



HOW TO INSULATE BASEMENT WALLS

with Rigid Foam
Insulation

Installation Procedure:



1. Ensure that the wall is as flat and even as possible by hammering off any rough concrete areas.

2. Measure the height of the wall to be insulated. Trim a panel of **Celfort® 200 Cel-Lok®** and the metal channel to the correct length.

3. Place the first panel vertically on the wall starting in a corner and ensure that it is plumb. Trim off the ship-lap edge to fit full thickness against the corner.

4. Rest bottom of steel channel on floor. In the centre of the steel



channel, choose one of the pre-punched holes and drill your first pilot hole for the masonry fastener (ensure at least 1" penetration into the masonry). Drive in the masonry fastener.



5. Repeat drilling and fastening at floor and ceiling levels. Use a minimum of three fasteners per metal channel. Use more fasteners per channel if the wall will support loads (e.g. bookshelves, etc.).



6. Add the next panel of pre-trimmed insulation. Insert the metal channel into the grooves along the edges of the two panels where they meet. Repeat

fastening procedure, steps 4 and 5.

7. Install electrical boxes and wiring. Install junction box for electrical outlets in ceiling joists above.

7a) Cut out an opening in the



insulation, at the location of the electrical outlet in order to receive the electrical box and a 51mm x 76mm x 152mm (2"x3"x6") piece of wood.



NOTE: A poly vapour retarder is not required, if the drywall or foam system perimeter and penetrations are sealed against air leakage using acoustic caulk or foam sealant.

RECOMMENDED PRODUCTS

2' x 8' Celfort® 200 Cel-Lok®
1.5" or 2" Thickness



INSULATION COSTS LESS THAN ENERGY†



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Installation Procedure (continued):



7b) Fasten the 2"x3"x6" wood piece to the foundation wall.

7c) For 38 mm (1-1/2") thick panels, fasten the electrical box to the side of the 2"x3"x6" wood piece. The electrical box must exceed the 2"x3"x6" by 13 mm

(1/2") or by the thickness of the drywall finish. The drywall should be flush with the electrical box. For 51 mm (2") thick panels, repeat the above described procedure while adding a 13 mm (1/2") thick spacer behind the 2"x3"x6" wood piece, to ensure that it remains flush with the insulation panel.

7d) Widen one of the two existing grooves at the centre of the insulation panel to receive the electrical wire coming from the junction box to the outlet. Make a knife cut into the back of the groove and insert electrical wire into it. Embedment of wire should be 13 mm (1/2") minimum (i.e. electrical wire should be at least 25.4 mm (1") from drywall surface).



7e) Set electrical wire into groove leading to outlet.

7f) Connect the wire to the electrical box.*

7g) Use foam sealant to fill the enlarged groove, the area behind the electrical box and the perimeter of the 2"x3"x6" piece of wood and the electrical box.



7h) Fill in joint at the perimeter of the insulated wall as well as all perforations made in the insulating panel (for example, electrical boxes, windows) using foam sealant.

7i) Cut off protruding foam sealant with a knife or hacksaw blade to ensure gypsum board can be installed properly.

8. When installation is complete, cover the insulation with 13 mm (1/2") gypsum board attaching it with self-tapping drywall screws to the metal channel. (Screws should be spaced 8" on centre.) Measure the distance between metal channels to insure that the drywall joints occur at the centre of the channels. It may be necessary to cut the drywall panels occasionally to assure this. Finish the drywall according to manufacturers instructions. Consult the National Building Code for requirements when using other finishes.

*NOTE: Electrical installation laws and requirements may vary from province to province. Some laws prohibit non-licensed people from installing their own electrical work and some allow it providing a permit is obtained. Consult the National Electrical Code for electrical requirements. Owens Corning recommends that all electrical work be done by qualified people only.

For more information call

I-800-GET-PINK®

or visit our web site www.owenscorning.ca



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†Insulating residential structures to well above building code levels should result in net energy savings, over time, above the cost of the insulation. Savings vary with application and the amount of existing insulation. Higher R-values mean greater insulating power.

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