





## World Leading Armour Technology

NP Aerospace specialises in the design and manufacture of advanced armour systems for personal and platform protection using lightweight, high performance composite materials. EOD suits and breacher suits are an integral part of the company's survivability and personal protection portfolio and are used all over the world in military and security operations.

Through integrating leading edge materials and world class garment engineering, NP Aerospace EOD and breaching suits combine maximum protection with class leading ergonomic performance and are tested in the most extreme environments. Our most advanced suit, the 4020 Elite, delivers outstanding overall protection (frontal protection V50 >1900m/s), encompassing sophisticated technology including an innovative emergency quick release mechanism and optional CBRN protection systems. These have been developed to meet the needs of EOD technicians following decades of service to the UK MOD and are trusted by thousands of EOD operators worldwide. The 3020 Elite is a lightweight suit designed for search and detection missions.

- Flexible, ergonomic bomb disposal suits for reduced fatigue and optimum performance
- Design features and materials combining high protection with maximum manoeuvrability
- Comprehensive options for disposal, search and breaching operations
- Training and aftersales support options
- Extensive testing for extreme performance and blast protection



# NP Aerospace Bomb Disposal & Breacher Suit Portfolio



4020 ELITE
PROTECTING BOMB DISPOSAL
TECHNICIANS



3020 ELITE
DEFENDING BOMB SEARCH
& BREACHING TEAMS





# 4020 ELITE SUIT OPTIMUM PROTECTION AND FLEXIBILITY

- FLEXIBLE DESIGN FOR KEY BOMB DISPOSAL MANOEUVRES
- EASE OF DONNING AND DOFFING
- INTEGRATED COOLING TO REDUCE OPERATOR FATIGUE
- QUICK RELEASE SYSTEM FOR EMERGENCY REMOVAL
- OUTSTANDING VISION, SITUATIONAL AWARENESS, REACH AND MANOEUVRABILITY

The 4020 Elite is our highest performance bomb disposal suit delivering unrivalled protection and mobility. Utilising advanced materials and world class garment engineering, the 4020 Elite provides 360° blast protection and survivability against pressure, fragments, blast wind and heat and flame, protecting the operator even if the device is located in a challenging or restrictive location. All suits undergo rigorous testing including blast trials, ballistic testing, impact attenuation and electronic and environmental testing.

The flexible design of the 4020 Elite allows for the performing of manoeuvres including climbing, crawling and crouching. Interchangeable armour pouches enable threat protection levels to be raised and integrated cooling systems extended wear and reduces operator fatigue. Optional capability including cameras and communication systems can be used with the 4020 Elite.

# FULLY CBRN GARMENT COMPATIBLE When used with the optional CBRN Visor, the 4020 Elite works with leading theatre-proven CBRN protection systems to deliver a complete EOD CBRN protective solution. The CBRN Visor features a slightly wider surface area to accommodate a CBRN facemask, whilst an air purification system attaches to the MOLLE strips on the rear of the suit jacket.

### **CORE BENEFITS**



### **Advanced Protection**

The 4020 Elite incorporates leading textile design to protect against blast and fragmentation. All seams are specially constructed to resist both ruptures and blasts, the Nomex® outer skin provides water resistance and fire protection, whilst dissipating static charges.



### Superior Mobility

The lightweight, ergonomic construction of the 4020 Elite jacket and trousers, alongside a flexible breastplate provides the user with the vital operational flexibility for bomb disposal assignments, including crouching and climbing.



### Quick Release System

The 4020 suit has a patented quick release system leaving no ballistic openings. The suit's jacket and trousers can be can be removed, unaided by the user in less than 30 seconds.



### **Proven Beyond Doubt**

The 4020 Elite has been extensively blast tested against the NIJ 0117.01 Public Safety Bomb Suit Standard and other key military blast requirements, ensuring the highest levels of survivability and pressure reduction to protect the operator.

### **Components as Standard:**

### **JACKET AND TROUSERS**

- Protects against rupture, blast, fire and water ingress
- Tubular construction for maximum freedom of movement
- Integrated quick release system in both the jacket and trousers

### **BREASTPLATE**

 Innovative three-piece telescopic construction for flexible movement

 Minimises the transmission of shockwave energy to the user's torso

# INTEGRATED SPINE PROTECTION AND FORCED AIR VENTILATION SYSTEM

- · Protects against blunt trauma
- Delivers cool air to the operator's torso and neck to reduce the effects of fatigue

### INTEGRATED COOLING SYSTEM

 Provides cool air to head and body areas sufficient for a one-hour operation running at full power

# Recommended Upgrades:

### HELMET

- An integrated powerful heated visor to prevent misting in hazardous environments
- Helmet with acrylic visor (600 m/s)
- Helmet with glass visor (730 m/s)
- Helmet with glass CBRN visor (730 m/s)

### SPECIFICATION

The 4020 Elite is available in five sizes: extra small, small, medium, large and extra large.

### Colours

Paris Blue Sage Green

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### Base Suit - Ballistic Protection (V50 m/s)

Arms	Legs	Chest	Helmet	Visor
Upper: 500 Lower: 450	460	1900	575	Acrylic Faced: 600 Glass Faced: 730 CBRN: 730

### **Blast Protection**

	Survivability probability (as measured on Bowen Curve)	Reduction in pressure at Lung
NIJ 0117.01 0.567 kg C4 at 0.6 m (kneeling)	>99%	Between 96.9-99.7%
1 kg C4 at 1.0 m (standing)	>99%	Between 98.1 and 98.5%
2 kg C4 at 2.0 m (standing)	>99%	Between 87.6 and 92.3%
10 kg C4 at 3.0 m (standing)	>99%	Between 99.0 and 99.7%

### Weight (Medium Suit)

Without Helmet	30.5 kg	67.2 lbs
With Helmet	35 kg	77.2 lbs
With CBRN Helmet	35.5 kg	77.8 lbs









UPGRADE PACK. TO FIND OUT MORE EMAIL INFO@NPAEROSPACE.COM



### 3020 ELITE SUIT

# FOR BOMB SEARCH AND BREACHING MISSIONS

- PROTECTION FOR SEARCH OPERATIONS IN A HIGH THREAT ENVIRONMENT
- LIGHTWEIGHT AND FLEXIBLE FOR ENHANCED MANOEUVRABILITY
- FURTHER ENHANCEMENT WITH COOLING, VENTILATION AND OPERATIONAL ACCESSORIES

The 3020 Elite search suit offers a lightweight solution to enable extended duration search missions in high threat environments. The suit has been designed to provide high protection against blast, low speed impact, fragment penetration and flame immersion whilst carrying out search and breaching missions.

Note: Helmet and tactical add-on products are available separately.



### **CORE BENEFITS**



### Intelligent Design

The suit's jacket and trousers both feature an outer shell and inner garment. The outer shell's Nomex® provides the wearer with first line defence against the tearing effects of dynamic blast, flash and flame. The inner layer protects against fragments. This ensures constant protection for the operator during search operations.



### Designed for extended wear

The 3020's lightweight construction reduces user fatigue and strain, to allow extended wear for search operations whilst ensuring constant protection. Comfort is enhanced through the addition of the optional Forced Air Ventilation System and Cooling Jacket to provide further cooling to the operator.



### Interchangeable Armour Pouches

The 3020 Elite contains armour pouches on the front and rear of the jacket. These are manufactured using NP Aerospace acclaimed portfolio of lightweight LASA® body armour, so operators can choose mission specific armour to increase protection levels.



### **Proven Beyond Doubt**

The 3020 Elite has been extensively blast tested against the NIJ 0117.01 Public Safety Bomb Suit Standard and other key military blast requirements.

# Components as Standard:

### **JACKET AND TROUSERS**

- Protects against ruptures, blast, fire and water
- Tubular construction of the suit's trousers, 'telescopic' shoulder and knee sections allow free movement with full body ballistic and blast protection
- Jacket integrates seamlessly with optional LASA body armour for higher level protection
- Includes integrated spine protector

# Recommended Upgrades:

### LASA AC903 IED HELMET AND VISOR

Ballistic helmet provides high level blast protection. 250, 450, and 600 m/s visor options available.

### LASA LWBIII+ IC06 BODY ARMOUR

Works with the jacket's hard armour pouches to increase chest and back area protection to 1200 m/s.

### **FORCED AIR VENTILATION SYSTEM**

Integrates with the 3020 Elite jacket to distribute cool air around the operator's torso for enhanced comfort.





### **SPECIFICATION**

The 3020 Elite is available in three sizes: small, medium and large.

### Colours

Paris Blue Sage Green Deser

### Base Suit - Ballistic Protection (V50 m/s)

Arms & Legs	Chest	Ballistic Plate (LASA LWBIII+ IC06 plate)	Helmet	Visor
Front: 460 Rear:	610	Front: 610 +>1200 Rear: 300	600	1 layer: 250 2 layer: 450
300		+>1200		3 layer: 600

### Blast Protection

Based on a 3020 Elite with front and rear LASA LWBIII+ IC06 plates.

	Survivability probability (as measured on Bowen Curve)	Reduction in pressure at Lung
NIJ 0117.01 0.567 kg C4 at 0.6 m (kneeling)	>99%	92%
1 kg C4 at 1.35 m (standing)	>99%	84%

### Weight

	kg	lbs
Without Helmet	13.1	28.9
With Helmet (AC903 IED 450 m/s visor)	16.2	35.7

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### **ACCESSORIES AND SPARES**

NP Aerospace provides a range of accessories and spare parts for each of its bomb disposal and breacher suits to enhance capability, endurance and comfort. For more information contact orders@npaerospace.com

### **AFTERSALES TRAINING AND SUPPORT SERVICES**

NP Aerospace provide a range of customer support options to assist with bomb disposal suit needs.

- User training and technical advice
- Bomb disposal and breacher suit equipment servicing and upgrades
- · Spare parts



