Sign-Brite Technical Data

DEFINITIONS: (back to the top)

Weathering-Weathering is the process of exposure of sign faces to outdoor conditions and influences of temperature, oxygen, relative humidity and UV radiation. Weatherability is the resistance of a sign face against weathering.

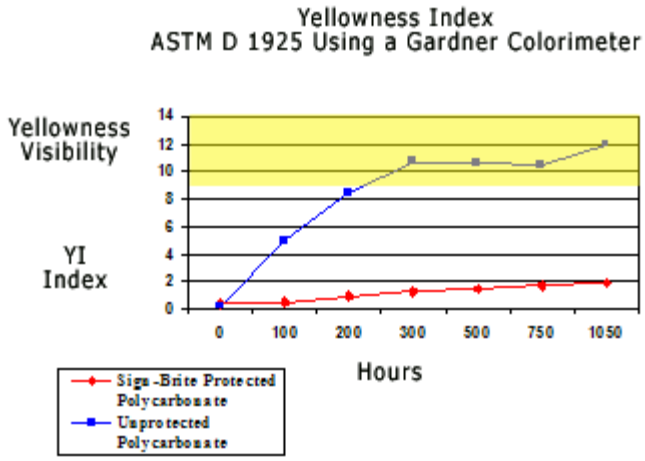
Yellowing-Yellowing is discoloration by the effect of light, chemicals, atmospheric oxygen, etc...

Haze-Haze gives a cloudy appearance on the surface of a sign face. It is a measure of the clarity of a transparent sheet.

Gloss-Gloss is a measure of brightness and luster on a sign surface. Gloss reduction occurs when sign faces experience weathering, yellowing and haze.

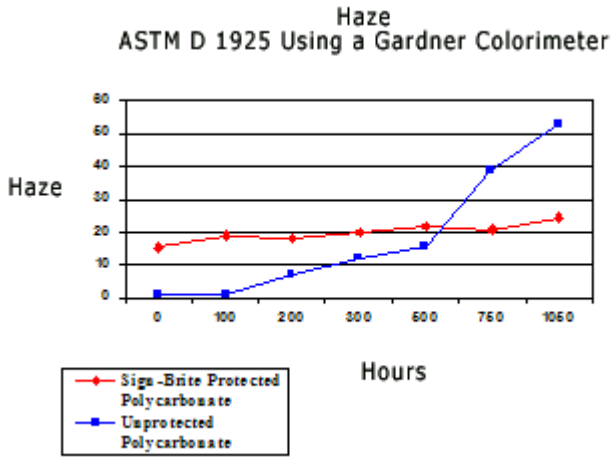
Sign-Brite has conducted both accelerated and field weathering trails on the Sign-Brite restoration process.

ACCELERATED QUV WEATHER RESULTS: (back to the top)



Summary

- Unprotected polycarbonate is in the visible yellowness range after 200 QUV hours or approximately 1 year.
- Sign-Brite protected polycarbonate is NOT in the visible yellowness range after 1500 hours or approximately 5 years.



Summary

- Sign-Brite protected polycarbonate has a higher initial haze because of the outdoor environment in which it is applied.
- The unprotected polycarbonate soon passes Sign-Brite in haze. Sign-Brite increases slowly meaning only small visual changes in your signs appearance.

IMPACT TESTING: (back to the top)

GE Drop Dart Test
5lb. Steel Dart
1 inch Diameter Tip

Unprotected Polycarbonate	**>200ft. lb.**
Sign-Brite Protected Polycarbonate	**>200ft. lb.**

- Many cleaning chemicals and solvents are incompatible with polycarbonate. This causes it to become brittle and lose impact resistance resulting in stress fractures and breaks. Sign faces with fractures and breaks often require replacing.
- Impact studies have been conducted with the proprietary materials and processes utilized in the Sign-Brite restoration process.

Summary

- Polycarbonate protected and restored with Sign-Brite maintains its > 200 ft. lb. impact resistance.
- This demonstrates Sign-Brite materials and processes are compatible with polycarbonate and WILL NOT be detrimental to your sign face.

GLOSS RETENTION/LIFE EXPECTANCY: (back to the top)

- You should be aware that all plastic materials are subject to irreversible decomposition of atmospheric elements and can be expected to show signs of weathering, yellowness, haze and overall gloss reduction eventually.
- Sign-Brite has conducted both accelerated weathering and field weathering tests on samples utilizing the Sign-Brite Restoration Process.
- No “Visible Gloss Reduction” was noted after 1050 hours of QUV testing or 2 years of field weathering. Slight “Visible Gloss Reduction” was noted after 3 years of field testing.