

In table 2 we can see the result of tensile measurement for multi panel on 3 panels. Visible weak areas in sample number 2 and 5. This is due to the large concentration of impact energy in the area.

TABLE II: Tensile Strength data from multi panel 3 panels

Sample	Force N	Area mm ²	Width mm	Thickness mm	Tensile MPa
1	4350.61	20	4	5	217.53
2	4883.34	20	4	5	244.17
3	4261.82	20	4	5	213.09
4	4261.82	20	4	5	213.09
5	4883.4	20	4	5	244.17
6	4261.82	20	4	5	213.09

4. Conclusion

The ballistic limit and the extension of the damage area increased with the thickness of the single panel laminates. The ballistic limit in a multi-panel laminate is similar to that of a single panel laminate of equal thickness. Nevertheless, the extension of the damage area is different, being greater in the back face-sheet of the multi panel than in the spaced plates, whereas the behavior of the front-face sheet is the opposite. These differences are influenced by the propagation of stress waves, which is controlled by the difference in the properties between air.

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6. References

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