



**MITSUMI<sup>®</sup>  
HOUSING**

AN ISO 9001:2015 CERTIFIED COMPANY



**INDIA'S #1**

**LGSF Housing  
Developer**

Mitsumi Housing Private Limited

**Housing For All  
Happiness For All**



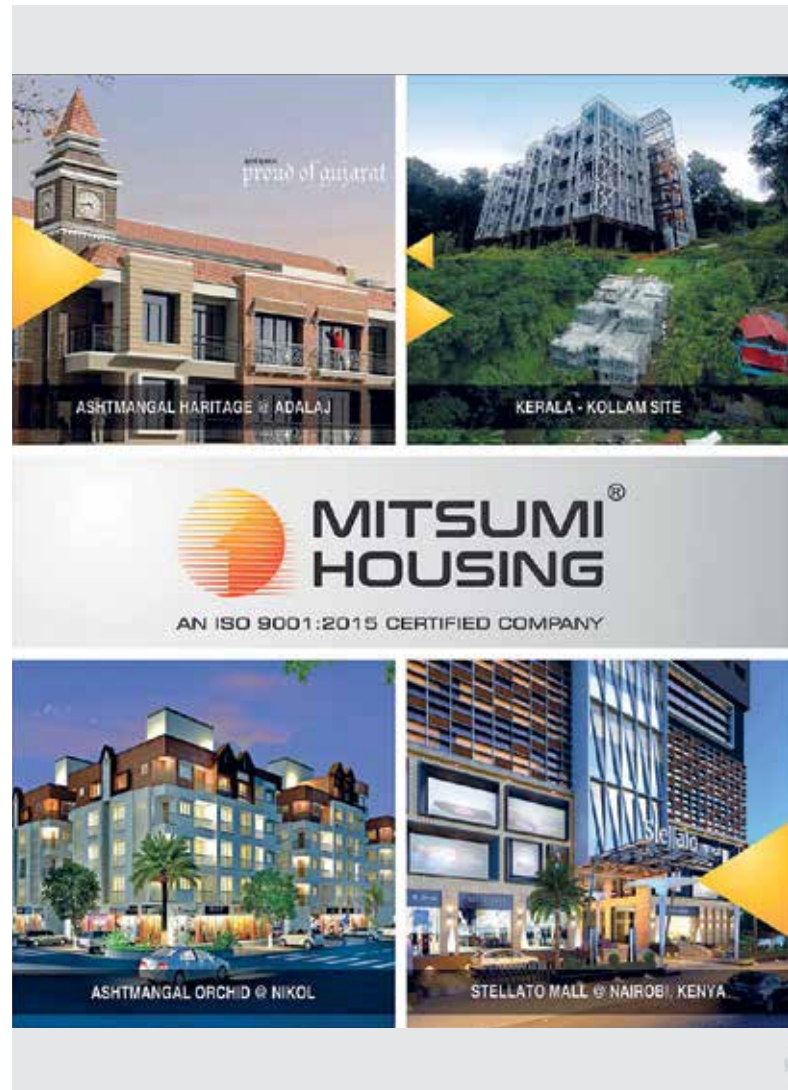
POWERED BY MITSUMI HOUSING

# About Us

At Mitsumi Housing Private Limited we capitalize on the fact that we master the art of civil and infra projects, completely. We have 27 years of great construction knowhow and civil backup to our advantage.

Light Gauge Steel Frame (LGSF) is not only the about manufacturing the steel profiles. It is a proven complete housing solution technology adopted by various European countries, USA, Canada, Australia and New Zealand.

MHPL has adopted New Zealand based LGSF technology which approved by Prime Minister Shri Narendra Modi making MHPL India's 1st LGSF Developer equipped with India's largest LGSF factory, in-house design team, Research and Development Facility, experienced management team with 28 years' experience and all development in house setup



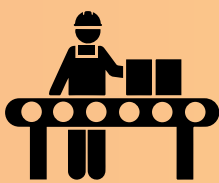


# Our Strength



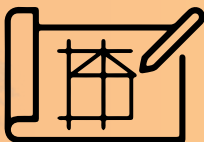
## Our Expertise

With 28 years of experience in civil construction with an experienced management team to execute mass level projects.



## Our Production Facility

Per day production facility of 35 metric tons complying with IS codes.



## Our Design

The in-house design team ensures the optimal code complying design and our designs are vetted and approved by various IITs e.g. IIT Roorkee, IIT Delhi, etc.



## Our Execution

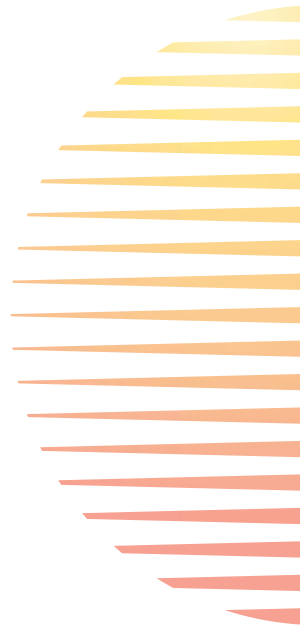
With the experienced erection crew, we are able to give complete LGSF build solution from foundation to final finish within.

**“MHPL has under its belt project of 11,27,814 Sq Ft across India”**



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# LGSF in India



Ministry of Housing and Urban Affairs  
Government of India



GLOBAL  
HOUSING  
TECHNOLOGY  
CHALLENGE INDIA

Ministry of Housing and Urban Affairs (MoHUA), Government of India organized Global Housing Technology Challenge (GHTC) – India to identify and mainstream best available global technologies so as to bring paradigm shift in the construction sector 54 Innovative Construction technologies put in 6 broad categories were shortlisted during the challenge process.





6 Light House Projects on 6 different location with 6 distinct technologies amongst shortlisted have been initiated by MoHUA.



Mitsumi Housing Private Limited is entrusted with completion of Light House Project both as technology provider and contractor agency after financial and technical scrutiny by a special Technical Evaluation Committee (TEC) in 2019.



Accreditation of

# LIGHT GAUGE STEEL FRAMING (LGSF) HYBRID WITH PRE-ENGINEERED BUILDING



**Building Materials & Technology Promotion Counsel**



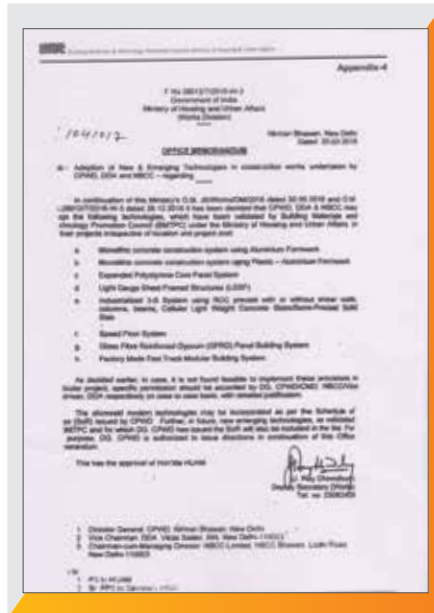
**Central Public Works Department**



**MOU at Vibrant Gujarat**



**ISO Certified**





# TECHNOLOGY ADOPTED BY

- Ministry of Housing and Urban Affairs
- Ministry Of Defence, Border Road Organisation
- Building Materials and Technology Promotion Council
- Indian Oil Corporation Limited
- Kerala Life Mission, Kerala
- Urban Development & Housing Department, Bihar
- Urban Development And Urban Housing Department, Gujarat
- Forest Department, Jammu And Kashmir
- Public Works Department, Himachal Pradesh
- Ropeway and Rapid Transport System Development Corporation, H.P.



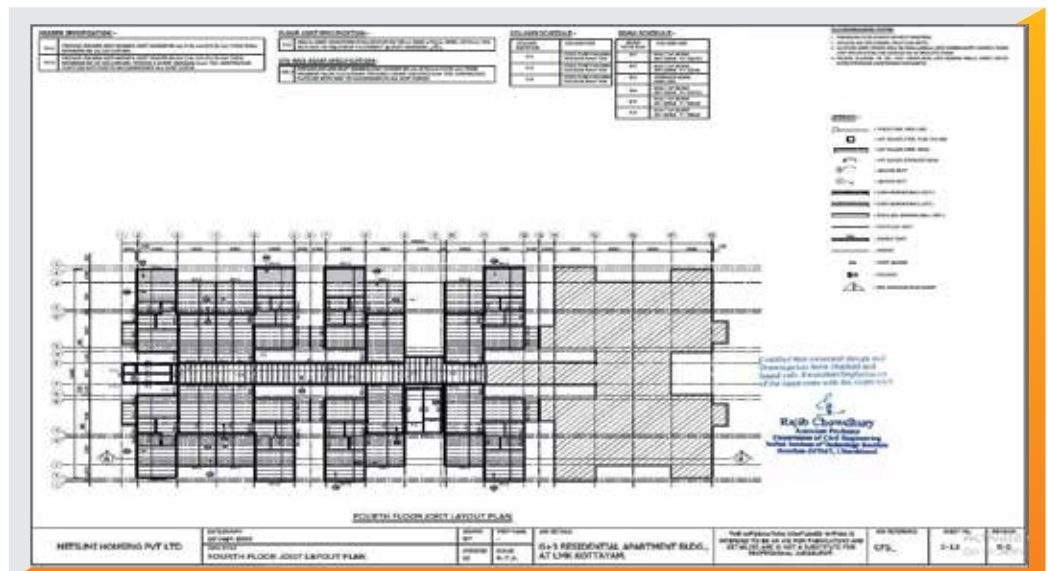
Indian Institute of Technology, Delhi



## Approved and Vetted by Institution



Indian Institute of Technology, Roorkee



# CLIENTELE



Ministry of Housing and Urban Affairs  
Government of India

**Ministry of Housing & Urban Affairs, GOI**




**Government of Kerala**

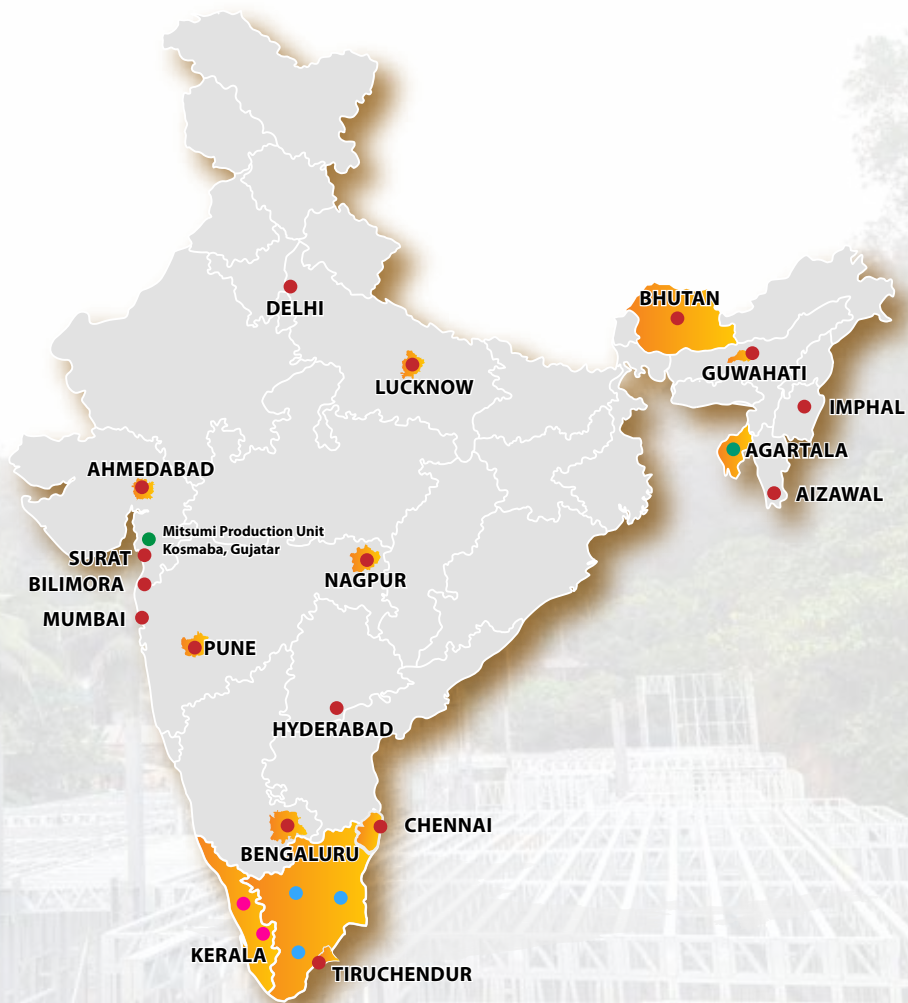


**IndianOil**

**Indian Oil Corporation Limited**



**Private Projects**



## International Footprint



KENYA



UAE



USA



AUSTRALIA



# LIFE MISSION KERALA

 **Units**  
**910**

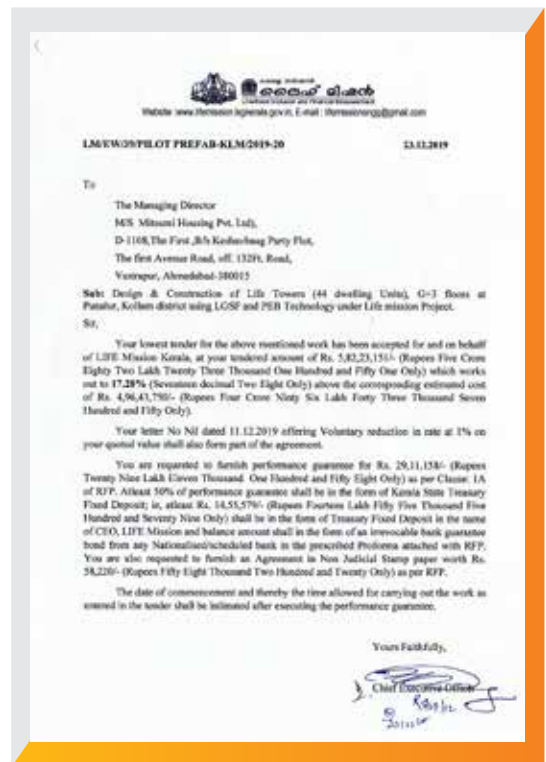
 **IBuilt Up Area (sqft.)**  
**5,59,343.29**

Sr No	Project Name	Building Story	No of Units (2bhk)	Area (Sq ft)
1	Idukki, Thodupuzha	G+3	42	26,843.69
2	Kollam, Punalur	G+3	44	26,544.02
3	Kottayam, Vijaypuram	G+3	44	26,544.02
4	Puthupudduy, Kozhikode	G+3	44	26,626.05
5	Pallipad (Naduvattam), Allapuzha District	G+3	44	26,626.05
6	Mavoor, Kozhikode District	G+3	44	26,626.05
7	Karimaloor, Enrnakulam	G+3	44	26,626.05
8	Payyanur, Kannur District	G+3	44	26,626.05
9	Ayyampuzha, Ernakulam District	G+3	44	26,626.05
10	Anthur, Kannur District	G+3	44	26,626.05
11	Karalam, Thrissur District	G+3	72	44,479.43
12	Thalaiyolaparambhu, kottayam District	G+3	36	22,239.72
13	Koothatukulam, Ernakulam District	G+3	36	22,239.72
14	Chirrakal, Kannur District	G+3	36	22,239.72
15	Enathu, Pathanmthitta	G+3	56	35,394.18
16	Mannacheri, Alapuzha District	G+3	28	17,697.09
17	Poovachal	G+3	56	35,394.18
18	Azhoor, Trivendrum	G+3	44	26,626.05
19	Madavoor, Trivendrum	G+3	36	22,239.72
20	Naduvanoor, Kozhikode	G+3	72	44,479.43
<b>Total</b>			<b>910</b>	<b>5,59,343.29</b>



# Life Mission Kerala

Life Mission Kerala is affordable housing scheme under Government of Kerala with aim to provide safe and decent housing to all landless homeless people in Kerala within five years to enable them to self-employ and earn a living, to participate decently in social processes



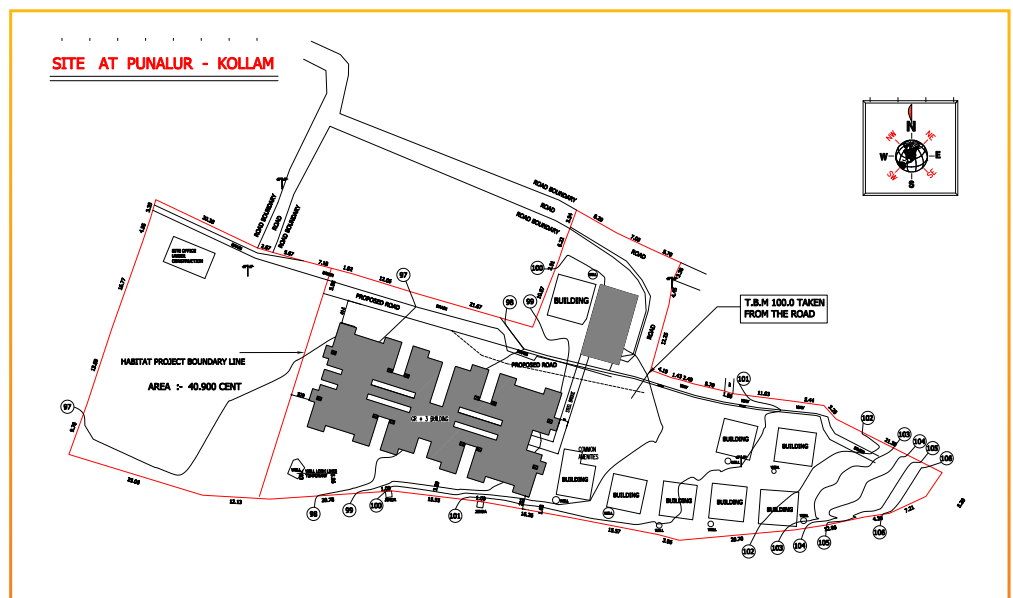
കേരള സർക്കാർ  
**ലൈഫ് മിഷൻ**  
 Livelihood Inclusion and Financial Empowerment





# Kollam

Address - Life Mission site, Punalur municipality, Placheri, Punalur, Kollam to Tenkashi Road (Evanchalikal church placheri), Kollam District – 691305

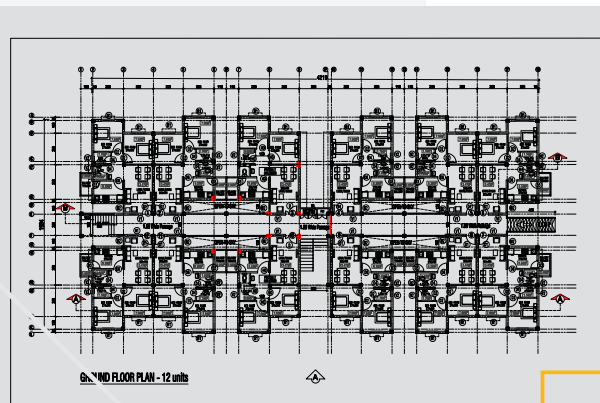


No of Storey	G+3
Carpet Area of Each House	603 Sq ft (2 BHK)
No of Houses	44
Builtup Area	26,541 Sq Ft

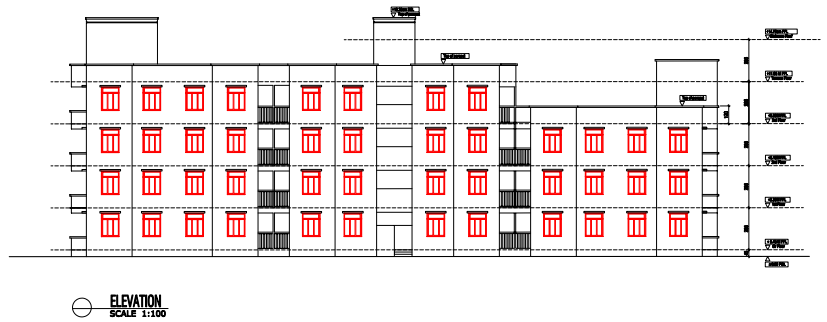


# Planning & Designing

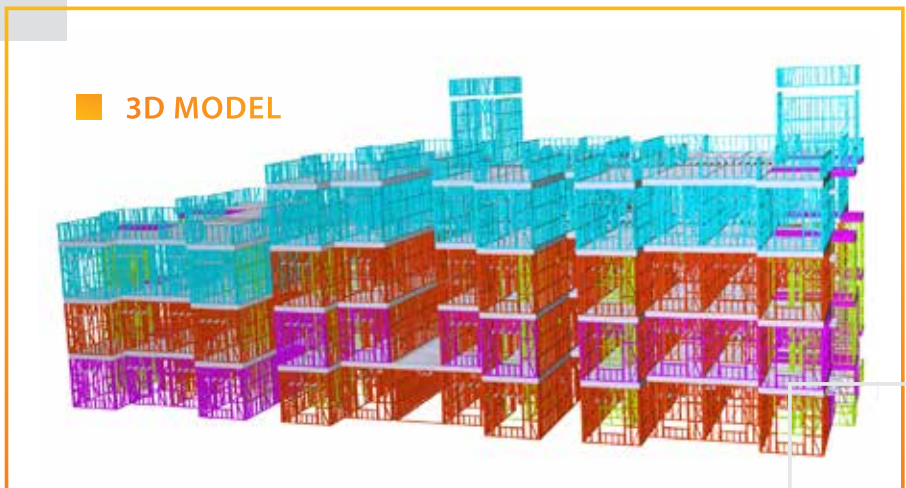
## FLOOR PLAN



## ELEVATION



## 3D MODEL







## Production & Logistics







## Assembly & Erection

### Excavation & Foundation



After soil testing foundation will be done as per the SBC of the soil. With the use of LGSF we can minimize the costing of foundation due to light dead load of the structure.





## Panel Assembly



Factory manufactured LGSF steel profiles are joined together using screws. Non welding of superstructure makes the assembly provides ease in erection



## Connectors on Joints

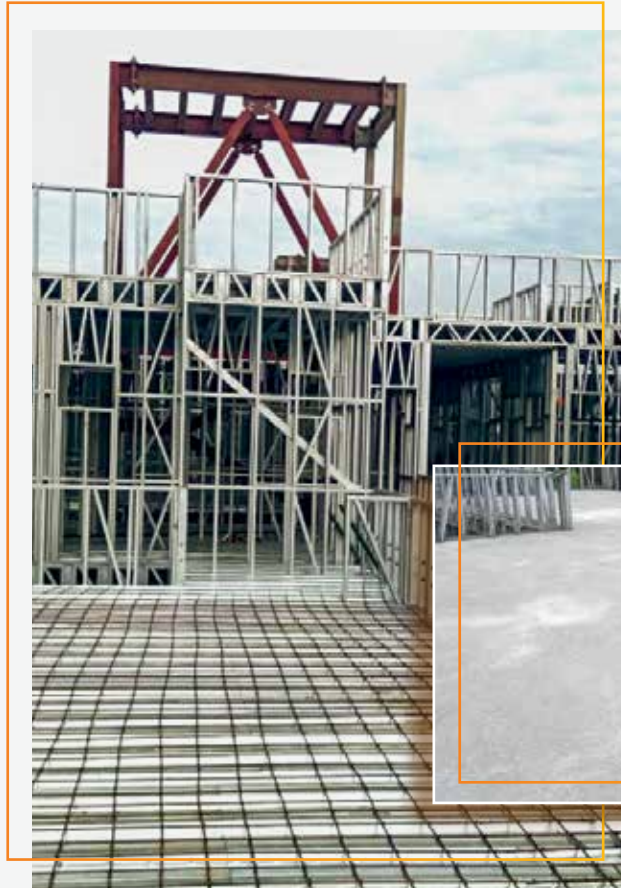


Connectors made from Hot rolled rust proof steel are used in joints, lintel plates and joists for structural strength





## Deck-Sheet Concreting



MS deck sheet is used for roofing where concrete topping is placed for strength and conventional look







## Cladding & Finishing

### Vapor Barrier



It is used between insulation and external cladding which resists diffusion of moisture through the wall assemblies of buildings to prevent interstitial condensation.





## External Cladding



Over the vapor barrier, two layered fiber cement boards are used for better as exterior cladding which....



## MEP Works



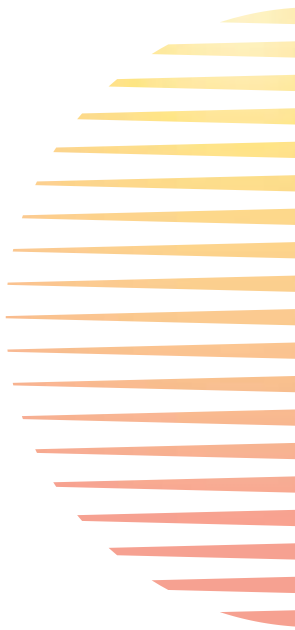
Conceal conduits of electrical and plumbing implements with special arrangement of whole in required panels to provide esthetic and smooth surface look in the wall.



## Insulation



In Drywall solutions insulation of Rockwool is placed inside the inside the LGSF walls between the cladding boards. It gives superior thermal efficiency and maintains the temperature inside.



## Internal Cladding



Inside of the building two layers of fiber cement boards are fitted over the insulation over final interior finishing is done







# Handover

Mitsumi Housing Private Limited (MHPL) adheres to quality standards and complies with statutory obligations determined at the time of project allocation. MHPL is committed to fulfill all the above parameters before handover the projects to client





## LGSF Steel & Accessories

Mitsumi connectors are laser cut using high precision AMADA machines. Each connector uses 2.5 mm H.R. sheet steel and comes with the bright orange signature color of our brand with an anti-rust paint treatment for better life and longevity of your structure. Our connectors also have unique anti slip matt texture for better grip during assembly of the structure.

### LINTEL PLATE



Material - 2.5mm  
(High Tensile Steel & Powder Coated )

### 50x50x2.5 Clip Angle



Material - 2.5mm  
(High Tensile Steel & Powder Coated )

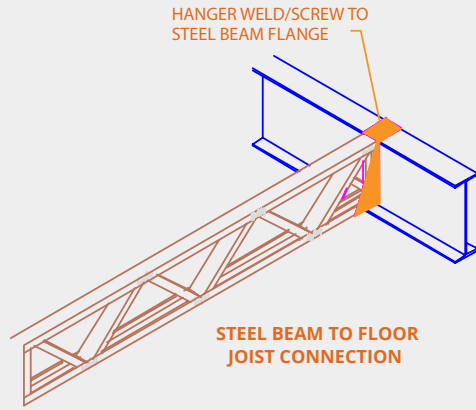




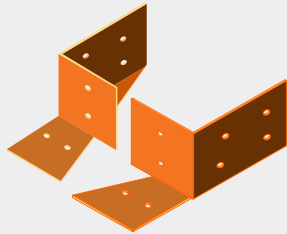
## JOIST HANGER



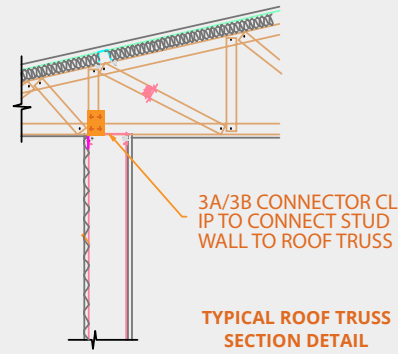
Material - 2.5mm  
(High Tensile Steel & Powder Coated)



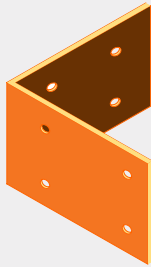
## CONNECTION BRACKET- 3A/3B



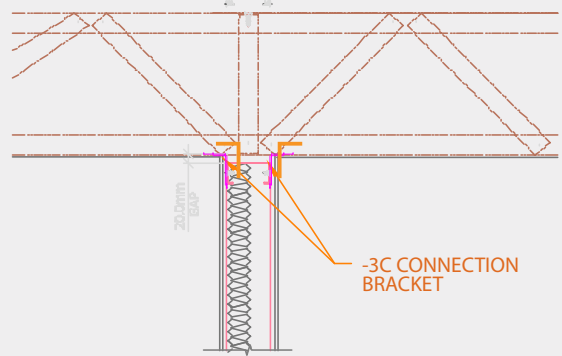
Material - 2.5mm  
(High Tensile Steel & Powder Coated)



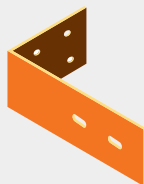
## CONNECTION BRACKET- 3D



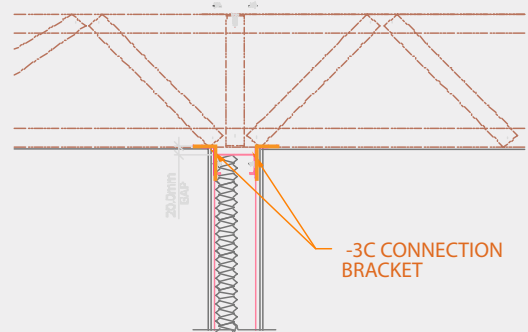
Material - 2.0 mm  
(High Tensile Steel & Powder Coated)



## CONNECTION BRACKET- 3C



Material - 2.0 mm  
(High Tensile Steel & Powder Coated)



### HOLD DOWN BRACKET

3mm FILLET WELD

Material - 2.0 mm (High Tensile Steel & Powder Coated )

Ø 12mm MECHANICAL FASTNER/ANCHOR BOLT

### ANCHORAGE BRACKET

Material - 2.5mm (High Tensile Steel & Powder Coated )

## LGSF SCREWS

Screw Points	Drill Point DP 12 Gauge to 16 Gauge	Winged Drill Point WDP Hard Board to Steel/Wings break at Steel point	Sharp Point SP For < 0.75mm	Tri Lobular For Transportable Withstand Vibration
Screw Heads	Wafer Head For Wall Panels Sits into Dimple	Hex Head High Torque, Panel to Panel Rubber Seal for Waterproofing	Counter Sunk Head (CSK) Sinks into Cladding Boards Smooth Finish after Coating	
Screw Drive	Most Popular Low Torque	Hex Drive For Panel to Pane High Torque	Square Drive Stick fits Low Torque For One Hand Drive	X Drive Stable High Torque No CAM-OUT Issues

**Framing Screw Flat Head 10.9-16x16**

**Panel Joiner Screw 109-18x19 Hex Head**

**F100 Fix 109-18x45**

**Gypsum Screw**

**SS x 14x 55mm Hex Head 205Self Drilling Screw**

**Anchor Bolts 12 x 150mm/ 216mm/220mm/ 450mm**





# LHP Agartala By Ministry of Housing and Urban Affairs



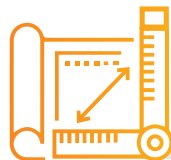
TRIPURA URBAN PLANNING AND DEVELOPMENT AUTHORITY



**Light Guage steel Framing (LGSF) Hybrid with Pre Engineered Building**

 **Units**

**1000**

 **IBuilt Up Area (sqft.)**

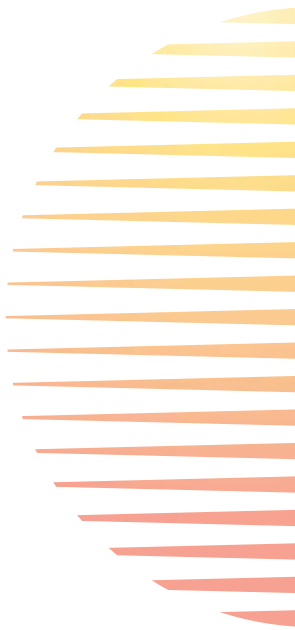
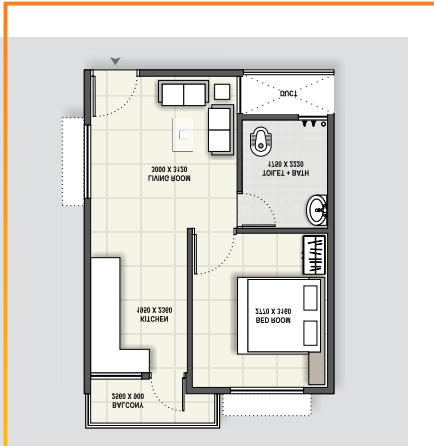
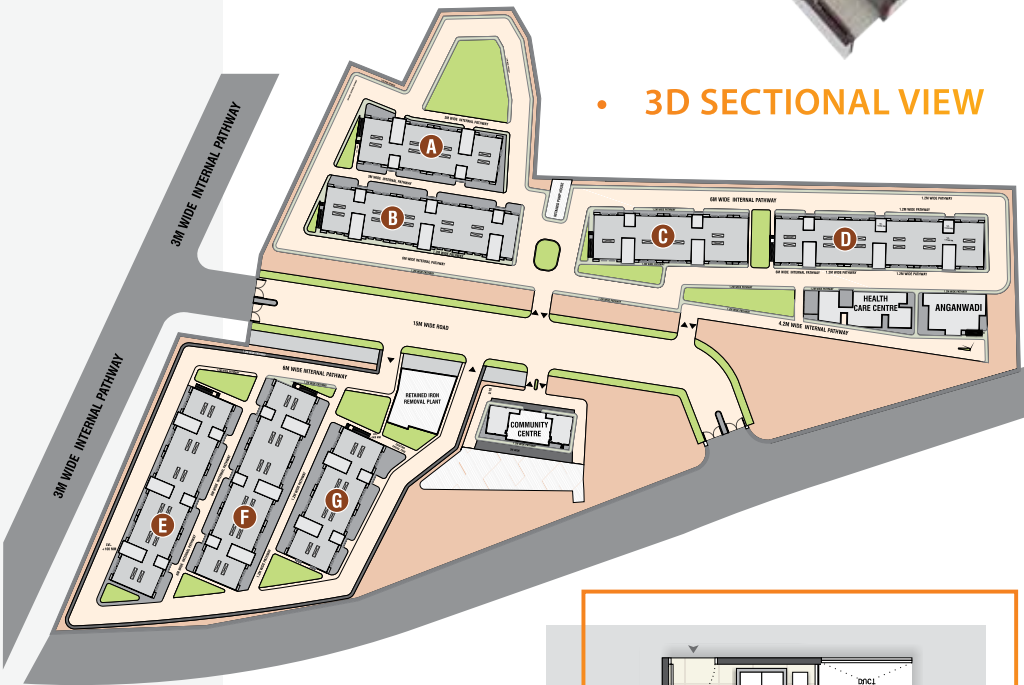
**5,68,472.04**

- Anganwadi
- Community Center
- Public Health Center





• 3D SECTIONAL VIEW







# Mitsumi Skill Development

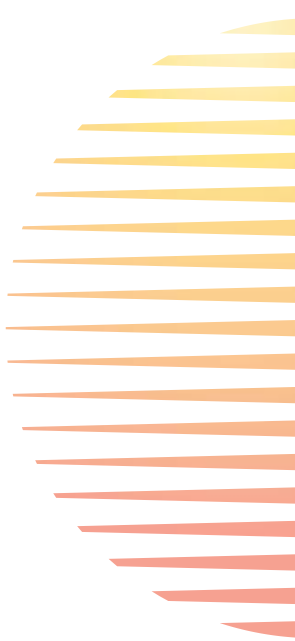
## Youth Empowerment Mitsumi Skill Development Centre

Mitsumi Housing Pvt. Ltd. has taken an initiative to promote the new and emerging construction technology selected by the Ministry of Housing and Urban Affairs (MoHUA) with support of BMTPC in India. Our mission is to transform the unskilled to skilled and betterment of the youth of nation by skill development program.



Our unique skill development program has begun from the South, we shall soon be covering the entire country to help youth empowerment.

- 30 Students per batch
- Admission on First Serve Basis
- Training Duration 2 to 3 months
- Support for Job Identification
- Will be approved and promoted by NSDC & PMKVY.



### COUNSELLING



### ENROLMENT



### TRAINING



### ASSESSMENT



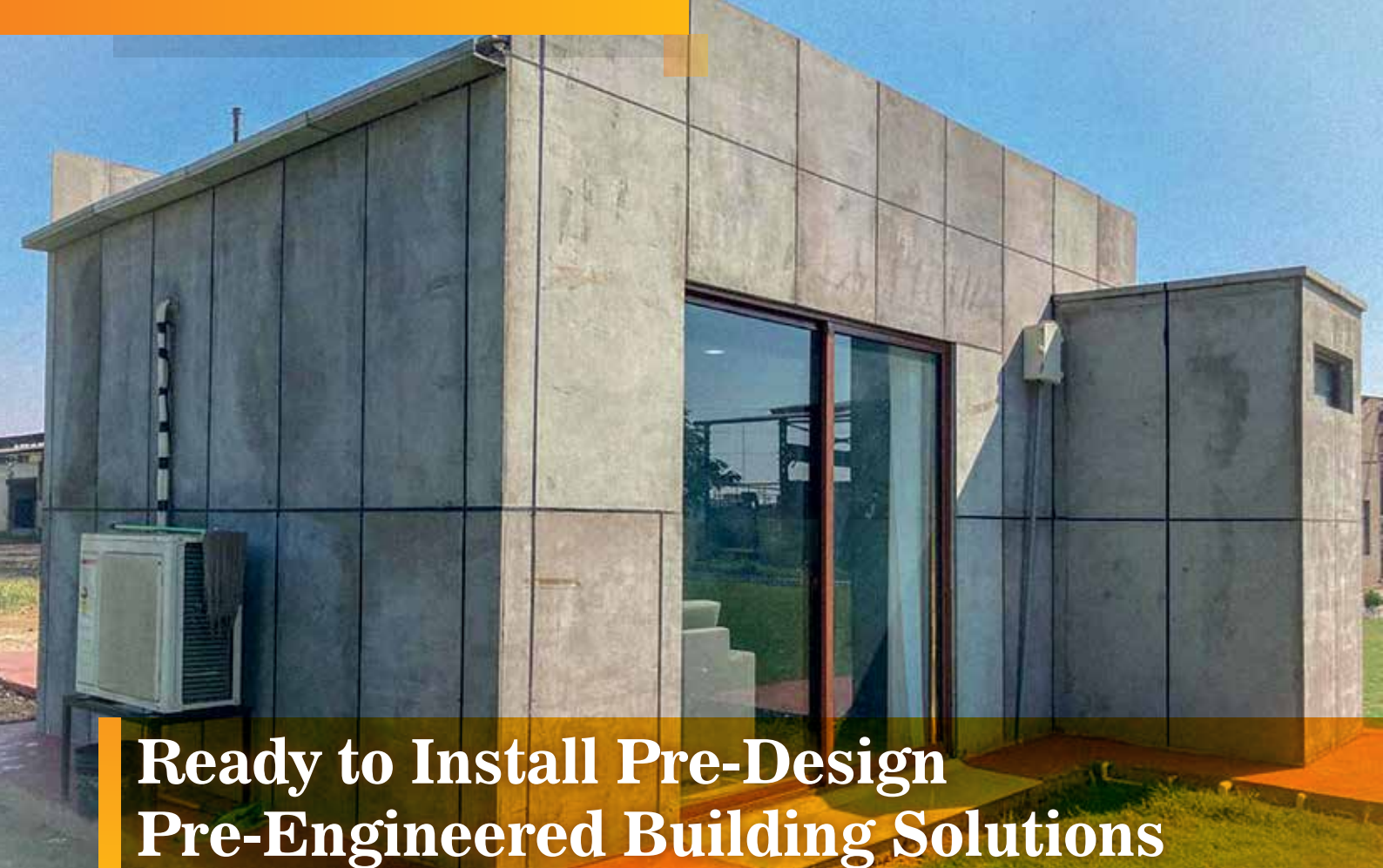
### CERTIFICATION



### PLACEMENT







## Ready to Install Pre-Design Pre-Engineered Building Solutions

Do-it-Yourself Kit Homes is a fast picking up market in India. The High Quality Galvastrong Steel Kit and Non Steel Kits are available so the Engineers within you can build your own Roof top extensions, Coffee Houses and Cabins the Do-it-Yourself Way.

### LGSF Site office



# Pre Designed, Pre Engineered, Ready to use Solutions

## Residential Solutions

Architectural floor plan of a residential house. The overall dimensions are 8190 mm in width and 7180 mm in depth (5680 mm for the main house and 1500 mm for the porch). The layout includes a Kitchen (11'2"x7'10"), Study Room (6'8"x7'10"), Living Room (14'7"x9'11"), Bed Room (11'4"x9'11"), and a Porch (12'x4'11"). There are two Toilets, each 3'7"x7'10". The plan shows various openings: Doors (D1, D2, D3), Windows (W1, W2), and Ventilators (V). A table titled 'OPENING SCHEDULE' provides details for these openings.

OPENING SCHEDULE	
DOOR= D1	=1000x2100mm
DOOR= D2	=900x2100mm
DOOR= D3	=750x2100mm
WINDOW= W1	=1200x1200mm
WINDOW= W2	=1200x1200mm
VENTILATOR= V	=600x600mm

**ARCH PLAN**

Two 3D wireframe models of the house structure. The left model shows a side view of the steel frame, highlighting the vertical columns and horizontal beams. The right model shows a perspective view of the entire steel frame, including the roof trusses and the foundation.

## Commercial Solutions







# INDIA'S 1<sup>ST</sup> LGSF Housing Developer

“लाइट हाउस कंस्ट्रक्शन प्रोजेक्ट देश में हाउसिंग कंस्ट्रक्शन को नई दिशा देगा अगरतला में न्यूजीलैंड की स्टील फ्रेम से जुड़ी टेक्नोलॉजी से घर बनाये जाते हैं, जहां भूकंप का खतरा ज्यादा होता है, वह ऐसे घर बेहतर होते हैं।”

माननीय श्री प्रधानमंत्री नरेंद्र मोदी



#### MITSUMI HOUSING PVT. LTD.

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CIN No: U45209GJ2018PTC101256