

 CARDINAL IG Product Development Group	TITLE: P1 Testing of Eagon VIG	ID#: 18-204
	CONTACTS: <i>Weil, Grommesh</i>	10/28/2019
KEY WORDS: VIG, Eagon, P1		

Objective

VIG units were constructed by Eagon and shipped to the IG lab to be tested in the P-1 Test (Constant UV and Humidity exposure).

Test Method

All of the VIG triples had a construction of 4mm glass separated by spacer pillars in a vacuum space.

Initially, the samples were inspected for dew point and edge/seal abnormalities. The samples were then exposed in P1 chamber. This is a moisture infiltration test exposing the samples to: continuous moisture, 140°C, and UV light. The samples were exposed for a total of 40 weeks.

During the exposure the samples were periodically inspected for seal integrity and dew point. At the completion of testing the units were inspected again for dew point and seal integrity/quality.

Results

None of the VIG units failed during testing, and all maintained low dew points. No loss of adhesion or bond quality was noted in the perimeter seal, nor was temperature seen to be a concern. Constant high moisture levels did not elicit any effect to the perimeter seal. All units appeared unchanged after 40 weeks of testing.

Conclusions

The VIG units did not appear to be significantly affected by the moisture. The performance of the VIG as unit appeared to match that of a standard Cardinal IG unit. In this test (basically a constant exposure test) this did not have a great effect on the unit. There was not any noted degradation or alteration of the VIG edge seal.

CARDINAL IG CONFIDENTIAL INFORMATION – DO NOT RELEASE WITHOUT PERMISSION

This document is the confidential property of Cardinal IG & includes proprietary information. It is to be used for no purpose other than the limited purpose for which is delivered & is not to be used by or disclosed to any other individual or legal entity without the express written authorization of an authorized representative of Cardinal IG. This report may be just one part of the research performed for this project.