High-velocity impact behaviour of aluminium honeycomb sandwich panels with different structural configurations

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Highlights

- Increasing facesheet thickness caused smaller deformation depths but larger deformation areas.
- Core height had a small effect on the ballistic limit velocity of sandwich panels.
- Front facesheet failed more easily due to stress concentration with the increase of core stiffness.
- The increase of front-to-back thickness ratio led to higher damage resistance.
- A structural optimisation for maximising the specific energy absorption was presented.