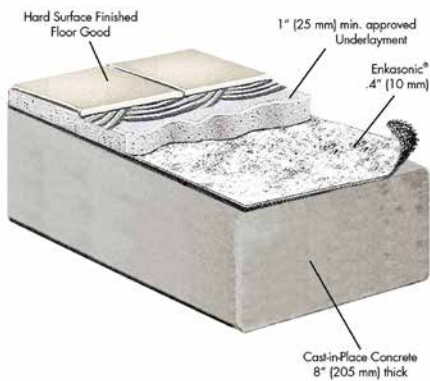


Enkasonic[®] Floor Underlayment



Please Note: These installation instructions are given as a general guide to avoid common errors. Installer should follow best practices for construction and workmanship. Acoustical Solutions bears no responsibility for installation or contractor selection. Please contact a sales representative if you have questions, concerns or specific project requirements.

Be sure to inspect materials upon delivery. Please note any damage on the delivery ticket and notify Acoustical Solutions immediately. Materials should be stored in original packing in a clean, climate controlled environment free of moisture. Installation should not commence until building is enclosed and under standard occupancy conditions and surfaces are of clean, acceptable condition and properly prepared. Installation is best done at the end of a construction project. Do not install materials of unacceptable quality.



Enkasonic[®] Floor Underlayment Lightweight Concrete

Installation Bulletin

Subfloor and Site Preparation

1. All preparatory site and subfloor work should be in compliance with the standards of the tile trade as well as the recommended installation procedures developed and printed by the CTI (Ceramic Tile Institute of America.)
2. Subfloor should be clean and level. Thoroughly check the subfloor, fill in any open cracks and remove any residue that would interfere with the Enkasonic. Deflection should not exceed 1/360 of the span, including expected live and dead loads.
3. If a waterproofing system is to be used, verify that the subfloor is properly sloped to the drain weep holes. Minimum recommended slope is ¼" (6.5mm) per foot. Verify that the waterproofing membrane is a load bearing membrane.

Perimeter Isolation Barrier Installation

1. Apply acoustical sealant to the lower 1" backside of the perimeter isolation barrier. The isolation barrier shall be Perimeter ISO. Perimeter isolation barrier should exceed the planned height of the floor system by 1" (2.5cm). Typically 1" to 6" (2.5 to 15.5cm) high material required.
2. Firmly press and adhere the isolation barrier to the wall or vertical partition (including door frames) surrounding the perimeter of the subfloor receiving the Enkasonic system, and around the perimeter of any protrusion through the floor system, such as floor drains, columns, pipes, electrical conduits, etc.

Note: If mechanical fasteners are used for the perimeter isolation board, fasten in the top area which will be removed as excess upon completion of the floor.

Enkasonic Installation

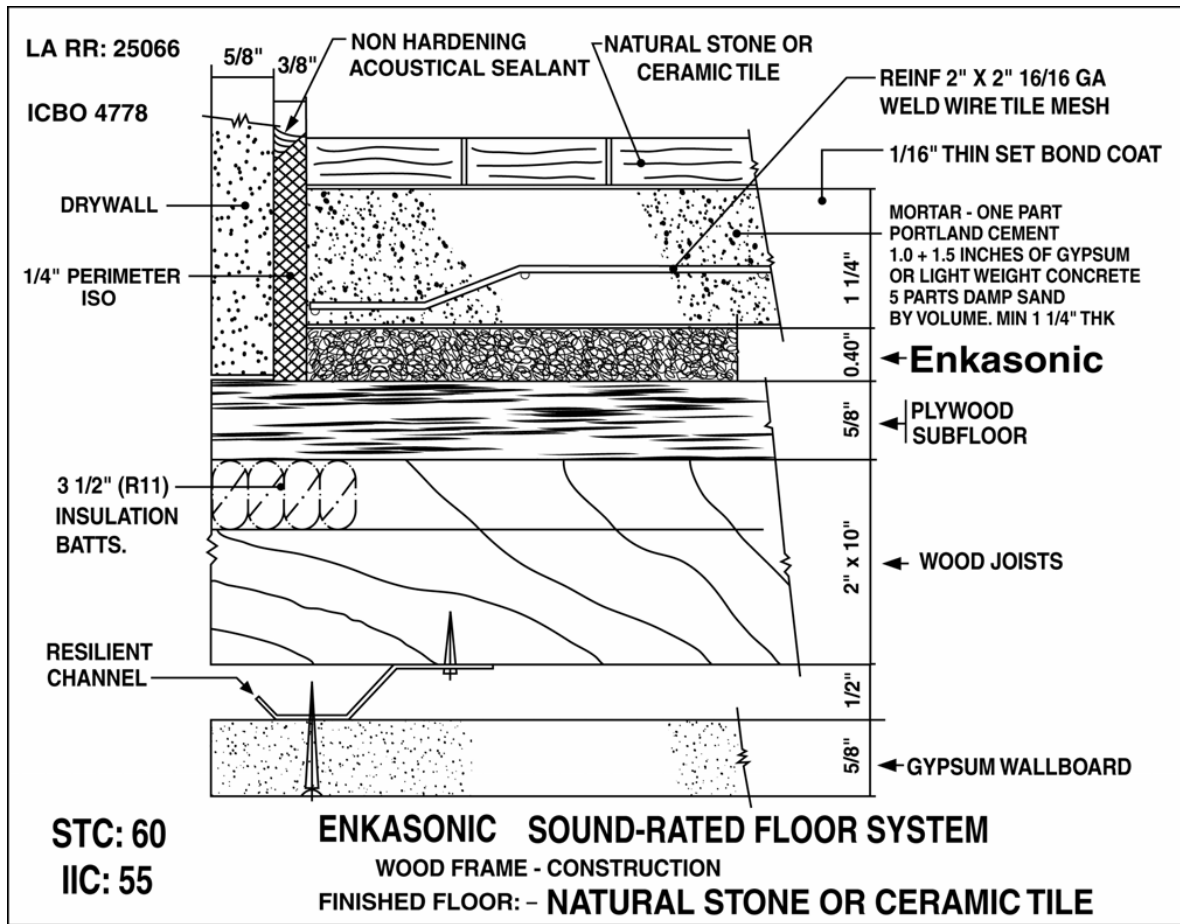
1. Lay the Enkasonic directly over the subfloor (or waterproofing membrane if applicable) with the **black mesh down, white fabric side up**. The Enkasonic should be pushed up tightly to the isolation barrier previously installed around the perimeter of the floor.
2. Adjoining edges of the black Enkasonic mesh must be butted together. Tape (duct tape or 2" (5cm) wide cellophane tape) the 3" longitudinal fabric overlaps snug to the fabric on the adjoining Enkasonic strip. There must be no gap between adjacent Enkasonic strips and the Enkasonic must fit snugly against the perimeter isolation barrier. All seams must be taped in order to prevent any lightweight concrete from flowing into the nylon mesh and creating hard points that could compromise the acoustical isolation. Also, tape the seam/joint that is created when the Enkasonic butts the perimeter isolation barrier strips.

Lightweight Concrete Installation



Enkasonic[®] Floor Underlayment Lightweight Concrete

1. Lightweight concrete can be pumped directly on to the white fabric and must be a minimum of 1" (3.0cm) thick, and have a minimum 28 day compressive strength of 1800 psi and be supported by Enkasonic 7918R. The slab should be 1000 psi (6.9 Mpa) minimum before proceeding to Step 2.
2. After thin setting tile and grouting, trim the excess perimeter fiberglass board (or closed-cell foam) using a knife angled downward at a 45° to 1/4" (6.5mm) below the finished tile surface. Fill the resulting groove with a bead of acoustical sealant.



Finishing

1. **After** the finished flooring is installed, trim the perimeter isolation barrier to 1/4" (6.5mm) below the finished flooring. Fill the groove with a bead of acoustical or elastomeric sealant. Do not allow hard grout to come in contact with the wall. If the floor is carpet or vinyl, trim the perimeter isolation barrier flush with the surface **before** the finished flooring is installed. Shim the molding to 1/16" to 1/32" (1.6 to 0.8mm) above the finished flooring preventing a transmission path for sound between the finished floor and wall.
2. If a flat base is adhered to the wall, space it 1/8" (3mm) 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.

Enkasonic[®] Floor Underlayment Mortar Bed

Installation Bulletin

Subfloor and Site Preparation

1. The subfloor must be structurally sound and able to withstand live and dead loads with a deflection limitation of L/360.
2. Subfloor must be clean and free of residue that could interfere with the Enkasonic installation. Fill cracks and voids with caulking material to eliminate sound leaks
3. Expansion joints should be allowed to carry through the sound rated floor at the same width.

Enkasonic Installation

Lay the Enkasonic directly over the subfloor with the black mesh down, white fabric side up. Enkasonic is laid over the entire subfloor. Care should be taken when cutting corners or floor penetrations. Tape (duct or 2" (51mm) wide cellophane tape) the 3" (76mm) longitudinal fabric overlapping snug to the fabric on the adjoining Enkasonic strip. There must be no gap between adjacent Enkasonic strips and the Enkasonic must fit snugly against the wall or perimeter isolation strip. All seams must be taped in order to prevent any foreign material from filling or flowing into the nylon mesh and creating hard points that could compromise the acoustical isolation.



Enkasonic[®] Floor Underlayment Mortar Bed

Note: Tape the seam/joint that is created when the Enkasonic butts the perimeter isolation barrier strip.

Perimeter Isolation Barrier Installation

1. The perimeter isolation material shall be either the Maxxon Perimeter Isolation 2 1/2" (64mm) X 1/8 3mm) or 3" (76mm) X 1/4" (6mm).
2. Perimeter isolation barrier can be installed before or after the Enkasonic installation. Perimeter isolation barrier shall exceed the planned height of the floor system.
3. Perimeter Isolation barrier can be installed by glue, tape or stapled above the top area which will be removed as excess upon completion of the floor.
4. Install the perimeter isolation barrier to the wall or vertical partition (including door frames) surrounding the perimeter of the subfloor receiving the Enkasonic system, and around the perimeter of any protrusion through the floor systems, such as floor drains, tubs, showers, columns, pipes, electrical conduits, etc.
5. Tape the seam/joint that is created when the Enkasonic butts the perimeter isolation barrier strips.

Installation:

Follow Tile Council of America Handbook Method F111:Cement Mortar, Cleavage Membrane, over a Concrete Floor

1. Use a 1 1/4" – 2" (32mm – 50mm) mortar bed supported by wire mesh.
2. After the mortar bed has been leveled to the proper plane, it shall be moist cover cured for 24 hours before the finished floor installation. The maximum variation in the slab shall not exceed 1/4" (32mm) in 10' (3m.)



Enkasonic[®] Floor Underlayment Mortar Bed

3. All traffic shall be kept off of the fresh mortar bed for at least 72 hours unless the “wet set” method (ANSI A108.1) is used.

Finishing:

1. After the finished flooring is installed, trim the perimeter isolation barrier to ¼” (6.5mm) below the finished flooring. Fill the groove with a bead of acoustical or elastomeric sealant. Do not allow hard grout to come in contact with the wall. If the floor is carpet or vinyl, trim the perimeter isolation barrier flush with the surface before the finished flooring is installed. Shim the molding to 1/16” to 1/32” (1.6 to 0.8mm) above the finished floor preventing a transmission path for sound between the finished floor and wall.

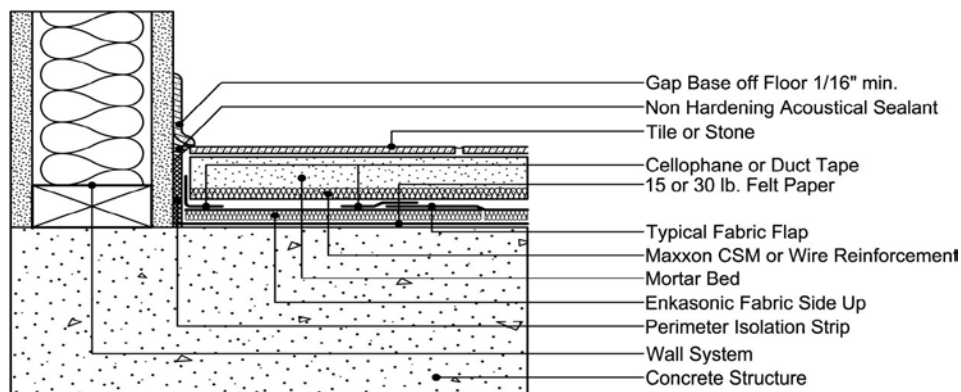
2. If a flat base is adhered to the wall, space it 1/8” (3mm) up from the finished flooring, and run a bead of acoustical sealant into the void. If a cove base is used, fill the joint between the last course of finished flooring and the base with acoustical sealant.

3. Damp cover cure the finished installation for at least 72 hours and keep all traffic off the floor for at least 72 hours.

2. If a flat base is adhered to the wall, space it 1/8” (3mm) 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.

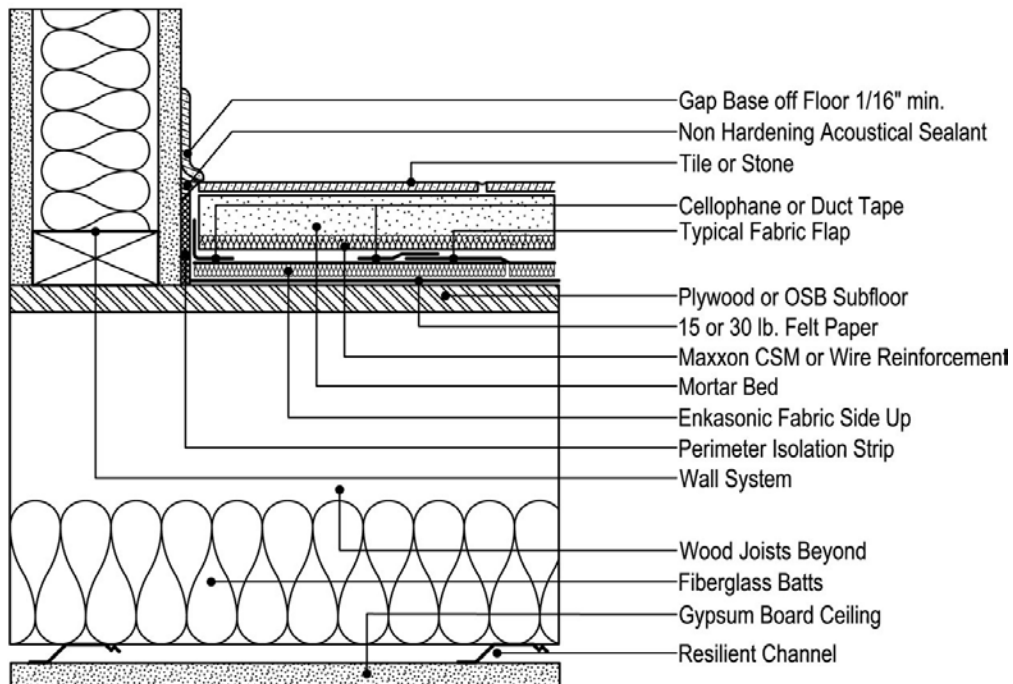
3. Damp cover cure the finished installation for at least 72 hours and keep all traffic off the floor for at least 72 hours.

Mortar Bed / Enkasonic / Concrete Subfloor



Enkasonic[®] Floor Underlayment Mortar Bed

Mortar Bed / Enkasonic / Wood Frame



Enkasonic[®] Floor Underlayment Plywood Floating Floor

Installation Bulletin

Subfloor and Site Preparation

1. All preparatory site and subfloor work should be in compliance with the standards of the tile trade as well as the recommended installation procedures developed and printed by the CTI (Ceramic Tile Institute of America.)
2. Subfloor should be clean and level. Thoroughly check the subfloor, fill in any open cracks and remove any residue that would interfere with the Enkasonic. Deflection should not exceed 1/360 of the span, including expected live and dead loads.
3. If a waterproofing system is to be used, verify that the subfloor is properly sloped to the drain weep holes. Minimum recommended slope is 1/4" (6.5mm) per foot. Verify that the waterproofing membrane is a load bearing membrane.
 - 3.1 Install one layer of 15lb. (7kg) roofing felt over subfloor or waterproofing membrane.

Perimeter Isolation Barrier Installation

1. Apply acoustical sealant to the lower 1" backside of the perimeter isolation barrier. The isolation barrier shall be Perimeter ISO. Perimeter isolation barrier should exceed the planned height of the floor system by 1" (2.5cm). Typically 1" to 6" (2.5 to 15.5cm) high material required.
2. Firmly press and adhere the isolation barrier to the wall or vertical partition (including door frames) surrounding the perimeter of the subfloor receiving the Enkasonic system, and around the perimeter of any protrusion through the floor system, such as floor drains, columns, pipes, electrical conduits, etc.

Note: If mechanical fasteners are used for the perimeter isolation board, fasten in the top area, which will be removed as excess upon completion of the floor.

Enkasonic Installation

1. Lay the Enkasonic directly over the roofing felt with the **black mesh down, white fabric side up**. The Enkasonic should be pushed up tightly to the isolation barrier previously installed around the perimeter of the floor.
2. Adjoining edges of the black Enkasonic mesh must be butted together. Tape (duct tape or 2" (5cm) wide cellophane tape) the 3" longitudinal fabric overlaps snug to the fabric on the adjoining Enkasonic strip. The taping procedure seals the overlap seams and keeps any residual moisture from getting into the Enkasonic mesh. Tape the Enkasonic to the perimeter isolation barrier with duct tape for added stability.



Enkasonic[®] Floor Underlayment Plywood Floating Floor

Plywood Installation

1. After the Enkasonic is installed, place one layer of ½" (13mm) plywood APA RATED SHEATHING, on top of the matting. Offset the joints (seams) and leave a small gap between sheets 1/16" or 3/32" (1.5mm or 2.5mm) in order to prevent any expansion of the plywood from buckling the layer.

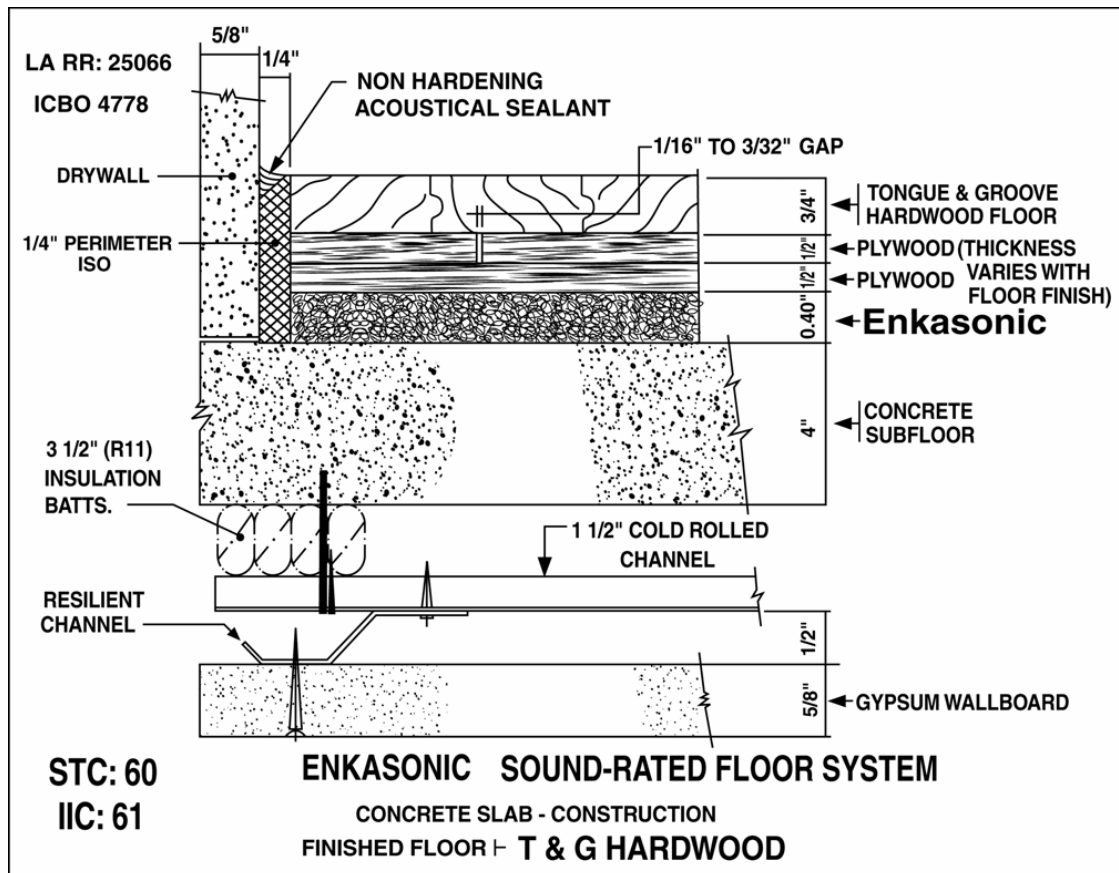
Note: If the subfloor has an unusual amount of surface distortion, cut the plywood sheets into smaller units such as 4' x 4' or 2' x 2' (120 x 120 cm or 60 x 60cm) panels. Then, lay the smaller panels in an offset joint pattern so that the grain of each panel is perpendicular to the grain of the adjacent panel.

Tape the joints with duct tape in order to keep the construction traffic from moving the panels and to prevent any adhesive, which will be used in the following step from infiltrating into the Enkasonic. Expansion gaps between adjacent panels are still necessary.

2. Apply a non-water based adhesive to the top of the first plywood layer and then place a second layer of ½" (13cm) plywood 90° to the first layer, offset so that the seams do not line up and then screw the center and corners of this top layer of plywood to the bottom layer of plywood. This top plywood layer should be constructed with full sheets.

Note: If the initial layer of plywood consisted of panels rather than full sheets, the top layer of full plywood sheets should be positioned at 45° to the general trend of the bottom layer. This will stiffen the 2-layer floating composite to about the same rigidity as 2 layers of full sheets.

In lieu of using wood screws, the two layers could also be fastened together by power stapling in a 6 inch (15.5 cm) pattern using staples with minimum 1" (2.5cm) wide crown. **Do not penetrate into the Enkasonic with either wood screws or staples.**



Enkasonic[®] Floor Underlayment Plywood Floating Floor

Finishing

1. Install tongue and groove wood floor on top of the floating 2-layer plywood composite. **Make sure that nails or power cleats are offset so they do not penetrate through the Enkasonic matting into subfloor.**
2. **After** the finished flooring is installed, trim the perimeter isolation barrier to ¼" (6.5mm) below the finished flooring. Fill the groove with a bead of acoustical or elastomeric sealant. If the floor is carpet or vinyl, trim the perimeter isolation barrier flush with the surface **before** the finished flooring is installed. Shim the molding to 1/16" to 1/32" (1.6 to 0.8mm) above the finished flooring preventing a transmission path for sound between the finished floor and wall.
3. If a flat base is adhered to the wall, space it 1/8" (3mm) 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.

Hardwood Floor Installation

Plywood thicker than ½" (13mm) can be used. In athletic areas such as dance floors and gymnasiums, 2 layers of 5/8" (16mm) plywood generally are floated over the Enkasonic. When carpet is preferred as the finished floor covering, the Enkasonic overlay is minimum two layers of 5/8" (16mm) plywood.

The only special material requirement for the 2 layers of plywood is that it be stamped APA RATED SHEATHING. This is necessary in order to meet the structural requirements of the Enkasonic system. All stamped span ratings on APA RATED SHEATHING are acceptable for the Enkasonic system. The veneer grade is not critical. Hence, CD is acceptable **if it is not bowed or warped**. Standard practice for material suppliers, however, is to store CD as if bowing or warping were not critical to the end-use application. Therefore, you may be forced to use a more expensive veneer grade such as BC in order to get panels that are not bowed. With regards to exposure durability, interior panels are acceptable if the plywood panels are protected from moisture during storage prior to installation.

Wood frame construction requires a resiliently suspended ceiling with a minimum of 3 ½" (9cm) (R-11) insulation packed between joists in order to achieve optimum acoustical ratings in an Enkasonic sound-rated hardwood floor system.



Enkasonic[®] Floor Underlayment Wire-Reinforced Mortar Bed

Installation Bulletin

Subfloor and Site Preparation

1. All preparatory site and subfloor work should be in compliance with the standards of the tile trade as well as the recommended installation procedures developed and printed by the CTI (Ceramic Tile Institute of America.)
2. Subfloor should be clean and level. Thoroughly check the subfloor, fill in any open cracks and remove any residue that would interfere with the Enkasonic. Deflection should not exceed 1/360 of the span, including expected live and dead loads.
3. If a waterproofing system is to be used, verify that the subfloor is properly sloped to the drain weep holes. Minimum recommended slope is ¼" (6.5mm) per foot. Verify that the waterproofing membrane is a load bearing membrane.

Perimeter Isolation Barrier Installation

1. Apply acoustical sealant to the lower 1" backside of the perimeter isolation barrier. The isolation barrier shall be Perimeter ISO. Perimeter isolation barrier should exceed the planned height of the floor system by 1" (2.5cm). Typically 1" to 6" (2.5 to 15.5cm) high material required.
2. Firmly press and adhere the isolation barrier to the wall or vertical partition (including door frames) surrounding the perimeter of the subfloor receiving the Enkasonic system, and around the perimeter of any protrusion through the floor system, such as floor drains, columns, pipes, electrical conduits, etc.

Note: If mechanical fasteners are used for the perimeter isolation board, fasten in the top area, which will be removed as excess upon completion of the floor.

Enkasonic Installation

1. Lay the Enkasonic directly over the subfloor (or waterproofing membrane if applicable) with the **black mesh down, white fabric side up**. The Enkasonic should be pushed up tightly to the isolation barrier previously installed around the perimeter of the floor.
2. Adjoining edges of the black Enkasonic mesh must be butted together. Tape (duct tape or 2" (5cm) wide cellophane tape) the 3" longitudinal fabric overlaps snug to the fabric on the adjoining Enkasonic strip. There must be no gap between adjacent Enkasonic strips and the Enkasonic must fit snugly against the perimeter isolation barrier. All seams must be taped in order to prevent any mortar from flowing into the nylon mesh and creating hard points that could compromise the acoustical isolation. Also, tape the seam/joint that is created when the Enkasonic butts the perimeter isolation barrier strips.

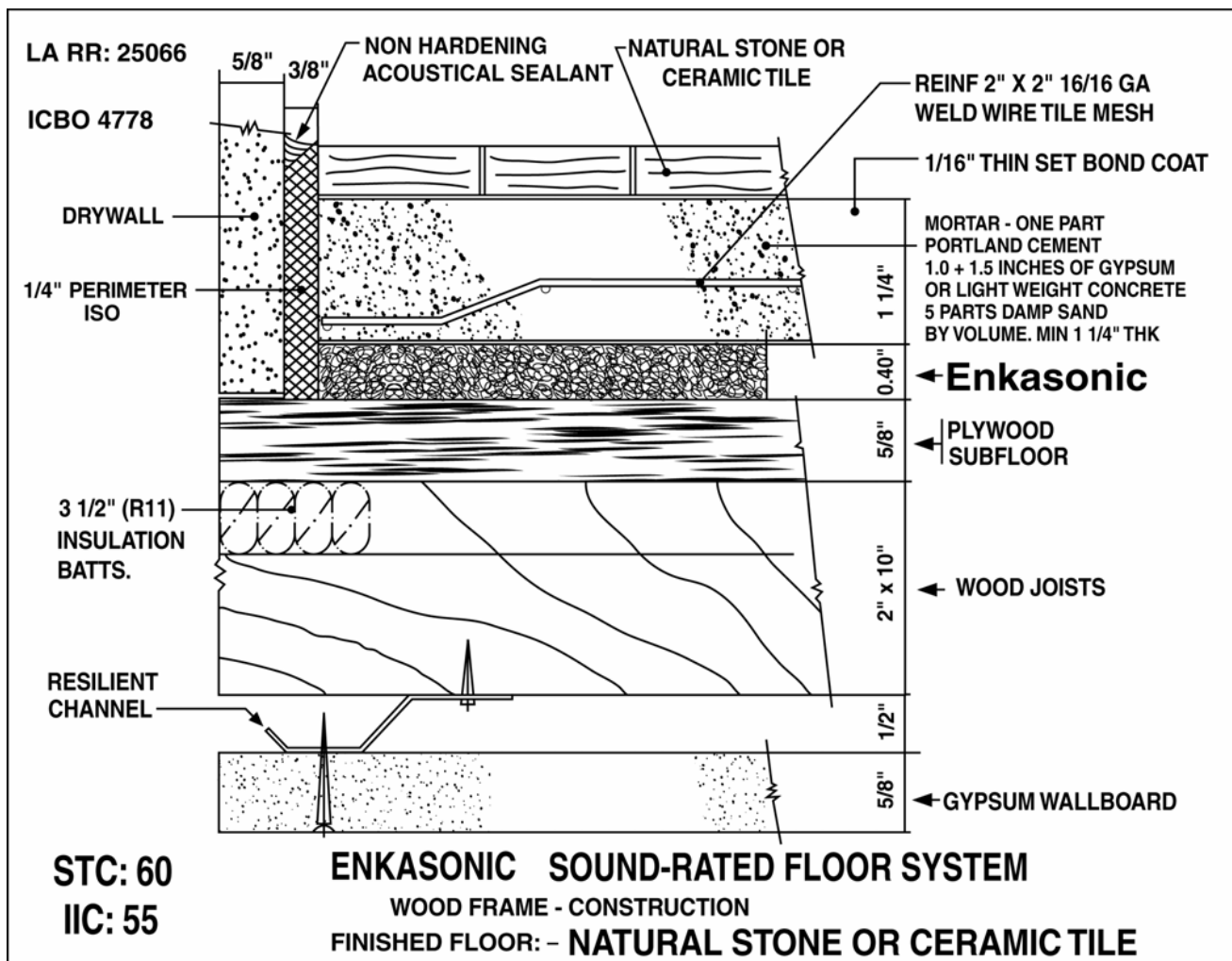


Enkasonic[®] Floor Underlayment Wire-Reinforced Mortar Bed

before the finished floor installation. The maximum variation in the slab shall not exceed 1/4" (32mm) in 10' (3m.)

- All traffic shall be kept off of the fresh mortar bed for at least 72 hours unless the "wet set" method (ANSI A108.1) is used.

Caution: Enkasonic is a resilient material and may cause difficulty during installation with the "wet set" method. Consult your Colbond Inc. representative prior to proceeding.



Enkasonic[®] Floor Underlayment Wire-Reinforced Mortar Bed

Finishing

1. **After** the finished flooring is installed, trim the perimeter isolation barrier to ¼" (6.5mm) below the finished flooring. Fill the groove with a bead of acoustical or elastomeric sealant. Do not allow hard grout to come in contact with the wall. If the floor is carpet or vinyl, trim the perimeter isolation barrier flush with the surface **before** the finished flooring is installed. Shim the molding to 1/16" to 1/32" (1.6 to 0.8mm) above the finished flooring preventing a transmission path for sound between the finished floor and wall.
2. If a flat base is adhered to the wall, space it 1/8" (3mm) 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.



Enkasonic[®] Floor Underlayment Wonder-Board Installation

Installation Bulletin

Subfloor and Site Preparation

1. All preparatory site and subfloor work should be in compliance with the standards of the tile trade as well as the recommended installation procedures developed and printed by the CTI (Ceramic Tile Institute of America.)
2. Subfloor should be clean and level. Thoroughly check the subfloor, fill in any open cracks and remove any residue that would interfere with the Enkasonic. Deflection should not exceed 1/360 of the span, including expected live and dead loads.
3. If a waterproofing system is to be used, verify that the subfloor is properly sloped to the drain weep holes. Minimum recommended slope is ¼" (6.5mm) per foot. Verify that the waterproofing membrane is a load bearing membrane.

Perimeter Isolation Barrier Installation

1. Apply acoustical sealant to the lower 1" backside of the perimeter isolation barrier. The isolation barrier shall be Perimeter ISO. Perimeter isolation barrier should exceed the planned height of the floor system by 1" (2.5cm). Typically 1" to 6" (2.5 to 15.5cm) high material required.
2. Firmly press and adhere the isolation barrier to the wall or vertical partition (including door frames) surrounding the perimeter of the subfloor receiving the Enkasonic system, and around the perimeter of any protrusion through the floor system, such as floor drains, columns, pipes, electrical conduits, etc.

Note: If mechanical fasteners are used for the perimeter isolation board, fasten in the top area, which will be removed as excess upon completion of the floor.

Enkasonic Installation

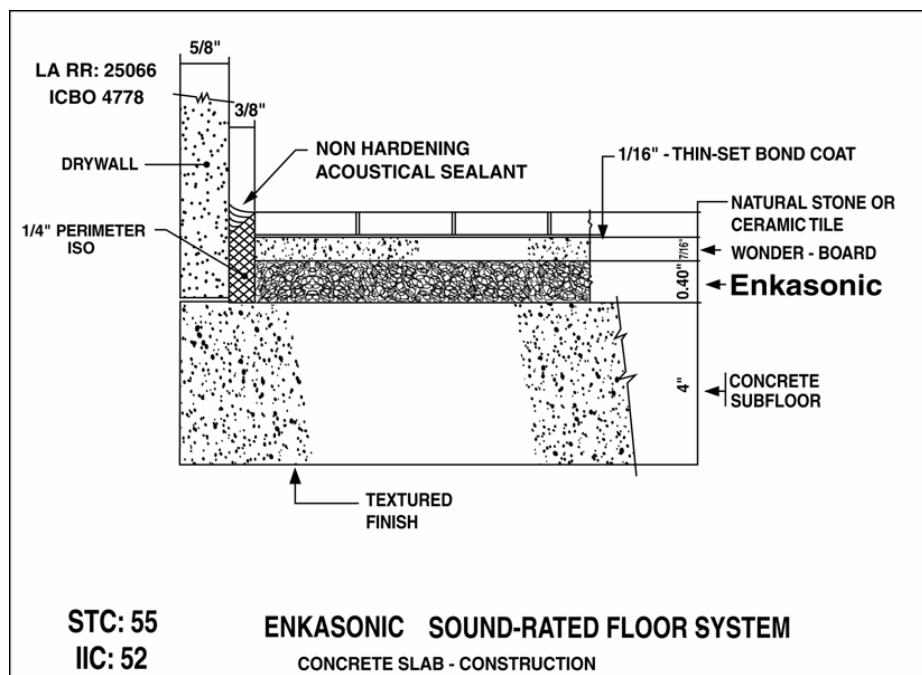
1. Lay the Enkasonic directly over the subfloor (or waterproofing membrane if applicable) with the **black mesh down, white fabric side up**. The Enkasonic should be pushed up tightly to the isolation barrier previously installed around the perimeter of the floor.
2. Adjoining edges of the black Enkasonic mesh must be butted together. Tape (duct tape or 2" (5cm) wide cellophane tape) the 3" longitudinal fabric overlaps snug to the fabric on the adjoining Enkasonic strip. The taping procedure seals the overlap seams and keeps any residual moisture from getting into the Enkasonic mesh. Tape the Enkasonic to the perimeter isolation barrier with duct tape for added stability.



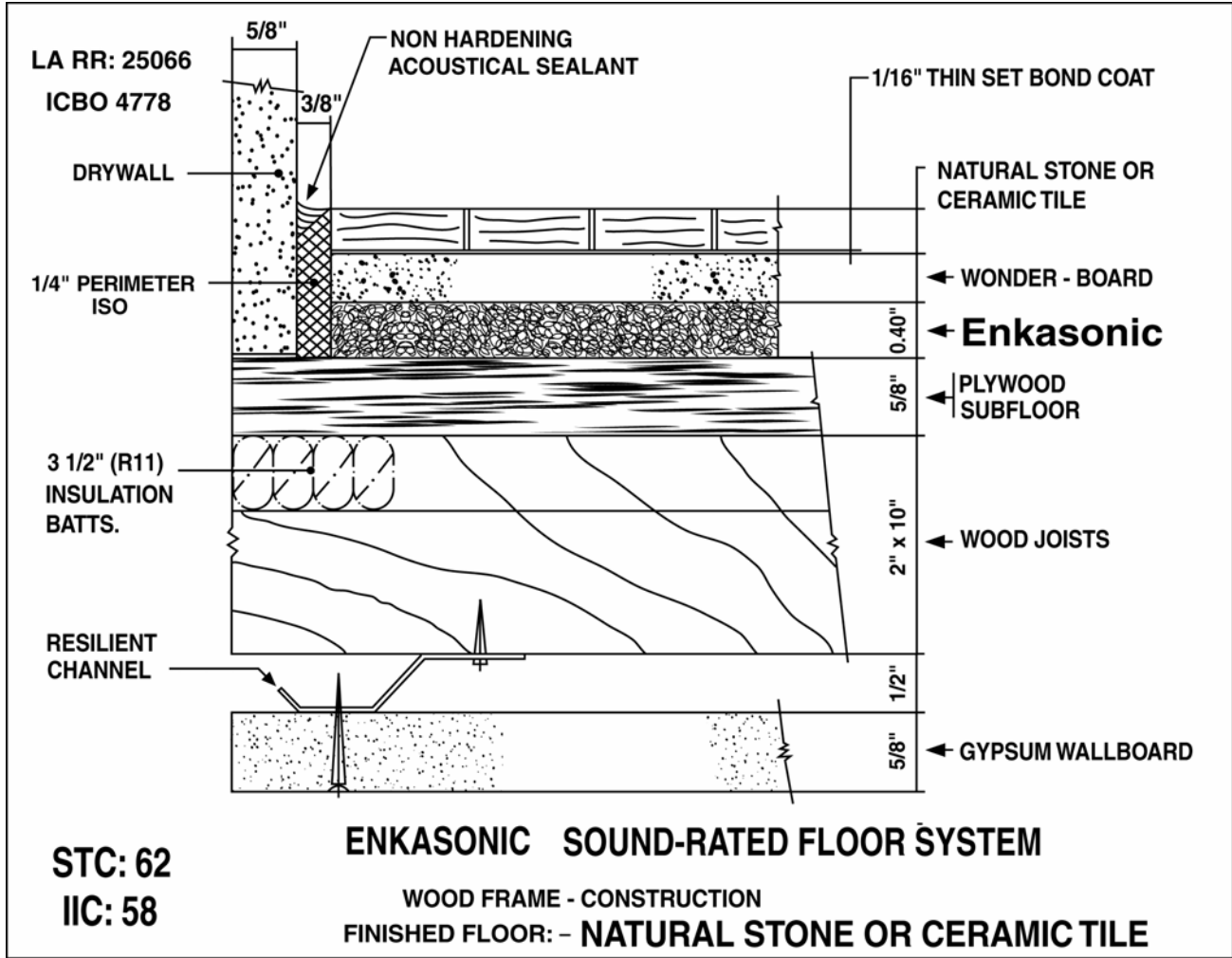
Enkasonic[®] Floor Underlayment Wonder-Board Installation

Wonder-Board Installation

- 1.1 Installation conditions: Wonder-Board should be installed only when the ambient temperature within the building is above 55° F (13° C.) Adequate ventilation should be provided to carry off excess moisture during installation.
- 1.2 Wonder-Board joints must not be placed directly over an Enkasonic edge-butt joint. It is recommended that Wonder-Board joints paralleling the underlying Enkasonic joints be offset a minimum of 8-10 inches (20.5 to 25.5cm.) **Note:** Wonder-Board joints will have to pass over Enkasonic joints at right angles in order to complete the Wonder-Board pattern.
2. The Wonder-Board panels should be patterned with a 1/4" (6.5mm) gap between the units. Snap chalk lines onto the white Enkasonic fabric marking the joint placement of the Wonder-Board panels.
3. Prepare latex Portland cement slurry, thick in consistency. Dip the 2" wide fiberglass tape into the slurry and center it on chalk lines.
4. Apply slurry on top of the tape. For added protection, it is recommended that a light skim coat of the latex Portland cement slurry be trowled approximately 1.5" (4cm) at the edge of all four sides of the Wonder-Board units before laying Wonder-Board over the tape. Lay and position the Wonder-Board sheets over the slurried tape in a timely manner leaving a minimum 1/4" (6.5mm) gap. Walk on the edges of the Wonder-Board units forcing slurry into the joint gap. Fill the remainder of the joint gap with slurry from the top of the joint.
5. Avoid applying too much pressure when filling the joint from the top, excessive pressure may cause a ridge which could develop on the underside of the Wonder-Board panel creating an uneven surface and a potential plane of weakness.
6. Lay another strip of the Wonder-Board fiberglass tape directly over the joint. Trowel a very thin skim coat of latex Portland cement over the tape creating a smooth surface for bonding the tile. If the Wonder-Board is uneven prior to the joint bond taking set, light loads (box of tiles, etc.) placed at different locations is a method to level the panels.
7. Allow 48 hours for joints to harden.



Enkasonic[®] Floor Underlayment Wonder-Board Installation



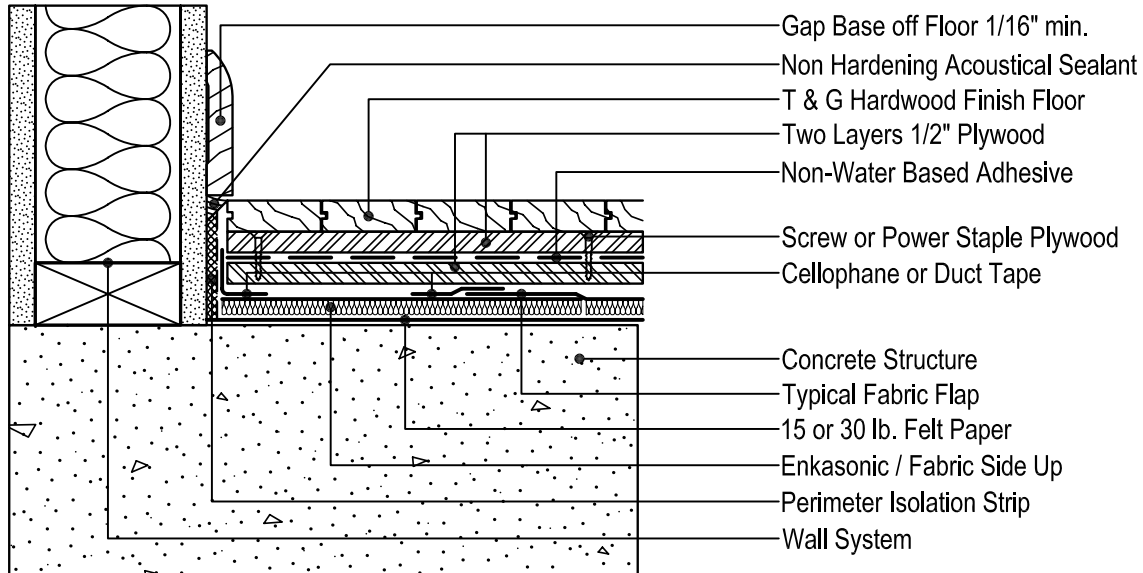
Finishing

1. **After** the finished flooring is installed, trim the perimeter isolation barrier to 1/4" (6.5mm) below the finished flooring. Fill the groove with a bead of acoustical or elastomeric sealant. Do not allow hard grout to come in contact with the wall. If the floor is carpet or vinyl, trim the perimeter isolation barrier flush with the surface **before** the finished flooring is installed. Shim the molding to 1/16" to 1/32" (1.6 to 0.8mm) above the finished flooring preventing a transmission path for sound between the finished floor and wall.
2. If a flat base is adhered to the wall, space it 1/8" (3mm) 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.

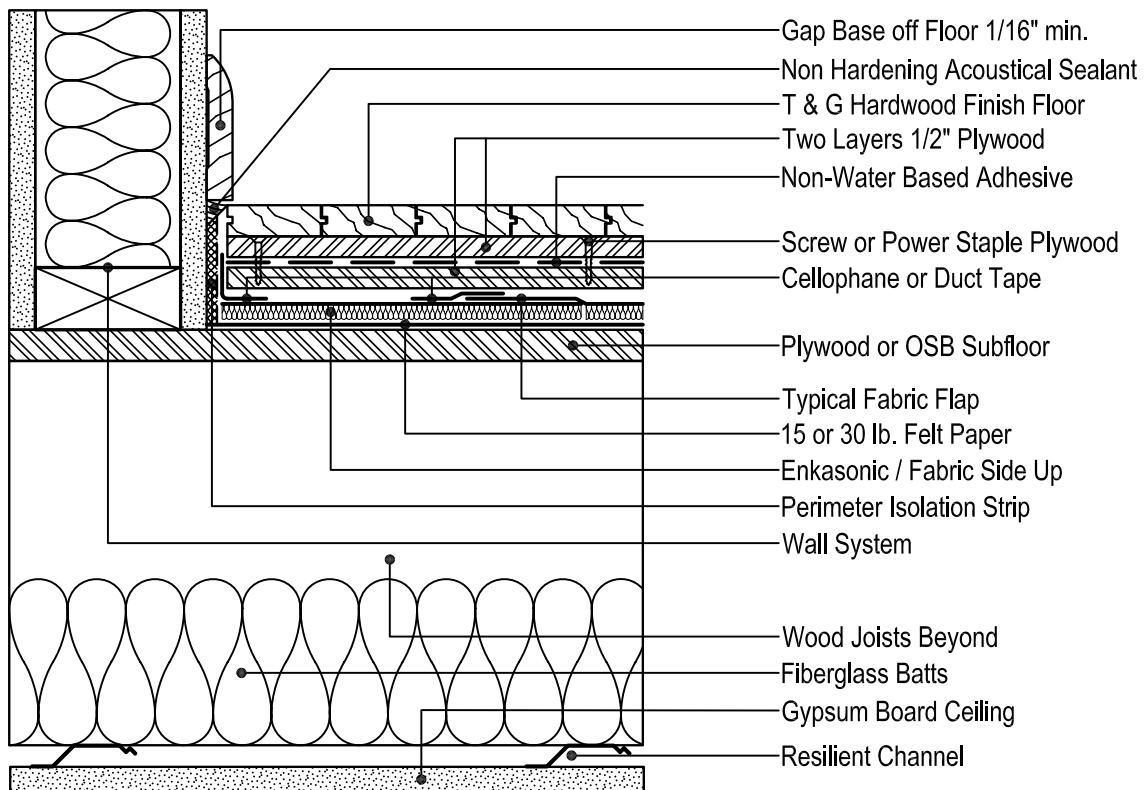


Enkasonic[®] Floor Underlayment Hardwood Floor

Hardwood Floor / Enkasonic / Concrete Subfloor



Hardwood Floor / Enkasonic / Wood Frame



Enkasonic[®] Floor Underlayment Hardwood Floor

Hardwood Floor Installation Over Enkasonic

Read First

These suggestions represent generally accepted procedures for successful installation of Maxxon Products. These instructions may be followed, modified or rejected by the owner, engineer, contractor or their representative since they, not Maxxon Corporation, are responsible for planning and executing procedures appropriate to a specific application.

Installation Bulletin

Subfloor and Site Preparation

1. The subfloor must be structurally sound and able to withstand live and dead loads with a deflection limitation of L/360.
2. Subfloor must be clean and free of residue that could interfere with the Enkasonic installation. Fill cracks and voids with caulking material to eliminate sound leaks
3. Expansion joints should be allowed to carry through the sound rated floor at the same width.
4. Mechanically attach 15 lb. or 30 lb. felt paper over the entire wood subfloor. Over concrete the felt paper can be loose laid or spot glued.

Enkasonic Installation

Lay the Enkasonic directly over the subfloor with the black mesh down, white fabric side up. Enkasonic is laid over the entire subfloor. Care should be taken when cutting corners or floor penetrations. Tape (duct or 2" (51mm) wide cellophane tape) the 3" (76mm) longitudinal fabric overlapping snug to the fabric on the adjoining Enkasonic strip. There must be no gap between adjacent Enkasonic strips and the Enkasonic must fit snugly against the wall or perimeter isolation strip. All seams must be taped in order to prevent any foreign material from filling or flowing into the nylon mesh and creating hard points that could compromise the acoustical isolation

Note: Tape the seam/joint that is created when the Enkasonic butts the perimeter isolation barrier strip.

Perimeter Isolation Barrier Installation

1. The perimeter isolation material shall be either the Maxxon Perimeter Isolation 2 1/2" (64mm) X 1/8 3mm) or 3" (76mm) X 1/4" (6mm).
2. Perimeter isolation barrier can be installed before or after the Enkasonic installation. Perimeter isolation barrier shall exceed the planned height of the floor system.
3. Perimeter Isolation barrier can be installed by glue, tape or stapled above the top area which will be removed as excess upon completion of the floor.
4. Install the perimeter isolation barrier to the wall or vertical partition (including door frames) surrounding the perimeter of the subfloor receiving the Enkasonic system, and around the perimeter of any protrusion through the floor systems, such as floor drains, tubs, showers, columns, pipes, electrical conduits, etc.
5. Tape the seam/joint that is created when the Enkasonic butts the perimeter isolation barrier strips.



Enkasonic[®] Floor Underlayment Hardwood Floor

Hardwood Floor Installation Over Enkasonic

Plywood Installation:

1. After the Enkasonic is installed, place one layer of ½” (13mm) minimum thickness plywood APA RATED SHEATHING, on top of the matting. Offset the joints (seams) and leave a small gap between sheets 1/16” or 3/32” (1.5mm or 2.5mm) in order to prevent any expansion of the plywood from buckling the layer.

Note: If the subfloor has an unusual amount of surface distortion, cut the plywood sheets into smaller units such as 4’ x 4’ or 2’ x 2’ (120 x 120 cm or 60 x 60 cm) panels. Then lay the smaller panels in an offset joint pattern so that the grain of each panel is perpendicular to the grain of the adjacent panel.

Tape the joints with duct tape in order to keep the construction traffic from moving the panels and to prevent any adhesive, which will be used in the following step, from infiltrating into the Enkasonic. Expansion gaps between adjacent panels are still necessary.

2. Apply a non-water based adhesive to the top of the first plywood layer and then place a second layer of ½” (13cm) minimum thickness plywood 90° to the first layer, offset so that the seams do not line up and then screw the center and corners of this top layer of plywood to the bottom layer of plywood. This top plywood layer should be constructed with full sheets.

Note: If the initial layer of plywood consisted of panels rather than full sheets, the top layer of full plywood sheets should be positioned at 45° to the general trend of the bottom layer. This will stiffen the 2-layer floating composite to about the same rigidity as 2 layers of full sheets.

In lieu of using wood screws, the two layers could also be fastened together by power stapling in a 6 inch (15.5 cm) pattern using staples with minimum 1”(.5cm) wide crown. **Do not penetrate into the Enkasonic with either wood screws or staples.**

Finishing:

1. Install tongue and groove wood floor on top of the floating 2-layer plywood composite. **Make sure that nails or power cleats are offset so they do not penetrate through the Enkasonic matting into subfloor**
2. **After** the finished flooring is installed, trim the perimeter isolation barrier to ¼” (6.5mm) below the finished flooring. Fill the groove with a bead of acoustical or elastomeric sealant. If the floor is carpet or vinyl, trim the perimeter isolation barrier flush with the surface **before** the finished flooring is installed. Shim the molding to 1/16” to 1/32” (1.6 to 0.8mm) above the finished flooring preventing a transmission path of sound between the finished floor and wall.
3. If a flat base is adhered to the wall, space it 1/8” (3mm) 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.



Enkasonic[®] Floor Underlayment Hardwood Floor

Hardwood Floor Installation:

Plywood thicker than ½” (13mm) can be used. In athletic areas such as dance floors and gymnasiums, 2 layers of 5/8” (16mm) plywood generally are floated over the Enkasonic. When carpet is preferred as the finished floor covering, the Enkasonic overlay is minimum two layers of 5/8” (16mm) plywood.

The only special material requirement for the 2 layers of plywood is that it be stamped APA RATED SHEATHING. This is necessary in order to meet the structural requirements of the Enkasonic system. All stamped span ratings on APA RATED SHEATHING are acceptable for the Enkasonic system. The veneer grade is not critical. Hence, CD is acceptable **if it is not bowed or warped**. Standard practice for material suppliers, however, is to store CD as if bowing or warping were not critical to the end-use application. Therefore, you may be forced to use a more expensive veneer grade such as BC in order to get panels that are not bowed. With regards to exposure durability, interior panels are acceptable if the plywood panels are protected from moisture during storage prior to installation.

Wood frame construction requires a resiliently suspended ceiling with a minimum of 3 ½” (9cm) (R-11) insulation packed between joists in order to achieve optimum acoustical ratings in an Enkasonic sound-rated hardwood floor system.

