

# RELIABLE ICF

Building excellence ...

Greener | Safer | Stronger | Faster.....

www.building-insulation-india.com





#### **EFFICIENT**

Wall erection and insulation in one go.
Build to last with minimal repair costs.
One trained crew can build a floor in one day.
Sound insulation at no extra cost.



#### **FAST**

Easy to fix light weight, interlocking formwork Saves 20-50% construction time. Simple tools no heavy lifts & tackles.



#### GREEN

Saves energy for cooling/heating.

Conserves material and natural resources.

Saves money during construction & later.



### VERSATILE

Easy cladding of all types.

Any design / shape and size.

Better disaster & weather resistance.



HEALTHY & SAFE

Disaster & damage proof monolithic walls withstands all kinds of pressure & shocks.

Tested to survive even blasts.

No crack, seepage or damp interior.

Rooms dry, comfortable, dust & allergen free.

# The Reliable ICF method

faster, stronger, safer, cleaner, quieter system

### 10 functions in 1 product

- 1. Wall structure reinforced concrete
- Exterior insulation & fastening
- 3. Interior insulation & fastening
- 4. Air barrier
- 5. Sound barrier
- 6. Vapour barrier
- 7. Water barrier
- 8. Wind resistance
- Fire resistance
- 10. Energy efficiency



Showrooms: Exhibitor's delight



Design from a fairytale : Traditional or modern, no constraints

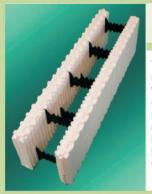


VILLA: Easy to build & finish



Group Housing: Weather & disaster proof

## **OUR PRODUCTS**



#### Reliable ICF No. 0101 STANDARD

These Standard ICF make the basic form work for the building envelope and have 50 mm EPS for insulation on both sides and 8 hard plastic ties that hold the panels together.



#### Reliable ICF No. 0102 CORNER

These Corner ICF constitute the 90° corners of the building. Again the two sides are 50 mm EPS panels held together with 8 hard

#### Reliable ICF No. 0103 HALF HEIGHT

Together with the Lintel ICF, these form the top layer of all gaps in the wall and hold the required steel reinforcement.



#### Reliable ICF No. 0104 LINTEL

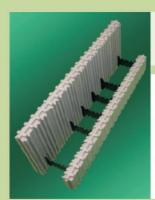
These, in combination with Half height ICF, form the top layer of all wall gaps and hold the concrete; thus preventing thermal bridges.





#### Reliable ICF No. 0105 END PIECE

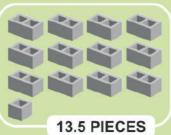
These create the wall endings. They are fixed on the ends / edges of the standard or corner ICF and provide a smooth and thermal bridge free ending to the wall.



#### Reliable ICF No. 0106 FLOOR EDGE

The Floor Edge forms the top most layer of the ICF where the wall ends and floor (or ceiling) begins. This envelopes the floor slab and thus prevents thermal bridging.







#### Reliable No. 1111 TRESTLE

Scaffolding to hold formwork and provide a walkway during concrete pour. Turn buckle in diagonal stay used to straighten formwork to perfect plumb.



# HOW TO BUILD MONOLITHIC WALLS WITH RELIABLE ICF



Interlocking, insulating, hollow EPS molded Ultra light form work, for quick assembly



Concrete poured inside form work pre reinforced with steel with minimum resources and material waste.



Adiabatic curing at constant temprerature retaining heat generated and water in concrete mix. No extra water for curing.



Straight & smooth external & internal surfaces



Wall surface easily clad & rendered

# **CONSTRUCTION STAGES**

#### **FOUNDATION:**

Reliable ICF can be built on footings similar to conventional masonry footings, slabs-on-grade or piles. Or can also be easily built on step footings & shallow foundation systems.











#### FORMWORK:

Walls built by fast and easy assembly of interlocking, molded hollow insulating forms.



#### **REBARS:**

Fixing reinforcement steel bars with hard ties inside formwork as per calculated structural requirement









#### TRESTLES:

Fixed for plumb straight walls & support during concrete pour **SCAFFOLD**:

Platform on trestles for easy access & assembly of high walls **PROPPING**:

Fixed to framework as props.





#### **INSULATED WALLS:**

Walls for a single floor, assembled in a day's work, and waiting for concrete pour.



# **CONSTRUCTION STAGES**



#### **SERVICE PIPES:**

All necessary service penetrations are marked & then chased with drill machine or cut with a hot knife.









#### CONCRETE (M 20 GRADE):

Concrete of specified slump and strength poured inside formwork to form a strong core.



#### ROOF & FLOOR:

Speed Floor, in three days. Ready for internal partitions (if not from Reliable ICF) or for another floor addition, if needed.











#### **CONDUITS & WIRING:**

Cables for electrical fittings are easily placed inside chased lines cut out on the insulation foam.





DOORS & WINDOWS:

Fixed after concrete poured but before walls are rendered.









FINISHED STRUCTURE: After wall cladding or rendering.





