Flat ICF Wall System Requirements

Plan View

- Actual Wall Thickness
- Insulation Form
- Concrete
- Vertical Wall Reinforcement as required

Samples from www.AutoCADDetails.net
Floor on ICF Wall Connection (Top Bearing Connection)

Vertical Wall Reinforcement as Required

Lap Splice as Required

3.5 Min.

Bond Joist or Blocking

Anchor Bolt

Sill Plate

Min. #4 Bar (Continuous)

ICF Wall

3.5 Min.

7" Min.

Samples from www.AutoCADDetails.net
Light Frame Construction above

Joist

Sill Plate

Anchor Bolt as Required

Vertical Wall Reinforcement as Required

ICF Wall

7" Min.

Floor on ICF Wall Connection (Top Bearing Connection)

Minimum #4 Bar (Continuous)
Double (shown) or staggered Anchor Bolt as Required

Min. 4"x4"x1/4" Steel Plate for each bolt

Lap Splice as Required

Minimum #4 Bar (Continuous)

Floor Ledger ICF Wall Connection (Throught Bolt Connection)
Double (shown) or staggered Anchor Bolt as Required

Min. 4"x4"x1/4" Steel Plate for each bolt

Lap Splice as Required

Minimum #4 Bar (Continuous)

Vertical Wall Reinforcement as Required

Insulating Form

Ledger Board

Joist

Joist Hanger

3.5" Min.

ICF Wall

Floor Ledger ICF Wall Connection (Throught Bolt Connection)
Floor Ledger ICF Wall Connection (Side Bearing Connection)

Double (shown) or staggered Anchor Bolt as Required

Lap Splice as Required

Minimum #4 Bar (Continuous)

Vertical Wall Reinforcement as Required

Samples from www.AutoCADDetails.net
Double (shown) or staggered Anchor Bolt as Required

Lap Splice as Required

Minimum #4 Bar (Continuous)

Vertical Wall Reinforcement as Required

Floor Ledger ICF Wall Connection
(Side Bearing Connection)
ICF Wall System

Horizontal Wall Reinforcement as Required

Light Frame Floor

Wall Height 10 feet Max.

Depth of Unbalanced Fill 4 Feet

Min No. 5 Bar @ 4' O.C.

Wall to Footing Connection

ICF Wall System

Vertical Wall Reinforcement as Required

Footing

8" 8" 3"

12"

ICF Basement Wall Construction

Samples from www.AutoCADDetails.net
ICF Wall System

Vertical Wall Reinforcement as Required

Footing

Min No.5 Bar @ 4' O.C.

ICF Foundation Wall-to-Footing Connection

8"

8"

3"

12"
ICF Stem Wall and Monolithic Slab on Grade

Min No. 5 Bar @ 4' O.C.

ICF Wall System

Horizontal Wall Reinforcement as Required

Vertical Wall Reinforcement as Required

Monolithic Concrete Slab on Grade

Samples from www.AutoCADDetails.net
ICF Wall System

Slab on garde

Horizontal Wall Reinforcement as Required

Min No. 5 Bar @ 4' O.C.

Wall to Footing Connection

Vertical Wall Reinforcement as Required

Footing

ICF Stem Wall

4 Feet Max.
Light Frame Wall System

Light Frame Floor

ICF Wall System

Wall Height 10 foot Max.

Horizontal Wall Reinforcement as Required

ICF Wall System

Vertical Wall Reinforcement as Required

Min No.5 Bar @ 4' O.C.
Wall to Footing Connection

Supporting Light Frame Construction with Slab

8"

3"

8"

12"

Footing Slab

Footing

Samples from www.AutoCADDetails.net
Top Wood Sill
Plate-ICF Wall System Connection

ICF Wall System

Floor Ledger-ICF Wall Connection (Throught Bolt Connection)

Vertical Wall Reinforcement as Required

Light Frame Floor

Horizonal Wall Reinforcement as Required

First Floor Wall Height 10' Max.

ICF WALL Supporting Light Frame Roof
Roof ICF Wall System Connection

Second Story Wall Height 10 feet Max.

ICF Wall System

First Story Wall Height 10 feet Max.

Light Frame Floor (or concrete slab on grade)

Wall Height 10 feet Max.

Horizontal Wall Reinforcement as Required

ICF Wall System

Depth of Unbalanced Fill 4 Feet

Min No.5 Bar @ 4' O.C.

Wall to Footing Connection

Footing

ICF Wall Supporting ICF Second Story and Light Frame Roof

Samples from www.AutoCADDetails.net
Concrete

Reinforcement as Required

Maximum $d_b / 8$

Reinforcement as Required

Lap Splice Requirements
Light Frame Roof

Roof to Sill Plate Strap Anchor as required

Vertical Wall Reinforcement as Required

Sill Plate
Anchor Bolt

ICF Wall
Min. #4 Bar (Continuous)

Roof ICF Wall System Connection
Light Frame Roof

Uplift Connector as Required

Vertical Wall Reinforcement as Required

ICF Wall

Min. #4 Bar (Continuous)

Roof ICF Wall System Connection

Samples from www.AutoCADDetails.net
2" Minimum Concrete Web

Insulating Form

Horizontal Concrete Core (Hidden) @ Max. 12" O.C.

Vertical Concrete Core

Vertical Wall Reinforcement as Required

Plan View
Screen-Grid ICF Wall System Requirements
Plan View

Waffle-Grid ICF Wall

System Requirements

- 2" Minimum Concrete Web
- Insulating Form
- Horizontal Concrete Core (Hidden) @ Max. 16" O.C.
- Vertical Concrete Core
- Vertical Wall Reinforcement as Required