

PRIMARY INSTALLER ILC TRAINING WORKBOOK

SECTION 4: Post Concrete and Finishes

MODULE 16: Waterproofing / Dampproofing

MODULE 17: Unique Applications

MODULE 18: Services – Electrical, Plumbing

MODULE 19: Interior and Exterior Finishes

MODULE 20: Project Log





TABLE OF CONTENTS

SECTION 3: The Build

| MODULE 16: Waterproofing/Dampproofing | 4 |
|--|----|
| MODULE 17: Unique Applications | 6 |
| MODULE 18: Services - Electrical, Plumbing | 8 |
| MODULE 19: Interior and Exterior Finishes | 10 |
| MODULE 20: Project Log | 12 |

PRIMARY INSTALLER TRAINING ILC WORKBOOKS

SECTION 1: Pre-Build (6 Modules)

SECTION 2: Building the Wall (6 Modules)

SECTION 3: Concrete (3 Modules)

SECTION 4: Post Concrete and Finishes (5 Modules)





OVERVIEW

Congratulations on the completion of Sections 1, 2 and 3. This is the final section of the Primary Installer Training Course.

Workbook, Section 4 covers 5 important modules, highlighting key content, plus reference documentation, videos and checklists that will further enhance the educational and construction experience with Fox Blocks. Utilize this Workbook when following the ILC video training for Section 4.

PRIMARY INSTALLER COURSE

This training course is a series of self-paced educational modules. Register on the website and open each module in order, successfully complete the questions for each of the modules. Once you have completed all the modules in all four sections, you will be sent a notification of completion and registered as a Fox Blocks Primary Installer, receiving a certificate and wallet card.

Once you are registered, the site allows you to login and logout anytime and will track your progress. There are 20 modules in total with an estimated viewing time of approximately 6+ hours. Some





modules are 5± minutes and some are 20± minutes. View all the modules in full screen mode and answer the questions to complete each module.

FOX BLOCKS REFERENCE MATERIAL

All reference materials are available on the Fox Blocks website – www.foxblocks.com





MODULE 16: Waterproofing/Dampproofing

This module reviews below grade waterproofing or dampproofing applications and installation procedures. Also, discuss the transition materials from finished grade to the exterior finish.

Attention to detail moisture protection and the prevention of water intrusion.

Key Items to Consider for the Walls

- Walls must be cleaned, remove any concrete spillage or mud
- Clean top of footer so membranes can be folded over or attached
- If walls have been exposed the sun for a period of time and have a powdery film, this film needs to be washed off with a broom and water
- Create a clean straight edge at the top of the membrane, at the grade line, to allow for a smooth application of the transitional material over the membrane

Key Items to Consider for Waterproofing/Dampproofing Materials

- All materials must be compatible with EPS insulation, petroleum based materials are non-compatible
- For peel and stick membranes, follow manufacturers recommendation for the application of a primer to the walls prior to installing membranes
- Be aware that the application of membranes are influenced by weather – cold, hot and/or wet, plan accordingly
- Follow manufacturer's recommendation for a protection material over the membrane prior to backfill
- For dampproofing dipple wrap materials use the manufacturer's recommended fasteners and fasten to the Fox Blocks fastening strips





Transition Materials

- A transition material covers the EPS from top of wp/dp membrane to underside of the exterior finish around the perimeter of the project
- In addition to protection the EPS the material guides any exterior surface water draining down the wall to go over the below grade membrane

- 1.02.16 Waterproofing and Dampproofing for below Grade Walls US
- 1.02.17 Waterproofing for Below Grade Walls CAN
- 1.02.18 Dampproofing for Below Grade Walls CAN
- 1.15.01 Compatible Materials





MODULE 17: Unique Applications

This module reviews unique design applications that may require block cutting, radius walls, transitions, gables and other details that Fox Blocks has experience in adapting the ICF blocks, to ensure a safe build, to the design requirements.

Key Design Tips

- ICF are very easy to work with, cutting and sculpting to suit any design
- Field cuts should to be made as straight as possible for a cleaner joint
- Installing a standing or stacked seam is a good design solution, strapping on both sides of the wall are required
- Short wall jogs can be made with one modified corner block and a modified standard block
- Larger radius walls are easily made by cutting one side of the block at 8" o.c. and bending the other block face. Smaller radius walls may require the block to cut into segments. Addition banding is required on every row of block. Fox Blocks does supply pre-cut radius block.
- Concrete core size transitions are best designed at corners to maintain structural integrity
- Gables as a triangular wall are easily built and easy to place concrete
- For exposed concrete walls use the Fox Blocks Reveal product
- To enhance thermal resistance, insert the Energy stick or panel adding R-8 to the existing wall cavity
- Fox Blocks has approved 2 to 4 hour fire resistance wall assemblies
- Fox Blocks wall assemblies have sound attenuation ratings to meet and exceed code requirements





- 1.01.10 Energy Stick
- 1.01.11 Reveal Product
- 1.01.08 Curb Block
- 1.02.01 Technical Information and Training Guide
- 1.02.04 Wall Layout Staked Seam
- 1.02.06 6 in 1 Design Advantages
- 1.03.01 Optimizing Wall Layouts
- 1.11.01 Fire Resistance Ratings
- 1.11.02 Flame and smoke Development
- 1.11.03 15 Minute Thermal Barrier
- 1.13.01 Thermal Resistance IECC
- 1.13.03 Continuous Insulation
- 1.15.01 Compatible Materials



MODULE 18: Services – Electrical and Plumbing

Objectives are to identify the procedures on how these services may be installed on the ICF wall assembly.

Realization that the installation of electrical and plumbing on an ICF wall should be considered an easy and efficient task.

Planning and Coordination

- Confirm with the electrical and plumbing contractor that they are familiar with the installation of their services in an ICF wall assembly
- Coordinate that services are not installed in the concrete cavity, only as horizontal sleeves where required
- Coordinate with all trades the installation of service sleeves prior to concrete placement

Key Items to Review for Electrical

- The fastening strip in the Fox Blocks may be cut after concrete placement
- After the placement of concrete the EPS is channeled (cut-out) to a depth on 1½" to inset wiring runs, use spray foam to secure wiring in channel
- Electrical boxes are cut into the EPS with hot-knife, router or saw, only cut required depth for box, leaving insulation behind box
- Utilize shallow electrical boxes
- Electrical boxes may by fastened to block fastening strip, or through to concrete or with spray foam





Key Items to Review for Plumbing

- Water lines, drain and vent pipes may be installed in cut into the 2⁵/₈" EPS, any larger main drain lines are required to be furred in or moved to an interior wall
- Any wall hung fixtures will require addition support added to the ICF prior to gypsum board

- 1.09.01 Plumbing
- 1.09.02 Electrical





MODULE 19: Interior and Exterior Finishes

This module reviews the requirements and how to install a thermal barrier as the interior finish.

Discuss the compatibility of various exterior finishes and how they may be directly installed to the Fox Blocks wall assembly.

Key Design Considerations

- Fox Blocks is an acceptable substrate for any exterior finishing materials
- Codes require all interior walls, in living spaces, to have a 15 minute thermal barrier (½" gypsum board) installed as fire protection (other finishes must be NFPA approved)
- Masonry requires support on and into the concrete from either the Fox Blocks corbel block or the taper top forms and the use of the Fox Blocks tieKey
- Direct applied finishes, i.e. acrylic stucco, require the walls to be cleaned and any oxidation of the EPS removed
- Openings require proper installation of a flashing membrane to prevent any water intrusion
- Follow manufacturer's application instructions for attachment of finishes
- Fox Blocks recommends appropriate screws for attaching finishes, interior and exterior





Fox Blocks Advantages for Finishes

- A vapor retarder membrane is not required on any interior Fox Blocks wall assemblies
- The monolithic concrete acts as continuous air barrier, no addition membrane is required
- Fox Blocks meets the requirements as weather resistive barrier, no additional membrane is required
- Fox Blocks eliminates thermal bridging, no additional insulation is required to compensate
- Fox Blocks thermal resistance exceeds current energy and building codes for above and below grade walls in all climates zones (some States/Provinces may have enhanced energy codes)

- 1.02.06 6 in 1 Design Advantages
- 1.01.14 tieKey
- 1.08.01 Interior Finish gypsum board
- 1.08.05 Fiber Cement Siding
- 1.08.06 Manufactured Stone Veneer
- 1.08.08 Fasteners
- 1.08.03 Baseboard and Trim
- 1.12.01 Air Barrier
- 1.12.02 Vapor Barrier
- 1.12.03 Weather Resistive Barrier
- 1.13.01 Thermal Resistance IECC





MODULE 20: Project Log

This module reviews how to use the Fox Blocks Project Guide to log results and utilize this information to improve your business, for future savings on material and labor.

Utilize this training and Fox Blocks support materials as a best practice guide, in the experiences of installing these wall assemblies in order to improve you and your crews overall efficiency.

Key Installation Considerations

- Every project has different situations, applications, pluses and minuses in the overall installation. The advantage is to use the Project Log to record each and use that to improve the next project and constantly improve each build
- Fox Blocks, inherently, have numerous construction advantages and efficiencies which have been identified in this training and with additional documentation. Every contractor should use these tools for a smooth and successful build
- Communication and coordination are key elements in working with other trades, concrete suppliers, pump truck operators and material suppliers
- Utilize the Fox Blocks Resource library, Cad Details and technical support

Project Log

- Use the Project Log either as a hard copy booklet or digitally as a handy reference guide for contact numbers, material quantities, and checklists
- Note aspect of the build that could be improved upon or are advantageous
- Track your man-hour rates, and product material estimates
- Compare each project to enhance the next project from you notes





Fox Blocks Reference Material

- 1.14.10 Field Guide Project Log
- 1.14.01 Man Hour Rates
- 1.14.05 Step by Step Checklist
- 1.14.06 Concrete Pre-Placement Checklist
- 1.14.08 cost Savings Material and Labor

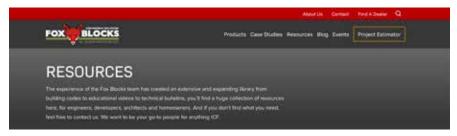
The goal for a Fox Blocks installer/contractor is to efficiently build a high-performance, environmental conscientious home or building with Fox Blocks.

CONGRATULATIONS ON COMPLETING THE

ILC PRIMARY INSTALLER TRAINING COURSE!

Follow the Integrated Learning Center for more educational webinars, videos and training sessions.

Fox Blocks Website - www.foxblocks.com



- **■** /FoxBlocks
- @foxblocksicf
- ල @foxblocks_icf
- in /company/fox-blocks
- /foxblocksairlite





Please go to:

FOXBLOCKS.COM

WHERE YOU WILL FIND:

Product Information

Local Dealer and Regional Advisor Contact Information

Downloadable Technical Files

Estimating Program

Case Studies

Training - Integrated Learning Center (ILC)

Links to 2D and 3D CAD and BIM Details

Educational Video Library (ILC)



TRUEGRIDPAVER.COM

HEAD OFFICE:

6110 Abbott Drive | Omaha, NE 68110 | 1-877-369-2562



Y /FoxBlocksICF

/FoxBlocks_ICF

in /company/fox-blocks

/FoxBlocksICF



























































