Notice

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The company name in the following report could not be retroactivly changed from Bekaert to Solar Gard. The integrity of the product represented in the test has not changed and the results for this product are still valid. As the test is update the new report will re□ect the Solar Gard name.

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Report No: 805/07

Client: Bekaert Specialty Films

Project: Impact Testing for Organic Coated Glass to AS / NZ 2208.96

Date: July 6, 2007

Objective:

To determine the performance of the organic coated glass to impact requirements of AS/NZ 2208.96 to Grade "A' status.

Samples

Bekaert Specialty Films supplied us with the samples. There were 45 pieces of organic coated glass that were 3 mm and 6 mm thick annealed glass. The organic film was placed on one side of the panels.

The organic films were of 3 different thickness- 100 micron, 175 micron and 200 micron thick and were manufactured by Bekaert Specialty Films LLC in San Diego in the USA.

The panels were of the size 1900mm X 860 mm.

Sample Preparation

The samples were conditioned for 24 hours at 23°C ±.5

- 8 off – 1900 mm X 860 mm X 6mm thick annealed glass with 175 micron (7 mil) Clear safety film
- 8 off – 1900 mm X 860 mm X 6mm thick annealed glass with 100 micron (4 mil) Clear safety film
- 8 off – 1900 mm X 860 mm X 6mm thick annealed glass with 200 micron (8 mil) Clear safety film
- 8 off – 1900 mm X 860 mm X 3mm thick annealed glass with 100 micron (4 mil) Clear safety film

Test Results

The results obtained from the tests conducted on the 45 samples are provided in the table below.

6 mm Thick annealed glass with 100 micron clear safety film

Sample No:	Drop Height	Impact Surface	Comments	Results
1	300 mm	Impact on Film Side	Glass cracked, no tear in the film	Pass
2	300 mm	Impact on Film Side	Glass did not crack, no tear in the film	Pass
	450 mm	Impact on Film Side	Glass cracked, no tear in the film	Pass
3	300 mm	Impact on Film Side	Glass cracked, no tear in the film	Pass
4	300 mm	Impact on Film Side	Glass did not crack, no tear in the film	Pass
	400 mm	Impact on Film Side	Glass did not crack, no tear in the film	Pass
	600 mm	Impact on Film Side	Glass did not crack, no tear in the film	Pass
	750 mm	Impact on Film Side	Glass cracked, no tear in the film	Pass
5	300 mm	Impact on Film Side	Glass cracked and a tear was observed. The opening was 140 mm long X 26 mm wide.	Even though a tear was observed, it is deemed to have passed.
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6 mm Thick annealed glass with 200 micron clear safety film

Sample No:	Drop Height	Impact Surface	Comments	Results
1	300 mm	Impact on Film Side	Glass cracked, no tear in the film	Pass
2	300 mm	Impact on Film Side	Glass cracked, no tear in the film	Pass
3	300 mm	Impact on Film Side	Glass cracked, no tear in the film	Pass
	450 mm	Impact on Film Side	Glass cracked, no tear in the film	Pass
4	300 mm	Impact on Film Side	Glass cracked, no tear in the film	Pass
5	300 mm	Impact on Film Side	Glass cracked and a tear was observed. The opening was 145 mm long X 26 mm wide.	Even though a tear was observed, it is deemed to have passed.
6	300 mm	Impact on Non Film Surface	Glass cracked and a tear was observed. The opening was 180 mm long X 30 mm wide.	Even though a tear was observed, it is deemed to have passed
7	300 mm	Impact on Non Film Surface	Glass cracked and a tear was observed. The opening was 80 mm long X 10 mm wide.	Even though a tear was observed, it is deemed to have passed
8	300 mm	Impact on Non Film Surface	Glass cracked and a tear was observed. The opening was 150 mm long X 12 mm wide.	Even though a tear was observed, it is deemed to have passed
9	300 mm	Impact on Non Film Surface	Glass cracked and a tear was observed. The opening was 40 mm long X 20 mm wide.	Even though a tear was observed, it is deemed to have passed

3 mm Thick annealed glass with 175 micron clear safety film

The results obtained from the series conducted on the glass/ film composite shows that they have passed the requirements of the AS/ NZ 2208:96 for Grade A Safety glass and glazing materials.

It must be noted that these results are only valid for the above mentioned products namely:

- 100 micron (4mil) Clear Safety Film
- 175 micron (7mil) Clear Safety Film
- 200 micron (8mil) Clear Security Film

Manufacturer by Bekaert Specialty Films LLC

Laboratory Manger.