



# BuildPro

## Residential

Multistorey LGS apartments. G+1 to G+5.

Engineered for RERA. Certified for PMAY.

**G+5**

Max 6 storeys

**8 weeks**

Per floor

**₹850+**

Per sqft

**PMAY**

AHP eligible

Fixed price. Fixed timeline. IS-code certified.

**G+3 in 10 months.**

**RERA timeline guaranteed.**

MME BuildPro

**Every unit identical.**

**Factory CNC precision.**

MME BuildPro

**PMAY AHP eligible.**

**Auto milestone certs.**

MME BuildPro

# 02

## Why LGS+HRS Wins in Every Apartment Block

India needs 72 million homes. Most developers build in RCC — and lose 12–18 months on every project to curing, re-curing, and corrections.

MME BuildPro changes the economics: floor-by-floor in 8 weeks, no curing waits, identical units from a CNC factory, and a SiteIQ dashboard that generates PMAY milestone certs automatically.

From plot to possession in 10 months (G+3). Your RERA date holds. Your buyers stay.



### CONSTRUCTION SPEED

MME BuildPro: 8 weeks per floor. A G+3 block completes in 10 months total including fit-out.

RCC: 18–28 months for the same G+3. Foundation curing alone takes 6–8 weeks.

#### 10 months (G+3)

*vs 22 months RCC*

### COST CERTAINTY

MME issues a fixed-price EPC contract on Day 1. No provisional sums. No steel price escalation clause. No concrete over-pour.

RCC contractors add 15–25% provisional sums. On a ₹10 Crore project: ₹1.5–2.5 Crore of hidden uncertainty.

#### Fixed price Day 1

*No escalation*

### RERA COMPLIANCE

RERA requires developers to commit a completion date to buyers before selling. A fixed-price, fixed-timeline MME BuildPro contract makes that commitment bankable.

SiteIQ generates real-time milestone certificates — accepted by RERA portals in Tamil Nadu.

#### RERA date guaranteed

*SiteIQ certified*

### PMAY AHP ELIGIBILITY

LGS technology is GHTC-India listed. Technology Innovation Grant: ₹4 Lakhs per unit above standard PMAY assistance. SiteIQ auto-generates SHA-256 certified PMAY milestone certificates.

Most RCC contractors lose 3–4 weeks per milestone on documentation alone.

#### ₹4L/unit grant available

*Auto milestone certs*

# STRUCTURAL SYSTEM — LGS + HRS HYBRID FRAME

Load-bearing LGS to G+3. LGS+HRS hybrid for G+4 and G+5. IS 800:2007 designed throughout.

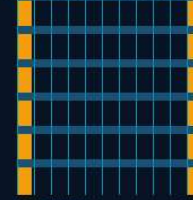
## STRUCTURAL SYSTEM DIAGRAM

### G+3 LGS LOAD-BEARING



LGS WALL  
LOAD  
BEARING

### G+5 HRS+LGS HYBRID



HRS LGS INFILL  
COL + HRS FRAME

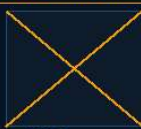
HRS COL

### COMPOSITE FLOOR SYSTEM



FC1000 topping 65mm  
LGS joists  
Composite floor

### LATERAL BRACING



At staircase cores  
and corners.  
IS 1893 seismic  
compliance  
per zone.

LIFT SHAFT: HRS frame with LGS cladding. Fully integrated into BuildPro standard

## WALL SYSTEM

G+1 to G+3

LGS C140 load-bearing studs at 400mm centres. FC600 fill (0.14 W/mK thermal, 55dB acoustic, 60-min fire). IS 2185 Part 4. Handles full dead + live + wind + seismic loads to 5 storeys.

## WALL SYSTEM

G+4 to G+5

HRS RHS/UB primary frame (IS 2062 E350). LGS C89/C140 infill panel — non-structural, provides all thermal + acoustic + fire performance. HRS carries all vertical and lateral load.

## FLOOR SYSTEM

All heights

C200/C250 LGS joists at 400mm. Composite LGS trimdek deck. FC1000 topping 65mm — density monitored by SiteIQ per pour. System dead load: 1.8-2.2 kN/m<sup>2</sup> vs RCC 5.0+ kN/m<sup>2</sup>.

## FOUNDATION

Benefit

30-40% lighter superstructure reduces foundation load. Smaller RC pad footings — saves ₹5-20 Lakhs on foundation depending on soil and storeys. Hold-down bolts cast into slab.

## FIRE RATING

IS 3809

FC600 walls: 60-minute fire rating. FC1000 composite floor: 90 minutes. LGS coated with intumescent paint at all structural connections — 90 minutes. Full IS 3809 compliant package.

## SEISMIC

IS 1893

LGS is inherently ductile — absorbs seismic energy without brittle failure. HRS K-brace or X-brace at each core. Tested to IS 1893 Zone II and Zone III. NBF compliance documentation from DesignAI.

## THE MME BUILDPRO RESIDENTIAL RANGE

Four building typologies. Every urban residential need. One structural system.

BR — 1

### ROW HOUSE BLOCK

G+1 · 4-8 units · ₹1.5-4 Cr total project

Ground + 1 floor · 2-3BHK per unit · Individual or shared foundations · Internal staircase

The entry point for developers building 4-8 units. LGS load-bearing wall system throughout — no primary frame needed. Each unit 700-1,200 sqft. Ideal for landowners developing row housing on narrow pl...

**IDEAL FOR:** Small developers · Landowners · Row housing · Urban plots

BR — 2

### WALK-UP APARTMENT

G+2 / G+3 · 9-18 units · ₹4-12 Cr total project

Ground + 2 or 3 floors · 2-3BHK per floor · 3-6 units per floor · Common staircase · No lift required

The core product for the Chennai suburban developer. LGS load-bearing wall system to G+3. FC600 walls for thermal and acoustic separation. SiteIQ generates PMAY milestone certificates automatically. 1...

**IDEAL FOR:** Mid developers · PMAY AHP · Cooperative societies · Urban apartments

BR — 3

### MID-RISE BLOCK

G+4 / G+5 · 20-40 units · ₹12-30 Cr total project

Ground + 4 or 5 floors · 4-8 units per floor · HRS+LGS hybrid frame · Lift standard · 2-3 staircases

The full-scale developer product. HRS primary frame carries vertical and lateral loads. LGS infill panels provide thermal, acoustic, and fire performance without contributing structural load. 40% ligh...

**IDEAL FOR:** Developers · Housing projects · IT corridor apartments · Premium residential

BR — 4

### PMAY AHP CLUSTER

G+3 · 24-48 EWS units · ₹5-12 Cr govt-funded

Ground + 3 floors · 6-12 EWS/LIG units per floor · Government-partnered development · Full PMAY documentation

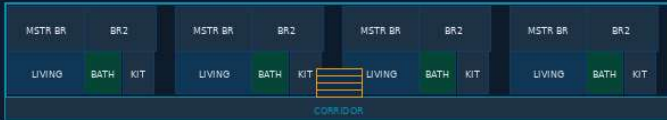
LGS technology is GHTC-India listed — qualifying for the ₹4 Lakh Technology Innovation Grant per unit above standard PMAY central assistance. SiteIQ auto-generates SHA-256 certified milestone certific...

**IDEAL FOR:** PMAY AHP contractors · Housing boards · TNUHDB · ULBs · EWS/LIG housing

## DESIGN GALLERY — FLOOR PLANS & BUILDING ELEVATIONS

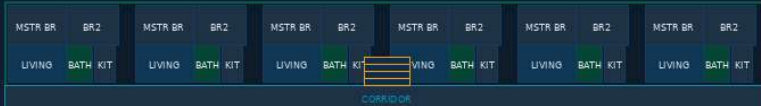
*Illustrative layouts. DesignAI generates your custom plan from plot dimensions and brief.*

### TYPICAL FLOOR PLAN — 4-UNIT PER FLOOR (2BHK)



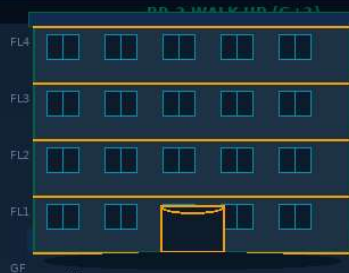
4 × 2BHK per floor · 800–1,000 sqft each · Common corridor · Central staircase

### TYPICAL FLOOR PLAN — 6-UNIT PER FLOOR (2BHK, PMAY EWS)



6 × EWS/LIG per floor · 300–400 sqft each · PMAY AHP standard · SitelQ, Australia

### BUILDING ELEVATION — G+3 WALK-UP vs G+5 MID-RISE



Height: ~15m  
Units: 9–16  
Foundation: Pad  
Lift: Not required  
Timeline: 10 months



Height: ~22m  
Units: 24–40  
Foundation: Raft/Pile  
Lift: Standard  
Timeline: 15 months

### SYSTEM KEY

#### FC600 WALLS

Thermal 0.14 W/mK · Acoustic 55dB Rw · Fire 60min · Composite deck + topping · Dead load 1.8–2.2 kN/m² · LVL 400mm · G550 HDGI · IS 811 compliance

#### FC1000 FLOOR

#### LGS STUDS

#### HRS FRAME

6H-4/G+5 · IS 800:2007 · Seismic per IS 1893

DesignAI generates your complete building — floor plans, structural calculations, IS code certs, CNC cut files — in 48 hours

Input: plot dimensions + number of units + budget + local wind/seismic zone.

Output: 3 design options, SE stamp, foundation specification, BIM-to-CNC production files.

designnai.mme.build · Upload your plot · Get 3 building designs in 48 hours · Free consultation

#### FLOOR-BY-FLOOR BUILD

Each floor is a self-contained production and erection cycle — factory produces, site erects, services follow. Revenue-funded construction is possible from Ground Floor onwards.

#### IDENTICAL UNITS

Every apartment is CNC-produced to the same BIM model. No contractor variation between unit 1 and unit 36. Snag rate approaches zero.

#### EXPANDABLE VERTICALLY

Phase 2 floors bolt onto the existing structure if designed for it from Day 1. Add 2 floors in Year 3 without demolishing what stands.

All plans can be mirrored, rotated, and customised · IS 875 wind zone + IS 1893 seismic zone applied for every location

## THE BUILD PROCESS — FLOOR BY FLOOR

*G+3 in 10 months. Every floor is an 8-week production and erection cycle. No curing waits.*

### G+3 SAMPLE TIMELINE — 10 MONTHS FROM GROUND TO POSSESSION

01

MONTH 1

#### Site Preparation + Foundation

Soil investigation → DesignAI foundation design → RC M25 pad footings or raft (as specified). Hold-down bolts cast in. Ground floor slab poured and cured.

02

MONTH 2

#### Ground Floor Frame Erection

Chennai factory delivers bundled QR-labelled components for Ground Floor. MME crew erects LGS wall frame + composite deck in 3 weeks. FC600 wall pour monitored by SiteIQ IoT. FC1000 floor pour.

03

MONTH 2-3

#### Repeat: 1st Floor

Factory delivers 1st floor bundle while GF services proceed. Parallel workflow: site assembly + factory production. SiteIQ alerts resolve within 4 hours.

04

MONTH 2-8

#### Floor-by-Floor Cycle

Each floor: 3-4 weeks structural + 2-3 weeks FC pour and cure + 1-2 weeks services rough-in. Factory is always one floor ahead of site. No delays waiting for components.

05

MONTH 8-9

#### Services + Finishes

All floors: electrical, plumbing, data. Internal gypsum + paint. Flooring. Kitchens and bathrooms. External render or cladding. Lift installation (G+4+).

06

MONTH 9

#### SiteIQ Digital Handover

Automated CV defect scan. Snag list resolved in 48hr SLA. Structural certificate. QR manifest. IS code compliance certificate. PMAY milestone certs (if applicable).

07

MONTH 10

#### RERA Inspection + Possession

RERA completion certificate based on SiteIQ data. Buyers receive possession on the committed RERA date. Full digital handover pack including 10-year structural warranty.

**MME BuildPro delivers G+3 in 10 months, G+5 in 15 months — guaranteed. Fixed completion date in every EPC contract.**

*RERA commitment is bankable because the timeline is guaranteed. SiteIQ data is the audit trail.*

## RERA & PMAY ADVANTAGES

MME BuildPro is engineered specifically for India's two most important regulatory frameworks.

### RERA COMPLIANCE

#### Fixed Price + Fixed Date

Every MME BuildPro EPC contract carries a guaranteed completion date and a fixed price with no escalation clause. This is the foundation of a credible RERA commitment to buyers.

#### SiteIQ Timeline Evidence

SiteIQ logs every construction event with timestamp and SHA-256 hash. If a RERA dispute arises, you have an immutable, third-party-verifiable audit trail of every milestone.

#### Monthly Progress Certificates

DesignAI + SiteIQ auto-generate monthly construction progress certificates in the format required by TNRERA. These can be submitted digitally — no manual documentation.

#### Consistent Unit Quality

Every apartment unit is CNC-produced to the same BIM model. No variation between Unit 1A and Unit 24B. Buyer complaints about quality variation — the leading RERA complaint — are structurally eliminated.

#### No Delay from Material Supply

MME controls its own steel production at the Chennai factory. No waiting for contractor procurement. The production schedule is locked before the contract is signed.

### PMAY AHP COMPLIANCE

#### GHTC-India Listed Technology

LGS+FC is listed under MoHUA's Global Housing Technology Challenge — India (GHTC-India) basket of approved innovative construction technologies. This is the gateway to the Technology Innovation Grant.

#### Technology Innovation Grant

₹4 Lakh per unit above the standard ₹1.5 Lakh central PMAY assistance. On a 48-unit AHP project, this is ₹1.92 Crore of additional funding. No RCC contractor can access this — only alternate technology builders.

#### Auto Milestone Certificates

PMAY disburses in 5 milestone stages. Each requires documentation signed by SE + client + contractor. SiteIQ auto-generates SHA-256 certified certificates. Disbursement cycle: 48 hours vs 3-4 weeks manual.

#### DigiLocker-Ready Documents

All SiteIQ certificates are DigiLocker-compatible. TNUHDB and ULBs accept digital certificates — removing the physical document submission queue that delays most AHP contractors by 6-8 weeks per disbursement.

#### IS 2185 Part 4 FC Certification

FC600 foam concrete fill is certified to IS 2185 Part 4. This is the specific IS code required by PMAY guidelines for alternate walling materials. LGS+FC600 passes all PMAY technical compliance checks.

Quality Risk: ZERO. MME's fixed timeline removes the most common cause of RERA. ₹1.92 Crore additional funding. No RCC contractor qualifies.

### SITEIQ MILESTONE AUTOMATION — HOW IT WORKS



SHA-256 hash: every certificate is legally non-repudiable. TNUHDB, banks, and RERA portals accept SiteIQ certificates directly.

### ₹4L × UNITS

Technology Innovation Grant per EWS unit. Applies to every PMAY AHP project built with GHTC-listed technology.

### 48 HRS

Milestone disbursement cycle with SiteIQ vs 3-4 weeks manual. On a 48-unit project: 5 stages × 2 weeks saved = 10 weeks of cashflow freed.

### ZERO PENALTY

Fixed price + fixed date = zero RERA penalty exposure. The most common developer liability: completely eliminated.

## FEATURES & SPECIFICATIONS

Every MME BuildPro project is engineered to multistorey residential standard. Full IS code compliance throughout.

### STRUCTURAL SYSTEM

#### Frame (to G+3)

HDGI G550 C140 LGS load-bearing studs @ 400mm. IS 811. Z275 galvanised. HRS moment connections at floor-wall junction.

#### Frame (G+4/G+5)

HRS RHS columns (IS 2062 E350). UB beams. LGS infill C89/C140 non-structural. K-brace or X-brace at core per IS 1893.

#### Floor system

C200/C250 LGS joists at 400mm. LGS composite trimdek. FC1000 topping 65mm, monitored by SiteIQ IoT per pour.

#### Foundation

RC M25 pad footings (G+1-3) or raft (G+4-5). Hold-down bolts per IS 800. Foundation load 30-40% lower than RCC equivalent.

#### Design codes

IS 800:2007 · IS 811 · IS 801 · IS 875 Pts 1-3 · IS 1893 · IS 456 (foundation). SE-stamped calculations every project.

### WALL & ENVELOPE

#### FC600 wall fill

600 kg/m<sup>3</sup> ·  $\geq 3.5$  MPa · Thermal 0.14 W/mK · Acoustic 55dB Rw · Fire 60 min · IS 2185 Part 4. IoT density monitoring.

#### External finish

FC board 9mm + weather-coat render. Brick-look or stone-look finish available. Balcony: HDGI railing standard.

#### Internal finish

Gypsum board 12.5mm + skim. Bathroom: FC board + ceramic tile. Ceiling: gypsum board painted.

#### Party wall

Double LGS stud party wall: 55dB Rw acoustic — exceeds NBC 2016 minimum 45dB requirement for apartments.

### SERVICES + SAFETY

#### Electrical

3-phase supply per block. Individual MCB + ELCB per apartment. LED lighting provision. EV charging provision (G+4+).

#### Plumbing

CPVC hot+cold per unit. Concealed runs in FC wall chase. Individual water meter. Common sump + overhead tank.

#### Fire safety

Dry riser (G+3+). Fire extinguisher per floor. FA panel per block. FC600 60-min compartmentation. IS 2189 compliant.

#### Lift (G+4+)

Standard 6-person passenger lift. HRS lift shaft. Machine room on roof or MRL option.

### SUSTAINABILITY

#### Recyclability

100% steel recyclable. BIM-to-CNC eliminates all site cutting waste. Zero concrete over-pour.

#### Thermal performance

FC600 0.14 W/mK reduces residential AC load 20-35% vs RCC. ECBC compliance documentation from DesignAI.

#### Lighter structure

30-40% lighter superstructure reduces embodied carbon by ~25% vs equivalent RCC block.

#### Green rating

GRIHA 3-star documentation auto-generated by DesignAI. Supports affordable housing green scheme incentives.

## PRICING GUIDE

Per sqft EPC rates, per-unit estimates, and total project costs. All prices ex-GST, ex-foundation.

### EPC RATE SCHEDULE — PER SQFT (LGS SYSTEM)

| Project Type                         | LGS Frame ₹/sqft | LGS+FC ₹/sqft | Full TurnKey ₹/sqft | Notes                                                  |
|--------------------------------------|------------------|---------------|---------------------|--------------------------------------------------------|
| EWS/LIG residential (300-400 sqft)   | ₹850-950         | ₹1,050-1,200  | ₹1,400-1,600        | PMAY AHP rate. Technology Innovation Grant applicable. |
| LIG/MIG residential (600-800 sqft)   | ₹950-1,050       | ₹1,200-1,350  | ₹1,600-1,850        | Walk-up apartment standard. IS 2185 Pt FC.             |
| MIG/HIG residential (900-1,200 sqft) | ₹1,050-1,150     | ₹1,300-1,500  | ₹1,750-2,100        | Premium finish. GRIHA 3-star documentation.            |
| G+4/G+5 HRS+LGS hybrid               | ₹1,100-1,300     | ₹1,350-1,600  | ₹1,900-2,400        | HRS primary frame included. Lift, external cladding.   |
| PMAY AHP (EWS 300 sqft, bulk)        | ₹850             | ₹1,050        | ₹1,400              | Volume discount >24 units: ₹50-80/sqft reduction.      |
| Row house block (G+1, 2BHK)          | ₹950-1,050       | ₹1,200-1,400  | ₹1,700-2,000        | Individual foundations. Internal staircase.            |

### TOTAL PROJECT ESTIMATES — WHAT DEVELOPERS ACTUALLY BUILD

| Project                      | Build Cost  | Timeline  | Notes                                             |
|------------------------------|-------------|-----------|---------------------------------------------------|
| BR-1 Row House G+1 (6 units) | ₹1.8-2.5 Cr | 6 months  | 6 × 900 sqft 3BHK. TurnKey. Foundation extra.     |
| BR-2 Walk-up G+3 (12 units)  | ₹4.5-7 Cr   | 10 months | 12 × 900 sqft 2BHK. TurnKey. Lift not required.   |
| BR-3 Mid-rise G+5 (30 units) | ₹15-22 Cr   | 15 months | 30 × 950 sqft 2BHK. TurnKey+HRS. Lift included.   |
| BR-4 PMAY AHP G+3 (48 EWS)   | ₹6-9 Cr     | 10 months | 48 × 350 sqft EWS. TurnKey. PMAY grant: ₹1.92 Cr. |

### PMAY TECHNOLOGY INNOVATION GRANT CALCULATOR

12 units

₹48L grant

Technology Innovation Grant

24 units

₹96L grant

Technology Innovation Grant

48 units

₹1.92 Cr grant

Technology Innovation Grant

96 units

₹3.84 Cr grant

Technology Innovation Grant

₹4 Lakh per EWS unit · GHTC-India listed technology · Available to all MME BuildPro PMAY AHP projects

### EVERY MME BUILDPRO PROJECT INCLUDES:

- ✓ DesignAI: 3 building design options, structural calculations, IS code compliance reports
- ✓ Fixed-price EPC contract — price agreed Day 1, guaranteed to completion, no escalation
- ✓ Structural engineer stamp + IS code compliance certificate (IS 800, IS 811, IS 875, IS 1893)
- ✓ SiteIQ live construction dashboard + daily client WhatsApp updates
- ✓ QR traceability manifest — every steel component logged from Chennai factory to structural position
- ✓ PMAY milestone auto-certificates (if applicable) · 10-year structural warranty · Digital handover pack

# G+3 in 10 months. Your RERA date guaranteed.

Start with a free DesignAI building plan.

## CALL US

**+ 91 [CEO mobile]**

Gangaivendan Padmanabhan  
Co-Founder & CEO

## EMAIL US

**apartments@mme.build**

For project quotations,  
design consultations

## DESIGN ONLINE

**designai.mme.build**

Upload your plot  
Get 3 designs in 48 hours

## VISIT OUR FACTORY SHOW SITE

MME BuildPro Show Site · SIPCOT Sriperumbudur, Chennai

See live G+2 display building on site · Factory tour · Saturday & Sunday 10am-5pm

*We committed a RERA date we could not keep with an RCC contractor. We switched to MME BuildPro. We delivered 18 units 3 weeks ahead of schedule. Not a single buyer complaint about quality.*

— Developer, G+3 walk-up, Tambaram, Chennai, 2025

## G+5

Max height

## 10 months

G+3 completion

## PMAY

AHP eligible

## ₹4L/unit

Innovation grant

### BR-1 ROW HOUSE

**₹1.5-4 Cr**

Total project EPC

### BR-2 WALK-UP

**₹4-12 Cr**

Total project EPC

### BR-3 MID-RISE

**₹12-30 Cr**

Total project EPC

### BR-4 PMAY AHP

**₹5-12 Cr**

Total project EPC

**FIXED PRICE · FIXED DATE · 10-YEAR WARRANTY · IS CODE CERTIFIED · SITEIQ MONITORED · RERA COMPLIANT**

## PMAY AHP: TECHNOLOGY INNOVATION GRANT AVAILABLE

MME BuildPro is GHTC-India listed — qualifying your AHP project for ₹4 Lakh per EWS unit above standard PMAY assistance. SiteIQ auto-generates SHA-256 milestone certificates. DigiLocker-compatible. Accepted by TNUHDB and all South India ULBs.

## MME BUILDPRO RESIDENTIAL · METAL MATRIX ENGINEERING PVT. LTD.

SIPCOT Sriperumbudur, Chennai, Tamil Nadu · apartments@mme.build · designai.mme.build

IS 800:2007 · IS 811 · IS 875 · IS 1893 · IS 2185 Pt 4 · IS 3809 · All structures IS-code certified

Prices ex-GST, ex-foundation · Site-specific conditions apply · PMAY grant subject to government approval