



Technical Bulletin
Rev. 11/8/04

Monolithic Low E Glass

Pyrolytic Low E glass, such as Pilkington Energy Advantage Low-E, Pilkington Solar E or PPG Sungate 500, has a permanent coating that does not oxidize. Therefore, it is technically possible to use these products as a monolithic lite of glass. However, Vitro America does not recommend that pyrolytic Low E glass be used in that manner.

Low E coatings were developed so a dual glazed insulating unit would perform like a triple glazed insulating unit. If the Low E coating is not used in conjunction with other lites of glass and an air space, the coating will not reflect long-wave infrared energy in the manner that was intended. Monolithic Low E glass is a poor performer for the money being spent.

In addition, pyrolytic Low E coatings are very difficult to clean. If the coating is left exposed, it will be a long-term maintenance problem. Petroleum based solvents are often needed to remove something as common as fingerprints. More tenacious residues may require cleaning with cerium oxide or muriatic acid. In any event, the coating must be glazed toward the interior of the building; it cannot be turned to the weather.

Vitro America strongly recommends against using pyrolytic Low E glass in a monolithic glass installation.