



Commercial Heavy 430FR is a high quality knitted flame retardant shade fabric designed for tension structures, awnings and shade sails specifically for commercial architectural applications; supplied in bulk rolls.

- Strong HDPE 100% recyclable fabric won't rot or absorb moisture.
- Stentered (heat-set) to reduce shrinkage and for ease of fabrication.
- Certified to California State Fire Marshall CSFM 1237.1 and complies with NFPA701 across all colour variants.
- 12-year UV degradation warranty on fabric.
- 100% Lead and Phthalate free
- Engineered in Australia to meet the harsh climate

FABRIC PROPERTIES

(AS 2001.2.13) mass per unit

Nominal fabric mass 12.7 oz./yd²; 430 gsm ± 20;
Approximate thickness 0.06in. / 1.6 mm

ROLL SPECIFICATIONS

Nominal width: 9 ft. 10 in. / 3.0m (unfolded)
Length: 131 ft. 3 in. / 40m
Approx. roll weight: 119 lbs / 54 kg
Approx. roll diameter: 1 ft. / 0.30 m
Core diameter: 3 in. / 76 mm

USAGE INSTRUCTIONS

Do not use against flames.
Contact with organic solvents, halogens or highly acidic substances may reduce the service life of the fabric and void the warranty.

Biaxial elastic material properties available on request.

SUGGESTED SPECIFICATION

Shade cloth fabric shall be compliant to Australian standard AS 4174:2018 and shall be GALE Commercial Heavy 430 FR knitted with HDPE monofilament offering a UVE Protection Category of "Effective".

FLAMMABILITY

CSFM Title 19 1237.1
NFPA 701 Test Methods 1 & 2
ASTM E84 19B Class A
NFP92-503 Class M1 in process

Each color individually tested and passes all certification criteria for above. Test results available upon request.

PERFORMANCE

ASTM D5034

Tensile Strength and Elongation

| | |
|---|---------|
| Maximum Force – Warp (Mean) | 282 lbf |
| Elongation at Maximum Force – Warp (Mean) | 56 % |
| Maximum Force – Weft (Mean) | 362 lbf |
| Elongation at Maximum Force (Mean) | 106 % |

ASTM D2261

Tearing Strength – Tongue (Single Rip)

| | |
|-------------------|----------|
| Mean Force – Warp | 55.8 lbf |
| Mean Force – Weft | 48.7 lbf |

ASTM D6797

Bursting Strength – Ball Burst (Constant Rate of Extension)

| | |
|------------|---------|
| Mean Force | 376 lbf |
|------------|---------|

(AS 4174:2018) Shade Protection Fabric Performance

| Colour | Cover Factor | Shade Factor | UV-Vis Trans % | UVR Trans % | UVR Block % | UVE % | Protection Category |
|-----------------|--------------|--------------|----------------|-------------|-------------|-------|---------------------|
| Aquatic Blue | 86 | 85.7 | 14.3 | 14.1 | 85.9 | 85 | Effective |
| Black | 87 | 87.5 | 12.5 | 12.5 | 87.5 | 87 | Effective |
| Bright Green | 85 | 84.1 | 15.9 | 14.6 | 85.4 | 84 | Effective |
| Brunswick Green | 84 | 84.5 | 15.5 | 15.5 | 84.5 | 84 | Effective |
| Charcoal | 86 | 86.8 | 13.2 | 13.1 | 86.9 | 86 | Effective |
| Deep Ochre | 87 | 87.0 | 13.0 | 12.9 | 87.1 | 86 | Effective |
| Desert Sand | 85 | 79.8 | 20.2 | 14.7 | 85.3 | 84 | Effective |
| Emerald | 86 | 86.2 | 13.8 | 13.5 | 86.5 | 86 | Effective |
| Natural | 87 | 75.9 | 24.1 | 12.7 | 87.3 | 87 | Effective |
| Navy Blue | 87 | 87.4 | 12.6 | 12.5 | 87.5 | 87 | Effective |
| Orange | 85 | 75.5 | 24.5 | 14.8 | 85.2 | 84 | Effective |
| Red | 86 | 75.5 | 24.5 | 13.8 | 86.2 | 86 | Effective |
| Royal Purple | 87 | 86.8 | 13.2 | 12.5 | 87.5 | 87 | Effective |
| Steel Grey | 86 | 85.9 | 14.1 | 13.3 | 86.7 | 86 | Effective |
| White | 86 | 71.5 | 28.5 | 13.8 | 86.2 | 86 | Effective |
| Yellow | 86 | 74.1 | 25.9 | 13.3 | 86.7 | 86 | Effective |



The above results are typical averages from quality assurance testing and are not to be taken as a minimum specification nor as forming any contract between GALE Pacific and another party. Due to continuous product improvement product specifications are subject to alteration without notice. As the use and disposal of this product are beyond GALE Pacific's control, regardless of any assistance provided without charge, GALE Pacific assumes no obligation or liability for the suitability of its products in any specific end use application. It is the customer's responsibility to determine whether GALE Pacific's products are appropriate for the specific application and complies with any legal & patent regulations.