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**CHECKLIST #0480 FOR THE APPROVAL OF:  
TRANSPARENT & TRANSLUCENT PLASTICS**

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- Basic Requirements Checklist.
- One set of the manufacturer's 'approval document'.
- Provide how the plastic will be identified. Placement, wording, and sample of identification shall be provided.
- Provide a quality control procedure as to how the identification of the plastic product will be achieved.
- Manufacturer's brochure with description, characteristics, use, installation, etc. of the product considered for approval.

**The following current laboratory tests and test reports in compliance with protocol TAS 301.**

**Plastic**

- Test for self-ignition temperature greater than 650° F according to ASTM D1929.
- Test for rate of burning for Class C1 or C2 according to ASTM D635.
- Test for smoke density development index less than 450 and flame spread of 75 or less when tested in accordance to ASTM E84.
- If exposed to weather:
  - Test for 5 years in Florida South Exposed at 45° or ASTM G26 Xenon Arc utilizing a 6500-watt lamp for 4500 hours with 2-1/2" x 5-1/2" samples.
  - Perform tensile test per ASTM D638 and/or flexural test per ASTM D790 on exposed and non-exposed samples. Maximum allowable difference: +/-10%.
  - Additional test required due to the characteristics of the plastic.

**Flat Face Extruded Sheet with Honeycomb or Square-like Cross Section**

*Sample preparation:* Proper identification of the exterior face is required. Shave off the excess material behind the outer face sheet of the sample.

- Follow the same requirements for Plastic above.

**Laminated Glass**

- Test for self-ignition temperature greater than 650° F according to ASTM D1929.
- Test for rate of burning for Class C1 or C2 according to ASTM D635 or D4804.
- Tests for smoke density development index less than 450 and flame spread of 75 or less in accordance to ASTM E84.





MIAMI-DADE COUNTY, FLORIDA  
BUILDING AND NEIGHBORHOOD COMPLIANCE DEPARTMENT  
PRODUCT CONTROL SECTION

- ❑ Test for 5 years in Florida South Exposed at 45° or ASTM G26 Xenon Arc utilizing a 6500-watt lamp for 4500 hours on 2.5" x 5.5" samples.
- ❑ Procedure used for delaminating of the glass interlayer to yield undamaged plastic interlayer.  
*Procedure:*
  1. Five 1" x 5.5" strips are cut from laminated glass specimens.
  2. Each strip is scribed on both sides with glasscutter at 1/4" spacing leaving 3/4" at each end intact.
  3. Each strip is clamped at each end and pulled by a constant rate pull tester @ less than 0.5 inch/minute to remove the glass sections.
  4. Extension during delamination (step 3) shall not exceed 2" with extension duration not to exceed 5 minutes.
  5. Any glass pieces remaining on the interlayer can be carefully removed with the aid of blunt-tipped tweezers.
  6. The plastic sample is then removed from tension and one of the two remaining 3/4" glazed areas is cut off. Place the plastic interlayer held at the glazed end, free hanging, in a controlled test environment for 24 hours to allow for relaxation and conditioning. The measured sample length shall be within +/- 0.25" of original specimen length.
  7. Tensile specimens shall be die cut from the yielded interlayer pieces alternating between controlled and weathered interlayer samples.
- ❑ ASTM D638 tensile properties of plastics shall be performed on the cut tensile bars. The tensile testing shall be performed on the samples in the order of die cutting as detailed above.
- ❑ Results of ten (10) tensile samples each of controlled and weathered samples are averaged and reported. (None are dropped for averaging and shall all be within 15 %.) Comparison of the averages of the controlled and weathered samples shall be within +/- 10%.
- ❑ Additional test required due to the characteristics of the plastic.

**Autoclave Bonded Surface Films:**

- ❑ Follow the same requirements for Laminated Glass above. For the tensile test, the laminate may be peeled off the weathered and non-weathered samples and cut into "dog bone" shape required for ASTM D638.

Note:

The thinnest plastic layer shall qualify the thicker layers for weathering.

