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The following pages list the results of static load and impact load testing done on the following parts.

- (20" Safety Screen - P/N 3009SS)
- (24" Safety Screen - P/N 3008SS)

These two products are made of Lustran ABS LK 312 produced by Bayer Corporation (Plastics Division). Please refer to their material specification sheets as to the material's thermal and mechanical specifications. The following list are some of this material's more relevant specifications.

- Tensile stress at Yield – 6,100 lb/in²
- Flexural Stress at Yield – 10,500 lb/in²
- Flammability – HB Rating – softens at 200° F
- Brittleness starts to occur below -20° F

The parts used for these tests were stored in a non-temperature controlled warehouse facility and subsequently exposed to the normal range of temperatures that these products will be exposed to throughout their life cycle. There are no amenable structural effects due to "normal environmental temperatures" that will affect the strength of these parts.

(20" Safety Screen - P/N 3009SS)

Static Load Test Method - Part was placed a 20" riser (P/N 3009). A 6" metal ring was used to distribute the load across the center of the safety screen.

Load	Deflection	Observation	Over All Results
250 lbs	1/8" deflection	no structural deformation of part was observed.	PASSED
500 lbs	1/4" deflection	no structural deformation of part was observed.	PASSED
800 lbs	3/8" deflection	Small deformation of ribs	PASSED
1000 lbs	1/2" deflection	deformation and buckling of ribs was observed.	PASSED
1200 lbs	n/a	Structural deformation and cracking of ribs	FAILED

Center Impact Load Test Method - Part was placed a 20" riser (P/N 3009). A 10 lbs. 2" diameter steel rod within a guide tube was raised incrementally and dropped onto center of part (handle area).

Load Rating	Observation	Over All Results
20 ft lbs	small part blemish	PASSED
40 ft lbs	small part blemish	PASSED
60 ft lbs	small part blemish	PASSED
80 ft lbs	handle deformation	PASSED
100 ft lbs	handle area rupture	FAILED

Off Center Impact Load Test Method - Part was placed a 20" riser (P/N 3009). A 10 lbs. 2" diameter steel rod within a guide tube was raised incrementally and dropped off center onto top flat surface / rib area.

Load Rating	Observation	Over All Results
30 ft lbs	small part blemish	PASSED
50 ft lbs	small part blemish	PASSED
70 ft lbs	rib fracture	FAILED

(24" Safety Screen - P/N 3008SS)

Static Load Test Method - Part was placed a 24" riser (P/N 3008). A 6" metal ring was used to distribute the load across the center of the safety screen.

Load	Deflection	Observation	Over All Results
250 lbs	1/4" deflection	no structural deformation of part was observed.	PASSED
500 lbs	1/2" deflection	deformations and buckling of ribs was observed.	PASSED
600 lbs	3/4" deflection	deformations and buckling of ribs was observed.	PASSED
650 lbs	n/a	structural deformation	FAILED

Center Impact Load Test Method - Part was placed a 24" riser (P/N 3008). A 10 lbs. 2" diameter steel rod within a guide tube was raised incrementally and dropped onto center of part (handle area).

Load Rating	Observation	Over All Results
20 ft lbs	small part blemish	PASSED
40 ft lbs	small part blemish	PASSED
60 ft lbs	small part blemish	PASSED
80 ft lbs	handle deformation	PASSED
100 ft lbs	handle area rupture	FAILED

Off Center Impact Load Test Method - Part was placed a 24" riser (P/N 3008). A 10 lbs. 2" diameter steel rod within a guide tube was raised incrementally and dropped off center onto top flat surface / rib area.

Load Rating	Observation	Over All Results
30 ft lbs	small part blemish	PASSED
50 ft lbs	small part blemish	PASSED
70 ft lbs	rib fracture / rupture	FAILED