Hybrid Concrete-Steel Composite System for Energy Efficient Houses

This system uses Hybrid Concrete-Steel Composites to build an energy efficient house. The system uses walls of insulating Fibermesh concrete containing mix-water conditioner and concrete densifier admixtures; recycled steel in floors, internal walls and roof trusses; geothermal energy; and recycled insulation materials. Although the completed prototype house does not show any difference in appearance, its whole system is changed from conventional construction. Wooden floors are replaced with lightweight concrete on light gage steel decking and recycled steel beams. The conventional airconditioning and heating system is replaced with a quiet geothermal energy system that depends on an earth temperature of 58°F. Lightweight steel trusses replace conventional wooden trusses in the roof.

Contact: Gajanan M. Sabnis
Organization: Technology Transfer Consultants, Inc.
Address: 409 Northview Avenue
City: Silver Spring
State/Province: MD
Postal Code: 20905
Country: USA
Phone No: 301-879-3733
FAX: 301-879-3735
URL: 
Email: 