

Topic: Repacking of Clay Test Block

Purpose

During recent testing of nonplanar armor, it was brought to our attention that shot placement on C1-sized armor specimens submitted for compliance testing may not provide adequate room for accurate back face signature (BFS) measurements. This is a result of the clay buildup necessary for testing nonplanar armor specimens and the inability to move the armor panel around on the surface of the clay block to a location that provides a smooth clay surface during testing of this type of armor.

Furthermore, the requirements identified in NIJ Standard-0101.06, Clause 7.7.2.2 limit the laboratory by not permitting the filling of the clay voids during the test sequence. However, the filling of voids in the clay block is permitted before and after each test specimen (panel) test sequence per Clause 4.2.5.5.

Clarification

As a result, the CTP is issuing this clarification to NIJ Standard-0101.06 to improve the consistency and accuracy of the test results supplied to the CTP. Specifically, test laboratories may fill voids during test sequences when doing so would improve the accuracy of test results. The existing requirements for filling voids between test sequences are applicable.

As this is considered a deviation from the literal meaning of Clause 7.7.2.2, any filling of voids during test sequences must be clearly documented and justified in the Compliance Test Report (CTR).

Documentation should include at least shot number and proximity of next planned shot to voids caused by previous shots.