

Structures / Deployables

- [Citadels | Key-Capital Hubs & Field Stabilizers](#)
- [Combine Hardlight Fields \(CHD\) | AEGIS Barrier Systems](#)

Citadels | Key-Capital Hubs & Field Stabilizers



Information:

The **Citadels** are towering Combine megastructures deployed on subjugated worlds as symbols of absolute control and command. While often perceived as monolithic headquarters, their true function is multi-faceted: Citadels are central command spires, military bastions, population control hubs, and dimensional relay cores—integral to maintaining Combine authority on planetary scales.

On Earth, construction of the Citadel network began shortly after the **Seven Hours War** and the subsequent **Unification Treaty**. The Combine selected eight primary terrestrial locations as strategic loci for these spires, aligning with major continental population centers and key dimensional fault points. As of 2014—approximately two years prior to the events of *Half-Life: Alyx*—none of the Earth-based Citadels have reached full structural completion. However, each planned site is already host to a foundational array known as a **Citadel Anchor**.

The Role of the Citadels / Anchors | Pre Suppression Field

The Anchors, or Citadel Foundations, are subterranean constructs designed to stabilize trans-dimensional energy output and support early infrastructure deployment. These structures serve multiple purposes.

- **Localized Suppression Field Generation:** While the global Suppression Field referenced by Dr. Wallace Breen in later broadcasts within the Half-Life 2 timeline is not yet online, the Anchors emit a *regional suppression field* that inhibit human reproductive biology within controlled zones. These fields are especially concentrated around urban centers designated for long-term Combine occupation.
- **Dimensional Interfacing & Stabilization:** Anchors maintain stability between Earth and the Overworld (the Combine's interdimensional network), laying the groundwork for future phase-through transportation and signal relays during Early occupation where portal energy is still highly present in the occupied worlds atmosphere. It also mitigates the build-up of dimensional portal energy, preventing what was dubbed "Portal Storms" from occurring within Controlled territory.
- **Military Deployment Nodes:** Even at this Early phase, the Anchors function as fortified Combine strongholds. They house compact fabrication bays, repair bays, containment blocks, and bio-storage pods for dormant Transhuman units and Synthetics.

Operational Capabilities and Defense Contingencies

Each Citadel—once fully operational—will be vertically integrated command towers capable of exerting total regional control. Current Anchor installations already exhibit the following defense and readiness mechanisms:

- **Air Surveillance:** Integrated Synth Scanners equipped to deploy proximity-mines and recon packages across city zones. These operate in tandem with passive surveillance systems like City Scanners and Civil protection reports.
- **Transhuman Deployment Chambers:** Anchors possess stasis-pod arrays for standard Transhuman Soldiers like the Ordinals and Grunts. These troops are stored in a state of readiness for rapid mobilization in the event of insurgency or biohazard threat.
- **Synthetic Response Teams:** Finally, Anchors possess storage rooms containing various Synthetic Units such as the NOMAD unit, otherwise known as Striders located in the sub-levels of the Anchor. Activation protocols remain rare, but they are fully capable of deployment during major breaches or incursions.

The Citadels—and by extension their Anchors—are not solely tools of war. They are instruments of ideological and psychological warfare. Their impossible scale, featureless design, and constant presence in the skyline serve as reminders of human helplessness beneath the gaze of an unseen empire.

Though most citizens may not understand their full purpose, the intended perception of inevitability is deliberate: humanity is meant to see the Citadels as unchallenged, immutable, and eternal.

For the Combine, they are simply tools—constructs meant to turn Earth from a battlefield into a breeding ground for resources, soldiers, and eventual integration into the greater "*Universal Union*".

Combine Hardlight Fields (CHD) | AEGIS Barrier Systems



Combine Hardlight Deployment (CHD) "Aegis" Barrier Systems

Field-Controlled Photonic Partition Units - Generation I

Document Classification: Tier-2 Authorized Access

Date: ■/■/2014

Author: -REDACTED-

Distribution: City Administrator Networks / Civil Protection Infrastructure Divisions

Abstract:

The **CHD "Aegis" Barrier System** is the Combine's standardized deployment of **hardlight-based containment fields** used in urban occupation environments. Leveraging **advanced photon interactivity modulation** and **carbon-fusion lattice support**, the Aegis system enables fast-deployable, semi-permeable energy barriers for urban suppression, corridor denial, and perimeter lockdown operations.

Unlike traditional ballistic barricades or pre-war mechanical gate systems, CHD barriers are **modular, impervious to small-arms fire**, and **capable of on-demand deployment**, making

them ideal for Combine pacification protocols and transit restriction mandates.

Technology Overview:

Hardlight Structure:

CHD barriers are composed of **photonic constructs** projected from **paired emitter pylons**, arranged opposite each other at designated field nodes. These pylons generate a stabilized hardlight lattice by:

1. **Amplifying photon binding** through a **resonance field**, increasing the interactivity between photons beyond naturally occurring limits.
2. **Drawing ambient carbon molecules** from the surrounding atmosphere, especially from degraded industrial zones and airborne particulates.
3. **Fusing the carbon** into the photon lattice via **microscale plasma bonding**, resulting in a **semi-permanent carbon fiber matrix** that gives the barrier physical resistance and form.

This hybrid **light-carbon mesh** exhibits strength comparable to pre-war military-grade composite armor plating while maintaining the **inertia-deflecting, massless properties** of light-based constructs.

Field Generator Configuration:

Each CHD unit consists of:

- **Dual Phase Emitters (Model: Vx-2F):** Opposed pylons capable of synchronized lattice projection.
 - **Power Core (Type-4 Xen Reactor Node):** Supplies a constant field charge; protected from tampering by proximity shielding.
 - **Modulation Core:** Determines field behavior, including:
 - **Permeability** (e.g., blocking humans, allowing Combine-encoded IFF signals)
 - **Field polarity** (directional collapse on command)
 - **Decay protocol** (emergency shutdown via administrator override)
-

Applications in Urban Environments:

- **Checkpoint Control:** Used to partition City sectors, enforce curfews, and create compliance choke points.
- **Containment & Quarantine:** Rapidly deployed in response to rebellion hotspots or biohazard contamination events.
- **Crowd Management:** When integrated with Civil Protection formations, Aegis Barriers provide active suppression zones and dispersal corridors.

- **Automated Integration:** Compatible with **Scanner and APC IFF systems**, allowing dynamic barrier behavior based on personnel access hierarchies.
-

Operational Notes:

- Field visibility is **deliberately translucent**, often glowing in blue or yellow hues to induce **psychological compliance** in Citizens.
 - Barrier duration is **indefinite** when powered but will **fail immediately** if both pylons are disabled or separated beyond the link limit (~12m).
 - Touching the barrier while "red" with unprotected flesh results in:
 - **First-degree burns**
 - **Temporary nervous system disruption**
 - **Short-term amnesia or neurodesync** (in rare, prolonged exposures)
-

Future Development:

As of 2014, advancements in hardlight technology are underway to enable:

- **Mobile projector variants** deployable from dropships or man-portable rigs.
- **Multi-layered constructs** for tunnel-like enclosures and forcefield bridges.
- **Directional combat shielding**, where hardlight can be utilized as a forward-facing shield for Heavy Overwatch Units.

Until these developments are stabilized, the **CHD "Aegis" system remains the backbone** of forcefield infrastructure within Union-controlled territories.

Footnotes:

- **Unauthorized access** to barrier pylon cores will result in detainment and corrective Re-Education.
- Pylons emit detectable radiation; prolonged exposure without Combine-issued shielding is prohibited.
- Citizens are advised: **"Do not touch the barrier. Comply and proceed."**