

MODULAR ARMOUR SHIELD SYSTEMS



MASS

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Force Development Services



INTRODUCTION

FDS MASS Shields are modular multiple role personnel protection shields. MASS shields have been specifically designed for the operators conducting missions and training within a dynamic environment.

Initially designed for tactical military users tasked with conducting ship boarding operations the ergonomic designs have proven very effective for Tactical Firearms Units (TFU), Armed Response Vehicle (ARV) crews and Specialist Police teams who need to conduct confined space entry drills and searches in subterranean tunnels, attic roof spaces and similar areas.

The MASS shield is designed to be carried by operators that are tasked to enter spaces within buildings, ships holds (ship searches), subterranean tunnels and confined walkways maritime craft, trains and aircraft. In addition they provide the user with ergonomic carriage ability for climbing ladders or covering long distances over rough ground.



FDS MASS shields are in operational service with a number of ARV and TFU teams worldwide and have proven an effective and valuable aid for all Counter Terror (CT), law enforcement and military forces that require the operators to rapidly approach an adversary in the open or within a confined area.

KEY ADVANTAGES

Ergonomic Design

The MASS ergonomic harness system has involved extensive development following feedback from operational users. MASS are designed so that they can be carried on one arm without the need to hold the hand grip even while ascending or descending ladders. The unique hands free carriage on the arm allows the user to conduct normal weapon stoppage drills, reloads etc, whilst caring the shield. The modular harness incorporates its own shoulder straps allowing to the user to carry on their back whilst fast roping from helicopters. A ballistic shock absorber is incorporated into the design in order to mitigate shock transfer to the operators arm while taking impacts to the shield.

Compact

Folding sectional design makes MASS easy to carry within confined areas. Even the large shields configurations do not limit the user in either standing or crouching positions.

Buoyant

The shields can be swam with whilst attached or floated alongside the diver / swimmer operator and is a major safety factor for operators conducting maritime boarding operations.

Lightweight

MASS can easily be carried for long distances, even when conducting tactical movements and insertions over hostile terrain. The MASS incorporates the leading edge ballistic technology to deliver the lightest and most efficient solutions.

Modular Folding Side and Lower Sections

Allows for easy movement while pushing into and climbing through confined clutter and obstacles. During operational use the shield is attached on the outer forearm and allows both hands free to conduct normal weapon stoppage drills, reloads, etc.



BALLISTIC PROTECTION

FDS MAPS utilises the most advanced light weight armour technologies to achieve maximum protection without restricting the user ability to operate. To ensure maximum operational and cost efficiency, MAPS is supplied in either "Basic", "Standard" or "Advance" ballistic levels as follows:

Basic Ballistic Protection Provides protection against handguns and pistols as well as 9mm sub-machine guns.

Standard Ballistic Protection Provides protection against shotguns and multiple assault rifles armed with lead core 7.62 mild steel core and 5.56 lead core bullets.

Advance Ballistic Protection Provides protection against multiple assault rifles armed with 5.56 steel core/tip ammunition. Advanced armor level can be achieved by a single shield independently or by folding the "Standard" shield configuration.

Basic Level Specifications

International Ballistic Level Conformity

NIJ 018.01 Level I, II, IIA, IIIA

UL 752 Level 1,2, 3, 6

EN 1063 – BR 1, 2, 3, 4

Bullet types

9mm FMJ

.44 Magnum

.357 Magnum



.44 and .357
hand guns



MP5 Sub Machine Gun



Uzi Sub Machine Gun

Standard Ballistic Protection

International Ballistic Level Conformity

NIJ 018.01 Level III

UL 752 Level 5, 7

EN 1063 – BR 6

Bullet Types

12 Gauge Shot Gun

7.62x51mm NATO Ball

7.62x39mm FMJ

5.56x45 – M193

12 Gauge Shott Gun



Rifle



Colt M16 Assult Rifle



Advance Ballistic Protection

International Ballistic Level Conformity

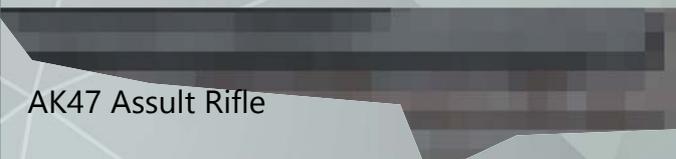
STANAG 4569 Level I

EN 1063 – BR 5

Bullet Types

5.56x45 – SS109

AK47 Assult Rifle



Colt M4 Assult Rifle

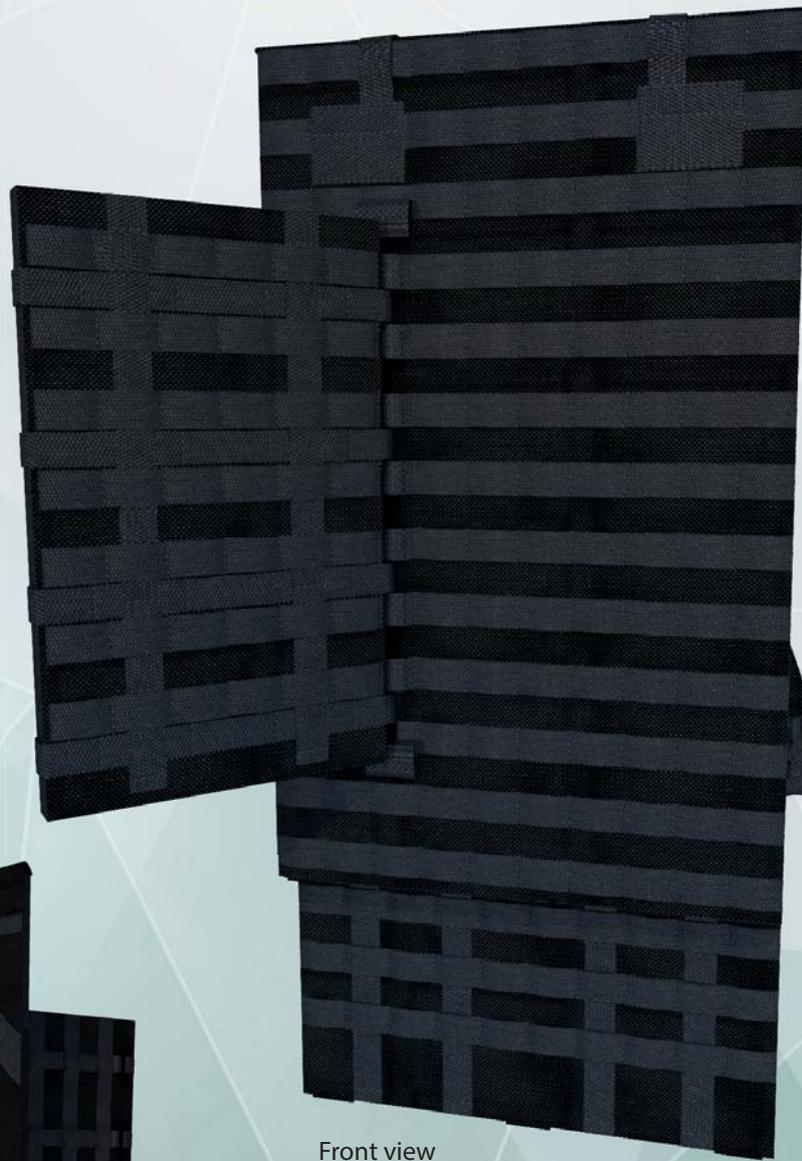


SPECIFICATIONS

Main shield width dimension enables the operation in aircraft and trains walkways as well as marine and submarine vessels and other confined locations.

Optional deployable side shield extend the protection to the user while providing weapon support for main weapon or side-arm. The side shield can be folded onto the front shield face to increase its resistance to multiple shot or higher threats.

Main shield include various hand grips and harness options to fit different roles of operation. The main forearm retention strap includes shock diffusion system to prevent trauma on impact. Grab handles are located to support both right and left handed firers a modular / optional back harness straps can be added to all types of MASS shields. An optional back hang straps can be added to any shield.



Front view



Back view

Optional deployable bottom shield extend the height of the main shield. The hinged connection enable the shield to adapt its position enabling the operator to assume a crouching position while fully protected and without ergonomic difficulties. The bottom shield can be folded onto the main shield to increase its protection level.

The shield front side of the shield can have a MOLLE finish or plain cordura texture. A Velcro patch is provided for signage attachment, additional optional kit pouches for modular attachment are available. Additional optional equipment includes lights, pouches etc.

VERSIONS AND VARIATIONS

Single Shield (SS)

A single section shield that incorporates all the ergonomic design features of the MASS range but within a single unit. The SS is manufactured in four size configurations or alternatively can be manufactured to the bespoke requirements of the entry teams.



Armed Response Vehicle and Tactical Intervention Shield (ARV & TIS)

The ARV & TIS is a modular multiple role shield that has been designed to fulfil the operational roles of both the ARV crews and the Tactical Intervention Teams. In the ARV role the shields are used as a single unit and designed for quick and easy extraction from the storage area with the vehicle. For the TIS role the shield is fitted with the harness strap assembly and has the ability of quickly being attached to form a two section shield that provides full length protection or utilised as two folded sections for enhanced ballistic protection.



Maritime Boarding Shield (MBS)

The MBS is a three part sectional shield that has been specifically designed for users that have to conduct operations within from a marine environment. The harness is provided with quick release fastenings for additional safety. When used in its single folded state the bottom section can quickly be deployed when required.



FDS MASS modular design approach allows us to deliver custom custom build shields for mission specific requirements. For more information please contact us.



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