Fox Blocks Products

With advice from leading contractors in the Insulated Concrete Form business, Fox blocks has created an incredible group of blocks.

Key elements – all products are reversible with a robust interlock design, blocks have 2⅝" of EPS insulation, the product line accommodates any wall design configuration and building type - residential or commercial.

Product drawings, dimensions and application details in all formats are available from these links:
www.caddetails.com and market.bimsmith.com/foxblocks

FOX BLOCKS LINE-UP INCLUDES:

A) Straight Blocks
Available in 4", 6", 8", 10" and 12".

B) Straight ½ Block
Available in 4", 6", 8", 10" and 12".

C) Extended 90˚ Corners
Available in 4", 6", 8", 10" and 12".

D) Extended 90˚ Corner ½ Block
Available in 4", 6", 8", 10" and 12".

E) 45˚ Corner Blocks
Available for 4", 6" and 8".

F) T-Blocks
Standard T: Available in 6" x 6" and 8" x 8"
Transition T:Available in 4" x 6", 6" x 4", 8" x 4",and 8" x 6"

G) Corbel Ledge Blocks
Available in 6" and 8".

H) Radius Blocks
For 5', 6', 7', 8', 9' and 10' radius.
Only available in the 6" blocks.

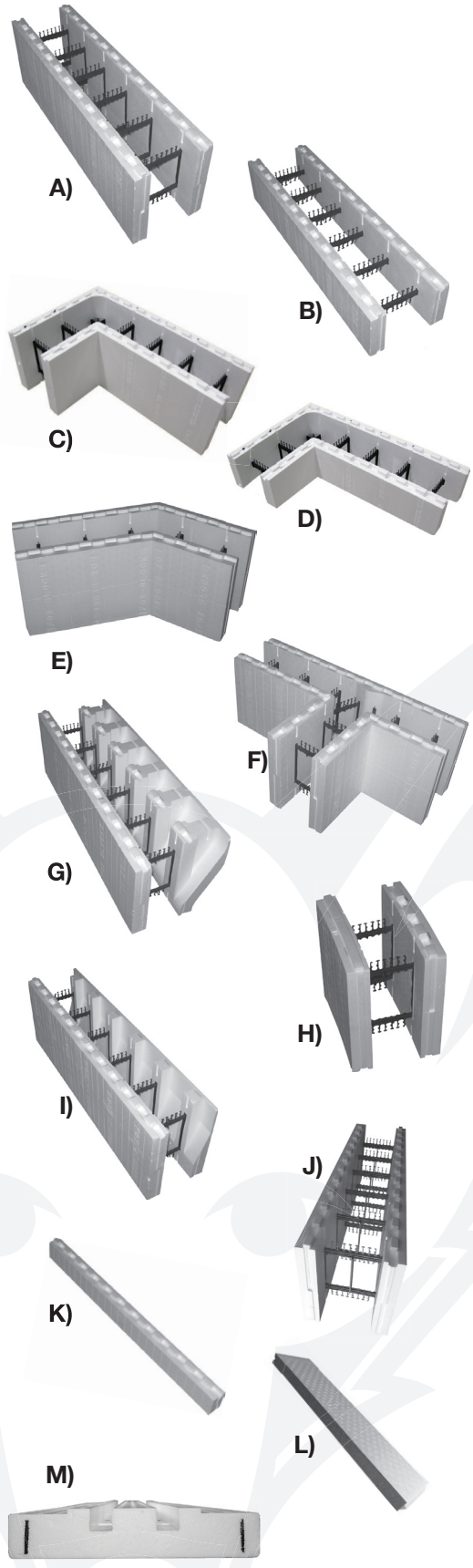
I) Taper Top Block
Available in 6" and 8".

J) Curb Block
Available in 8" and 10" Straight and 90˚

K) 4" High Extension
When you need extra height or to help with openings.

L) Energy Sticks
One size fits all.

M) Fox Buck
Available in 4", 6", 8", 10" and 12".



FOX BLOCKS STANDARD (STRAIGHT) BLOCK

The standard block is the core of the product line, typically makes up between 80-85% of the ICF wall assembly on most residential and commercial jobs.

STANDARD BLOCKS

1) 16" high x 48" long available in concrete core sizes 4", 6", 8", 10" and 12"

2) One standard block is 5.33 sq. ft. of wall area

3) Solid 2⅝" thick EPS continuous insulation panels providing R4.1 per inch

4) Cross-ties, polypropylene recycled industrial plastic at 8" o.c.

5) Cross-ties are designed with a full height 1½" wide fastening strips at 8" o.c. on each side of the block

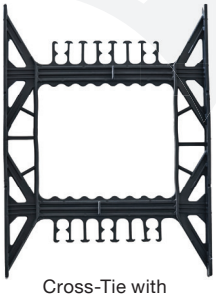
6) Rebar clips are built into the cross-ties to secure and space the rebar

7) Blocks have a robust, reversible, tight fitting interlocking system on the top and bottom

8) The locations of all cross ties are indicated on the exterior face of the block

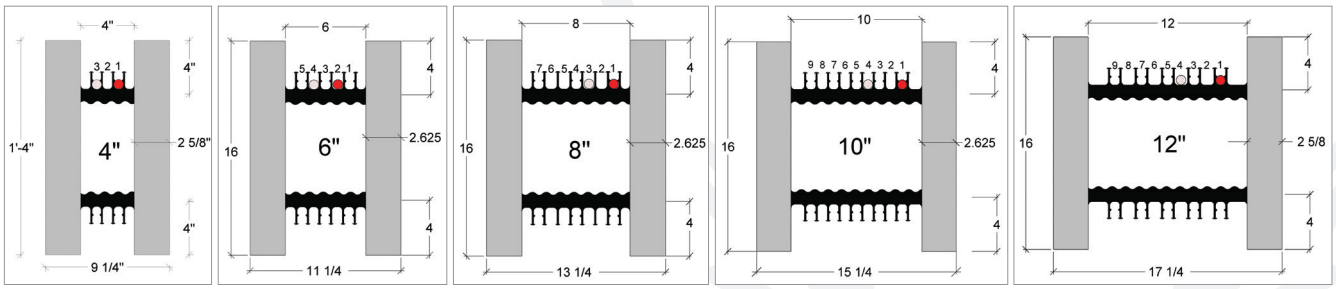
9) Cut lines are scribed on the exterior face of the block to allow cut blocks to maintain interlock

10) Fox Blocks creates a flat wall reinforced concrete wall assembly



Cross-Tie with Fastening Strip

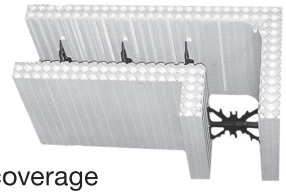
FOX BLOCKS END VIEW SIZING



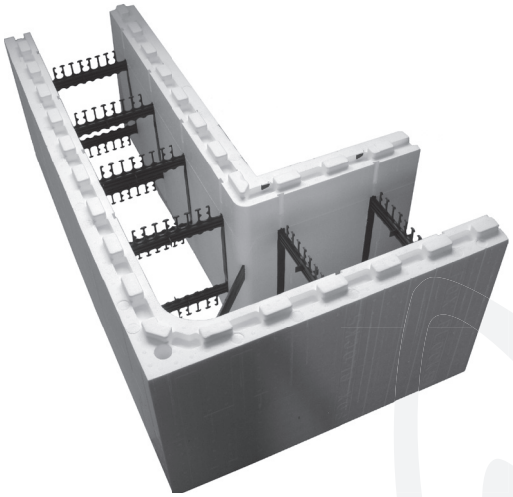
CONCRETE VOLUMES - CU.YD (CU.M)

4"	0.066 (0.05)	10"	0.165 (0.126)
6"	0.099 (0.075	12"	0.198 (0.151)
8"	0.132 (101)		

FOX BLOCKS EXTENDED 90° CORNER



Fox Blocks engineered the 90° corner to hold concrete without the need for extra strapping or external bracing.



FOX BLOCKS EXTENDED CORNER FEATURES

1) All blocks have Ties* at 8" o/c and are available in 4", 6", 8", 10" and 12" cavities.

** Ties are the black recycled polypropylene members that give the block strength and provide rebar positioning.*

2) Like all Fox Blocks, corner blocks are reversible so when you ask for a corner you will get the correct one every time. Each corner is left or right automatically!

3) Foam thickness is 2⅝" on all forms.

4) Tie allows rebar lap splices to lay on top of each other for good flowability during concrete placement.

5) Ties are clearly marked on EPS for attachments.

6) Tie flanges are 1½" wide and full height for ease of attachment.

7) Ties touch vertically when stacked, eliminating form settlement.

8) Each corner has a 1" hole strategically placed allowing the ICF contractor the option of inserting a full height ¾" PVC conduit to tie all courses together for extra form support.

OTHER ICF 90s

- 5 to 5.33 total square feet of coverage
- More costly per square foot of coverage
- 16" shorter than Fox Blocks
- Only 4 ties
- Only one tie on short end
- More movement during concrete

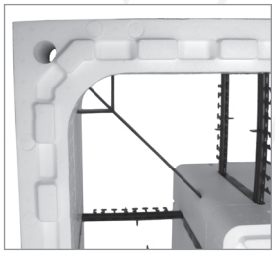
FOX BLOCKS 90s

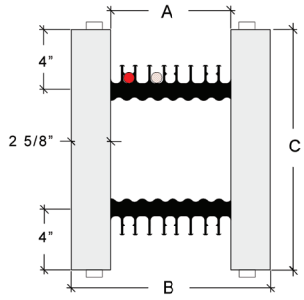
- 7.56 total square feet of coverage
- Less costly per square foot of coverage
- 16" longer than other ICF
- 6 ties
- Two ties on short end
- Less movement during concrete

Being 16" longer than other ICF allows you to eliminate one full straight block for every three Fox Blocks corners used. This also saves you money!

Radius on the inside face of the Fox Blocks Corners are:
4", 6" and 8" Blocks = **3"** 10" and 12" Blocks = **8½"**
Additional EPS was added to the 10" and 12" Corner Blocks to give additional strength for the longer distance from corner to 1st tie.

Every Fox Blocks corner has a large 100 sq. inch fastening zone in the corner.





A	B	C
4"	9.25"	8" or 16"
6"	11.25"	8" or 16"
8"	13.25"	8" or 16"
10"	15.25"	8" or 16"
12"	17.25"	8" or 16"

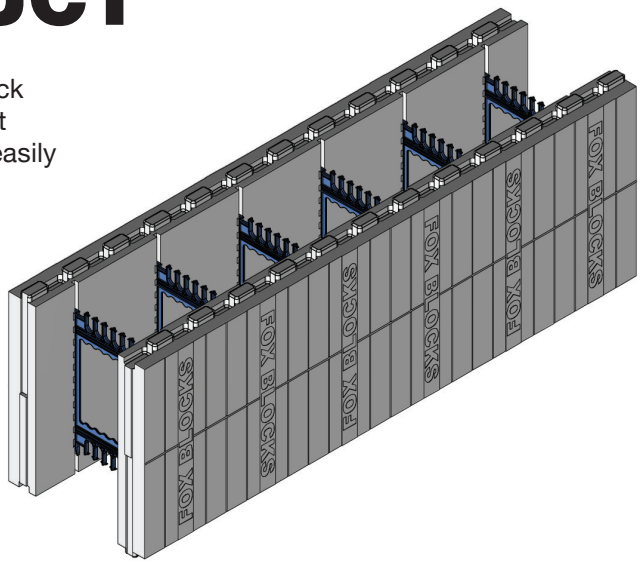
Fox Blocks 90° Extended Corner Size Chart

OUTSIDE DIMENSIONS ARE:

4" Corner = 38" x 22"
6" Corner = 40" x 24"
8" Corner = 42" x 26"
10" Corner = 42" x 26"
12" Corner = 46" x 30"

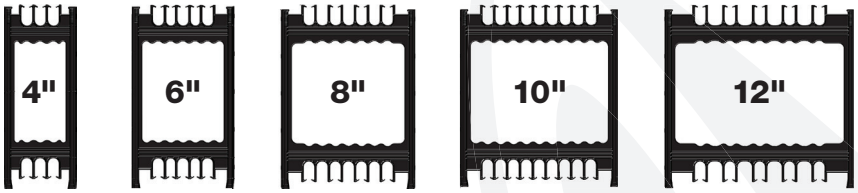
FOX BLOCKS COMPACT PRODUCT

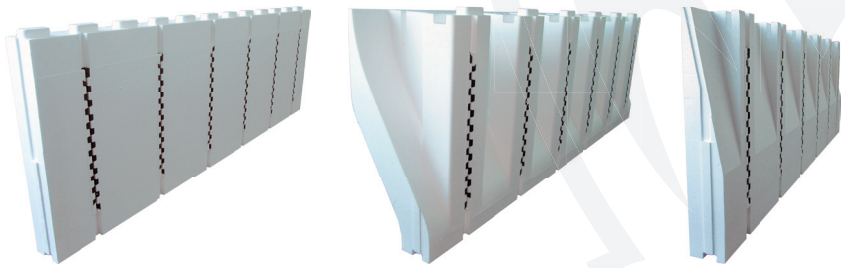
Fox Blocks Compact is a panelized product designed to stack seamlessly with the traditional Fox Blocks line. The Compact Block reduces freight costs by delivering flat. Ties are then easily inserted into the panels at the jobsite.



FOX BLOCKS COMPACT BLOCK APPLICATIONS

- Double Taper Top in any size
- Double Corbel in any size
- Emergency stock where storage is a premium
- Large block size required at a long distance from plant





STRAIGHT PANEL CORBEL PANEL TAPER PANEL

QUICK COMPACT BLOCK FACTS

- Dimensions are consistent with traditional Fox Blocks
- Rebar locations match traditional Fox Blocks ties
- Straight, Taper and Corbel panels available
- Ties lock into position when inserted into the panels
- Start with traditional Fox Blocks corners to anchor your wall
- When ties are locked into position use Fox Blocks HV Clips

GETTING STARTED

1) Insert one tie into one panel.
2) Lift this unit and slide the opposite side of the same tie to a second panel that is aligned with first panel.
3) Insert the remaining 5 ties into this unit to complete your first full block.
4) Press ties down until they lock into position.
5) Continue this procedure until first row is completed.

CONSECUTIVE ROWS

1) Lock two panels on top of lower row of block.
2) Insert 6 ties to complete the block.
3) Be sure to force ties down until they lock into position.

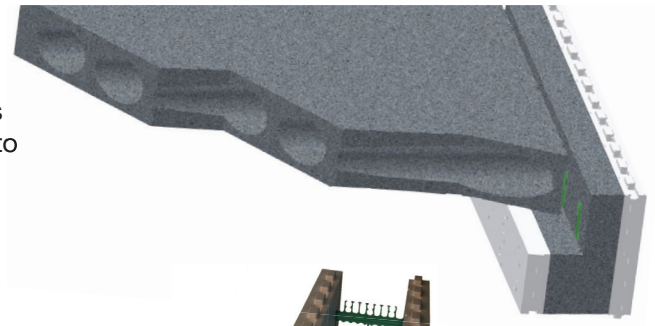
INTENSE REBAR CAGES

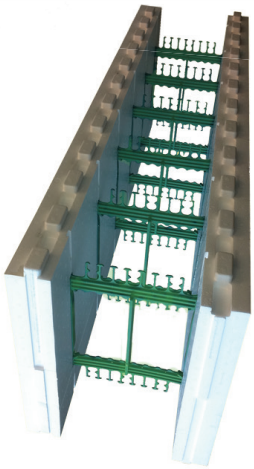
1) Install vertical rebar.
2) Assemble Compact Block around rebar.
3) Place and install stirrups as needed while assembling Compact Block.

GO TO FOXBLOCKS.COM FOR UPDATED INFORMATION

FOX BLOCKS CURB BLOCK

There has always been a need for a block that can create a ledge to support floor systems within the wall without limiting course heights. The Fox Blocks team has solved this by adding an extra attachment point within the tie. This patented solution allows you to form a curb with the block to support whatever you need to support.





USING THE CURB BLOCK

1) INSTALLATION
See following page for proper steps using the curb block.

2) SHAPES AVAILABLE WITH THE CURB BLOCK
Curb block is currently available in 8" and 10" straights, as well as 8" and 10" ninety degree corners.

3) RANGE OF USE
The Curb Block can be cut down as low as 11" from the top of the block. You can also cut up to as much as 11" from the bottom of the block to use when wrapping around concrete slabs. See page two for an example of this.

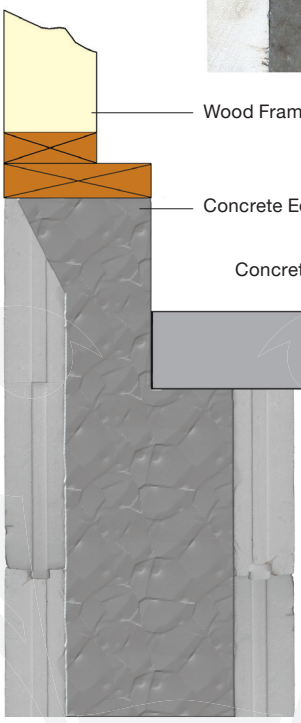
4) ESTIMATING
Straight blocks = 4'-0" long.
Formula: (Total linear footage of wall - total linear footage taken up by 90˚ corners)/ 4 = Number of straight curb blocks
90˚ corner blocks = 5'-4" each.
Formula: Number of 90˚ turns = Number of 90˚ corner blocks

5) IDENTIFICATION
The Curb Block has been designed with a green tie for easy identification. By producing the ties in green, supply yards will be able to identify and send you the proper block. This will also ensure your crew will not use it in the wall at the wrong time.

6) BUNDLE SIZES

8" straight block = 12 per bundle	8" 90˚ corner block = 6 per bundle
10" straight block = 9 per bundle	10" 90˚ corner block = 6 per bundle

7) EXCESS BLOCK?
If you end up with extra Curb Block on site, you can save for next job or simply use them up within the walls you are building. The shape and size of the Curb Block is identical to the normal straight and 90˚ corner blocks.

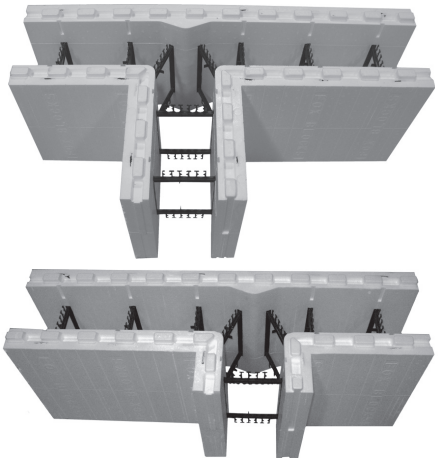


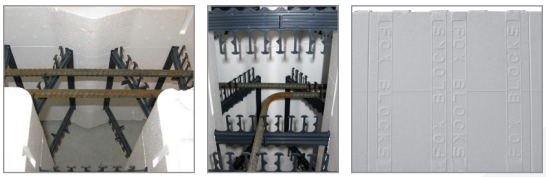
EXAMPLE OF A GARAGE SLAB/BEAM
Using the Curb Block in a garage situation allows a raw concrete finish on the interior face, eliminating the need to cover EPS. Any height beam or wall can use curb block on top row. Optionally, a field cut taper can be cut into outside face for extra bearing.

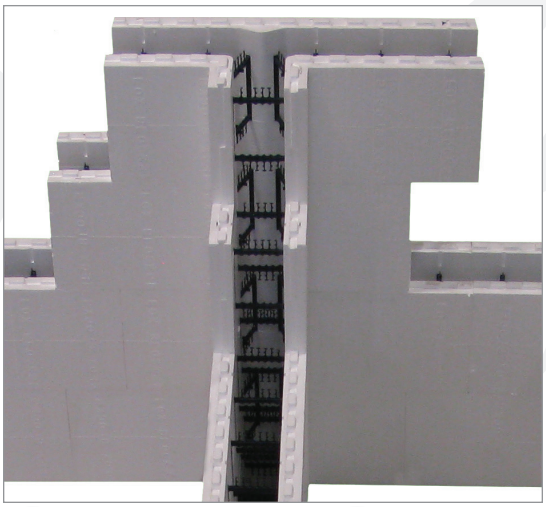
FOX BLOCKS T-BLOCK

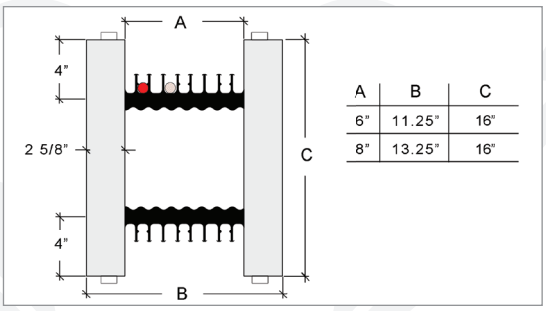
Sure you can build T walls with a couple of straight block and some tie wire, but if you want to lower your man hour rate, you need the **Fox Blocks T-Block**.

When contractors said they needed a T-Block, Fox Blocks delivered with one that is easy to use and incredibly strong.









A	B	C
6"	11.25"	16"
8"	13.25"	16"

FOX BLOCK T-BLOCK FEATURES

1) The T-Blocks are available in 6" and 8" concrete cores.

2) Six T-Blocks per bundle (3 short and 3 long)

3) Two ties* are used at the intersection of the "T" to give maximum strength and attachment. These ties are placed in such a way as to allow proper rebar placement and ultimate form strength.
** Ties are the black recycled polypropylene members that give the block strength and provide rebar positioning.*

4) Like all Fox Blocks, blocks are reversible which gives you double the options with just one block. You can choose to have the T section on the right or left of center simply by flipping the block over.

5) Foam thickness is 2⅝" on all blocks.

6) Ties allow proper rebar lap splices, for maximum flowability during concrete placement and consolidation.

7) Ties are clearly marked in EPS for attachments.

8) Tie flanges are 1½" wide and full height for ease of attachment.

9) Ties touch vertically when stacked eliminating form settlement.

10) The T-Block will give you 8" of overlap most directions.

8" T-BLOCK INSTALLATION

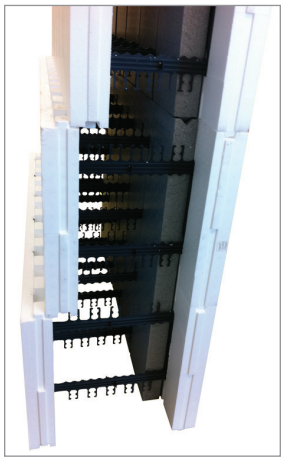
The unique manufacturing challenges were overcome for the 8" T-Block by establishing a 4" offset. This off-set results in rows of ties staggered by 4" if placed with factory ends against each other. The easy fix to properly line up ties is to install the T-Block and create a stacked joint at the butt end of the long T leg. Strap stack joint prior to concrete placement.

OUTSIDE DIMENSIONS ARE:
6" T - Block Short = 44" x 4⅜"
6" T - Block Long = 44" x 12⅜"
8" T - Block Short = 44" x 4¾"
8" T - Block Long = 44" x 8¾"

FOX BLOCKS ENERGY STICK

How do you improve an Insulated Concrete Form wall that already out-perform most wall system in all climates? You move the concrete mass toward the living side of the wall. This unbalanced R-value will allow the mass to be closer to the living temperature of the conditioned space allowing for a more comfortable building.

The Fox Blocks design team had two goals: 1) Move the mass away from the harsh temperatures and 2) Increase R-value. Each Energy Stick is 8" wide, 32" tall, 2" thick and profiled to fit within all Fox Blocks. The Energy Stick is used to ensure an R-8 boost to the already high R-Value of Fox Blocks.



SIZING AND ACTUAL R-VALUE

6" Block + 1 Energy Stick (R-30+*) = 4" Concrete
8" Block + 1 Energy Stick (R-30+*) = 6" Concrete
10" Block + 1 Energy Stick (R-30+*) = 8" Concrete
10" Block + 2 Energy Sticks (R-39+*) = 6" Concrete
12" Block + 1 Energy Stick (R-30+*) = 10" Concrete
12" Block + 2 Energy Sticks (R-39+* = 8" Concrete
12" Block + 3 Energy Sticks (R-48+*) = 6" Concrete

** This represents the overall average wall R-value. As an example in wood frame construction a wall with R-19 batt insulation will have an overall average wall R-value of less than R-16 due to thermal bridging.*

USING THE ENERGY STICK

1) INSTALLATION
Simply insert the patented Energy Sticks between the plastic ties and to the outside face of wall after every two rows of blocks have been placed.

2) CORNER BLOCKS
Fox Block corners are naturally thicker eliminating the need to insert Energy Sticks from the corner tie on. From the last straight tie to the corner tie you will need to wedge the Energy stick in place. A spot of expanding foam will also help to secure the Energy Stick from movement.

3) OPENINGS/STACKED SEAMS
Simply cut the Energy Stick to fit in locations that are narrower than 8". When larger than 8" use expanding foam to hold cut Energy Sticks.

4) RANGE OF USE
The Energy Stick will fit all Fox Blocks.

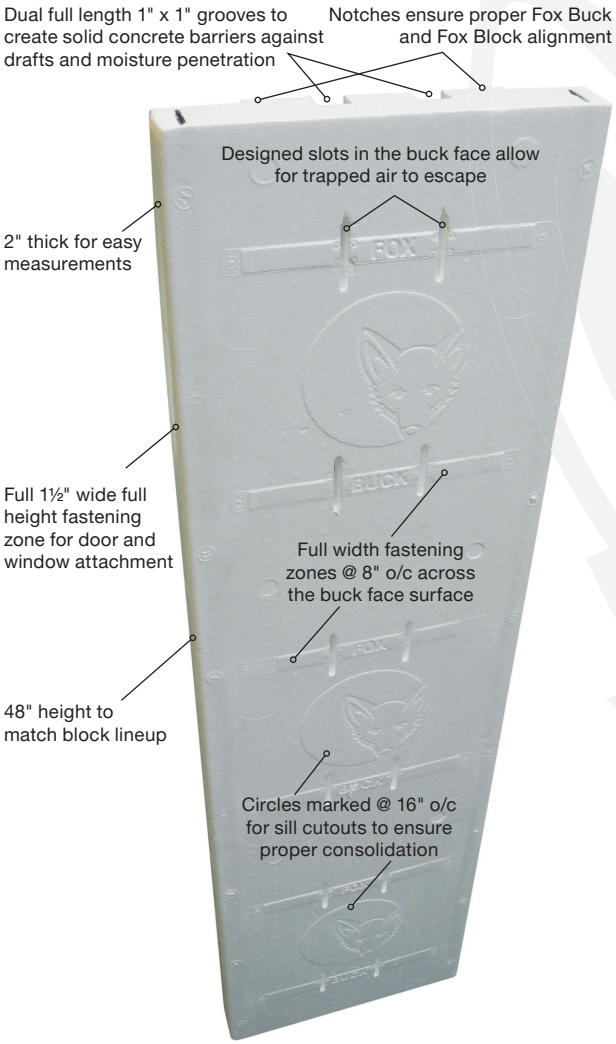
5) ESTIMATING
3 Energy Sticks for every block ordered.
One box = 36 Energy Sticks
One box of Energy Sticks will fill 12 blocks

6) MAN HOURS
Allow 4 minutes per box when inserting for the first time (= 950 square feet of wall per hour or .001 man hours per square foot)

7) BUNDLE SIZES
Each box of 36 Energy Sticks = approximately 24" x 24" x 33"

FOX BUCK CONTINUOUS INSULATION

The Fox Buck is a certified, fully integrated, continuous insulation window and door buck for commercial and residential ICF wall openings. Fox Buck completed 3rd party testing and obtained State of Florida product approval (FL 17775) for all of Florida, including Miami-Dade counties. To obtain certification and Florida code approval, the Fox Buck met and passed several tests related to wind and impact resistance, moisture and air infiltration, and fire related tests. The Fox Buck can be used in place of pressure treated wood bucks that tend to expand, contract, warp and move within the high moisture climates.



FOX BUCK NUMBERS					
Available Sizes	4"	6"	8"	10"	12"
Total Width	9¼"	11¼"	13¼"	15¼"	17¼"
Total Length	48"	48"	48"	48"	48"
Bag Quantity	10	10	10	10	10
Bag Weight	26 lbs	28 lbs	32 lbs	35 lbs	38 lbs

Photo above reveals consolidated concrete barriers created within the Fox Buck

The 1" x 1" notches create a dual barrier against drafts and moisture penetration. When installed properly, the concrete barrier protection is continuous around the entire opening. These barriers also anchor the Fox Buck to the wall with enough strength to hold in most weather* conditions

** Contact Fox Blocks for high wind anchoring recommendations.*

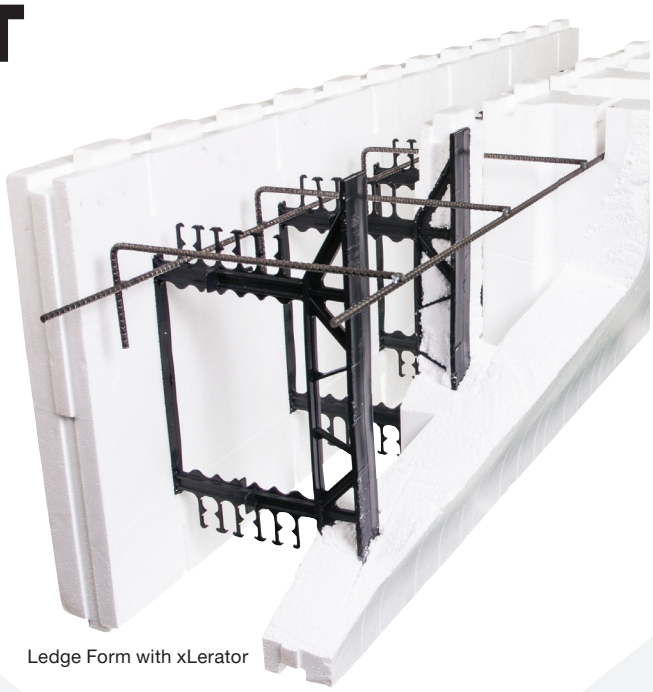
xLERATOR® LEDGE REINFORCEMENT

From foundation to finish, the Fox Blocks patented family of products helps you get the job done more efficiently. Combining industry feedback with the Fox Blocks product design team creativity, we offer an impressive array of product innovations that benefit the owner, the contractor, AND the design team.

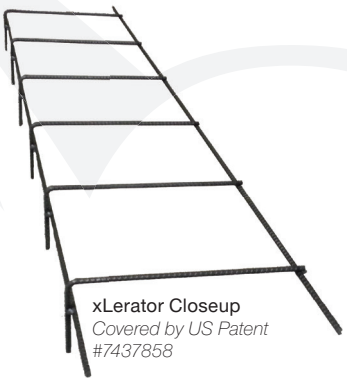
FOX BLOCKS' XLERATOR – the only product of its kind in the industry and first one to meet ACI 318 guidelines – is a patented ICF ledge reinforcement system that offers unmatched versatile performance ideal for supporting brick and stone exterior finishes, as well as slabs, floors and other structural features.

The one-piece, 4-foot long, welded wire reinforcement piece simply drops into the pre-formed slots in Fox Blocks' ledge form.

There's never been a faster way to meet deadlines and building code requirements, all while significantly reducing labor costs and delays associated with pre-bent stirrups or in-field rebar reinforcement.



Ledge Form with xLerator



xLerator Closeup
Covered by US Patent #7437858

Mitered Ledge Corner

BENEFITS INCLUDE

- **DROP & GO**
  Fully engineered ledge system allows you to easily place the ledge form, drop in the xLerator reinforcement piece and fill with concrete.
- **ACI 318 COMPLIANT**
  ONLY xLerator meets ACI 318 guidelines for ICF ledge reinforcement.
- **WEATHER RESISTANT**
  Hot-dipped galvanized to protect from corrosion for lasting durability.
- **FULLY ENGINEERED**
  Comes complete with full engineering details for multiple applications.
- **MAXIMUM STRENGTH**
  Reinforcement in all 6 ledge corbels.
- **VERSATILE**
  One size fits both 6" and 8" ledge forms.

WHY HOT-DIPPED GALVANIZED?

Hot-dip galvanization is the process of taking steel and dipping it into molten zinc to serve as a protective coating. If rebar in a ledge form is NOT galvanized, it's subject to corrosion because it is placed close to the outside edge of the brick ledge, sits in a foam slot, and is not completely encased in concrete. This allows water to reach the rebar and causes it to rust. As the rebar rusts, it expands, causes concrete to crack, and undermines the stability of the ledge.

Since the xLerator is hot-dipped galvanized, it protects the reinforcement from rusting and maintains the integrity of the concrete meeting ACI 318 guidelines.

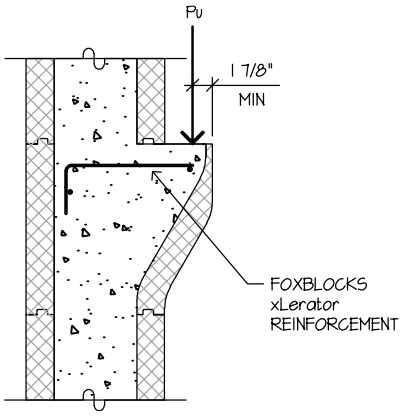
APPLICABLE ACI 318 GUIDELINES

Deformed Welded Wire Reinforcement (WWR)

- Reinforcement in every corbel
- WWR 60,000 PSI Yield Strength
- xLerator meets these guidelines

xLERATOR® LEDGE REINFORCEMENT

xLERATOR® ENGINEERING LOAD CAPACITY



ULTIMATE LOAD CAPACITY, PU = 2000PLF	
Example Application	Calculated ultimate load tributary area X LoadX Load Factor
Brick	35 Ft. x 40 PSF x 1.4 = 1960 PLF
Stone	17½ Ft. x 80 PSF = 1960 PLF
Wood Floor Joists	22½ Ft. tributary area or 45 Ft. clear span 22½ Ft. X (20 PSF x 1.2 + 40 PSF x 1.6) = 1980 PLF
Precast Hollowcore Floor	14½ Ft. tributary area or 29 Ft. clear span 14½ Ft. x (60 PSF x 1.2 = 40 PSF x 1.6) = 1972 PLF

Notes:

1. *Load capacity is based on a concrete strength of 2500 PSI or greater and to KSI Fox Blocks' xLerator reinforcement meeting ASTM A496*
2. *Load factors are based on ACI 318-11.*
3. *Tributary floor span is the length of floor supported by the ledge form, which is commonly half of the clear span.*
4. *Acceptable masonry heights and floor spans shown in the table are based on the structural capacity of the ledge only and may be limited by other factors. Consult a design professional for acceptable heights or unsupported masonry and floor spans.*

tieKEY® MASONRY ANCHOR

Designed by Fox Blocks, the tieKey anchor is a patented, cast-in-place, adjustable masonry tie anchor that embeds into the concrete wall formed by Fox Blocks. This award winning product provides the strength and security required when installing brick or stone veneer finishes.

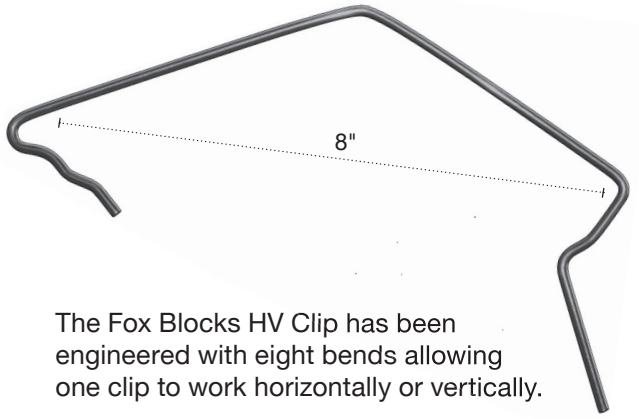
SEE HOW THE TIEKEY HAS BEEN PUT TO THE TEST

- Third party tested for tension and compression strength.
- Simplifies the installation of brick or stone exterior finishes.
- Adjustable wire tie accommodates construction tolerances and allows for larger differential movement for the brick finish.
- Provides strong resistance to negative and positive lateral forces.
- Available in two materials: hot-dipped galvanized steel or stainless steel.
- Recipient of the World of Concrete's Most Innovative Products Award.

tieKey Closeup
Covered by US Patent #8347531

FOX BLOCKS HV CLIP

Contractors asked for a wire clip to secure their Fox Blocks jobs together so the team at Fox Blocks went to work designing one. Fox Blocks ties are engineered to be perfectly balanced, spaced at 8" o/c Horizontally and Vertically, giving flat walls post concrete. This allowed us to put all of our design into one wire clip which helps everyone with only one SKU.



The Fox Blocks HV Clip has been engineered with eight bends allowing one clip to work horizontally or vertically.

HV CLIP PLACEMENT:

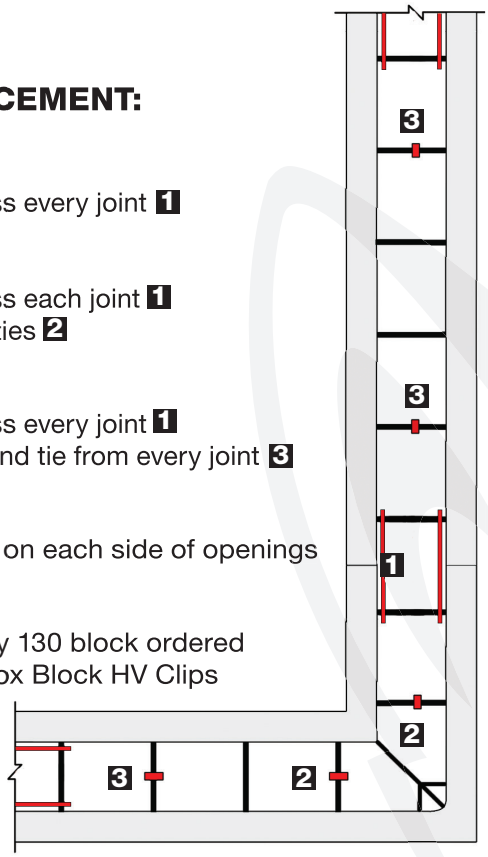
BOTTOM ROW:
Horizontally across every joint 1

CORNERS:
Horizontally across each joint 1
Vertically on first ties 2

TOP ROW:
Horizontally across every joint 1
Vertically on second tie from every joint 3

OPENINGS:
Vertically up wall on each side of openings

BUDGET:
One box for every 130 block ordered
One box = 250 Fox Block HV Clips



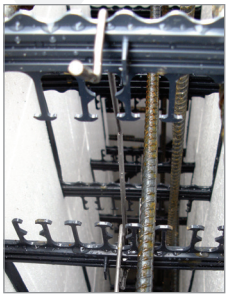
FOX BLOCKS HV CLIP POSITIONS

Vertical Clips in Place

Horizontal Clips in Place

Note: You can skew the HV Clip a notch or two for an even tighter fit, if needed.

FOX BLOCKS HV CLIP BEING USED ON JOBS



Vertical & Horizontal Clips in place close to corner

Showing HV Clips holding down a top row that has been cut down to +/- 8" in height

Using the Fox Blocks HV Clip eliminates the need for truss wire completely on your jobs. The result is that for about half the cost of the truss wire you will get a stronger and straighter job.

Product Label