ICC-ACOTEC

Precast Wall Panels

Saves Material, Labour & Time



ICC PRECAST

The Forefront of Construction Innovation

International Construction Consortium (Pvt) Ltd, has been recognized by the Sri Lankan construction industry as an innovative precast solution provider, one that enables fast & economical construction. With focus on quality, we obtained the best equipment and latest technology from the industry leaders to assure a quality product portfolio at the highest standards.

We continue our efforts in introducing value added solutions to the construction industry towards an emerging Sri Lanka



Elematic Acotec Plant at ICC Precast Yard, Madapatha, Piliyandala

Elematic is the market leader in precast concrete technology for medium and high-rise buildings.



ICC-ACOTEC Precast Wall Panels

Since their introduction in the late 1980's, ACOTEC walls have proven themselves in more than 15 countries including Germany, United Kingdom, Finland, Ireland, Spain, Japan, Singapore, Malaysia, China & India under various brands.

ICC-ACOTEC precast wall panels are made out of concrete comprising cement, sand & aggregate (G40)

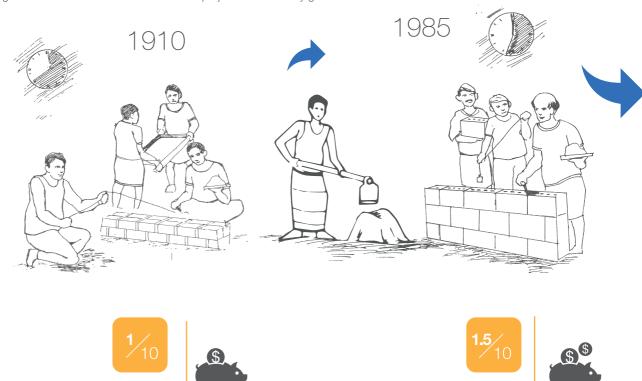
Its main application is the partitioning of residential, commercial, institute & office buildings replacing traditional materials used in partitions and facades such as brick & cellular blocks.

5 x Faster than Traditional Brick-Wall
5 x Faster than Cement Cellular-Block-Wall
3 x Fast as CLC or AAC Block-Wall

BRICK TO BLOCK - BLOCK TO PANEL

Leaps in Efficiency

Traditional on-site construction methods meet with efficiency problems especially in societies where labour costs are high and the demand for fast construction projects continuously grow.



Physical Properties of ICC-ACOTEC Panels

	ICC-ACOTEC 75 mm	ICC-ACOTEC 100 mm	ICC-ACOTEC 140 mm			
Weight	110 kg/m²	135 kg/m²	175 kg/m²			
Panel Bulk Density	1200 kg/m ³	1350 kg/m³	1250 kg/m³			
Fire Resistance	120 mins	>130 mins	>130 mins			
Sound Insulation	41 dB	43 dB	> 43 dB			
Thermal Resistance		0.17 m ² K /W	$> 0.17 \text{ m}^2\text{K/W}$			
Panel Strength	>5 N/mm²	>5 N/mm²	>5 N/mm²			
Flexural Strength	1.08 N/mm² (100 l	1.08 N/mm² (100 mm)				
Loading Test	299.7 KN (100 mr	299.7 KN (100 mm thick panel with 2700 mm height)				

^{*} According to International test references

Buildability*

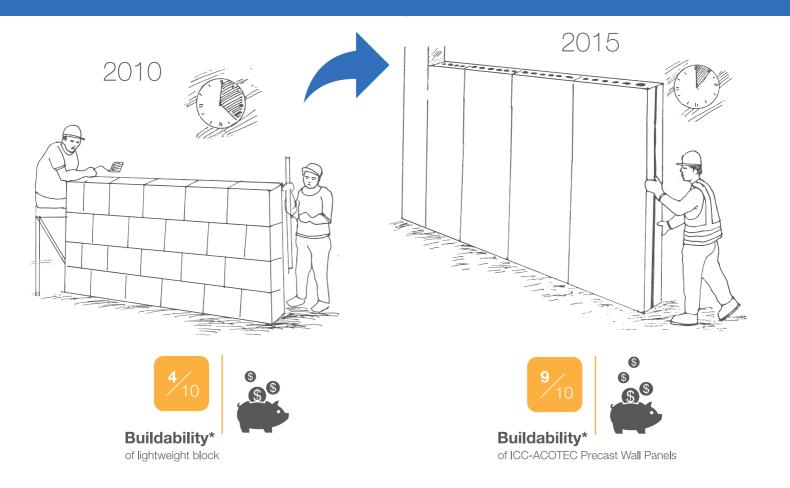
of conventional brick

ICC-ACOTEC Precast wall panels with thicknesses of **75mm, 100mm & 140mm** available in heights ranges from **2100mm - 3300mm**

Buildability*

of cellular blocks

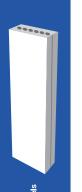
ICC-ACOTEC precast wall panels result in superior quality, faster construction & reduced labour, with an erecting speed of up to 5 m² per man day.



Comparison of Physical Properties ICC-ACOTEC vs Conventional Wall Materials

		Conventional Brick Wall	Cellular Block Wall	AAC / CLC Block Wall	ICC-ACOTEC Wall
Fire Rating (hrs)	()	1 - 2	1 - 2	2	1.5 - 2.5
Sound Insulation	()	35 dB	38 dB	42 dB	43 dB
Compressive Strength (N/mm ²)	ŵ	2.5	3	5	5 - 6
Thermal Conductivity (W/mK)	- <u>;</u> Ċ;-	0.13	0.88	0.18	0.56
Thermal Resistance (m²k/W)	-^\\\	- 0.8	-	0.75	0.18
Moisture Absorption (%)	•	30	10	15	8

^{*} According to International test references



PROFITABILITY AT IT'S PINNACLE

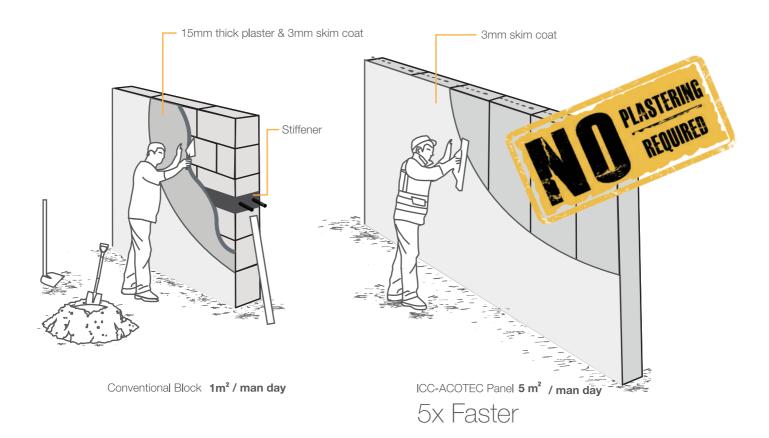
With ICC-ACOTEC Solutions



REVOLUTIONIZE TO A BETTER BUILDABILITY*

By Deploying ICC-ACOTEC Wall Panels

Being a factory finished product it has high accuracy which means less material & labour cost involved for final finishes which carries better quality standards.



	Conventional Brick Wall (with plaster)	Cellular Block Wall (with plaster)	AAC / CLC Block Wall (with plaster)	ICC-ACOTEC wall
Installation Speed (m²/man day)	0.9	1	2	5
Workmanship for 100 m ² (man days)	110	95	55	20
Units per 100 m² wall area	6000	1250	800	55
Mortar used (m³/m² of wall panel)	4.0	3.0	2.0	0.5
Plastering on each side (mm)	15	15	10	0
Weight per m² (kg)	285	220	90	135

^{*} Calculation for 100 mm wall

*BUILDABILITY is the extent to which the design and the adoption of construction techniques & processes affects the productivity level of building works

ACOTEC PRECAST WALL PANELS

Used Commercially Worldwide

Europe, Middle-East & Asia



Europe & Middle-East

Germany

United Kingdom

Spain

Ireland

Portugal

Saudi Arabia

Asia

Sri Lanka

Japan

Singapore

South Korea

China

India

Indonesia

Philippines

Taiwan

Thailand



Website - www.elematic.com



