

ACE CEM Build better, *faster*



Extruded Concrete Hollow-Core Wall Panels & Structural Slabs, Made In Bali, For:

- Villas
- Resorts
- Apartments
- Commerce's
- Industry
- Infrastructure

That finish months ahead

CHEAPER

30%

vs traditional block walls

FASTER BUILD

7.3×

78 m² in under 1 day

LABOUR SAVINGS

73%

3-person crew, not 6

RECYCLABLE

100%

zero-waste construction



Lower installed cost. *Faster* wall build

ACE CEM 100 mm & 150 mm Concrete Hollow-Core Panels

600 mm wide
Cut 0.5 m to 12 m

Benchmarked against Hebel (AAC) and Concrete Hollow Block



100 mm · 7 ROUND CORES · TONGUE & GROOVE JOINTS · C40/C45

SPEED

11 min/ 1.8 m²

up to 7.3× faster than AAC or block

INSTALLED COST

IDR 500–550K

lowest installed cost in class

COVERAGE IN ONE SINGLE GO

1.8 m²/3.0 m panel

less handling · fewer joints

SAVINGS

+1/3 cheaper

than Hebel/AAC at the wall



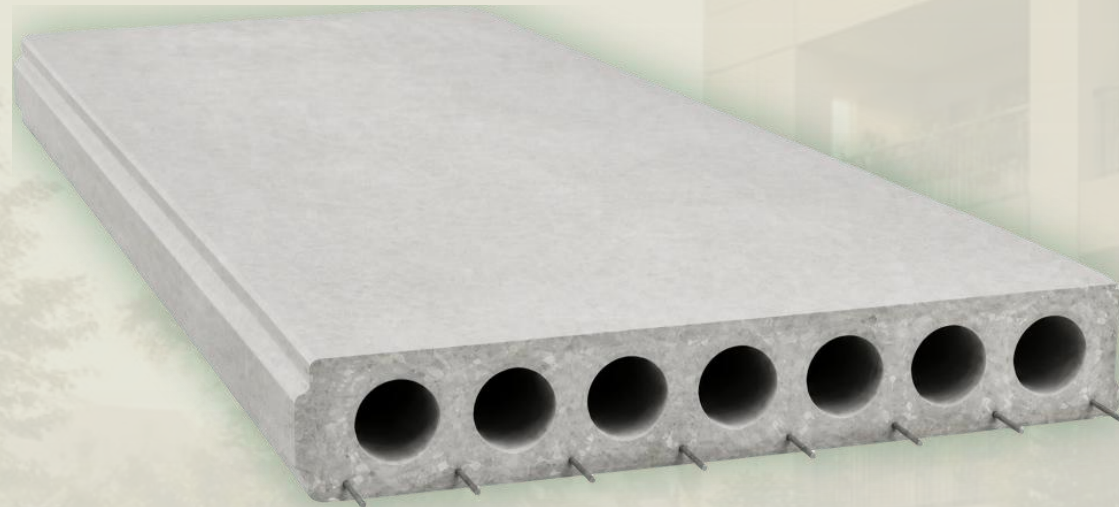
Two thicknesses, *cut to your required length*

Both panels are 600 mm wide and cut to order from 0.5 m to 12 m long

This deck benchmarks the 100 mm panel against AAC and blockwork

100 mm THICK · 7 ROUND CORES

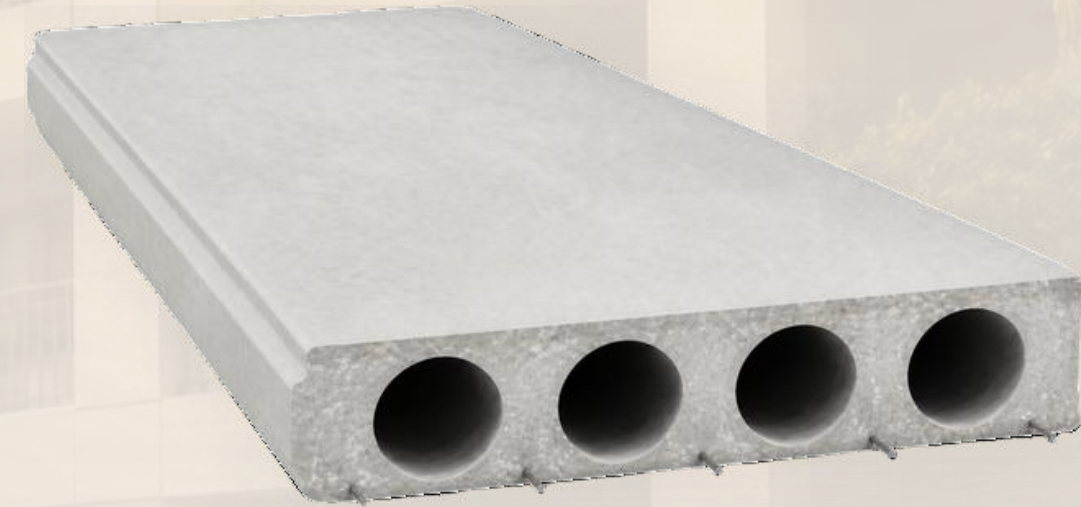
Wall panel · 100 mm



- ▶ 7 round cores · 33% less concrete than solid
- ▶ Benchmarked in this deck vs AAC and hollow block
- ▶ 3.0 m panel covers 1.8 m² of wall in one lift

150 mm THICK · 4 ROUND CORES

Wall panel · 150 mm



- ▶ 4 larger round cores · 42.24% less concrete than solid, greater section depth
- ▶ For longer spans, party walls and higher loading
- ▶ Also produced in-house, same plant, same process

WIDTH · BOTH PANELS

600 mm

CUT TO LENGTH

0.5 m – 12 m

EDGE JOINT · BOTH PANELS

Tongue & Groove

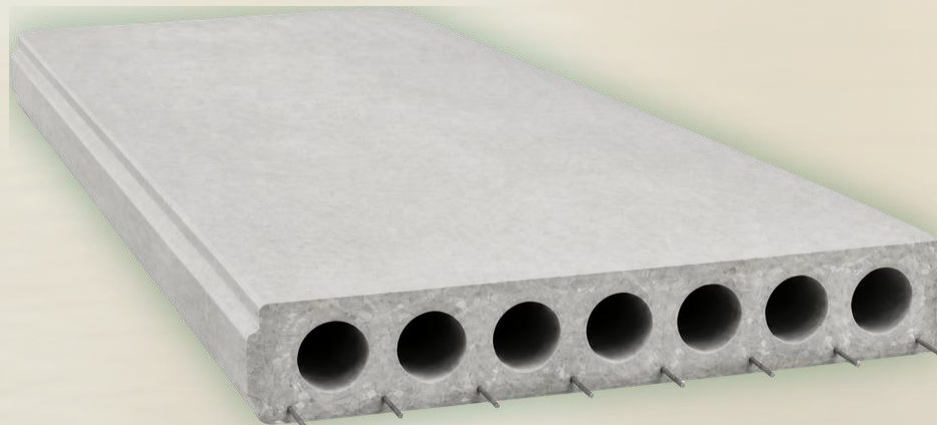


ACE CEM Walls and slabs, *one system*

Wall panels and floor / roof slab sections are available in a range of options to fit any project

WALL PANELS

Hollow-core wall



- ▶ 100 / 150 mm thickness available
- ▶ 600 mm standard panel width
- ▶ Non-load bearing · cut-to-size on site
- ▶ up to 78 m² installed per day by 3 people

FLOOR / ROOF SLABS

Structural slab *(Coming Soon)*

LOAD CAPACITY

≈ 4.6 kN/m²

SPAN LENGTH OPTIONS

2.0 m – 9 m

- ▶ 200, 250, 300 mm standard slab thickness
- ▶ 900 / 1200 mm slab width options
- ▶ Same plant, same hollow-core process
- ▶ Custom panel and slab sizing available



One supplier, one process, walls and floors from the same hollow-core line.



ACE CEM Engineered *voids*, not thin walls

600 mm wide · 100 mm thick · 7 round cores · cut 0.5 m to 12 m · c40/c45 concrete

COVERAGE

1.8 m² / 3.0 m panel

CONCRETE

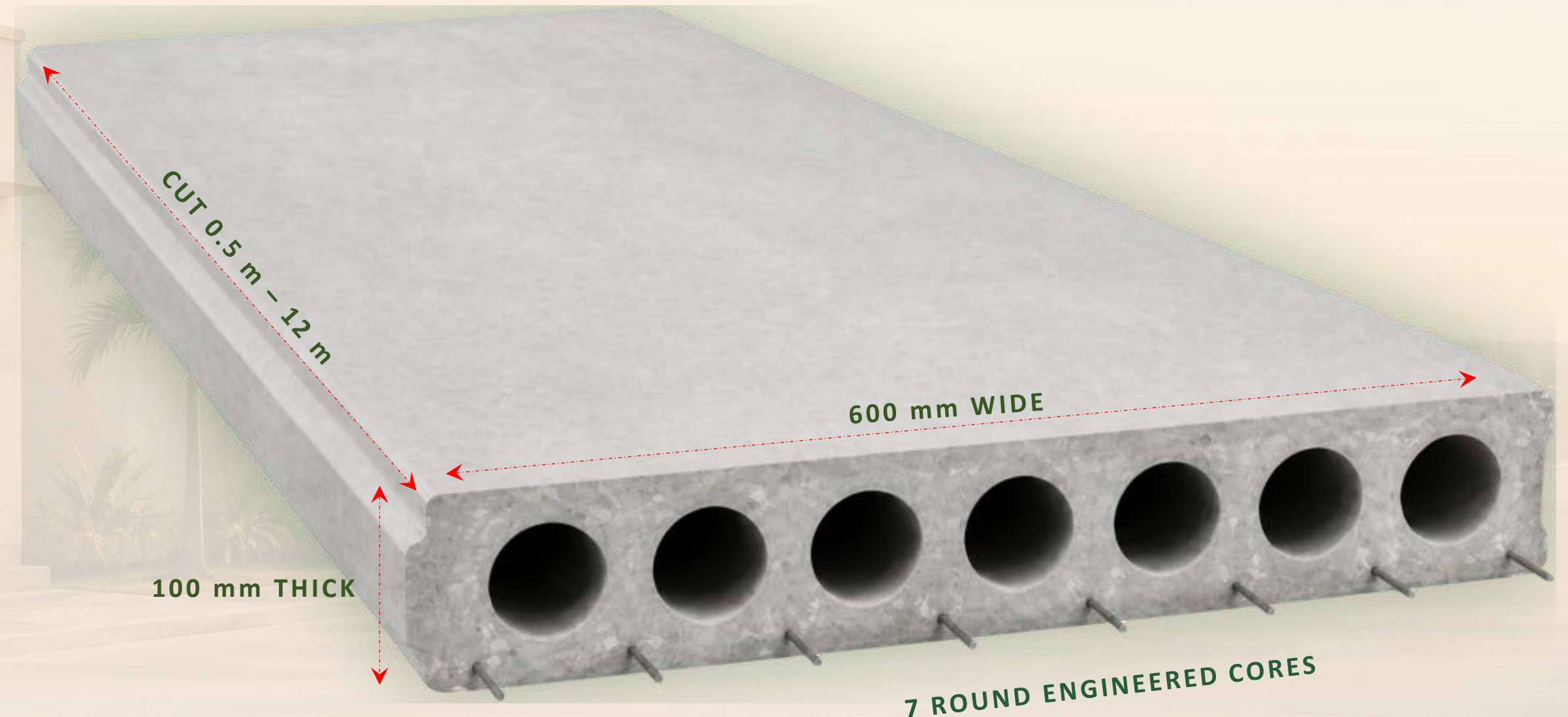
C40 – C45

MATERIAL SAVED

33% less

REINFORCEMENT

8 × Ø6 mm wire

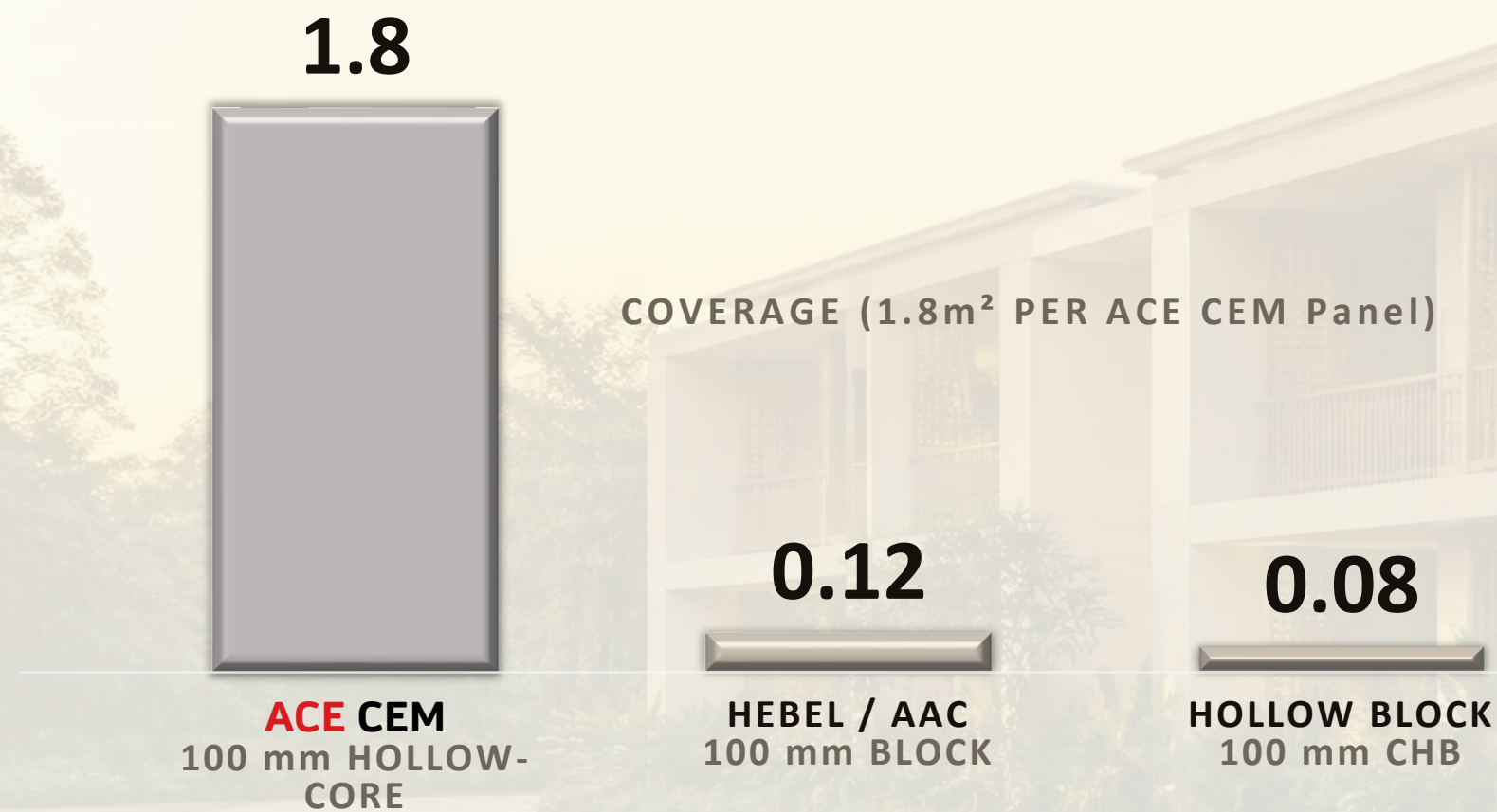


Tongue & Grooves Joints run the length of each flank
Adjacent panels slot together, reducing installation errors
& excessive use of mortar.



The comparison at a *glance*

100 mm wall · 1.8 m² completed · material + installation



ACE CEM PANELS ARE UP TO 7.3× FASTER TO ERECT THAN HEBEL

**ACE CEM
PANELS**

11 min to erect one ACE CEM Panel of 1.8 m²

9.81m² is erected in 1 hour

Up to 78.45m² is erected in an 8-hour working day

11 min

SPEED TO ERECT 1 m² of HEBEL/CONCRETE HOLLOW BLOCK

HEBEL / AAC

SLOW · LAY + ADHESIVE + DRY

45 min

CONCRETE HOLLOW BLOCK

SLOW · LAY + MORTAR + CURE

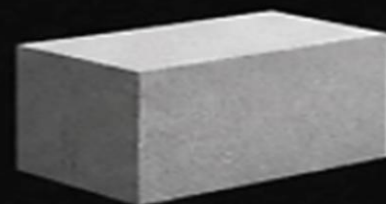
45 min



ACE CEM PANEL

1 panel = 1.8 m²

LOWEST



HEBEL / AAC

15 × 0.12 m² each



HOLLOW BLOCK

22 × 0.08 m² each



Better on *every* metric

ACE CEM wall panels outperform traditional block wall construction on nearly all key metrics

45 m ² BUILD	ACE CEM	BLOCK WALLS
Wall build time	< 4.5 hours	4.4+ days
Crew size needed	3 workers	6 workers
Seismic resistance	Excellent	Moderate – low
Thermal performance	High	Moderate
Moisture resistance	Superior	Moderate – low
Material waste	Zero · 100% recyclable	High waste
Overall cost	30% cheaper	30% more expensive



The choice is *clear*

Compared side by side with the other common wall construction methods in Bali. (8-hour wok day)

CRITERIA	ACE CEM	BLOCK	AAC / HEBEL	PLASTERBOARD
Thickness (mm)	100 / 150	110	200	100
Weight (kg/m²)	182 / 223	324	144	40
Speed (m²/person/day)	15 – 30	4 – 6	10.6	15 – 20
Strength (kgf/cm²)	350 – 425	70 – 150	< 50	N/A
Max height (non-load bearing)	12 m	2.5 – 3.5 m	3 – 4.5 m	3.5 – 4.5 m
Method	Semi-dry	Wet	Wet	Dry
Fire resistance	2 – 4 hr	3 hr	1 – 4 hr	1 – 2 hr

INSTALLED COST PER m²: MATERIAL + LABOUR + JOINTS + TIME



Installed cost per *m²*, all-in

Same villa, three wall systems · IDR per m² of 100 mm wall · material + labour + joints

400–550 IDR K/m²

HOLLOW BLOCK

Masonry baseline · wet trade

500–650 IDR K/m²

HEBEL / AAC

AAC catalogue baseline · imported

✓ LOWEST · ENDS BELOW 550K

500–550 IDR K/m²

ACE CEM 100 mm ✓

Hollow-core panel · semi-dry

MORE THAN ONE THIRD CHEAPER than Hebel/AAC at the wall



Four components, four *wins*

- Material
- Labour
- Time
- Jointing

Each pulled tighter than AAC or blockwork.



MATERIAL

33% less

Concrete vs a solid 100 mm wall, engineered hollow cores, not raw material cuts.

ENGINEERED HOLLOW CORE

LABOUR

73% less

0.18 hrs / 1.8 m² vs Hebel 0.45 hrs / 1 m² baseline.

3-WORKER CREW SUFFICES

TIME

7.3× faster

11 min / 1.8 m² vs 45 min/ 1 m² for both AAC and block, fastest in class.

UP TO 7.3× FASTER

JOINTING

Lowest joints

Fewer jointing mortar bags · no render prep · cleaner finished wall.

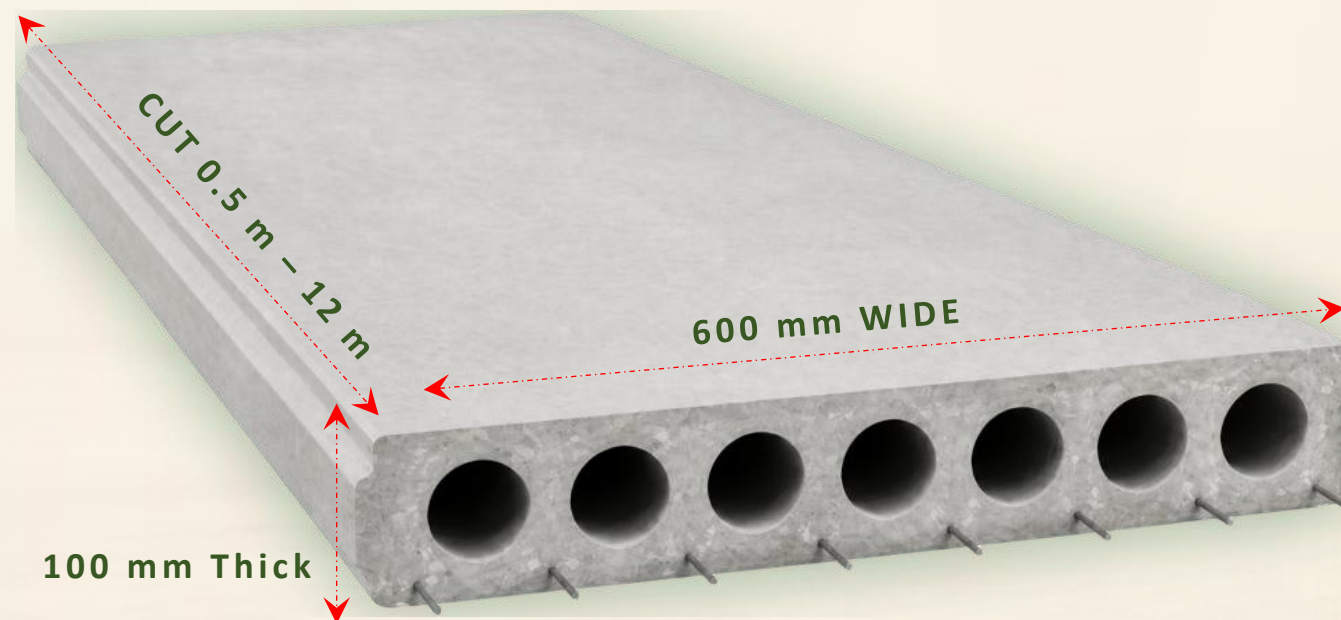
NO RENDER PREP



One **ACE CEM** panel replaces *22 blocks*

Less handling. Fewer joints. Faster alignment. Better productivity

ONE **ACE CEM** PANEL



=

22 × HOLLOW BLOCKS. 0.08 m² EACH

22 × 0.08 m² = 1.8 m² AT THE WALL

15 × HEBEL / AAC BLOCKS. 0.12 m² EACH

15 × 0.12 m² = 1.8 m² AT THE WALL





A small crew, a short *build*

MINIMUM CREW

3 workers



Trained 3-person field crew

ACE CEM TIME PER 1.8m²

11 min

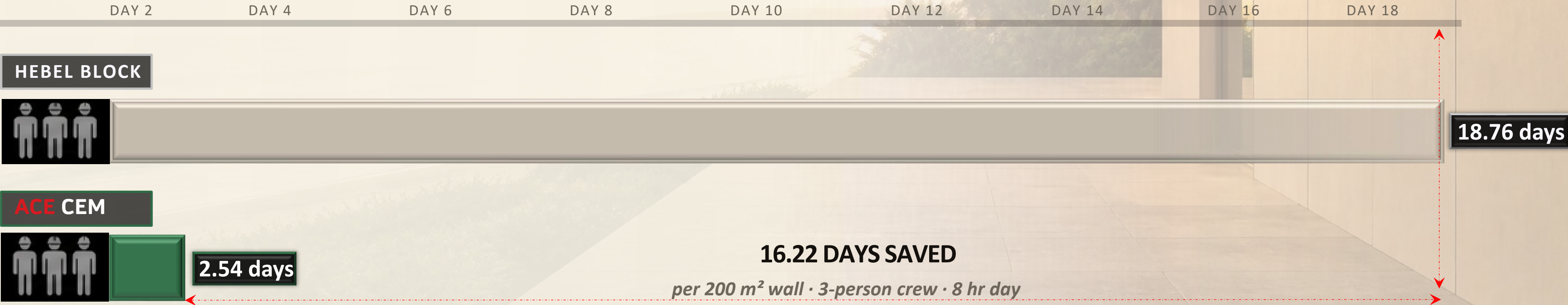
vs 45 min for 1m² of Hebel Or Concrete Hollow block

LABOUR SAVINGS

+73% less

vs Hebel baseline Or Concrete Hollow block

DAY-COUNT COMPARISON · 200 m² WALL · 3-PERSON CREW · 8 HR DAY





ROI in *numbers*, not adjectives

Same villa, three wall systems, ACE CEM 100 mm hollow-core panels · developer audit across 10 villa deliveries

↑ TOTAL PROFIT

\$205,000

across 10 villa deliveries

↑ RENTAL PULLED FORWARD

\$151,000

earlier handover, earlier income

LABOUR SAVINGS

\$18,000

3-person crew, not 6

↓ HOLDING COSTS

\$36,000

shorter build, less carry

HOLLOW BLOCK
Masonry baseline

HEBEL / AAC
Imported baseline

ACE CEM ✓
Hollow-core panels

BUILD-TIME BENEFIT / 3.6 months faster build 10 VILLAS · 200 m² WALL EACH / 3-PERSON CREW · FIELD-TRAINED



What people *compare*, what matters

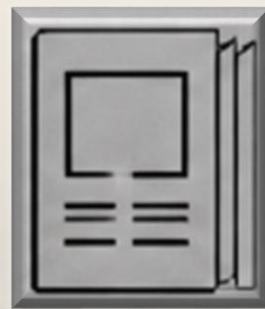
A cheap-looking unit is rarely the cheapest wall

WHAT PEOPLE COMPARE

Surface-level *pricing*



UNIT PRICE



CATALOGUE



STALE QUOTES

- ▶ Sticker price only
- ▶ Catalogue-only baseline
- ▶ Stale supplier quotes

WHAT ACTUALLY MATTERS

Total installed *value*



- ▶ Supply + freight + handling
- ▶ Installation & crew rates
- ▶ Jointing + finishing + speed

REAL VALUE = MATERIAL + LABOUR + TIME + PRODUCTIVITY



Lower impact, *higher* ROI

Less energy, fewer emissions and better lifetime efficiency than standard construction in Bali

CONCRETE & CEMENT

33% less

per m² of walls and slabs

TRANSPORT EMISSIONS

96% less

made in Bali vs imported Hebel

CONSTRUCTION WASTE

100% less

than traditional methods

ELECTRICITY USE

60% less

per m² vs traditional and Hebel

ACROSS THE WHOLE LIFECYCLE

100% recycling

On-site recycling of production waste · cradle-to-cradle end-of-life reuse.

Better insulation

Improved energy efficiency, lower cooling load across the building's life.

Quieter sites

Less noise pollution, minimal dust and debris around the project.

Zero-waste build

100% recyclable panels, no rubble stream from cut blockwork.

Reduce your ecological impact while increasing your ROI



Already *designed*? Switch

Project already designed and engineered? The transition to panels is fast, simple and cost effective

RAPID DESIGN TRANSITION

Adapt within days

- ▶ Engineered design adapted to panels within days
- ▶ Compatible with steel and concrete structures
- ▶ Custom panel and slab sizing available

DESIGN FIT

Balinese & Modern

An ideal system for both traditional Balinese and contemporary architectural designs.

IN-WALL SERVICES

Routed, not chased

- ▶ Wire, conduit and piping route inside the wall
- ▶ Wall-mounted AC, equipment and artwork
- ▶ Smooth surface ready for any finish

INCLUDED

Support & Training

Structural design assistance available, with training included in partner onboarding.



Four steps, *start to finish*

From panel layout to a surface ready for any finish, with our team alongside at every stage

01

Design

ACE CEM engineering and design expertise is available to optimise your panel layout.

LAYOUT OPTIMISED

02

Fabricate

Approved orders are slotted for fabrication in our factory and stored ready for delivery.

MADE IN BALI

03

Installation

Only 3 workers needed, using our simple alignment and connection system.

3-PERSON CREW

04

Finishing

Easy routing for wires, conduit and piping, and a smooth surface ready for any finish.

READY TO COAT

ACE CEM TRAINING & SUPPORT

From design assistance to field construction training, our team ensures your project's success



Who we *build* for

One panel system, scaling from low-cost housing through to luxury hospitality

01

Villa developers



Multi-unit villa programmes where every week of build time compounds into rental income.

02

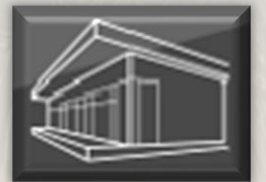
Hotels & resorts



Quieter, dust-free installation that can run alongside an operating property.

03

Apartment & Commercial



Walls above 12 m unsupported, with floor and roof slabs from the same line.

04

Eco investors



33% less cement, 96% fewer transport emissions and 100% recyclable material.

05

Architects



Suits both Balinese and modern design languages, with in-wall service routing.

06

Low-cost to luxury



The same system serves both ends of the market.

Whatever the segment, the maths are the same, faster walls, smaller crews, lower installed cost



Not our *first* plant

A Bali-based extrusion line, backed by decades of international project and cement-technology experience

EXPERIENCE

Our Bali Extrusion facility is backed by a professional team having completed +800
Cement related projects Worldwide

800

CEMENT RELATED PROJECTS
COMPLETED

90+

COUNTRIES WORLDWIDE

Development, design, construction and business leadership, all represented on
the Bali team

EXPERTISE

Swiss Engineering combined with our team's expertise in cement plant design &
technology reaches back to 1959.

66 yrs

CONSTRUCTION EXPERIENCE

1959

CEMENT CO. FOUNDED

Seven generations of cement expertise, applied to a hollow-core line built for Bali



Bottom line, *lasting* value

Developers are choosing **ACE CEM** panels to enhance their project's bottom line and lasting value

BUILD FASTER

73%

- ▶ Complete walls in 1 day vs 7.3 days traditional, for a 78 m² build
- ▶ Reduce crew size by 50%
- ▶ Get to market 3.6 months earlier

SLASH COSTS

+30%

- ▶ Cut labour costs 50–60%
- ▶ Zero construction waste
- ▶ Lower holding costs mean higher profits

VALUE BALI'S FUTURE

100%

- ▶ 100% recyclable materials
- ▶ 96% fewer transport emissions vs imports
- ▶ 33% less concrete than traditional methods

FINISH FASTER · COST LESS · LAST LONGER · PERFORM BETTER



Build a 1.8 m² wall in *11 minutes*, See it for yourself

Bring your drawings. We will price the wall, not the unit

STEP 01

Book a site visit

Walk the plant. Watch a sample wall go up with a 3-person crew.

STEP 02

Request your quote

Send your wall area and drawings. Get an all-in IDR per m² figure.

ACE CEM hollow-core wall panels

- 100 mm (7 cores) and 150 mm (4 cores)
- 600 mm wide
- Cut 0.5 m to 12 m Tongue & Groove Joints
- C40/C45 concrete
- 8 × Ø6 mm steel wires