

A GUIDE TO HOME INSULATION

INNOVATIONS FOR LIVING®





- · Saves money on heating and cooling costs
- I00% recyclable, 20% recycled content and GREENGUARD Indoor Air Quality Certified[™]
- Long term thermal resistance
- Moisture resistant
- 70% lower global warming potential***
- Achieves zero ozone depletion potential indoor air quality





BASEMENT WALLS, FLOORS • EXTERIOR WALLS, SHEATHING

AMULA **ENERGY-SAVING, MOISTURE RESISTANT EXTRUDED POLYSTYRENE RIGID INSULATION**

SAVE MONEY, SAVE ENERGY, HELP SAVE THE PLANET.



Insulate your home with FOAMULAR® Extruded Polystyrene Rigid Insulation, a moisture-resistant, rigid foam insulation, which can be installed on interior or exterior of walls, foundation walls and under concrete floor slabs. With a thermal resistance of R-5 per inch of thickness, it will help you save money on energy bills. Lightweight, durable and impact-resistant, FOAMULAR® products are easy to handle, and install. Choose FOAMULAR® Rigid Insulation for your next renovation and feel confident that you are helping to make a more energy-efficient world.



			ΝI
		-	
INSI	DE		

MENT/

FLOORS NOISE

SMALL PROJECTS

Find out how to save money, save energy AND help save the planet with FOAMULAR® Extruded Polystyrene Rigid Insulation products!

Owens Corning products overview 37 - 38

PRODUCT INFORMATION

FOAMULAR® Extruded Polystyrene Rigid Insulation

FOAMULAR® C-200 Insulation	39
FOAMULAR® C-300 Insulation	39
FOAMULAR [®] InsulPink [™] Insulation	39
FOAMULAR® CodeBord® Insulation	40
BEFORE YOU INSULATE	
Calculate your needs	41-42
Installation and safety tips	9
HOW TO INSULATE Step-by-step instructions	
Attic	43
Exterior walls	44
Basement walls	45-47
Basement Floors	48

FLIP!

See flip side of brochure for EcoTouch[®] PINK[™] FIBERGLAS[®] Insulation







FOAMULAR® C-200, C-300, INSULPINK™ EXTRUDED POLYSTYRENE RIGID INSULATION BASEMENT, FLOORS AND WALLS EXTERIOR INSULATING SHEATHING



BENEFITS

INFO

- Saves money on heating and cooling costs
- Long term thermal resistance R-5 per inch of thickness
- Easy to install, lightweight and durable
- Moisture-resistant
- 70% lower global warming potential****
- Achieves zero ozone depletion potential
- 100% recyclable, 20% recycled content
- 3rd party GREENGUARD Indoor Air Quality Certified[™]

SPECIFICATIONS

- Below grade/interior/exterior
- Concrete floor slabs
- 20 PSI (C-200); 30 PSI (C-300)
- Butt and shiplap edges

Calculate your needs:	page 41
How to instructions:	
Attics	page 43
Basement floors	page 48

Product	Specificatio	ons			
Thic	nickness		Vidth	Le	ength
in	mm	in	mm	ft	mm
	25	24	610	96	2438
1.5	38	24	610	96	2438
2	51	24	610	96	2438
2.5	64	24	610	96	2438
3	76	24	610	96	2438
3.25*	83	24	610	96	2438
3.5	89	24	610	96	2438
4	102	24	610	96	2438

*InsulPink[™] only

FOAMULAR® CODEBORD® EXTRUDED POLYSTYRENE RIGID INSULATION 2X4 OR 2X6 EXTERIOR WALLS



BENEFITS

- Saves money on heating and cooling costs
- Long term thermal resistance R-5 per inch of thickness
- Easy to install, lightweight and durable
- Moisture-resistant
- 70% lower global warming potential****
- Achieves zero ozone depletion potential
- 100% recyclable, 20% recycled content
- 3rd party GREENGUARD Indoor Air Quality Certifiedsm

Calculate y	our needs:	page 42
How to inst	ructions:	page 44

Pro	duct Spec	ificatio	ns				
Thi	Thickness		Width		Ler	ngth	
in	mm	in	mm	in	mm	in	mm
Ι	25	48	1220	96	2438	108	2743
11/2	38	48	1220	96	2438	108	2743
2	51	48	1220	96	2438	108	2743

QUICK FACTS: DID YOU KNOW?

Government grants and rebates can help to reduce your renovation costs. Visit www.showmethegreen.ca





CALCULATE YOUR NEEDS FOAMULAR® C-200/300 AND INSULPINK™ EXTRUDED POLYSTYRENE RIGID INSULATION



QUICK & EASY

It's easy to calculate the number of rigid foam panels you'll need to complete your project. Here's how:

I. TOTAL AREA

Determine the area in ft^2/m^2 to be insulated by multiplying the wall length by the wall height in ft/m.

LENGTH _____ X HEIGHT ____ = ____ FT²/M²

2. CALCULATE HOW MANY SHEETS YOU NEED

Divide total area to be insulated by ft^2/m^2 per sheet to determine the total number of sheets required. TOTAL AREA IN FT²/M² _____ ÷ COVERAGE AREA/SHEET IN FT²/M² _____ = TOTAL NUMBER OF SHEETS _____



CALCULATING YOUR NEEDS IS EASY AS 1, 2, 3...

EXAMPLE				YOUR HOME
Wall length	10 ft	(3.0	m)	
Multiply by wall height	8 ft	(2.4	m)	X
Total square area	80 ft ²	(7.43	m ²)	=
Divided by coverage area/sheet (e.g., 16 ft ² /1.49m ² for 2X8 sheets)	: 16 ft ²	(1.49	m²)	÷
Number of sheets required: 5				=

CALCULATE YOUR NEEDS FOAMULAR® CODEBORD® EXTRUDED POLYSTYRENE RIGID INSULATION



QUICK & EASY

It's easy to calculate the number of CodeBord®rigid panels you'll need to complete your project. Here's how:

I. TOTAL AREA

Determine the area in ft^2/m^2 to be insulated by multiplying the wall length by the wall height in ft/m.

LENGTH _____ X HEIGHT ____ = ____ FT²/M²

2. WINDOWS AND DOOR OPENINGS

Subtract total area of window and door openings in ft²/m². TOTAL WALL AREA IN FT²/M² _____ – AREA OF OPENINGS IN FT²/M² _____ = ____ WALL AREA TO BE INSULATED IN FT²/M²

3. CALCULATE HOW MANY SHEETS YOU NEED

Divide total area to be insulated by ft^2/m^2 per sheet to determine the total number of sheets required.

WALL AREA IN FT²/M² _____ ÷ COVERAGE/SHEET IN FT²/M² _____ = TOTAL NUMBER OF SHEETS _____

CALCULATING YOUR	NEEDS	IS EA	SY AS	I, 2, 3
EXAMPLE				YOUR HOME
Wall length	20 feet	(6.0	m)	
Multiplied by wall height	8 feet	(2.4	m)	x
Total area	160 ft ²	(14.87	m²)	=
Less area for openings	-32 ft ²	(-3.0	m ²)	-
Total wall area	128 ft ²	(11.9	m ²)	=
Divide by coverage/sheet (e.g., 32 ft ² /3.0 m ² for 4X8 sheets)	32 ft ²	(2.97	m²)	÷
Number of sheets required: 4	4			=





WALLS

BASEMENT/

FOAMULAR[®] C-200 or InsulPink[™] Extruded Polystyrene Rigid Insulation



Recommended thickness: 2" (51 mm)

- Product specifications: page 39
- Calculate your needs: page 41

ATTIC, BELOW RAFTERS

FOAMULAR[®] C-200 or InsulPink[™] boards may be installed below the attic rafters to achieve maximum assembly thermal resistance while maintaining ventilation space above the installed batts. It is a good practice to fasten strapping through the foam boards to the rafters for easy attachment of drywall.



I. Once the batt insulation has been installed flush with the underside of the framing, install FOAMULAR[®] C-200 or InsulPink[™] Rigid Insulation boards against the framing, using nails and washers.



2. Install a continuous and sealed polyethylene air/vapour barrier over FOAMULAR® C-200 Insulation. Install gypsum board over wood strapping. FOAMULAR® C-200 or InsulPink[™] can act as the air/vapour barrier with sealed joints. Consult applicable building code.

SEE PAGE 15 FOR EcoTouch[®] PINK[™] **FIBERGLAS® INSULATION**

QUICK FACTS: DID YOU KNOW?

FOAMULAR[®] Extruded Polystyrene **Rigid Insulation contains 20%** recycled content and recycles 100% of its own waste - no foam waste goes to landfills from our facilities.

Think PINK



FOAMULAR[®] CodeBord[®] Extruded Polystyrene Rigid Insulation



FLOORS

NOISE

CONTROL

SMALL

PROJECTS

Extra insulating power and more energy savings! **OUTSIDE & INSIDE WALLS**

Recommended thickness and R-values

2x4 Walls: I layer of 2"/50 mm FOAMULAR® CodeBord® Extruded Polystyrene Rigid Insulation plus 1 layer of R-12 or R-I4 PINK[™] FIBERGLAS[®] Insulation

2x6 Walls: I layer of 1"/25 mm FOAMULAR® CodeBord® plus I layer of R-20, R-22 or R-24 PINK[™] FIBERGLAS[®] Insulation

Product	Specifications	Calculate your needs
CodeBord®	page 40	page 42
PINK [™] FIBERGLAS [®]	page 4	page 8



90

6



To prevent discoloration caused by exposure to direct sunlight, apply

exterior finish as soon as possible.

I. Installing CodeBord[®]. Install

INSIDE WALLS To complete the installation on the inside exterior walls, follow instructions 1 to 4 on page 19 for EcoTouch® PINK™ FIBERGLAS® Insulation.





WALLS BASEMENT/ CRAWLSPACE

FLOORS	NOISE	SMALL
	CONTROL	PROJECTS

FOAMULAR[®] C-200 or InsulPink[™] Extruded Polystyrene Rigid Insulation



Recommended thickness: 2.5" (63 mm)

- Product specifications: page 39
- Calculate your needs: page 41

UNFINISHED CONCRETE BASEMENT WALLS

BASIC WALL INSULATION SEE PAGE 47 FOR EXTRA INSULATING POWER







45

I. Preparing walls. Ensure concrete walls are as flat as possible; hammer off rough spots.

2. Trim and place C-200 or InsulPink[™] insulation to wall

height. Measure the height of the wall. Trim insulation to correct length. Place insulation vertically on the wall starting in a corner. Use a spot adhesive to temporarily hold the foam boards in place against foundation wall ensuring that foam boards are level. Trim shiplap edge to fit the corner.

3. Insert wood furring strips. Insert wood furring strips in

insert wood furring strips in insulation voids (for InsulPink[™] product) or over insulation (for C-200 product) and anchor to concrete wall using appropriate masonry anchors a maximum of 24" (600 mm) o.c. vertically.

4. Installing electrical boxes and wiring. See next page.

5. Filling joints with foam sealant. Fill joint at the perimeter of the insulated wall as well as all perforations made in the insulating panel (e.g., electrical boxes and windows). Cut off protruding foam sealant with a knife



Install polyethylene vapour barrier over foam if required. Consult applicable building Code.

or hacksaw blade to ensure gypsum board can be installed properly.

6. Vapour retarder. Install

polyethylene vapour retarder or seal joints in foam board to act as vapour retarder. Consult applicable building code for requirements.

7. Finishing walls. When installation is complete, install I/2" (13 mm) drywall or other approved thermal barrier material using appropriate fasteners into wood furring strips. Finish the drywall according to manufacturers instructions. Consult the National Building Code for requirements when using other finishes.

INSTALLING ELECTRICAL BOXES AND WIRING



I. Prepping electrical box location. At the location of the electrical outlet, cut out a 2" × 6" void in the insulation.

2. Fastening electrical box.

Insert a wood filler piece in the opening to fill the void and fasten to concrete wall with appropriate masonry fasteners. Next cut out another void in the insulation next to the wood filler piece in order to be able to insert the electrical box and screw box into side of wood filler piece to hold it in place. Position the electrical box so that it will sit flush with the gypsum board once installed.

3. Bringing wire from junction box to outlet.

Widen one of the two existing grooves at the centre



of the insulation panel to receive electrical wire coming from junction box to outlet. Make a knife cut into the back of the groove and insert electrical wire into it. Wire should be embedded 1/2" (13 mm) minimum (i.e., electrical wire should be at least 1" [25.4 mm] from drywall surface). Set electrical wire into groove leading to outlet. Connect the wire to the electrical box.

4. Filling & sealing. Use

a foam sealant to fill the enlarged groove, the area behind the electrical box and the perimeter of the piece of wood and the electrical box.

FOAMULAR[®] C-200 or InsulPink[™] Extruded Polystyrene Rigid Insulation and R-14 EcoTouch[®] PINK[™] FIBERGLAS Insulation



Recommended R-value and thickness:

I layer of 2" (50 mm) FOAMULAR[®] C-200 or InsulPink[™] Extruded Polystyrene Rigid Insulation and 1 layer of R-14 PINK[™] FIBERGLAS[®] Insulation

Product	Specifications	Calculate your needs
C-200	page 39	page 41
InsulPink™	page 39	page 41
PINK™ FIBERGLAS®	page 4	page 8

UNFINISHED CONCRETE BASEMENT WALLS Extra insulating power and more energy savings!

INSTALLATION OVERVIEW

2" FOAMULAR[®] C-200 or InsulPink[™] Insulation is R-10 plus R-14 batts give you a total of R-24.

Follow step-by-step how-to instructions for each of the above recommended products as referenced below.

I. Installing FOAMULAR[®] insulation panels. (See how-to instructions on page 45)

2. Building a 2x4 wood stud wall. (See how-to instructions on page 21)

3. Installing FIBERGLAS[®] batts. (See how-to instructions on page 19)

4. Finishing the walls. (See how-to instructions on page 19)

WALLS BASEMENT/ **FLOORS** NOISE CRAWLSPACE CONTROL

SMALL PROJECTS

FOAMULAR® C-300 Extruded

Polystyrene Rigid Insulation



Recommended thickness: 1¹/₂" or 2" (38 mm or 50 mm)

- Product specifications:
- page 39
- Calculate your needs: page 41

CONCRETE BASEMENT FLOORS



I. Laying gravel. Lay at least 6" (152 mm) of coarse, clean, gravel on the top of the undisturbed soil and ensure that it is level.

2. Applying vapour retarder.

Apply a 6 mil. vapour retarder on top of the gravel. Extend up the walls 3" (76 mm).

3. Installing C-300. Install panels directly on top of the vapour retarder. Ensure panels are butted together as tight as possible.

4. Pouring concrete. Pour concrete over the panels to an even and level depth of 4-6" (100-150 mm).

Note: Local building code and building officials should be consulted regarding minimum construction requirements in your municipality.



Government grants and rebates can help to reduce your renovation costs. Visit www.showmethegreen.ca

















ECOTOUCH® PINKT FIBERGLAS® INSULATION

Batts



ENERGY-SAVING, MOISTURE RESISTANT

Rigid Foam

Ec@Touch PureFiber[™] Technology

FOAMULAR® Extruded Polystyrene Rigid Insulation A high level of defense against energy loss in homes.









HE PMK PMKHEF' 4 © 1041-2012 Phare-Goldwardsger Sundia in C.M. Right Bearred. The color TWM is a registered trademate of Owen Curing, Carried harmal Intuition Material COO-16, "75% cocycled content is based on the average recycled glar content in all Owen Curing (Borghar). This is an unoverled tradematered in Curing Partial Partia Partial P