

Build it BETTER with CONCRETE BLOCK.



THE COMMON SENSE BASEMENT FOR YOUR HOME.

Construct your basement with concrete block and comply with the International Residential Code (IRC). Think smart - increase your living space with a cost effective, energy efficient and DRY concrete block basement.

ECONOMICAL

Least expensive basement system.

Benefit: Use the money you will save to enhance the kitchen, family room or other part of your home.

ENERGY EFFICIENT

The thermal mass of concrete block contributes to lower energy costs.

Insulation installed to meet the R Value for your climate zone according to the IRC will also lower the cost.

Benefit: Lower energy costs throughout the life of your home saving you money. Conservation of our natural resources.

STRONG & DURABLE

Benefit: Concrete block has withstood the test of time - 100 plus years of dependable use.

MOLD RESISTANT

concrete masonry is NOT a food source for mold.

Benefit: If mold occurs concrete masonry can be cleaned and does not need to be replaced.

SAFE

Benefits: Fire resistant and structurally sound.

QUICK & VERSATILE

Benefits: Design changes can be easily made during construction to meet your needs without costly delays.

Reinforcement is easily added within the wall when required by the IRC for your particular home.

EGRESS

Benefit: Windows, doors and other forms of egress can be designed into the house to make it easier to convert your basement into livable space.

FINISHING OF INTERIOR WALL

For minimal cost concrete block basement interior walls can be finished to provide you with enjoyable living space.

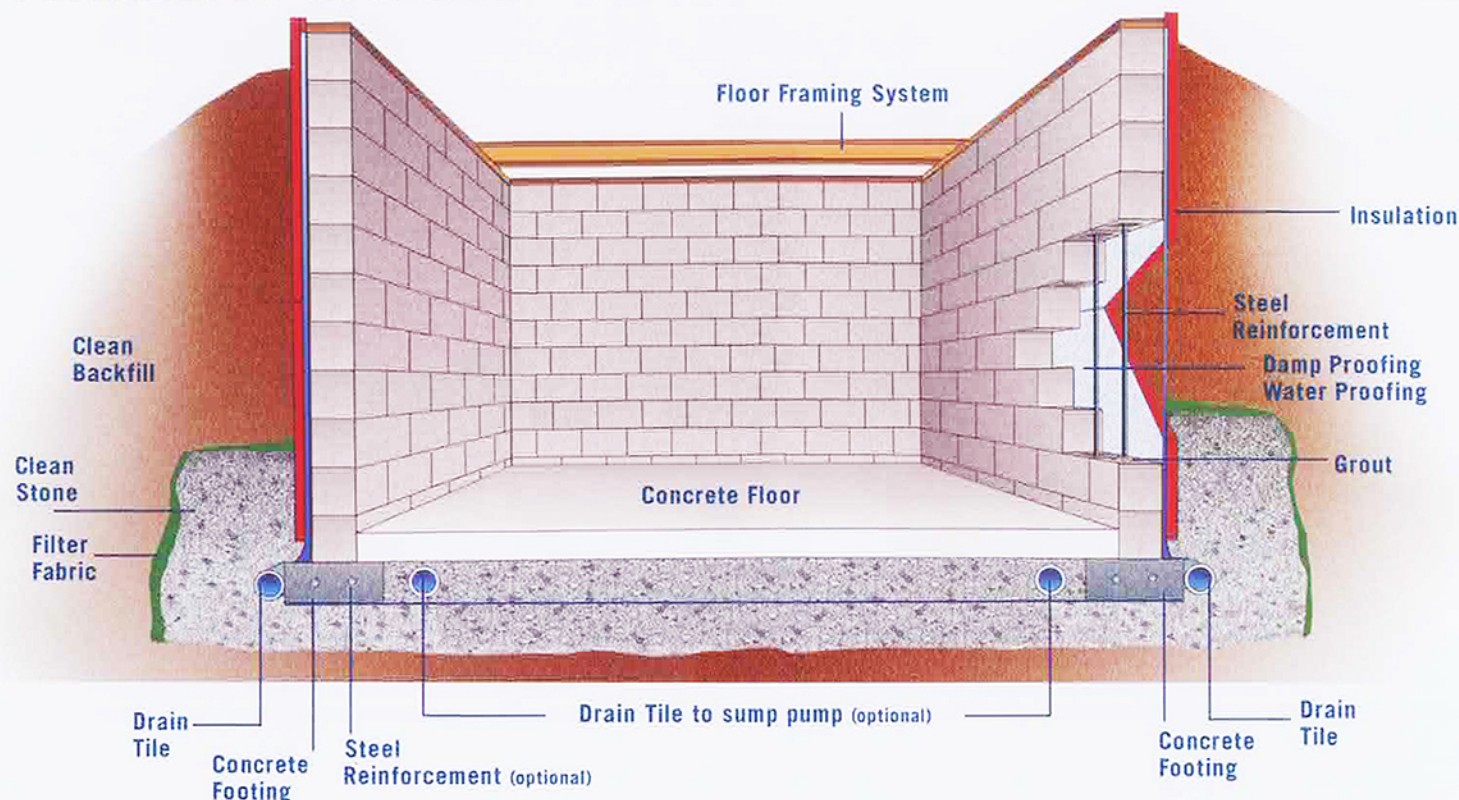
Benefit: Family Room, Workout Room, Home Entertainment Room, Hobby Shop.

LOCALLY PRODUCED PRODUCT

Concrete masonry units are produced in your local area and installed by local masons.

Benefit: Supporting business in your community.

MEET THE INTERNATIONAL RESIDENTIAL CODE & BUILD A SOLID FUTURE USING THIS RECOMMENDED BASEMENT SYSTEM.



CONCRETE FOOTING

- + Continuous solid base for the beginning of the concrete block basement system.
- + Soil bearing capacity must be a minimum of 1500 psi.

CONCRETE BLOCK

- + Use certified ASTM C90 load bearing units. Test reports are available by request.

REINFORCING STEEL & GROUTING

- + US Grade 60 is the minimum requirement for steel reinforcing bar.
- + When required, reinforcing steel should be placed in the inside third of the block core and that core filled solid, full height with the proper grout.

MORTAR

- + Type S or M mortar should be used in mortar joints.

DAMP-PROOFING / WATERPROOFING

- + Must be applied to the exterior of the wall from the top of the footing to the finished grade.
- + These are required by the IRC and several types of materials can be used.

INSULATION

- + If insulation is required, it can be easily installed on the interior, exterior or inside of the concrete block wall. There are three climate zones in PA with a minimum requirement of R9. Through the US Government authorized software program, REScheck, trade offs for the amount of insulation are dependent on other building elements. These elements include but are not limited to windows, doors, heating and air conditioning equipment.

DRAIN TILE & STONE FILTER FABRIC

- + Helps keep the water away from the foundation and must be placed below the top of the footing.
- + Drain tile can also be placed inside the structure below the concrete floor and covered with approved filter membrane.
- + The drain tile is placed on a minimum of 2 inches of clean crushed stone with a minimum of 6 inches of clean crushed stone placed above top of the footing.
- + Filter fabric is placed on top of the stone to separate the stone from the backfill.

BACKFILL

- + Use clean backfill and slope grading away from the house as directed in the IRC.

ADDITIONAL RECOMMENDATIONS NOT REQUIRED BY THE IRC.

- + We recommend a minimum of 2 feet of 1 inch clean crushed stone above the top of the footing.
- + A 45 degree bed of mortar on top of the footing to drain water from foundation.
- + Steel reinforcement can be added to the concrete footing for additional strength.

Pennsylvania Concrete Masonry Association

PO Box 4 • Lebanon, PA 17042

Phone: 717-279-6346 • Fax: 717-272-5147

jlboyer@nbn.net • www.pacma.com

The International Residential Code (IRC) is a minimum standard. Check your local municipality for additional code requirements. Additional construction details will be needed for code compliance. Illustration not to scale.