

### A GUIDE TO HOME INSULATION AND NOISE CONTROL

INNOVATIONS FOR LIVING®



Think **PINK** 

# **FCOTOUCH® PINK<sup>™</sup>** FIBERGLAS<sup>®</sup> INSULATION

The best choice for home energy savings.

- Guaranteed thermal performance for the life of your home
- 73% recycled content\* 3rd party SCS Certified
- Made with 99% natural materials<sup>\*\*</sup>
- 3rd party GREENGUARD Indoor Air Quality Certified<sup>™</sup> and is verified to be formaldehyde-free











The leaders in energy efficiency are leading a new movement towards greater environmental sustainability. Owens Corning EcoTouch® PINK™ FIBERGLAS® Insulation – made from 99% natural materials<sup>\*\*</sup>, it uses 73% recycled content<sup>\*</sup>. EcoTouch® provides the same outstanding thermal performance Canadians have come to rely on. And it's also GREENGUARD Indoor Air Quality Certified<sup>sM</sup> and verified to be formaldehyde-free. EcoTouch® by Owens Corning. Just one more reason to Think PINK<sup>™</sup>.

OWENS CORNING CANADA LP 3450 McNicoll Avenue Scarborough, ON MIV 1Z5

I-800-GET-PINK® www.owenscorning.ca



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### INSIDE

Find out how to reduce your carbon footprint and increase energy savings throughout your home with PINK<sup>™</sup>!

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### PRODUCT INFORMATION

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### **FLIP!**

See flip side of brochure for FOAMULAR® Extruded Polystyrene Rigid Insulation products.



3

### Think PINK

SMALL L PROJECTS



• PLUS: Save up to 28%\*\*\* on your heating and cooling costs



INNOVATIONS FOR LIVING®

Think PINK



### PINK<sup>™</sup> FIBERGLAS<sup>®</sup> INSULATION THERMAL BATTS



### ATTIC, WALLS, CEILINGS, FLOORS

### BENEFITS

INFO

- Guaranteed thermal performance for the life of your home
- 73% recycled content\* 3rd party SCS Certified
- Made with 99% natural materials\*\*
- 3rd party GREENGUARD Indoor Air Quality Certified<sup>™</sup> and is verified to be formaldehyde-free

page 8

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- Save up to 28%\*\*\* on your heating and cooling costs
- Canada's No. I Insulation
- Easy to install
- Safe for your home non-combustible

Calculate your needs: How to instructions:

Product Specifications								
R-Volue	Thickness		Width		Length		Coverage	
14 Value	mm	in	mm	in	mm	in	sq ft	sq m
			381	15	1194	47	88.1	8.2
			381	15	1194	47	97.9	9.1 ^
R-12 (2x4 Wood Stud)	89	3 1/2	483	19	1194	47	124	11.5
			504	22	1194	47	135.1	12.6
			584	23	1194	47	150.1	13.9^
B 12 (2 4 G) 1 G) B	0.2	2.5/0	406	16	1219	48	106.7	9.9
R-12 (2x4 Steel Stud)	92	3 5/8	610	24	1219	48	160	14.9
R-14 (2x4)Wood Stud)	89	3 1/2	381	15	1194	47	78.3	7.3^
1(-1+ (2X+ WOOd Stud)	07	5 1/2	584	23	1194	47	120.1	11.2
	152	6	381	15	1194	47	49	4.6
				15	1194	47	78.3	7.3^
R-20/19 (2x6 Wood Stud)			483	19	1194	47	99.2	9.2^
			584	23	1194	47	120.1	11.2^
			584	23	1194	47	75.1	7.0
P 22 (2v6 Mood Stud)	140	51/0	381	15	1194	47	49	4.6
11-22 (200 00000 3100)	140	51/2	584	23	1194	47	75.1	7.0
P 24 (2v6)Mood Ecomo	140	51/0	375	14 3/4	1194	47	33.7	3.1
11-24 (2X6 W000 Harre)	140	5 1/2	578	22 3/4	1194	47	52	4.8
P 70	214	01/2	406	16	1219	48	53.3	5.0^
11-20	210	0 1/2	610	24	1219	48	80	7.4^
0.21	241	0.1/2	406	16	1219	48	42.7	4.0
1(-31	271	9 1/2	610	24	1219	48	64	5.9
R-35	267	10 1/2	610	24	1219	48	56	5.2
R-40	279		610	24	1219	48	48	4.5^

^ coverage based on SpaceSaver® packaging format



### QUIETZONE<sup>®</sup> ACOUSTIC BATT INSULATION NOISE CONTROL



### **INTERIOR WALLS, CEILINGS, FLOORS**

### BENEFITS

- Minimizes unwanted noise in
  - bedrooms bathrooms basements
- home theatres laundry rooms home office
- Guaranteed thermal performance for the life of your home
- 73% recycled content\* 3rd party SCS Certified
- Made with 99% natural materials\*\*
- 3rd party GREENGUARD Indoor Air Quality Certified<sup>™</sup> and verified to be formaldehyde-free
- Save up to 28%\*\*\* on your heating and cooling costs
- Canada's No. I Insulation
- Easy to install
- Safe for your home non-combustible

Calculate your needs:	page 8
How to instructions:	page 26

Product Specifications					
Application Width		Length	Thic	kness	
	in/mm	in/mm	in/mm	in	mm
Wood Stud	15/381	23/584	48/1219	<i>\/</i> 2/2//2/3//2/6	38/65/89/152
Steel Stud	16/406	24/610	48/1219	11/2/21/2/31/2/6	38/65/89/152



### **QUICK FACTS: DID YOU KNOW?**

A quiet home not only means comfort for its occupants but can also yield health benefits – noise levels above 85 dB can harm hearing over time. The effectiveness in reducing or blocking

sound transmission through the assembly structures in a house – the walls, floors and ceilings – is measured by means of a decibel rating called Sound Transmission Class or STC. For example, a wall with a rating of STC 50 would reduce the noise of a portable stereo set on high from 112 dB to about 62 dB – the level of a normal conversation – and reduce the noise level of a loud alarm clock from 80 dB to about 30 dB – the level of a soft whisper. Learn more about QUIETZONE® Noise Control Solutions for your home. Visit www.owenscorning.ca



# **SMALL**

### **PINK**<sup>™</sup> FIBERGLAS<sup>®</sup> INSULATION **SMALL PROJECTS: DOORS, WINDOWS,**

PIPES, HEATING AND COOLING DUCTS, AIR CONDITIONER





### BENEFITS

- Guaranteed thermal performance for the life of your home
- 73% recycled content\* 3rd party SCS Certified
- Made with 99% natural materials\*\*
- 3rd party GREENGUARD Indoor Air Quality Certified<sup>™</sup> and is verified to be formaldehyde-free
- Handy size
- Easy to transport, easy to install
- Prevents energy leaks at small gaps
- Safe for your home non-combustible

#### How to instructions:

#### page 27

Product Spe	cificati	ons						
Product	Thickness		Wi	dth	Ler	igth	Cove	erage
	in	mm	in	mm	ft	mm	ft²	m <sup>2</sup>
Multi-Purpose	2	51	16	406	4	1219	5.33	.0495
PINK-PAK™	3.5	89	15	381	20	1219	25²	2.32

### **QUICK FACTS: DID YOU KNOW?**



**PINK<sup>™</sup> products annually reduce** over a billion tons of greenhouse gas emissions - equalling 200 million cars' worth of CO<sub>2</sub> emissions and two billion barrels of oil use.



### RAFT-R-MATE<sup>®</sup>: ATTIC RAFTER VENTS



### BENEFITS

- Increases attic ventilation
- Easy to install
- High resistance to moisture
- Will not decay over time

#### How to instructions: Calculate your needs:

page 15

To calculate the number of attic rafter vents required, please consult applicable building codes for required ventilation area.

#### Product Specifications

Thic	Thickness		Width		Ler	igth
in	mm	in		mm	ft	m
2	51	221/	2	572	4	1.2

### FOAMSEALR™ SILL GASKET: SILL PLATE



### BENEFITS

- · Saves money on heating and cooling costs
- Fills gap between sill plate and foundation wall
- Made in Canada and easy to install
- Reduces air leakage in your home
- Polyethylene foam is durable and moisture-resistant

#### How to instructions: page 28 Calculate your needs:

Measure the perimeter of your foundation wall. Divide the total perimeter in feet by 82 ft/roll to obtain the total number of rolls required.

Product Specifications
------------------------

Thic	Thickness		/idth	Len	igth
in	mm	in	mm	ft	m
3/16	4.7	31/2	89	82	25
3/16	4.7	5½	140	82	25





NOISE **BASEMENT**/ FLOORS **SMALL** CONTROL **PROJECTS** 

### CALCULATE YOUR NEEDS

# **PINK**<sup>™</sup> FIBERGLAS<sup>®</sup> INSULATION



**OUICK & EASY** 

It's easy to calculate the number of insulation packages you'll need to complete your project. Here's how:

### I. TOTAL AREA

Determine the area in square feet/metres to be insulated by multiplying the length by the width in ft/m.

LENGTH \_\_\_\_\_ X WIDTH \_\_\_\_\_ = \_\_\_\_ FT<sup>2</sup>/M<sup>2</sup>

### 2. WIDTH OF INSULATION

Measure the distance between joists to determine the insulation width for the job.

DISTANCE BETWEEN JOISTS = \_\_\_\_\_ INCHES/MM

### CHOOSE YOUR PRODUCT

Determine which insulation product (R-value and width) is appropriate for your project. (Choose product width to match distance between joists.)

PRODUCT WIDTH = \_\_\_\_ INCHES/MM

### 4. CALCULATE HOW MANY PACKAGES YOU NEED

Divide total area in ft<sup>2</sup>/m<sup>2</sup> to be insulated by the coverage area per package in ft<sup>2</sup>/m<sup>2</sup>. Round up to the next whole number to determine the total number of packages required.

#### TOTAL AREA IN FT<sup>2</sup>/M<sup>2</sup> \_\_\_\_\_ ÷ COVERAGE AREA IN FT<sup>2</sup>/M<sup>2</sup> PER PKG. \_\_\_\_ = TOTAL NUMBER OF PACKAGES \_\_\_\_

CALCULATING YOUR N	IEEDS IS EASY A	AS 1, 2, 3
WOOD STUD WALL EXAMPLE		YOUR HOME
Attic length	22 ft (6.7 m)	
Multiply by attic width	40 ft (12.2 m)	x
Total area	880 ft <sup>2</sup> (81.7 m <sup>2</sup> )	=
Divided by ft <sup>2</sup> /m <sup>2</sup> per pkg. SpaceSaver® Bag: R-20/15" width = 80	÷	
Number of packages required	=	

### INSTALLATION & SAFETY TIPS

### **OUICK & EASY**

### SAFETY FIRST



Wear protective gear: goggles, gloves, dust mask or respirator, long pants and sleeves.

Ensure there's proper lighting.

#### WORKING AREA



Ensure installation area is accessible and easy to move around in. You may need something sturdy to kneel or walk on such as a plank or a sheet of plywood.

AIR & WATER | FAKS



Seal gaps and air leaks with a foam sealant. Also check for water leaks and repair if existing insulation is wet.

PROPER FIT



Never cover vents, recessed light fixtures, ceiling fans, outlets or other access points.<sup>†</sup>

# TOOLS

Keep the following tools on hand: Hammer, putty knife, caulking gun, tape measure, straight edge, utility knife, lightweight stapler and a pole or rake (for hard-to-reach places).

#### KEEP PACKAGE INTACT



Do not open batt packaging outside of workspace, insulation will expand significantly.

 $^\dagger$ Keep away from vents and allow 3" (76 mm) of clearance around exhaust fans, chimneys and heat-emitting objects and light fixtures. Use approved CSA insulated boxes for recessed lighting. Consult applicable building code, standards or regulations for specific required clearances to chimneys, flue pipes and all other heat-emitting devices and combustion exhaust equipment.





CEILINGS

ENT/ FLOORS PACE NOISE SMALL ONTROL PROJECTS



# Is your attic costing you money?

If your attic floor is insulated but the wood beams (joists) are still visible, you probably don't have enough insulation. Even if you can't see your beams, that's still no guarantee that you have enough insulation. The best thing to do is measure.

Topping up your attic to 15 inches of PINK<sup>™</sup> FIBERGLAS<sup>®</sup> Insulation will make your home more comfortable while cutting down on your heating and cooling costs.

### TOP IT OFF WITH PINK<sup>™</sup> INSULATION AND SAVE!

- The No. I way to reduce energy costs\*\*\* with savings of up to 28%\*\*\* on heating & cooling costs
- Keeps your home cooler in the summer and warmer in the winter.
- Quick and easy weekend project
- Safe for your home non combustible

PLUS: Government grants available. Visit www.showmethegreen.ca

### QUICK FACTS: DID YOU KNOW?



Insulating your attic to R-50 or topping up your attic insulation to 15" saves half a ton of greenhouse gases per year, year after year.

Think **PINK** 



# **PINK<sup>™</sup>** FIBERGLAS<sup>®</sup> INSULATION

page 4





Recommended R-value and thickness: R-50 or 15" (381 mm)

- Product specifications:
- Calculate your needs: page 8

### THE UNINSULATED ATTIC









**I. Installing vapour barrier.** Install a continuous layer of polyethylene vapour barrier on the warm-inwinter side of the cavity.

2. Installing batts. Lay R-40 batts at outer edge of area, ensuring they cover top plate of the wall, then work toward the middle of the attic. Do not block the ventilation space leading up from the eave vents. Butt pieces together tightly; gaps reduce R-value significantly.

**3.** Adding a second layer. When using two layers of insulation, lay the second layer perpendicular to the first (e.g., place one layer of R-12 on top of and perpendicular to bottom layer of R-40).

### 4. Insulating end/kneel walls.

Install batts in end and kneel walls. At the perimeter of the attic, lay the insulation up to the roof rafters, but keep it away from plywood roof sheathing.



Ec@Touch



### 5. Wiring and detail areas.

Slip insulation under wiring and electrical where necessary. Keep away from vents and allow 3" (76 mm) of clearance around exhaust fans, chimneys and heatemitting objects and light fixtures. Use approved CSA insulated boxes for recessed lighting. Consult applicable building code, standards or regulations for specific required clearances to chimneys, flue pipes and all other heat-emitting devices and combustion exhaust equipment.



**6.** Sealing windows. Use a foam sealant for sealing and insulating around windows.

7. Ventilation. Staple *raft-R-mate®* Attic Rafter Vents as you go, at the eaves of every joist to ensure appropriate ventilation area.

### **QUICK & EASY INSTALLATION TIPS**





Cut batts so that they fit closely up against wood cross-bracing members.



See page 9 for pre-insulation and safety check list



Every pound of glass fiber insulation annually saves 12 times more energy than was originally used to produce it.





# **PINK**<sup>TM</sup> FIBERGLAS<sup>®</sup> INSULATION



Recommended R-value and thickness: R-50 or 15" (381 mm)

- Product specifications: page 4
- Calculate your needs: page 8

### TOPPING UP YOUR ATTIC INSULATION

Measure (in inches/mm) how thick the insulation in your attic is. Refer to the EcoTouch® PINK<sup>™</sup> FIBERGLAS® Insulation product specifications on page 8 to determine what R-value you need to add in order to reach a total of 15" (381 mm) of thickness.









I. Adding a second layer. Lay the second layer perpendicular to the first. Start by laying batts at outer edge of area, ensuring they cover the top plate of the wall, then work toward the middle of the attic. Do not block the ventilation space leading up from the eave vents. Butt pieces together tightly; gaps reduce R-value significantly. Cut batts so that they fit closely up against wood cross-bracing members.

2. Wiring and detail areas. Slip insulation under wiring and electrical where necessary. Keep away from vents and allow 3" (76 mm) of clearance around exhaust fans, chimneys and heat-emitting objects and light fixtures. Use approved CSA insulated boxes for recessed lighting. Consult applicable building code, standards or regulations for specific required clearances to chimneys, flue pipes and all other heat-emitting devices and combustion exhaust equipment.



EceTouch



3. Sealing windows. Use a foam sealant for sealing and insulating around windows.

4. Installing rafter vents. Staple raft-R-mate® Attic Rafter Vents, as you go, at the eaves of every joist. Ensure you leave 21/2" (64 mm) of ventilation space between the insulation and the roof sheathing.







Government Grants and Rebates available. visit www.showmethegreen.ca

PLUS: Save up to 28%\*\*\* on heating and cooling costs when you insulate with EcoTouch<sup>®</sup> PINK<sup>™</sup> FIBERGLAS<sup>®</sup> Insulation.

# **PINK**<sup>™</sup> FIBERGLAS<sup>®</sup> INSULATION

page 4

page 8

**FLOORS** 



Recommended R-value and thickness: R-50 or 15" (381 mm)

- Product specifications:
- Calculate your needs:

### FINISHING YOUR ATTIC











I. Installing rafter vents. Install eave vents such as raft-R-mate® Attic Rafter Vents and soffit and ridge vents.

2. Installing batts. Use separate pieces of FIBERGLAS® insulation for rafters and collar beams. Don't try to fit a continuous strip of insulation where collar beams and rafters meet - hard-to-fill gaps may be the result. Push the batts between the rafters until they are flush with the bottom edge of the wood.

**3.** Insulating flat ceilings. If a flat ceiling is being installed, place batts between joists.

4. Insulating end/kneel walls.

Install batts in end and kneel walls. Insert cut strips into narrow details. (Expanding foam is best for sealing and insulating around windows.)

5. Air/Vapour Barrier. Install sealed and continuous polyethylene air/ vapour barrier on the warm-inwinter side of the living area of the house.

**6.** Finishing the walls. As soon as the insulation has been installed, finish the walls and ceiling with an approved interior finish, such as gypsum wallboard.





### INSTALLATION NOTES FLAT AND CATHEDRAL CEILINGS

- If a flat ceiling is being installed, place batts between joists. Place the vapour retarder toward the warm-in-winter side of the living area of the house.
- If the depth of the framing members is less than 17½" (445 mm), you will need to extend the depth of the members by adding additional framing over the existing framing. A total depth of 17½" (445 mm) is required to achieve R-50 and required ventilation of 2½" (64 mm).
- Another option is to add FOAMULAR® C-200 Extruded Polystyrene Rigid Insulation to the underside of the framing members to get to the total R-50 desired.
- Install polyethylene vapour barrier if required and a thermal barrier (gypsum board). Consult applicable building code.

# SAFETY FIRST!



# Please consult the National Building Code before you start building

When selecting insulation thickness and installing insulation for the rafter portion of your attic, the National Building Code requires 2½" (64 mm) of ventilation air space between the insulation and the roof sheathing. For more information about the National Building Code (NBC), **visit www.nationalcodes.ca**.

# **PINK<sup>™</sup>** FIBERGLAS<sup>®</sup> INSULATION



Recommended R-value and thickness: R-50 or 15" (381 mm)

- Product specifications: page 4
- Calculate your needs: page 8

### CATHEDRAL AND FLAT CEILINGS











**I. Installing rafter vents.** Install eave vents, such as *raft-R-mate®* Attic Rafter Vents or soffit and ridge vents at the eave of every joist.

2. Installing batts. Use separate pieces of FIBERGLAS® insulation for rafters and collar beams. Don't try to fit a continuous strip of insulation where collar beams and rafters meet – hard-to-fill gaps may be the result. Push the batts between the rafters until they are flush with the bottom edge of the wood.

3. Wiring and detail areas. Slip insulation under wiring and electrical where necessary. Keep away from vents and allow 3" (76 mm) of clearance around exhaust fans, chimneys (refer to specific clearance requirements of the chimney flue manufacturer) and heat-emitting objects and light fixtures (unless IC rated). Use approved CSA insulated boxes for recessed lighting.

**4. Installing air/vapour barrier.** Install a continuous layer of polyethylene vapour barrier on the warm-in-

vapour barrier on the warm-inwinter side of the cavity. Overlap the joints by at least 6" and seal with approved caulking or tape.<sup>†</sup>

<sup>†</sup>Consult applicable building code, standards or regulations for specific required clearances to chimneys, flue pipes and all other heat-emitting devices and combustion exhaust equipment.





# Want to insulate your exterior walls for maximum energy savings?

Insulate with EcoTouch<sup>®</sup> PINK<sup>™</sup> FIBERGLAS<sup>®</sup> and FOAMULAR® CodeBord® Extruded Polystyrene Rigid Insulation and save up to 28%\*\*\* on energy bills!

If you're building a new home or addition, first, install FOAMULAR® CodeBord® Extruded Polystyrene Rigid Insulation directly to the outside of the entire stud wall frame. It's easy. Then fill the interior walls with EcoTouch® PINK<sup>™</sup> FIBERGLAS<sup>®</sup> batts. It's safe for your home, non-combustible and highly resistant to moisture. And Canadian-made, it's designed to keep the weather out and the comfort in.

Savings and comfort when you Think PINK<sup>™</sup>.

**FLOORS** 

**PINK**<sup>™</sup> FIBERGLAS® INSULATION

**NOISE** 

**SMALL** 

Ec@Touch

Recommended R-value and thickness: 2x4 Walls: I layer of R-I2 or R-I4 2x6 Walls: I layer of R-20 or R-22 or R-24

PINK PRINCIPLATER

- Product specifications: page 4
- Calculate your needs: page 8

### BASIC INSIDE EXTERIOR WALL INSULATION (SEE PAGE 44 FOR EXTRA INSULATING POWER)



WALLS





I. Installing batts. Be careful not to compress insulation beyond edges of the studs. The insulation should fit snugly against the studs and completely fill the cavity to the top and bottom plates.

2. Wiring cables. Split the batts and place behind and in front of wiring cables and use small strips for narrow areas. Stuff small pieces of insulation around plumbing, vents and around windows and doors.

3. Installing vapour barrier. Install a continuous polyethylene vapour barrier over entire wall area. Seal joints if vapour barrier is also acting as the air barrier in the assembly.

4. Installing drywall. Install drywall or other wall finish on top of the vapour barrier as soon as you have finished installing the insulation.

### **QUICK FACTS: DID YOU KNOW?**



**PINK<sup>™</sup> FIBERGLAS<sup>®</sup>** Insulation is packaged in material that is recycled into products such as grocery bags, garbage bags and plastic lumber.

Think PINK









# Want to put more space in your home and money in your pocket?

Insulate your basement and crawlspace with EcoTouch® PINK<sup>™</sup> FIBERGLAS® Insulation, FOAMULAR® C-200 and C-300 Extruded Polystyrene Rigid Insulation.

Transform that cavernous basement into a cozy family room, spare bedroom, workshop or home office. Uninsulated, any basement or heated crawlspace is a major energy drain. But you could save on energy costs, plus increase the comfort and resale value of your home just by insulating.

Make any necessary repairs, then insulate the walls with Canada's No. I Insulation, EcoTouch® PINK™ FIBERGLAS® batts and/or FOAMULAR® C-200 Rigid Insulation. Then, for even greater savings and comfort, wrap the ducts and pipes with PINK™ FIBERGLAS® Insulation. Increase the comfort of your home and reduce your carbon footprint with PINK™ Insulation.

Savings and comfort when you Think PINK<sup>™</sup>.

# **PINK<sup>™</sup>** FIBERGLAS<sup>®</sup> INSULATION

**FLOORS** 



**BASEMENT**/

CRAWLSPACE

WALLS



**NOISE** 

CONTROL

**SMALL** 

**PROJECTS** 

Recommended R-value and thickness: R-12, R-14 – 3.5"(89 mm) or R-20 – 6" (152 mm)

- Product specifications: page 4
  - page 8

### 2X4 WOOD STUD BASEMENT WALLS



• Calculate your needs:

**I. Applying moisture barrier.** Apply moisture barrier from the floor up to the finished level of the ground outside.

### 2. Building a standard wall.



**3. Cutting batts.** Cut batts to fit the band joists between the top plate and underside of the floor.

**4. Installing batts.** Place batts between studs, flush with inside face of studs. Ensure band joists are covered with insulation because heat loss can be significant.

**5. Installing vapour barrier.** Staple vapour barrier over the entire wall to edge of the studs and plates. Ensure it covers joints between wall and upper floor ceilings and over insulation at header between floor joists.

**6.** Applying wall finish. Apply drywall or other wall finish on top of the vapour barrier.





WALLS BASEMENT/ CRAWLSPACE FLOORS NOISE S CONTROL PR

### SMALL PROJECTS

# **PINK<sup>™</sup>** FIBERGLAS<sup>®</sup> INSULATION





Recommended R-value and thickness: R-12, R-14 – 3.5"(89 mm) or R-20 – 6" (152 mm)

• Calculate your needs: page 8

### CRAWLSPACE: INSULATED, HEATED

### I. Applying vapour/moisture

**barrier to the floor.** Spread vapour/ moisture barrier over the entire floor area of the crawlspace, overlapping sheets by 12" (300 mm).

### 2. Cutting batts for joists.

Measure, cut and place small pieces of batts to fit between ceiling floor joists and band joist.

**3. Installing batts for walls.** Cut pieces of insulation long enough to hang down the wall and extend out about 24" (600 mm) over the crawl-space floor.

4. Attaching batts to sill. Attach batts to sill using long furring strips. Attach pieces of insulation to the edge of sill. Allow top ends of insulation to extend above sill. Trim to fit snugly around bottom edges of joists. For walls running parallel to the joists, use longer strips of insulation and secure them directly to the band joist with furring strips. Drive the nails in just far enough to hold the furring strip securely – the insulation should not be compressed to less than half its thickness. On the walls that run parallel to the joists, use longer lengths of insulation and secure them directly to the band joist with furring strips.







### 5. Applying air/vapour

barrier. Staple polyethylene air/vapour barrier over floor and wall insulation. Slit and closely staple at joists and floor sheathing. Seal all joints.



# Cold floors freezing your tootsies?

Insulate your floors with EcoTouch® PINK™ FIBERGLAS® Insulation or FOAMULAR® C-300 Extruded Polystyrene Rigid Insulation

Uninsulated floors can chill your toes and rob your home of precious energy. Especially if the floor is over an unheated garage, basement or crawlspace. Wherever your floor is cold or damp to the touch, you need to insulate.

Get to the bottom of this very Canadian problem with a Canadian-made solution: EcoTouch® PINK™ FIBERGLAS® Insulation and C-300 Extruded Polystyrene Rigid Insulation. Easy to install, and GREENGUARD Certified. Meaning? By saving energy to warm your feet, you're reducing your carbon footprint.

Savings and comfort when you Think PINK<sup>™</sup>.

### Thinking of insulating your basement floor?

Insulate with FOAMULAR® C-300 Extruded Polystyrene Insulation. Refer to how-to instructions on page 48.



page 8

WALLS **BASEMENT**/ **CRAWLSPACE** 

**FLOORS** NOISE CONTROL **SMALL** 

# **PINK**<sup>™</sup> FIBERGLAS<sup>®</sup> INSULATION



Recommended R-value and thickness: R-31 or 9.5" (241 mm)

- Product specifications: page 4
- Calculate your needs:

### FLOORS OVER UNHEATED SPACES



I. Sealing air leaks. Seal air leaks between unheated/heated area (garages, basements, crawlspaces) before insulating. Leaks include basement stairs, electrical wiring, plumbing and ductwork.

2. Applying vapour barrier. Apply

a 6 mil. vapour barrier to the

**Ec**@Touch



warm-in-winter side (against the floor above). Consult applicable building code for air barrier requirements and location. 3. Installing batts. Place batts between floor joists, where they will stay in place temporarily.



Ensure insulation fits snugly against the band joists and the underside of the floor and that it overlaps the bottom plate.



4. Holding batts in place. To hold insulation in place, nail wire mesh at right angles to the floor joists. Continue adding adjacent strips until insulated area is covered.

5. Finishing walls. Install finish over framing structure.

### **OUICK & EASY INSTALLATION TIPS**





Cut batts so that they fit closely up against wood cross-bracing members, electrical wiring and lighting fixtures.



# Want to reduce noise in your home?

Insulate your interior walls, ceilings and floors with EcoTouch<sup>®</sup> OUIETZONE<sup>®</sup> PINK<sup>™</sup> FIBERGLAS<sup>®</sup> Acoustic Insulation

Have teenagers or pets? Noisy appliances or home entertainment equipment? You can significantly reduce the noise in your home by installing EcoTouch® QUIETZONE® PINK<sup>™</sup> FIBERGLAS<sup>®</sup> Acoustic Insulation between interior walls, floors and ceilings. Non-combustible and safe for your home, EcoTouch® QUIETZONE® PINK™ FIBERGLAS® Acoustic Insulation is made from 73% recycled content\* and is GREENGUARD Certified and verified to be formaldehydefree, which means our products meet strict indoor air quality standards. Owens Corning is proud to be at the forefront of our industry when it comes to indoor air quality and environmental initiatives. So take comfort in knowing that while you're making things quiet around home, you're being easy on the environment.

### PEACE AND COMFORT WITH QUIETZONE® INSULATION

- Minimizes unwanted noise
- Safe for your home
- Non-combustible
- Made with 99% natural materials\*\*





Ec@Touch

# $\ensuremath{\mathsf{QuietZone}}^{\ensuremath{\mathbb{R}}}$ acoustic insulation



Wood stud walls: I layer 3.5" (89 mm) QUIETZONE<sup>®</sup> Steel stud walls: I layer 3<sup>5</sup>/<sup>8</sup>" (92 mm) QUIETZONE<sup>®</sup>

- Product specifications:
- Calculate your needs:

#### page 5 page 8

### NOISE CONTROL FOR WALLS, CEILINGS, FLOORS



I. Sealing holes. Seal all areas in walls where sound may penetrate, such as outlets, lighting fixtures, plumbing and sill plates, using caulking or foam sealant.



2. Installing batts. Install insulation batts between studs. Don't compress insulation beyond edges of studs. The insulation should fit snugly against the studs and completely fill top to bottom plates of cavity.





3. Insulating around small areas.

Cut batts to fit snugly around obstructions such as electrical boxes, plumbing and plumbing vent lines.

**4.** Fastening resilient metal channels. Fasten resilient metal channels across studs to minimize sound energy passing through studs.

5. Finishing the wall. Install drywall or other wall finish to the structure as soon as you have finished installing the insulation. For added noise reduction, install QUIETZONE® Acoustic Batt Insulation in the ceiling area in the same manner with resilient metal channels.

### **PINK**<sup>™</sup> FIBERGLAS<sup>®</sup> INSULATION Multi-Purpose and PINK-PAK<sup>™</sup>





Product specifications:

page 6

### SMALL PROJECTS





### Insulating duct work

Wrap duct work with EcoTouch® PINK<sup>™</sup> FIBERGLAS® insulation. Tape polyethylene around outside to hold into position. If you are applying an interior finish, apply vapour barrier and patch any rips or tears before installing the interior finish.

### Insulating pipes on exterior walls

When insulating around water supply pipes on exterior walls, insulation must always be installed behind the pipes. To ensure there is no heat loss, do not leave any gaps between insulation pieces.

#### Insulating electrical boxes, air conditioners and windows

Cut small strips and stuff behind/beside narrow areas such as electrical boxes. Do not leave gaps or spaces between the strips of insulation.

#### Insulating the attic hatchway

The hatchway into an attic is a common source of heat loss. Be sure to insulate the board itself by using an adhesive to fasten FIBERGLAS<sup>®</sup> insulation to the top of the hatch. If you have a pull-down stairway, lay batts on and around a built-up framework over the opening. Foam gaskets around hatch are also recommended.





PRODUCT PRE-INSULATION FAQS ATTIC CEILINGS INFO

### FoamSealR<sup>™</sup> SILL GASKET



Recommended thickness:  $3\frac{1}{2}$ " (89 mm) or  $5\frac{1}{2}$ " (140 mm)

- Product specifications: page 7
- Calculate your needs: page 7

### FOUNDATION WALL: SILL PLATE

### TOP OF FOUNDATION WALL



- I. Smooth top surface of foundation wall to no greater variation than ¼" and brush off loose debris.
- Unroll FoamSealR<sup>™</sup> Sill Gasket on top surface of foundation wall or fasten to bottom of sill plate on tilt-up wall sections.
- 3. Butt all end and perpendicular joints tightly.
- 4. Pierce *FoamSealR*<sup>™</sup> Sill Gasket at anchor bolt locations.
- 5. Set and anchor sill plate to foundation wall.

### QUICK FACTS: DID YOU KNOW?

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



# FAQS: HOME INSULATION

WALLS



**FLOORS** 

NOISE

**SMALL** 

**PROJECTS** 

### GENERAL INSULATING QUESTIONS

### How does EcoTouch<sup>®</sup> PINK<sup>™</sup> FIBERGLAS<sup>®</sup> Insulation work?

Millions of tiny air pockets form between tangled strands of insulation. These trapped air pockets resist the passage of heat flow, reducing heat loss in the winter and heat gain in the summer. In general, the thicker the insulation, the more air pockets and the higher the R-value.

### What is thermal performance?

All insulation materials respond to a single basic principle: heat moves from warmer areas to cooler areas. On cold days, heat from inside tries to get out, and on warm days, the heat outside tries to get in. Properly installed insulation helps reduce costly heating and cooling bills.

#### What is R-value?

R-value measures resistance to heat flow, and is determined by the thickness and density of the insulation. The higher the R-value, the greater the insulating power. (See page 4 for R-value chart).

#### Which R-value should I choose for my project?

New and retrofit insulation projects must always meet local building code insulation levels. Higher levels are recommended to increase energy efficiency, occupant comfort and help save the planet. See how-to pages for recommended insulation levels.

# Remember! The higher the R-value, the greater the insulating power and the savings.

#### Do higher insulation levels create condensation problems?

No. Insulation is not a source of condensation problems. Properly ventilated areas, the use of vapour barriers/ retarders and a continuous air barrier system help to reduce the risk of condensation.

#### What is the purpose of a vapour barrier/retarder?

Vapour barriers/retarders, made from polyethylene film and placed on the warm side of the insulation, help control the





# FAQS: HOME INSULATION





Sealing air leaks



Applying vapour barrier

Installing rafter vents

amount of water vapour passing through insulation, minimizing the risk of condensation within exterior walls, ceilings and floors.

# I am in the middle of an insulation project, and I accidentally tore the vapour barrier. Do I need to repair it?

Yes, seal all punctures with contractor sheathing tape or duct tape. The polyethylene film acts as a vapour barrier and can also act as the air barrier if it is sealed and continuous.

### Detecting and fixing air leaks before insulating is very important and doing so can result in an annual energy cost savings of 10%. How do I detect air leaks? How do I fix air leaks?

Cold and windy days are the best time to check for air leaks. Attach a piece of tissue or light paper to a string, and then hold it close to an area where you suspect a draft. If the tissue moves, you've found a leak. Problem areas include the edges of doors and windows, and plumbing and electrical wiring access through walls, floors and ceilings.

Weather-stripping, caulking and sealing doors, windows, cracks and openings can reduce or stop air leakage. When building a new home, remodelling or re-siding, ensure that a continuous air barrier system exists or is installed.

### Why is ventilation important?

When your attic or crawlspace is properly ventilated, a positive airflow is created, allowing the house to breathe, and thus preventing moisture build-up. Soffit vents (openings under the eaves) combined with roof vents or gable vents create positive movement of air out of the attic. Allow for at least two vent openings, so air can flow in one and out the other.

Vent area requirements: Consult your local building codes for requirements. The unobstructed vent area must not be less than 1/300 of insulated ceiling area. For roof slopes less than 1 in 6 or for cathedral ceilings, the unobstructed vent area must not be less than 1/150 of the insulated ceiling area. Batts and loosefill insulation in attics must not restrict the ventilation air at eaves. *raft-R-mate®* Attic Rafter Vents retain the insulation instructions.

# FAQS: HOME INSULATION



Adding a second layer

Applying air/vapour barrier Installing attic rafter vents

### ATTIC & CATHEDRAL CEILING QUESTIONS

My attic currently has about six inches of insulation. If I want to add another six inches of insulation, what type should I use? Before installing a layer of unfaced batts or having a contractor install loosefill insulation, check roof sheathing for evidence of moisture accumulation. Seal any leaks into the attic at light fixtures by taping the edges of a piece of polyethylene film over the fixtures to back of ceiling finish and by installing a foam gasket around any hatches. Check to see that the air/vapour barrier is intact and repair if necessary.



The recommended R-value in the attic for optimum energy efficiency is R-50. Six inches of insulation has an R-value of R-20. To get to R-50, add 9.5" of batt insulation or 12" of loosefill insulation over existing batt insulation. Be sure to provide adequate ventilation.

# How do I add additional layers of insulation to a joist cavity that is only half full?

If the joist cavity is only half full and the recommended insulation level in your area is R-50 (equivalent to approximately 15" (381 mm) of EcoTouch® PINK<sup>™</sup> FIBERGLAS® Insulation), fill the joist cavity flush to the top of the joist using the appropriate thickness of PINK<sup>™</sup> FIBERGLAS® Insulation. Then lay a second layer of insulation perpendicular to the existing layer, for a total of 15" (381 mm) (or an R-value of 50) in the joist cavity. If a first layer of retrofit insulation is not available in an appropriate thickness so that it's flush with the top of the joists, install appropriate width layers of batts between and parallel to the joists. Covering the attic joists with the second layer will reduce heat loss through the wood. See page 11 for installation instructions.





ATTIC CEILINGS

FLOORS NOISE SMALL CONTROL PROJECT

FAQS: HOME INSULATION





Insulating floor above

Insulating cathedral ceiling Plywood for walking on

In winter, there is a wet spot on my ceiling where it meets the inside of the exterior wall. The attic area above this room is insulated. What might be causing this moisture problem?

Check to see if your attic insulation completely covers your ceiling area. (Attic insulation should extend out over the wall top plate, but not over the eave.) You may have a cold spot caused by a lack of insulation over this area, or you may have a ventilation problem or "ice damming."

Insulation should extend out over the exterior wall, right up to the roofline, but should not cover the eave vents. Install eave baffles wherever there are eave vents to ensure airflow. For additional ventilation, install roof vents.





# Do I need ventilation air space between the insulation and the roof deck in cathedral ceilings?

Rafters in cathedral ceilings are usually made of  $2\times10$ s or  $2\times12$ s, and Owens Corning has installation products designed specifically for these rafters. These products help prevent moisture damage, help ensure the durability of roof shingles and provide a minimum of  $2\frac{1}{2}$ " (63 mm) of ventilation space between the top of insulation and underside of roof sheathing. Check local building codes for additional requirements.

### CRAWLSPACE QUESTIONS

### How do I insulate the dirt floor of my crawlspace?

A dirt floor of a crawlspace should be covered with a 6 mil. polyethylene vapour retarder.

# If my crawlspace is ventilated, can I still insulate the walls of the crawlspace, or is it better to insulate the floor?

If there are insulated ducts and no pipes, the best course of action is to insulate the floor above (see page 24 for installation

# FAQS: HOME INSULATION







Insulating walls

Applying air/vapour barrier Finishing walls

instructions for floors above unheated spaces). The other option is to insulate both the walls and the floor and have a heated, unvented crawlspace.



### WALL QUESTIONS

Since EcoTouch® PINK<sup>™</sup> FIBERGLAS® Insulation batts compress so easily, can I increase the effectiveness of my insulation by squeezing a 5½" (140 mm) R-20 batt into a 2×4 wall instead of using 3½" (89 mm) R-12 batt?

No. Compressing FIBERGLAS<sup>®</sup> Insulation into a smaller stud cavity will not increase your insulation's efficiency and the stress on drywall may result in nail pops or bends. R-12 and R-14 FIBERGLAS<sup>®</sup> Insulation that is  $3\frac{1}{2}$ " (89 mm) thick is designed for use in 2x4 walls. R-20/22/24 FIBERGLAS<sup>®</sup> Insulation that is  $5\frac{1}{2}$ " (140 mm) or 6" (152 mm) thick is designed for use in 2x6 walls. Check availability in your area.



















Batts





**Rigid Foam** 



ENERGY-SAVING, MOISTURE RESISTANT

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







