# Hypalon® Specification



2250 SOUTH TENTH STREET • SAN JOSE, CA 95112 • 800-669-7010 • 408-297-3500

### 1. PRODUCT NAMES

Burkeline Hypalon®-CSPE roofing membranes Mechanically Fastened Fully Adhered Vac-Q-Roof Loose-laid/Ballasted

### 2. MANUFACTURER

Burke Rubber Company Division of Burke Industries, Inc. 2250 South Tenth Street San Jose, CA 95112 Phone (408) 297-3500 or (800) 669-7010 FAX: (408) 280-0699

Burke has been providing high-performance rubber products for construction and industry for more than 55 years. As pioneers in the manufacture of high-performance flexible membrane materials for more than 20 years, DuPont and Burke have been working to refine the use of Hypalon based flexible membranes for use in a broad range of applications and weather conditions. Roofs completed with Hypalon in 1970 are still providing excellent leak proof performance and show no sign of deterioration or need of repair.

## 3. PRODUCT DESCRIPTION

Basic Uses: sheet roll goods for roof coverings.

- New roof construction
- Re-roofing existing roofs

Composition and Material: Hypalon, chlorosulfonated polyethylene (CSPE), compounded as a thermoplastic elastomer in white for maximum resistance to heat build-up, or in custom colors available through special order, is the top ply of all single ply membrane constructions. The back ply is compounded Hypalon elastomer compounded in black for increased performance. Burke Hypalon may be applied with either side exposed to the weather. The black Hypalon bottom ply is laminated to the white top ply, encapsulating a polyester reinforcing scrim for optimum strength. All constructions are pressure-laminated to assure pinhole-free membrane.

White/White laminated unreinforced Hypalon is used for flashing, and for forming around penetrations. Welding solutions of the same compound or heat seaming techniques are used to assure a homogeneous construction throughout the complete roofing installation.

Limitations: All components of the roofing system must be recommended or approved by Burkeline. Contact Manufacturer for recommendations where aromatic or chlorinated hydrocarbons or petroleum-based solvents are used, or it is anticipated that the roof will be exposed to oils, fats and greases, or chemical environments.

## 4 - TECHNICAL DATA

Physical properties of the Hypalon compound prior to lamination to reinforcing fabric or fiber-backing, are listed below:

#### (SEE TABLE BELOW)

Sizes: reinforced roofing material; Calendered roll goods, nominally 61 inches wide by 100 feet long are standard. Standard scrim reinforcement is 1000 denier polyester plain weave fabric,  $10 \times 10$  count .

#### Standards:

U.L.Underwriters Laboratory reports file number R 10156 Burkeline Hypalon Roofing Systems are approved for Class A and Class B fire rated constructions as noted in the approval section of this binder.

Factory Mutual: Test Reports Burkeline Roofing Systems approved for Class 1-60 or 1-90 windstorm resistance.

J.I. OJ5A1.AM J.I. 1Q1A7.AM J.I. 1N1A0.AM J.I. 2X8A7.AM J.I. 1M2A3.AM I.P.7A6.AM J.I. 3Y7A1.AM J.I. 2W2A3.AM

ASTM test procedures are followed as indicated throughout the binder.

PROPERTY	TEST METHOD	COMPOUND
Color	_	White
Thickness tolerance	_	±10%
Specific gravity	ASTM D297	1.65
Tensile strength, PSI	ASTM D412	800
Elongation, %	ASTM D412	400
Tear resistance, lb.	ASTM D1004, Die C	6
Puncture resistance, lb.	FTMS 101C Method 2031	80
Water absorption, % weight gain	ASTM D471 7 days @ 72°F	5
Ozone resistance	ASTM D1149 100 pphm@ 104°F 30% strain, 7 days	7x no cracks
Low temperature brittleness	ASTM D1790	-40°F pass
EMMAQUA Accelerated weathering	ASTM E838 3 million Langleys*	pass, without degradation

<sup>\*3</sup> million Langleys is equivalent to approximately 25 years of normal weathering.

# 5. INSTALLATION

Installation procedures vary as to the type of membrane employed and the specific job requirements. Four system fastening procedures are available:

- Mechanically fastened (using screws and plates for attachment)
- Fully adhered (attached with Burke contact adhesive)
- Vac-Q-Roof (The patended Burke Vac-Q-Vent)
- Loose-laid/Ballasted (River rock or stone pavers)

Burke provides detailed instructions for each type of application. The following are general installation procedures for all application techniques:

Surface Preparation: The existing roof surface should be inspected prior to installation, and any conditions that could inhibit the proper functioning of the Burkeline Hypalon roofing membrane should be corrected before installation begins. The roof surface must be clean, smooth, dry, and free of sharp edges; nor shall there be any loose and/or foreign materials present.