

INSTALLATION GUIDE

EcoBatt® Insulation



PERSONAL PROTECTIVE EQUIPMENT

Recommended PPE: N95 dust mask, loose fitting clothing with long sleeve shirt, safety glasses and gloves are recommended.

RE-ENTRY/OCCUPANCY TIMES

It is safe to be in the areas while EcoBatt® is being installed as long as eye protection and a dust mask are worn. Recommended PPE is not required to re-enter or to re-occupy the building once EcoBatt has been installed.

SITE PREPARATION

Bays and cavities that will be filled with insulation shall be broom cleaned removing all wood waste (sawdust, drilling waste, trash, etc.) and any other debris that is not part of the construction such as loose nails, plastic containers, electrical, plumbing and mechanical scraps, etc. Lumber in contact with only non-combustible unfaced fiber glass insulation

around chimneys, flues and other heat sources following local code requirements.

Check with the manufacturer of any heat source in regards to how much clearance is needed around it.

R-VALUE

"R" means resistance to heat flow. The higher the R-Value, the greater the insulating power. To get the marked R-Value, this insulation must be installed properly. Install EcoBatt insulation with the R-value identification facing the interior.

SPECIFICATIONS

This product conforms to the performance requirements of ASTM C665, ASTM E84 (unfaced and FSK faced only) and ASTM E136 (unfaced only). This product meets the California Referenced Standards Code, Chapter 12-13 Standards for Insulating Material, Part 6, Title 24, C.C.R.

TIPS TO REMEMBER

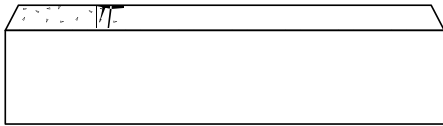
EcoBatt insulation is compression packaged and should be opened only when ready to install. The insulation will recover and expand to the labeled thickness once the package is opened. Some handling electrical, plumbing and heating equipment specify combustion safeguards that must be followed per the product manufacturer's instructions. Follow all governing jurisdictional codes and regulations.

Repair all tears in the facing with appropriate vapor retarder tape.

AIR SEALING AN EXISTING HOME

Minimizing air infiltration is dependent on the air barrier system and not the insulation type. Like any system it is composed of multiple parts, but these parts can basically be categorized as air barriers and air gap sealants. An air barrier is anything that blocks air from moving—which includes exterior sheathing and interior gypsum board sealed at the edges. For an air barrier system to be effective, air gaps—including all gaps, seams, and penetrations (think plumbing and electrical entries where air could get in) need to be sealed properly.

Knauf recommends using ECOSEAL Plus elastomeric sealant and gasket for all penetrations, joints, seams and other air sealing areas required by governing codes, weatherization and other performance and sustainability programs. Application training for ECOSEAL Plus using pressure-applied spray equipment is provided by Knauf Insulation's training professionals. ECOSEAL Plus may also be applied by hand using a bulk loading caulking gun. Other materials such as highly flexible caulk and foam may be used. Certain restrictions for sealants in contact with hot objects must be followed explicitly to meet approved application procedures.



FLOORS

Over Unheated Crawl Spaces, Garages, Overhangs and Cantilevers

Determine the maximum R-Value of insulation that can be installed by measuring the depth of floor framing members. Select either R-38 (12"), R-38HD (10¼"), R-30 (10"), R-30 (9½"), R-30HD (8½") R-22 (6½"), R-19 (6¼"), or R-13 (3½"). Determine the width of the insulation you'll need by measuring the typical distance between floor joists.

Fit EcoBatt® kraft-faced batts between floor framing joists with the facing toward the warm-in-winter side. Support with wire insulation supports, criss-crossed rust-proof wire, chicken wire or other means of support.

Position insulation to protect water lines and HVAC duct systems keeping them between the insulation and the conditioned portion of the home.

When installing unfaced EcoBatt over unconditioned, vented crawl spaces, install batts that are properly sized for friction fit between joist spacing and type of joist, i.e., manufactured joists, dimensional lumber. Underfloor insulation support systems shall be installed so the insulation remains in full contact with the sub-floor, flat and in place for the life of the residence. Supports may be installed using wood lath, twine, wire, or other suitable material. Insulation supports shall be installed with spacing no more than 24" on center. Foundation vents shall be placed so the top of the vent is below the lower surface of the floor insulation. When foundation vents are not placed where the top of the vent is below the lower surface of the floor insulation, a permanently attached baffle shall be installed at an angle of 30° from horizontal to divert air flow below the lower surface of the floor insulation.

In crawl spaces, cover the ground with a 6 mil polyethylene film to serve as a barrier to ground moisture. Provide adequate ventilation to the outside.

UNVENTED CRAWL SPACE

Friction fit slightly oversized sections of EcoBatt batts in each corner and over sill plates.

Crawl space wall insulation shall be permanently fastened to the interior of the foundation wall. Insulation shall extend downward from the Rim/Band Joist and continue over the top of the foundation wall to the finished grade of the crawl space and extend horizontally out from the foundation wall for no less than 24". Exposed earth in unvented crawl space foundations shall be covered with a Class I vapor retarder. 6 mil polyethylene is an acceptable material. All joints in the vapor retarder shall overlap by six inches and be sealed or taped. The edges of the vapor retarder shall extend not less than six inches up the foundation wall behind the insulation. Wall insulation shall cover the vapor retarder on the foundation wall with the bottom edge of the insulation taped to the vapor retarder. Insulation shall be placed over the vapor barrier ground cover and taped or sealed at the edges. Secure the insulation by driving galvanized nails and washers through the insulation into the sill plate. You can also nail wood lathes into the sill plate every 18", compressing the insulation between the lathes and sill plate.

Be sure to cover the ground with 6 mil polyethylene film to serve as a barrier to ground moisture. Mud Sill Install kraft-faced EcoBatt after airsealSI

SOUND CONTROL

Wood Frame (Residential and Multi-family Construction)

Identify interior walls, floors, or ceilings which border areas that need to be isolated from other areas of the structure. Determine the width of insulation needed by measuring the typical distance between framing in each of these areas (usually 15" or 23").

Install EcoBatt® unfaced or kraft-faced insulation between all framing members bordering this area. Friction-fit unfaced insulation or install kraft-faced batts. Faced batts may be stapled to the studs, if desired. Filling the cavity will provide the most acoustical performance.

Cover faced insulation with an approved finish material (i.e. gypsum board).

Metal Frames

Identify interior walls or ceilings which border rooms or common areas that need be isolated from other rooms or common areas.

Partition Walls

Friction fit one side of unfaced EcoBatt insulation into the metal C-channel and butt the other side against the metal stud. Install insulation to cover the full height of the wall.

Cover with an approved finish material (i.e. gypsum board).

Acoustical Ceilings

Position unfaced EcoBatt batts over the top of acoustical lay-in ceiling panels or metal pan ceilings.

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