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Impact effects of explosively formed projectiles on normal strength concrete LAURIN BOOKOUT, JASON BAIRD, Missouri University of Science & Technology — This paper will address the experimental results of the impact of four-inch explosively formed projectiles on normal strength concrete targets. Five projectiles will be recovered using a soft recovery system to determine the average mass and nose shape of the projectiles. Velocity data for each test will be measured with a high speed camera. The average projectile nose shape and mass plus the striking velocity, and the penetration depths from ten tests will then be compared to existing penetration equations to see if one or more of the equations are applicable for this type of projectile impact. The coarse aggregate gradation used in the concrete mix has Hugoniot data available. If spalling occurs on any of the targets, the Hugoniot data will allow comparison of the observed spalling with the theoretical predictions.

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