

Fire Resistant Army Combat Uniform (FR ACU)



Specifications

Component materials: 65 percent FR rayon, 25 percent para-aramid, and 10 percent nylon that is treated to be wrinkle-free

Color: Universal camouflage pattern

Size: 37 coat sizes, 36 trouser sizes

Status: Deploying forces are being issued four FR uniforms.



With the advent of the Improvised Explosive Device (IED) as the weapon of choice for insurgency forces in the Iraqi theater, the Army experienced a dramatic shift in the nature of the injuries sustained by our nation's warfighters. Rather than the usual wounds suffered from bullets and shrapnel in previous conflicts, Soldiers began to experience a higher rate of burn injuries. These injuries came from two primary sources; high thermal flux during the initial explosion of the IEDs and vehicle fuel pool fires that resulted from destroyed vehicles. In response, in 2006 the Army raised the call for a dramatic increase in the number of fire resistant (FR) uniforms available to the dismounted Soldier. Until that time, FR uniforms consisted primarily of flight suits issued to aviators and fuel handlers, and coveralls issued to combat vehicle crewmen. Most other military occupational specialties were provided with 50 percent cotton/50 percent nylon Army Combat Uniforms (ACU) that would melt and drip when exposed to high heat, sticking to the skin and intensifying Soldier injuries.

In response to a solicitation from the Army, the American textile industry responded with over two dozen excellent FR fabrics. Extensive testing and evaluation resulted in 6 oz. Defender M[®] fabric being selected as the material of choice for the Fire Resistant Army Combat Uniform (FR ACU). Defender M[®] provided the best combination of fire resistance, durability, and breathability while also closely matching the non-fire resistant ACU in texture and appearance. In late 2007, the Army began issuing two FR ACUs and two non-FR ACUs per deploying Soldier, and four FR ACUs in early 2008.



With the exception of additional 1 inch x 1 inch tabs affixed to the left sleeve cuff on the coat, and the left cargo pocket flap of the trouser, the FR ACU is made with the same pattern as the non-FR ACU. The tab allows leaders to quickly and easily identify that their Soldiers are wearing FR uniforms. Its FR properties provide the warfighter with extra seconds of protection before the material combusts, and once combustion occurs, it quickly self-extinguishes when the heat source is removed. The fabric does not melt or drip, furthering reducing chances of injury to the wearer.

