Integrated Conduit Architecture
Order in Orbit

In many orbital habitats, the presence of visible hoses, cables, and patchwork wiring reflects a need for flexibility and on-the-fly upgrades. At Aegis Station, we take a different approach—one that supports both technical access and a sense of order.

1. Embedded Utility Channels
Power, data, and fluid conduits are routed through planned structural service spaces—beneath floors, behind panels, or within ceiling trays—to keep occupied areas clear.

2. Modular Snap-In Interfaces
Standardized utility ports allow quick plug-and-play connections for equipment and workstations. This eliminates the need for exposed rewiring or surface cabling during upgrades or repairs.

3. Surface Discipline
When systems must be visible (e.g. in labs or industrial nodes), they follow organized, color-coded routes that preserve symmetry, accessibility, and visual clarity.

4. Separation of Zones
Heavy-duty plumbing and cabling are confined to dedicated service corridors, away from residential, recreational, and communal areas. Maintenance stays out of sight and out of mind.

5. Built-In Capacity for Growth
Spare routing paths and conduit capacity are integrated from the start—allowing the station to evolve without retrofit chaos or system conflicts.

—Excerpt from the Aegis Station Design Dossier