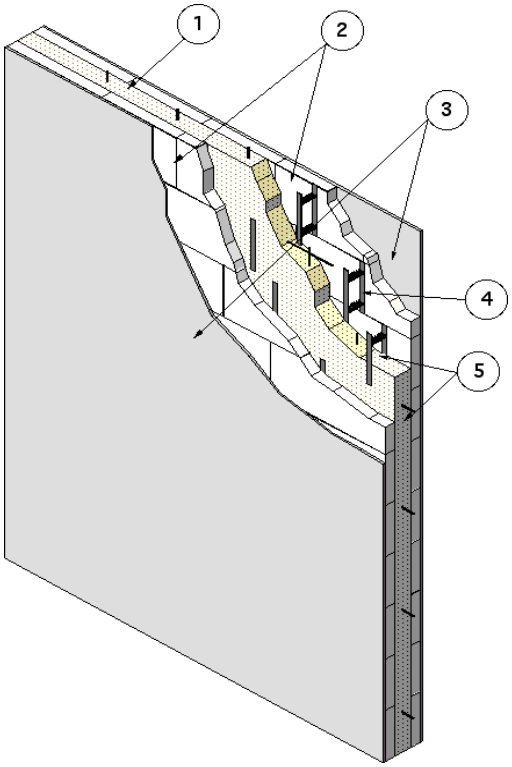
BuildBlock Building Systems, LLC
Design No. BBS/ICF 180-01
Load Bearing and Non-load Bearing Fire Resistance Rated Wall Assemblies
BUILDBLOCK® AND BUILDLOCK® INSULATED CONCRETE FORMS
ASTM E119
CAN/ULC S101
Maximum Load 5000 lb/lin ft
Assembly Rating – 3 Hour Rating



FORMED WALL THICKNESS	MAX FIRE RATING
11 in. (279 mm)	3 Hours
13 in. (329 mm)	3 Hours
15. in (381 mm)	3 Hours
17 in. (432 mm)	3 Hours

1. **CONCRETE:** Pour normal weight concrete (density between 150-155 pcf) having a min. 3,000 psi (21 MPa) nominal compressive strength into the forming system (Item 2).

2. **INSULATED CONCRETE FORMING SYSTEM:**

   CERTIFIED MANUFACTURER: BuildBlock Building System, LLC

CERTIFIED PRODUCT: BuildBlock® and BuildLock® Insulated Concrete Forms (ICF)

The BuildBlock® and BuildLock® ICF forming system consists of Type II (ASTM C578) (Type 2 – CAN/ULC S701) molded expanded polystyrene (EPS) foam panels separated by injection-molded polypropylene cross ties. The polypropylene cross ties maintain the EPS panel facings at a fixed distance of 6 in. (152 mm), 8 in. (203 mm), 10 in. (254 mm), or 12 in. (305 mm) to create overall form widths of 11 in. (279 mm), 13 in. (330 mm), 15 in. (381 mm), or 17 in. (432 mm) respectively. The form units have a preformed interlocking mechanism along the top and bottom edges to facilitate interlocking and stacking.

3. **INTERIOR AND EXTERIOR FINISHES (Optional):** Interior and exterior finishes may be added to BuildBlock® ICFs without affecting the fire-resistance rating as required by BuildBlock's Code report.

4. **POLYPROPYLENE FORM TIES:** Every 6 in. (152 mm) on center (oc), the cross ties connect the EPS foam plastic panels at a fixed clear distance. The flange of the tie measures 1-1/2 in. wide by 15 in. high by 3/16 in. thick (38 mm by 381 mm by 4.8 mm) and is recessed 1/2 in. (12.7 mm) below the EPS surface. The flange is used for attachment of exterior and interior finish materials.

5. **STEEL REINFORCEMENT:** Steel reinforcement shall be placed before filling the forming system with concrete (Item 1). #5 steel rebar is placed horizontally at 32 in. (813 mm) oc and every 24 in. (610 mm) oc. The rebar is to be designed and placed per the applicable Code requirements and approved by a registered design professional with the appropriate license for the Authority Having Jurisdiction.

6. **ADHESIVE (Not Shown):** A bead of Foam2Foam™ polyurethane adhesive manufactured by Wind-lock foam shall be applied along all joining surfaces of ICFs.

Consult the listing report on the Directory of Building Products (https://bpdirectory.intertek.com) for the edition of the standard(s) evaluated.