

Stravifloor Deck*

Datasheet



Stravifloor Deck is a [low-profile floating floor system](#) using a proprietary dovetailed metal deck for thin concrete pours.

The system's high bending stiffness allows for concrete toppings as thin as 2" (50 mm), making this system a great solution for projects that require a low-profile or lightweight concrete floating floor. It is also suitable for areas with high live loads.

This system provides a high-performance floating floor system for excellent structure-borne and airborne noise isolation, while minimizing any impact on the available floor-ceiling height.



CHARACTERISTICS

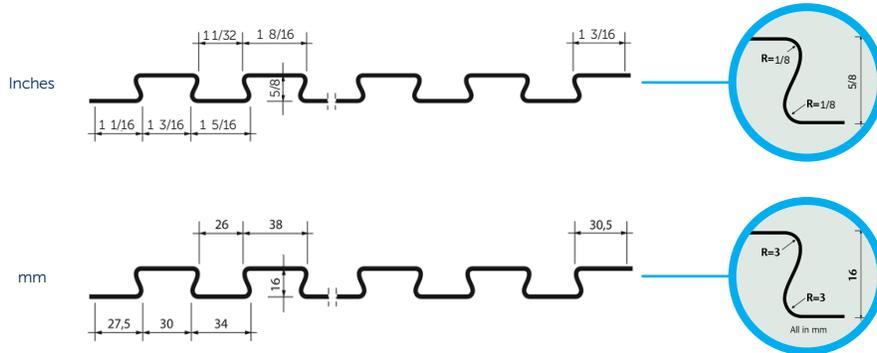
- Available with natural rubber pads (HR) as standard resilient support
- Available with AASHTO-grade neoprene rubber pads (AR), upon request
- Can be changed to meet project specifications in terms of natural frequency and damping requirements, IIC or STC using non-standard bearings
- The standard range of resilient pads is available to provide load-bearing capacities from 14.5 psi (0.1 MPa) to 440 psi (3 MPa) per pad
- Uses elastomeric isolators with low stiffness/high resilience allowing natural frequencies as low as 6Hz, or springs allowing natural frequencies as low as 2.5Hz**
- Stravifloor Deck steel parts are galvanized
- Extremely low-profile floating floor system (allows as little as 2" (50 mm) concrete topping)
- High performance floating floor system with large support spans (up to 48" (1200 mm))
- High bending stiffness
- Suitable for high live loads
- Extremely quick to install resulting in a cost effective solution
- Durable and extremely low creep rate

*Previously known as CDM-QuietDeck

** Standard springs are epoxy coated, suitable for C2 environments. Springs with special coating or special spring materials are available upon request for installation in outside conditions or other special environments.



Dovetailed sheeting



Channel

Rail Standard length

6' 6-3/4" (2 m)

Pad

Stravifloor Deck standard solutions are available with resilient pads in four standard grades: Pad-L (low stiffness), Pad-M (medium stiffness), Pad-H (high stiffness) and Pad-X (extra high stiffness)

Thickness

1-3/16" (30 mm) or 2" (50 mm)

Note: the type of elastomeric pad as well as the channel spacing - which can be between 1' 3/8" and 48" (400 mm and 1200 mm) - need to be determined by the CDM Stravitec engineering team according the (concrete or screed) floating floor thickness and the load cases in operation phase.

Pad Color Code

Natural Rubber (HR)

- Pad-M_{HR} ●
- Pad-H_{HR} ●
- Pad-X_{HR} ● (black pad marked with the company logo in green)

Perimeter Strip

Resilient strips specially designed to minimize the flanking transmissions

Insulation material

Fiberglass or rock wool insulation

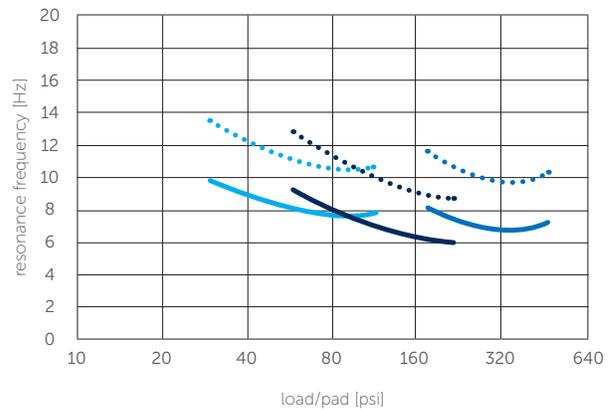
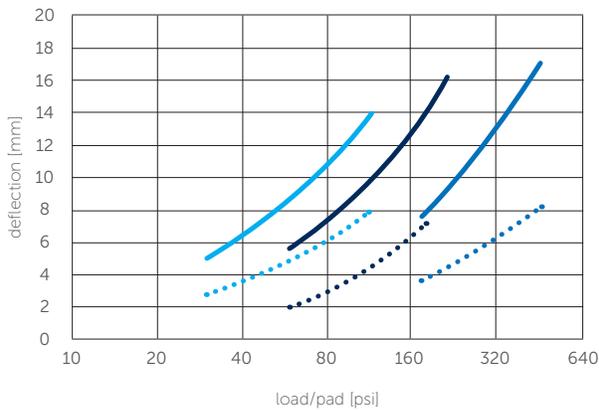
Note: the steel mesh necessary to cope with the loads in the finished floor needs to be calculated for the load cases in operation phase (service phase). This needs to be done by a structural engineer (upon request, CDM Stravitec can provide recommendations).



PHYSICAL & MECHANICAL PROPERTIES OF NATURAL RUBBER PADS

Type	Degree of stiffness	Color	Shore hardness ASTM D2240	Tensile strength ISO 37	Elongation at break ISO 37	Compression set 50%/73°F(23°C)/70h ISO 815
Pad-M _{HR}	Medium	Blue	40 A	290 psi (2 MPa)	> 300%	< 15%
Pad-H _{HR}	High	Brown	55 A	754 psi (5.2 MPa)	> 400%	< 15%
Pad-X _{HR}	Extra High	Green	73 A	870 psi (6 MPa)	> 200%	< 15%

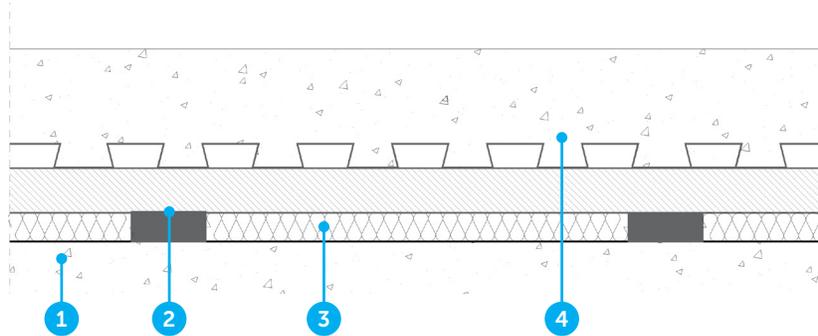
Note: working temperature between 14°F (-10°C) and 212°F (100°C) (momentary higher temperatures are acceptable).



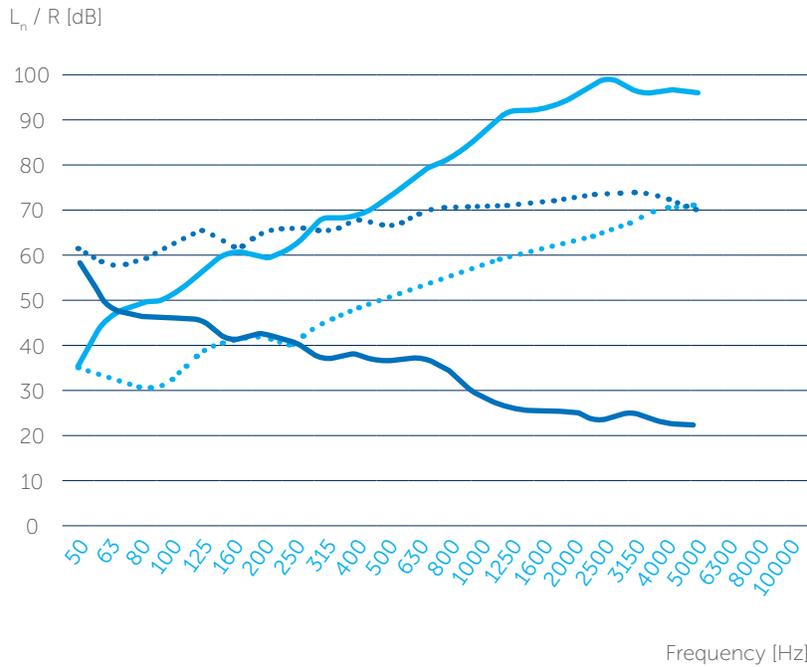


Test report LA.170209.R02 by Level Acoustics&Vibration⁽¹⁾ - Test Setup

1. Structural floor: 5.5" (140 mm) reinforced concrete slab
2. Pad-L 2" (50 mm) + metal channel
3. Mineral wool 1.57" (40 mm)
4. Floating floor: deck + 2" (50 mm) concrete



Acoustical Isolation



- R₀ (bare slab)
- L_{n,0} (bare slab)
- R
- L_n

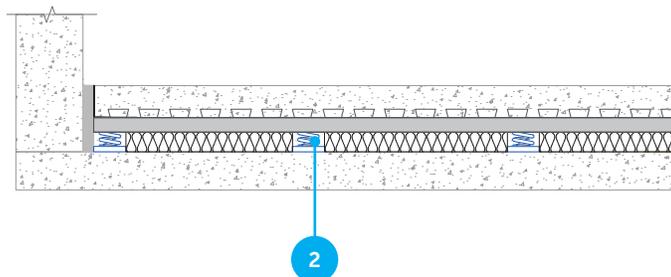
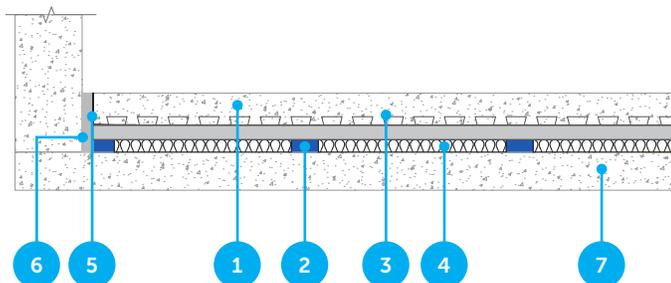
Bare Slab IIC ⁽³⁾	System IIC ⁽³⁾	Bare Slab STC ⁽²⁾	System STC ⁽²⁾
25	73	55	80

⁽¹⁾ Test report available upon request.
⁽²⁾ Single figure rating determined in accordance with ASTM E413 – 16.
⁽³⁾ Single figure rating in accordance with ASTM E989 - 06(2012).



TYPICAL ASSEMBLIES

1. Concrete/Screed floating floor
2. Isolated channel (pads OR springs)
3. Dovetailed sheeting
4. Insulation material
5. Metal edge profile
6. Perimeter Strip
7. Reinforced concrete slab



Note: an installation manual is available upon request.



Other Stravifloor Deck assemblies available on our test data platform Stravi-dB.



SCAN ME

DISCLAIMER

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