

# Structural Layering System

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At the simplest level, structural meshing technology consists of a series of bars and spherical joints at various sizes re-enforcing one another on different layers, all inter-woven on a macroscopic level with microscopically accurate components. Each bar is able to extend between 30% to 400% it's original length and contract by up to 70% (outer meshes extend more-so than internal meshes).

The casing of the bars are hollow tubes constructed of carefully treated steel/chrome composite crystals which are convergent and aligned on a nanoscopic level, woven into a strong flexible metallic fiber with carbon nanotubes to chain their forms together. It is the crystals themselves which expand and contract, taking the nanotubes with them.

This elaborate system is able to oscillate out of quantum phase in a separate harmony with the rest of the main body, acting as a powerful attractor to gravitons and even exploiting the Zero Point Energy Casimir Effect to provide lift and physical force with objects in close proximity or even an extremely dense barrier. The specific oscillation and rotation speed of the spheres can easily control the gravitons and direct them in a precise and coherent manner inside and outside the overall structure.

This means the traditional rules of aerodynamics can be cheated by forcefully evoking laminar-flow across the body and the impact of a round can be dissipated or deflected entirely depending upon the specific harmony of any given area of the mesh to the target and even propel the mesh without expelling fuel with an intermediate acceleration arc.

The mesh also acts as a heat sink and energy dissipation system by exploiting the neuromorphic properties of the compound used in the construction of the frame which partially side-step known the zeroth and at times, the second law of thermodynamics, transplacing thermal energy either into or out of the frame up to a 10 foot radius. This allows for a vastly lighter construction without any heavy engine cooling systems which would usually only be able to fit upon a fighter but also means a higher thermal footprint if the engines are exerted.

The elegance of the construction also means that the entire mesh acts as an amplifier to this effect and provided a low feed of energy is provided to the frame after the initial high-ampage ignition, it can continue to operate on very tiny amounts of electricity until combat performance is desired.

Theoretically, a properly charged structural mesh can dissipate fire from graviton and scalar based weapons. If a chain within the mesh is given a slightly different oscillation from the remainder of the

body, the effects are substantially more powerful and physical or energy rounds with a sufficient mass [b]can[/b] be deflected.

A simple explanation of the structural meshing's capability to deflect incoming rounds can be explained as a forced increase in the casmir effect given off by the specially constructed nanotubes and crystalline material which comprises the structural layering system's mesh. This forced increase is accomplished by altering the quantum oscillation of the material thus creating greater forces exerted outside of the exterior of the structural mesh.

## Damage Rating

Varies depending on ship size

## Additional Function - Structural Locking System

Due to the stresses exerted upon starships and mecha in high-speed flight, Structural Mesh made units which utilize pivoting joints are capable of utilizing the properties inherent to structural mesh to allow for joints to be fixed into place.

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