

# FirepowerSFX

## Pyrotechnics Safety & Technical Reference 2026 Edition

Gujarat's licensed pyrotechnics and special effects company since 1999. 25+ years, 5,000+ events. This reference compiles the same technical and safety data already published at [firepowersfx.com/sfx-specifications.html](https://firepowersfx.com/sfx-specifications.html) and [firepowersfx.com/articles/commercial-vs-consumer-pyro-safety.html](https://firepowersfx.com/articles/commercial-vs-consumer-pyro-safety.html).

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# 1. Cold Sparkular (Showven Sparkular Series) — Technical Specifications

Source: Showven Technologies manufacturer safety documentation, and FirepowerSFX's own venue-planning checklist. Full detail: [firepowersfx.com/sfx-specifications.html](http://firepowersfx.com/sfx-specifications.html)

## Clearance & Height

- Sparkular Original: up to 10 ft (3 m) effect height — indoor-rated.
- Minimum unobstructed buffer above set spark height: 1 m (3.3 ft), per Showven.
- Practical full-height minimum ceiling clearance: ~13 ft (4 m). FirepowerSFX runs a lower setting requiring 8 ft clearance for standard banquet-hall ceilings.
- Sparkular Cyclone: up to 30 ft (9 m) — outdoor clearance envelope only, not deployed indoors.

## Temperature & Smoke

- Titanium-based spark output: approximately 50–60°C at point of emission (body temperature is 37°C).
- Minimum clearance from guests/decoration: 1–1.5 m — sparks self-extinguish before reaching people or fabric at this distance.
- Smoke output: less than a single incense stick per activation. Does not trigger a standard ceiling-mounted smoke detector at normal operating settings.

## Brand Comparison

- Showven (FirepowerSFX's equipment line): minimum 1 m clearance buffer above effect height.
- MagicFX SparXtar (comparable brand, for context): stricter 2 m buffer plus a 3 m safety radius.

# 2. Consumer-Grade Sparklers vs. Professional Cold Spark

Source: U.S. Consumer Product Safety Commission (CPSC) for consumer-sparkler data (combustion chemistry is not country-specific), and Showven manufacturer data for cold spark. Full detail: [firepowersfx.com/articles/commercial-vs-consumer-pyro-safety.html](http://firepowersfx.com/articles/commercial-vs-consumer-pyro-safety.html)

Parameter	Consumer Sparkler	Professional Cold Spark
		Burn temperature ~1,093–1,200°C+ (

## 3. Power Consumption Reference

Source: FirepowerSFX equipment inventory data. Full detail: [firepowersfx.com/sfx-specifications.html](https://firepowersfx.com/sfx-specifications.html)

### ~1 kW per unit (cold-effect machines)

- Sparkular (Original), Sparkular Spinner, Sparkular Cyclone, Sparkular Waver
- Circle of Flame, Snow Machine, Fan Wheel, Dry Ice / Fog Machine

### ~3 kW per unit (high-output machines)

- Sonic Boom, Sonic Boom Reco, Color Sonic Boom (CO2 cryo jet control units — the CO2 propellant itself is unpowered)
- 5-Head Flame Machine

### Circuit provisioning

FirepowerSFX provisions a 15–20A circuit per deployment zone as a safety margin for multi-unit setups (e.g. a Niagara Falls rig built from multiple ~1 kW Sparkular units) — this is a circuit-capacity recommendation, not the single-machine draw figure above.

## 4. Fire NOC & Compliance Framework (General Guidance)

Source: FirepowerSFX's published compliance framework. Full detail: [firepowersfx.com/articles/fire-noc-pyrotechnic-safety-protocols-india.html](https://firepowersfx.com/articles/fire-noc-pyrotechnic-safety-protocols-india.html). This is general information, not legal advice — requirements vary by state, city, and venue.

### Who is responsible for permits?

Obtaining Fire NOC, municipal permission, and any venue-specific permission is the responsibility of the event host or their appointed event planner — not FirepowerSFX. FirepowerSFX provides equipment specifications, safety certifications, insurance documentation, and PESO licence copies to support that application, but does not file, submit, or manage it.

### Does indoor cold pyro / CO2 need a Fire NOC?

Generally no — indoor cold sparkular and CO2 jets are not classified as display pyrotechnics under Indian explosives regulation and typically do not require a separate PESO display permit or standard municipal fire NOC for indoor use. Some venues or municipal bodies may still require a general event or fire-safety NOC depending on guest count and venue type — always confirm with the specific venue and local authority rather than assuming.

### FirepowerSFX credentials

- Licensed pyrotechnicians — Government of India
- Statutory licenses under the Explosives Act, India, for pyrotechnics display, storage, and handling
- 25+ years in business (est. 1999) · 5,000+ events delivered · full event insurance

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