



# LIGHTGAUGE

STEELBUILDINGS





Dalal Steel Industries, established in 1984, is one of the leading manufacturers of Steel Structures in Lebanon, Middle East, and Africa.

We are a design-build firm that specialize inproducts such as:

- Steel Buildings
- Prefab Houses
- Shelters
- Containers
- Covering
- Panels
- Sandwich
- Panels Steel
- Stairs Steel
- Doors Shelving
- Racks Cranes
- Water Heaters
- Architectural
- Metal Facades
- Light Gauge
- Steel Framing

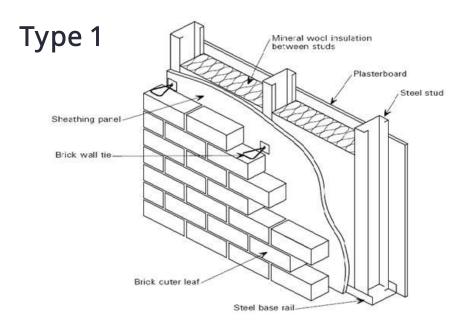


# Today we are introducing a new line of building called Light Gauge Steel Housing.

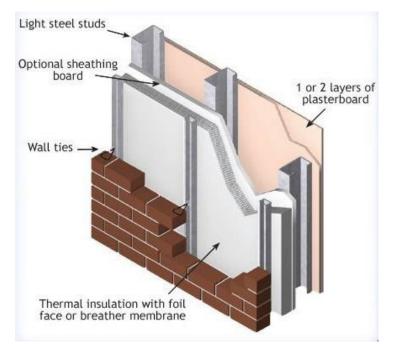
Light Gauge Steel Framing has come to the forefront as one of the best and most feasible alternative building materials for residential and commercial construction. It consists of a structure made up of profiled galvanized steel studs, tracks, and floor/roof trusses.

Completed with thermal barrier insulated walls, ceiling and floor systems, insulated doors, and double glazed windows, minimizing the dissipation of thermal energy. The housing may be further coupled with solar panels, to provide a complete energy efficient residential home.

## Wall Details

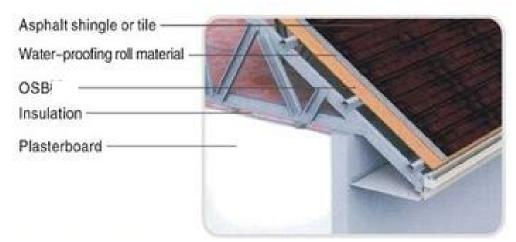


#### Type 2



## Roof Details

#### Type 1



#### Type 2



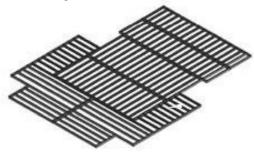
Type 3 - Sandwich Panel

### Floor Details

#### Type 1 - C Purlin Joist Floor System

#### **Components:**

- Finish
- OSB or Cement Board
- Insulation
- Floor Joist C Pulin
- False Ceiling



#### Type 2 - Web Joist Floor System

#### Components:

- Finish
- OSB or Cement Board
- Insulation
- Floor Joist Web Truss
- False Ceiling

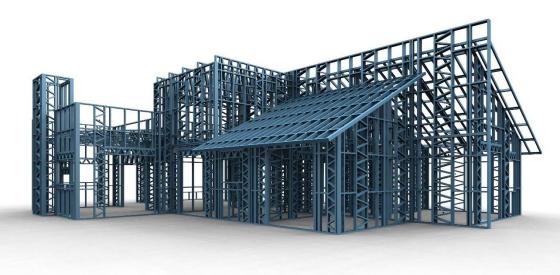


#### Type 3-Concrete Floor System

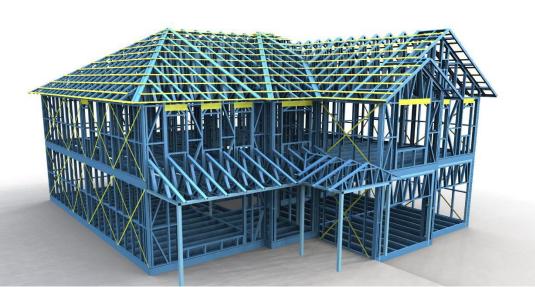
#### **Components:**

- Finish
- Concrete
- Deck Panel
- Floor Joist Web Truss
- False Ceiling





The Light Gauge framing system allows for design flexibility, clear spans, and larger openings.





In fact, there are many benefits to building with steel as opposed to other traditional building materials such as concrete or wood.



### General Benefits



- Cost-effective.
- Shorter and predictable construction schedule.
- Highest strength to weight ratio of any building material.
- Non-combustible does not burn nor contribute fuel to the spread of a fire.
- Inorganic will not rot, warp, split, crack or creep.
- Dimensionally stable does not expand or contact with moisture content.
- Consistent material quality produced in strict accordance with national standards, no regional variations.

#### Benefits to the Builder

- Lighter than other framing materials.
- Saves job-site time with ease of penalization off-site. (Or can take machine for site fabrication if big quantity).
- · Installed with basic hand tools.
- Straight walls and square corners.
- Less scrap and waste (2 for steel vs. 20 for lumber).



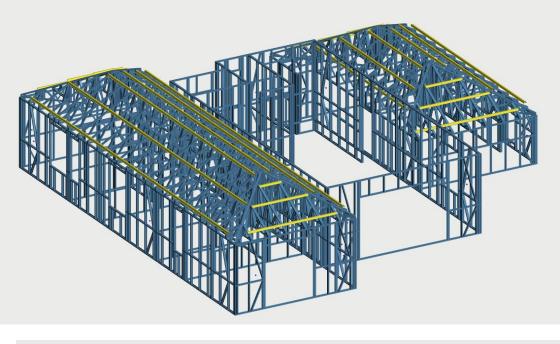
#### Benefits to the Consumer

- High strength results in safer structures, less maintenance and slower aging of structure.
- Fire safety doesn't burn or add fuel
- to the spread of a house fire.
- Not vulnerable to termites.
- Not vulnerable to any type of fungi or organism, including mold.
- Less probability of damage in an earthquake.

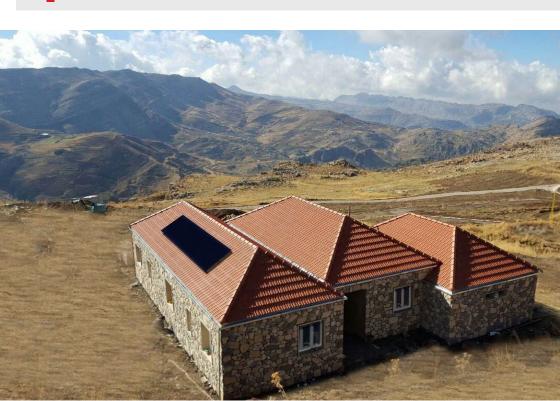
- Lighter structure with stronger connections results in less seismic force.
- Less probability of damage in high winds.
- Stronger connections, screwed versus nailed
- Less probability of foundation problems - less weight results in less movement.

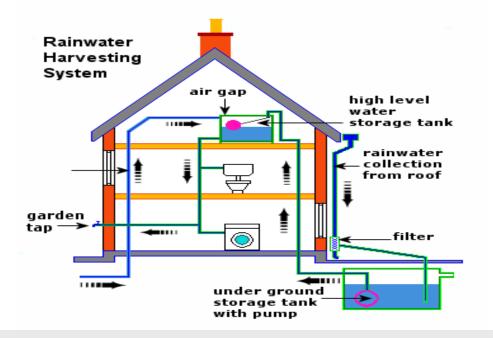
### Benefits of the Environment





## **Residential Solutions**





### **Green Design Solutions**





## Town House Solutions



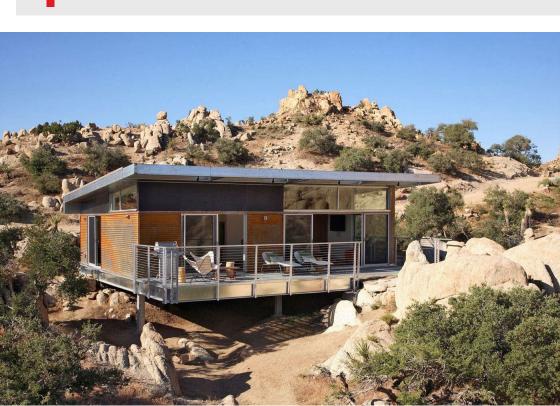


# Affordable Solutions



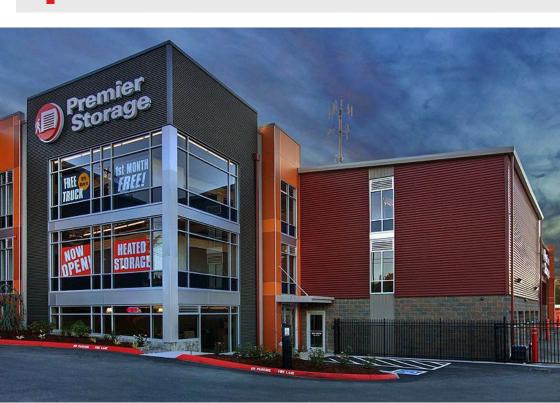


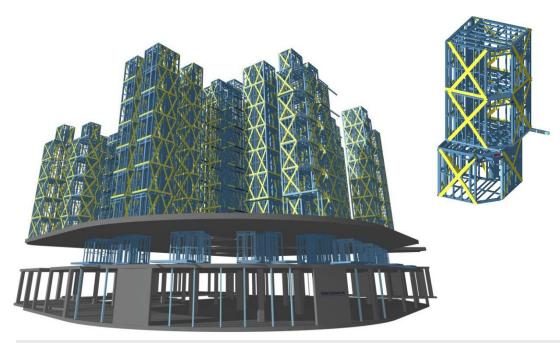
## Architectural Solutions





### Multi-Story Solutions





### **Modular Solutions**

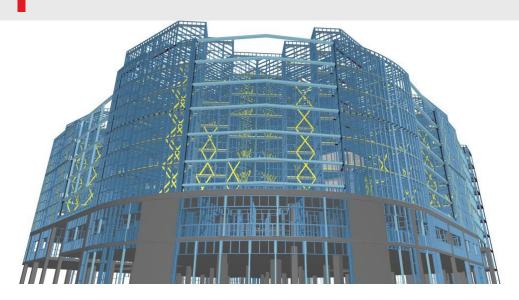


Pods prefabricated with sanitary:

- 250 Pods
- 4000 panels created
- 172 tons or 80 Km of LGS Steel C150, C100, C70 in 1.2/1.6mm flat bracing



#### **Modular Multi-Solutions**



For the main structure (excluding pods): 10 months X 2

persons Over 6000 panels created • 300 tons or 140 km of LGS steel C150, C100, C70 in 1.2/1.6mm Flat bracing and Z profiles



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We may provide a turnkey solution in the following way:

- Dalal Steel has set plans and designs with multiple finishing to choose from.
- Dalal Steel has set plans and designs in collaboration with respected Architects to choose from.
- Custom design available (at additional fee)
- Cost Effective & Fast Building Process
- Strong and Design-Flexible
- · Durable and Safe
- Environmentally Friendly

- Fire Resistant
- · Earthquake Resistant
- No Lightning Risks



