

energy right[®] Program
Criteria for Evaluating and Approving Mastic Sealants

Mastic sealants shall be approved based on the following five (5) criteria:

1. Solids Content

The mastic shall have a minimum of 50% solid content - to minimize shrinkage of the product after application.

2. Adhesion Quality

The mastic material shall have both good adhesive and cohesive properties, exhibited by:

- the mastic provides a strong, air-tight bond to the duct material.
- the mastic adheres to itself, eliminating the tendency to run or settle during the curing process.

3. Integrity and Flexibility

The material shall:

- be sufficiently rigid to insure the structural integrity of the duct
- maintain its impermeability to air flow (aging)
- be tolerant of system pressures, temperature extremes, including expansion and contraction of the base material.

4. Safety

The product manufacturer or supplier shall provide a MSDS Sheet showing the mastic sealant does not contain volatile or toxic materials. The MSDS Sheet (or equivalent independent test report) shall provide evidence that the product:

- has a Class 1 Rating with respect to flame spread and smoke tests
- does not contain any substance that would give off toxic fumes/vapors during application, curing, or in use (operating) conditions.
- In lieu of MSDS, UL-181-(B to M) approval/listing

5. Water Base

TVA requires mastic sealants to be water-based.

Note: Rolled mastic will be accepted only if:

- 1) Minimum mastic thickness is 15.0 mils.
- 2) Minimum aluminum backing is 2.0 mils.