

EnkaSonic[®]

Acoustic subfloor solutions

These instructions apply to the EnkaSonic portfolio¹ of sound control products. EnkaSonic sound mats can be used over a variety of subfloors including OSB, plywood, concrete, and precast concrete.

These suggestions represent generally accepted procedures for successful installation of the EnkaSonic family of products. These instructions may be followed, modified, or rejected by the owner, engineer, contractor or their representative since they, not Low & Bonar, Inc., are responsible for planning and executing procedures appropriate to a specific application.

Preparation

A structurally sound subfloor with deflection not to exceed L/360 of the span is required. Subfloor must be clean and free of construction debris. Concrete subfloor should be at 28 day strength. Open cracks or gaps in the subfloor should be filled with compatible underlayment filler. The building temperature for installation of the EnkaSonic system should be 50 °F (10 °C) as a minimum. The careful installation of each component of the EnkaSonic sound floor system is essential to the final design performance.

Perimeter Isolation Installation

1. Install the Perimeter Isolation material to the base of the wall and around the perimeter of any protrusion through the floor system, such as floor drains, columns, pipes, electrical conduits, etc. to break up the transmission path of vibration between the floor and walls. Top of isolation foam must be higher than top of planned topping slab.

2. Apply acoustical sealant to the lower 1" backside of the perimeter isolation barrier. Firmly press and adhere the isolation barrier to the wall or vertical partition (including door frames).

3. If mechanical fasteners are used, fasten in the top area, which will be trimmed off upon completion of the floor.

4. Adhesive backed isolation foam may be used in place of foam attached with sealant or mechanical fasteners.

EnkaSonic Mat Installation

1. Lay the EnkaSonic directly over the subfloor (or waterproofing membrane if applicable) with the white filament side down, white fabric side up. EnkaSonic Plus products should be installed with the melt blown fabric side down.

2. The EnkaSonic should be pushed up tightly to the perimeter isolation material previously installed around the perimeter of the room. The EnkaSonic must fit snugly against the perimeter isolation barrier.

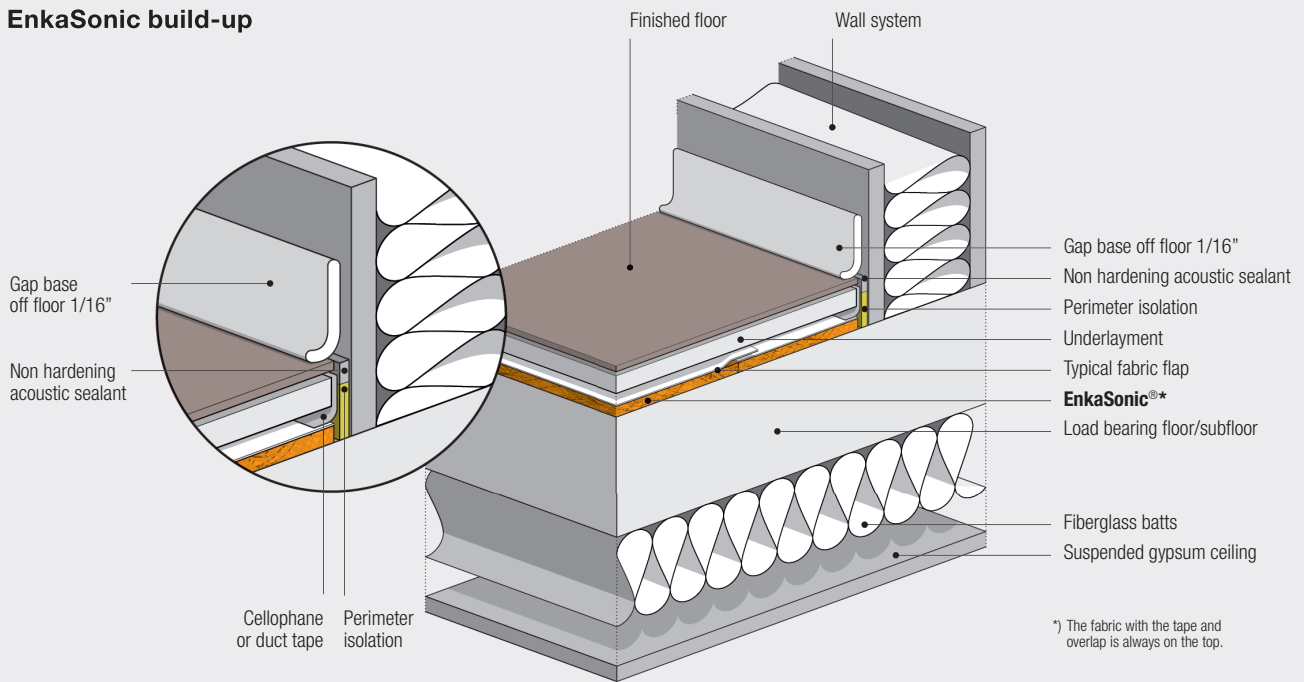
3. Butt the filament core edges of the EnkaSonic together with the flush fabric edge abutting the fabric flap edge of the adjacent EnkaSonic mat. Remove adhesive liner from the overlap flap and pull flap snug to create a smooth flat transition. There should be no gaps between adjacent EnkaSonic mats.

4. Tape all butt seams that do not have an overlap flap.

5. Tape the room perimeter joint where the EnkaSonic touches the Perimeter ISO material.

6. All tape used to seal any joints prior to pouring the underlayment must be of sufficient adhesion and strength to prevent any of the liquid topping material from leaking into the gap space under the fabric created by the entangled filament mat.

EnkaSonic build-up



*) The fabric with the tape and overlap is always on the top.

Alternate Perimeter Isolation & EnkaSonic Mat Installation

1. Lay the EnkaSonic directly over the subfloor with mat fit snugly against the drywall wall.
2. Install the Perimeter Isolation material to the base of the wall in an L shape with one leg of the L on the wall and the other on the EnkaSonic top fabric. Top of isolation foam must be higher than top of planned topping slab.
3. L shaped isolation material may be self-adhesive or attached with acoustical sealant.
4. Follow notes 1, 3, 4, & 6 in EnkaSonic Mat Installation section above.

EnkaSonic Build-up

A. Gypsum or Cementitious Underlayment² (refer to figure: EnkaSonic Build-up)

1. Inspect sound mat installation and joints before pouring underlayment.
2. Consult gypsum / cementitious underlayment manufacturer for installation requirements for pouring over entangled filament sound mat and for any other special requirements.

3. No primer is required to pour on EnkaSonic because of the water resistant and high bond strength between the EnkaSonic fabric and poured toppings.
4. Pump the gypsum underlayment to the recommended depth for each specific sound mat. The chart below has general recommendations.

B. Lightweight Concrete Underlayment (refer to figure: EnkaSonic Build-up)

1. Install reinforcing wire or mesh as specified by designer.
2. No primer is required to pour topping on EnkaSonic because of the water resistant and high bond strength between the EnkaSonic and poured lightweight concrete toppings.
3. Pump lightweight concrete directly on to the top white fabric. Concrete must be a minimum of 1" (3.0cm) thick, and have a minimum 28 day compressive strength of 1800. Verify that the slab is 1000 psi (6.9 Mpa) minimum before proceeding to next step.

EnkaSonic product line

Sound Mat	Mat Thickness (Nominal)	Topping Thickness (Minimal)	Total Thickness (Nominal)
EnkaSonic 125 A	0.13 in. (3 mm)	0.75 in. (19 mm)	0.88 in. (22 mm)
EnkaSonic 250 B	0.25 in. (6 mm)	1.00 in. (25 mm)	1.20 in. (31 mm)
EnkaSonic 250 B Plus	0.25 in. (6 mm)	1.00 in. (25 mm)	1.33 in. (33 mm)
EnkaSonic 400 A	0.40 in. (10 mm)	1.00 in. (25 mm)	1.40 in. (35 mm)
EnkaSonic 400 A Plus	0.40 in. (10 mm)	1.00 in. (25 mm)	1.45 in. (37 mm)
EnkaSonic 750 A	0.78 in. (20 mm)	1.00 in. (25 mm)	2.25 in. (57 mm)
EnkaSonic 750 A Plus	0.78 in. (20 mm)	1.50 in. (38 mm) reinforced	2.29 in (58 mm)

Finish Floor & Trim for All Installations

1. Install finish floor material: Ceramic Tile, Stone, Marble, LVT, Sheet Vinyl, Carpet, Laminate Flooring or Engineered Wood.

2. Trim Perimeter Isolation ¼” below finish floor. (If finish floor is carpet or vinyl trim the Perimeter Isolation flush with the surface before the finished flooring is installed.

3. Apply non-hardening acoustical sealant or elastomeric sealant to top of Perimeter Isolation filling the groove. Do not allow any hard grout to come in contact with the wall.

4. Install baseboards if desired. If a flat base is adhered to the wall, space it 1/16” to 1/8” up from the finished flooring and run a bead of acoustical sealant into the void. If a cove base is used, fill the joint between the last course of finished flooring and the base with acoustical sealant.

Notes

1) Includes EnkaSonic 125 A, EnkaSonic 250 B, EnkaSonic 250 B Plus, EnkaSonic 400 A, EnkaSonic 400 A Plus, EnkaSonic 750 A, EnkaSonic 750 A Plus

2) Including but not limited to the following products: AccuCrete, Firm-Fill, Gyp-Crete, LevelRock, or Rapid Floor.

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