Equivalent collector glazing

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NOTE: This rule applies for thermally toughened safety flat glass only. For all other types of glass, no equivalences can be defined at present, due to a lack of experience.

Collector glazing can be considered as equivalent if the following requirements are fulfilled:

1. If material, texture, surface treatment and thickness of the glass remain unchanged,
   a. the solar transmittance (AM 1.5) shall be measured and documented for both types of glazing. The solar transmittance (AM 1.5) shall not differ by more than ± 1 percentage point from the one of the glass used for the initial Solar Keymark collector test. These measurements shall be not older than 2 years and shall be made by one of the Solar Keymark test labs or by labs accredited for transmittance measurements;
   and
   b. if the impact resistance test according to EN12975-2, chapter 5.9 was performed during the initial test, the impact resistance test shall be passed successfully with equal or better result than in the initial test. The tests shall be carried out by a Solar Keymark test lab or at the manufacturing site by a test engineer from a Solar Keymark test lab.

2. If the glass is not identical like described in point 1 above the following additional test has to be done:
   a. If the thickness of glass is changed, mechanical load and rain penetration has to be tested.
   b. If the thickness of glass is changed by less than ± 1 mm no transmittance measurement needs to be done, if no other characteristic of the glazing was changed and if the glass is of the same type and from the same glass manufacturer (e.g. Securit Albarino T from Saint Gobain).
   c. If texture or surface treatment is changed, the collector performance test incl. IAM has to be done.

Remark: New test results from collector testing (not glass only testing) have to be documented in an updated test report from accredited test lab according to EN 12975.