



Dear Design Professional,

An often overlooked aspect of selecting commercial roofing systems is the membranes or coatings ability to resist unwanted biological growth on the roof. ASTM G21 is an industry standard test to analyze the degree of biological growth on different membranes.

Samples are placed onto the surface of ASTM G-21 nutrient salts agar and sprayed with a mixed spore suspension of five fungal cultures listed below.

1.	Aspergillus niger or Aspergillus brasiliensis	ATCC 9642
2.	Penicillium pinophilum	ATCC 11797
3.	Chaetomium globosum	ATCC 6205
4.	Gliocladium virens or Trichoderma virens	ATCC 9645
5.	Aureobasidium pullulans	ATCC 15233

The nutrient salts agar provides all of the trace nutritional elements needed by fungi to support growth. However, to achieve heavy growth, the fungi must use the test material as its primary carbon source. Inoculated samples are incubated and then examined for fungal growth each week for a total of 4 weeks.

The rating scale for the samples is as follows:

- No Growth = 0 rating
- Trace of Growth (less than 10% coverage) = 1 rating
- Light Growth (10 to 30% coverage) = 2 rating
- Medium Growth (30 to 60% coverage) = 3 rating
- Heavy Growth (60 to 100% coverage) = 4 rating

All of Versico's White and Black EPDM roofing membranes had a zero or No Growth rating which is listed on the respective Technical Data Bulletins in the Physical Property table. Keeping buildings and their occupants safe and healthy is an important part of the sustainable design principle and EPDM continues to deliver benefits in this regard such as unmatched long-term service life, hail damage resistance and now excellent resistance to unwanted biological growth.

Sincerely,

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Ronald L. Goodman EPDM Marketing Manager