions provide continuous ground circuit monitoring per MSHA requirements for underground coal equipment.

30 CFR Part 18 Underground Coal	30 CFR Part 75 Coal Mine Safety	30 CFR 56/57 Metal/Nonmetal	Flame Resistant All Constructions
---	---	---------------------------------------	---

APPLICATIONS

- Underground coal mine trailing and feeder cable (30 CFR Part 18 / 75)
- Underground metal and nonmetal mine power cable (30 CFR Part 57)
- Surface mine power feeder and equipment cable (30 CFR Part 56)
- All applications where MSHA-approved flame-resistant cable is required
- Mine substations, transformers, and distribution panel feed cables
- Any cable requiring ground check conductor per MSHA ground monitoring mandate

KEY SPECIFICATIONS

- MSHA flame resistance test qualified — 30 CFR Part 18 methane/air test
- Full range: Type W, G, G-GC (feeder) and SHD, SHD-GC (trailing)
- All constructions: EPR insulation, CPE or CSPE jacket
- Ground check conductor (GC) versions for MSHA continuous ground monitoring
- Available with reduced concentric neutral for grounded-neutral mine systems
- 30 CFR Part 18 (underground coal), Part 56/57 (metal/nonmetal) compliant
- MSHA approval number traceable on cable reel marking and documentation
- Factory test certificates and MSHA approval documentation supplied with order

TECHNICAL SPECIFICATIONS

Cable Type	MSHA Regulation	Key Requirement
Type W Feeder	30 CFR Part 56/57	Flame resistant
Type G Feeder	30 CFR Parts 18/56/57	Flame + mechanical
Type G-GC Feeder	30 CFR Part 18	Flame + ground check
Type SHD Trailing	30 CFR Parts 18/75	Shielded + flame
Type SHD-GC Trailing	30 CFR Parts 18/75	Shielded + GC + flame
Shuttle Car Cable	30 CFR Parts 18/75	High-flex + flame
All Types	MSHA Approval No.	On reel marking + docs

CONDUCTOR SIZES & CONFIGS Full MSHA documentation and approval numbers supplied with every order	STOCKING LOCATIONS Reno, NV · Houston, TX Standard & project-phased delivery	OEM REPRESENTATIVE GCP Energy LLC — Salt Lake City, UT portal.gcpenergy.us
--	---	---