

Analyzed Report 1

Panels with wide, thick buffer strips were stronger than panels with thin, narrow buffer strips. Graphite-epoxy panels with S glass buffer strips were tested in tension and shear to measure their residual strengths with crack-like damage. The buffer strips were regularly spaced narrow strips of continuous S glass. Except for panels with short slits, the buffer strips arrested the propagating crack. The strength (or failing strain) of the panels was significantly higher than the strength of all-graphite panels with the same length slit. Panels were made with a uniweave graphite cloth where the S glass buffer material was woven directly into the cloth. Panels were made with different width and thickness buffer strips.



