Cable Catcher System

As per ASTM Standard:
F 1642-04/GSA TS01 - level 3A

Defense Systems
Force Protection Experts

About
G.G. Defense Systems Ltd.

- Founded in 2007, our company offers solutions for various defense and HLS threats from blast mitigation to ballistic protection, from simple vandalism crimes to massive terrorist attacks.
- Our company provides solutions for complex protection applications, combining experience in force protection solutions and an extensive knowledge of materials and technologies.
- Our range of products and solutions comprise also light composite ballistic panels, personal protective plates and bullet-proof body armor.

Our Clients

Cable Catcher:
Introduction

Existing windows on building elevations are vulnerable to the effects of blasts generated by nearby explosive devices. Under the blast loads, the windows break and glass fragments and window frame debris are thrown into the building, resulting in injuries to the inhabitants.

The G.G. retrofit cable system can catch the window as it moves inward under the blast effect and prevent glass fragments and window frame debris from flying into the building.

The G.G. retrofit cable system is composed of steel cables with special energy absorbing modules at the top and bottom, anchored into the ceiling and floor.

Cable Catcher:
Blast Test

June 28, 2018.

Level of performance: GSA 3a

Two concrete walls were installed at a certain distance from an explosive charge of 400 kg Ammonium Nitrate and fuel oil (ANFO).

Two window sizes were tested:
1000mm X 1700mm fixed window and 1000mm X 1620mm curtain wall with 4 and 6 cables (respectively) connected to the concrete with energy absorbing modules to catch the windows.

Cable Catcher:
Blast Test, First Wall:
Fixed Window

Test Results:

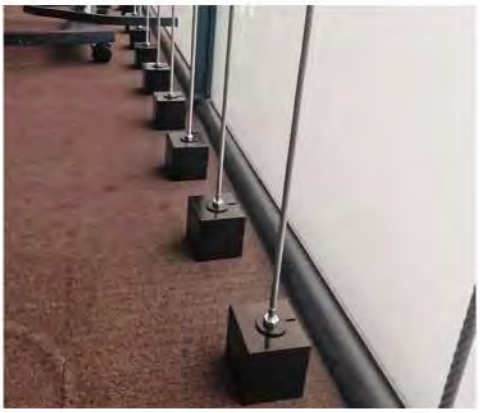
- The glazing and debris of the window frame were found in front of the target, while the cables were tensed and remained bent with a maximum inward deflection in the middle of about 35cm.
- The energy absorbing modules were elongated by controlled elastic deformation at the bottom.
- No damage was observed in any anchors, all which remained in place.
- Small glass fragments were found on the floor up to 1 meter

Cable Catcher:
Blast Test, Second Wall:
Curtain Wall

Test Results:

- The window and its distorted frame were found "caught" on the cables which were tensed and remained bent with a maximum inward deflection in the middle of about 45cm.
- The glazing cracked but remained in the frame.
- The energy absorbing modules were elongated by controlled elastic deformation and no damage was observed in any of the anchors, all which remained in place.
- Small glass fragments were found on the floor just behind the window (up to 1 m)

Project Samples
From Around the World



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