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## Vertical ICF Wall System

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## VERTICAL ICF WALL SYSTEM

### THE NEED

Traditional ICF systems' installation is tedious and labor intensive resulting in out of level, bowing, and snaking walls with a significant amount of bracing adding to the cost. Traditional ICF blocks also have built-in weakened planes because of the massive amounts of horizontal and vertical joints and attachment points are limited for fastening interior and exterior finishes.

### THE TECHNOLOGY

ICF (Insulated Concrete Form) walls are a form of structural walls used for construction. Hobbs Vertical ICF system uses less concrete, more recycled material and requires less labor for construction. The furring assemblies and retainer clips of the Hobbs VICF system are made from 100% recycled post-industrial waste.

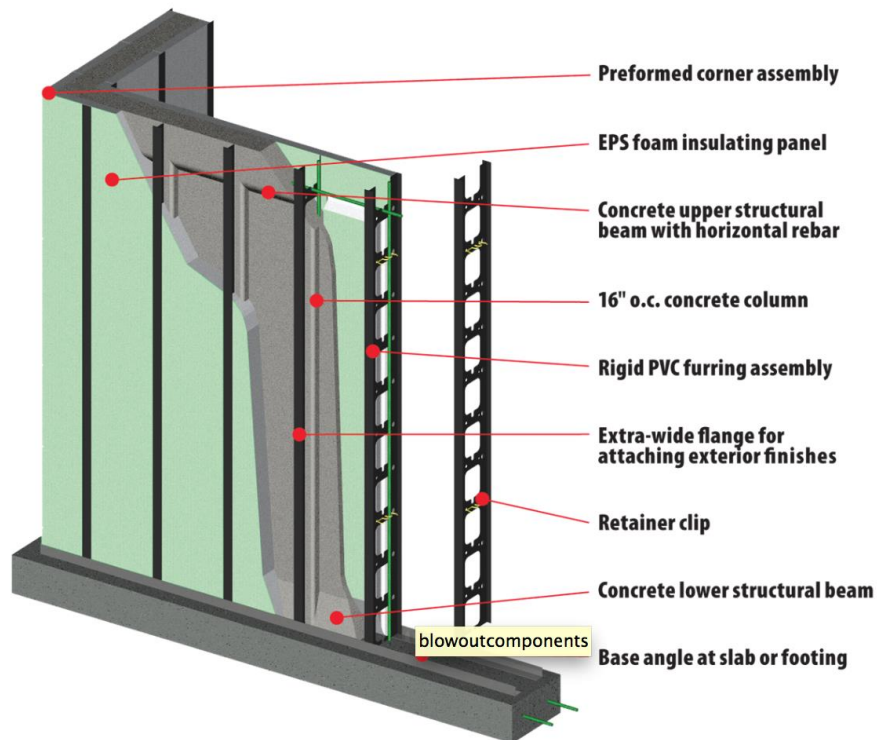


FIGURE 1 THE COMPONENTS OF THE HOBBS VERTICAL ICF WALL SYSTEM



There are two wall designs- contoured and flat- as shown below. Flat wall designs can be used around window and door openings as well as for additional structural strength along with contour walls.



**FIGURE 2 CONTOUR WALLS**



**FIGURE 3 FLAT WALLS**

Other components include:

- Furring Assemblies (Rigid PVC Studs) (see Figure 4)
- Retainer Clips(see Figure 5)
- Base Angle (see Figure 6)
- Performed Corner Assembly (see Figure 7)
- Tees (see Figure 8)



**FIGURE 4 FURRING ASSEMBLIES (RIGID PVS STUDS)**



FIGURE 5 RETAINER CLIPS



FIGURE 6 BASE ANGLE



FIGURE 7 PERFORMED CORNER ASSEMBLY



FIGURE 8 TEES

## THE BENEFITS

- Uses 40% less concrete and 39% more insulation than typical ICF blocks.
- It uses components consisting of materials derived from recycled content and is considered to be the most environmentally friendly ICF system available



- The Hobbs system “contoured design” achieves a superior insulation value by using less concrete and more foam insulation
- Energy-efficient design means a reduction in the size and cost of HVAC equipment – which could translate to saving of 50-70% in utility costs every month of every year. The unique vertical panel system is a one piece, full wall height; formers can work primarily from the ground, resulting in a safer, faster, and easier assembly
- It has been tested by third party physical testing-Iowa State University- to verify its strength

According to Hobbs, the following table shows a sample of the savings incurred when choosing the Hobbs ICF compared to a regular ICF (Hobbs Vertical ICF, 2014).

Concrete Cost per C.Y.	6" ICF Concrete Cost per S.F.	Hobbs Concrete \$ per S.F.		Hobbs \$ Savings per S.F. of Wall	Actual Savings
\$ 75.00	\$ 1.39	\$ 0.76	=	\$ 0.63	45%
\$ 80.00	\$ 1.48	\$ 0.81	=	\$ 0.67	45%
\$ 85.00	\$ 1.57	\$ 0.86	=	\$ 0.71	45%
\$ 90.00	\$ 1.67	\$ 0.91	=	\$ 0.76	45%

FIGURE 9 HOBBS VICF VS. TYPICAL 6" FLAT WALL ICF'S

Video clip: [The ICF challenge – Vertical VS Typical](#)

## STATUS

Hobbs Building Systems has received a U.S. patent for their "Hobbs Vertical ICF Wall System" and has been used on a number of projects by homeowners and contractors.

## BARRIERS

Not known



## POINTS OF CONTACT

Hobbs Building Systems  
Phone: (866) 904-9255 Website: <https://www.hobbsbuildingsystems.com/>

## REFERENCES

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## REVIEWERS

Peer reviewed as an emerging construction technology

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