

USG LEVELROCK® BRAND LOW PROFILE SOUND MAT D20 PLUS™

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 Levelrock applicators

DESCRIPTION

USG Levelrock® Brand D20 PLUS™ Low Profile 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 5/8 in. of USG Levelrock® engineered cementitious underlayments, the total system thickness is a nominal 3/4 in. D20 PLUS sound mat is also highly resistant to trade traffic and water.

LIMITATIONS

1. Do not use in exterior applications.
2. Do not install where continuous exposure to moisture is a possibility.
3. Structure shall be designed so that deflection does not exceed L/240 from combined dead and live loads and L/360 from live loads. Certain floor coverings such as marble, limestone, travertine and wood may have more restrictive deflection limits. Consult the appropriate floor covering manufacturer.
4. Do not use on concrete floors with extreme spalling or cracking.

INSTALLATION

USG Levelrock D20 PLUS 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. Check the concrete subfloor for moisture vapor emission rate which should be below 5 lbs./1000 sq. ft./24 hrs. Contact USG if it exceeds this limit. The subfloor should be clean and free of construction debris and dirt. The building temperature should be maintained at a 50 °F minimum. If a fire rating is required, the concrete subfloor must meet UL thickness requirements for that design.

When conditions warrant, USG Levelrock D20 PLUS sound mat may be adhered to the subfloor with the gray wear-resistant side up using the recommended adhesive. The sound mat must lay flat, uniform and even. USG Levelrock™ Perimeter Isolation Strip must be installed prior to installing USG Levelrock floor underlayment (see assembly drawings).

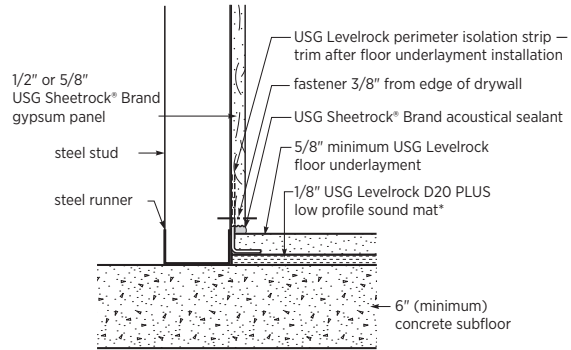
Prime the surface of USG Levelrock D20 PLUS sound mat with USG Levelrock™ Wood Primer just prior to the installation of USG Levelrock floor underlayment. Make sure that the sound mat is firmly adhered to the subfloor before starting the underlayment pour. USG Levelrock floor underlayment should be installed at a minimum thickness of 5/8 in.

Protect USG Levelrock underlayment floors poured over sound mat from heavy trade traffic loads with plywood.

For further details on installation requirements, specifications and the most up-to-date product information, please see usg.com, pourlevelrock.com and usgdesignstudio.com.

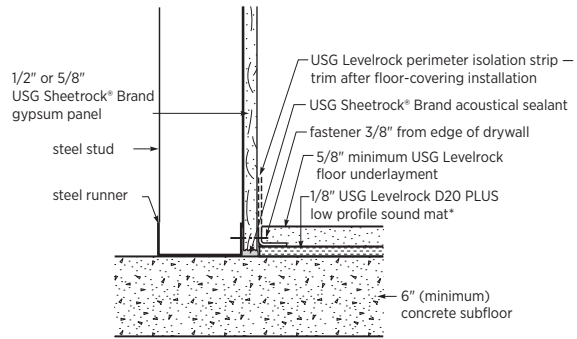
ASSEMBLIES

CONCRETE SUBFLOOR, STEEL FRAMING —
USG LEVELROCK INSTALLED BEFORE DRYWALL



**USG Levelrock D20 PLUS Low Profile Sound Mat Over Concrete
USG Levelrock Poured Before Drywall**

CONCRETE SUBFLOOR, STEEL FRAMING —
USG LEVELROCK INSTALLED AFTER DRYWALL



**USG Levelrock D20 PLUS Low Profile Sound Mat Over Concrete
USG Levelrock Poured After Drywall**

* Adhere to subfloor with XL Brands® Stix® 2230 or Stix® Essential RES adhesive.
NOTE: Drawings not to scale.

PRODUCT DATA

	USG Levelrock™ D20 PLUS™ Low Profile Sound Mat
Width (inches)	50
Mat thickness (inches)	0.1
Mat thickness (mm)	2.54
Roll size	200 lineal ft.; 50-in. roll: 833 sq. ft./roll
Weight (lbs./roll)	50 (typical)
Roll diameter (inches)	14-15 (typical)
Mat color	Top-gray/bottom-white

TEST DATA
SYSTEM DESCRIPTION

The system tested was composed of (starting from top down):

- Floor covering (see further description on various test results).
- USG Levelrock® 2500 engineered cementitious underlayment. (Note – Sound tests were conducted at ½ in. underlayment thickness.) The sound mat was primed with USG Levelrock wood primer prior to the installation of the underlayment.
- USG Levelrock D20 PLUS low profile 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 USG Levelrock® Perimeter Isolation Strip.

TEST RESULTS¹

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 (NVLAP Lab Code: 200291-0). 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 E2179 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 USG Levelrock engineered cementitious underlayment with USG Levelrock D20 PLUS low profile sound mat should provide with various floor coverings.

SUBMITTAL APPROVALS

Job Name	
Contractor	Date

PRODUCT INFORMATION

See usg.com or pourlevelrock.com for the most up-to-date product information.

CAUTION

Dust may cause irritation to eyes, skin, nose, throat and upper respiratory tract. Wear eye protection. If eye contact occurs, flush thoroughly with water for 15 minutes. Remove contact lenses and continue rinsing. If on skin: Wash with plenty of water. If irritation persists, call physician. For more information call Product Safety: 800-507-8899 or see the SDS at usg.com.

KEEP OUT OF REACH OF CHILDREN.

TRADEMARKS

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NOTICE

We shall not be liable for incidental and consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instructions or for other than the intended use. Our liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing to us within thirty (30) days from date it was or reasonably should have been discovered.

SAFETY FIRST!

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

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