Go-Dome™ Cloth Performance & Fire Safety Specification

Projection surface, blackout performance and documented laboratory fire testing

Projection cloth performance

Go-Dome™ cloth is custom manufactured for portable planetariums. Its light-gray flocked, high-gain projection interior balances image brightness and contrast while reducing cross-talk across the dome. The blackout construction provides a dark projection environment. Protect the flocked coating from abrasion, moisture and freezing to preserve performance and durability.

Property	Standard cloth
Base fabric	Cotton and polyester blend
Interior	Light-gray flocked projection coating, 28% gray by design
Surface behavior	Inflation helps smooth wrinkles for projection
Light control	Practically opaque blackout construction
Acoustic surface	Felt-like flocking helps control reflected sound

Current fire testing

Item	Latest report (November 5, 2026)
Standard	NFPA 701:2023, Test Method 1
Laboratory	SGS-CSTC Standards Technical Services Co., Ltd., Anji Branch
Report	AJFTS26009070R01_EN, November 5, 2026
Test dates	October 27 to November 2, 2026
Sample	Black T/C fabric plus gray flocking; 294 g/m2; single layer
Average mass loss	6.90% (requirement: 40% or less)
After-flame	0 seconds for all 10 specimens
Fallen fragments	0 seconds burn time
Conclusion	Tested sample passed NFPA 701:2023 Test Method 1

Item	Also on file (June 27, 2025)
Standard	NFPA 701:2023, Test Method 1
Report	AJFTS25003561R01_EN, June 27, 2025
Test dates	June 4 to 11, 2025
Sample	Blue base fabric with gray flocked surface; 283 g/m2; single layer
Average mass loss	19.98% (requirement: 40% or less)
Conclusion	Tested sample passed NFPA 701:2023 Test Method 1

Other current reports

Report	Test standard	Cloth and result	Date
SGS AJFTS26009070R02	BS 5867-2:2008, Type B	Dome cloth; meets Type B	November 5, 2026
SGS AJFS2208006514RS	California TB 117-2013	Light dome cloth; meets cover fabric test	August 18, 2022
SGS AJFTS26000639R02	BS 7837:1996	Outer vinyl cloth, 850 gsm; pass	February 3, 2026
SGS AJFS2402001376FF	NFPA 701:2023, Test Method 2	Outer vinyl cloth, 850 gsm; pass	March 1, 2024

Report history

Report	Test standard	Date
SGS AJD201207426	NFPA 701:2010, Test Method 1	December 3, 2012
Intertek SHAT02214440	NFPA 701	February 2012
Intertek STX798280 and STX798283	CPAI-84	January 19, 2006

Historical reports describe the tested samples and dates. Current SGS NFPA 701 reports use the 2023 edition of the standard; the edition year is not the report date. CPAI-84 history is not a claim of a current certificate for every configuration. Reports for outer vinyl cloth apply to that cloth, not to the standard flocked projection cloth.

Quality assurance and testing

- Dome cloth is sample tested to NFPA 701.
- Fire test reports are available on request. Keep copies with your operating records and make them available to your venue or fire marshal.
- Fire-test results apply to the tested material and method; they do not replace local approval, clearance or occupancy requirements.
- Keep hot lights away from the cloth. Fire-retardant material is not heatproof.

Exit planning

The airlock supports entry and exit while the blower is running. Operators must keep a working flashlight available, clear all exits and rehearse the power-outage procedure in the Installation & Care Instructions. Custom multi-airlock installations use project-specific evacuation procedures.

Note: Request fire test reports at info@go-dome.com.