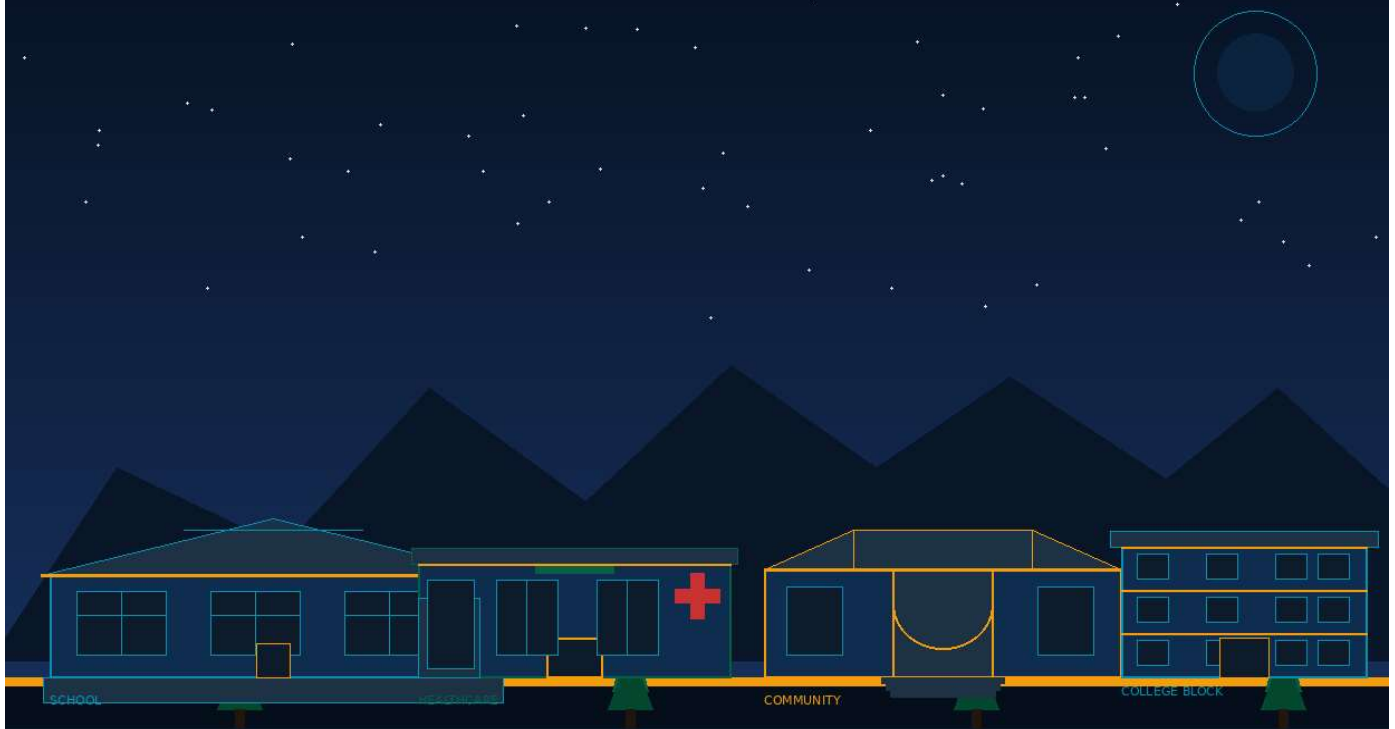




InstitutePro

Building Programme

Schools · Hospitals · Community Buildings · Govt Facilities.

NBC 2016 compliant. GeM listed. PMAY eligible. 8-12 weeks.

8 weeks

Classroom block ready

₹8L

Per classroom module

GeM

Direct procurement

PMAY

Tech grant eligible

Non-combustible. Fire-rated. Accessible. IS-code certified.

Build in a term break.

Open when students return.

MME InstitutePro

Non-combustible.

Fire-rated for children.

MME InstitutePro

GeM listed.

No tender under ₹25L.

MME InstitutePro

02

Why Public Buildings Need a Better Method

India's primary schools and health centres are built in the same way as they were in 1975. RCC contractors, 12–18 month timelines, no fire compliance, no accessibility ramp, and structures that need repair in Year 8.

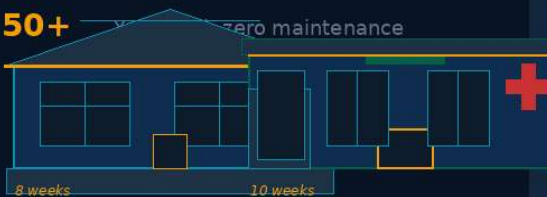
Children attend class in a building under construction for a second year. Patients wait outside a PHC that is six months overdue.

MME InstitutePro ends this. A classroom block in 8 weeks. A PHC in 10 weeks. NBC 2016 compliant on Day 1. Non-combustible. Fire-rated. Accessible. Built to last 50 years without maintenance.

1 term Build + open a classroom block

₹4L/unit PMAY Innovation Grant

50+ years zero maintenance



EDUCATION

Classroom blocks · Lab blocks · Libraries · Hostels · Admin blocks · Canteens

School built in 8 weeks. Labs and libraries in 10. Identical modules replicated across a campus or across 20 government schools in a district — same CNC cut files, same quality, guaranteed.

IS 1641 fire compliance. NBC 2016 Part 3 educational occupancy. Ramp + accessible toilet as standard.

Build time with MME InstitutePro:

HEALTHCARE

Primary Health Centres · CHC blocks · OPD blocks · Ward blocks · Diagnostic centres

PHC in 10 weeks. Ramp access and accessible toilet standard. FC600 walls are non-absorbent — hygienic, mould-proof, easy to disinfect. IS 3809 fire rated. NBC 2016 healthcare occupancy compliant.

PMAY Technology Innovation Grant: ₹4 Lakh per community health unit.

Build time with MME InstitutePro:

COMMUNITY

Community halls · Panchayat bhavans · Anganwadis · Crèches · Police outposts

GeM catalogue: every standard module is listed. Direct orders under ₹25 Lakhs without tender — a community hall at ₹18–22L is a direct order. PMAY AHP amenity buildings funded alongside housing clusters.

Built and operational in one construction cycle.

Build time with MME InstitutePro:

CORPORATE / GOVT

Industrial canteens · Training centres · Medical bays · Worker dormitories · TIDCO/SIPCOT facilities

MME's own Chennai factory is the proof of concept — built using the same InstitutePro system. SIPCOT Sriperumbudur manufacturer clients can inspect a live building 5 minutes from the industrial zone.

Fixed-price EPC. 8-week structural completion guarantee.

Build time with MME InstitutePro:

COMPLIANCE & SAFETY STANDARDS

Institutional buildings carry a higher duty of care. MME InstitutePro meets every requirement.

NBC 2016
Part 3

EDUCATIONAL & HEALTHCARE OCCUPANCY

National Building Code 2016 Part 3 defines minimum egress widths, travel distances, staircase dimensions, and occupant load calculations for educational and healthcare buildings. DesignAI auto-checks every floor plan against Part 3 occupancy requirements and flags any non-compliance before the drawing is issued.

IS 1641 &
IS 3809

FIRE RESISTANCE RATING

IS 1641 requires fire compartmentation and automatic detection in educational institutions. IS 3809 specifies minimum fire resistance periods for structural elements. FC600 walls: 60 minutes. FC1000 composite floor: 90 minutes. LGS connections with intumescent paint: 90 minutes. The complete InstitutePro package is IS 3809 compliant as standard.

IS 2189

FIRE ALARM & DETECTION

IS 2189 requires automatic fire detection and alarm systems in institutional buildings over 15m height and all healthcare occupancies. MME InstitutePro includes conduit provision and detector point provision as standard. Complete FA panel installation available as an upgrade — integrated with SiteIQ for ongoing monitoring.

NBC 2016
Part 3 §5.2

UNIVERSAL ACCESS & ACCESSIBILITY

NBC 2016 Part 3 Section 5.2 requires accessible entrances, ramps (1:12 gradient), accessible toilets (1800mm turn radius), and tactile floor indicators in all public institutional buildings. Every MME InstitutePro DesignAI output includes these as standard — ramp at main entrance, accessible toilet block, handrails at all changes of level.

IS 1893
Zone II/III

SEISMIC DESIGN

Schools and hospitals are Category II (Important) structures under IS 1893 — requiring Importance Factor $I=1.5$ applied to seismic design forces. LGS is inherently ductile and performs well under seismic loading. HRS bracing designed to IS 1893 Zone II (Chennai) and Zone III (Coimbatore, Tiruchirappalli) as required by site.

GeM &
PMAY

GOVERNMENT PROCUREMENT

All standard InstitutePro modules are listed in the Government e-Marketplace (GeM) catalogue with IS code certificates. Direct orders under ₹25 Lakhs require no tender — a community hall at ₹18-22L is placed as a direct order. LGS+FC is GHTC-India listed — qualifying for PMAY Technology Innovation Grant of ₹4 Lakhs per community/PHC unit.

THE MME INSTITUTE PRO RANGE

Four typologies. Every institutional need. One structural system.

IP — 1

CLASSROOM MODULE

600-900 sq ft • ₹8-14 Lakhs

1 classroom (40 students) • 1 toilet block • Veranda • Accessible ramp

The replicable unit of South India's school infrastructure. One classroom with its own toilet block, covered veranda, accessible entrance. DesignAI generates the IS-code structural drawing and CPWD specifi...

IDEAL FOR: Government schools • NGOs • CSR programmes • GeM direct order

IP — 2

SCHOOL BLOCK

3,000-6,000 sq ft • ₹40-90 Lakhs

6-12 classrooms • Staff room • Library/lab option • Toilet block • Staircase (G+1 option)

The full-campus educational building. LGS load-bearing wall system to G+1. 6 classrooms per floor × 2 floors = 12 classrooms in a single block. IS 1641 fire compartmentation between classrooms as standard....

IDEAL FOR: School management • Govt education departments • PMAY AHP schools

IP — 3

HEALTHCARE UNIT

1,200-3,500 sq ft • ₹18-55 Lakhs

OPD (2 consulting rooms) • Waiting • Pharmacy • Lab • Ward (4-8 beds) • Nurse station • Accessible toilet

The standard PHC and CHC building. FC600 walls are non-absorbent and anti-microbial — critical for infection control. Ramp access, accessible toilet, and handrails standard. PMAY Technology Innovation Gran...

IDEAL FOR: TNUHDB • District health departments • NGOs • PMAY AHP amenities

IP — 4

COMMUNITY COMPLEX

2,000-5,000 sq ft • ₹30-75 Lakhs

Main hall (150-350 seats) • Stage/platform • Office rooms • Toilet blocks • Accessible entrance

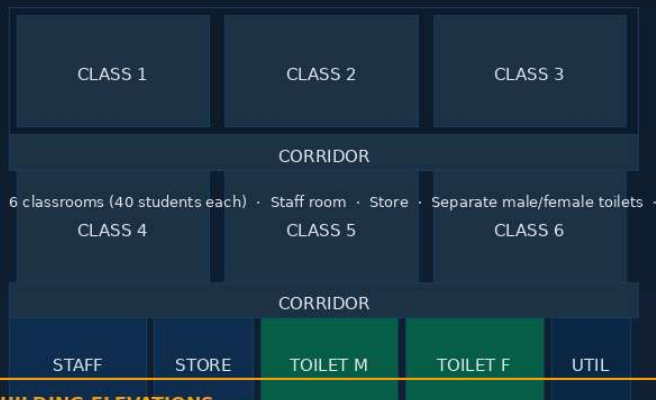
The panchayat bhavan, community hall, and worker welfare centre. GeM catalogue listed — community hall at ₹18-22L is a direct order under the ₹25L threshold (no tender required). Standard module for PMAY A...

IDEAL FOR: Panchayat bodies • PMAY AHP amenities • SIPCOT welfare • GeM procurement

DESIGN GALLERY — FLOOR PLANS & BUILDING ILLUSTRATIONS

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

6-CLASSROOM SCHOOL BLOCK — TYPICAL FLOOR PLAN



BUILDING ELEVATIONS

8 classrooms (Teal) + 4 lab rooms (Green) + admin • Campus complete in 16 weeks

SYSTEM KEY

■ FC600 WALLS

60-min fire · 55dB acoustic · IS 2185 Pt 4

■ LGS FRAME

IS 811 · G550 HDGI · Termite-proof

■ VERANDA

LGS pergola · Standard all types

■ RAMP ACCESS

NBC 2016 55.2 · 1:12 standard

DesignAI generates your complete institutional building – floor plan, structural drawings, IS code compliance certificate, GeM specification sheet, and PMAY documentation – in 48 hours.

QUICK SPEC — ALL INSTITUTEPRO BUILDINGS INCLUDE:

- | | |
|---|--|
| ✓ IS 1641 fire compartmentation between rooms | ✓ NBC 2016 Part 3 occupancy egress widths by DesignA |
| ✓ Ramp at main entrance + accessible toilet (NBC 2016 §5.2) | ✓ IS 3809 60-minute fire-rated walls (FC600) |
| ✓ SitelQ IoT monitoring + digital handover pack | ✓ 10-year structural warranty + SE certificate |

THE BUILD PROCESS — FROM BRIEF TO OPENING

A 6-classroom school block in 8 weeks. A PHC in 10 weeks. A community hall in 8 weeks.

BUILD TIMELINE COMPARISON — 6-CLASSROOM SCHOOL BLOCK

MME InstitutePro: 8 weeks

Traditional RCC: 52+ weeks

Delay cost: 1 year x 240 students = irreplaceable learning.

01

WEEK 1

Site Survey & DesignAI Brief

Soil investigation + plot survey uploaded. DesignAI generates 3 NBC 2016-compliant building options with structural calculations, fire compartmentation layout, ramp design, and toilet block specification in 48 hours.

02

WEEK 1-2

SE Review + Fixed-Price Contract

MME Structural Engineer reviews and stamps DesignAI output. Fixed-price EPC contract issued — price and completion date guaranteed. No provisional sums. Procurement officer receives IS-code certificate before contract signing.

03

WEEK 2

Foundation

RC M25 pad footings to DesignAI specification. Hold-down bolts cast in. Foundation is 30-40% lighter than RCC equivalent — saving ₹1-4 Lakhs on a typical school block. Ground slab poured.

04

WEEK 2-3

Steel Manufacturing at Chennai Factory

CNC roll-formers cut every C-stud, track, joist, purlin, and roof rafter simultaneously. All components QR-labelled by building element. Bundled and dispatched by truck — arrives site on Day 15.

05

WEEK 3-5

Frame Erection + Cladding

LGS wall frames erected in room-by-room sequence. FC600 poured into wall cavities — density monitored by SiteIQ IoT sensor. Roof purlins and zinc-alum sheeting fixed. Building weathertight by Week 5.

06

WEEK 5-7

Services + Accessibility + Finishes

Electrical, data (school) or medical gas provision (PHC). Gypsum board internal. Flooring. Ramp cast at main entrance. Accessible toilet fitted. Signage and tactile floor indicators installed.

07

WEEK 8

Inspection + Digital Handover

SiteIQ automated CV defect scan. IS 1641 fire check. NBC 2016 Part 3 compliance certificate. Ramp gradient verified. Structural certificate. QR component manifest. GeM completion certificate (if applicable). Handover to management committee.

08

WEEK 9

OPENING DAY

Students attend class. Patients register. Community gathers. The building that was a site eight weeks ago is now a functioning institution.

MME InstitutePro: fixed completion date in every EPC contract. The school year does not wait. Nor will we.

If we miss the agreed date, penalty clause applies — only possible because we manufacture our own steel.

GeM, PMAY & GOVERNMENT PROCUREMENT

MME InstitutePro is designed for government procurement from the ground up.

GeM — GOVERNMENT e-MARKETPLACE PMAY

Direct orders under ₹25 Lakhs — no tender required

Every standard InstitutePro module is listed in the Government e-Marketplace catalogue with IS certificates, NBC 2016 compliance statement, and CPWD specification. A community hall at ₹18-22L is a direct order — no tender, no delay.

Udyam MSME and GeM vendor registered

MME holds Udyam MSME registration and GeM vendor status. All orders can be placed through the GeM portal with full GST invoice, IS certificate, and delivery confirmation.

Standard modules with fixed catalogue prices

Classroom module IP-1: GeM listed at ₹8-14L. PHC module IP-3: ₹18-55L. Community hall IP-4: ₹18-22L base. Prices include structural

GeM portal: gem.gov.in · MME vendor category: Construction Materials & Prefabricated Urban Gov.in · Technology Innovation Grant per unit: ₹4L

TECHNOLOGY INNOVATION GRANT

GHTC-India listed technology

LGS+FC is listed under the Global Housing Technology Challenge. Every PMAY AHP community/health unit built with LGS qualifies for the Technology Innovation Grant.

₹4 Lakh per unit above standard PMAY

Standard PMAY: ₹1.5L per community unit. With Technology Innovation Grant: ₹5.5L per unit. On a 20-unit cluster (anganwadis + PHC + community hall): additional ₹80 Lakhs of funding.

SiteIQ auto-generates milestone certs

PMAY disburses in 5 stages. SiteIQ auto-generates SHA-256 certified certificates at each stage — disbursement in 48 hours vs 3-4 weeks manual documentation.

GeM portal: gem.gov.in · MME vendor category: Construction Materials & Prefabricated Urban Gov.in · Technology Innovation Grant per unit: ₹4L

PMAY GovKit integration

GRANT CALCULATOR — PMAY TECHNOLOGY INNOVATION GRANT

GovKit product catalogue in BuildIQ automatically populates PMAY

All certificates are DigiLocker-compatible and accepted by TNUHDB, all Tamil Nadu ULBs, and central MoHUA portal.

5 units

₹20L grant

Tech Innovation Grant

10 units

₹40L grant

Tech Innovation Grant

20 units

₹80L grant

Tech Innovation Grant

50 units

₹2 Cr grant

Tech Innovation Grant

₹4 Lakh per unit · GHTC-India listed · Applicable to PHC, community halls, anganwadis, crèches

CSR-FUNDED INSTITUTIONAL BUILDINGS

SIPCOT NEIGHBOURS

Hyundai, Foxconn, Saint-Gobain, and 200+ SIPCOT Sriperumbudur units all have CSR obligations. MME InstitutePro provides the fastest, most credible delivery of CSR-funded schools and health centres in Tamil Nadu.

CPWD SPECIFICATION

All InstitutePro buildings carry CPWD specification compliance certificates. Government CSR submissions require CPWD spec — DesignAI generates this automatically.

IMPACT CERTIFICATES

Digital impact certificates: student count, building area, IS code certs, SiteIQ construction record. For company CSR reports and ESG filings. DigiLocker and board presentation ready.

GeM vendor status · PMAY GovKit listed · GHTC-India registered · CPWD spec compliant · CSR impact certificates provided

FEATURES & SPECIFICATIONS

Every MME InstitutePro building is engineered to institutional grade. NBC 2016 compliance built into DesignAI.

STRUCTURAL SYSTEM

Frame

HDGI G550 C140 LGS studs at 400mm or 600mm centres. IS 811. Z275 galvanised coating. Termite-proof. Rot-proof. 50+ year structural life.

Roof

LGS rafters + Z200 purlins. Pitched (school/community) or flat with parapet (healthcare/industrial). Zinc-alum trimdek or clay-look tile.

Floor

LGS C200 joists + FC1000 screed 65mm. Finish: terracotta/stone/vinyl. Ground floor: RC slab with FC screed.

Foundation

RC M25 pad footings. 30–40% smaller than RCC equivalent. Hold-down bolts per IS 800. G+1 option: standard on school blocks.

Design codes

IS 800:2007 · IS 811 · IS 875 (wind) · IS 1893 (seismic, I=1.5 Category II) · IS 456 (foundation). SE certificate with every project.

FIRE & LIFE SAFETY

Wall fire rating

FC600 foam concrete fill: 60 minutes IS 3809. Intumescent paint at all structural connections: 90 minutes.

Floor fire rating

FC1000 composite deck: 90 minutes IS 3809. Critical for multi-storey school and healthcare blocks.

Compartmentation

IS 1641 fire compartmentation between classrooms and between wards. FC600 party walls: full-height fire separation.

Fire detection

IS 2189 detector point provision standard. FA panel installation available. SitelQ ongoing smoke sensor integration option.

Egress

NBC 2016 Part 3 egress widths: corridors $\geq 1,500\text{mm}$ (education), $\geq 1,800\text{mm}$ (healthcare). Staircase per NBC Part 3. Ramp 1:12.

HEALTHCARE SPEC

Wall hygiene

FC600 is non-absorbent, non-porous, and mould-resistant. No paper-faced gypsum board in wet clinical areas — FC board throughout.

Acoustic separation

55dB Rw between consulting rooms and ward bays. Essential for patient privacy and clinical concentration.

Accessible design

NBC 2016 §5.2: ramp at entrance, accessible toilet (1800mm turn radius), grab rails, level threshold, tactile floor indicators.

Medical gas provision

Concealed trunking and panel provision for piped medical gases and nurse call systems in wards and treatment rooms.

SUSTAINABILITY

Recyclability

100% steel recyclable. BIM-to-CNC eliminates on-site cutting waste. No concrete over-pour. No rubble on school grounds.

Thermal performance

FC600 0.14 W/mK reduces passive heat gain. Classrooms stay 3–4°C cooler without A/C — critical for coastal Tamil Nadu.

Natural light

DesignAI optimises classroom orientation for natural daylighting per NBC 2016 Part 7 daylighting requirements.

Green certification

GRIHA/LEED documentation auto-generated by DesignAI. Supports central and state government green building incentives.

PRICING GUIDE

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

EPC RATE SCHEDULE — PER SQFT

Building Type	LGS System ₹/sqft	LGS+FC ₹/sqft	Full TurnKey ₹/sqft	Notes
Classroom module (600-900 sqft)	₹900-1,000	₹1,100-1,250	₹1,400-1,650	GeM catalogue listed. IS 1641 fire standard.
School block G+1 (3,000-6,000 sqft)	₹900-1,050	₹1,100-1,300	₹1,500-1,800	NBC 2016 egress. Ramp + accessible toilet standard.
PHC / Healthcare unit (1,200-3,500 sqft)	₹950-1,100	₹1,150-1,350	₹1,600-2,000	FC600 hygienic spec. Accessible design. PMAY grant.
Community hall (2,000-5,000 sqft)	₹900-1,000	₹1,100-1,250	₹1,450-1,750	GeM direct order <₹25L. PMAY AHP amenity.
Anganwadi / crèche (300-500 sqft)	₹850-950	₹1,050-1,150	₹1,350-1,550	GeM listed. NBC 2016 Part 3 child occupancy.
Industrial canteen / welfare (1,000-3,000 sqft)	₹900-1,050	₹1,100-1,300	₹1,500-1,800	SIPCOT/TIDCO welfare. Fixed-price guarantee.

TOTAL PROJECT ESTIMATES

Project	Cost	Timeline	Notes
IP-1 Classroom module (single)	₹8-14L	8 weeks	1 classroom + toilet + veranda. GeM direct order.
IP-2 School block 6-room G+1	₹40-65L	10 weeks	12 classrooms. NBC 2016 egress. Lift not required.
IP-3 PHC primary health centre	₹18-35L	10 weeks	Full PHC: OPD + lab + pharmacy + ward + accessible.
IP-4 Community hall (200-seat)	₹22-38L	8 weeks	Stage + seating + office + toilet. GeM listed.
12-classroom campus block	₹80-120L	14 weeks	2-storey. Admin + labs included. CPWD specification.
PHC cluster (5 units, PMAY AHP)	₹90-175L	12 weeks	PMAY grant: ₹20L additional. Auto milestone certs.

EVERY MME INSTITUTEPRO PROJECT INCLUDES:

- ✓ DesignAI: 3 design options, NBC 2016 compliance check, IS code structural calculations
- ✓ Fixed-price EPC contract — price agreed Day 1, guaranteed to completion, no escalation
- ✓ SE stamp + IS code compliance certificate (IS 800, 811, 875, 1893, 3809, 1641)
- ✓ SiteIQ live construction monitoring + daily WhatsApp updates + digital handover
- ✓ GeM completion certificate (if applicable) · PMAY milestone certs (if applicable)
- ✓ Ramp + accessible toilet as standard · 10-year structural warranty · CPWD specification



Build in a term break. Open when students return.

Start with a free DesignAI institutional plan.

CALL US

+ 91 [CEO mobile]

Gangaivendan Padmanabhan
Co-Founder & CEO

EMAIL US

institutions@mme.build

For quotations, GeM orders,
CSR and PMAY projects

DESIGN ONLINE

designai.mme.build

Upload your site plan
Get 3 designs in 48 hours

VISIT OUR SHOW SITE

MME InstitutePro Show Site · SIPCOT Sriperumbudur, Chennai

See live display classroom and PHC modules · Factory tour · Weekdays + Saturday 10am-5pm



The classroom block was complete before the October term began.

240 children moved into their new school in the first week of classes. Nobody believed it until they saw it.

— School management committee, Tiruvallur district, Tamil Nadu, 2025

8 weeks

classroom block

₹8L

per module

GeM

direct order

50+ yrs

structural life

IP-1 CLASSROOM

₹8-14L

EPC per project

IP-2 SCHOOL BLOCK

₹40-90L

EPC per project

IP-3 HEALTHCARE

₹18-55L

EPC per project

IP-4 COMMUNITY

₹30-75L

EPC per project

FIXED PRICE · FIXED DATE · 10-YEAR WARRANTY · IS CODE CERTIFIED · NBC 2016 COMPLIANT · GeM LISTED

PMAY TECHNOLOGY INNOVATION GRANT + CSR IMPACT CERTIFICATES

PMAY AHP community buildings: ₹4 Lakh per unit Technology Innovation Grant.

CSR-funded projects: digital impact certificates for company ESG/CSR reports. DigiLocker-compatible.

MME INSTITUTEPRO · METAL MATRIX ENGINEERING PVT. LTD.

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

NBC 2016 · IS 3809 · IS 1641 · IS 2189 · IS 1893 · IS 2185 Pt 4 · GeM listed · PMAY GovKit

Prices ex-GST, ex-foundation · PMAY grant subject to approval · Content correct at time of print