



FINANCIAL SAVINGS	WEIGHT PROFILE	ACOUSTIC RATING	LIFESPAN
20%–30% Cost Reduction	2.6 kg (15% Lighter)	42 dB Noise Reduction	100+ Years (Zero Saltpetre)

KEY PERFORMANCE & VALUE BENEFITS

- Financial & Plastering Efficiency:** Requires up to 30% less mortar mortar jointing due to uniform dimensions and zero breakage during transport. Perfectly flat surfaces eliminate the need for double-coat plastering.
- Weight & Dead Load Savings:** Weighing significantly less than traditional clay red bricks, fly ash bricks reduce structural dead load, optimizing steel requirements in RCC columns and foundations.
- Noise Cancellation & Thermal Insulation:** High density and micro-porous structure provide high Sound Transmission Class (STC) ratings, reducing ambient urban noise and improving indoor thermal comfort.

MANUFACTURING PROCESS & SUSTAINABILITY

Produced using an automated hydraulic compaction process mixing industrial Fly Ash, Cement, Lime, and Sand. The hydraulic press delivers 30+ tons of pressure to ensure uniform density, followed by controlled water curing for 14–21 days.

PARAMETER	ABI FLY ASH BRICK	TRADITIONAL CLAY BRICK
Compressive Strength	7.5 N/mm ² to 10 N/mm ²	3.5 N/mm ² to 5.0 N/mm ²
Water Absorption	6% – 12% (Prevents Dampness)	15% – 25% (High Dampness)
Environmental Footprint	Recycles Coal Ash, Zero Carbon Emissions	Topsoil Depletion, High Kiln Emissions

CONCRETE PAVER BLOCKS

AGARWAL BRICKS INDUSTRIES (ABI®)

Heavy-Duty Interlocking Paving



FINANCIAL VALUE Zero Maintenance Costs	LOAD CAPACITY M30 to M50 Grade (45+ Tons)	ACOUSTIC PROFILE Vibration & Tyre Dampening	DURABILITY 30+ Years Lifespan
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PRODUCT ADVANTAGES & USAGE FEATURES

Financial & Operational ROI: Eliminates continuous repair expenses associated with asphalt or plain concrete. Individual pavers can be lifted and re-laid cleanly for underground utility maintenance.

Heavy Traffic Weight Bearing: Manufactured in 60mm, 80mm, and 100mm thicknesses engineered to support heavy truck movement, container yards, fuel stations, and public roadways.

Acoustic & Safety Performance: Interlocking design absorbs heavy vehicle tyre noise and vibration, providing an anti-skid textured surface that prevents vehicle hydroplaning.

ADVANCED MANUFACTURING & ECO-FRIENDLINESS

Formed using dual-layer vibro-compression technology. Top layer utilizes hard-wearing quartz pigments for long-lasting color, while the base layer contains crushed granite aggregate and Portland cement for maximum density.

SPECIFICATION	60MM THICKNESS	80MM HEAVY-DUTY
Recommended Application	Residential Driveways, Footpaths, Parking	Industrial Parks, Bus Terminals, Fuel Pumps
Concrete Grade	M-30 / M-35 Grade	M-40 / M-50 High-Strength Grade
Eco-Benefit	Permeable Jointing Promotes Water Recharge	100% Reusable Material (Zero Construction Waste)



FINANCIAL BENEFIT 30% HVAC Power Savings	WEIGHT PROFILE 550–650 kg/m³ (50% Lighter)	NOISE CANCELLATION 45 dB Sound Insulation	FIRE RATING Up to 4 Hours Resistance
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STRUCTURAL BENEFITS & PERFORMANCE

- Financial & Construction Savings:** Speeds up masonry speed by 3x due to large block sizing. Reduces structural steel requirements by up to 15% and cuts lifetime air conditioning bills due to superior thermal insulation.
- Ultra Lightweight Advantage:** Roughly 1/3rd the weight of traditional clay bricks. Significantly reduces dead load on high-rise building foundations, enhancing earthquake safety ratings.
- Superior Noise Cancellation & Fire Safety:** Millions of microscopic hydrogen air pockets provide an acoustic barrier (45 dB), making them ideal for hospitals, hotels, schools, and residential apartments.

MANUFACTURING PROCESS & GREEN CREDENTIALS

Produced by reacting finely ground quartz sand, fly ash, lime, cement, and an aluminum foaming agent. The expanding mixture is cut with precision wires and steam-cured under high pressure in an autoclave for maximum dimensional stability.

PROPERTY	ABI AAC BLOCK	DENSE RED CLAY BRICK
Dry Density	550 – 650 kg/m³	1800 – 2000 kg/m³
Thermal Conductivity (k)	0.16 – 0.24 W/mK (Insulating)	0.81 – 1.00 W/mK (Heat Conductor)
Sustainability	IGBC Green Building Certified Material	High Carbon Kiln Footprint

PRECAST BOUNDARY WALL

AGARWAL BRICKS INDUSTRIES (ABI®)

Instant Perimeter Security



FINANCIAL SAVINGS 40% Cheaper than Brick Wall	INSTALLATION SPEED 100+ Running Feet / Day	ACOUSTIC BARRIER High Highway Sound Shield	LONGEVITY 50+ Years Maintenance Free
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KEY ADVANTAGES & SECURITY FEATURES

Financial & Time Savings: Costs up to 40% less than traditional brick-and-mortar boundary walls. Pre-fabricated offsite and installed in hours, saving labor costs and project time.
Reinforced Structural Strength: Built with high-strength M-30/M-40 grade concrete and high-tensile steel rebars. Completely re-locatable and resistant to high wind forces, seismic shifts, and soil erosion.
Noise Reduction & Perimeter Shield: Dense RCC solid panels act as effective sound barriers against traffic and industrial noise, providing immediate privacy and security.

MANUFACTURING & SUSTAINABLE ENGINEERING

Cast in precision steel molds using high-frequency table vibration to eliminate air voids. Pre-stressed steel wires and high-yield strength RCC ensure maximum tensile and flexural strength prior to site installation.

PARAMETER	ABI PRECAST WALL	CONVENTIONAL MASONRY WALL
Installation Speed	100 Running Feet per day	15-20 Running Feet per day
Weathering Resistance	Zero Moisture Seepage / No Cracking	Prone to Saltpetre & Plaster Peeling
Eco-Friendly Factor	Zero Onsite Water Waste / Clean Install	High Water Curing & Site Debris Waste