11 Dansk Court • Toronto, Ontario • M9W 5N6 • CANADA
Tel: 416-674-3831 • Fax: 416-674-9323 • Toll Free: 1-866-899-6799
www.fenzi-na.com info@fenzi-na.com

QUALITY CONTROL PROCEDURES

Sealant

RATIO CHECK: **The sealant ratio should be check on a regular basis. The recommended ratio of base to catalyst is 10 to 1 by volume, 100 to 9.5 by weight.**

Samples of our cured sealant should be sent periodically to our laboratory for X-Ray ratio analysis.

Monitor Slave Cylinder setting for proper setting, it should be set at approximately 4.57".

MIXED SEALANT: Mixed sealant should be visually inspected for Any signs of color change, striations or any unmixed sealant that may be present.

QUALITY CONTROL CHECKS – SEALANT

Apply a bead of mixed sealant onto sheet of paper (bead of approximately two feet should be sufficient.) Apply another piece of paper on top of the sealant bead and squeeze evenly

QUALITY CONTROL CHECKS

along the sealant. Butterfly the paper and check for sealant mix.

Check mixed sealant for cure rate and tack-free time along the 2' bead of sealant. Cure rate and tack free time are related to the temperature, humidity and sealant being mixed at 10 to 1 by volume.

Clean two piece of glass thoroughly. Apply a patty of sealant to one piece of glass, then place the second piece of glass on top of the the mixed sealant. Squeeze evenly and visually look down through the glass for signs of striations, color change or any unmixed material.

ADHESION – ADHESION TO GLASS AND SPACER SHOULD BE CHECKED ON A DAILY BASIS.

QUALITY CONTROL CHECKS – ADHESION

GLASS: Glass should be cleaned thoroughly to remove any oil or contaminants that may be present on glass. After the glass is cleaned thoroughly, apply about four to five beads of mixed sealant to the glass. Check the adhesion to the glass after 24 hours, 72 hours and one week. Check sealant for cohesive type failure.

SPACER: Spacer should be thoroughly cleaned to remove any cutting oil or contaminants that may be present on the spacer. Apply enough mixed sealant on piece of clean glass, then embed the spacers into the sealant. Allow the sealant to cure for 24 hours and then remove the spacer from the sealant.

QUALITY CONTROL CHECKS – ADHESION continued

The sealant should tear, leaving sealant on both the glass and spacer. Spacers can also be pulled after 72 hours and one week.

PROBLEMS THAT COULD LEAD TO PREMATURE FAILURE OF THE IG UNIT

Voids or skips in the sealant.
Poor corner fill.
Poor spacer/glass alignment.
Dirt on glass.
Desiccant in frame is bad.
Poor mix of sealant.
Excessive air pockets in the sealant.
PIB extends to the edge of the glass.

DESICCANT

Desiccant testing should be run daily. Contact your desiccant supplier for proper test to use. Be sure to use the test kit provided by your supplier.

Inspect filing of Spacers: Make sure spacers are being filled completely. Allow enough room for the corner key to fit correctly into the spacer so that the spacer does not flair out.

Keep drum lids completely closed and sealed when not in use.

Frost points/humidity in air space: I.G. units should be sealed within two hours of filling spacer. One hour is optimum.

All desiccant information should be recorded in a book. Include:

DESICCANT

Lot number
Temperature rise
Date tested.

SPACERS

Check for accurate cuts. Make sure that there are no burrs or high spots in the spacer. Check the spacer for proper profile.

Make sure that spacers are thoroughly clean. They must be free of oil and other types of contamination. Unclean spacers could have some effect on the adhesion of the I.G. sealants.

Gloves should be worn when handling spacers.

Spacer should be checked for breathing. If spacers are too tight, it will not allow the desiccant to absorb the moisture that may be present in the air space.

Make sure that the corner key fits into the spacer properly without causing the spacer to flair. As this could lead to glass breakage.

GLASS

Check for accurate cuts. Measure glass for proper dimensions and squareness.

Inspect the glass edges for any nicks or other types of flaws in the glass.

Inspect the glass thoroughly after it is run through the washer. Many commercial cleaners do an excellent job; however, some cleaners leave a thin film that can cause adhesion problems to the glass with the IG sealants.

GLASS

Consult your glass washer manufacturer for the proper glass cleaner to use.

For low "E" soft coat glass: It is recommended that all low "E" soft coat glass be edge deleted (Confirm with your glass supplier). Care should be taken when handling and washing the soft coat low "E" glass.

VISUAL INSPECTION OF I.G. UNITS

The following steps are important for evaluating the overall workmanship of your I.G. units.

Spacer/Glass Alignment

Poor spacer/glass alignment could lead to excessive sealant in some areas and too little sealant in other areas. Spacer should not protrude beyond the glass.

Corner Fill

There should be absolutely no voids or gaps at the corners.

Sealant Appearance

There should be no skips or voids in the sealant. Sealant should be flush to the edge of the glass and to the shoulder of the spacer.