

Project Title: High Velocity Multi-hit Resistant Movable Protective Booth/Shack for Security Personnel

Duration: August 2022- July 2024

Deliverables: Prototype Multi-hit Resistant movable Security Booth complying to NIJ Level III

Significant Achievements: CSIR-SERC have developed bullet resistant prototype movable booth/shack for security personnel. The main motivation behind this prototype development is to replace conventional ballistic protection using sand filled bags as Morcha which occupy lot of space. The steel Morchas are also available in market which pose high risk of collateral damage due to ricochet of bullets (which is not advisable in crowded places) and, they also become hot/cold when kept in open area hence uncomfortable for a security personnel. The security booth is modular type and made up of steel fibre reinforced cementitious composite panels fitted in steel frame. The booth has been designed for providing level-III protection against multiple hits of 7.62 AP projectiles as per NIJ standard.

Potential applications:

The developed prototype technology for security booth may be useful for various security agencies such as, CISF, CRPF, BSF, involved in protecting various industrial and defense installations, Embassies, Airport etc.

Salient Features:

- ❖ Multi-hit resistant
- ❖ Pre-engineered & precast solution
- ❖ Easy to assemble (plug & play) in about an hour
- ❖ No need of heavy machinery for assembly
- ❖ Easy to Repair, Reuse and replace
- ❖ Fully indigenous
- ❖ Better ricochet resistance
- ❖ Movability for better positioning
- ❖ Cost-effective
- ❖ Aesthetic look

Team:

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Front view



Back View

Multi hit resistant movable security booth- Protoype