



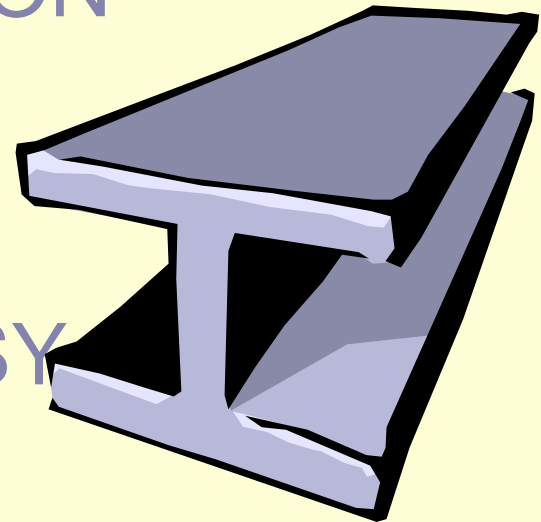
HYDRAFORM BUILDING SYSTEM

A SOLUTION
TO
ECO-FRIENDLY
AND
ENERGY EFFICIENT BUILDING



FEATURES

- AN ECO FRIENDLY, ENERGY & COST EFFICIENT BUILDING SYSTEM
- SOLUTION FOR PROMOTING FLY ASH USAGE IN CONSTRUCTION
- ADVANTAGES & APPLICATION
- TECHNICAL INFORMATION
- PROJECTS
- CONSTRUCTION MADE EASY





HYDRAFORM

- ESTABLISHED IN 1988 IN SOUTH AFRICA
- OVER 40 COUNTRIES ADOPT SYSTEM
- **POINEERS OF INTERLOCKING BUILDING SYSTEM ON MASS SCALE**
- ECO FRIENDLY USE OF LOCAL MATERIALS
- NOW GAINING WIDE ACCEPTANCE IN INDIA & ABROAD



BUILDING TECHNOLOGY

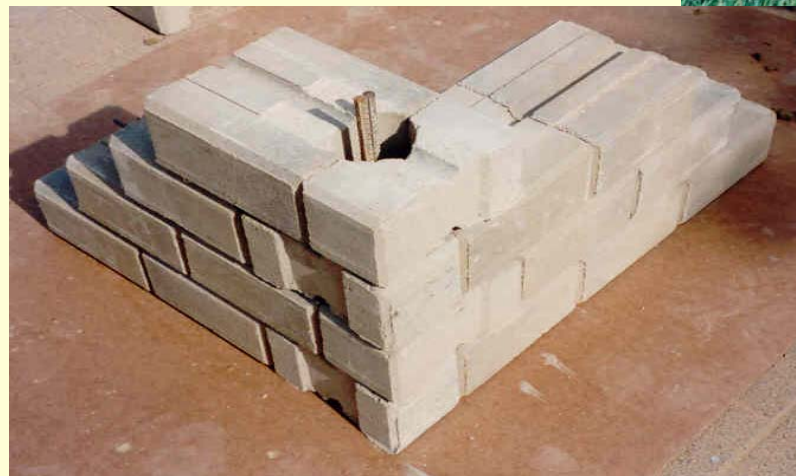
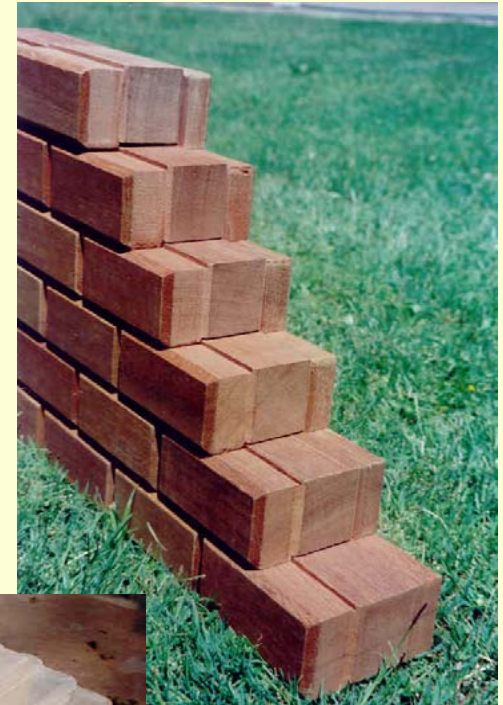


- No Mortar – Only Optional Slurry!
- No Burning - Energy & Eco-Efficient Blocks!
- Blocks from Fly Ash – Cement or Soil - Cement
- Finished Exterior without Plastering !
- High Strength & Technical superiority over conventional methods
- Interlocking Blocks providing Mechanical Bonding
- Follows Basic Construction Norms
- Low Embodied Energy

Interlocking Blocks!



- An alternate to conventional bricks & mortar
- Male/Female Interlocking – Vertical / Horizontal Shear keys
- Suitable for Load/Framed Structures Compatible to incorporate V/H
- Suitable for Seismic structures
- Reinforcements





Advantages

- Eco Friendly Process
- Speedier Construction
- Superior Finishes
- Cost & Energy Effective
- Simple to Use
- Compatible for almost all types of Construction
- Lighter Unit weight
- Re-usable Blocks
- Better Thermal Efficiency





Applications

- Walling: Structures – External / Internal, columns Boundary, Load / Non Load Bearing, Curved
- Compatible for V/H Reinforcements , Conduiting, Mortar construction, Thermal Efficient structures
- Used in Residential, Commercial, Industrial, Security Walls, Schools, Godowns, Community Projects



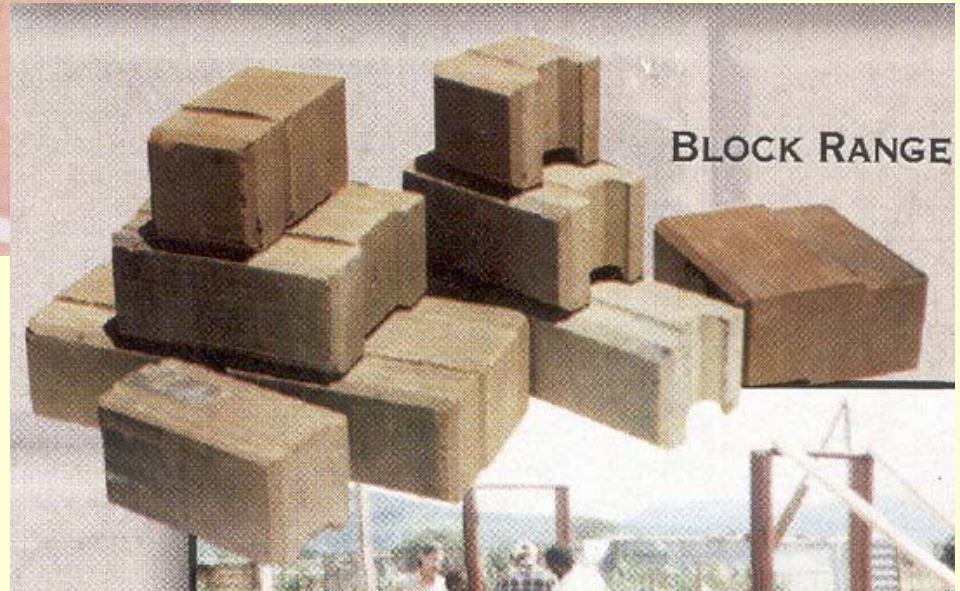
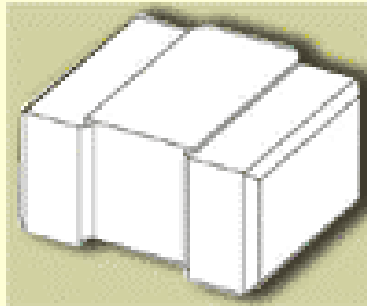
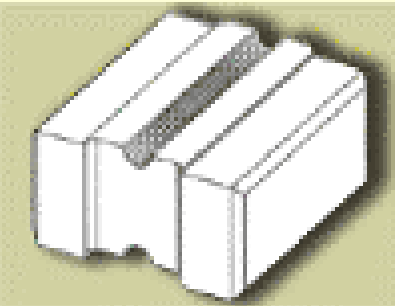
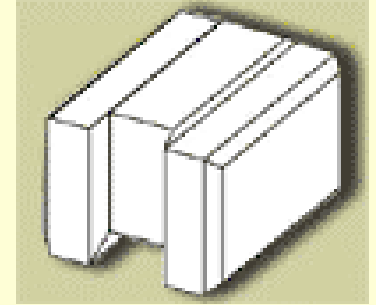
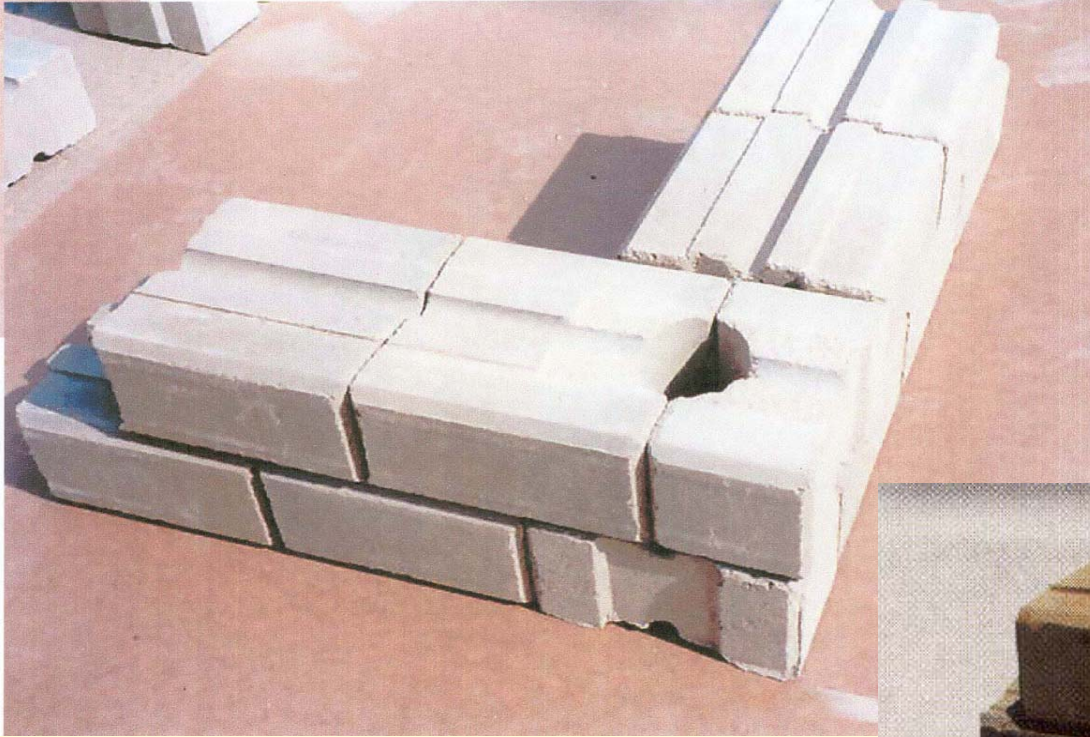


Some Structures





Variety of Options





Technical Information

● Raw Material:

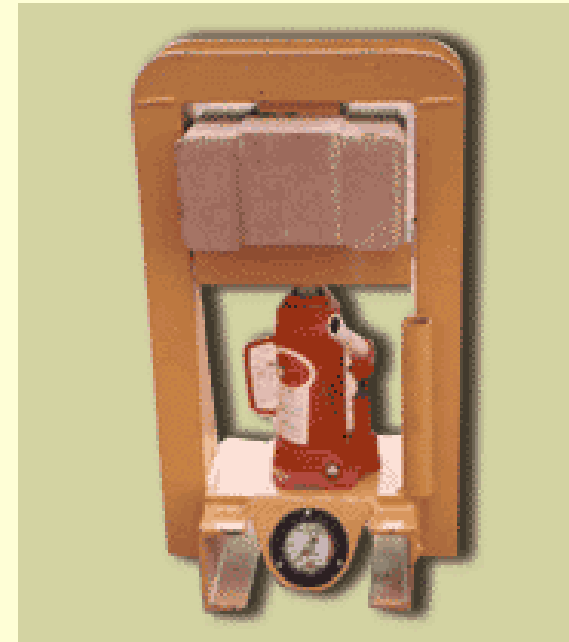
- For Fly Ash Blocks: In line with IS 12894:1990 for *Fly Ash Lime Bricks specs.*
- For Soil-Cement Blocks: In line with IS 1725:1982 and GSDMA guidelines for *Compressed Stabilized Earth Blocks*

● Manufacturing Process:

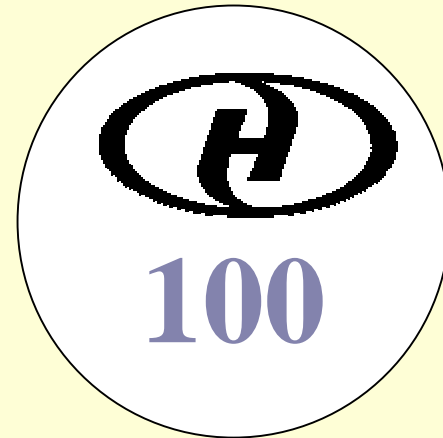
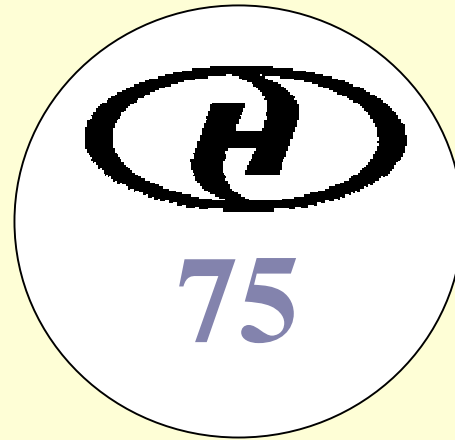
Raw Material Mixing at OMC  Hydraulic
Compression in Hydraform machine 
Covered Sprinkled Water Curing for 28 days

Quality Levels Achieved

- Compressive Strengths ranging from
 - For Fly Ash Blocks: 75 – 200+ Kg / sq.cm
 - For CSEBs: 50 – 100 Kg / sq.cm
- Water Absorption ranging from
 - For Fly Ash Blocks: Up to 12%
 - For CSEB: Up to 15%




Quality Produced!





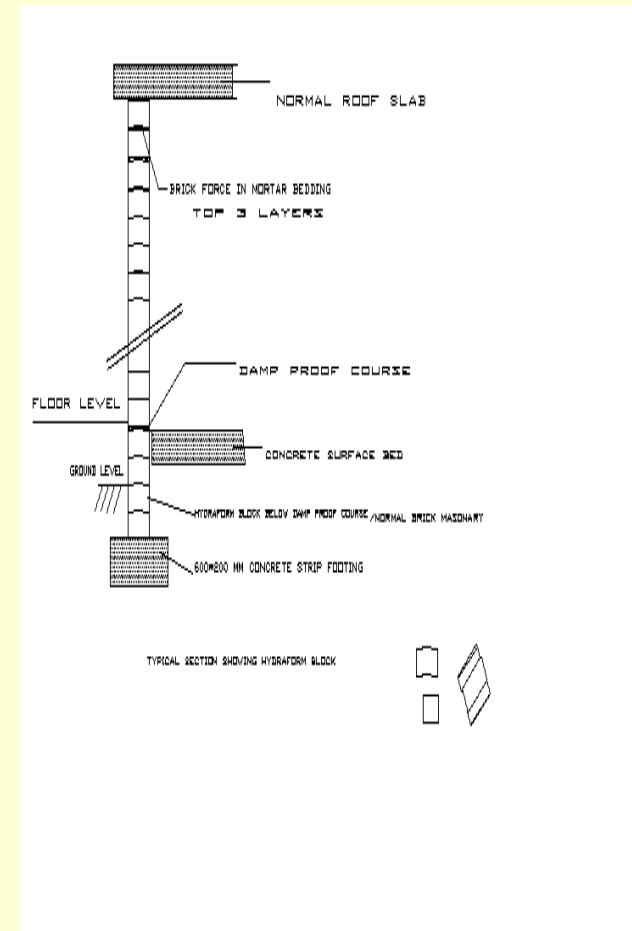
Relevant Indian Standards

Hydraform Interlocking Fly Ash / CSEB blocks are in accordance with the following Indian standards:

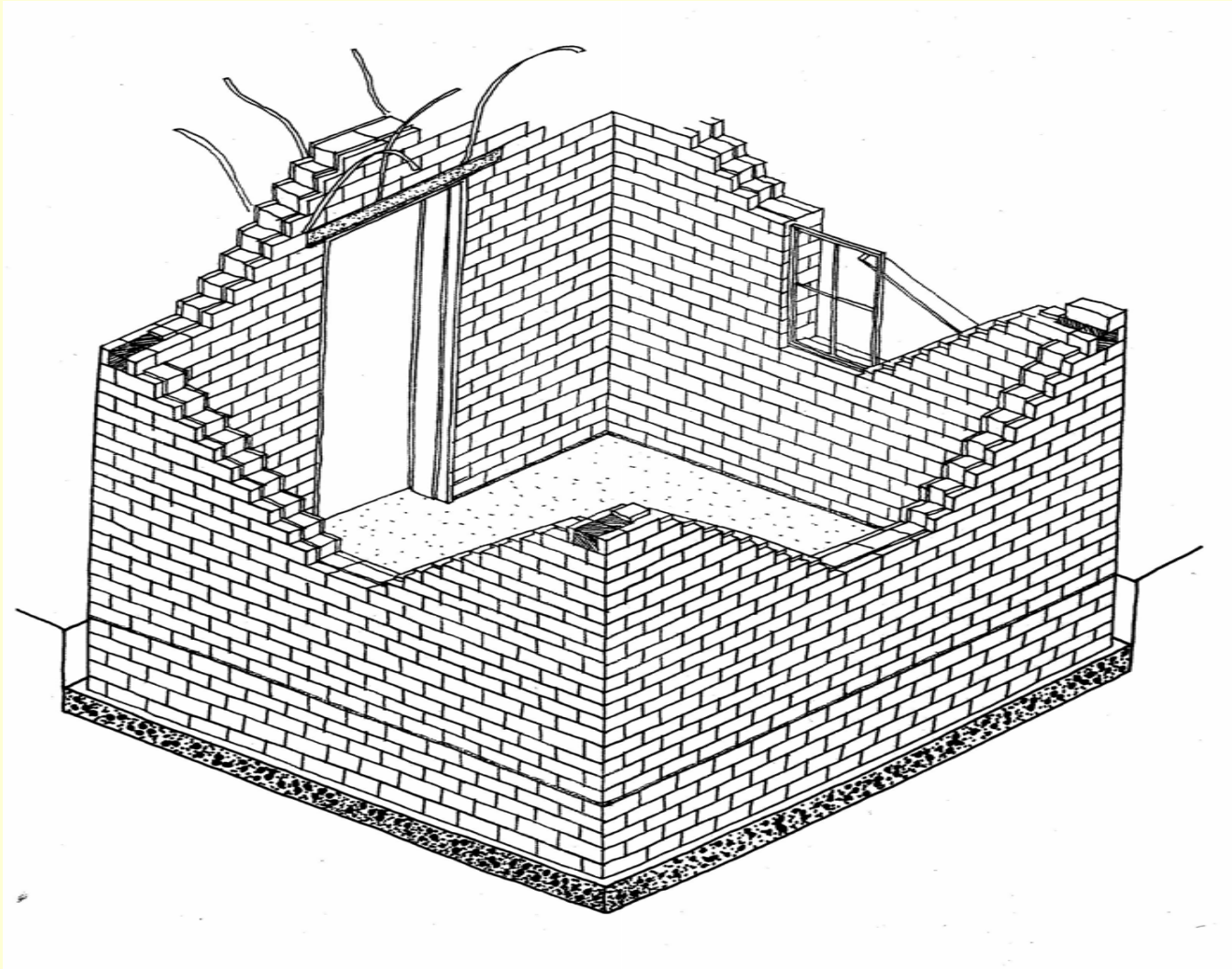
- IS 12894:1990 Fly Ash Lime bricks specs
 - IS 4326:1983 Earthquake resistance design & construction of building code of practice
 - IS 3495:1992 Method of tests of bricks
 - IS 1905:1987 Code of Practice for structural use of un-reinforced masonry
- 

Construction Methodology

- **Normal** / Hydraform 7+MPa foundation
- Conventional DPC
- 1st Hydraform Block layer with mortar
- Subsequent layers laid dry / with slurry
- Top 2 layers with mortar
- Other Construction requirements viz Bands, Openings, Columns, etc may be incorporated as per conventional Practice
- V / H reinforcements for Seismic compatible constructions
- Groove Pointing
- Optional Plastering
- Paint / Water Resistant Coating



Construction Details





Suitability for Multistory

- Excellent Face Brick Pre-pointed Finishes
- Material Saving
- Lower Dead Weight
- Speedier Construction
- Eco Friendly
- Seismic Reinforcements





Hydraform Superiority Over

Concrete Hollow Masonry


- Moisture Penetration
- Thermal Efficiency
- Electric & Plumbing Jobs
- Sizes & Design
- Insects
- Load Bearing Structures
- Cost Efficiency
- Finishes

Fired Brick Masonry

- Thermal Efficiency
- Eco Friendly
- On site Production
- Cost & Time Efficiency
- Finishes
- Water absorption
- Unit Weight
- Control over quality



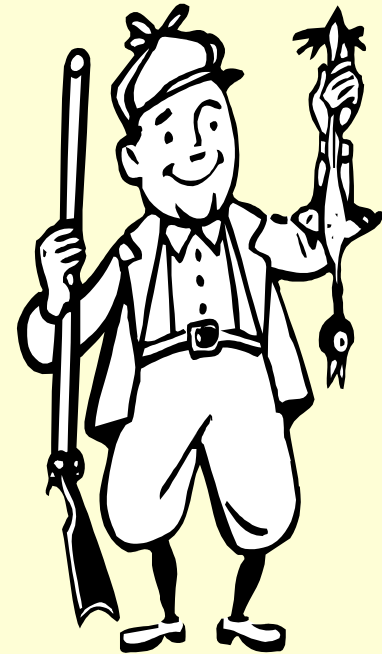
Major Projects

- **PWD office** at Dhaula Kuan
 - **Ministry of social Welfare** Buildings at Sikri, Ballabgarh
 - Earthquake resistant rehabilitation 6000 + houses projects, Gujarat by **HUDCO, BMTPC** /others
 - **ASI** Complex at Gujarat
 - 1000+ cyclone resistant houses by CARE
 - Boundary Walls in Leh by **PWD**
 - Magarpatta Township in Pune
- 



Utility

- Urgent need for Fly Ash based building elements
- Burnt Bricks causing Ecological imbalance
- High Aesthetic construction
- Cost, Time & Energy Efficient construction
- Maximum Reusable masonry
- Thermally efficient Structures
- On site Production to reduce transportation





Hydraform Offers:

- Substitute of Burnt Bricks & for effective use of Fly Ash in High Quality construction
- Factory supply/ On-site production solution
- Technical Training
 - Soil / Fly Ash selection
 - Mix design for making blocks
 - Block Production
 - Construction
- Quality Control Procedures





GO GREEN

GO HYDRAFORM WAY!



***BLOCK BY BLOCK LET'S
BUILD THE NATION !***

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