

LHP Group

LHP Group is proud to introduce the brand-new line of products to cater the ever-growing demand for quality and innovative structural components. As a specialist in this domain with over 30 years' experience in the industry, we are offering a distinguished range of PPGI Sheet and allied structural/roofing products. A wide range of, the highest quality Hi-Ten PPGI roofing sheets are available in a stunning collection of profiles and colours. They are available as both single skin and double skin EPS sandwich panels.

Our products are tested for its ability to withstand diverse climatic conditions and are rigorously tested on defined parameters for quality. Whether the development is Industrial, Agricultural or a Domestic Project we work together with the client providing close consultation and technical advice to determine their budget and material requirements. Moreover, our raw materials are sourced from the finest steel producers in the world and we place a great emphasis on quality control to maintain a first-class experience from initial enquiry through to the delivery of goods.

Featured Product

Buffalo EPS sandwich wall and Roof panels.

Advantages of using EPS is due to its light weight, fire resistivity, cost effectiveness and low water absorption properties. We offer them in different dimensions and the product can be customized according to the requirements of our clients. Our panels find their application in cold storage, workshops, shelters, houses etc.

The Buffalo sandwich roof panels does not require additional insulation and a roof ceiling / internal facades. This enable a considerable cost saving due to reduction use of raw material, labour and time. Some of the other advantages are;

- ☞ All-in-one Roofing Solution
- ☞ Light weight – (easy to transport + ease of fixing and handling) 10 to 14kg/sqm.
- ☞ More than 6 standard thicknesses
- ☞ Water resistive EPS material
- ☞ Excellent thermal Insulation (heat conductivity: $\leq 0.041/\text{mk.}$)
- ☞ Noise reduction
- ☞ Flame retardant
- ☞ Heavy load bearing capacity
- ☞ Flexibility in application
- ☞ Lowest carbon footprint for an insulated roofing system
- ☞ No colour change of EPS or Roofing Sheets
- ☞ Involve quick installation process experience along with fair and reasonable prices.



Why Buffalo Sandwich Panels.



Considering Mobility and Efficiency

☞ Sandwich Panel allows disassembling the structural system and re-erection on a new site. Due to the versatility and light weight the transportation of the structure is considerably cost effective.



Erection Promptness and Effective Usage Space

☞ High-speed erection is achieved due to the light weight of panels and the user friendly design features. Significant increase of usable structural space due to significant decrease in thickness of walls and partitions.



Construction Saving

☞ The cost of erection is significantly reduced since heavy lifting machinery or crange is not required.

☞ Labour required to erection of a EPS-FR sandwich panel is less than 20% of a conventional concrete structure.

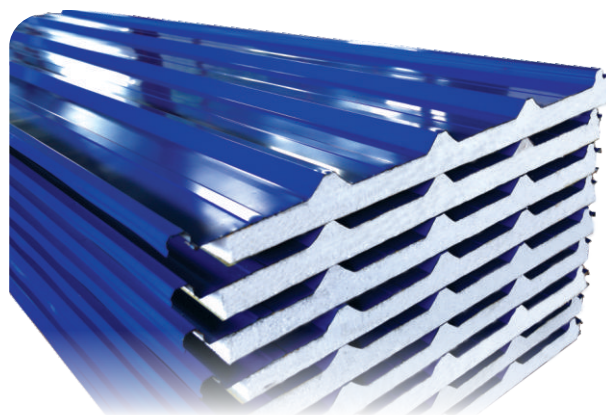
Buffalo Sandwich Roofing Panel

Product Description

Buffalo Sandwich® roof panel is a long-spanning commercial and residential insulated roof panel system. The system consist of roofing sheet, Fire Retardant EPS-FR insulation and a pre-painted ceiling sheet in one durable, functional and attractive roof panel. This all-in-one roofing solution is manufactured in Sri Lanka using SGS certified steel for durability and is installed in a variety of applications including educational facilities, multi-residential housing and retail facilities.

The product is tested for use in tropical weather conditions to ensure a sound customer experience.

The uniqueness of the product is that the insulation thickness of EPS-FR can be altered if requested by client to cater different applications.



| Panel Properties | | | | | | |
|--------------------------------|------|------|------|------|------|------|
| Panel Thickness (mm) | 50 | 75 | 100 | 125 | 150 | 200 |
| Mass (Kg/m ²) | 6.03 | 6.30 | 6.61 | 6.92 | 7.12 | 7.33 |
| Thermal Performance at 8°C | | | | | | |
| 'R' Value (m ² k/w) | 1.60 | 2.30 | 2.90 | 3.60 | 4.20 | 5.50 |
| Thermal Performance at 20°C | | | | | | |
| 'R' Value (m ² k/w) | 1.60 | 2.20 | 2.80 | 3.50 | 4.10 | 5.30 |

Span Table

SL Grade EPS-FR Core Hi-tensile External Internal Steel Skins. Maximum uniformly distributed ultimate wind load (kPa) for the given span;

| Multi-span, Wind Pressure acting outwards | | | | | | |
|---|----------------------|------|------|------|------|------|
| Span (mm) | Panel Thickness (mm) | | | | | |
| | 50 | 75 | 100 | 125 | 150 | 200 |
| 1500 | 4.15 | 5.90 | 7.61 | 7.74 | 7.74 | 7.75 |
| 2700 | 2.07 | 2.91 | 1.00 | 4.35 | 4.35 | 4.35 |
| 3900 | 1.17 | 1.72 | 2.41 | 2.95 | 3.04 | 3.05 |
| 5100 | - | 1.11 | 1.58 | 1.98 | 2.35 | 2.36 |
| 6300 | - | - | 1.10 | 1.40 | 1.77 | 1.93 |
| 7500 | - | - | - | 1.03 | 1.31 | 1.64 |
| 8700 | - | - | - | - | - | 1.43 |

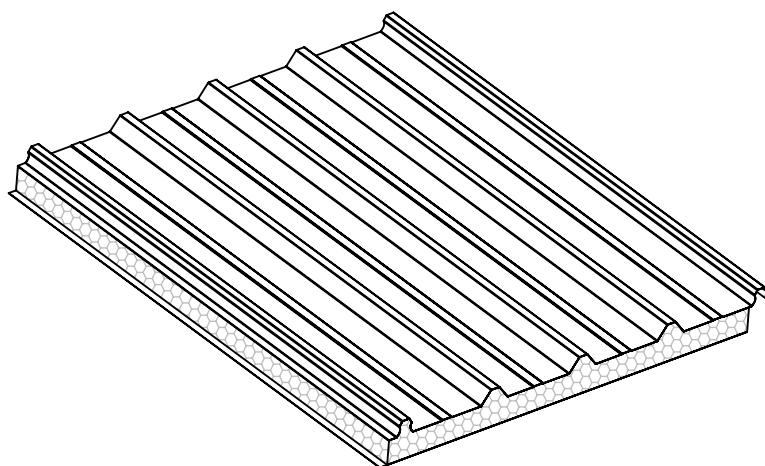
| Single-span, Wind Pressure Acting Outwards | | | | | | |
|--|----------------------|------|------|-------|-------|-------|
| Span (mm) | Panel Thickness (mm) | | | | | |
| | 50 | 75 | 100 | 125 | 150 | 200 |
| 1500 | 5.16 | 7.70 | 9.41 | 10.98 | 13.26 | 17.81 |
| 2700 | 2.35 | 3.74 | 4.63 | 5.55 | 6.78 | 9.28 |
| 3900 | 1.28 | 2.00 | 2.55 | 3.11 | 3.67 | 4.79 |
| 5100 | - | 1.21 | 1.53 | 1.86 | 2.19 | 2.85 |
| 6300 | - | - | 1.04 | 1.25 | 1.47 | 1.91 |
| 7500 | - | - | 0.76 | 0.92 | 1.07 | 1.38 |
| 8700 | - | - | - | - | 0.82 | 1.05 |

Note:

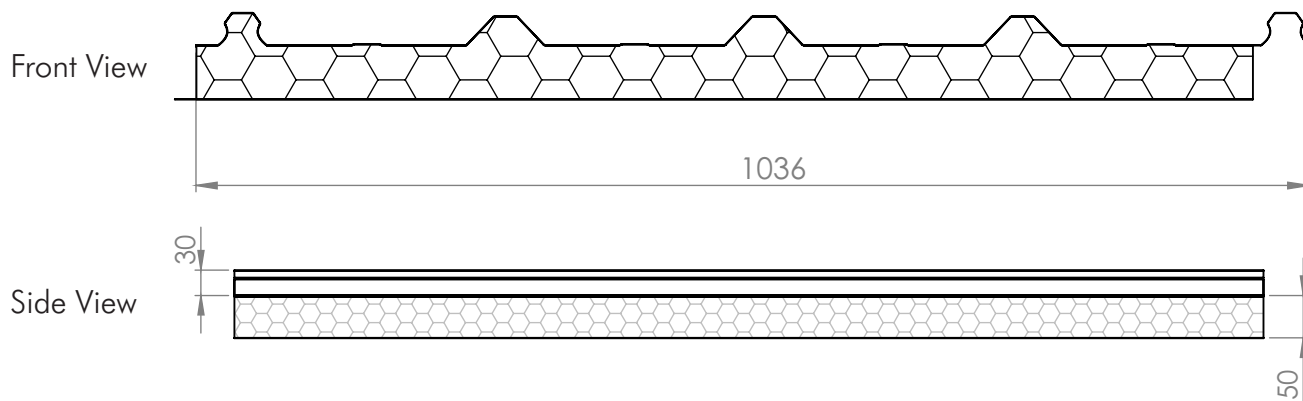
**Check with your local Buffalo® dealer for more information and colour availability.

**Span table is for 0.6mm roof with 0.4mm ceiling combination

| | |
|-----------------------------------|--|
| Core | EPS - FR (Expanded Polystyrene with Fire Retardant) |
| Effective Width (Cover mm) | 985 |
| Thickness (mm) | 50, 75, 100, 125, 150, 200, 250 |
| Length | Upto 24m (Check for availability) Exterior |
| Exterior Facing Skin | Upto 0.48mm SGS Accredited Steel Sheet |
| Interior Facing Skin | 0.3mm - 0.6mm |
| Interior Facing Colours (Ceiling) | <div>Cream</div> <div>White</div> <div>Wood</div> <div>Grey</div> |
| Exterior Facing Colours (Roof) | <div>Dark Green</div> <div>Blue</div> <div>Brown</div> <div>Eucalypt</div> |
| Internal Finishes | Plain, Railed Finish |
| Acoustic Properties | Rw24-25 Depending on Thickness |
| Recommended Pitch | 3 degrees minimum |



Technical Data Sheet



Buffalo Sandwich Wall Panel

Product Description

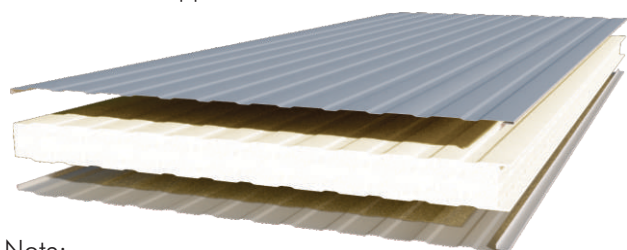
Buffalo Sandwich wall pannel® with EPS core are intended for applications in various kinds of buildings: industrial, commercial and housing. The Buffalo Sandwich wall pannel consist of three layers: top steel skin, EPS interlayer and back steel skin. During production, an EPS-cored sandwich panel from Buffalo Panels range is formed out by external and internal metal facings, which are profiled into a desired shape. These facings are then glued continuously to the in-house manufactured polystyrene blocks using a special glue.

Advantages of EPS-cored panels are a low, affordable price and is tested for suitability to be used in tropical weather conditions.

Some Other Features

- Quick erection time.
- Great appearance
- Light weight but firm
- Resistance to strong wind-Water and is fire proof
- Anti-corrosion skins
- Sound insulation
- Excellent thermal insulation
- Flexible and easy to install

The uniqueness of the product is that the insulation thickness of EPS-FR can be altered if requested by client to cater different applications.











Note:

**Check with your local Buffalo® dealer for more information and colour availability.



| Panel Properties | | | | | | |
|--------------------------------|------|------|------|------|------|------|
| Panel Thickness (mm) | 50 | 75 | 100 | 125 | 150 | 200 |
| Mass (Kg/m ²) | 6.03 | 6.30 | 6.61 | 6.92 | 7.12 | 7.33 |
| Thermal Performance at 8°C | | | | | | |
| 'R' Value (m ² k/w) | 1.60 | 2.30 | 2.90 | 3.60 | 4.20 | 5.50 |
| Thermal Performance at 20°C | | | | | | |
| 'R' Value (m ² k/w) | 1.60 | 2.20 | 2.80 | 3.50 | 4.10 | 5.30 |

| | | | | |
|----------------------------|---|--|--|--|
| Core | EPS - FR (Expanded Polystyrene with Fire Retardant) | | | |
| Effective Width (Cover mm) | 985 | | | |
| Thickness (mm) | 50, 75, 100, 125, 150, 200, 250 | | | |
| Length | Upto 24m (Check for availability) Exterior | | | |
| Exterior Facing Skin | Upto 0.48mm SGS Accredited Steel Sheet | | | |
| Interior Facing Skin | 0.3mm - 0.6mm | | | |
| Standard Exterior Colours |  Stone  Red Brick  Grey  Summer Bliss | | | |
| Standard Interior Colours |  Wood  White  Grey  Summer Bliss | | | |
| Internal Finishes | Plain, Railed Finish | | | |
| Acoustic Properties | Rw24-25 Depending on Thickness | | | |

Buffalo Structural Members

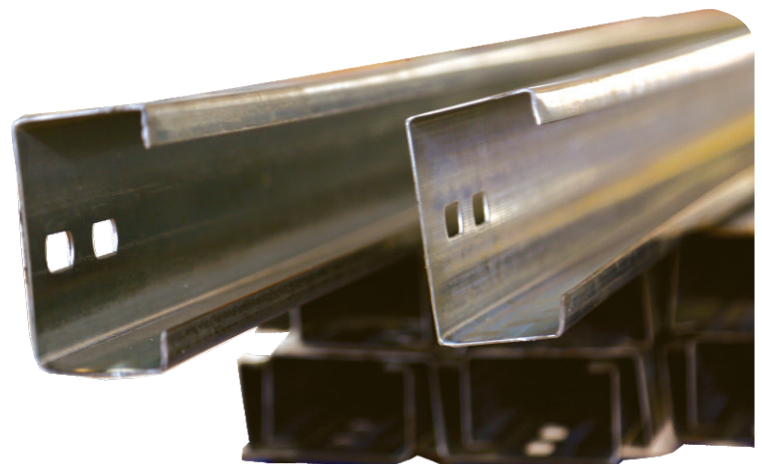
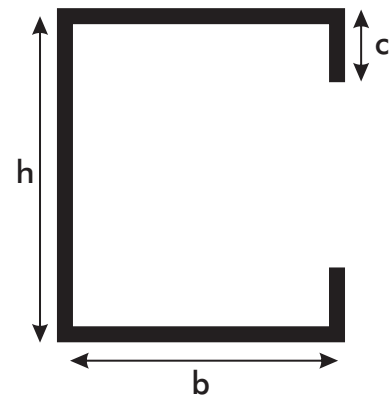
Product Description

Built to last, buffalo purling's are alternative to expensive wooden beams are used to support roof and wall sheeting in housing, industrial, commercial and rural buildings and as structural framing in medium sized buildings and re-locatable accommodation as well as garages, patios and carports. C sections can be used over single spans and un-lapped continuous spans.

Why Buffalo roofing structural members?

- ☞ Produced with high quality material, conforming to the highest standards.
- ☞ A full range of sections from 50mm to 350mm to choose from.
- ☞ Buffalo purlins and girts can be supplied plain, or punched using standard hole punching, spaced to your specifications.
- ☞ Joint connectors available to extend the length of span without compromising the strength.
- ☞ They are available in 1.8mm -3.0mm gauges that are custom cut to any transportable length.
- ☞ Purlins and girts are manufactured from high tensile 30g ~ 90g Al-Galvanized steel for increased strength and reduced weight.
- ☞ Buffalo roofing solutions supply a full accessory range of brackets, tie rods, turnbuckles, bolts, as well as larger items such as fascia purlins.
- ☞ Subject to availability can be supplied in number of colors as per client requirements.

| Model | Section Sizes (mm) | | | |
|---------------|--------------------|----|------|------|
| | h | b | c | t |
| LHP/CP/751-8 | 75 | 40 | 12 | 1.80 |
| LHP/CP/1001-8 | 100 | 50 | 12.5 | 1.80 |
| LHP/CP/1002 | 100 | 50 | 12.5 | 2.00 |
| LHP/CP/1502 | 150 | 65 | 12.5 | 2.00 |
| LHP/CP/1602 | 160 | 60 | 12.5 | 2.00 |
| LHP/CP/1702 | 170 | 50 | 12.5 | 2.00 |
| LHP/CP/1902 | 190 | 65 | 12.5 | 2.00 |
| LHP/CP/2002 | 200 | 60 | 12.5 | 2.00 |
| LHP/CP/2252-5 | 225 | 70 | 17.5 | 2.50 |
| LHP/CP/2402-5 | 240 | 65 | 15.0 | 2.50 |
| LHP/CP/2502-5 | 250 | 65 | 15.0 | 2.50 |
| LHP/CP/2702-5 | 270 | 60 | 10.0 | 2.50 |
| LHP/CP/3003 | 300 | 80 | 15.0 | 3.00 |



Buffalo PPGI Roofing/Cladding Sheets

Product Description

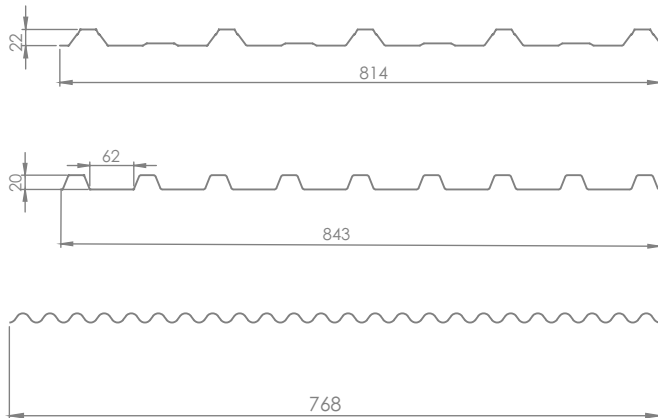
We supply steel roof sheets otherwise known as metal roof cladding to individuals and businesses all over Sri Lanka to be used as facades, cladding and roofing.

Our metal roof cladding sheets are an ideal solution for garages and car ports, workshops, factories and warehouses.

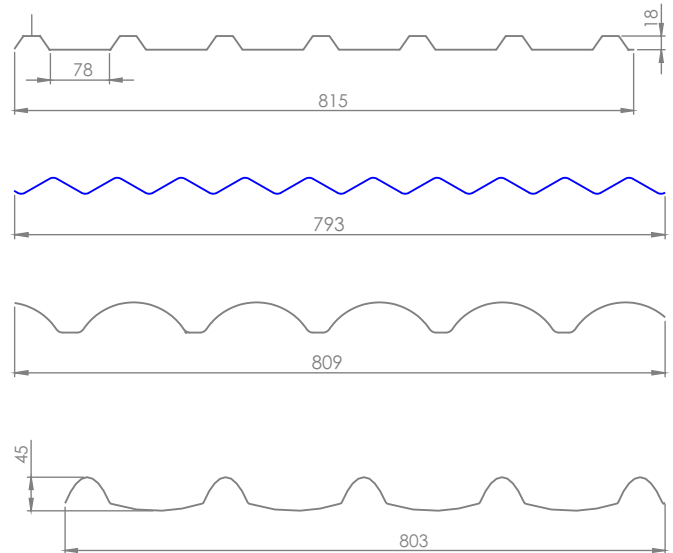
Depending on building type, use and appearance, we manufacture and supply 6 different types of profiled sheeting, all of which can be supplied to the exact length necessary in a choice of colours, with the necessary structural components.

Furthermore, we also supply curved roofing cladding to suit a wide range of dorm roofs.

Available profiles.



| | |
|----------------------------|---|
| Effective Width (Cover mm) | 780 |
| Thickness (mm) | Six Different Designs |
| Length | Upto 24m (Check for availability) Exterior |
| Profile Gauge | Upto 0.48mm SGS Accredited Steel Sheet |
| Standard Exterior Colours | <div> <div>Blue</div> <div>Clay Tile</div> <div>Earth Brown</div> <div>Green</div> <div>Red</div> <div>White</div> <div>Grey</div> <div>Summer Bliss</div> </div> |



LHP group take pride in introducing the new economical and highly versatile building solution .LHP groups experience and expertise can guide the client to the precise solutions. All the structural components including steel structure and buffalo roofing/wall panels are made here in Sri Lanka at the LHP roofing factory in Colombo. Buffalo Structural solution can cater variety of industries, including construction, mining, government, education, Hotels, health care and commercial. Our portable buildings can be quickly deployed anywhere, and stacked and configured to create custom solutions that are cost effective, attractive and professional.

BUFFALO

Container Homes, Office, Camps, Schools, Retail Stores, Toilets, Laundries and more *"They're not what they seem!"*

Manufactured from Fire resistant and thermally insulated EPS Sandwich panels, the Buffalo portable units provide an internal environment well suited for the Sri Lankan tropical climate.

Unlike the recycled heavy metal shipping containers (which are used for accommodation) that swelter under the tropical sun, our galvanized steel framed / light weight units keep the structure cool in hot weather and warm in cooler climate areas of the island.

Being modular (flat pack) and light weight, the structures are easily transportable and ideal when a number of units are required to be transported in a short period for emergency situation. This is ideal for site offices and temporary/emergency building requirements as well as permanent structures on either land or stagnant water.

An added advantage of buffalo structure is that the client is not limited to the 20' or 40' Container length. Our wall panels are interchangeable; they can be added to or removed as desired, making them one of the most versatile prefabricated building units on the market.

Our units are easily linked together, either by stacking on top of one another or interlinked side-by-side. Whatever your needs, our designer can tailor the structure to meet clients' needs. Moreover internal layouts too, can be reconfigured to meet your new project needs.



Site Sheds & Offices

Buffalo portable offices can be quickly deployed anywhere, and stacked and configured to create custom solutions that are cost effective, attractive and professional.

They can be utilized any construction projects, schools and colleges, major events, and retail locations.

Our Site Based product advantages includes:

- o Future internal space modifications through re-arranging walls, doors and windows.
- o Possibility easily extend or change the floor area of the building.
- o Safe from rodent and termite attacks.
- o Does not absorb water unlike buildings made from composite material.
- o Fast erection and ability to re-locate.
- o Occupant friendly walls and roof and thus no excess heat or sound inside building



Workforce Housing Solutions

LHP Buffalo buildings specializes in remote workforce accommodations around the island. Beyond providing transportable buildings, we prioritize safety processes, quality and the understanding of your unique requirements.

LHP has a standard fleet of transportable buildings from bunkhouses, kitchen and dining facilities, recreation buildings and more, ready to be rapidly deployed to your project site. Our extensive manufacturing capabilities also allow us to customize a building solution for you, whether you need a temporary construction camp or a permanent workforce housing facility.

Hotels and Cabanas

We take pride in engineering masterpieces of your imagination. Being highly versatile and re-locatable the product enables the client to build the dream holiday cabana or hotel in any inaccessible remote locations with ease.

Floating option

Why not utilize the water body in your property to build your investment property, cabana or holiday home. With in-house manufacturing capabilities our building department will make your floating dream a reality. With number of options to choose from the buffalo floating cabanas are the ideal solution for a sound and safe yet a beautiful floating structure.



Education Solutions

Not only do we build classrooms, we set the standard for superior modular school buildings that accommodate your growing community.

Our demountable buildings can be configured many ways and are ideal for classrooms, libraries, labs, canteens and outside school care facilities.

Other Applications

- ☞ Houses
- ☞ Floating Bars
- ☞ Temporary Hospitals
- ☞ Agriculture Buildings
- ☞ Garment Factories
- ☞ Storage Facilities
- ☞ Cool Rooms
- ☞ Telecommunication Tower Houses
- ☞ Guard Rooms
- ☞ Portable Shops



Why LHP Buffalo Building Solutions



Cost saving:

Most Cost Effective pre-fabricated buildings in the market. The flat packed units are delivered in stacked bundles, saving up to 75% on transport costs. Also being fully thermally insulated, you save on ongoing cooling and heating costs.



Service:

Full spectrum of construction services, from a needs assessment to complete design and build services.



Capacity

We can handle any project, regardless of size, scope or complexity.



Recycle and reuse

Buildings are manufactured with the ability to reuse and to be recycled.



Versatile

Can be used for a myriad of accommodation applications e.g. office, washrooms, parents/teenage retreat, mining, military application, temporary accommodation etc. You are only limited by your imagination.



Strong and reliable

Galvanized steel framed structure, combined with PPGI sheets/polyurethane sandwich panels, makes the units strong and lasting for 30+ years.



Customized design

You can choose whatever size and internal designs you wish. Just talk with our designers.



Easy transportation

With their lightweight construction, 10-20 Flat packed units can be transported on 1x trailer compared to the transportation of just 1x standard Metal shipping container.



Easy assembly

Two to three people can assemble one standard Flat packed unit within 3-4 hours.



Flexible combination

Multiple modular units can be easily combined horizontally or vertically as desired.



100% Sri Lanka made and owned

All Spark Pre-Fab buildings and all the structural components are 100% made and manufactured to the Australian Building Code.

