Advantage of Habinest over RCC or MS Structural Housing Solutions:

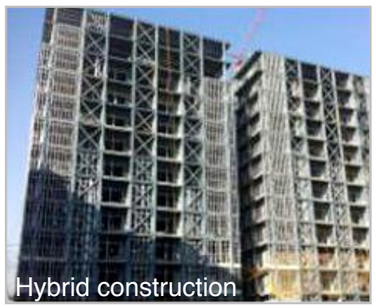
Solution parameters:	Brick & Motor/ RCC Housing	MS/Tubular Structural Housing	HabiNest
Construction duration for any basic Multistorey Building	1 year (approximately)	5 Months (approximately)	5 Months (approximately)
Quality control	Difficult to have control on site control workmanship	Difficult to have control on site Welding Quality	Factory made fabrication, High quality control
Resource engagement	Multiple sourcing of resources and solutions (Material & Manpower)	Single point solution	Single point solution
Maintenance	Low	High (corrosive structure)	Low (galvanized structure)
Strength/Weight ratio	Low	Low	High
Requirement of soil condition	High SBC (Soil bearing capacity)	High SBC required	Low SBC also acceptable

Applications:


Medical buildings


Residential


Commercial


Hybrid construction


Educational buildings


Armed forces

Call to action line: Website and Helpline no.

Toll free 1800 108 8282 I nest-in@tatasteel.com I www.nestin.co.in

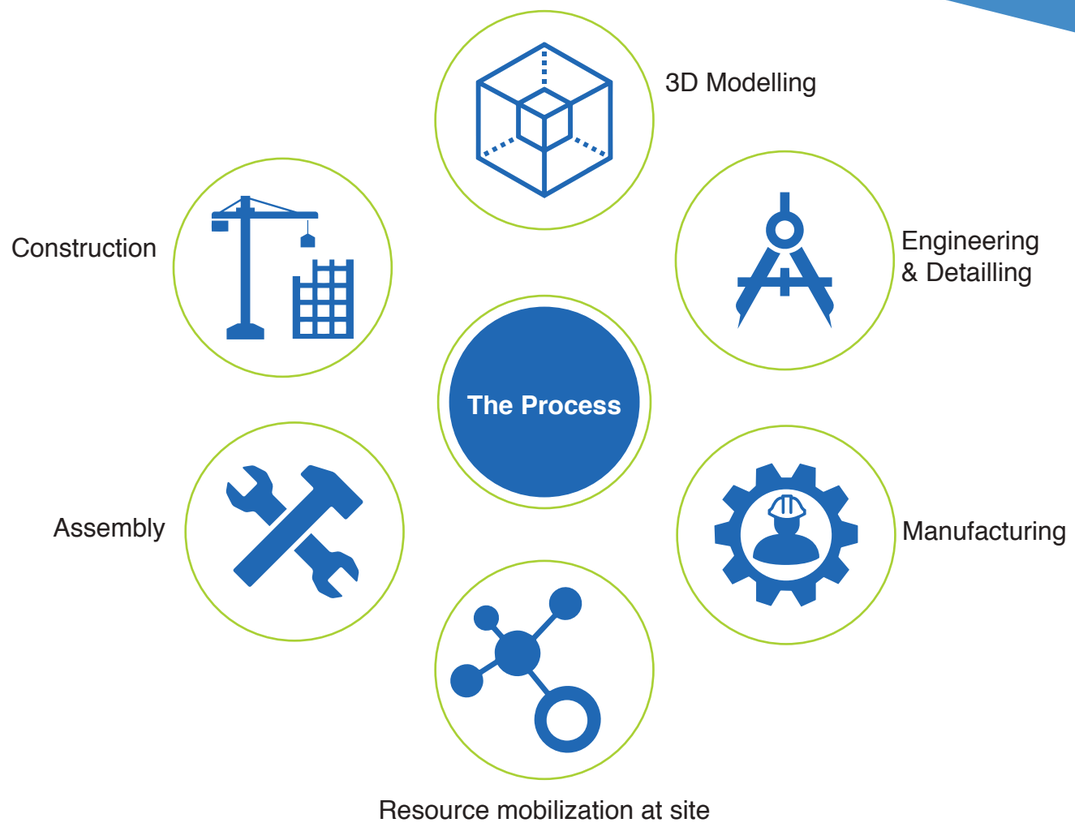
HabiNest
A Tata Steel Solution

HABINEST MULTI-STOREY

What is HabiNest?

Habinest is a unique construction solution designed for Indian customers from the house of Tata Steel. This one-stop turnkey construction solution is developed with the combined effort of Tata Steel's Global R&D team India and Europe.
In simple words Habinest is 'A light gauge steel construction solution, to build mass housing, offices, community centres, cafeteria, shops, schools and farmhouses'.
The construction solution is completely hassle-free, affordable as well as sturdy and of good quality.

Building Process:



New state-of-the-art technology for Multi-storey buildings:

Unique Technical Benefits over “Dipple Click” or other LGSF Solution

High Precision:

The sections are manufactured using **Centrally Numerical Control (CNC)** automatic Roll Forming machine with very high precision, Steel frames will be consistently accurate to within ±0.5mm every time. Assembly errors are also minimized as fastener holes are pre-punched.
Label references are printed on each steel member for quick and easy assembly.

High Structural Stability:

High strength to weight ratio. Due to low weight, significant reduction in design earthquake forces. Here chances of progressive collapse are marginal due to highly ductile and load carrying nature of closely spaced studs/joists. Blocking of Trusses is used for better positioning and stability.

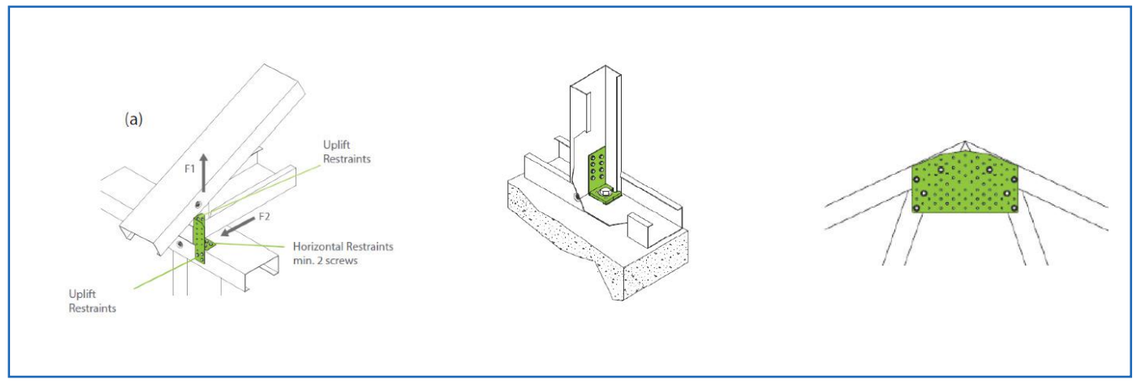
Roof trusses can be virtually of any shape or profile for residential building.
Ex. Two way Slope, Four way Slope etc.

No structural reliance needed on wall boards:

In other LGSF solutions trusses are placed on complete wall sections which consist of steel and wall board also. As Wall Boards are not designed to support structural loads, in this solution all trusses are placed only on structural members.

No Axial Forces on Connection Bolts:

Connections are made with specially made connector plates which is particularly designed so that the bolts experience only shear force, no any tensile or compression forces against which bolts are weak.



Ranges of Walling Options:

Here in Habinest we use Cement Bonded Particle Boards and Ferron Boards also which made of ferro-cements and fixed with Ferron Seal which makes the walls a crack free one.

Load Bearing Wall Surface:

The wall surface can be used to hang and fix things (AC, TV etc) as needed by the method of screwing.

Features and Benefits:

1 **Quality structures:**
Our buildings are manufactured to very tight tolerances. They have a superior strength-to-weight ratio. LGSF structures can be engineered to withstand extreme loads such as 240km/h winds, zone IV seismic forces under the International Building Code and 3 feet of snow loading. Furthermore, our factory based manufacturing environment consistently delivers superior quality standards through rigorous control of the whole construction process.

2 **Use of cutting edge technology:**
Nest In uses proprietary software for design of light steel structures. All the walls, floor joists, roof truss, etc. are detailed to the last millimetre showing the position of the steel sections, their sizes and even the point where one member would be connected to the other.

3 **Less weight, greater recyclability:**
light steel reduces waste and subsequently lowers waste disposal and removal costs. Our structural components are fabricated to exact specifications, thereby reducing the amount of excess material. Any waste generated is recycled in the production centre. Steel is 100% recyclable, hence does not contribute to depletion of natural resources or degradation of environment

4 **Dimensional accuracy:**
Small tolerances can be achieved and maintained within the module interior and in the sizing and positioning of openings. This leads to ease and accuracy of fit-out in a production environment

5 **Safer construction:**
Modular construction sites have proved to be significantly safer than traditional sites because of the more controlled operations and less site labour.

6 **Use on infill sites:**
Modules are useful in small urban infill sites, particularly where it is uneconomical to build because of problems of disturbance and site location.

7 **Light weight:**
Modular construction is about 30% of the weight of conventional masonry construction, leading to reduced foundation costs.

8 **Insect Damage Resistant:**
Steel is also impervious to termites. Since steel is not a food source for insects such as termites, structures built with LGSF technology provide greater resistance against termite damage than structures built with traditional materials, such as wood.

9 **Expeditious Construction:**
Time taken for construction can be reduced by up to 50% using modular building techniques, which translates into earlier return on investment.

10 **Seismic Resistant:**
Steel structures are supremely robust, which means that they are more resistant to seismic loads than conventional buildings and more than meet international standards for every seismic zone.