

Levelrock™ Low Profile Sound Mat

D20™

Low profile sound system for concrete decks

- Delta IIC values help meet code requirements for sound attenuation
- Achieves sound attenuation with minimal height differential
- Ideal for residential units with concrete subfloors
- Applied by USG-authorized applicators

Description

LEVELROCK™ brand low profile D20™ sound mat provides an economical method of improving the IIC ratings of concrete subfloors often found in high-rise condominiums. With a thickness of just under 1/8 in. and a topping of 1/2 in. of LEVELROCK® floor underlayment, the total system thickness is a nominal 5/8 in. D20 sound mat is also highly resistant to water.

Limitations

- Do not use in exterior applications.
- Do not use as a wearing surface.
- Do not install where continuous exposure to moisture is a possibility (i.e. exterior balconies or large commercial/institutional shower rooms).
- Do not install on deflections exceeding L/360.
- Do not use on concrete floors with extreme spalling or cracking.

Installation

D20 sound mat is intended for use on cured concrete subfloors. New concrete must have cured for a minimum of 28 days, while existing concrete must be sound and free of excessive spalling. The subfloor should be clean and free of construction debris and dirt. The building temperature should be maintained at a 50 °F minimum. In addition, the subfloor must not exceed L/360 deflection. If a fire rating is required, the concrete subfloor must meet UL thickness requirements for that design.

Apply DUROCK™ tile membrane adhesive using a 3/8-in. nap roller. The mat should be installed within 15 minutes of the adhesive application. Apply DUROCK tile membrane at a rate of 250 sq. ft./gal. Roll D20 sound mat into the adhesive while it is still wet or tacky. Areas that have dried must be recoated. The sound mat must lay flat, uniform and even. Refer to the *LEVELROCK Applicator's Manual* for additional instructions.

The sound mat can be cut easily with shears or scissors. Roll or smooth out any bumps or folds. For small areas, this can be done by hand. For larger areas, use an 80- or 100-lb. floor roller (these can be rented at any floor-covering retailer) to ensure that there is good contact between the sound mat and the subfloor.

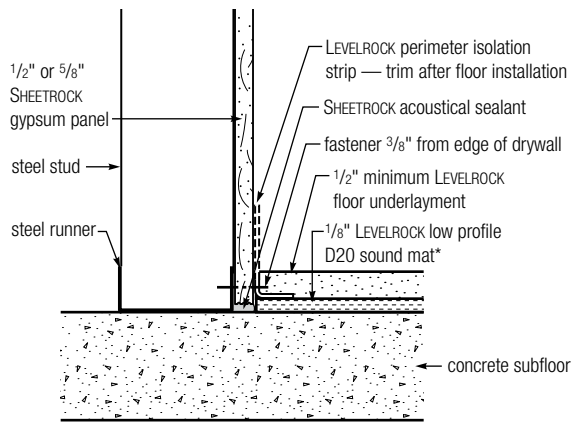
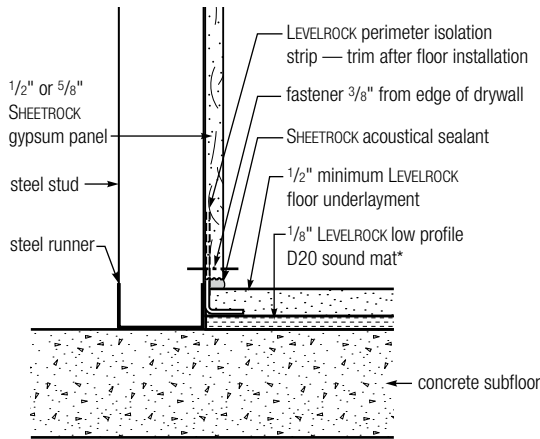
After gluing the D20 sound mat to the subfloor, allow the adhesive to dry for approximately 30 minutes. Apply a coat of LEVELROCK floor primer to the top surface of the D20 sound mat. If LEVELROCK floor underlayment is not immediately installed, protect the sound mat from trade traffic with FIBEROCK™ floor protection paper, cardboard, hardboard or similar protective materials.

Make sure that the sound mat is firmly adhered to the subfloor before starting the underlayment pour. LEVELROCK floor underlayment should be installed at a minimum thickness of 1/2 in.

Assemblies

Concrete Subfloor, Steel Framing — LEVELROCK Installed Before Drywall

Concrete Subfloor, Steel Framing — LEVELROCK Installed After Drywall



* Adhere to subfloor with Durock tile membrane adhesive.

Note: Drawings not to scale.

Product Data

Width: 50 in.
Mat thickness: 0.1 in. (2.54 mm)
Roll size: 300 lineal ft.; 50-in. roll: 1250 sq. ft./roll
Weight: 45 lbs./roll (typical)
Roll diameter: 14-15 in. (typical)
Mat color: White

Test Data

System Description

- The system tested was composed of (starting from top down):
- Floor covering (see further description on various test results).
 - 1/2 in. of LEVELROCK 2500 floor underlayment. The sound mat was primed with LEVELROCK floor primer prior to the installation of the underlayment.
 - LEVELROCK low profile D20 sound mat with a thickness of 0.1 in. (2.54 mm). The sound mat was adhered to the subfloor.
 - 6-in.-thick reinforced concrete slab.
 - The perimeter of the assembly included a perimeter isolation strip.

Test Results ¹	Floor covering	STC	Delta IIC ²
	None	51	20
	Wood laminate flooring with foam underlayment	N/A	19
	Vinyl	N/A	20
	Quarry tile with NobleSeal [®] CIS crack isolation sheet	N/A	21

¹ Tests were conducted under laboratory conditions according to ASTM E2179, ASTM E90 and ASTM E492 in a NVLAP-accredited facility. Actual field conditions may vary from laboratory conditions and affect results. Consult ASTM E1007 for a list of variable conditions.

² The Delta IIC is the difference between the IIC of the reference floor per ASTM E2179 and the IIC determined from the Normalized Impact Sound Pressure Levels (NISPL) of the reference floor as listed in E1279 after they have been adjusted for the difference between the measured NISPL's of the tested floor with and without the topping.

How to use these results

These test results allow the acoustician and architect to judge how their particular system will perform. The Delta IIC value can be used to estimate what expected improvement LEVELROCK floor underlayment with LEVELROCK low profile D20 sound mat should provide with various floor coverings.

Submittal Approvals

Job Name		
Contractor	Date	

Product Information

See levelrock.com for the most up-to-date product information.

WARNING!

Direct, repeated rubbing contact with the skin may cause slight irritation. Avoid contact with eye. Do not ingest. If ingested, call physician. When used with other products, read warnings associated with each product. Read crystalline silica warnings when using with certain LEVELROCK underlayments containing sand (crystalline silica) or when adding sand and always avoid high dust levels. Product safety information: 800 507.8899 or usg.com.

KEEP OUT OF REACH OF CHILDREN.

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Safety First!

Follow good safety/industrial hygiene practices during installation. Wear appropriate personal protective equipment. Read MSDS and literature before specification and installation.

