

The PLUG concept is intended as easy-to-build, quick-to-deploy, off-grid provisional housing.

PLUG is a system of basic parts that are readily pre-fabricated in preparation for any possible event/disaster. The floor and ceiling/roof panels are constructed of a structural, light-steel frame, and clad in appropriate *and available* materials. The wall panels consist of a 2' x 6' frame and are clad in a durable, fire-rated, cement board. All of these elements are filled with cellulose insulation - recycled newsprint - which is a plentiful and non-toxic material. The Utility Core contains the main amenities for 2 Living Plugs (i.e. kitchenette & washroom), accommodates for solar energy collection technology for both electricity generation and domestic hot water needs, and is designed to collect rain water for potable water systems. It is pre-built and ready to be conveniently transported in standard shipping crates; the floor, roof, and wall panels are stackable and manageably shipped.

Once debris has been cleared, site preparation consists of installing footings and structural columns. If considered early in the debris-removal stages, existing foundations could be re-used accordingly rather than being demolished and removed; this could drastically reduce the amount of waste, lessen the amount of materials brought in, and accelerate the deployment/re-deployment process.

Deployment is efficient and straightforward. Once footings and structural columns are in place, and all elements have arrived on site, it's only a matter of stacking and connecting the various pieces. Because it is grid-independent, the units are operative immediately. Deconstruction and redeployment of PLUG to a new site is as rapid as is deployment.

Living Plug layouts can be pre-determined by authorities, or better yet, those that will inhabit the units can request layouts suited to respective needs and wants (i.e. accessibility issues). This would offer a sense of agency to many who may have otherwise felt ineffective or helpless throughout the disaster scenario. I would also propose that those displaced play an even more prominent role in their own recovery by participating fully in the construction of these PLUG units, further encouraging a sense of community, building community capacity - *and promoting resilience*.

The adaptability of PLUG is appropriate for a wide range of demographics and densities. Units are not restricted to accommodations only; they can be arranged as mixed-use units, with both residential and commercial functions.

Within a neighborhood context, the layout of PLUG units will ensure a sense of safety via its human scale, offering functional 'eyes on the street,' and will be supported further by its close pathways and positive spaces.

PLUG is intended to function as versatile, provisional living. Its good design is demonstrated in its *simplicity of construction*, its *efficient assemblage, dismantling, and re-use*, its *adaptability to environment and population*, and finally as a *vessel for community*.

