

TROAX®

TEST REPORT - ST20Rapid Fix 1600 Joules

Report No. TR-20-039B **Date:** 2020-06-29

Place: Troax Test Center



TEST MATERIAL

Panel: ST20 2050x1000 mm Post: 60x40x2200 mm Fixing: Rapid Fix bracket

Floor fixing: Bolted to the test rig

PURPOSE

To document the effect of a high energy impact test from inside the hazard zone with Rapid Fix machine guard system, the 60x40 posts and the ST20 mesh panels.

TEST PROCEDURE

Pendulum mass: 100 kg Pendulum speed: 20,36 km/h

Impact energy: 1600J

The test was performed in accordance with the pendulum test method stated in ISO14120:2015 Annex C. Panels and posts were assembled with the Rapid Fix system according to the assembly instruction and then fixed to the test rig with M10 bolts. The pendulum was adjusted so the impact hits the panel 1466mm above the floor, 2/3 of the total wall height of 2200 mm. To reach the energy of 1600 J the pendulum was raised 1629 mm from the starting point.

RESULTS

The Rapid Fix system successfully withstand the high energy impact. The centre panel and the posts absorb all energy and obtain a remaining deformation. The total deflection of the panel was 284 mm. Despite the high energy impact there was no penetration and no parts departed. The Rapid Fix bracket shows no deformation.



